INTERNATIONAL KNOWLEDGE AND TECHNOLOGY TRANSFER LEADERSHIP SUMMIT 2024

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Jointly Organized By:

autm
Transforming Ideas into Opportunities

WIPO
WORLD INTELLECTUAL PROPERTY ORGANIZATION

COUNTRY REPORTS (APPENDIX B)

In advance of the meeting, each Summit participant was asked to provide an overview of their nation's K/TT landscape, answering questions about:

- External factors that will affect the K/TT profession over the next decade, and

- Approaches/skills needed to prepare the K/TT professionals of tomorrow.

Through these questions, themes emerged, providing a comprehensive overview of global perspectives on the future of the K/TT profession. Common themes across different countries included:

1. **Demographic Changes and Talent Dynamics:** The availability of skilled K/TT professionals was recognized as a key factor. Demographic shifts, skills shortages and changing workforce expectations were highlighted as challenges that may impact the quality and availability of professionals in this field.

2. **Technological Advancements:** Emphasis on rapidly evolving technologies like artificial intelligence (AI), biotechnology, nanotechnology, and quantum computing.

3. **Intellectual Property and Legal Challenges:** Changes in laws and policies, especially concerning AI's impact on authorship and patents.

4. **Ethical and Social Responsibility:** The importance of considering ethical implications of technology transfer and promoting responsible practices.

5. **Government Budgets and Funding for Research:** Fluctuations in government budgets for research and development were identified as external factors affecting technology transfer activities. The availability of funding for transfer activities is crucial for the success of K/TT professionals.

6. **Global Crises and Pandemics:** Unpredictable events, such as pandemics, also were acknowledged as external factors that can significantly impact the future of the industry. The need for professionals to be adaptable and prepared for unexpected challenges was emphasized.

7. **Climate Change and Sustainability:** Growing awareness of climate change and sustainability was acknowledged as driving increased demand for technologies related to clean energy and environmental management. This trend influences the priorities and focus areas of knowledge and technology transfer.

8. **Changes in Intellectual Property Laws and Regulations:** The evolving landscape of intellectual property laws, at both the national and international levels, was emphasized in multiple reports. The emergence of new technologies requires professionals to stay updated on legal frameworks and navigate challenges related to patents, copyrights and other legal aspects.

9. **Global and Real-Time Commercialization:** The role of new platforms facilitating global and real-time commercialization of intellectual property was recognized. This requires professionals to work in international environments, understanding how cultural and legal differences affect transactions.

10. **Institutional and Policy Changes:** Various countries highlighted shifts in government policies, funding mechanisms and institutional strategies affecting the profession

Panel Discussion and Breakout Session

INCENTIVES FOR TECHNOLOGY TRANSFER

Moderator:

Michael Mbogoro
Head of Tech Transfer Section
World Intellectual Property Organization (WIPO)

In tech transfer offices around the world, a recently heightened awareness surrounds the vital role incentives have in facilitating successful transfer inside academic institutions. Universities continue to work towards bridging the gaps between research and real-world applications. Many Summit participants noted that it has become increasingly evident new incentives are needed to grow and inspire innovation ecosystems.

Non-Financial Incentives: Understanding the Entrepreneurial Spirit

Financial incentives, such as revenue sharing from spin-outs or licensing agreements with inventors, will indefinitely remain at the core of many tech transfer programs. Yet the challenge lies in finding equilibrium: presenting alluring incentives to researchers, while ensuring the sustainability of the technology transfer office and academic institution. Although monetary incentives often dominate discussions in technology transfer, many Summit participants agreed non-financial incentives can be equally powerful motivators. These types of incentives vary significantly and can include something less tangible such as an expression of gratitude, or a more concrete motivation like flexible working conditions. For academic researchers possessing a deeply entrepreneurial spirit, ensuring a thriving ecosystem of dedicated support and resources can be a key incentive. Access to research funds, even if they're not tied to a personal financial benefit, can also inspire researchers to pursue innovation.

Summit attendees noted that a sensitive topic regarding incentivizing is the idea of returning intellectual property (IP) to researchers. In certain instances where a university has failed to commercialize certain IP, many tech transfer professionals believe it would be beneficial to create an option to assign the IP rights back to the academic. This approach benefits and incentivizes the researchers, since it helps them to keep control over their innovations and also encourages them to pursue commercialization through alternative channels.

Elevating a Researcher's Academic Capital: How Can Academia Best Promote Commercialization?

Integrating knowledge and technology transfer tasks has also emerged as a crucial incentive for many researchers and staff members during the evaluation process. By promoting institutions' commercialization initiatives equally alongside other more traditional academic

> " There's the traditional academic capital question. I'm sure we've all had the big debate with academics we work with when we say, you know, they want to publish, publish, we want to say we will be trying to get this into society or into the market. There's a timing issue between the two."

benchmarks like publications, institutions communicate the value they place on research discovery that leads to societal impact. Some universities have even gone a step further: they explored the possibility of including technology transfer achievements in promotion or tenure appointments. These new approaches can significantly help lessen the long-standing tension at institutions often arising from competing pressures to publish and bring innovations to market. The end goal remains to create an equal system that recognizes commercializing a technology and publishing high-impact papers both vastly contribute to a researcher's academic capital.

> "It's quite a tricky thing to do, the topic around incentives for both tech transfer staff as well as researchers, partly because different parts of the world are at different stages of maturity with different levels of resources."

Customizing Incentives to Career Stages

Summit participants noted a key insight regarding incentives: the need to tailor approaches to the various career stages in tech transfer. For example, more novice researchers aspiring to reach the tenure track likely have different motivations than their senior colleagues. Faculty who are early in their career journey also may be more interested in boosting their academic reputation by consistently publishing high-impact papers. Senior faculty researchers, on the other hand, may be more incentivized by the altruistic vision of someday leaving a permanent legacy to better society through their innovation and commercialization work.

A Welcoming Ecosystem

Summit participants noted that the most truly effective incentives they've seen implemented in their respective tech transfer offices do not only reward individual researchers. Instead, they offer their researchers a hub of support and resources where they can feel inspired to innovate in an ecosystem specially designed for their needs. This kind of robust ecosystem could include in- person and virtual trainings, incubator spaces, accelerator programs for researchers lacking experience in entrepreneurship, and mentorships where successful innovators can help guide novice researchers unfamiliar with commercialization. Certain academic institutions have even found success in further incentivizing their researchers by offering them reduced teaching schedules or sabbaticals, with the goal of enabling them to focus their time on commercialization initiatives.

Aligning Researcher Incentives with Institutional Priorities

Summit attendees agreed that one of the biggest obstacles in implementing successful incentive structures lies in aligning institutional priorities with researcher motivations. Clear communication is key to facilitating this kind of alignment. The university's mission, along with its vision for innovation and technology transfer and commercialization, must be clearly understood and promoted to stakeholders. Equally important is ensuring the institution's daily priorities reflect its vision. An ongoing challenge many universities face happens when they must strike a delicate balance between maintaining their academic freedoms and pursuing economically viable commercial interests. It's also important for institutions to be sure they are not improperly pressuring their staff to prioritize potentially profitable projects over imperative research.

Measuring Success: What Are Key Strategies for Incentive Programs?

Tech transfer professionals believe that broad impacts, such as societal benefits and educational outcomes, should play a major role in determining an institution's metrics of success in addition to financial revenue indicators. As academic institutions undergo major changes to their funding landscapes and societal needs evolve, Summit attendees noted that future incentive structures must also be able to adapt to these shifts. This kind of vigilance will require institutions to regularly review policies to ensure they align with both institutional goals and researcher needs.

Some of the main performance indicators institutions can use to evaluate the success of their incentive programs include:

- Track the quality and number of invention disclosures.

- Develop data that looks at the diversity of faculty members engaging in technology transfer.

- Ensure there is an alignment of technology innovations with the market's needs and corporate partnerships.

- Create an ecosystem that tracks and supports the advancement of startups through various stages of their technology's development.

- Measure the impact on student placement and engagement in tech transfer innovation activities.

> " Access to additional funds. It's not so much that they can then buy a Lamborghini. It's more that they can then continue to do more research in their department. It gives them a little bit of breathing room."

Recommendations and Key Takeaways:

- Ultimately, incentives enable the technology transfer industry to nurture a philosophy of innovation inside academic institutions.

- It's important to thoughtfully design incentive structures that serve the varying needs and motivations of researchers at different career stages. Benefitting the institution and researchers leads to societal impact by translating academic discovery into real-world applications.

- As higher education across the world continues to evolve in the coming years, technology transfer will play an increasingly vital role in communicating the value and impact of universities.

- If institutions prioritize creating the right kinds of incentive structures for researchers, they will stand at the forefront of innovation and gain a reputation for creating positive contributions for both academia and society at large.

Panel Discussion and Breakout Session

SOCIAL RESPONSIBILITY AND INVESTMENT

Social impact emanates from everywhere, which is a key reason why AUTM intentionally pivots its International Knowledge and Technology Transfer Leadership Conference to a different continent each year. Fostering this kind of inclusion has enabled global innovation to reach its full potential by opening doors for a diverse mix of attendees. The conference welcomes input from esteemed tech transfer leaders around the world who each bring different life experiences and perspectives to the forefront of the industry. This kind of unique collaboration advances new technologies not only for profit, but societal impact.

At the 2024 Conference in Cape Town South Africa, Summit participants discussed some of the key challenges they face in their respective countries, how they mobilize resources effectively, and the recognition of tech transfer as a social responsibility that remains vital for driving societal progress through innovation. Through frameworks including the Theory of Change (ToC), initiatives such as social impact licensing, and a renewed focus on aligning various stakeholders from the project's onset, the research community has developed a thriving system that fosters innovation with social value creation. Participants agreed that the social responsibility journey to connect societal impact and research is complex, one that requires careful planning and a mutual investment from all stakeholders. Yet with the right resources, knowledge sharing, and alignment, Summit participants see hope and noted the tech transfer community is remarkably poised to discover scientific knowledge that can be commercialized to benefit society at large. If universities and research institutions learn how to better integrate social responsibility into their commercialization activities, they will successfully balance profit with societal benefits.

Egypt: A Model for Bringing Female Innovators into Tech Transfer

According to data from the World Economic Forum, only an estimated one in four Egyptian entrepreneurs and one in six established business-owners is female. Unfortunately, many women in Egypt who aspire to be innovators face significant social barriers, a lack of specialized training, poor educational backgrounds, and limited access to finance.

An assistant vice president for innovation and entrepreneurship from a university in Egypt who attended the Summit shared a remarkable success story about a project specifically created for female researchers in the country.

> " You need an alignment of founders, investors, and management to see that potential, that cultural piece. Are we spinning out these companies purely for profit? Or is there a sort of social imperative, a social benefit to be had there?"

In April 2024, The National Intellectual Property Academy of Egypt (NIPA) and the World Intellectual Property Organization (WIPO) Academy completed a joint initiative to upskill and educate women researches across Egypt on how to integrate an intellectual property (IP) strategy into their work. The project included an online training phase followed by an in-person mentoring phase, both of which were spearheaded by the WIPO-certified trainers of NIPA, a WIPO intellectual property training institution (IPTI). Nearly 100

candidates from different industries were selected for this highly competitive opportunity. Through the project, female innovators became empowered to make more informed decisions about their IP. The training they completed covered the basics of IP, IP policies in Egyptian academic institutions, and effective IP management techniques for commercialization and monetization. Each lesson, very importantly, also featured real-life case studies from Egypt for the female researchers to use as a learning tool.

Projects like this initiative in Egypt can be a powerful catalyst to bring social equity to innovation. WIPO notes that only around 16% of inventors named on international patent applications are female, meaning a vast minority of women entrepreneurs hold patents globally. This translates to approximately one female inventor for every five male inventors.

Recommendations and Key Takeaways:

- According to the World Intellectual Property Organization (WIPO), only around 16% of inventors named on international patent applications are female.

- In April 2024, The National Intellectual Property Academy of Egypt (NIPA) and the WIPO Academy completed a joint initiative to upskill and educate nearly 100 women researchers across Egypt on how to integrate IP strategy into their work.

- Projects such as this initiative can be a powerful catalyst to bring social equity to innovation.

Global Perspectives: South African and Europe

The chair of the Southern African Research and Innovation Management Association spoke of the importance of understanding challenges fellow tech transfer professionals face in their respective countries, particularly if those challenges are different from what is familiar. He stressed the importance of adopting novel solutions to local problems, and noted that the Summit offers a critical opportunity to learn best practices from other communities.

Recently, the European Commission made a pivotal shift in focus towards value creation, along with prioritizing societal impact and citizen science engagement. The Association of Science and Technology Professionals (ASTP), which is Europe's association of knowledge transfer professionals with two decades of experience in advocating for the profession, highlighted a special interest group focused on social sciences, humanities, and arts (SSHA). The group's goal is to share information and contribute to periodic reporting requirements for universities. The initiative reiterates that social impact can stem from all disciplines.

> **It is extremely important for us as professionals that if we talk about social impact, we have a common understanding of what it is, and certainly, if we try to measure it."**

European Commission Thrives with Social Impact Licensing

Impact licensing initiative (ILI) is another key project that leverages data and technology using innovative licensing strategies. It's led by the European Commission and has a dual mission: to tackle the most challenging problems impacting European society, giving equal importance to the social impact of intellectual property as well as its economic value. When it comes to quantifying each of these attributes, it's critical to incorporate impact assessment methodologies including ToC from the project's beginning. The United Kingdom's Research Excellence Framework (REF) impact case studies also offer a useful reference guide for technology transfer professionals that uses real examples of research

impact across varying disciplines. Summit attendees agreed that tracking impact requires vigilance in using indicators. Solely looking at single indicators can, for example, lead researchers on the wrong path to fulfill the indicator, instead of succeeding in the primary goal to deliver a genuine societal impact.

Recommendations and Key Takeaways:

- Product-market fit is an important step that requires looking at how successfully a solution or technology addresses market needs.

- Theory of Change is a way to describe how technical innovations or solutions help solve broader issues impacting society.

- Input and output indicators refers to creating frameworks that reflect on both indicators -— the resources invested or input and the results accomplished, or output.

- Impact Licensing Initiative (ILI) is led by the European Commission and has a dual mission of giving equal importance to the social impact of intellectual property and its economic value.

Challenges: Quantifying Societal Impact

Although some ventures may be solely driven by profit, many research projects are rooted in deep social impact that is important for all stakeholders to understand. Social scientists play a critical role in explaining what exactly societal impact means. These professionals are specially training in using the scientific method to study both humans and the often-complex relationships that exist in the communities where people reside. Most consortia projects require social scientists to measure societal impact using parallel work packages, yet, they face challenges. For example, communication issues between social scientists, funding agencies, and technical or research subject matter experts can arise when there is a difference in project expectations or a scarcity of standardized methods to assess impact. This is one reason why aligning founders, investors, management, and scientists remains a critical component of weaving social responsibility into university spin-outs.

Recommendations and Key Takeaways:

- At a project's onset, it's critical for all stakeholders to align on a framework and determine collaboratively whether their spin-outs are for profit, are socially driven, or have elements of both.

- Social scientists use scientific methodologies to study the relationships of humans and societies;, they are an important part of the team required to lead a genuine investment in social responsibility.

- Investor participation is an important component to recognize from a project's onset. Ideally, investors should align with the project's mission and have a history of backing socially responsible ventures.

Panel Discussion and Breakout Session

FRAMEWORKS AND ADVOCACY

Moderator:

Anji Miller, Senior Business Manager, LifeArc

Panelists:

Marco Alemán, Assistant Director General, WIPO
Varinka Farren, Executive Director, Andes Pacific Technology Access (APTA) Hub
Heba Labib, Assistant Vice President for Innovation and Entrepreneurship, Nile University
Stephen J. Susalka, CEO, AUTM

Why are Frameworks and Advocacy Important?

Although tech transfer plays a crucial role in driving innovation around the world, many people including policy makers and institutional leaders do not understand exactly what commercialization means. This is where advocacy comes into play, making it an essential way for tech transfer offices to communicate their activities and most compelling news to the outside world. In this session, Summit participants analyzed the key strategies and best practices for tech transfer advocacy. They agreed that by focusing on impact, coalition building, proactive outreach, and best practices, offices can strengthen their influence and drive positive societal change. Although advocacy looks different in various corners of the world, its core goal remains the same: to champion how tech transfer translates research discoveries into real-world benefits for society and economies. Ensuring the successful implementation of effective frameworks is also a critical part of advocating for the advancement of tech transfer. Frameworks are important tools, particularly since they provide tech transfer offices with structure, resources, and guidance from working models. Tapping into a strategic approach in both frameworks and advocacy is what Summit attendees believe will ultimately help to best maximize the impact of tech transfer initiatives.

> **We need to exemplify not only the power of technology transfer, innovation and the profession, but also how advocacy can really support it and make it even more impactful."**

Key Strategies for Advocacy

Truly effective advocacy always aims to inform and influence key decision makers. For the tech transfer sector, advocacy is very much needed to reach a number of goals: raising awareness about the role and value of tech transfer, securing funding and resources, helping to shape supportive policies and legislation, and building strategic partnerships and coalitions. Summit participants noted advocacy can take varying forms depending on its context, and is of the utmost importance in the industry whether it happens inside institutions or externally.

Focus on Impact and Benefits

It's especially important when advocating for tech transfer to focus on its broader impacts and benefits, rather than the many technical details that could be conceptually difficult for stakeholders to grasp. Key messages should emphasize the important big picture concepts that are easily relatable:

- Economic development and job creation

- Solutions to societal challenges

- Improved quality of life

- National competitiveness and security

One Summit participant astutely noted that both politicians and decision makers in the government have no particular interest in the tech transfer technicalities of how it's done. Instead, it's better to veer the discussions with these stakeholders to the bottom line of jobs created, local trade, subject matter expert support, economic prosperity, and in some countries, national security.

For tech transfer offices with limited resources, it's also important to focus advocacy efforts strategically, so it captures the most impactful areas. Strategies might include:

- Respond selectively to policy issues connected to technology transfer

- Create a clear approval process for advocacy positions including talking points to ensure branding consistency

- Consider posting public messages to increase exposure

Communicate Compelling Stories

Though quantitative data is useful, it's heartfelt stories and real-life examples that become the best strategies for impactful advocacy. If a tech transfer advocate can paint a picture for key stakeholders of specific success stories, ideally focused on technologies that have made a difference on a large scale in society, that image will remain ingrained in the stakeholders' minds long past the initial meeting. One Summit participant noted that it's these kinds of stories that become light bulb moments, the ones that hit home, that people talk about. There are many ways to communicate stories in our world right now, ranging from the press to social media, videos, webinars, and other resources. It may also be beneficial for an office to consider hiring a specialized tech transfer marketing professional who understands the complexities of the industry, how to best articulate the future potential of innovations, and has a proven track record of success in publicizing this fascinating field to the media and other external audiences.

> **We need to start to change the story a little bit. So instead of concentrating on technology transfer models and mechanisms, we need to start with the economic and social benefits that come out of a knowledge economy."**

Build Coalitions and Partnerships

On their own, technology transfer offices can often have limited influence in the industry. Yet, if they build coalitions with other key stakeholders, they can significantly amplify their advocacy efforts. AUTM, for example, often works in collaboration with other tech transfer coalitions. Potential partners that offices might want to consider building coalitions with include:

- University leadership

- Industry associations

- Economic development organizations

- Other technology transfer associations

Associations can also amplify advocacy efforts by growing memberships. Strategies to empower and attract more members could include providing talking points and position statements, creating online advocacy toolkits and templates, and encouraging members to engage with local policymakers. It's important to also ensure advocates both understand and are inspired by the research innovation that can help improve their communities.

Remain Visible and Proactive

When advocating in tech transfer, it's always important to be proactive instead of waiting for a stakeholder to make the first move. Helpful strategies to initiate this kind of proactive approach include:

- Volunteering for government initiatives and committees

- Meeting regularly with policymakers and staffers

- Hosting events, in person and online, and inviting key stakeholders

- Speaking to the press, offer to be a resource and subject matter expert

- Working with the university to ensure someone from the tech transfer office is listed as a press contact and subject matter expert on the institution's website

Key Takeaways and Recommendations:

- **Understand the audience.** It's critical to shape messages and approaches, pivoting when needed so that they resonate with a specific audience. Whether that's university leadership, policymakers, or other stakeholders, it's crucial to use language and advocacy framing that strikes a chord with stakeholders' priorities and interests.

- **Include data and evidence.** Although stories of impact can serve as extremely powerful advocacy tools, it's important to back up advocacy efforts with clear data and evidence of that impact. For tech transfer offices, that means collecting and analyzing relevant information pertaining to technology transfer outcomes.

- **Align with broader strategies.** It's important to frame technology transfer in the context of broader institutional or national innovation strategies. When thinking about advocacy, think broadly about how it supports the existing priorities and big picture impact goals.

- **Grow relationships.** Developing lasting relationships with key stakeholders is more effective than one-off interactions. It's key to look for opportunities to network and establish networks where tech transfer office professionals can be seen as trusted resources who are needed on the pathway to innovation.

- **Prepare advocates with training.** It may be a smart idea for offices to consider implementing a formal advocacy training specifically designed for tech transfer professionals. This kind of training would ensure that those engaging in advocacy are equipped with the right knowledge, skills, and messages. It would also ensure branding consistency when advocates speak externally about the innovation initiatives.

- **Start small, then expand.** In some tech transfer offices, it may be more effective to begin advocacy frameworks with small steps, rather than pushing for massive changes rapidly. One Summit participant suggested considering a frog in a pan approach, meaning incremental introductions of technology transfer concepts to key stakeholders.

Frameworks for Tech Transfer

Seeing through a different lens can be an invaluable tool in tech transfer. Summit participants noted that this kind of knowledge exchange of global stories and best practices serves as a powerful tool in advocacy.

Several countries are creating their own national frameworks, along with legislation, for IP and tech transfer innovation.

- **In New Zealand,** the country's science system is undergoing major reforms. Its tech transfer offices are determining how to create national frameworks for both IP and tech transfer. By reviewing international examples from other offices around the world, they hope to inform their own principles for structuring deals.

- **Chile** has developed its own framework using a specialized toolkit that guides university and industry relationships. Their guide includes a decision tree that helps tech transfer professionals evaluate important initiatives like building relationships and considering business models. Chile's tech transfer professionals are also building separate frameworks for university-company and university-startup relationships.

The USIT Guide Framework

The USIT guide's international framework builds upon the experiences of universities, investors, and founders, offering a standardized system aimed at inspiring scientists and researchers to turn their ideas into thriving spinouts. The framework was initially developed by an advisory group in connection to a government review. TenU, an international collaboration that captures effective practices in research collaboration, supports the USIT guide. Its members believe the framework allows both universities and venture capitalists to speed up the process of developing spin-outs by providing direction and advice in areas like equity share and IP. Ultimately, the framework leads to creating spin-outs faster and attracting increased venture investment. It also offers support to universities so their researchers can have the resources they need to create companies that seek to solve some of the most important problems society faces.

Panel Discussion and Breakout Session

CHALLENGES AND FUTURE DIRECTIONS

Embracing a Changing Landscape

Vast change continues to shift the landscape of knowledge and tech transfer in academic and industry sectors alike, bringing a dichotomy of substantial challenges and tantalizing opportunities. Although many tech transfer offices have progressed from their long-standing job responsibility to license and protect IP, they now must contend with broader responsibilities. Summit attendees discussed the shared challenges they currently face that are shaping the future of innovation: AI, supporting startups, and managing investment programs are top among that list. They spoke of the need to adopt a collaborative approach, which enables industry professionals to move forward and adapt despite continuous challenges. Participants noted that by leveraging emerging technologies like AI, tech transfer becomes strategically poised to be in the right place, at the right time, and play an important role in driving future innovation. It's also necessary to help colleagues in emerging regions around the world that lack resources. This is particularly important since innovation can happen anywhere, but the future of tech transfer commercialization cannot. It can only happen where there are flourishing ecosystems that connect the public, scientific research, and industry.

Tech Transfer Offices Evolve with New Roles

Though tech transfer offices continue to maintain their critical responsibilities of managing patents and agreements, something else is happening within their walls: they have become significant hubs for nourishing innovation. These offices now have the increasingly important responsibility of engaging with industry in a more meaningful way. They strive to create holistic ecosystems where knowledge sharing flows freely, partnerships are boosted, and research outcomes are customized to meet industry demands. Yet in order to fully reach this goal, tech transfer offices also need to broaden and pay careful attention to communication, relationship-building, and acquiring new skills. Summit participants noted their future focus should include growing more robust networks with industry partners, a pivotal step for research to translate into real-world use.

International Perspectives: What Does Tech Transfer Look Like Globally Right Now?

