
AUTM ASIA 2016 SCHEDULE AT A GLANCE

VENUE: SHANGRI-LA HOTEL, CHIANG MAI

PRE-CONFERENCE WORKSHOP

Tuesday 15 March 2016 (8:30 – 17:00 Hrs.)

ESSENTIALS OF TECHNOLOGY TRANSFER
(6 ATTP POINTS ELIGIBLE)

MARC C. SEDAM, MANAGING DIRECTOR OF UNHINNOVATION, UNIVERSITY OF NEW HAMSHIRE, USA;
STEPHEN SUSALKA, PH.D., CLP, EXECUTIVE DIRECTOR, AUTM, USA;
DAVID WINWOOD, PH.D., RTTP, AUTM PRESIDENT, USA

Abstract: a “Start to Finish” overview of technology transfer

This pre-conference workshop is composed of 4 x 1.5 hour topics:

- 1) Evaluating Invention Disclosures: Triage
 - 2) Marketing
 - 3) Principles of Technology Negotiation
 - 4) Non-License Agreements
-

Wednesday 16 March 2016 (8:30 – 17:00 Hrs.)

ANATOMY OF RESEARCH COLLABORATION AGREEMENT

KEVIN NACHTRAB, SENIOR PATENT ATTORNEY, JOHNSON & JOHNSON, BELGIUM

Abstract: The audience will go through anatomy of research collaboration agreement, and learn about legal and business aspects and in-depth explanation and solution for frequently arguing clauses.

Wednesday 16 March 2016 from 18:30 Hrs.

WELCOME RECEPTION (RSVP - SPEAKERS ONLY)

@ CABANA (OUTDOOR), SHANGRI-LA HOTEL

REMARKS BY PICHET DURONGKAVEROJ, Ph.D., MINISTER OF SCIENCE AND TECHNOLOGY, THAILAND

CONFERENCE DAYS (10 ATTP POINTS ELIGIBLE)

THURSDAY 17 MARCH 2016			
08:00 - 08:45	Registration		
08:45 - 08:50	Report by Narong Sirilertworakul, Ph.D., Chairman of the AUTM Asia 2016 Organizing Committee, Thailand		
08:50 - 09:20	Opening and Keynote Address by Pichet Durongkaverroj, Ph.D., Minister of Science and Technology, Thailand		
09:20-09:40	Remarks by David Winwood, Ph.D., RTTP, AUTM President, USA		
09:40 - 10:40	Plenary Session: Technology Transfer Opportunity in ASEAN Countries Panelists: <ul style="list-style-type: none"> • Pailin Chuchottaworn, Ph.D., Former President and CEO of PTT, Thailand • Lily Chan, Ph.D., CEO of NUS Enterprise, Singapore • Herbert Hongbo Chen, Ph.D., COO, Tus-Holdings Co.,Ltd., China Moderator: Audrey Yap, Managing Partner of Yusarn Audrey, Singapore		
10:40-11:00	Networking Break		
Each session is about 45 minutes.	Essential Tools for TTO (ET)	IP for the Interests of the Emerging Economies (DC)	Emerging Trends in Technology Management (TM)
11:00-11:45	ET1. Tools and Operation Model for Early-Stage TTOⁱ <ul style="list-style-type: none"> • Kevin Croft, Managing Director of Croft IP, Australia • Jaci Barnett, Director, Innovation Office, Nelson Mandela Metropolitan University, South Africa 	DC1. Creativity for Development <ul style="list-style-type: none"> • Richard S. Cahoon, Ph.D., President, BioProperty Strategy Group Inc. and Adjunct Professor, International Programs, Cornell University, USA Level: All 	TM1. IP Rights and Life Science Research: Who Owns the Medical Breakthroughⁱⁱ <ul style="list-style-type: none"> • Sean M. O'Connor, Boeing International Professor and Chair of University of Washington IP Management Advisory Committee, USA Level: Intermediate
11:45-12:30	<ul style="list-style-type: none"> • Alan Paaau, Ph.D., Chairman of Guangda-Cornell China-US Hi-Tech Transfer Center (GCITC), USA • Moderator: Akkharawit Kanjana-opas, Ph.D., Director of Prince of Songkla University Science Park, Thailand Level: All 	DC2. GI and Community Interestsⁱⁱⁱ <ul style="list-style-type: none"> • Fabrice Mattei, Country Manager for Thailand and Myanmar of Rouse&Co., Thailand Level: Intermediate 	TM2. Technology Intelligence and Competitive Intelligence: How It Supports Decision-Making in Commercialization^{iv} <ul style="list-style-type: none"> • Sze Tiam Lin, Ph.D., Director at IPI Singapore Level: Advanced
12:30-13:30	Lunch		
<ul style="list-style-type: none"> • Luncheon Talk by WIPO: <ul style="list-style-type: none"> • Concept and Context of IP Hub Project by Andrew Michael Ong, WIPO, Switzerland • Role of Universities in Technological Innovation and Public Private Partnership (PPP) by Yumiko Hamano, Partner of ET Cube International, France • Moderator: Richard S. Cahoon, Ph.D., President, BioProperty Strategy Group Inc. and Adjunct Professor, International Programs, Cornell University, USA 			