The challenges and opportunities tech transfer professionals encounter around the world vary markedly.

- **Puerto Rico:** This region's tech transfer industry aims to bridge academic research and real-world technology application with a heavy focus on incorporating advanced workforce components into the country's tech transfer initiatives.

> " We know that people who are doing knowledge transfer need to become really good storytellers. A) to inspire the academics to come forward, B) to inspire the rest of the world to want to take the technology and partner, and C) to explain to the rest of the world exactly what it is we do

- **Ghana and Thailand:** These countries face significant obstacles, such as lack of resources and low pay, that can make it challenging to develop tech transfer initiatives. They hope to offer more substantial support for local research and to better encourage collaboration between universities, investors, and researchers. The West African tech transfer attendees noted they are especially proud that a lot of cutting-edge research emanates currently from their universities.

- **New Zealand:** As a geographically remote country with a smaller population, New Zealand faces challenges when it comes to determining the best methods for scaling its tech transfer initiatives. Reforms currently underway in the country's national science system intend to address many of these issues in the coming years.

- **India:** By the end of the decade, India is projected to be a $5 trillion economy. The country remains focused on scaling its tech transfer offices, hoping to build a future pipeline of trained professionals who can fill the many job demands in the industry they believe will continue to increase in coming years.

> **"You hear about the inventor. You hear about the spin-off company. A new communications person came to us and said, you know, you don't talk about yourselves at all. And suddenly, you have a stark realization that you are not including yourself in the story."**

Communicating Strategically: How Do You Simply Explain the Value of Tech Transfer?

Many attendees spoke of the long-standing problem plaguing the tech transfer industry: infinite confusion. Questions arose including: how do you communicate to the public what it is that a tech transfer professional does? How can you get a person to care, to see the everyday impact of a technology's potential that does not yet exist? These were among the talking points that emerged in this discussion, which centered around the importance of explaining the industry to different stakeholders ranging from the broader public, academic institutions and government, to key financial players. The general consensus among attendees was that too many people do not fully comprehend the pivotal role that tech transfer plays in innovation, ecosystems, and driving economic growth. Several attendees pointed out a positive: that academic institutions, particularly with the popularity and proven impact of social media, are increasingly recognizing the significance of storytelling. Many noted there is an urgent need for skilled communicators to translate complex technology transfer processes into understandable, relatable stories for diverse audiences. It is then that they can start to envision how a technology innovation might help solve one of the problems afflicting society. Case studies, particularly those with tangible social responsibility impact data, can also be an important tool that several attendees noted they use in their marketing practices.

Technology Transfer and Diversity, Equity, and Inclusion (DEI)

Across the world, there remains an insatiable desire to ensure diversity, equity, and inclusion (DEI) principles are reflected in new products, new companies, and new technologies. Like much of the tech profession in general, the technology transfer community has long been plagued by a lack of representation of minority demographics. Yet in recent years, as seen in Egypt and several other regions, women and other historically underrepresented groups have broken into the tech transfer profession. Although political climates in certain regions have hindered the ability to move DEI initiatives forward, Attendees agreed that making sure the industry grows inclusively and equitably is essential for its sustainability. It's also essential to recognize innovation knows no bounds and can happen anywhere, including pockets of the world with few resources. Summit attendees noted that an inclusive workforce opens up unlimited possibilities for fresh perspectives and idea exchanges, which is perhaps one of the most vital components of advancing innovation.

Growing Future Generations of Tech Transfer Professionals

Tech transfer professionals in many countries, including India which is experiencing rapid growth, noted the critical importance of training and inspiring future generations of tech transfer professionals. Attendees spoke of a growing need to hire a diverse group of professionals. In particular, they emphasized the importance of hiring professionals with skillsets not only in law and business, but also in communications, marketing, and storytelling. Future generations of tech transfer professionals will need to adapt, multitask with a range of job responsibilities, and develop high levels of emotional intelligence and interpersonal relationship skillsets that empower them to work smoothly with an increasingly diverse and interdisciplinary team. Training programs in tech transfer for future generations should make sure to explore and offer knowledge that goes beyond the surface. The right courses, webinars, events, and industry partnerships can help equip the future workforce of tech transfer experts with the abilities they need to thrive in a rapidly changing environment. Although lectures and workshops can be valuable, Summit participants noted hands-on experiences in real-world scenarios will teach tech transfer professionals far more about the field.

Embracing AI in Tech Transfer

Perhaps the most notable trend currently impacting the future of tech transfer is the growing role of AI. Already, AI has revolutionized many parts of the tech transfer process, such as finding new commercialization opportunities and automating routine administrative tasks. As these AI capabilities grow in their levels of sophistication, they will be able to take over even more of the data-intensive tasks that have historically eaten up a significant part of tech transfer jobs. This change, though it may require developing new skillsets in learning best practices as to how to work with AI,

AI is becoming a more transformative tool that's helping to shape how we operate."

also presents exciting opportunities for tech transfer professionals. For example, AI can allow experts in the industry to devote their attention to the more complex and strategic aspects of technology transfer like engaging industry, developing partnerships with key stakeholders, and creating solutions geared to specific business or societal needs. Although it's inevitable that the automation functions will lead to increases in efficiencies and scalability, Summit attendees agree AI is unlikely to replace the essential human aspects of the tech transfer profession required for building relationships, driving innovation, as well as navigating complex ethical and regulatory climates.

Recommendations and Key Takeaways:

- **Growing industry collaboration:** The demand for more robust synergies between academia and industry continues to increase. Tech transfer offices now have broader responsibilities and will assume a more central, and also vital, role in building these relationships and connections. They will increasingly need to ensure their research outcomes align with the most pressing market and societal needs.

- **Holistic innovation:** Tech transfer offices will also evolve to form a more inclusive, wider, and comprehensive ecosystem driven by knowledge transfer. There will be a deepened emphasis in coming years on solving real-world problems through interdisciplinary collaboration and data informed user research.

- **Promoting DEI and equity:** The key to driving innovation on a global scale lies in making sure that the tech transfer field remains inclusive and diverse. Recruiting and attracting talent from varying backgrounds, as well as learning new strategies and best practices from tech transfer professionals in other corners of the world, remain two of the most important ways to ensure DEI thrives in the global tech transfer community.

- **Embracing AI and automation:** AI is poised to become a helping hand for tech transfer professionals faced with an increasing amount of responsibilities. AI is a tool that improves efficiency, which is an important attribute since it relinquishes tech transfer professionals of certain job duties so that they may focus on more high-value, strategic tasks that require complex creative and emotional intelligence AI cannot replicate.

- **Persuasive communication and advocacy:** In the growing world of tech transfer, it is even more critical that professionals in the industry promote its value. Advocating in society, policy, and academic institutions is another key role of tech transfer offices. Storytelling, particularly in a way that everyday people can understand, will also continue to play a pivotal role in growing the industry and catalyzing innovation.

Panel Discussion and Breakout Session

PROFESSOR'S PRIVILEGE

Moderator:

Lars Andersson, Assistant Director, Technopolis

Panelists:

Diana Adobea Owusu Antwi, President, West African Research and Innovation Management Association
   (WARIMA) and Senior Research Development Officer, Ghana
Alessandra Baccigotti, Knowledge Transfer Manager, University of Bologna
Andrew Bailey, Senior Manager of Innovation, University of Cape Town
Urša Jerše, Head of Knowledge Transfer Office, University of Ljubljana
Stuart Wilkinson, CEO, Praxis Auril

A session on ownership models and challenges in tech transfer took a deep dive into both the pros and cons of professor privilege and student innovation. Although academic institutions play a critical role in advancing new knowledge and innovations that can help benefit society, there are a number of complicated challenges to consider when it comes to the ownership and commercialization of IP. Summit participants noted that ownership and commercialization often lead to complex tradeoffs. They emphasized the importance of incorporating various ownership models, understanding their implications for tech transfer offices, and ensuring consideration of issues surrounding fairness and student IP rights. Although institutional ownership offers greater control and consistency, professor's privilege can empower and inspire researchers, an important outcome since the goal of commercialization lies in maximizing public benefit from research. Session participants agreed that in order to achieve successful technology transfer, there needs to be the right funding, relationships with stakeholders, and culture regardless of the specific ownership model. Offices are increasingly facing the challenge of how to build trust and value to researchers and students, while also carefully navigating these complexities.

> **The institution has a stake or an interest or a responsibility to commercialize, or to exploit, or to have an impact from that research that seems to happen in a more organized way than if it's down to the professors individually to do it."**

Ownership Models: Professor's Privilege vs. Institutional Ownership

Summit participants noted that many countries have veered away from the professor's privilege model, which enables researchers to own the IP they create. Instead, many have switched to institutional ownership, which gives a research institution the ownership rights to a newly developed technology or IP. While the rest of Europe has removed professor's privilege from its ownership models, Sweden remains a country that chooses to maintain the practice, empowering its researchers to own the IP they create. The Swedish model has gained some success using this model, particularly with its incubator. The country's incubator boasts an impressive history running one of the top business university incubators in the world without owning it. Instead of focusing on IP, this model considers more intangible assets. Its true focus lies in creating value.

Key Ingredients for Successful Tech Transfer

Irrespective of the ownership model, Session participants identified a number of key factors as crucial ford successful tech transfer and commercialization:

- **Culture:** Summit participants agreed that culture is a fundamental piece of the jigsaw puzzle of funding, especially since filing patents costs significant money.

- **Funding:** When thinking about funding and where it comes from, it's important to consider having a mix of revenue streams and not solely relying too heavily on one source. If an institution retains ownership of IP, it should consider whether it can invest in that.

- **People:** Noting that tech transfer commercialization is a complex industry, Summit participants discussed the importance of hiring different types of staff who can successfully assist with the intensive IP due diligence that is required to move inventions forward.

- **Trust and building relationships:** One of the most critical components of successful tech transfer lies in building trust. Ownership is not nearly as important as is ensuring that the people surrounding the researchers are supportive and understand the impact of their invention, as well as how to communicate that to key stakeholders.

- **Providing value:** In addition to determining the ownership structure, it's critical to provide the value. Offices must ensure this value is clearly understood by the team that is supporting the research and innovation.

- **Fairness and public benefit:** A key consideration is ensuring fairness, especially with public research funding. Since an institution's primary goal is to disseminate knowledge for the public good, they must be willing to relinquish control to allow freedom and opportunity. Revenue sharing models that equitably distribute IP could be a way to help balance interests.

Challenges and Advantages: Institutional Ownership

While institutional ownership yields more control, it also brings complications, for example, resource constraints. Session participants noted that in some cases 99% of their students complete their master thesis projects with researchers inside the faculty. They choose this path instead of looking outside, yet go outside to work. Bureaucracy can be another challenge, particularly when tech transfer offices are already overwhelmed by patent or key performance applications, and not real patents. Enforcement difficulties can also arise and present their own challenges to tech transfer offices. Session participants noted they have to proceed carefully with their researchers and records and that it is often a delicate balance. They noted the desire to want to own everything and maintain control can be widespread, and it can worsen if tech transfer offices become too tough with their researchers. On the plus side, one advantage lies in understanding that institutional ownership is not rocket science. It does come with responsibility but that can be a critical asset for a university, especially now when many are losing funds and rapidly shifting their landscapes and resources. With ownership, universities maintain a stake in innovation, but they have to carefully assess the situation and decide: does it make sense to own the patent or would it be a more advantageous move to grant the rights back to the inventors?

> **The students of today are very different than the students of my era. They are coming to university not to get a degree, but to change the world."**

Student IP Ownership

Student IP ownership in tech transfer can be particularly complex. Summit participants had divided views on whether or not students should have the opportunity to own their IP. On the plus side, students who own their IP feel proactively empowered, which can lead to a ripe environment for innovation. Yet, there is also a downside to student ownership. For example, where the university is getting the fame, it's not getting the fortune out of the invention, and instead it is the students who tap into that benefit. Also, universities lose their exposure to a network and dealing, along with the opportunity to determine how to commercialize the invention. Legal complexities also make student IP complicated. Several questions arose from Summit attendees such as: under what legal framework can a university claim? Are students benefiting from any other services from the university and if that's the case, what implications arise from this situation? Some participants noted that claiming student IP is the same as claiming next door universities. In some countries such as New Zealand, tech transfer offices have adopted a varied approach to student IP. In this country, all students own their own IP yet with PhD students, there will often be an agreement upfront that assigns the IP to the institution for purposes of commercialization.

Key Recommendations and Takeaways:

- **Policy knowledge:** There is a vast need for tech transfer offices to understand the policies at stake, including the pluses and minuses. They must be able explain this information in an easily digestible way to key stakeholders.

- **Articulate value:** If a professor owns a critical technology, a tech transfer office must show its value in order to get that professor engaged so that they are excited to venture into a partnership towards commercialization. The key to this skillset lies in building trust, so professors engage with tech transfer offices from the onset of their work.

- **Anticipate challenges:** Many challenges can arise given the complexity of various ownership models. For example, if the professor owns a technology, how can tech transfer offices plan ahead with staffing and resources? This can be particularly challenging when it's not yet clear how many professors will seek out assistance in commercializing.

- **Resolve conflicts:** Co-inventor disputes can surface anytime, anywhere. One frequent example happens when two or more professors create an innovation that they each own, but they struggle to agree on a percentage breakdown of that ownership. They can't decide who owns the invention, if it should be 50/ 50, or 80/ 20, for example, but they need to decide in order to move forward. How can tech transfer offices help encourage them to make a decision?

Panel Discussion and Breakout Session

COLLABORATIVE OUTCOMES AND NETWORK BUILDING

The Summit featured a critical discussion that highlighted the growing importance of collaboration and network building among tech transfer professionals around the world. Summit attendees looked at the benefits of building a united global network that shares best practices, challenges, and ultimately enhances the global impact of tech transfer activities. Key themes that emerged from the discussions included: examining the complexities of quantifying innovation, understanding the significance of mentorship, and building strategies to help with engagement and low disclosure rates, particularly in regions of the world with potentially groundbreaking innovation but few resources to commercialize.

Quantifying Progress: Can Innovation be Measured?

The U.S. tech transfer community relies upon research expenditures to serve as a primary method for tracking an institution's growth. This monetary marker offers a concrete way to evaluate research activities, yet challenges can arise, for example, when a researcher attempts to quantify tech transfer outcomes and innovation using softer numbers that are often easily susceptible to manipulation. Some institutions have tried to enhance their startup statistics by building countless paper startups that exist primarily on paper but lack funding and legal establishment. To address these challenges will require a detailed system with standardized, auditable metrics for measuring innovation that also stops the incentivization of counterproductive behaviors. Since not all activities of value can be tracked and measured, there is an additional need to strike a delicate balance between tracking numbers and going after new initiatives that align with the organization's long-term vision. This becomes especially paramount when understanding the role of foundational research, which may not bring prompt, quantifiable results, but is nonetheless vital for future innovations.

The AUTM Licensing Survey: Tracking Trends in Technology Transfer Metrics for 35 Years

Since the 1990s, AUTM has been conducting its long-running benchmark licensing survey, which examines industry trends and provides valuable insights into the complexities of the field. The survey captures critical performance indicators such as invention disclosures, licenses, patent applications, research expenditures, and startups. Over the years of administering it, efforts have been made to utilize additional data that can provide more nuanced insights into tech transfer initiatives. There have been some challenges with balancing this case for more data, while also ensuring the survey's response rates remain high. Nonetheless, insights from the survey's data analysis continue to reveal important trends, including the overall stability of exclusive licenses contrasted to the increase since 2005 in non-exclusive licenses. This change may signal a decreasing focus on patents, which also illustrates the growing significance of startup companies in tech transfer.

> " It's a great opportunity for me to share the experiences and learn from you all to make the capacity at the European world level much better."

Why Are Mentorships Important in Tech Transfer?

The tech transfer profession is a complex and distinctive landscape that requires in- depth understanding. It's important for longtime practitioners in the field to recognize the value of mentorship in helping new tech transfer professionals learn the complexities of this specialized and unique industry. By leaning into knowledge sharing and peer- to- peer support in tech transfer, particularly with colleagues in countries that lack resources, professionals from all walks of life have the opportunity to add value. This brings not only innovation, but equity and diversity of idea exchange to the industry. In a similar sense, by fostering collaboration between established corporations and startups, the gap becomes bridged and creates a more equitable playing field. These kinds of synergies where a successful company can offer tips to an emerging spinoff helps accelerate the commercialization of pioneering technologies. In this sense, mentorship offers the tech transfer industry the opportunity to fuel economic growth, and shape emerging companies that will help grow ecosystems.

Worldwide Collaboration: The Research Management Roadmap and Global Innovation Index

The Research Management Roadmap project taps into the expertise of experts from a wide array of countries including Spain, Italy, and South Africa. In Europe and throughout the rest of the world, this highly collaborative initiative seeks to enhance capacity in research management, technology, and knowledge transfer. The project encourages leaders to share their respective experiences and learn from one another, which helps to collectively boost the profession. The Global Innovation Index, another potential model, offers a new structure for quantifying innovation at institutional levels. By incorporating this model, which relies upon both input and output indicators, tech transfer professionals may be able to find a more detailed and realistic overview that accurately captures an institution's innovation performance.

> **KiwiNet was established under the belief that we're much better off working together as a group and taking a team effort to commercialize, to perform tech transfer, than doing it alone.**

Enhancing Tech Transfer: Stories of Best Practices Around the World

Some regions, such as West Africa, face significant challenges in encouraging invention disclosures from faculty members despite their ongoing engagement efforts. While certain universities have experimented with providing monetary incentives for new disclosures, it's also critical that these incentives promote high-quality submissions rather than quantity alone aimed at securing a financial reward. By utilizing transparent and comprehensive evaluation processes, tech transfer offices can seek out the disclosures that have true potential for commercialization. Additionally, more tech transfer offices are exploring green transition strategies, which can empower small and medium enterprises (SMEs) who may be especially vulnerable to global environmental challenges. Several countries, including Turkey, are currently engaging in strategies that will help them to adapt and embrace this kind of green transition. By creating these specialized policies, businesses will be able to play a vital role in creating a sustainable future global economy.

Engaging New Inventors

Several institutions are increasingly focused on incentivizing disclosures from researchers who previously never engaged with a tech transfer office. This approach expands and diversifies the pool of researchers, with the ultimate goal of discovering new types of innovation that broaden the impact of tech transfer initiatives. It's equally important to understand that successful invention disclosure operations rely upon continuous communication and engagement with faculty members. By building this kind of culture with dependable support, tech transfer offices can develop superior disclosures that drive significant impact.

Key Takeaways:

- As tech transfer offices continue to navigate complex landscapes and research management, collaboration, adaptability, and a nuanced approach to measurement are key to their success.

- By learning from global experiences and continuously refining strategies, tech transfer offices can enhance the impact of their work and drive innovation forward.

- If offices are continuously engaging new faculty members, they propel discoveries and help strengthen the ecosystem. Tech transfer leaders can also offer their best practices to less experienced researchers eager to break into the industry.

New Zealand's KiwiNet Model: What Can it Teach Us?

New Zealand is currently undergoing a major science system reform — the largest in 30 years — which is why tech transfer professionals are particularly eager to benefit from the advice of the wider international network and expertise of other Summit attendees. The Kiwi Innovation Network, or KiwiNet, has been operating for the past 13 years as the country's primary consortium of tech transfer officers stemming primarily from universities and public research organizations. The model was established to benefit the unique attributes of New Zealand, which exists in a corner of the world far removed from major economic markets. The consortium aims to address challenges New Zealand faces such as its remote location, low population, and multiple research institutes with small offices, which can make it difficult to scale its pipeline. The consortium aims to be a front door for investors from the onset, working on building relationships within the private sector.

A proof of concept fund, called the Precede Accelerator fund, offers a 50/50 matched fund and takes no equity stake in the technologies being developed. Its main mission it to develop the emerging technologies that come through New Zealand's pipeline at the disclosure stage through to the point of investor readiness, with the goal of eventually reaching a license deal with an existing company or forming a startup alongside private investment. Through the Investment Committee, otherwise known as the engine room, approximately 20 members in the group meet eight times a year to collaboratively assess the projects coming down the pipeline.

Recommendations and Takeaways:

- The Kiwi Innovation Network, or KiwiNet, has been operating for the past 13 years as New Zealand's primary consortium of tech transfer officers.

- The consortium aims to address challenges New Zealand faces such as its remote location, low population, and multiple research institutes with small offices which can make it difficult to scale around practice and pipeline.

- KiwiNet was established under the belief that New Zealand tech transfer professionals are far better off working together as a group and taking a team effort to commercialize than working alone.

- A proof of concept fund, called the Precede Accelerator fund, offers a 50/50 matched fund and takes no equity stake in the technologies being developed. Its main mission it to develop the emerging technologies that come through New Zealand's pipeline at the disclosure stage.

- New Zealand tech transfer professionals benefit from the advice of wider international networks and expertise of other Summit attendees, particularly from countries with a more advanced tech transfer community.

Panel Discussion and Breakout Session

PRACTICAL APPLICATIONS AND CASE STUDIES

A session on practical applications and case studies delved into in- depth discussions on policy impacts, strategic planning, and tools and strategies that have proven effective in various institutional settings. Attendees brought stories of real-world examples of tech transfer in their respective countries, offering a lens into the global landscape of the industry comprised of both shared struggles and distinctive regional circumstances. Well-resourced tech transfer communities, as well as emerging ecosystems, aspire to have more impactful, equitable, and successful methodologies for translating their research into societal good. They believe their future success in tech transfer depends on their ability to: adapt to rapidly shifting technological advancements, build stronger collaborations and networks, and to address local needs while also striving for global innovation. Summit attendees spoke of the many challenges the world at large faces right now from climate change, to healthcare, to AI. At the same time, currently there is an unprecedented opportunity for tech transfer to be at the forefront of global innovation, something that has perhaps never been as important as it is right now.

> **We're synthesizing high density bubbles of potential partners, sector specific. We're just creating these micro environments where people can interact with each other where deals can happen. And we believe that this is important in order for the private sector to gain from the assets and knowledge of universities."**

The Evolving Role of Tech Transfer Offices

For decades, technology transfer offices throughout the world have performed the vital role of closing the gap between academic research and practical applications. These offices are entrusted with the complex responsibility of translating scientific discoveries into palpable benefits for society and the global economy. Yet, attendees from varying regions noted that the trek from lab to marketplace is often accompanied by difficulties. It's important to look at these challenges from a global perspective.

- **Chile**
  The emphasis in Chile has pivoted towards an increasingly demand-driven perspective, one that highlights the significance of industry pull in tech transfer. Leaders aim to scale their tech transfer models in the coming years by increasing their collaboration with natural resource businesses and regional clusters. In the next decade, tech transfer professionals hope to create an integrated Latin American tech transfer corridor.

- **Brazil**
  In a similar sense in Brazil, tech transfer professionals aspire to focus on scaling and capacity building, while also giving additional attention to expanding soft skillsets. Summit attendees from the Brazilian Association for Technology Transfer emphasized the need to embrace emerging technologies like AI, while also ensuring they're building relationships and trust with essential stakeholders.

- **Turkey**
Turkey's tech transfer community has focused its growth strategies on the green movement and socially responsible innovation. Professionals continue to develop strategies to better engage stakeholders on the importance of climate sustainability and hope to facilitate collaboration between big companies and cutting-edge tech startups.

> **Eventually, you will have the patents coming through. It's making sure that everything else is operating on the right level."**

Challenges in Emerging Economies

- **Malawi**
In Malawi, a landlocked country in Southeastern Africa, a movement has sparked a growing focus on developing science and technology research solutions for industrialization. The country also faces many of the same challenges other parts of the world grapple with such as climate change. Leaders in tech transfer are searching for ways to leverage university research, and solve local problems while also generating revenue. They also hope to develop a better understanding of how management in Malawi's emerging tech transfer offices can help build traction locally and nationally.

- **Namibia**
Namibia, which operates one of the youngest tech transfer offices in the world, struggles to find visibility on the global landscape and to secure funding from substantial international donors. This challenge resonates with several other tech transfer offices throughout Africa, drawing the rest of the tech transfer community's attention to a pressing problem: many of these regions need more targeted strategies to elevate their voices in global research.

- **Jordan**
In Jordan, tech transfer professionals discussed the need to call upon academic institutions so they can become more substantial assets and hubs for social and economic development. Jordan's tech transfer community struggles with limited resources and high numbers of universities. Tech transfer professionals are learning how to be increasingly resourceful, and how to create micro-environments where academia and industry can collaborate to drive innovation.

Network Building and Collaboration

Across the globe, whether a tech transfer office is well-resourced or underperforming, networking and collaboration in the industry remains paramount to the sector's future growth. To help ignite collaboration, many regional and international networks have emerged with the united purpose of promoting knowledge sharing and capacity building.