THURSDAY 17 MARCH 2016			
13:30-14:15	ET2. Dos and Don'ts in Technology Licensing^v <ul style="list-style-type: none"> Audrey Yap, Managing Partner of Yusarn Audrey, Singapore <p style="text-align: right;">Level: All</p>	DC3. Convergence of IP, Genetic Resources, Traditional Knowledge and Traditional Cultural Expression^{vi} <ul style="list-style-type: none"> Jennifer Corpuz, Program Coordinator, Tebtebba-the Indigenous Peoples' International Centre for Policy Research and Education, the Philippines <p style="text-align: right;">Level: All</p>	TM3. Modern Aging Society^{vii} <ul style="list-style-type: none"> Sean P. Flanigan, RTTP, Director of NUS Industry Liaison Office, Singapore <p style="text-align: right;">Level: All</p>
14:15-15:00	ET3. International Approaches to Measure Technology Transfer Impact Metrics^{viii} <ul style="list-style-type: none"> Jim Henderson, Ph.D., RTTP, Chief Operating Officer of NewSouth Innovations Pty Ltd, University of New South Wales, Australia John F. Ritter, MBA, JD, Director of Office of Technology Licensing, Princeton University, USA <p style="text-align: right;">Level: Advanced</p>	DC4. Commercial Agricultural Project^{ix} <ul style="list-style-type: none"> Michael D. Carriere, Ph.D., UC Davis InnovationAccess, USA <p style="text-align: right;">Level: All</p>	TM4. IP Management for Medical Devices: <ul style="list-style-type: none"> Kevin Nickels, Technology Marketing Manager, Office of Technology Commercialization, University of Minnesota, USA <p style="text-align: right;">Level: Advanced</p>
15:00-15:30	Networking Break		
15:30-17:00	License Negotiation: University vs Industry^x Team U: <ul style="list-style-type: none"> Akkharawit Kanjana-opas, Ph.D. , Director of Prince of Songkla University Science Park, Thailand Yingyong Tanthanapongphan, IP Manager, SCG, Thailand Team I: <ul style="list-style-type: none"> Chiew Yu Sarn, Founding Partner of Yusarn Audrey, Singapore Moderator: Kevin Nachtrab, Johnson & Johnson, Belgium		
18:00	Shuttle bus to Gala Dinner Venue		
19:00 – 20:30	Gala Dinner at Khum Kham International Convention Complex <ul style="list-style-type: none"> Welcome remarks by Pawin Chamniprasart, Chiang Mai Governor 		