- **Africa**
The Southern African Research and Innovation Management Association (SARIMA) has immensely helped grow the region's research and innovation management capacities. Tech transfer offices have implemented a number of initiatives to support the establishment of research and innovation associations in Central Africa, East Africa, and the Caribbean region, providing training and a network that research managers and administrators can tap into to build their capacities.

- **Europe**
ASTP, the European tech transfer professional's organization headquartered in the Netherlands, is comprised of more than 800 members from 41 countries. Its members have spent the past two decades at the forefront of educating, connecting, and advocating for the profession. The nonprofit organization's platform regularly shares best practices and common challenges with its members. It aims to offer its community access to Europe's key innovation stakeholders.

How Can Tech Transfer Offices Measure Success?

Across the global community of tech transfer, a longstanding challenge plaguing the industry lies in understanding how to create clear metrics that evaluate success and impact. Conventional indicators such as patent filings and licensing revenues provide valuable insight, but there remains a growing awareness of the need for more nuanced and extensive evaluation practices.

AUTM

Since 1991, AUTM has been conducting an annual licensing survey that tracks key metrics such as research expenditures, invention disclosures, and startup formations. As the leading organization for tech transfer professionals in the U.S., there is currently a major initiative to grow these metrics and help professionals capture and communicate a more complete analysis of tech transfer impact.

The Global Innovation Index: Pros and Cons

Published by WIPO, The Global Innovation Index (GII) is an annual ranking of countries that measures how well a region's innovation ecosystem and capabilities perform across different sectors. It offers a benchmark for countries to evaluate their performance compared to their peers' successes around the world. Yet, as several Summit participants noted, it has become vital to balance tracking not only quantifiable outcomes, but also less tangible yet equally critical aspects of innovation and knowledge transfer. This index may not yet be able to capture these kinds of indicators.

Incentivizing Quality Disclosures

Many institutions, particularly in emerging economies, grapple with a low number of invention disclosures. Although several universities have implemented policies that provide monetary incentives for disclosures, Summit participants noted concerns when it comes to establishing the quality and high caliber features of these disclosures.

Attendees discussed the significance of maintaining ongoing engagement with faculty members and using transparent evaluation policies and strategies that help paint a clear picture of each disclosure's potential. Tech transfer professionals agreed that the overarching goal lies not only in increasing the number of disclosures, but building an altruistic culture of innovation. Increasingly, researchers are inspired by the future impact of their innovations and how it will benefit society at large, rather than its potential to bring financial incentives.

Recommendations and Key Takeaways:

- As the field of tech transfer continues to rapidly evolve, professionals face new challenges and also opportunities.

- The rise of AI, the growing importance of factoring in sustainability, and the need for more equitable innovation ecosystems are some of the key trends defining tech transfer's future.

- The COVID-19 pandemic reminded the tech transfer community of the importance of rapid knowledge exchange and global collaboration. In an increasingly complex and intertwined world, professionals continue to re-evaluate the roles and strategies in their tech transfer offices so that they can provide the most needed and relevant services.

Appendix A

Summit Attendees

Assistant Director General, IP and Innovation Ecosystems Sector, World Intellectual Property Organization, Geneva (Switzerland)

Mr. Marco Alemán has been dedicated to the protection and development of intellectual property for over 30 years. He is an excellent expert and scholar, who is committed to understanding the changing IP climate, and has comprehensive experience in multilateral negotiations.

Mr. Alemán has extensive knowledge and experience in intellectual property, including over 20 years of professional work at expert and managerial levels at WIPO. After acting as Director of the Colombian Industrial Property Office, he started his career at WIPO in 1999 at Cooperation Programs for the Development for Latin America and the Caribbean.

Now as Assistant Director General, Mr. Alemán is responsible for helping Member States develop their IP and innovation ecosystems to drive economic growth. He is also responsible for providing support for researchers, innovators, and enterprises, including SMEs. Other key focus areas include IP commercialization for business growth; emergence of IP as an asset class; development of advisory expertise on national IP strategies; economic analysis on the role IP plays in promoting innovation and creativity; strengthening ADR and the services provided by the Arbitration and Mediation Center; and providing technical assistance to the judiciary, as well as services related to the legal databases.

Emilia Alfonso Nhalevilo, Professor, has been involved in the area of RM since 2008 when she was appointed Deputy Director and subsequently Director of a Research Center in Mozambique. Through the years, she has played diverse roles in RM as for example: President of the Mozambican Association for Research in Mathematics, Science and Technology Education (AMIEMAC); President of the African Association for the Study of Indigenous Knowledge Systems (AASIKS); Executive committee member of the Southern Africa Association for Research in Mathematics, Science and Technology Education (SAARMSTE). She was SARIMA Vice President for the Africa Engagement portfolio (2013-2017) and this year she became SARIMA President.

Emilia holds a PhD in Science Education from Curtin University of Technology, Australia. She was a postdoctoral fellow at the UWC (South Africa) and a Fulbright researcher at the New York University (USA). She is the Vice Chancellor of Pungue University, Mozambique.

Mohammed Al-Jafari is the Deputy Chief of Party of the Higher Education for Innovation and Growth at iPARK, the Royal Scientific Society. He is a seasoned strategy, industry, investment, entrepreneurship, IP, innovation, and finance professional. With more than 20 years of experience in Innovation, he has engineered and successfully executed technological alliances across multiple sectors. Dr Aljafari is a member of numerous technical and advisory boards at academic and private institutions worldwide and is a World Intellectual Property Organization (WIPO) Expert in IP policy and management. Dr Aljafari has assisted tens of public and private institutions in support of innovation, commercialization and entrepreneurship. Dr Aljafari has a PhD in Pharmaceutical Sciences from Nottingham University.

Ahu Altinkut Uncuoğlu has been holding a full-time professor position in the Bioengineering Department at the Faculty of Engineering, Marmara University. She took part in the establishment of the Marmara University Innovation and Technology Transfer Office and served as the TTO Director. Prof. Uncuoglu, is co-founder of TarLab Biyoteknoloji Ltd. Co, which was established with the support of TUBITAK Technoenterprise Capital and develops biotechnological solutions for agricultural sustainability and climate change since 2019. Having RTTP, PMP and PSMI certificates, Prof. Uncuoglu, she is a member of the Executive Board of USIMP and serves as a member of the Group Executive Committee at TUBITAK Entrepreneurship Support Group since 2021. Since 2023 she is Associate Ambassador of Türkiye in EARMA Research Management Road Map Project and Member of Course Recognition Committee of ATTP. She is currently the Vice Director of University Industry Cooperation Development Application and Research Center of Marmara University.

Lars Andersson Lars Andersson is a Swedish innovation and entrepreneurship facilitator with a law degree focusing on business and IP. He has been working with academic based innovation and entrepreneurship for more than 25 years, first in Sweden, where he was part of the team behind Chalmers School of Entrepreneurship and what today is Chalmers Ventures, and Norway, where he worked a lot with the creative industries, and later in Thailand. His roles has included both support, education and research, but also to actively take part in promoting and managing the utilization of research results. He has also been directly involved in a few start-ups, and he just stepped down after 5 years as the vice president for innovation and education at the Thai-Swedish Chamber of Commerce.

Mr. Andersson is currently the Head of Innovation & IP at Suranaree University of Technology, in Thailand. He has been a critical contributor in the creation of a more entrepreneurial university, which means developing entrepreneurial skills, including the capabilities to manage IP, with both students and faculty, but also to upgrade the university's innovation system, to sustainably support the utilization of research results, innovation and spin-offs. Suranaree University of Technology wants to set a good example as an entrepreneurial university, not only for Thailand but hopefully for the whole region, for how a university can contribute to the strengthening of innovation and entrepreneurial capabilities in the society. This includes working

close with not only local and international industry, but also the local communities and government, to create a sustainable future, and IP plays a very important role in these processes.

Mr. Andersson's experiences are unique, having worked deep in the innovation systems in both a country that is considered to be one of the most innovative in the world, and one that has great aspirations but still has quite a long way to get there. It adds to his understanding of research utilization and impact, that Sweden is one of the few countries in the developed world that still allows academic researchers to own their own results, and that Thailand is at the other end of the spectrum.

Diana Adobea Owusu Antwi is an experienced intellectual property and technology transfer professional, with twelve years of experience in a university setting. She specialises in identifying, protecting, and commercialising intellectual property created by the university's researchers, students, and staff. Diana designs and delivers educational programmes to promote a culture of innovation and entrepreneurship. She has a proven record of developing policies, strategy, negotiating agreements and fostering university-industry partnerships to advance research and development.

Diana is a member of the University of Ghana Intellectual Property Committee; National Council of University Research Administrators, Association of University Technology Managers (AUTM); and Co-chair, African Subcommittee of the International Strategy Committee, AUTM. She has a Master of Philosophy in Economics from the University of Ghana and pursuing a Master of Arts in Law for Mirco, Small and Medium Enterprises. Diana has completed the World Intellectual Property Organisation Academy Continuous Training Program for Trainers of IP Training Institutions, and a Certified Data Protection Supervisor Course.

She can be reached by email at daowusuantwi@ug.edu.gh

Alessandra Baccigotti is Knowledge Transfer Manager and Head of the University of Bologna's Knowledge Transfer Office, where she is responsible for the team dealing with intellectual property protection and valorization for the Bioeconomy and Engineering areas. With over 25 years of experience working for the institution, she held positions as EU Research Advisor and Project Manager of EU funded programmes, among others. Since 2016 Alessandra has been collaborating with several European Commission units as expert evaluator for project proposals. She is also a member of Innovation working group of The Guild of research-intensive universities. She has been member of the ASTP Board for 4 years and is still collaborating with the association as expert for EU policies and matters related to research and innovation. Alessandra holds a Master in Open Innovation and Knowledge Transfer and is RTTP (Registered Technology Transfer Professional).

Andrew Bailey is the Senior Manager: Innovation in the Research Contracts & Innovation Department at the University of Cape Town, where he has been for 17 years. In this position, he is responsible for the TTO functions of the Department. RC&I also manages several seed and early stage "VC-type" funds that support the creation of spin-off companies.

Andrew is the Immediate Past President of the Southern African Research and Innovation Managers Association (SARIMA), and a member of AUTM (International Strategy Committee: Africa Co-Chair), represents SARIMA on the ATTP Council and is on the ATTP and ASTP "metrics" working groups.

Art Bos is Head of Business Development and Knowledge Transfer, Erasmus Research Services, University Rotterdam. He is also the Vice President of Impact on the ASTP Board of Directors.

Following a successful career with IXA VU/VUmc, Amsterdam, in 2021 Art commenced his new role Head of Business Development and Knowledge Transfer, Erasmus Research Services, Rotterdam, the Netherlands.

Prior to joining IXA, Art worked as Director Knowledge Partnering for Leiden University and Leiden University Medical Center in their joint TTO, Luris. Art has a master in Astronomy and Science Based Business from Leiden University. He now has over 10 years experience in Technology Transfer, Business Development and Licensing. He fully enjoys supporting scientists in initiating and shaping relationships with companies and other societal partners. He is also passionate about supporting teams spinning-out technologies into new businesses. In his previous positions, Art has supported projects from both the Natural Sciences and the Social Science and Humanities.

Isaac Chingota is Acting Director of Technology Transfer, Innovation and Commercialisation at National Commission for Science and Technology. He holds a Master Degree in Intellectual Property (IP) obtained from Africa University, Zimbabwe in 2011. He has acquaired considerable training in Intellectual property management, Conventional IP Protection systems, IP and Economic Development, IP and Small and Medium Enterprise (SMEs) development, technology transfer and commercialisation. In his position he provides leadership at National level on how technology transfer should be conducted in research institutions so as to address national socio-economic development goals. His key achievements include facilitating the development and institutionalisation of Procedures and Guidelines for Technology Transfer in Malawi, establishment of first ever technology transfer office in a public university and the acquisition and commercialisation of a local patent from research supported by Government.

Giuseppe Conti is General Director of IUSS, Institute of advanced university studies in Pavia. He is President of NETVAL (Italian Network for research exploitation), an association of Italian universities and public research institutes collaborating on the valorization of research results (107 institutional shareholders).

He has worked from 2010 to 2020 as head of Third Mission and industrial relationships, within the central administration at the University of Bologna. He has worked from 2003 to 2010 as head of Technology Transfer Office (TTO) at the Polytechnic of Milan.

In the domain of Universities' Third Mission and Technology Transfer, he has been RTTP (ATTP association) since 2023 and he has served as expert evaluator in the national Assessment of third mission and engagement of Italian Universities run buy ANVUR (National Agency for Assessment of Universities).

He has been Deputy Italian representative "SME and Access to Risk Finance" EU program – Horizon 2020. He has been a board member of the University of Bologna Foundation (FAM) and of Almacube, the incubator of the University of Bologna.
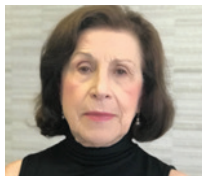
Shirley Coutinho is the past-president and member of the Board of Directors of FORTEC-Association Forum of Innovation and Technology Transfer Managers, and has been the head of the Technology Transfer Office at the Catholic University of Rio de Janeiro (PUC-Rio) from 2003 to 2022. She has obtained her Master Degree in Business Administration from PUC- Rio and before working in the field of IP and TT she has experience in various management positions held at VALE, Brazili's largest mineral and logistics company.

Varinka Farren is an MBA from Clarion University of Pennsylvania and Economist. Professor of Technology transfer and entrepreneurship of Adolfo Ibañez University, Chile. RTTP, Registered technology professional with more than 15 years of experience in the public, university and industry sectors in matters related to innovation and entrepreneurship. I have a comprehensive knowledge of innovation processes from R&D project management to effective transfer to the market. I have designed and implemented various technology transfer strategies and entrepreneurship programs that have allowed me to bring more than 50 technologies belonging to different industries to the national and international market. I have contributed to the creation of innovation units and programs and led various multidisciplinary teams. Recognized as the First Technology Manager of Chile in 2016, an award given by Corfo and the Network of Technology Managers (Red GT). Host of the #MadeInnChile podcast, the first program aimed at making visible the advances and challenges around technology transfer and scientific-technological ventures developed from Chile to the world. Currently Executive Director of Hub APTA and Co-founder and president of the association of directors of science-based companies Woman Board Up. Member of board of directors of Lanek, a science-based Startup. Member of the AI Public Policy Board designated by the Government (Senate) of Chile.

Marcela Figa graduated in Biology and master in Basic Biomedical Research from UNAM. She is currently President of the Technology Transfer Offices Network in Mexico (RedOTT México) also, part of the board of Directors of Transferencia AP, the tech transfer arm form the Pacific Alliance in Latin America, as well as Industrial Vocal of the Chemical Society of Mexico. She also holds the position of Liaison Secretary at the Institute of Chemistry, UNAM. Her different activities and functions include monitoring projects and work with companies, providing external services in the area of searches, analysis of technological information, expert opinions, courses, workshops, support on intellectual property issues and technology transfer, negotiation of licensing agreements, collaborations, among others.

She has approximately 17 years working in areas of linkage and technology transfer, including positions at CIATEJ-Guadalajara; at UNAM in the Food Program and the Innovation and Development Coordination with the objective of promoting the transfer of knowledge and basic research technology towards the country's productive sectors, and also promoting the culture of protection, among other relevant topics about the vision of universities and research centers.

Joy Goswami is the Senior Director of the Office for Corporate Engagement at Johns Hopkins University's Whiting School of Engineering and is a longtime technology transfer executive.

Joy's key responsibilities at Johns Hopkins University is facilitating broader and deeper engagement among JHU's researchers, industry partners, other universities, government groups, and foundations. He brings important skills and experience to the position with a background in technology transfer for the pharmaceutical and medical device industries. He has managed public-private partnership efforts in technological areas that include several disciplines in engineering, computer sciences, medical devices, data-management, and research tools at several corporate and academic organizations.

Prior to joining JHU, Joy served University of Delaware's Office of Economic Innovation Partnerships, where he worked for more than ten years, overseeing, and managing corporate partnerships and technology transfer activities for the University. Joy has been actively involved in bringing forth university-industry collaborations and partnerships, managing commercialization of novel innovations, and assisting in establishing start-up and spin-off companies for university faculty.

Joy earned his Bachelor and Master of Science degrees from Delhi University and his MBA from St. Cloud State University, Minnesota. Joy is a Registered Patent Agent for the US Patent & Trademark Office. He is also a Small Business Innovation Research (SBIR/STTR) reviewer for the National Institutes of Health (NIH) and a Howard Bremer Scholar, conferred by AUTM. Joy earned his Registration as a Technology Transfer Professional (RTTP) from the Alliance of Technology Transfer Professionals.

Joy has been involved in several AUTM Committees and is the incoming Chair of the AUTM Board of Directors.

Dr. David Gulley is Executive Director and founder of the Technology Transfer Office (TTO) of the Puerto Rico Science, Technology, and Research Trust, a private non-profit organization. The TTO, established in 2017, is a regional multi-institutional office serving 5 universities with 17 campuses, including 4 medical schools. He also serves as PI on the 2023-2025 NSF Engine Development Award "Advancing biopharmaceutical technologies and manufacturing practices (PR)", the 2023-2025 EDA Tech Hub Phase 1 award "PRBio Tech Hub", and the US Department of Commerce's EDA Designation by the Biden-Harris administration of Puerto Rico as one of 31 "Tech Hubs" in the U.S.

Prior to joining the Science Trust, he led a partnership between AUTM and Chile's CORFO to establish and reinforce Chile's technology transfer system. From 1989-2012 he served as Associate Vice President, Technology and Economic Development, University of Illinois System, Assistant Vice Chancellor for Research at the Chicago campus. His voluntary service includes Chair of the AUTM International Strategy Committee which engages and promotes the technology transfer profession globally. He holds a BA and PhD from Southern Illinois University and an MA from Virginia Tech. He is a Certified Licensing Professional and a Registered Technology Transfer Professional.

James Hutchinson leads the KiwiNet Innovation Network (KiwiNet) which is the combined power of New Zealand's Universities, Crown Research Institutes and other research organisations who receive public funding. KiwiNet leads NZ's collaborative model of research commercialisation to transform scientific discoveries from publicly-funded research into new disruptive products and services to create impact for New Zealand.

He holds a PhD in Chemistry from the University of Cambridge and is passionate about the important role that science and the scientific community must play in growing the economy into new high-tech and knowledge-based sectors, informing public policy and in changing our world for the better. He has experience in supporting research and innovation in the UK and internationally with a focus on the life sciences and global societal challenges. He is a Junior Policy Fellow of the Centre for Science and Policy (CsaP) at the University of Cambridge.

Urša Jerše has been Assistant Secretary General for Knowledge transfer at the University of Ljubljana since April 2018. Prior to that (2009 – 2017), she worked at a public research institute in Slovenia, where she encountered the transfer of knowledge from public research institutions to the business sector and gained extensive experience. She holds a bachelor's degree in law and is specialised for procedures of acquiring and protecting employment-related inventions, R&D contract negotiation, and concluding license contracts.

Mattias Karlsson Dinnetz is an innovation management and technology transfer professional focusing on creating value in the interface between public research and private enterprise across several technological fields. He works as Senior Program Officer at WIPO and is, e.g., responsible for raising awareness and building capacity in relation to general technology transfer and life science innovation, which includes the development of reference materials and trainings and their delivery through conferences and workshops in developing countries.

Mattias has held the position of Senior Program Manager in the Intellectual Property and Technology Transfer Unit at the EC-Joint Research Centre (JRC), and prior to that worked at the Technical University of Denmark as Chief Innovation Advisor and Senior Business Developer. His experience includes developing and running PoC programs, IP portfolio management and IP-based dealmaking, public-private sector R&D collaborations, as well as holding board directorships in university spinout companies. Mattias is also an authorized European Trademark and Design Attorney.

Heba Labib, PhD, is a dynamic and accomplished ecosystem builder serving as the Assistant VP of Innovation at Nile University. With a remarkable track record, she has been leading NilePreneurs since 2017, a nationwide initiative dedicated to fostering the growth of startups and SMEs through incubation, capacity building, and innovation support. Under her guidance, NilePreneurs has successfully nurtured over 300 startups and nearly 800 SMEs, while also providing valuable training to more than 12,000 individuals.

Dr. Labib's impressive career includes serving as the Director of Innovation, Entrepreneurship, and Competitiveness Center (IECC) and managing the Technology Commercialization and Industry Relations Office at Nile University. She is also the visionary founder and executive director of NU100, a prominent entrepreneurship initiative empowering techpreneurs with groundbreaking ideas throughout the country. Her entrepreneurial achievements extend to being a co-founder of Palm Paper, a pioneering wastepaper recycling mill established in 2007, as well as Nile's Gift, an esteemed exporter of medicinal and aromatic plants since 2004.

Recognized for her influential contributions, Dr. Labib was honored as one of the top 50 Influential Women in Egypt in 2022. Her exceptional leadership in entrepreneurship garnered her recognition as a top female entrepreneurial leader in Africa at the Triple E Awards by ACEEU, held in Barcelona in 2023. Additionally, she has been the recipient of prestigious accolades such as the Arab Business Challenge in 2007 (UAE), Business in Development Challenge in 2006 (Netherlands), and Shell's "Intelaqah for Best Business Idea" Award in 2005 (Oman).

Dr. Labib holds a BSc degree in Mechanical Engineering from Oakland University, MI, USA, and later pursued her passion for the Management of Technology, earning both an MSc and PhD from Nile University, Egypt. With her exceptional expertise and innovative mindset, she continues to drive impactful change and inspire the next generation of entrepreneurs.

Dr. Anne Nakagiri is a Lecture and researcher in Civil, water, sanitation, and OHSE related displines in the Department of Civil and Environmental Engineering, Faculty of Engineering, Kyambogo University Kampala. Besides teaching and training, she has been involved in the review, development and assessment of Engineering training programmes and research and innovation proposals. She served as the Ag. Dean of the Faculty of Engineering, Kyambogo University from July 2022 to Dec 2023. Currently she heads the Research and Grants office under the office of the Vice Chancellor Kyambogo University and is the Alternative Chairperson/ member Kyambogo University STI Taskforce Committee. She is a member of ERIMA, a HERS-EA fellow and registered engineer with more than twenty years' practice experience.

Andy Maas is the Associate Vice President for Research overseeing the office of Innovation and Technology Commercialization at Louisiana State University and he has over 15 years of experience in technology licensing and commercialization.

Andy's activities have taken him from an engineering start-up where he built a company from two to 14 employees to academic roles in both university and research foundation settings. Andy manages an office of 25 full time and 4-5 part-time employees that are responsible for all technology commercialization, small business support, incubation, acceleration, and SBIR/STTR activities of the LSU Flagship campus in Baton Rouge, Louisiana.

Andy has been involved in several AUTM Committees and is the Chair of the AUTM Board of Directors.

Laura MacDonald has headed up the HQ of ASTP (the pan-European members association for knowledge transfer professionals) since September 2016. Her role there combines responsibility for professional training events, conferences and advocacy to enhance capacity-building of the KT sector. Originally qualified as a Scots lawyer, specializing in EU and IP law, her transition to the world of academic/ industrial collaborations started in 1992 when she established the first in-house legal function in a UK university to support these collaborations. Then followed a career across different UK universities (Dundee then Edinburgh) before moving to the Netherlands, spending 10 years at Leiden University and Medical Centre, with responsibility across all aspects of knowledge transfer activities. She has been active in key professional organizations which bring together players in this ecosystem, such as Licensing Executives Society and AUTM as well as ASTP.

Sana Maqbool is the Director Innovation & Commercialization Office at NUST. She has over 13 years of experience in public relations, corporate communication, media outreach, event management, tech commercialization and building industry-academia linkages. Sana has successfully developed partnerships and collaborated with top companies like The Coca-Cola Company, Jazz, PTC, HBL, PepsiCo, IDC, Arcelik, and many more. Additionally, she has executed national and international innovation and entrepreneurial programs and conferences. She has also taught communication skills and technical writing to undergraduate students at NUST for over 4 years.

Anna Matros-Goreses is a dynamic leader with over 18 years of experience in top management and leadership roles. She holds a PhD in Economic Regulation of Water Management from Cranfield University, UK, giving her a cutting-edge understanding of regulatory and investment evaluation across Namibia, England, Ghana, Tanzania, and Zambia. As the founding Director of the Projects Services Unit (PSU) at the Namibia University of Science and Technology (NUST), she pioneered grants management and established robust processes for monitoring, evaluation, and assessment.

Currently serving as Executive Director at NUST, Anna is driving transformative initiatives such as the Technology Transfer Office, Entrepreneurial Hub, and Postgraduate Studies Development Centre, while emphasizing the socio-economic impact of research and innovation through the High-Tech-Transfer Plaza Select (HTTPS). Her leadership extends to the Southern African Research and Innovation Management Association (SARIMA), where she has served as Vice-President: Research Management and is currently the President-Elect. In this role, she focuses on bridging the intersections between research and technology (knowledge) transfer.

Anna also brings extensive corporate and public governance experience, serving on various national and international boards, including Namibia's Intellectual Property Policy and Strategy Implementation Technical Committee. Her work continues to shape the future of research, innovation, and governance in Southern Africa and beyond.

Michael Mbogoro is the Head of the Technology Transfer Section within the IP and Innovations Ecosystems Sector (IES) in the World Intellectual Property Organisation (WIPO). His Section provides crucial assistance to WIPO member states and their innovation stakeholders. Support to Member states focuses on providing tools and resources to support upskilling and professional development in the field of Knowledge and Technology Transfer (K/TT). In addition, the Section strengthens innovation ecosystems by building linkages between stakeholders, and developing national innovation policy frameworks, as well as institutional IP policies for universities and public research institutions.

Previously, Michael was a Director at Oxentia, an innovation management service provider borne out of Oxford University Innovation. In this role he bridged the divide between research intensive Corporates and universities, to foster research

collaborations, licensing and early-stage investment and due diligence on spinouts. Furthermore, Michael was a Mentor to academic entrepreneurs from middle income Member States for several years, helping them build their startups/spinouts, secure investment and scale up.

Dr Mbogoro earned his PhD in Physical Chemistry and is a Registered Technology Transfer Professional (RTTP).

Ignacio Merino is Executive Director, HUBTEC. Ignacio is an Electrical Engineer with over 20 years of experience in innovation, entrepreneurship, investments, and technological development. He has co-founded and led various startups with operations in Chile, Latin America, Australia, and New Zealand. Responsible for multidisciplinary teams, the development and launch of new products and services, and leadership in the design and implementation of Development, Marketing, and Commercial Strategies for various technologies in mobile telecommunications services, software/IT, energy, and the food/nutrition industry, among others. Extensive experience in investments and venture capital in the technology industry. In 2018, he began working at HUBTEC, a technology and knowledge transfer center, a non-profit corporation that was born as a public policy with public-private collaboration, aiming to generate positive impacts and business opportunities based on the capabilities and technologies of universities and R+D centers in Chile and Latin America. Since 2020, he has served as its Executive Director, with a regional impact focus.

Anji Miller MSc PhD is a highly accomplished Innovation Professional with over 20 years' experience of translating early-stage academic research in the Life Science sector. She has extensive experience of IP related transactions and management, including, licensing, strategic partnership, funding, business development of healthcare technologies and development of knowledge transfer policies.

As a proponent for professional advancement in technology transfer, Anji uses her experience in translational research, intellectual property protection, management, licensing, and company formation to train and empower emerging innovation professionals. At LifeArc she leads LifeArc's global support of translational education, training and skills, with responsibility as the Programme Director of LifeArc's Translational Skills Fellowship programmes, and the Lead for advancing the Innovation Hubs for Gene Therapies' gene therapy skills agenda. She also holds management responsibility for specific projects within LifeArc's translational portfolio.

An advocate of equity diversity and Inclusion (EDI), Anji is a cofounder of Global Equality, Diversity, and Inclusion in Technology Transfer (GEDITT), an initiative with a mission to raise awareness and promote EDI in the technology transfer sector. She also works closely with industry, academia, and associations to implement ED&I strategies and policies, and is an active participant in LifeArc's policy engagement.

Anji earned an M.Sc. in Human Molecular Genetics and Ph.D. in Cancer Genetics from Imperial College, as well as an M.Sc. and Certificate in Intellectual Property Law

from Queen Mary, University of London. She is a certified project manager (PRINCE2), and is both a Registered Technology Transfer Professional (RTTP) and a Certified Licensing Professional (CLP).

A seasoned tech transfer professional, Anji holds numerous advisory roles and is a Board Director of AUTM, ASTP, ATTP, CLP. She is also the Chair of the LESI Life Science Committee and a member of the BioIndustry Association Cell & Gene Therapy Advisory Committee.

Helena Montiel is the Past-President of the Spanish association for knowledge exchange professionals Redtransfer. She is a member of the National Associations Advisory Committee (NAAC) of the Association of European Science and Technology Transfer Professionals (ASTP) and a member of the board of the global Alliance of Technology Transfer Professionals (ATTP). She has been a previous member of the Board of the Catalan Network of Science Parks (XPCAT) and a member of the Board of the Spanish Association of University Technology Transfer Offices (redOTRI).

She is currently the Director of the Research and Technology Transfer Office at the University of Girona, as well as the Head of the Academic and Student Affairs Department at the same university.

Helena holds a PhD in Chemical Engineering by Polytechnic University of Catalonia. She has been professor and researcher at the University of Girona.

Helena's professional life has concentrated on the University and Industry Collaboration as a driver of business competitiveness and regional development.

Alvaro Ossa is Head of the Technology Transfer Office at Pontificia Universidad Católica de Chile (UC). President of the Network of Technological Managers of Chilean Universities (RedGT). He is the author of "Del Laboratorio al Mercado," a book published by Ediciones UC in 2021, and "From Research to Market," which will be published by Springer in October 2024.

Master's degree in Policy Studies in Education (UCL – United Kingdom), Master's degree in Technological and Industrial Business Management (School of Industrial Organization - Spain), Industrial Civil Engineering (Universidad Técnica Federico Santa María - Chile). The Chilean government awarded Alvaro the TECH TRANSFER MANAGER OF THE YEAR 2017.

UC´s Office of Technology Transfer was recognized as Chile's best Technology Transfer Office between 2017 and 2022. Under Alvaro's management, Universidad Católica was awarded as the institution that filed the most patent applications in Chile between 2015 and 2023.

Alvaro has extensive experience in the management of science-based innovation programs. Alvaro specializes in technology transfer, intellectual property, and science-

based entrepreneurship. Professor in different training programs of technological innovation management and entrepreneurship in different regions of the country has been a speaker on various national and international panels, and is a columnist and writes for various national press.

Dr. Orakanoke Phanraksa is a policy specialist in the field of intellectual property laws at the Technology Licensing Office, National Science and Technology Development Agency (NSTDA). Currently, she is leading the International Affairs Division at Thailand Science Research and Innovation (TSRI). She has been playing a key role to form a policy framework to promote and strengthen technology licensing offices and IP professionals in the academic and research institutions in Thailand. This year, she has served the national committee to develop the national accreditation system for IP professions in Thailand. At the regional level, Dr. Phanraksa was selected as one of the five regional IP Policy experts by WIPO to develop the IP Policy Model for Universities and Research institutions in ASEAN.

Marli Elizabeth Ritter PhD in Administration Sciences at the National Autonomous University of Mexico, with experience in innovation management and technology transfer offices at universities, having worked at Federal University of Rio Grande do Sul (UFRGS) and Pontifical Catholic University of Rio Grande do Sul (PUCRS), in Brazil. Founder and first president of FORTEC, she is currently a member of its Advisory Board. She is a Consultant for the World Intellectual Property Organization (WIPO), working in several countries. She is the only Brazilian professional internationally accredited as a Registered Technology Transfer Professional (RTTP).

Alejandro Roca Campaña has 30 years of professional experience in WIPO. He currently holds the position of Senior Director, IP for Innovators Department in the IP and Innovation Ecosystem Sector (IES) since March 2021. The main responsibility of Mr. Roca Campaña consists of advising and coordinating the programs related to capacity building for the development of institutional innovation ecosystems of universities, knowledge transfer organizations (including Technology and Innovation Support Centers – TISCs) and other research and development institutions to effectively use IP assets and to manage them from creation to the commercialization of products and services based on research outcomes. He is also responsible for the implementation of activities and projects to provide resources, tools and platforms to enable active local innovation support and for the coordination of national, regional and international networking to share experiences and best practices as effectively as possible.

Guillermo Roura Pérez graduated as a Pharmaceutical Chemist Biologist (ULSA) and with a Master's Degree in Chemical Sciences from the Faculty of Chemistry of the UNAM, and a Specialty in Health Law from the Graduate Program of the Faculty of Law also from UNAM. He has worked in the Industrial Property field for the last 15 years, from both the private and academic sector, and also as WIPO's consultant. Currently, he is part of to the National Autonomous University of Mexico (UNAM), Services and Training Director of the Board of Directors of the Technology Transfer Offices Network (RED OTT) in Mexico. He is also part of the working commissions of the Pacific Alliance Transfer Network (Transferencia AP) which brings together experts from Mexico, Chile, Colombia and Peru, and part of the Advisory and Liaison Council of the Faculty of Chemical Sciences of La Salle University (Mexico).

Stephen J. Susalka is the Chief Executive Officer of AUTM, a 3,000+ member non-profit association, focused on supporting and enhancing technology transfer globally, and oversees a cooperative agreement with the Federal Laboratory Consortium for Technology Transfer to support federal technology transfer for more than 300 federal labs across the US.

As an international leader in technology commercialization, Dr. Susalka uses his experience in intellectual property protection, licensing, and company formation to empower, promote and connect AUTM members as they advance the next generation of ground-breaking innovations into the products and services of tomorrow.

A regular speaker on technology transfer issues, Dr. Susalka has frequently presented on Capitol Hill and internationally on topics ranging from start-up formation to the evolution of the profession. He has worked with senior leaders from around the world on strategies to enhance the commercialization of early-stage inventions and has provided testimony to the Canadian House of Commons Standing Committee on Industry, Science, and Technology on promoting best practices for intellectual property and technology transfer.

Before joining AUTM, Dr. Susalka served as Associate Director for Commercialization at Wake Forest Innovations.

Dr. Susalka earned his Ph.D. in Neuroscience from the University of Virginia and is a registered U.S. Patent Agent. He is a past Board member of multiple Wake Forest-affiliated start-ups and is both a Registered Technology Transfer Professional (RTTP) and a Certified Licensing Professional (CLP).

Ana Torkomian is vice president of FORTEC, the Brazilian association that brings together innovation and technology transfer managers. She is also a board member of ALTEC, the Ibero-Latin American association for technology and innovation management. An industrial engineer with a master's, doctorate and post-doctorate in Technology and Innovation Management, she is a full professor at the Federal University of São Carlos, where she directed its TTO, UFSCar's Innovation Agency, for 8 years.

Prof. Fazilet Vardar Sukan is a Chemical Engineer with a Ph.D. in Biochemical Engineering from University College London. She is the founding head of the Bioengineering Department at Ege University and was the head of Department until 2017 and Director of SUNUM Sabancı University Nanotechnology Research and Application Center until 2024.

She is the holder of 1989 Turkish Scientific and Technological Council Incentive award in Bioengineering. She was the Director of Ege University TTO and Coordinator of Enterprise Europe Network. She has RTTP Certificate and EuKTS Grandfather Certificate. She is currently also the vice president of USIMP- University-Industry Collaboration Centers Platform of Turkey and EU Research Management Ambassador represents Turkey on ATTP Board, AUTM International Committee and ASTP-NAAC.

M. Carme Verdaguer is the Director of Strategic Projects at the Bosch i Gimpera Foundation, the Knowledge Transfer Centre of the University of Barcelona. She coordinates the UB participation in institutional projects, networks and associations in the field of knowledge transfer, innovation and entrepreneurship.

She has a degree in Chemical Engineering from the Institut Químic de Sarrià (Universitat Ramon Llull, Barcelona), a Master in Business Administration (MBA) from the University of California, Los Angeles (UCLA) and is a RTTP (Registered Technology Transfer Professional).

Carme has over 23 years of experience in the field of knowledge transfer, innovation and entrepreneurship and has managed the Bosch i Gimpera Foundation (KTO of the University of Barcelona) for 14 years.

She co-founded RedTransfer (the Spanish Association of knowledge transfer professionals) and is currently member of its Executive Board. She is a member of the Enterprise and Innovation Policy Group of the League of European Research Universities (LERU) and has held different management positions in RedOTRI, a network of knowledge transfer offices of Spanish Universities.

Vijay Vijayaraghavan is a technology management professional with four decades of global engagement in innovation advancement for public research organizations and the corporate world. Vijay founded Sathguru Management Consultants, a global technology transfer organization with presence in 12 countries. He has been academically affiliated to Cornell University, teaching two courses in IP and technology management and cross-border innovation applications. Vijay has led technology transfer transactions for numerous global research bodies, providing footprint for their technologies in emerging markets. Vijay holds Board positions in international organizations engaged in innovation investment.

Dr. Stuart Wilkinson is the CEO of Praxis Auril, soon to be called Knowledge Exchange UK, a world-leading professional association for Knowledge Exchange practitioners. He oversees the organization's strategic direction and drives initiatives to empower professionals in the sector that enable collaboration between universities, business and other organizations.

Prior to his role leading PraxisAuril Stuart was the Assistant Director of Innovation and Engagement at the University of Oxford, and Innovation and entrepreneurship Fellow of Reuben College. He has held a number of knowledge exchange roles in technology transfer, regional innovation, entrepreneurship and social impact through which he has gained multifaceted insights into the innovation ecosystem.

Rosemary Wolson is the Vice-President for Innovation and Technology Transfer of the Southern African Research and Innovation Management Association (SARIMA), a professional organization for technology transfer practitioners and research managers in the Southern Africa region. Rosemary has a BSc (Hons) in Microbiology, an LLB and an MPhil, from the University of Cape Town. She has worked in technology transfer at the University of Cape Town, University of Johannesburg and the CSIR. She has participated as a member or advisor to various stakeholder bodies; published in and carried out reviews for peer-reviewed publications; presented on innovation topics at local and international conferences and seminars; acted as a mentor; and provided training, facilitation and capacity-building for technology transfer.

Dr. Alwin Wong, RTTP, is the Chair of the Alliance of Technology Transfer Professionals (ATTP), and the sub-committee chair of AUTM international strategy committee for the East Asia region. He has been an active advocate for the advancement of technology transfer policy framework, academic-industrial engagement, and professional capacity building in the tech transfer communities across the world. Dr Wong worked full time at the Hong Kong Polytechnic University as a director for technology transfer and entrepreneurship until retirement in 2020, his long-term service as the secretary-general of the International Strategic Technology Alliance (ISTA) helped advanced value of good technology transfer management for university-industry collaboration and technology commercialization for its members.

Greta Žėkienė is the Head of Intellectual Property (IP) Management at Kaunas University of Technology's (KTU) National Innovation and Entrepreneurship Center since 2015. With more than 20 years of experience, she is a results-oriented professional specializing in IP, technology transfer and business development, and manages IP protections and commercialization strategies. Her portfolio includes more than 250 invention disclosures, 75 patent families, 130 licensing/rights transfer agreements and 60 spin-off companies. Greta mentors startups and spinoffs, and as an associate professor practitioner she leads IP modules at KTU. She holds a WIPO certificate for the capacity building program in the framework of Baltic States pilot project on the development of a regional poll of IP commercialization experts (2018) and represents the TTO Lithuania and TTO Baltic network established in 2020 with the collaboration of WIPO and the Baltic States Patent Offices. Greta is actively involved in various IP working groups and she is a member of the Advisory Board of the Europe Startup Nations Alliance ESNA since 2023. Previously, she worked with the Lithuanian Copyright Protection Agency and the largest publishing houses on IP commercialization. Greta holds degrees in Political Science, Economics, and Intellectual Property Law and Management.

Appendix A
Country Reports

ASTP: PAN-EUROPEAN MEMBER ASSOCIATION
Art Bos and Laura MacDonald

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Since we are non-regional, we cannot describe the situation across all 45 countries where we have members. But we shall share here the European-level trends with a focus on the experience/activities ASTP activities. The theme can be split across two aspects:

- Staff incentives:
  Recruitment and retention of KT staff is an ongoing challenge across Europe. Most research centers are publicly funded so governed by public sector pay scales. Turnover of KT/TT staff into private sector where the skills are also highly valued and essential means there is a constant struggle to retain highly qualifies people. Reward mechanisms common in private sector such as bonus schemes are unusual due to public sector governance rules. Some institutions try to establish more private sector structure for some seriously commercial activities including investments in new ventures where some added flexibility of remuneration can be facilitated. For research staff, there are incentives for engaging in TT/KT endeavors. This is recognized as being above and beyond the scope of core employment duties hence traditionally some revenue sharing of successful commercialization activities based on their inventions is the norm, A wide spectrum of scales does exist, but a common range can be found to fall between 20-33% for the individual researcher team.

- Recognition /embedding of the TT/KT function
  Although recognition of the need for KT/TT activities to be facilitated effectively in research organizations is long established across Europe, there is still a lag in more formal recognition of the roles and career structures open to TT/KT professionals. Therefore, while ATTP drives individual recognition which is valued by the ASTP membership, there have been several national and European move to more formally address the embedding of the profession in public sector careers. See the following
    - Regarding EU policies to increase capacity of KT across Europe, ongoing progress via rolling out the General Principles of Knowledge Valorisation in series of 'tour des capitales' around different cities; promoting awareness raising of the 4 codes of practice is also underway, see Guiding Principles for Knowledge Valorisation and implementing Codes of Practice - European Commission (europa.eu) with ASTP playing particular attention to raising awareness of the role of Standards in KT, working with EC and key experts;
    - RM ROADMAP Project Home; ERA_PolicyBrief_02.pdf (ncpwideranet.eu)

ASTP is also interested to ensure that the TT/KT profession remains supported and recognized as a distinct function from Research Management, where there have already been Competence Frameworks proposed for each of Researchers and Research managers.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

As a member association of individuals, we are careful not to be overtly driving lobbying activities. However, we do canvas and share collective views and opinions in a variety of different ways;

- 3rd party voices:
  We join 3rd party statements or recommendations such as COARA or EIC statement about ownership of research results (see The Agreement - CoARA or EIC access rights: ASTP statement (astp4kt.eu)

- **ASTP NAAC (National Association Advisory Committee)** has working groups currently looking at producing short policy recommendation paper on spin-off policies for stakeholders- to be launched 24th October 20204; 2nd WG on KPIs collaborating with ATTP WG on metrics. It also published a White Paper calling on the E Commission to add funding dedicated for TT/KT functions to each project. Power of National Associations Embedding KT in Horizon Europe (astp4kt.eu) and this will be a renewed call for the next round of Framework Funding conditions.

BRAZIL

Ana Torkomian, Elizabeth Ritter and Shirley Coutinho

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Brazilian researchers can apply for research funding programs offered by government agencies of the Brazilian government. There have been no recent incentives from the federal government specifically for technology transfer activities in university offices. However, there are several regional agencies in the Brazilian states, called Research Support Foundations (FAPs), that have funding lines specifically geared towards the activities developed by technology transfer offices.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

FORTEC – "Forum Nacional de Gestores de Inovação e Transferência de Tecnologia" is the Brazilian Association for IP&K/TT created in 2006 to support K/TTO and practitioners that work on this field, and besides the capacity building actions for the associates, especially the Professional Master Degree Course strictu sensu, created in 2016 that has 1193 graduates, FORTEC is in charge of many actions based on the priorities established in its Strategic Plan elaborated in collaboration by members of its Board of Directors,

Councils and Regional Coordinators.

Considering the capacity developed by its managers and associates along the 18 years of activity, that is recognized by the government, enterprises and entrepreneurs, and its experience at work with universities, research centers and other associations, as well as with governmental bodies at the federal, regional and local levels, the Ministry of Science and Technology signed some collaboration agreements with FORTEC aiming at to provide manuals for:

- 2.1 METRICS, based on the FORTEC INNOVATION SURVEY annually made, covering data on the IP&KTTO activities implemented by the TTO aiming at to provide information for the decision making concerning its activities.

- 2.2 Manual containing the rules and main issues to be covered by the IP&K/TT Policy for TTO of the Universities, Research Centers according to the Brazilian Law on this subject.

- 2.3 Guides and technical notes for TTO orientation on subjects such as:
  - A) Strategic alliances aiming at implementing Catalysts Thematic Innovation Environments
  - B) Research Infra-Structures co-working facilities
  - C) Budge and Expenses Categories relocation
  - D)R&D Agreements and Partnership contracts
  - E) R&D Service Contracts for TTO of Public Institutions
  - F) TT Agreements
  - G) Guidelines for the Innovation Policy elaboration
  - H) Guidelines for the categorization of a Science and Technology Institution
  - I) Technical Note on Service Contracts and for R&D Agreements
  - J) Technical Note on IP issues in Projects supported by the Informatics Law
  - K) Technical Note on Startups Legal Framework.

CANADA

Anouk Fortin

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Canada offers a robust ecosystem of institutional and governmental (federal and provincial) incentives for researchers engaged in knowledge and technology transfer (K/TT). Several grant programs serve as financial incentives to facilitate K/TT. Notable examples include NSERC's lab to market, I2I and Alliance grants; Mitacs' Accelerate and Elevate programs and the Innovation Fund from the Canadian Foundation for Innovation. Several regional development agencies also provide funding and support for innovation and commercialization. These include IPON, FedDev Ontario, the RSRI in Quebec, and Atlantic Canada Opportunities Agencies. The Canadian government also provides academic institutions (and SMEs) a reduction on certain fees for obtaining and maintaining patents ("Small Entity" status). Non-financial incentives by federal and provincial

governments include access to many training programs and resources (entrepreneurship support), such as Lab2Market, i2I, IPON and ElevateIP.

Institutional incentives will typically include policies that specify sharing of commercialization revenues with the inventors and the ability for researchers to participate in consulting (often up to one day a week). Some institutions have awards/prizes to celebrate the achievements of their inventors and innovators. Many institutions also have internal funds (POC, translation, seed, venture) that their researchers can access.

The Canadian government does not currently have any national programs (capacity building, CPD) or incentives for K/TT professionals. A few programs exist at the regional or provincial level such as Springboard Atlantic, supported by ACOA and the post-secondary member institutions, which is an active, regional, Atlantic Canadian network providing member funding for POC, Patent & Legal, Market Validation and Industry Engagement activities, as well as professional development opportunities, and IPON in Ontario which provides IP education and IP related services and grants.

At the institutional level, it is not common to have performance-based compensation for K/TT professionals and even bonuses or financial awards are rare. Many institutions have less formal ways of recognizing its K/TT professionals, through acknowledgements and training opportunities.

AUTM yearly recognizes an outstanding Canadian K/TT professional with the Canadian Award.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

Canada does not have an independent national K/TT association and operates as a chapter within AUTM. As such, the Canadian K/TT community works with, and generally relies on, AUTM to support its advocacy efforts nationally. No specific best practices or advocacy documents have been prepared.

A few Canadian associations, networks and organizations do engage in advocacy related to K/TT on behalf of its members, either nationally or regionally. These include groups like U15, Springboard Atlantic, the Intellectual Property Institute of Canada, the Global Innovation Clusters, the Canadian Association of Research Administrators, Axelys in Québec and the Ontario Center of Innovation.

CHILE
Varinka Farren

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

- *Technology Transfer Law:* Currently under discussion in the Senate, aims to strengthen innovation by bridging the gap between academic research and the market This year was introduced a bill aimed at establishing an institutional framework to regulate technology and knowledge transfer. The law promotes a balanced environment for knowledge and technology transfer, fostering collaboration between academic institutions, research agencies, the government, and industry. It clarifies rules on **intellectual property (IP) rights** and revenue-sharing, encouraging universities and researchers to engage more actively in technology transfer. The law promotes collaboration between academia, industry, and the government, fostering the creation of startups and technological ventures. Additionally, it emphasizes **IP protection** and enhances the effectiveness of **technology transfer offices (TTOs),** helping to drive commercialization and boost Chile's global competitiveness.

- *Creation of Transfer and Licensing Offices (TTO´s) in Universities and Transfer Hubs:* In 2011, CORFO (chilean economic development agency)) established a funding instrument to create and strengthen TTO´s in universities. These offices focus on developing policies, building technology transfer capacities, creating spin-offs, and fostering international practices. Transfer hubs were also established to support this prior work and generate critical mass and expertise to boost national and international technology licensing, work with the industry and boost startups.

- *Tax Incentives for R&D Investment:* Chile offers a tax incentive that allows companies to receive a 35% tax credit on total R&D investments, provided these are linked to certified contracts with higher education institutions. The maximum eligible credit USD 1millionper year . This initiative also led to the creation of a survey managed by the National Institute of Statistics (INE) to track the expenditure R&D activities led by the industry.

- *Programs to Promote Applied Research:* In 2012, Chile created programs like **Engineering 2030** and **Science and Innovation 2030,** aimed at transforming engineering and science faculties into internationally recognized centers for innovation, technology transfer, and entrepreneurship. Funding programs like these were later established to promote R&D structures, with a gender perspective and support for applied science dissemination.