FRIDAY 18 MARCH 2016									
08:30 - 09:00	Registration								
09:00 - 10:00	Plenary Session: Lessons Learnt from Technology Commercialization Promoting Law^{xi} Panelists: <ul style="list-style-type: none"> • Sun R. Kim, CLP, Kims and Lees, Korea • Luis Sison, Ph.D., Director of Technology Transfer and Business development Office at University of the Philippines, the Philippines • Jaci Barnett, Director of Innovation Office, Nelson Mandela Metropolitan University, South Africa • Takafumi Yamamoto, Ph.D., CEO & President of TODAI TLO, Ltd., Japan • Moderator: Sean M. O'Connor, Boeing International Professor and Chair of University of Washington IP Management Advisory Committee, USA 								
10:00 - 10:15	Networking Break								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #d9ead3; text-align: left;">Researchers' Interest (RI)</th> <th style="background-color: #d9ead3; text-align: left;">Industries' Interest (II)</th> </tr> </thead> <tbody> <tr> <td style="background-color: #fff2cc;"> RI1. Disruptive Innovation: Finding the Right Path Forward^{xii} <ul style="list-style-type: none"> • Marc C. Sedam, Managing Director of UNHInnovation, University of New Hampshire, USA <p style="text-align: right;">Level: All</p> </td> <td style="background-color: #d9ead3;"> II1. The Great Economic Inversion: A Case Study of Technology Commercialization and Intangible Asset Management <ul style="list-style-type: none"> • Michael Masterson, Head of Commercial of EverEdgeIP, New Zealand <p style="text-align: right;">Level: All</p> </td> </tr> <tr> <td style="background-color: #fff2cc;"> RI2. Using IP data for competitive analysis & innovation strategy formulation <ul style="list-style-type: none"> • Wong Poh-Kam, Ph.D., Director of NUS Entrepreneurship Centre, Singapore <p style="text-align: right;">Level: Advanced</p> </td> <td style="background-color: #d9ead3;"> II2. IP Management for Collaborative Research^{xiii} <ul style="list-style-type: none"> • Chiew Yu Sarn, Founding Partner, Yusan Audrey, Singapore <p style="text-align: right;">Level: All</p> </td> </tr> <tr> <td style="background-color: #fff2cc;"> RI3. Examples of Success of Start-up Companies^{xiv} <ul style="list-style-type: none"> • Gijs Wuite, Co-Founder, LUMICKS, Netherlands • Kamchai Poomkate, Founder, Gold Silk by Art, Thailand • Jessada Wannasin, Ph.D., Advisor, Gissco, Thailand <p style="text-align: right;">Level: All</p> </td> <td style="background-color: #d9ead3;"> II3. Lesson Learnt from Litigation Cases^{xv} <ul style="list-style-type: none"> • Judge Annabelle Claire Bennett AO, Judge of the Federal Court of Australia, Australia • Judge Vichai Ariyanuntaka, Thai Intellectual Property and International Trade Court, Thailand <p style="text-align: right;">Level: Intermediate</p> </td> </tr> </tbody> </table>	Researchers' Interest (RI)	Industries' Interest (II)	RI1. Disruptive Innovation: Finding the Right Path Forward^{xii} <ul style="list-style-type: none"> • Marc C. Sedam, Managing Director of UNHInnovation, University of New Hampshire, USA <p style="text-align: right;">Level: All</p>	II1. The Great Economic Inversion: A Case Study of Technology Commercialization and Intangible Asset Management <ul style="list-style-type: none"> • Michael Masterson, Head of Commercial of EverEdgeIP, New Zealand <p style="text-align: right;">Level: All</p>	RI2. Using IP data for competitive analysis & innovation strategy formulation <ul style="list-style-type: none"> • Wong Poh-Kam, Ph.D., Director of NUS Entrepreneurship Centre, Singapore <p style="text-align: right;">Level: Advanced</p>	II2. IP Management for Collaborative Research^{xiii} <ul style="list-style-type: none"> • Chiew Yu Sarn, Founding Partner, Yusan Audrey, Singapore <p style="text-align: right;">Level: All</p>	RI3. Examples of Success of Start-up Companies^{xiv} <ul style="list-style-type: none"> • Gijs Wuite, Co-Founder, LUMICKS, Netherlands • Kamchai Poomkate, Founder, Gold Silk by Art, Thailand • Jessada Wannasin, Ph.D., Advisor, Gissco, Thailand <p style="text-align: right;">Level: All</p>	II3. Lesson Learnt from Litigation Cases^{xv} <ul style="list-style-type: none"> • Judge Annabelle Claire Bennett AO, Judge of the Federal Court of Australia, Australia • Judge Vichai Ariyanuntaka, Thai Intellectual Property and International Trade Court, Thailand <p style="text-align: right;">Level: Intermediate</p>
Researchers' Interest (RI)	Industries' Interest (II)								
RI1. Disruptive Innovation: Finding the Right Path Forward^{xii} <ul style="list-style-type: none"> • Marc C. Sedam, Managing Director of UNHInnovation, University of New Hampshire, USA <p style="text-align: right;">Level: All</p>	II1. The Great Economic Inversion: A Case Study of Technology Commercialization and Intangible Asset Management <ul style="list-style-type: none"> • Michael Masterson, Head of Commercial of EverEdgeIP, New Zealand <p style="text-align: right;">Level: All</p>								
RI2. Using IP data for competitive analysis & innovation strategy formulation <ul style="list-style-type: none"> • Wong Poh-Kam, Ph.D., Director of NUS Entrepreneurship Centre, Singapore <p style="text-align: right;">Level: Advanced</p>	II2. IP Management for Collaborative Research^{xiii} <ul style="list-style-type: none"> • Chiew Yu Sarn, Founding Partner, Yusan Audrey, Singapore <p style="text-align: right;">Level: All</p>								
RI3. Examples of Success of Start-up Companies^{xiv} <ul style="list-style-type: none"> • Gijs Wuite, Co-Founder, LUMICKS, Netherlands • Kamchai Poomkate, Founder, Gold Silk by Art, Thailand • Jessada Wannasin, Ph.D., Advisor, Gissco, Thailand <p style="text-align: right;">Level: All</p>	II3. Lesson Learnt from Litigation Cases^{xv} <ul style="list-style-type: none"> • Judge Annabelle Claire Bennett AO, Judge of the Federal Court of Australia, Australia • Judge Vichai Ariyanuntaka, Thai Intellectual Property and International Trade Court, Thailand <p style="text-align: right;">Level: Intermediate</p>								
12:45	Lunch								
13:30 - 17:00	Excursion Tour Option A: Thai GI: Chiang Mai Celadon Option B: Cultural Tour: Wat Phrathat Doi Suthep								