- *Development of Innovation Accreditation Standards for Universities:* In 2022, the Chilean government, through the Ministry of Education and the National Accreditation Commission (CNA), introduced new innovation accreditation standards for higher education institutions. This accreditation now requires institutions to develop patents, licenses, spin-offs, and systematic innovation projects in partnership with private entities.

- *Start-Up Chile* is a pioneering startup incubation and acceleration program created by the Chilean government to attract entrepreneurs from around the world. While it does not exclusively focus on technology transfer, many supported startups have a science or technology base, complementing technology transfer efforts in the country.

- *Innovation for Competitiveness Fund (FIC):* It is a fund aimed at financing applied research and technological development projects in different regions of Chile, focusing on creating value for local productive sectors. This fund seeks to more closely link universities with the productive sector.

- *Regional and Global Alliances:* Chile has signed collaboration agreements with several countries and economic blocs (such as the European Union) to promote scientific research and technological development. These agreements help Chilean researchers access global networks, resources, and new funding opportunities, thus promoting international technology transfer.

- *INAPI-WIPO:* Programa de Asistencia a Inventores (PAI), led by the Instituto Nacional de Propiedad Industrial (INAPI). The PAI provides legal support and guidance to individual inventors and small businesses, facilitating access to intellectual property protection by covering patent application costs. This initiative aims to foster innovation by reducing barriers for inventors, particularly those with fewer resources, to protect their ideas.

Additional information:

CORFO's Technology Transfer Programs:
CORFO (Corporación de Fomento de la Producción) is a government agency that plays a central role in promoting innovation and economic growth in Chile. It offers a variety of programs and grants for K/TT professionals, including:

- **Technological Transfer Hubs:** These programs support the creation of technology transfer offices (TTOs) in universities and research centers to facilitate the transfer of knowledge to the private sector.
- **InnovaChile Program:** This initiative supports innovation projects that promote the commercialization of R&D. It provides co-financing for projects with a focus on applied research and technological innovation.
- **Start-Up Chile:** This program attracts global talent to Chile, helping entrepreneurs build technology-based startups with international potential, encouraging K/TT professionals to engage with global innovation networks.
- **Strategic Programs:** These initiatives encourage public-private collaboration in key industries, such as mining, energy, and agriculture, often focusing on technological innovation and knowledge transfer.

2. ANID (Agencia Nacional de Investigación y Desarrollo):
ANID, previously known as CONICYT, promotes research and development activities. Some of the incentives include:

- **FONDEF (Fondo de Fomento al Desarrollo Científico y Tecnológico):** A funding program that fosters the transfer of scientific and technological research to the productive sector.
- **FONDECYT (Fondo Nacional de Desarrollo Científico y Tecnológico):** This fund supports basic research that can later lead to technological innovation.

- **Millennium Science Initiative (MSI):** Supports centers of excellence in research, promoting cross-disciplinary work and interaction with industry.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

Since its creation in 2018, the Andes Pacific Technology Access Corporation (HUB APTA) has focused on promoting, managing, and disseminating technology transfer at the national and international level, with a special emphasis on strategic national sectors and frontier technologies such as Artificial Intelligence. HUB APTA focuses on four development areas and two cross-cutting actions. The development areas include Entrepreneurship, for the creation and scaling of Science and Technology-Based Companies (EBCTs); Commercialization and Transfer of Technologies from universities nationwide; Industry Challenges (Open Innovation, CVC, others); and Capacity Building in Technology Transfer for Chile. Additionally, through its two cross-cutting actions, HUB APTA participates in forums and working groups for the development of public policies in innovation, entrepreneurship, and technology transfer. It also disseminates and communicates relevant content on technology transfer through both physical and digital media.

We have specific programs tailored to different regions of Chile, given the diverse nature of each area. For example, in the north, we are highly focused on mining, in the central region on agriculture, and in the south on health. Additionally, we run specific gender-focused programs. One of the key initiatives developed by HUB APTA is the **Builder program,** focused on scaling up startups. In its latest edition, the program experienced a 118% growth, with 46% of the projects led by women, attracting projects from all regions of Chile and from seven countries, establishing itself as a nationally significant program. This success led to the design of a new program to support the creation of early-stage EBCTs from universities. To enhance the Builder program, we created a network of national experts called "Builders," who have extensive knowledge of how the ecosystem works and have achieved success. Experts like Pablo Zamora of NotCo (https://notco.com/cl/) and Alberto Rodriguez of Levita Magnetics (https://www.levita.com/) contribute valuable contacts and knowledge, offering insights from a Chilean perspective.

In our technology commercialization area, we have 30.2% of the researchers associated with HUB APTA being women. To develop capabilities, we held various workshops in 2023, reaching over 1,300 participants in that year alone. We have developed 2 programs to increase the technology transfer: **Fill the Gap:** This program addresses specific industry challenges to unlock licensing opportunities or capital raising for technology commercialization. APTA´s team identifies key industry gaps, facilitates connections with strategic partners, and provides tailored commercial and legal advisory services to overcome challenges in licensing or capital raising. **APTA WomanPower:** A program designed to empower women researchers in academia by enhancing leadership, communication, and access to funding. In the first year, it has supported 36 projects involving over 90 women from 10 Chilean universities. Through tailored training and mentoring, it aims to promote gender equity and drive innovation, helping projects progress toward successful market transfer.

In terms of dissemination, HUB APTA made 243 publications in 2023, 34 of which were in high-impact national print media, and we have been recognized with different awards. As part of our contributions to the ecosystem, we developed infographics on the bill regulating AI, a brief on the fast-track intellectual property law, a report on trends about mining of the future, a financial manual for entrepreneurs, and a licensing and royalties handbook used by the majority Chilean universities. These are all available for free to the Chilean ecosystem.

Details of the scope and results of our activities can be found in HUB APTA's 2023 Annual Report, available on our website.

CHILE

Alvaro Ossa

Main R&D and technology transfer policies:
Among the most relevant public policies in the country in terms of R&D and transfer, the following stand out:

- **Draft Law on Technology and Knowledge Transfer:** Its objective is to establish a regulatory framework to facilitate the transfer of technology and knowledge from higher education institutions (HEIs) and research centers to the private sector. It was unanimously approved by the Chamber of Deputies in July 2024: the next step is the discussion in the Senate.

- **Industrial Property Law No. 19,039 of 1981:** Protects intellectual property rights in Chile, such as patents, trademarks and industrial designs. On July 5, 2021, Law No. 21,355, known as the Short Industrial Property Law, was published in the Official Gazette, which modifies the Industrial Property Law and Law No. 20,254 that establishes the National Institute of Industrial Property (INAPI), which includes, among other things, provisional patents as a protection mechanism in Chile.

- **Law on Access to Public Information Law No. 20,285 of 2009:** Guarantees the right of access to public information in Chile.

- **National Artificial Intelligence Policy:** It was launched in May 2021 by the Ministry of Science, Technology, Knowledge and Innovation, and aims to turn Chile into a cutting-edge country in AI, inserting it into a framework of global collaboration and an ecosystem of research, development and innovation in these matters.

- **National Repository of Scientific and Technological Knowledge and Information:** It was created in 2012 by the National Agency for Research and Development (ANID) and aims to collect, classify, conserve, promote and disseminate the scientific and technological knowledge existing in the country.

- **National Strategy for Science, Technology and Innovation 2021-2030:** It is the reference framework for the development of STI in Chile, with the aim of turning the

country into a global benchmark in innovation and knowledge. The strategy is based on five pillars: Strengthen the institutional framework of STI, Increase investment in STI, Encourage the generation of knowledge and talent, Promote innovation and technology transfer and Internationalize STI. It depends on the Ministry of Science, Technology, Knowledge and Innovation of Chile.

Among the R&D and transfer promotion programs implemented in the country, the following stand out:

- Program for the creation and strengthening of transfer and licensing offices: In 2011, the Development Corporation (CORFO), an agency under the Ministry of Economy, created a program called Strengthening the Transfer and Licensing Office, whose objective was to strengthen technology transfer capacities in higher education institutions.

- Program for the creation of Technology Transfer Hubs: Created by CORFO in 2015, this program seeks to increase the quantity and national and international projection of technological businesses based on the results of R&D generated in universities and national research centers, in order to increase productivity and diversification of the Chilean economy. through the creation of Technology Transfer Hubs.

- National Innovation Program for Competitiveness (FIC): Since 2008, this program has sought to support Chilean companies to be more innovative and competitive. It offers instruments such as grants, financing, technical assistance and collaboration networks. The administration of the FIC is a joint and coordinated effort between the central level of government, represented by the MEFT (Ministry of Economy, Development and Tourism) and the STCTI (Undersecretary of Science, Technology, Knowledge and Innovation), the DIPRES (Directorate of Budgets) and the Regional Governments.

Status of R&D and Technology Transfer:

- Investment in Research and Development (R&D) in Chile has shown growth, although it is still below the OECD average. In 2023, R&D spending reached 0.36% of GDP, while the OECD average is 2.72%. However, an increase in private investment has been observed, surpassing state financing for the first time. Chile is positioning itself as a regional digital hub, with a focus on emerging technologies such as artificial intelligence, cloud services, data management, and the Internet of Things (IoT). These technological capabilities are driving innovation and business growth, with a significant impact on various economic sectors

- According to the INE, in 2023, the internet penetration rate in Chile reached 84.8%, a figure higher than the Latin American average.

- The country has a constantly expanding fiber optic network, which covers 90% of the population. In addition, initiatives have been implemented to improve internet coverage and quality in rural areas.

- Oranks fifty-second among the 132 economies surveyed by WIPO through the GII (Global Innovation Index) in 2023.

- It ranks thirty-fourth in the Global Talent Competitiveness Index 2023 among the 134

countries with the highest skills to attract, develop and retain talent.

- According to the ARWU (Academic Ranking of World Universities), in 2023 there are not Chilean universities in the top 100, with the first of them appearing in 401st place.

- Chile is home to important research centers such as the University of Chile, the Pontificia Universidad Católica de Chile and the ICM Mining Research Center. These centers have laboratories equipped with state-of-the-art technology for various scientific and technological areas. In addition, large national and international companies have established research and development laboratories in Chile, promoting innovation in sectors such as mining, energy and biotechnology.

- The government implements programs such as "Chile Digital" and "Aula Digital" to promote the use of ICTs in education and daily life. However, there is still a digital divide between different sectors of the population, especially in rural areas and lower socioeconomic groups.

- Adoption of emerging technologies: Chile is exploring the potential of technologies such as artificial intelligence, blockchain, and the Internet of Things (IoT) in various sectors.

- According to WIPO data (WIPO, 2022), Chile is ranked 52nd in the world in patent applications and 50th in foreign applications.

- The country has a favorable regulatory framework for technological development, including intellectual property and data protection laws.

- In 2024, Chile has made significant progress in technology transfer thanks to new initiatives and regulatory frameworks. A recent bill seeks to promote a balanced environment for technology and knowledge transfer, fostering collaboration between academic institutions, government agencies, and industry. This regulatory framework aims to facilitate the transmission of scientific and technological research results to the market and society, promoting sustainable development.

CHINA AND ATTP

Alwin Wong, Chair, ATTP

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

To drive economic development through innovation and technology, Chinese government has been relentlessly providing policy and resources that favour academic translational research and commercialization. Over the years, government has absorbed TT risks which would otherwise have to be absorbed by inventors and investors through academic-municipal applied research funding programs, with cash support schemes from proof of concept to industrial pilot, with public seed funds with or without angel rounds and early stage venture fund series. The net effect is the rapid increase of start-ups and collaborative research institutes with operators working on projects with reduced risks.

Since around 2017, national law requires that inventor share of commercialization proceeds would be at least 70%, more than double of the conventional 1/3 split of the Western practice. Similar to key TT metrics of major economies, the number of patents, TT contract value, the number of POC projects, and the number of start-ups have been on the steady rise in the last few years, even as the economic data is reflecting an apparent slow down due to a number of domestic issues even if geopolitical factors are discounted.

To address the weak links along the TT value-chain, China also launches massive general education / professional training programs to boost up the capacity and competence of tech transfer practitioners, with a spectrum across early-stage practitioners to senior professionals. It is said that 110,000 participant-counts were recorded to have undergone structured training for the 3 years between 2022 - 2024, soon after the lifting of the Covid lock down. For curricular bearing academic credentials, the top two national universities are offering new master programs focused on career technology transfer managers (in a broader sense). As of 2022, technology transfer manager has been formally registered as a profession by manpower authorities with different competence levels of attainment pegged with the government pay scale.

Does your association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

Established in 2010, the Alliance of Technology Transfer Professionals (ATTP) has emerged as a pivotal global hub dedicated to recognizing and elevating the contributions of technology transfer practitioners worldwide through recognition of professional TT practitioners as Registered Tech Transfer Professionals (RTTP). This accreditation not only enhances professional standards but also elevates the profile of technology transfer within the broader innovation landscape.

In parallel with our accreditation programs, ATTP aims to play a consultative role in the development of local capacity-building frameworks and programs, particularly in emerging economies. We recognize that fostering technology commercialization is crucial for creating

innovation-driven marketplaces. Our initiatives include aligning RTTP programs with local qualification frameworks to facilitate enhanced competence recognition at both national and international level. By cultivating strong member associations capable of operating effectively within their regional contexts, we promote a cohesive network that can address the unique challenges and opportunities presented by rapidly changing economic environments. Through coordinated sharing of best practices among our members, ATTP aims to strengthen its global community of RTTPs, ultimately enhancing the overall effectiveness of tech transfer practices worldwide.

EGYPT
Heba Labib

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Technology Innovation and Commercialization Offices (TICO): the Egyptian government started addressing the issue of technology commercialization in 2012. At that time very few universities had technology transfer offices, and they were established based on an EU (Erasmus+ KA2) Grant, which had helped establishment of 3 technology transfer offices in Cairo, Helwan and Assuit Universities, and the upgrade of the existing one at the American University in Cairo. In 2012, the Academy of Scientific Research and Technology (one of the funding arms of Ministry of Higher Education and Scientific Research) started addressing the establishment of TICO offices (Technology Innovation and Commercialization Offices). In order to do so, the ASRT established a channel with MTDC (Malaysian Technology Development Corporation) and a delegation of professors and professionals from Egyptian Universities traveled to Malaysia for multiple study tours. This resulted in the establishment of the first wave of TICO offices (comprised of Technology Transfer Office, Grants and International Collaborations Office, and IP Office).

The ASRT currently supports more than 45 TICO offices across Egypt, with the mandate of commercialization of technologies. The program mandates that all member offices develop an IP policy for their universities and research institutes. The ASRT remains committed to the TICO program, and during the past two years it has organized, together with WIPO a capacity building program for technology managers, which featured best practices from around the globe, as well as sharing experience from within the region (experience from Egypt, Lebanon and UAE).

Intelaq Incubators: Along the same lines, ASRT also launched its program (Intelaq) for university-based incubators in 2016, to support research spinoffs. There are currently more than 40 incubators affiliated with that program in different universities and research institutes. Following the establishment of the program, ASRT lobbied for establishment of University Company Establishment Law: In 2018, the Egyptian government issued a law to support establishment of scientific research spin offs from universities. By that law, the university has the right to have ownership in companies established by faculty. At the same time, faculty members have the right to establish such companies that would be incubated and co-owned by the university.

Knowledge Technology Alliance (KTA): The ASRT launched the Knowledge Technology Alliance in 2016, with the aim of establishing alliances that include: universities, research institutes, NGO's and no less than 3 companies per each consortium (of 10 or more members). The role of the alliance is to facilitate the transfer of knowledge and technology from academia to industry, and at the same time, for academia to be more aware of industry needs.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

Ever since its establishment in 2007, the mission for Nile University has been "to pursue excellence in learning, research, innovation, and entrepreneurship, to create and positively impact a sustainable and knowledge-driven economy and society." With that mission in mind, Nile University has managed to earn the title "African Entrepreneurial University of the Year for 2023" in the Triple E Awards granted by the ACEEU. Much of the award was credited to NU's flagship project of NilePreneurs, which to date, has supported more than 300 startups, and served more than 800 SMEs through knowledge transfer, and engaged in collaborative activities of more than 200 product development projects, as well as provided capacity building for 16000 youth, as well as directly created 2400 jobs.
Home - NilePreneurs

Being engaged in the aforementioned project, Nile University has recently drafted a proposal to ASRT to help replicate NU model and other successful entrepreneurial university models. The Entrepreneurial University proposal aims to develop an assessment tool to measure the strength and weaknesses of Egyptian universities and hence support universities in developing their transformation strategy and provide the necessary capacity building for these universities to aid the transformation.

Meanwhile, on the research level, NU has partnered with the Academy of Scientific Research and Technology in running the Egypt Community Innovation Survey and conduct the associated qualitative research to understand what hinders innovation within Egyptian SMEs through the project MEIS-SME. The outcomes of the research were shared through a community engagement event that included members from government, industry, NGO's and Egyptian Parliament, as well as delegates from European countries. The project also resulted in 2 papers currently undergoing publishing, the first outlining obstacles to innovation in Egyptian SMEs, and the second mapping of innovation policy instruments in the Egyptian ecosystem from 2020 through 2023 and analyzing gaps for such policy instruments.

Last but not least, within Nile University's latest edition of Sustainable Multidisciplinary Advanced Research Trends (SMART) Conference, a panel discussion titled "How does STI Policy Impact Lives?" has taken place. The panel featured members from industry, academia, government and Egyptian Parliament. The parliament member listed the different legislations interfering with knowledge and technology development. Accordingly, a series of workshops with stake holders will take place in order to draft a policy report for the Egyptian Parliament.

GHANA

Diana Adobea Owusu Antwi

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

The knowledge and technology transfer landscape in Ghana is evolving and supported by various governmental and institutional incentives. Policies to foster knowledge and technology transfer include the National Intellectual Property Policy and Strategy, and the National Science, Technology and Innovation Policy (NSTIPP). The Ghana Industrial Property Office (GHIPO) and the Copyright Office conduct programs to educate researchers, and authors about the importance of intellectual property protection and provide guidance on intellectual property registration processes.

The National Entrepreneurship and Innovation Program provides funding, training, and other resources to young entrepreneurs and encourages the commercialization of research outcomes. Further, a National Research Fund (NRF) was established under the Ghana National Research Fund Act, 2020 (Act 1056), to provide financial resources to support sustained research in all fields of national endeavor. Additionally, the Ghana Innovation and Research Commercialization Centre was established under the Ministry of Environment, Science, Technology and Innovation (MESTI) to facilitate the transformation of innovative concepts into products and services of commercial value. Nonetheless, the absence of operational frameworks has impeded the implementation of Act 1056 and limited the ability of GIRC to function effectively. Efforts are being made to address these challenges to promote an enabling environment for knowledge and technology transfer to thrive.

The University of Ghana has developed a robust framework of support systems and incentives to enhance knowledge and technology transfer. These include the establishment of a Research and Innovation Directorate (formerly Office of Research, Innovation and Development), set up of a research fund, facilitation and support of collaborative research projects. The University has a dedicated technology transfer office that provides guidance and assists researchers and students to identify, protect, and commercialize intellectual property, and navigate the complexities of bringing their innovations to market. Capacity building programs on grantsmanship are organized periodically for early career faculty, as well as workshops to educate researchers and students about intellectual property rights and the commercialization process. The Academia Industry Series provides a platform for researchers and industry to collaborate on interdisciplinary projects with commercialization potential. The University is implementing an Intellectual Property Policy, and an Innovation Policy, while plans to establish an Innovation Fund are advanced.

Faculty promotion criteria now recognize patents as an exhibit (awarded 20 points), under the Research and Scholarly Work criterion. Engineering innovation (8 points); published or documented creative works (8 points), or a journal article (10 points). The University has implemented the Student Venture Support Program (SVSP) as part of the Innovation for African Universities initiative, sponsored by the British Council and Imperial College

London. Since the inception of the program 300 students have received training and 85 student-led businesses have been created. Additionally, several innovation hubs have been established to support entrepreneurial initiatives at the University.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

Yes, the University actively engages in influencing and advocating for intellectual property, knowledge and technology transfer by participating in initiatives and discussions aimed at shaping science, technology and innovation policy, intellectual property policy and technology transfer frameworks. Faculty members and university administrators have collaborated with government agencies to provide input on policy development, conduct training workshops and promote best practices in intellectual property management, knowledge and technology transfer. Some staff of the University are involved in regional networks and initiatives that address intellectual property and knowledge and technology transfer issues to share best practices.

INDIA

Vijay Vijayaraghavan

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Over the last five years, the support for K/TT initiatives within public research and academic universities has expanded considerably in India. Some of the efforts contributing to the accelerated IP creation and technology licensing are:

- Government factoring Institutional IP creation as a critical metric for the national ranking of universities.

- Government investment in the creation and nurturing of regional technology transfer entities embedded in academic institutions to accelerate knowledge dissemination through the technology transfer of publicly created IP assets

- Government and public institutions supporting professionals to gain RTTP accreditation

- The government supports the participation of K/TT professionals in national and global knowledge-sharing seminars and other convergences.

- Creation of new job opportunities – Over 150 professionals have been inducted into K/TT offices in the last five years with emoluments that are attractive for well-qualified professionals to engage.

- STEM, the national association of K/TT professionals recognise and rewarding success stories in national forums

- STEM provides professional competency to all professionals – experienced, newly entering and mid-career professionals to gain and adopt best practices

- India has emerged in the last five years among the top 5 global IP filings with enlarged technology licensing opportunity

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

- STEM, the National Association of K/TT Professionals, is strongly engaged in advancing the professional opportunity for K/TT professionals within the public bodies as well as within the industry

- STEM has designed and secured support from the National Science and Technology body to augment the capacity of K/TT professionals. A grant of $ 8 million was provided to 8 regional TTOs for energising their human resource and enlarging their team for delivering IP and TT services at the regional level

- National research funding bodies are represented at the Governing Council level of STEM to take up issues paramount to advancing the professional engagement of K/ TT professionals to enhance the value of IP assets generated within the public research system.

- STEM has secured support from private innovation entities to provide capacity for early career K/TT professionals and to gain professional qualification (RTTP) and STEM Fellowship

- STEM has secured support for a dozen mid-career K/TT professionals to gain international exposure in global K/TT offices and advance best practices in their practice realm.

- STEM Annual Summit converges the public and private K/TT professionals and the policy planners to bring out challenges in advancing innovation to markets and to shape policies that can accelerate the knowledge dissemination

ITALY
Giuseppe Conti and Alessandra Baccigotti (NETVAL)

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

The Italian patent law (Code for Industrial Property) establishes K/TT incentives in the form of revenue-sharing with researchers-inventors. Before August 2023 the Code established a minimum percentage of revenues to be shared with inventors (50%) and a minimum share for the university (30%). Institutions had the autonomy to define, in their own regulations, the percentages for revenue-sharing within the above-mentioned limits (that is min. 50%-max. 70% to inventors and min. 30%-max. 50% to university). In August 2023 the Code was amended and currently the percentages for revenue-sharing are completely left to the university's autonomy. After the entry into force of the amended Code, most Italian universities are still in the process of revising their institutional regulations. The approach to revenue-sharing is rather diversified and partly depends on the level of "maturity" of K/TT, where more mature institutions (that have already an established deal-flow of inventions and no longer need to promote K/TT activities because there is a satisfactory level of awareness) tend to stick to the revenue-sharing mechanisms of their previous regulation (on an average, 50% to researchers), whereas less mature environments tend to reward their inventors more.

Apart from financial incentives, there are no other types of incentives for career progression for academics engaging in K/TT activities.

The last major reform of the Italian university system (Gelmini Law n. 240/2010) established the possibility for universities to set up a fund for valorization of research results but this rule has not yet been properly implemented in university regulations.

There are currently no governmental incentives for K/TT professionals, also considering that the K/TT profession is not very well recognized in the Italian university system, where K/TT professionals (permanent staff) are part of the overall administrative staff and their profile and competences are not clearly acknowledged. Also, recruitment procedures (public selections) do not allow to hire people with specific K/TT profiles. At the moment there are, however, two Italian universities that are starting to consider the possibility to use part of the licensing revenues to incentivize K/TT staff either by providing them with additional dedicated training (which they would otherwise not be able to access through the standard training offer for university's staff) or by providing them with financial incentives. This a very new phenomenon in Italy which has not been thoroughly implemented yet.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

At the national level, Netval has been very active in the past 10 years in advocacy activity for K/TT and has established consolidated relationships with the Italian Ministry for

Research and the Italian Ministry for Industry (now called MIMIT, which includes also the Italian patent office called UIBM).

Netval played a major role in supporting the reform of the Italian Code for Industrial Property which, in 2023, led to the abolition of the so-called Professor's privilege. This rule, granting ownership of IP to researchers instead of universities, was introduced in 2005 but did not prove to be successful in promoting IP and innovation in Italian universities and therefore Netval strongly engaged in influencing MIMIT to revert to institutional ownership. During the process that led to the reform of the Italian patent law, Netval also supported the Ministry in drafting guidelines related to IP management in sponsored research. Sponsored research is a very relevant type of collaboration between universities and businesses: it allows universities to engage in applied research that can help solve industry needs and it is an important source of funding for research groups. However, negotiating IP in contract research is often a very complex and lengthy process due to the different missions and visions of HEIs and companies. That is why having national (non binding) guidelines that establish a range of possible scenarios for the management of IP in sponsored research agreements, validated by the government, is a very relevant innovation and brings added value to academia-industry collaboration.

Netval has successfully collaborated with the Italian Ministry for Industry in a range of initiatives as described hereunder:

1. **NATIONAL PROGRAMMES for setting up and developing KTOs (4 editions since 2015):**
    The call, aimed at Universities, Italian Public Research Bodies and Research Hospital (IRCCS), aims to increase the intensity of technology transfer flows towards businesses by supporting the enhancement and protection of the industrial property of the projects promoted by Knowledge Transfer Offices (KTOs). The initiatives are intended both to consolidate the ongoing processes of strengthening the KTOs and to establish new ones, in order to improve the quality of technology transfer by enhancing the skills and innovative capacity of businesses, particularly small and medium-sized enterprises.

    The details of the different editions of the programme are listed hereunder:
    - **2015** (Targeted at Universities and Public Research Bodies)
        - Applicants drafted a specific project and co-financed it by 50% (the other 50% provided by UIBM) for the inclusion of new staff in Knowledge Transfer Offices (KTO).
        - 38 entities participated and a total of 75 people were involved.
        - Resources provided: 3 million EUR.
    - **2018** (Targeted at Universities and Public Research Bodies)
        - 36 entities participated and 65 people were involved.
        - Resources provided: 3 million EUR.
    - **2019** (Targeted at Universities, Public Research Bodies and IRCCS)
        - 48 entities participated in this call (no evidence of the total number of people involved — approximately 100).
        - Resources provided: 7 million EUR by MIMIT and the Ministry of Health.

- **2022** (Targeted at Universities, Public Research Bodies, and IRCCS)
  - 74 entities participated in this call (no evidence of the number of people involved).
  - Funding: 7.5 million EUR allocated under the PNRR (Next Generation EU funding) by MIMIT and the Ministry of Health, with the primary objective to finance interventions related to Universities, Public Research Bodies, and IRCCS that have already benefited from this type of funding, ensuring operational continuity for personnel hired within the KTOs until 2025. Additionally, the resources are also aimed at further strengthening KTO staff, contributing to increasing the intensity and quality of technology transfer processes.

This programme was very successful and contributed to strengthening Italian KTOs which were generally understaffed small offices, apart from a few exceptions in the larger technical universities. Thanks to the programme more than 50% of the total number of currently active KTO managers have been recruited during the last 10 years!

More details on the Italian performance in technology transfer is reported hereunder:

- The full-time equivalent (FTE) staff of the Technology Transfer Offices (TTOs) at universities and public research institutions (PRIs) now total 436. The result reflects the strategic importance of MIMIT-UIBM funding calls for strengthening TTOs and, consequently, the competitiveness of our system.

- The number of new patent applications in 2022 was 516, showing a slight decrease compared to the previous five-year period.

- The number of patents granted in the year was 797. This number shows significant growth compared to the previous year for universities and PROs.

- The number of patents in the portfolio of universities and PROs at the end of 2022 was 8,821. This number reflects the structural growth that the technology transfer system in Italy has experienced in recent years. It is worth noting that the number has grown by 75% over the last five years.

- The expenditure incurred for Intellectual Property protection in 2022 was 5.9 million euros for universities and PROs.

- The number of licenses and/or options concluded in 2022 was 145. After a surprising increase noted in 2021, the number saw a sharp decline, driven largely by a drop in contracts from the 'top 5' institutions.

- The revenues from active licenses as of December 31, 2022, amounted to 5.7 million euros for universities and PROs. In this case as well, after the extraordinary growth seen in 2021, there has been a return to the normal growth trend experienced over the last five years.

- Finally, in 2022, 108 spin-off companies were created in universities and PROs, adding to the already existing ones, bringing the total to 2,020 spin-offs recorded in Italy by 2022.

2. IPA AWARDS (3 editions 2019-2021-2023 on going)
    The 'Intellectual Property Award - IPA' competition, a result of the collaboration between UIBM and Netval, is aimed at promoting innovation and valorizing the creativity of inventors from Italian universities and IRCCS, who use their technical, scientific, and intellectual abilities to make a real contribution to technological progress and economic growth, thereby improving daily life. The project provides the opportunity to submit patents related to specific technological fields available on the Knowledge Share platform (https://www.knowledge-share.eu/en/), which represent significant challenges for research and innovation. The initiative is dedicated to promoting the best results from public and university research, with a cash prize awarded to the best patent within these fields, to be used for the patent's enhancement.

    In 2022, as part of EXPO Dubai, the final event of the second edition of the IPA took place. The presentation of the finalist patents (5 for each of the 7 technological areas) was held at the Italy Pavilion at EXPO Dubai in the presence of international investors and companies (127 new patented technologies from 38 different research centres and universities.

    https://uibm.mise.gov.it/images/DOSSIER.pdf
    https://uibm.mise.gov.it/images/INFORMATION_PACK.pdf

3. Knowledge Share Platform
    In the past five years Netval has been developing the [Knowledge Share](#) platform, which is a digital matchmaking platform for the valorization of the Italian Research with the aim is to connect research teams with companies and investors. The platform was started as a pilot project, directly funded by Politechnics of Turin and Netval but it soon attracted the interest of MIMIT, which saw it as a strategic tool to support access to innovation for businesses. Knowledge Share is now a joint project of the Italian Patent and Trademark Office of MIMIT (MIMIT-UIBM), Netval and the Politecnico di Torino that aims to represent the meeting point between the projects generated from the Italian research laboratories to produce real applications.

    Access to the platform is free and open to all large companies, SMEs, investment funds, Italian and foreign accelerators and incubators and is subject to registration. By registering to the platform, users will be able to interact with the project team, access content relating to published projects, and send contact requests for technologies and entities they are interested in, from which possible collaborations and synergies may arise.

    In the first version, the platform hosted only patented inventions coming from Italian public research organisations. The new 2.0 version renews the objective of optimising contact between research and the entrepreneurial network, but with a new and constantly updated user experience and content. In fact, among the major new features, a section including Start-Ups and Spin-Offs has been added so that businesses and investors have now access not only to new technologies but also to innovative companies. The new AI-based 2.0 KS platform was designed to be a scalable and replicable project that can be implemented by other K/TT associations at international level.

Some facts and figures about KS:
- Patented technologies: more than 2500
- Spin-offs: more than 250
- Visualization/month: more than 30.000
- Active Users: more than 2000
- Engaged cases: more than 350.

• Knowledge Share was acknowledged as a best practice for knowledge valorisation by the European Commission https://projects.research-and-innovation.ec.europa.eu/en/research-area/industrial-research-and-innovation/eu-valorisation-policy/knowledge-valorisation-platform/repository/promoting-ip-valorisation-through-ip-platform-knowledge-share-run-national-network-netval .

4. PoC Programme (2019)

The measure promoted by MIMIT-UIBM and managed by Invitalia Spa, was created with the aim of contributing to the competitiveness of national industry through the enhancement of industrial property rights, specifically by raising the technological maturity (TRL) of patented inventions from public research institutions (Universities, Public Research Organisations, IRCCS). This is to ensure that they can become the focus of development and co-development actions with the business sector through Proof of Concept (PoC) projects.

The submitted projects were designed to have a maximum duration of 18 months from the date of signing the grant agreement. For each technology involved in a PoC project, a maximum amount of 40,000 euros was allocated, with a cap of 320,000 euros for the entire programme presented by the applicant/s. The measure, in total, was allocated 5.3 million euros. An additional co-financing by beneficiary institutions was also envisaged.

Following the launch of the measure in 2019, a total of 58 institutions, either individually or in a consortium, participated in the call, resulting in a total of 45 PoC programs. After the evaluation phase, carried out by a specific commission appointed by the managing body (Invitalia Spa), 24 programmes managed by 37 entities were selected for funding. These institutions then selected a total of 155 technologies to be taken to PoC through the various programmes.

The technologies selected within this measure had an average starting TRL of 3.5. At the end of the PoC project, an average TRL of 5.3 was registered, indicating a TRL percentage increase of over 70%.

In terms of results and impact: 35% of the technologies involved in the PoC programme were transferred, through exploitation processes via academic entrepreneurship channels. Specifically, 21 licensing agreements were signed, while for 19 technologies some form of negotiation with potential future partners was launched during the programme. A total of 55 technologies, out of 155, were exploited through academic entrepreneurship pathways. More precisely, 31 technologies were key to the creation of an academic spin-off and for the other 24 technologies, applicants are in the process of setting up new companies.

Finally, it is important to highlight that the PoC programmes fostered connections between researchers and the external environment through structured in-person and online meetings. These discussions provided opportunities for researchers, project managers, and/or TTO staff to showcase their technologies. Notably, 380 companies and 47 investors were engaged, including both national and international entities.

This programme is particularly relevant in the Italian context because when it was launched only very few (2-3) institutions in the whole country ran a PoC programme, mostly funded by their own resources or by local investors. Now, thanks to the national PoC programme, institutions are more aware of the need to devote funding to de-risk technologies and increase their TRL and some of them have committed resources to develop their own PoC programmes.

JORDAN

Mohammed Aljafari

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Governmental and Institutional Incentives for Researchers and Technology Transfer Professionals in Jordan:

- The Government of Jordan, through the ministry of higher education and scientific research, can be understood to have endorsed the outputs of the WIPO supported program for developing IP policies for universities and research institutions in Jordan. One of these outputs is a model IP policy that was disseminated by the ministry to all Jordanian higher education institutions. This model policy included provisions for revenue (or net-revenue) sharing with researchers.

- A separate initiative of the same ministry is independently developing a second model IP policy as part of the ongoing executive implementation of the Economic Modernization Vision. This draft model policy is also understood to include provisions for revenue (or net-revenue) sharing with researchers.

- Many of Jordan's research and higher education institutions have codified incentives in the form of sharing the licensing proceeds (or net proceeds) of commercialization with the researchers (50-75% of the proceeds for the researcher(s)). Occasionally, the spinoff pathway is also codified, although this is less often and the pathway itself is practically unused.

- In terms of publicly funded research, the main research funding body is the Scientific Research and Innovation Support Fund, whose IP provisions also include revenue shares for the university and the research team.

- Career progression for academics in Jordan is largely a point-based system, where researchers gain points for publications (with consideration for journal impact and first-authorship). Though not directly linked to technology transfer, certain

universities have opted to grant promotion points, and in some cases financial rewards, against patents.

- There are hardly any incentives for technology transfer professionals. If the position is assigned to an active member of the faculty, this administrative assignment (e.g. as the head of the innovation center) may command a small compensation/bonus payment.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

The Intellectual Property Commercialization Office at the Royal Scientific Society, non-governmental non-profit organizations, is the central office of the Jordan Technology Transfer Network, providing technical support and IP related services to all institutions in Jordan. As such, the institution is regularly engaged by public and private actors to assist in developing IP strategies and regulations for Jordan. Examples for this include the support provided to the recent WIPO project for the development of IP policies in Jordan, as well as participation in the Steering Committee for IP Policy Development in the ministry of higher education.

In addition, the Royal Scientific Society is the co-leader of the Higher Education for Innovation and Growth, a five-year activity funded by the United States Government through the United States Agency for International Development (USAID). HEIG seeks to create an ecosystem where Jordanian HEIs provide quality, market-relevant, student-centered education, and foster innovation for economic growth through research-led partnerships with industry that bridge the gap between supply and demand. Part of this involves the development of a supportive and aligned policy environment that promotes HEI collaboration for innovation and growth, including technology transfer.

LITHUANIA
Greta Žėkienė

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Lithuania has made significant efforts to promote technology transfer through institutional networks, financial incentives, and the establishment of dedicated support services. Technology transfer offices (TTOs) at universities and research institutes have been supported by government funding programs since their inception in 2009. These initiatives aim to enhance the knowledge transfer (K/TT) and commercialization processes. Currently, €14 million is allocated to support 12 TTOs through various activities, including:

- **Facilitation and Training:** Organizing partner seminars, training sessions, consultations, and best practice exchange events to improve collaboration and knowledge sharing.

- **Internationalization Promotion:** Conducting training and consultations to bolster international knowledge transfer and commercialization capabilities.

- **Publicity and Communication:** Engaging in event organization and communication activities to raise awareness of R&D efforts.

- **Commercial Potential Assessment:** Evaluating the market potential of R&D products or inventions, including patenting and market analysis.

- **Intellectual Property Protection:** Assisting with patenting, trademarks, designs, and other forms of IP protection.

- **Scientific Conferences Participation:** Supporting attendance at conferences to showcase R&D results and foster international networking.

- **Technological Readiness Development:** Facilitating proof-of-concept activities to advance the readiness levels of R&D products.

- **Entrepreneurial Skills Enhancement:** Providing consultancy, training, and community events to strengthen entrepreneurial capabilities within the institutions.

- **Demonstration Spaces Establishment:** Creating spaces for presenting mock-ups, prototypes, and art projects to potential users.

- **Labs Accreditation:** Accrediting laboratories or research methods to enhance the reliability of R&D data.

Several initiatives are underway to support spin-off development:

- **Mission-Driven Science and Innovation Programs:** This project focuses on establishing incubators, prototyping spaces, and pilot production lines for startups and spin-offs. It includes three priority themes: "Secure and Inclusive e-Society," "Smart and Climate Neutral Lithuania," and "Innovations for Health."

The project aims to establish three Centers of Excellence, implement 23 R&D projects, develop 41 prototypes, and create 21 new startups or spin-offs by April 2026.

- **Investment in AI and Technology:** Government has allocated €15 million to support 170 startups and spin-offs developing solutions in artificial intelligence and blockchain technology. This funding is crucial for enhancing technological capabilities and fostering innovative solutions in these emerging fields.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

Lithuanian and Baltic universities have established TTO networks to enhance and influence knowledge and technology transfer (K/TT) and intellectual property (IP) activities at both national and regional levels.

In 2020, five of Lithuania's largest universities - Kaunas University of Technology (KTU), Vilnius University (VU), Vilnius Tech, Lithuanian University of Health Sciences (LSMU) and Klaipeda University (KU) - joined forces to establish the **TTO Lithuania** network. This is the first network of its kind in Lithuania. Its aim is to bring together knowledge and technology transfer professionals working in research and higher education institutions, to enable them to exchange knowledge on professional practices and to enhance their competences in the field of intellectual property management. The network's action plan also includes strengthening cooperation between research and study and public administration institutions to improve the efficiency of IP management and technology transfer processes at national level.

Later, in 2022, following the success of the TTO Lithuania initiative, the **TTO Baltic** network was established, comprising the Lithuanian, Latvian and Estonian TTO networks. The foundation for this regional collaboration was laid during the "Baltic States Pilot Project on the Development of the Pool of Regional IP Commercialization Experts," coordinated by the World Intellectual Property Organization (WIPO) and implemented by the patent offices of the three Baltic countries. This project aimed to equip professionals with the necessary skills to effectively manage IP and support technology transfer initiatives. The network seeks to unite technology transfer professionals across the Baltic States to facilitate knowledge sharing and best practices in IP management.

In May 2024, WIPO launched a Spin-offs Mentoring Program specifically designed for technology transfer professionals in the Baltic States. This program aims to address challenges such as low-quality R&D, funding difficulties, and competition among TTO staff while promoting collaboration among universities, government entities, and private investors.

The TTO Baltic network represents a pivotal step towards strengthening innovation ecosystems within the Baltic States. By fostering collaboration among universities and enhancing technology transfer capabilities, this initiative aims to boost regional competitiveness and support sustainable economic development through innovation.

Website: www.tto.lt

MALAWI

Isaac Chingota

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

In Malawi, Technology Transfer in the Universities is a relatively new. Before 2021 the focus had been on publishing research results and little on IP protection. Most Universities at the time did not have IP policies and there did not exist technology transfer offices in the Universities. Therefore, technology transfer was almost nonexistent and by extension researchers rarely provided any incentives for researchers/inventors.

Since 2021, the National Commission for Science and Technology a government body mandated to promote technology transfer put in place national guidelines for technology transfer that mandated Universities to develop institutional IP policies that clearly provide monetary and nonmonetary benefit for researchers and inventors. They further laid down the framework for establishing technology transfer offices. Since then, one technology transfer office has been established in 2022 and a second one is in the offing. These developments being led by Government are a bold step the Government has taken to recognize and award inventiveness in the Universities. For instance, the IP policy for the only TTO distributes revenue in the following proportions: 60% to inventor and 40% to the University. At the moment the University is yet to commercialize any IP.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

My organization, National Commission for Science and Technology (NCST) is a parastatal organization developed to advise Government and all stakeholders on matters relating to science, technology and innovation. In this role we provide guidance and advice to the Government on matters relating to technology transfer and IP. This is done through periodic reports on the state of science and technology transfer in the country that are done every 2 years. We also make presentations to the lawmakers through the parliamentary committee on science, technology and education. Our organization further advice the Government on appropriate technology that can be adopted for the country. For instance, in 2010 the Commission conducted a survey and presented to the Government a paper on the adoption of ethanol as fuel.

At the regional level, we are part of the science granting council's initiatives, a grouping 17 of organizations in Africa concerned with granting research, science, technology and innovation initiatives. In August this year, our Commission co-organized with our partners Scinnovent Centre, and Association of African Universities (AAU) hosted a regional meeting on Developing Institutional IP Policies and Private Sector Engagement Strategies. We used the meeting to share our experiences in IP management and technology transfer.

MEXICO
Marcela Castillo and Guillermo Roura

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

In general

In Mexico, in the case of researchers and their institutions, there are no incentives for doing knowledge or technology transfer work. There is no policy that outlines any route for these achievements. The country's National System of Researchers does not give them any recognition, there are very few research centers or universities where these topics and transfer work is rewarded. Researchers in general are evaluated for articles, student training and classes. And the responsible people who are in charge of the transfer offices do not receive greater incentives for doing the daily work of linkage or technology transfer. Years ago, there was another ecosystem in the country where the TTOs had greater recognition and obtained benefits for an effective business- government linkage. We are waiting for the new government, which will start on October 1, 2024, to present a proposal or roadmap that allows us to re-launch (renew) the ecosystem.

In particular

There are some states that, individually, do seek to maintain a balance between science, development and technology. Such is the case of Jalisco, Guanajuato, Querétaro, Nuevo León and Yucatán, which have laws and/or policies that specifically encourage and promote innovation and K/TT in such States, industry-academia-government collaboration and entrepreneurship. Mexico City was very poor in this type of policies, although due to its size and collaboration networks it maintains its leadership, such is the case that it has been defined as a cluster in the new GII 2024.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

The TTO NETWORK (RED OTT) promotes intellectual property and technology transfer issues among its members, with the productive sector and the interested general public. The TTO NETWORK engages in influencing and advocating with activities open to the public which are:

- Coffee Sessions a space for sharing,

- Cycle of meetings on challenges of innovation in health sciences, and

- International seminar on best experiences in technology transfer.

    These types of activities reach all Latin America and are free of charge for the interested public with the purpose, precisely, of positively influencing at a regional level the importance of knowledge, its valorization and protection for the benefit of society...how to generate impact with our research results, new knowledge,

our innovations and how to overcome the difficulties that hinder its use for all stakeholders.

The coffee sessions seek to generate a dialogue with the participants on experiences, challenges and pending issues in the field of technology transfer, both for the public and private sectors.

In the case of the cycle on the challenges of innovation in health sciences, it is a space open to public participation to discuss and expose Latin American realities of innovation and its impact on health, with diverse topics, from the legal scope of intellectual property to the access to public information, genetic resources and international treaties to which Mexico is a signatory.

Finally, the International Seminar on Best Experiences in Technology Transfer seeks to generate a space for discussion, analysis and training based on best practices in technology transfer.

For both, the Cycle of meetings on challenges of innovation in health sciences and the International Seminar, we will be preparing advocacy documents once the cycles end by November 2024.

These activities seek to promote the culture of protection and K/TT directly with the generators of knowledge or technology. We hope that in the short term these efforts can be aligned with government leadership at the federal level, since Mexico still has much to do and collaborate on the K/TT issue.

NAMIBIA
Anna Matros-Goreses

As Namibia's National Intellectual Property Policy and Strategy (NIPPS) 2019-2024 nears its conclusion, significant progress has been made in key areas of Intellectual Property (IP) and innovation management. One of the central achievements has been the establishment of Technology and Innovation Support Centres (TISCs) at all public Universities including Namibia University of Science and Technology (NUST. These TISCs, focused on IP and knowledge transfer, particularly Indigenous Knowledge Systems (IKS), provide innovators and researchers with access to technical information, IP services, and guidance on patenting processes, helping to streamline the innovation value chain. The TISC is done in collaboration with BIPA and WIPO.

NUST has been at the forefront, setting up a Technology Transfer Office (TTO) (2023) that is aligned with the FA BLAB, serving as a hub for product development, entrepreneurial support, and fostering spin-out companies. The TTO is key to realizing several NIPPS objectives, including supporting IP asset generation, commercialization, and encouraging collaborations between academia and industry through the HTTPS and NUST-i initiatives. By integrating these efforts into the innovation value chain, the TTO plays a vital role in creating pipelines for new technologies and start-ups, enhancing Namibia's

competitiveness in the global market. The next phase will focus on strengthening these initiatives by aligning further resources to support the FABLAB, expanding IP awareness and commercialization strategies, and fostering deeper collaborations between industry, entrepreneurs and academia. This will ensure Namibia's continued growth as an innovation-driven economy.

Key players in Namibia's IP and innovation landscape include the Business and Intellectual Property Authority (BIPA), responsible for the overall IP framework; the National Commission on Research, Science, and Technology (NCRST), which promotes research and development; and universities like NUST, which are driving IP generation and commercialization. The collaborative efforts of these institutions contribute to the growth of Namibia's knowledge-based economy, ensuring that IP and innovation remain central to socio-economic development.

NEW ZEALAND

James Hutchinson

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

There are few tangible institutional or governmental incentives in place for researchers and K/TT professionals in New Zealand.

There is little in the way of legislative mechanisms to incentivize K/TT activity at the Government level. The main financial incentive is through provision of the PreSeed Accelerator Fund (proof-of-concept stage fund), whereby universities and public research organizations can access 50:50 matched government funding to progress early technology opportunities to a point of 'investor readiness'.

The current Government is undertaking a major reform of New Zealand's science, innovation and technology system (the most significant in over 30 years) alongside a strong expectation that researchers (and the system) deliver more commercialization of research to help generate wealth and to diversify the economy. The exact mechanisms by which this will be achieved remains to be seen, however we can expect that the Government will explore a range of interventions such as IP legislation (akin to the US Bayh-Dole act), non-legislative IP frameworks, enforcement of standard deal terms for universities and public research organizations, stronger empowerment of researchers to spin-out companies and outcome-oriented funding instruments.

Note that the spin-out/start-up TT pathway is more common than traditional licensing in New Zealand due to the nature of the New Zealand economic landscape, traditional industries and geographical location, meaning there are few accessible companies with the experience or appetite to license IP. The creation of a new business as an initial vehicle to progress an opportunity to market is often viewed as the more feasible route.

At an institutional level, there are highly variable practices to incentivize researchers and K/TT professionals. There are a wide range of business models in place for TTOs by parent institutions, ranging from revenue targets from commercialization through to expectations of impact. This means that while the majority, if not all, of New Zealand's universities and public research organizations operate 'institute owns' IP approaches as the baseline starting model (excluding student IP), approaches to IP management and incentivization of researchers and K/TT professionals vary significantly across the system and will be enabled through each institution's IP policies. Some universities have incentivized researchers through the establishment of a venture fund that will invest in a researcher-led spin-out alongside private investors, alongside founder-friendly deal terms. Other universities deploy a range of spin-out models (and deal terms) based on the appetite of the researcher to lead and "spin out" with the company. Unlike universities, NZ's Crown Research Institutes (CRIs) do not formally enable researchers to financially benefit from commercialization, however some have explored other incentives such as tying K/TT outcomes to internal recognition and career progression and providing a time-limited 'safety net' for researchers wishing to lead a spin-out so that they might retain their original employment should the spin-out fail.

One university is exploring the establishment of a reward scheme for the TTO, whereby a portion of the carried interest from the university venture fund (or returns to the TTO) would be saved for distribution as a bonus for staff, to be paid out to the whole TT team at the discretion of the TTO Board.