ⁱ Abstract: Framework, skeleton and tools of TTO, basic contracts, what executives need to know, how to deal with stakeholders

Kevin Croft: *The fundamental objective of a TTO is to enable use of the outcomes of research. In achieving this, there is a need to balance a variety of potentially competing demands; engage effectively with diverse groups and individuals (each of which has different expectations of the TTO); and, dispel myths and misunderstandings about the role of the TTO and the effect of technology transfer. Any TTO can lose sight of the fundamental objective while addressing these demands. This is especially true for an early stage TTO. A TTO succeeds by having the right people acting in accordance with clear policies and good procedures. Clear communication and the ability to initiate, build and maintain strong relationships with a variety of contacts are vital. These must all be operating with the right resources and given sufficient time to achieve agreed objectives. Drawing on evidence from TTOs in different jurisdictions, this presentation will outline some basic structures and key tools that will assist every TTO to establish a firm foundation and build from it to success.*

Jaci Barnett: *Setting up a new TTO is difficult enough; setting one up in a developing country with an undeveloped innovation system can be almost impossible. Difficulties include a lack of researcher awareness, a shortage of skilled staff, lack of understanding by university management, unclear legislation, few private companies that understand early stage technologies and an absence of funding. In this presentation, a few key things to consider when setting up a TTO will be covered, including the things to focus on first, what to do right now if you have no funding and how to become indispensable to your stakeholders.*

Alan Paau: *Technology Transfer Programs (“TTOs”) exist for many reasons, depending on the missions and goals of the organizations to which the TTOs serve. Despite the diversity, the basic needs of all TTOs are quite similar although the emphasis of their needs and operational details may necessarily differ to best serve the organizations. The emphasis on their needs and operations may also change as the organizations they serve or the missions or goals change with time. It is important to recognize that TTOs are but one of the many units within the larger organizations and do not exist for their own purposes or interests and hence their operations must serve and contribute to the organizations and beyond. For an early-stage TTO, it is paramount to understand early on the key “reasons” for its establishment and hence the performance and ultimately, the results that are “expected” of it. Working together with the organization to establish clear goals and measures of the TTO’s performance and results are essential. Since most TTOs have multiple roles, the measures for the TTOs’ performance and results are preferably “weighted” in a clear and documentable manner. Once the goals and measures for performance and results are established, the TTO may then proceed with an organizational structure, and its staffing and activity plans using the best judgment and knowledge of its leadership. The speaker will discuss from his experience some examples of operation model and tools.*