It is fair to say that few institutions have a strategic imperative around commercialization and entrepreneurship embedded within their organizational strategy to create the top-down imperative to generate scale in activity and to build the institutional culture needed for a step-change in performance.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

KiwiNet is a consortium of TTOs from across the New Zealand tech transfer community, that each hold an equal custodial shareholding in the company. As such, we can play a role in advocating for K/TT at a regional and national level. We do not seek or assume to represent the views of all of our shareholders, especially given they are all unique within the context of their parent organizations.

KiwiNet does, however, play an important role in giving a voice to K/TT within the wider science, innovation and technology ecosystem in New Zealand. The critical connecting role that K/TT plays in bridging the gap between public research and private sector, and forging pathways to impact, can be lost or misunderstood. KiwiNet seeks to proactively advocate with policymakers on the importance of K/TT, barriers that are inhibiting sector performance and the design of policy instruments and resources that will enable the K/TT sector to deliver further benefit to New Zealand. We also seek to showcase success stories to the New Zealand public where publicity opportunities arise, so that the general public can see where K/TT is delivering tangible benefit to New Zealand. Advocacy documents

are normally reactive to public policy consultations. A recent KiwiNet submission to the New Zealand Government's Science System Advisory Group (SSAG) is included by way of example.

Beyond generally seeking to raise awareness of the importance of K/TT, part of our advocacy strategy is to focus our messaging and efforts on one or two key related issues or opportunities at any one time. Currently, we are advocating for a TT capability fund to support critical mass in staffing and activity within each institution. We seek to achieve this through a combination of formal submissions to policy consultations and via face-to-face meetings with individual policymakers where possible. Building trusted relationships with the leadership of universities and public research institutes is also an important channel for supporting change at an institutional level. We also work across the KiwiNet TT community to shape and inform KiwiNet positions on various topics.

The KiwiNet Research Commercialization Awards are an annual opportunity to celebrate the success and impact being achieved across the New Zealand TT community. The showcase event brings together a community of 350 stakeholders from across research, TT, government, industry and investment. It is an important opportunity to highlight the impact that the sector is delivering for New Zealand and is attended by the Government Minister of Science, Innovation & Technology. Videos and press releases are created for each of the finalists, which generates a suite of good news stories in the New Zealand news media.

PAKISTAN

Rizwan Riaz

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

NUST provides extensive incentives for researchers to encourage innovation and intellectual property (IP) generation including but not limited to:

- NUST has implemented a policy framework that rewards researchers with points in their annual appraisals,

- Promotions, and monetary incentives for securing Patents.

- Patents are also granted equivalence with academic publications, and upon patent commercialization, researchers receive significant monetary benefits, with up to 100% of the licensing revenue being awarded to the inventors.

- Policy for researchers to form spinoff companies based on their IP to promote commercialization, and the university provides dedicated facilities such as:
  - Intellectual property filing services,
  - Assistance in company registration,
  - Tax incentives of Special Economic Zone and Special Technology Zone and
  - Office space at the National Science and Technology Park (NSTP) to support these ventures

This comprehensive support structure fosters an innovation-centric research environment.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

NUST actively engages in national-level advocacy for the promotion of intellectual property (IP) and technology transfer (TT) initiatives. Through its Research Innovation and Commercialization (RIC) Secretariat and the Innovation and Commercialization Office of NUST (ICON), NUST works closely with various government bodies, including the Intellectual Property Organization (IPO) Pakistan, the Ministry of Science and Technology (MoST), the Permanent Mission of Pakistan to the United Nations in Geneva, the Higher Education Commission (HEC) of Pakistan, and the Pakistan Science Foundation (PSF) to shape policies and advocate for IP protection. Some of our key initiatives include:

- **Organizing the Annual Intellectual Property Summit:** This initiative, launched in 2022, has already seen the successful completion of two summits. These events have garnered the participation of WIPO's Director General (DG), Deputy Director General (DDG), and other WIPO officials, both in person and virtually.

- **Promoting Entrepreneurship and Knowledge/Technology Transfer (K/TT):** NUST runs Pakistan's first and only international entrepreneurship program, Finding Innovative and Creative Solutions (FICS), where thousands of students from national and international universities pitch their ideas to industry experts. The program also provides support for establishing startups. In 2024, a significant number of students from universities across Türkiye and Azerbaijan participated in FICS. International chapters were held in their home countries, with finalists invited to Pakistan for the grand finale.

- **Collaboration with Public and Private Sector Organizations:** NUST collaborates with various public and private entities to promote innovation, entrepreneurship, and K/TT initiatives, including:
  - **Prime Minister's National Innovation Award:** Under this initiative, hundreds of participants from across Pakistan took part in a startup competition. They were trained and incubated by NUST, promoting entrepreneurship among individuals from remote areas.
  - **Rising Star Initiative:** In partnership with the U.S. Embassy in Pakistan, NUST launched the Rising Stars Startup Competition, aimed at creating an inclusive entrepreneurial ecosystem by increasing the representation of marginalized and underprivileged communities and providing equal opportunities for all.

- **NUST X UNDP Innovation and Entrepreneurship Award:** In collaboration with UNDP, NUST has been promoting an entrepreneurial culture among individuals from KPK. The program also supports startups and SMEs by offering training and financial assistance.

- **IP Awareness Sessions:** NUST regularly conducts IP awareness sessions for its researchers as well as industry partners, fostering a deeper understanding of intellectual property protection.

- **Extending Services to Other Universities and Startups:** NUST offers its expertise and services to universities and startups across Pakistan, positioning itself as a leader in fostering an IP-driven knowledge economy.

- **Consultancy and Industrial Projects Policy:** NUST encourages knowledge and technology transfer by allowing its employees to undertake consultancy and product-based industrial projects, as per its policy on consultancy and industrial projects.

SLOVENIA

Urša Jerše

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

In addition to the Employment Invention Related Act, which gives institutional ownership of inventions to universities, the government is helping develop technological transfer offices. At most universities, the development of KTOs is still at an early stage, however a huge progress has been made in the last five years. In the University of Ljubljana, a first attempt to establish a central KTO was made in 2006, but the actual breakthrough came with ministerial funding and the possibility of collaboration with other KTOs through the knowledge transfer consortium.

In 2017, the government launched the Consortium for Technology Transfer/KTT 2.0 program (2017-2022) . KTT is a consortium co-financed by the Slovenian Ministry of education, science, and sport and European structural funds (European Regional Development Fund). KTT performs the activities of technology transfer for eight major Slovenian public research organizations (University of Ljubljana, University of Primorska, Jožef Stefan Institute, National Institute of Chemistry, National Institute of Biology, University of Maribor, the Agricultural Institute of Slovenia, Faculty of Information Studies Novo Mesto). The University of Ljubljana is the consortium leader supporting through its central KTOs the work of other KTOsfrom the seven other PROs. The objective of the project is to promote connections and cooperation between public research organizations (PRO) and the business sector, and to strengthen the competencies of technology transfer offices (KTO), researchers, and companies.

It has succeeded in combining several elements in a five-year timeframe. This concerns firstly, establishment and financing of technology transfer offices. Secondly the KTO

consortium also undertakes the exchange of experiences and collective cross-institutional learning from different (public and private) universities as well as non-university research institutions, which is relatively rare internationally. Finally, even in its short existence, the KTO consortium has also succeeded in having an effect on the individual level (for researchers) through training and the exchange of good practices. The progress made in implementing the KTO can also be seen in the number of ideas and inventions brought into the office as well as the patent applications derived.

Currently ongoing is the program "Support of Knowledge Transfer Office Activities (JRO KTO) 2024-2029)", which is a continuation of the above mentioned KTT program, bring new institution in the consortium, establishing new KTOs and enhancing even closer connection among the KTOs.

A quick overview of the JRO KTO program:

- Establishment of new KTOs

- Strengthening Connections: Enhancing collaboration between KTOs and stakeholders in the innovation ecosystem.

- Skill Development: Improving the knowledge and skills of KTO employees.

- Funding: Supported by the European Union's European Regional Development Fund and Slovenia, with a total of up to €4.3 million available.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

The Knowledge Transfer Office of the University of Ljubljana (UL KTO) is unique in its youth energy, flexibility and diversity. It offers services to 23 faculties and three art academies. It has been restructured in 2018 and since it has achieved great success in raising awareness. Being part of the oldest and largest university in Slovenia it makes it one of the most important players in the innovation ecosystem.

Since its establishment UL KTO has been engaging at the national level, through the "Knowledge and Technology Transfer KTT 2.0 program" (supported by the Slovenian government from 2017 to 2022), in which together with other partners it helped raise awareness among policy makers about the importance of knowledge transfer. UL KTO released "Guide for knowledge transfer at UL" and launched webpage with a lot of useful information which made a huge impact also on the policymakers. We managed to improve the understanding of what knowledge transfer is, and by sharing good practices, we also managed to show the impact of KT. In 2021 we have prepared a document together with some other KTOs in Slovenia in which we presented our vision of knowledge transfer in Slovenia in the next years, and that was also the document (available only in Slovene) which helped shaped the new national programme "Support of Knowledge Transfer Office Activities (JRO KTO; 2024-2029)". In this new project, which started in April this year, UL KTO is the leading partner on the side of the Universities, which will allow us to advocate for KT also in the future.

In the last year UL KTO has been a member of the expert group on Action Plan for the implementation of Goal 5 of the Resolution on the Research and Innovation Strategy of Slovenia 2030: "Accelerated cooperation between science and the economy, knowledge transfer, and innovation. UL KTO is also engaging in the Slovenian Industrial strategy, Start-up strategy and Intellectual Property Strategy.

At the regional and EU level, we are part of different groups, such as GUILD and EUA, that both have a specialized innovation section, which advocates for universities' interest in the field of knowledge transfer and IP. We were also taking part in the expert ERA FORUM VALORISATION SUBGROUP and helped shaped the Guiding principles on Knowledge Valorisation. Some of our activities were also admitted as good practices by European Commission and are part of Knowledge Valorisation Platform.

SOUTH AFRICA

Rosemary Wolson & Andrew Bailey

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Institutional Incentives – Researchers

The University of Cape Town (UCT) provides a number of incentives to researchers to participate in innovation activities. There is also increasing recognition of activity/ achievements in invention, innovation and spin-off company creation when considering an academic's application for ad hominem promotion in STEM faculties.

Incentives include:

- **Inventor coffee mug** — awarded to filers of a provisional patent at the annual Inventors Breakfast, where achievements of inventors are recognized. These provide some recognition right at the outset of the process as the time to get to a granted patent can be several years. These are actually highly regarded and again, promote innovation in the faculty tea room.

- **Duplicate South African patent certificate** — these are obtained from the patent office and presented to inventors at the annual Inventors Breakfast. They look great and can be framed by the recipients and displayed in their offices, which advertise IP protection within the university.

- **Benefit share** — there is provision for a share in the revenue from successful commercialization in terms of the UCT IP Policy, which is uncapped. South African legislation requires the university to distribute at least 20% of gross revenue to inventors, ensuring that they are rewarded early and before the university has recovered all of its IP protection expenses.

- **News features** — when we surveyed inventors some years back it was clear that money is not the only incentive, but rather recognition. We provide a variety of

news features that are published on either our TTO website, or the main university news (articles are often picked up from there and appear in mainstream media). We also produce an annual innovation booklet, which profiles inventors and inventions rci-innovations-uct-brochure-web.pdf.

- **Ranking of inventors in research reports —** we provide a 'ranking' of inventors by the most granted patents and the highest number of inventions (patent families)

- **Ability to "double dip"** if commercializing spin-off company and playing an active role. Here an inventor can hold equity in a spin-off company and receive their share of the portion accruing to the university from royalties, cashed-in university equity, etc.

- **Ability to consult** to own spin-off 8h/week. Researchers are permitted to spend up to a day per week on private work and with Head of Department permission, all of this time can be spent on supporting a spin-off company in which they hold equity.

Government Incentives — Researchers

The National Intellectual Property Management Office (NIPMO) is mandated by legislation to provide incentives to IP creators who develop and commercialize IP. NIPMO provides IP Creators Recognition Certificates annually to inventors from public research institutions.

In 2019, on a once-off basis, awards were made to the most 'prolific' inventor from each public research institution, consisting of certificates to the inventors and a cash award to the institution to be used to further develop and/or commercialize one or more of the inventor's inventions.

- The right of an inventor at a public research institution to **receive a portion of revenues** accruing to the institution from commercialization of IP they created is enshrined in legislation.

- Universities are eligible for **subsidy** from the Department of Higher Education and Training (DHET) for certain creative outputs and **innovations**. The first patent or plant breeder's right in a family to be granted by a substantive examining office is considered a qualifying innovation for a monetary subsidy which is paid over to the university concerned. Some universities have policies that provide for some or all of this amount to be made available to the inventors (often into a university research account).

- The National Science and Technology Forum (NSTF) is a multi-stakeholder forum bringing together stakeholders in science, engineering, technology and innovation. One of the flagship activities is the annual **NSTF Awards,** supported by the Department of Science and Innovation. Specific award categories for innovation recognize individuals, teams and organizations for notable achievements in innovation.

Institutional Incentives – K/TT Professionals

There are direct incentives provided to K/TT professionals at UCT. This has been considered, but in line with practices elsewhere it is felt that the structuring of incentives can drive inappropriate behavior — e.g. only focusing on products that can go to market rapidly, or incorporating companies too early, not managing a full portfolio of IP and cherry picking.

Through the university's performance management system, there are opportunities for individuals to be recognized through three levels of once-off bonus ranging from 1 to 15% of annual salary. Strong performance that exceeds standard KPA's would be rewarded through these bonuses, effectively recognizing technology transfer excellence.

Government Incentives – K/TT Professionals

- The Southern African Research and Innovation Management Association (SARIMA) hosts annual Excellence Awards to recognize excellence in the K/TT profession. Awards are available for early career excellence, professional achievement, distinguished contributions to the profession, and for teams/TTOs.

- K/TT professionals could be eligible for certain NSTF awards.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

The Southern African Research & Innovation Management Association (SARIMA) plays an advocacy role, both as an association directly and by providing a platform and resources to support members in their advocacy activities. It is acknowledged that there is a need to increase the level of advocacy both within South Africa, from where the association draws a majority of its members, and in other SADC member countries where technology transfer practices/functions are typically nascent or emerging.

Some examples of SARIMA advocacy activities include:

- TIA Seed Fund
  Noting the dearth of sources of comparatively small amounts of early "pre-seed" funding to support technology development post research within a university environment, SARIMA lobbied the Technology Innovation Agency, an agency reporting to the Department of Science and Innovation (DSI), to establish a Seed Fund for universities.

  The approach was successful. Several universities collaborated on the submission under SARIMA's umbrella highlighting the need and profiling international best practices. The fund has been very useful especially to universities who did not have access to alternative significant resources from donations, endowments, etc. The fund also demonstrated how critical this funding was to unlocking university innovation.

  SARIMA subsequently advocated on behalf of Seed Fund beneficiaries for reasonable funding terms that would promote and not stifle commercialization of funded projects.

- Technology Transfer Survey
  SARIMA has been appointed by the DSI to administer the third IP and TT survey in South Africa. As with previous surveys, SARIMA is represented on both the Steering and Technical Committees, allowing K/TT professionals from TTOs to shape questions for inclusion in the survey as well as to participate in analyzing the results. The survey tends to be one of the broadest conducted internationally and provides both quantitative and qualitative data that can be used to shape government policy

and funding programs. For example, capacity constraints are assessed (and some quantified) in both human and financial resources.

The results of the survey also support TTOs in their advocacy to senior management of their institutions by providing comparative data from other South African institutions, allowing them to motivate for similar support, etc.

- **University Technology Fund**
  The University Technology Fund (UTF) is a first of its kind in Africa, early-stage VC fund that also provides Pre-Seed and Seed funding. This was lobbied for by a consortium of universities, led by Stellenbosch University. It was exceptionally difficult to attract an investor who would be prepared to set up the fund in the manner necessary to properly support the early-stage technology space, where VC funds in South Africa do not typically focus and operate. While the bulk of this advocacy was not performed by SARIMA itself, the close network of TTOs created by SARIMA facilitated the community engagement and refinement of a prospectus.

- **Professionalization**
  SARIMA has played a pivotal role in advocating for professionalization of TT in South and Southern Africa, by developing competency frameworks and through membership of ATTP, providing a route for SARIMA members to receive recognition as RTTPs or Candidate RTTPs.

- **DSI**
  SARIMA advocates for community needs on an ongoing basis, especially with DSI as the government department responsible for science and innovation policy and support. DSI has over the years funded several SARIMA activities and programs which have been designed by SARIMA from time to time, on the basis of member input from surveys, needs assessment exercises carried out by the elected SARIMA Committee, and in response to international trends and best practice. The supported activities and programs have, amongst other things, helped shape policy and supported relevant DSI policy priorities.

- **Advocacy in the Southern African Region**
  SARIMA has carried out several projects in the region, developing and sharing resources to feed into policy at institutional and national level. A notable current example is the Strengthening Research and Innovation Management II project, funded by the DSI, endorsed by the SADC ministers responsible for science and technology in the various member states, and implemented by SARIMA in partnership with the SADC Secretariat and member states. National symposia held under the auspices of the project have brought together key stakeholders and provided an effective platform for advocacy of the importance of strong research and innovation management capabilities to support the science, technology and innovation ecosystem.

SPAIN

Helena Montiel and Carmen Verdaguer

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

The main incentives in Spain are promoted by the national government, the regional governments and by the institutions themselves.

- Incentives for researchers:

   A.1. Incentives promoted by the national government:
   Currently, the Transfer and Collaboration Plan promoted by the Ministry of Science, Innovation and Universities contemplates a series of incentives in its section 12: Incentives for transfer and collaboration. These incentives are applicable nationwide, since they are based on current Spanish regulations, such as the Law on Science, Technology and Innovation, the Organic Law of the University System, and the Law for the promotion of the ecosystem of emerging companies. ([El Gobierno aprueba un Plan de transferencia y colaboración para acelerar la innovación](#))

   1. Individual incentives
      - 1.1. Economic incentives:
         - Personal income for the recognition of the Six-year transfer period, obtained through a call from the Ministry of Science, Innovation and Universities. This recognition has an economic compensation for the researcher. It is obtained through the accreditation of knowledge transfer activities carried out in periods of six years.
         - Supplementary personal income for research contracted with private entities. Spanish laws allow university professors to obtain supplementary personal income from those incomes received by the university in return for research contracted by private companies and other institutions.
         - Additional personal income from the commercialization of patents. Spanish laws allow universities and public research centers to return to researcher's part of the income that the institution receives from the commercialization of the patents in which they are inventors (royalties).
         - Incentives for participation in spin-offs. Spanish laws allow university professors to participate in technology-based companies: with more than 10% of the shareholding, provided that the institution also participates in the share capital. Likewise, it also allows the participation of professors in the administrative bodies and the obtaining of a leave of absence to work in these companies.
      - 1.2. Incentives for professional careers:
         Spanish laws specify that the processes for access to professor and research staff positions, as well as the internal promotion processes, consider the merits obtained in knowledge transfer activities, and that these are comparable to research activities.

- **2. Institutional incentives:**

  There are funding mechanisms for institutions that are partially linked to obtaining knowledge transfer results, through the annual report of quantitative indicators within the framework of the Science, Technology and Innovation Information System (SICTI) of the Ministry of Science and Universities. [(Spanish Science, Technology and Innovation Information System (SICTI) (ciencia.gob.es)](https://ciencia.gob.es).

  - **A.2. Incentives promoted by the regional government:**

    At the regional level, universities received funding partly based on knowledge transfer metrics. They are basically programs aimed at both researchers and institutions and include different initiatives to promote knowledge transfer. Some examples of this are the Catalan Knowledge Industry Program ([Programa Indústria del Coneixement. Agency for Management of University and Research Grants (gencat.cat)](https://gencat.cat)) and the Galician Ignicia Program - [Programa Ignicia - Transferencia de conocimiento - Agencia Gallega de Innovación (xunta.gal)](https://xunta.gal)

  - **A.3. Incentives promoted by institutions:**

    Institutions often promote actions to increase knowledge transfer results. Institutions can, for example, improve their support services, hire technicians and acquire equipment. They can also create their own incentive programs, such as programs to reduce the teaching load, to increase the time spent in knowledge transfer activities; or financing programs, such as proof of concept or IPR protection.

    Some universities internally recognize research groups active in knowledge transfer. These groups receive additional support to promote their capabilities and research results.

- **Incentives for knowledge transfer professionals:**

  There are no economic individual incentives for knowledge transfer professionals at the national, regional or institutional level.

  There are, however, some programs promoted by regional governments. Thus, the Government of Catalonia has a funding program for universities that allows the incorporation of technicians in Knowledge Transfer Offices (KTOs) [Programa Indústria del Coneixement. Agency for Management of University and Research Grants (gencat.cat)](https://gencat.cat)

  In this context, without incentives for professionals, the directors of Spanish KTOs usually motivate knowledge transfer professionals through access to specialized training and attendance at meetings and conferences of high interest, both national and international.

  There is an interesting regional initiative in Galicia, within the IGNICIA program. This program finances the courses necessary for the RTTP accreditation of KTO staff ([Programa formativo con acreditación RTTP para personal de gestión de transferencia - Agencia Gallega de Innovación (xunta.gal)](https://xunta.gal))

Finally, it is worth mentioning a free training program, financed by the Ministry of Science, Innovation and Universities. The DINA-ITC program includes training and development activities to promote and facilitate the processes of knowledge exchange and transfer, which allow the results of research to be transferred to the productive system to advance in the development of solutions that improve people's lives. These activities are aimed at technicians and managers of knowledge transfer (ITC), as well as research staff , in Universities, Public Research Organizations (OPIs), technological institutes, scientific and technological parks, technological platforms and companies (Home - Programa DINA (csic.es))

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

The ways in which Redtransfer advocates and influences the Spanish innovation system are based on three key aspects:

- Professional Recognition
  Redtransfer is the national association for RTTP accreditation. Redtransfer has promoted this professional accreditation both at an institutional level (presenting it to the Ministry of Science, Innovation and Universities), and at a professional level through its courses and seminars.

- Documents
  One of Redtransfer missions is the preparation of position papers and participation in specialized documents related to the profession.

  Thus, Redtransfer has published some position papers. The most relevant ones are available on the website (redtransfer.org) and are the following:

  - Proof of Concept Programs: recommendations for their design, management and evaluation

  - Human Resources in Knowledge Transfer

  - RedTransfer position regarding the Transfer and Collaboration Plan promoted by the Ministry of Science, Innovation and Universities

Redtransfer has also participated in the drafting of external documents related to the profession, such as the national publication "Improving the creation of Spin-offs and Patent Licenses in Spanish Universities, Redtransfer and Fundación CyD" or the ASTP-National Associations Advisory Committee document "Embedding Knowledge Transfer Offices in Horizon Europe Projects".

Redtransfer has also had the opportunity to participate in the drafting of various national and regional laws and in the OECD Diagnostic Report "Improving knowledge transfer and collaboration between science and business in Spain" (by OECD, December 2021), which is the white paper for the Knowledge Transfer National Plan.

Redtransfer is currently, together with RedOTRI (the university OTCs network), a recognized stakeholder for the Ministry of Science, Innovation and Universities. This

relationship allows us to participate in the development of proposals for the Strategic Plan for Knowledge Transfer.

- **Participation in meetings and events related to knowledge transfer**
  Redtransfer annual meetings focus each year on topics of current interest, and they allow us to discuss them in a collective way. Members of the Redtransfer board also attend debates, round tables and other meetings related to knowledge transfer, at the international, national and regional levels, such as AUTM-WIPO Leadership Summits, ASTP Annual Conferences, NAAC Committees or ATTP Meetings.

THAILAND
Orakanoke Phanraksa and Chalermpol Tuchinda

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

In 2021, the Thailand Research and Innovation Utilization Promotion Act (TRIUP Act), a Bayh-Dole-like law, was enacted to boost IP utilization and drive investment in research. This allows grantees to claim ownership of inventions developed under government funding, empowering them to manage their IP and create meaningful national impact. While commercial IP utilization is a key focus, the act also addresses the need for technologies that benefit society. Researchers whose work is commercialized are eligible for benefit sharing, and special provisions ensure that government-funded research also serves communities, farmers, and the underprivileged through appropriate technology. "The Appropriate technology Section" is designed to be "appropriate" to the context it is intended for, should be easy to maintain, and to be effective for many people and have a wide impact, it must be affordable. Four funding agencies are tasked to secure the budget available to incentivize the researchers who create the appropriate technology that has brought impact to the community.

The success of the law hinges on having qualified knowledge and technology transfer (K/TT) professionals. Their expertise is critical to maintaining program quality and effectiveness. Despite the challenges ahead, establishing a robust K/TT infrastructure is essential for the long-term success of the TRIUP Act. The government is also addressing the lack of clear career paths for these professionals by developing a national accreditation system. Future policies may require certified K/TT agents in research proposals, ensuring that the government funded research will be professionally handled by qualified K/TT services.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

We are actively engaged in advocating for intellectual property (IP) and knowledge/technology transfer (K/TT) at both national and regional levels. At the national level, Thailand Science Research and Innovation (TSRI) has played a key role in establishing the Association of IP and Technology Transfer Professionals (AITP), which integrates a

national accreditation system aligned with the ASEAN framework. This system supports the professional development of K/TT experts in Thailand and can be adapted by other ASEAN member states. We have also shared Thailand's ISO 17024-certified K/TT competencies with the AUTM ASEAN committee, aiming to foster regional collaboration. To further this effort, we are planning an event in late November in Bangkok to bring together key K/TT leaders from across ASEAN to discuss potential collaborations.

THAILAND
Lars Andersson

- **National level**
  Thailand is still in the process of, in practice, implementing the so called TRIUP Act (Thailand Research & Innovation Utilization Promotion Act), which was presented as a Thai version of the US Bayh-Dole Act. The aim of the regulation was to clean up often messy ownership structures and move the ownership and responsibility for utilization to universities and research institutes, under government funding schemes. There are however a few big differences compared to the US, and also similar regulations in Europe, and the main difference is probably the scope. What has to be managed under the act are "research and innovation results". Which are defined as "a discovery or result of research or innovation created by researching, experimenting, exploring or studying, including knowledge, invention, manufacturing process, service process or new method of management, which are newly discovered or significantly developed, and can be utilized, whether or not it is protected under laws related to intellectual property" (my translation). The "research results" has to be disclosed to the funding agency, and the funding recipient has to request ownership based on a utilization plan. The funding recipient then gets a 2-year conditional ownership. The challenge here is that as the definition includes also non-IP, we can of course ask ourselves what that ownership means.

  As a consequence of the TRIUP Act there has been a lot of training activities to promote the act, but also to train different management levels at universities and research institutions. One example is the comprehensive TREX (Top Research Executive Deep Dive Training) Program. There is also a currently a process in place to develop "IP Standard for Professional Qualification", including, as I understand it to create a local "Association of Intellectual Property and Technology Transfer Professional" (not my translations).

  In parallel with this there are also many activities to try to strengthen Thailand as an entrepreneurial and innovative nation, including promoting university spinouts etc.

- **Institutional level**
  On an institutional level at Suranaree University of Technology (SUT) we have recently established a holding company, together with an investment company and a specific IP holding company, as means to try to work with a more dynamic and international IP strategy, and especially trying to bridge the lack of funding for international patents. The holding company is connected to our incubator as, it least in Thailand, licensing to existing entities has proven to be very difficult.

We are also in the process of totally redoing our IP regulation, which includes generally exclude ownership over student creations, and to narrow down the general scope, which today is very close to the definition under the TRIUP Act. SUT is not unique in Thailand when it comes to having very broad claims (including e.g. all teaching material, articles, and "new ideas") but these claims are not followed up in practice. We are still struggling to fit the TRIUP Act, and how to fit that together with an impact focused IP regulation.

The process of upgrading the university's innovation and IP policy has resulted in a very good understanding of the challenges with many universities' IP policies and regulations, which often are vague and non-transparent. This, in combination with often limited financial and human resources, has resulted in weaker contributions to innovation than what is desired, especially considering the potential that universities have to be a major factor in supporting the development of our society.

TURKIYE

Fazilet Vardar Sukan and Ahu Altinkut Uncuoğlu

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

The Governmental Incentives for researchers and K/TT professionals in Turkiye are coordinated along five main structures:

- **The Scientific and Technological Research Council (TUBITAK)** supports research development, technology development, and business development phases both at the national level through a widespread array of support programs target all TRLs and also internationally through bilateral/multilateral cooperation programs. TUBITAK is also the official coordinator of EU Research support programs. These supports are extended to to academics, entrepreneurs, TTOs, RTTP professionals, SMEs, and large industrial companies as well as students.

- **Small and Medium Enterprises Development Organization (KOSGEB)** provides support specifically for SMEs focused on entrepreneurship, product support, and investment, especially in the context of commercialization and enhancing production capacity.

- **Ministries (e.g., Agriculture and Forestry, Health, Environment, Defense, etc.)** provide R&D and innovation supports to private sectors and universities through their respective research units to foster University-Industry collaboration.

- **State Research Institutes/Centers of Türkiye** provide support to universities and enterprises to develop products and technologies to be exploited by the relevant commercial enterprises. These organizations are generally in the form of state-supported research infrastructures founded by a special law (Law No: 6550) or sectoral (Health - TUSEB, Water – SUEN, Boron technologies BOREN,…..).Regional Development Agencies, established in their respective

geographic regions, support public institutions in promoting regional development through knowledge and technology transfer, with a particular focus on smart specialization.

At Institutional level, there are three main stakeholders in the Turkish KE/TT ecosystem; although there is a strong parallelism amongst them, their objectives thus the support they provide are different. The performance of these institutions is measured by National Indices and announced annually in a competitive manner in six dimensions; R&D Performance, Economic Impact, Collaborations, IPR & Licensing, Entrepreneurship & Start-ups, Sustainability and Ecosystem Development Activities.

These METRICS of KE/TT slightly different for different stakeholders are announced by the Higher Education Council or Ministry of Technology & Industry, targeting Universities, Industrial Research Centers and Technoparks. Under the pressure of this competitive environment different institutions develop unique support systems for their own stakeholders. Individual Universities provide R&D&I support to academics and students via their Internal Project Support Units funded through their own budgets. In addition, Contract- Research Projects (University-Industry Collaborations) funded by individual companies are becoming more widespread.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

University-Industry Cooperation Centers Platform of Türkiye (USIMP), founded by a civil initiative in 2007 as a NGO aims to create awareness of university-industry cooperation/ collaboration and technology transfer among all stakeholders at national level. USIMP has over 150 institutional members (universities, tech-transfer offices, Chambers of Industry, Exporters Unions, NGOs etc.) from different regions of Türkiye.

USIMP determines targets and tasks in a collective spirit with members & stakeholders and these are usually hosted and/or co-funded by the member organizations. It organizes different activities to create synergies amongst stakeholders (academia, industry, government, public institutions and NGOs). It develops innovative tools tailored to specific needs, with a strong emphasis on University-Industry collaboration and knowledge exchange.

Tailor-made services are developed for various national and international players of the ecosystem and implemented for capacity building and skills improvement. Particular attention is given to fostering synergies among members, while services are limited to those that cannot be provided individually by any single member. USIMP's activities can be categorized under seven main categories:

- [Capacity Building - Tools and mentoring for capacity building of TTOs and industrial sectors](#)

- **Workshops and Seminars** - national TTO Network activities for experience sharing amongst best practice TTO's,

- **Working Groups** - to draw attention to the challenges of the Turkish R&D and innovation ecosystem and for the preparation of policy recommendations,

- **Annual Events** - USIMP National Patent Fair and Annual Congress; International participation and representation of the Turkish ecosystem,

- **Training and Certification Activities** - Official national definition of the KE/TT profession and training personnel for TTOs and Industry.

USIMP initiated the process for the official recognition of "TTO Specialist" as an occupation by the National Professional Proficiency Authority in 2014 and in June 2018, the definition of Technology Transfer Specialist was published in the Official Gazette. In 2024, the professional qualification criteria for technology transfer professionals, prepared by USIMP, were approved and published (https://portal.myk.gov.tr/index.php?option=com_yeterlilik&view=arama).

USIMP practices "Platform Approach" in all its services. In 2024, it has initiated a specialized platform with the participation of over 70 specialists from 27 different organizations to act as a "Solution Partner" to SMES for mentoring their Green Transformation Projects (https://www.usimp.org.tr/tr/sayfa/icerik/usimp-yesil-donusum-platformu-835).

USIMP has also been organizing the "National Patent Fair and University-Industry Cooperation Congress" since 2015 with the mission of exploiting academic IP for the benefit of society (https://www.usimppatentfuari.org.tr/index). In 2024, this event has been expanded to include industrial R&D Centers, aiming to foster awareness, promote university-industry cooperation activities and commercialization of IP.

USIMP also prepares reports to define the national R&D&I landscape including National Technology Transfer Ecosystem Statistics Report (https://www.usimp.org.tr/uploads/istatistik_raporu_2022.pdf) and TTO Employees' Loyalty and Satisfaction Report (https://www.usimp.org.tr/uploads/calisan_bagliligi.pdf), as well as promotes and supports efforts Patent-powered startups in Türkiye (Patent Effect, 2023).

EAST AFRICA, EARIMA

Anne Nakagiri

The East Africa Research and Innovations Management Association (EARIMA) provides a platform for professional development, capacity building, networking, and advocacy, ensuring that the region's research outputs align with global standards. Currently the Association boasts of over 50 active members, including representatives from universities, research institutions, and industry stakeholders all dedicated to enhancing the quality and impact of research and innovation in East Africa. EARIMA's membership is particularly strong in Tanzania, Uganda, Kenya and Somalia. We are working to expand our membership to include additional East African countries such as Rwanda, South Sudan, Somalia, and Burundi. This expansion will facilitate cross-border collaborations and the sharing of best practices in research management and innovation throughout the region.

East Africa is steadily advancing in technology transfer and innovation, despite facing unique challenges such as limited infrastructure, funding gaps, and a need for supportive policy frameworks. However, there are encouraging developments:

- 1. University-led Innovations: Many universities and research institutions, including have established technology transfer offices (TTOs) to facilitate the commercialization of research outputs. These TTOs aim to bridge the gap between academia and industry, ensuring that research translates into tangible products and services.

- 2. Public-Private partnerships: Increasingly, collaborations between governments, universities, and private sector actors are increasingly resulting in innovative solutions that address regional needs. Innovation hubs and incubators, serve as catalysts for startups and tech-driven solutions.

  Policy and regulatory frameworks: Governments across the region are recognizing the necessity for stronger support systems for research and innovation. Countries like Uganda, Rwanda and Kenya have implemented policies to enhance the development of technology innovation clusters and strengthen intellectual property rights, ensuring that innovators benefit from their creations. In Uganda the STI secretariate has clearly stipulated the idea to Market journey that enables innovators progress from basic research to bringing ideas/ solutions to market.

- 3. Financing: Financial support to innovator is currently through STI grants and government funded university research grant schemes. Universities are also collaborating with other universities worldwide to tap into existing funding to advance innovations.

Despite these advancements, technology transfer in East Africa remains in its early stages compared to more developed regions. However, with ongoing investments in human capacity, infrastructure, and supportive policies, we believe the region is on the path to becoming a leader in African research and innovation. Furthermore, we will continue undertake continuous education and development of Association members through exchanges, secondments, seminars, and facilitate the exchange of intellectual property and licensing opportunities, fostering a dynamic and collaborative environment.

UNITED KINGDOM
Stuart Wilkinson

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Incentives take two forms

- Financial / Reward
  - Direct: It is common for universities to share proceeds from IP with individual researchers (but not KE professionals)
  - Indirect financial benefits include increasing the chance of funding, and specific impact funds (mainly from Government, but sometime institutional) In additional successful impact generates discretionary funds at an institutional level (e.g. through) REF impact.

- Non-Financial / Recognition
  - At an institutional level our impact is measured through Case studies for the REF and through the HEBCI/ Research England: Knowledge Exchange Framework (kef.ac.uk) which demonstrates the performance of institutions from the collective individual activities
  - Increasingly institutions are looking at recognizing impact in appointments and promotion criteria, through this is patchy across the sector, though the demonstration of REF impact is a consideration in esteem.

- Reward and Recognition in KE is a focus of KE Concordat... KE Concordat | praxisauril.org. which although was not a public exercise encouraged debate and discussion across the sector through webinars.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

We represent the sectors (and our members) interests in IP /IPR in KE the UK and the devolved nations of the UK, through

- A key role in-house of Head of policy (which we have now had some form of for 10 years)

- Leading the UK KE Concordat... KE Concordat | praxisauril.org.uk (a framework established in the UK to enhance collaboration and knowledge sharing between academia, industry, and other stakeholders) we have recently taken on the leadership for this, having been part of the advisory groups

- Institutional policies and practice development - through our director forums and training offering

- Representation with stakeholders, through our regular stakeholder engagement but also partnering around specific initiatives, e.g.
  - The UK sponsored Spin-out Review... And the implementation of the outcomes of that review Independent review of university spin-outs published – UKRI
  - A series of workshops with the UK's IPO and members to update and develop a Knowledge Asset Management guide (we were involved 10 years ago in the original document the Intellectual Asset Management guide Intellectual asset management for universities - GOV.UK (www.gov.uk)

UNITED KINGDOM

Anji Miller

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

 The UK has several incentives for K/TT, including:

- Knowledge transfer partnership (KTP)
  This program is for UK registered academic institutions, RTOs, or Catapults to apply for funding to work with businesses or not-for-profits on innovation projects.

- Knowledge Asset Grant Fund (KAGF)
  This program is run by the Government Office for Technology Transfer (GOTT) to help identify and develop public sector knowledge assets. The fund is funded by the Department for Science Innovation and Technology (DSIT). The KAGF supports the commercialization, repurposing, or expanded use of knowledge assets, which can include inventions, designs, data, and more. The program also provides feedback to applicants and grant holders to help improve their projects.

- Shared technology transfer office (TTO) functions pilot
  This program is for universities with smaller research portfolios to apply for funding to develop sustainable models for shared TTO functions. Proposals must be collaborative and include at least one English higher education provider and another partner.

- K/TT Fellowships
  LifeArc has two fellowship programs to support training STEM trained individuals to enter the K/TT profession. This is one of the few formal training routes into the profession and has provided a pipeline of K/TT professionals to the sector.

- Institutional Translational Training
  An increasing number of UK universities are providing translational/innovation training for researchers with an ambition of translating their research.

- Innovation Hubs for Gene Therapies
  Set up in 2021 with £18m of funding from the independent research charity LifeArc, the Medical Research Council (MRC), and the Biotechnology and Biological Sciences Research Council (BBSRC), the hubs will operate as a coordinated network, sharing technical skills and resources.

The Hubs will enable academic researchers to progress novel gene therapy research into clinical trials, offering access to GMP (good manufacturing practice) facilities for clinical trials materials, alongside essential translational support, translational training and regulatory advice.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

LifeArc actively advocates and for intellectual property rights and the knowledge transfer sectors. Our number one approach is to ensure that we are party to the conversation and where possible, can provide examples and/or data to accompany the matter at hand.

UNITED STATES

Andrew Maas

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Institutional incentives for researchers involved in technology transfer at U.S. universities aim to facilitate the commercialization of research through various means such as patents, startups, and partnerships with industry. These incentives often include financial rewards, royalty shares, entrepreneurial support, and resources to navigate intellectual property (IP) management. Below are 10 university programs that offer specific technology transfer incentives:

1. Stanford University Office of Technology Licensing (OTL)
   Stanford's OTL incentivizes faculty by offering inventors a third of net royalties from their patents. Additionally, they provide support for entrepreneurs, workshops, and assistance in launching startups.

   [Stanford OTL]

2. University of California, Berkeley — Innovation and Entrepreneurship Initiative
   Berkeley offers royalty sharing of up to 35% of licensing income, along with extensive support for faculty and students to commercialize research through licensing opportunities and startup mentorship programs.

   [Berkeley Innovation]

3. Massachusetts Institute of Technology (MIT) Technology Licensing Office (TLO)
   MIT supports researchers by providing venture creation assistance, IP protection, and sharing royalties from successful patents. MIT is a leader in forming startups and engaging venture capitalists to help commercialize technologies.

   [MIT TLO]

4. **Louisiana State University (LSU) Innovation & Technology Commercialization**
   LSU offers faculty significant resources for patenting and licensing, including royalty sharing and support in launching startups. Through the LSU Innovation Park, the university provides mentorship, funding, and access to industry partners.

   [LSU Innovation]

5. **University of Michigan Office of Technology Transfer**
   The University of Michigan provides patenting support and royalty sharing, with an active system that connects researchers with industrial partners. This office facilitates the translation of academic discoveries into market-ready innovations.

   [University of Michigan Tech Transfer]

6. **University of Texas at Austin - Office of Technology Commercialization**
   UT Austin allows inventors to receive up to 50% of net royalties from licensed technologies. The office also provides support for faculty and students to launch startups and collaborate with industry partners.

   [UT Austin Tech Commercialization]

7. **University of Wisconsin-Madison - Wisconsin Alumni Research Foundation (WARF)**
   WARF offers comprehensive IP management and revenue-sharing options for researchers, helping faculty and students launch companies and commercialize their research through licensing deals.

   [WARF]

8. **University of North Carolina at Chapel Hill - Innovate Carolina**
   Innovate Carolina provides seed funding for prototypes, royalty-sharing incentives, and connects researchers with investors and industry for commercialization. The initiative focuses on enabling faculty and students to bring their research to the market.

   [Innovate Carolina]

9. **University of Washington CoMotion**
   CoMotion offers entrepreneurial education, IP management, and startup incubation resources. Faculty are encouraged through revenue-sharing programs and support in developing their technologies into marketable products.

   [CoMotion]

10. **Georgia Institute of Technology - VentureLab**
    VentureLab supports faculty through startup incubation, mentoring, and funding opportunities. Georgia Tech offers a robust royalty-sharing system to incentivize researchers in commercializing their innovations.

    [Georgia Tech VentureLab]

These programs show the diverse ways in which U.S. universities are incentivizing researchers to transfer their discoveries to the market, supporting both academic innovation and economic development.

In the United States, state and federal governments provide various programs designed to incentivize researchers to engage in technology transfer and commercialization of their research. These programs aim to support innovation by offering financial backing, resources, and collaborative opportunities with industries. Below are six key programs:

1. **Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR)**
   Managed by the U.S. Small Business Administration, the SBIR and STTR programs offer non-dilutive funding to small businesses to commercialize innovations. SBIR focuses on technological innovation, while STTR emphasizes collaborations between small businesses and research institutions. With an annual budget of approximately $4 billion, these programs fund early-stage R&D and help bring inventions to the market.

   More information: [SBIR.gov]

2. **U.S. Geological Survey (USGS) Technology Transfer Program**
   The USGS Technology Transfer Program promotes collaborations between federal research labs and private sector organizations. Through licensing agreements and cooperative R&D agreements (CRADAs), USGS enables the commercialization of scientific innovations related to earth sciences, with the goal of fostering economic growth and technological advancement.

   More information: [USGS Technology Transfer]

3. **National Institute of Standards and Technology (NIST) Technology Transfer Program**
   NIST plays a critical role in transferring government-funded innovations to the private sector. NIST's technology transfer efforts include CRADAs, licensing, and patents. The program provides federal labs and private companies with opportunities to collaborate on groundbreaking research in fields such as advanced manufacturing and cybersecurity, offering incentives for commercialization.

   More information: [NIST.gov]

4. **State of California Innovation Hubs (iHubs)**
   The iHub program in California is designed to foster regional innovation clusters. It promotes partnerships between universities, research institutions, and businesses to advance technologies in industries like biotech and cleantech. The program offers networking opportunities, shared research spaces, and resources to support startups, helping entrepreneurs bring innovations to market.

   More information: [California iHub Program]

5. **Michigan Technology Transfer Talent Network (T3N)**
   Michigan's T3N connects technology transfer offices across the state to share expertise and develop talent within the tech commercialization field. By offering workforce training and promoting best practices, T3N helps researchers, universities, and

businesses collaborate more effectively. The initiative also provides grants to enhance the commercialization of innovations within the state.

More information: [Michigan Economic Development Corporation]

6. Louisiana Board of Regents — Proof of Concept/Prototype (POC/P) and Industrial Ties Research Subprogram (ITRS)
    In Louisiana, the Board of Regents' POC/P program offers funding to help researchers advance early-stage innovations into market-ready prototypes. The ITRS program supports projects with strong economic potential, focusing on partnerships between academia and industry. Both programs aim to commercialize technologies in key sectors such as energy, biomedical, and agriculture, promoting economic growth within the state.

    More information: [Louisiana Board of Regents POC/P and ITRS]

These programs demonstrate a robust effort at both state and federal levels to support researchers in transferring technological innovations to the marketplace. Through these initiatives, governments provide critical resources and incentives to help bridge the gap between academic research and real-world applications, fostering innovation and economic development.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

At AUTM we take a very active role in advocating for intellectual property and technology transfer laws and policies that promote a vibrant innovation ecosystem. Although we have members from 65+ countries across the globe, we limit our advocacy to U.S. laws and policies (we do not weigh in on other country's laws or policies, or those of individual states within the United States). We have developed our advocacy strategy over time, and we have identified certain approaches that we have found to be particularly helpful:

- **Focus:** We limit our advocacy to issues of particular concern to our members and the profession. We are careful not to weigh in on tangential topics which would dilute our voice. To keep us focused, we have a multiple gate approach to weighing in on issues including specific AUTM committees, staff leadership review and ultimate Board approval.

- **Build Coalitions:** Our voice is stronger when we can lock arms with other stakeholders in the field and we participate in numerous coalitions. A particularly important coalition is our "Higher Ed Coalition" which is composed of presidential-level associations representing university, hospital and other research institutions. The associations of the Higher Ed coalition are composed of the leaders (like University Presidents and Vice Presidents of Research) to which our members (tech transfer professionals) report. Having alignment on key tech transfer issues is critical as messages can then be delivered up (from the tech transfer office UP to senior administration) and DOWN (from the institution's president DOWN to other senior administration).

- **Be Visible:** We take every opportunity to engage in tech transfer issues at the federal government level. Those engagements include bringing our message directly to government through tech transfer presentations to government staffers, volunteering for various government initiatives (for example, the US Patent and Trademark's Council for Inclusive Innovation), and providing thoughtful and data-driven responses to government requests for information (to elevate AUTM as a thought leader to government officials). Importantly, we also devote time and resources to meet with government officials and staff frequently including an annual AUTM Board Meeting at Washington DC which focuses a day on Board Members meeting with their governmental representatives. We plan on holding an expanded version of this advocacy "fly-in" in conjunction with our 2025 Annual Meeting to be held in Washington D.C.

- **Empower Membership:** While AUTM has a growing voice, it is our members, and the institutions from which they hail, that is a force-multiplier to our advocacy efforts. To maximize the impact of our members, we promote our current positions, provide timely advocacy updates to our Membership, and provide advocacy toolkits with template letters.

- Many AUTM advocacy resources can be found here: https://autm.net/about-tech-transfer/advocacy

PUERTO RICO
David Gulley

Describe in detail any current K/TT institutional or governmental incentives for researchers and K/TT professionals.

Current K/TT institutional and governmental incentives for researchers and K/TT professionals includes Act 60, which provides a unique tax incentive to foster research and development activity conducted at local universities in Puerto Rico. Qualified Principal Investigators or a Co-Principal Investigator can seek tax exemptions for salaries earned from eligible R&D research grants from US federal agencies. The main objective of this incentive is to attract and retain competitive researchers to strengthen Puerto Rico's performance in science and technology and the Island's position in the knowledge economy. The Puerto Rico Science, Technology and Research Trust facilitates this aspect of Act 60.

Does your institution or association engage in influencing and or advocating at the regional/nationwide levels for intellectual property and K/TT? Share your best practices.

The Puerto Rico Science, Technology & Research Trust was established in 2004 under Public Law 214 as an autonomous entity to stimulate innovation, support technology transfer and commercialization, and create high-technology jobs in Puerto Rico's targeted industry sectors such as: life sciences, alternative energy, environmental & agricultural sciences, computer science & information technologies, medical devices, and aerospace

& aeronautics, among others. The organization manages and hosts over a dozen initiatives that range from grants and technical support to meetups and educational resources for researchers, entrepreneurs, investors, and other groups. Among its incentives and support for K/TT:

- Proof-of-concept funding and incentives to advance locally developed R&D projects to become more competitive for US federal and private funding and/or commercialization.

- Technology transfer services to identify, evaluate, protect, market, and transfer the most promising research discoveries from Puerto Rico's universities, institutions, and research institutes to the private sector for commercialization and to benefit the public.

- Acceleration programs, facilities, and direct investment to support technology companies from around the world to help scale to global markets by providing high-quality business education, business connections, and create investment opportunities for startups.

- Technical and commercialization expert advice in securing non-dilutive funds to overcome the commercial viability risks associated with new technologies, assistance in the submission of competitive proposals to the SBIR program in all federal agencies, and matching funds from $100,000-200,000.