ii *Academic life sciences research provides the basis for the vast majority of innovative new life saving drugs, biologics, and medical devices. However, given the scope of IP and related property rights involved, together with the range of researchers in different legal relationships with the university and the spectrum of funding sources, tracing the ownership rights to materials, data, and ideas related to this research is a major challenge. This presentation conceptualizes the problem as one of research inputs and outputs. It considers the various ownership and rights claims, especially in light of changes in law and the asserted relationships of the players involved.*

iii *The protection and promotion of natural resources and traditional knowledge encompass a variety of IP and business strategies. Too often it is believed that many of the communities’ know how and technologies are not actually patentable. The use of collective rights such as certification, collective marks and geographical indications are of course useful because they make it possible for farming communities to make a living from sustainable lifestyles that can persist over time, whilst allowing for some change to adapt. However, there are potential problems in their use. For instance, primarily excessively prescriptive content specifications can run counter to the good of promoting varietal diversity, uniformity of products and commercial practices inhibit products’ competitiveness. Fabrice Mattei will provide a critical review of the IP tools which are commonly provided to local communities and discuss what other possible IP tools and strategies are in the Asia and international contexts.*

iv *As universities, research institutions and private corporations continue to invest in Research & Development (R&D), there is growing attention and accountability to commercialize such public and private R&D investments. Technology transfer managers and professionals are constantly looking to equip themselves with due diligence tools such as technology intelligence and competitive intelligence (TICI) to provide insights and support their commercialization decisions. From evaluating R&D projects to invention disclosures, from patent portfolio analysis to management, from go-to-market strategy to securing gap funding, from royalty rates to IP valuation, from competitive analysis to market sensing, having a good understanding of TICI framework provides good support to impact these commercialization decisions. The session will provide a good overview of the TICI*

process and best practices, and cite practical case studies to illustrate how TICI supports decision-making in commercialization.

^v *IP is increasingly understood and accepted as a business asset. But when it is time to commercialize or monetize the IP asset, what do you do? What is technology licensing? What are the considerations for Licensors? Are they different from what concerns the Licensee? This module will cover the anatomy of a License agreement, do's and don'ts and issues to remember when going into the agreement.*

^{vi} *It has been almost twenty years since the World Intellectual Property Organization (WIPO), recognizing a gap in its work, conducted fact-finding missions to identify the intellectual property needs and expectations of traditional knowledge holders. Since then, there has been recognition that the Intellectual Property (IP) system would have to make certain adjustments, possibly by adopting an international instrument or instruments, to ensure that the IP system is able to adequately protect traditional knowledge (TK).*

In almost sixteen years of work of the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions (IGC), a substantial body of work has been developed that explores the convergence of IP and genetic resources (GRs), TK, and traditional cultural expressions (TCEs). Options have been developed, as reflected in the consolidated document on GRs and the draft texts on TK and TCEs, to ensure adequate protections of the subject matter. This presentation shall re-examine the nature of TK and TCEs and explore options contained in the draft texts for their protection.

^{vii} *Singapore's population is aging. Quickly. Between 2009 and 2030 the percentage of the population over the age of 65 will more than double from 8.8% to 18.7%. At the same time life expectancy is also increasing and the skills of our future seniors are also dramatically changed. Over the next decade the percentage of seniors who regularly use a computer and access the Internet will also increase by more than 100%. When combined with overall growth in wireless high speed access and mobile phone usage there begins to emerge a very different picture of a Singaporean senior in 2025 as compared to 2005. The Government is doing its part by ensuring that our future seniors are well housed, have sufficient incomes, and are well attended to as their health care needs increase. But there is an active role to be played by private industry and NUS has positioned itself as a catalyst of innovation to address Modern Aging. The Modern Aging initiative at NUS will not only raise awareness of the value of the growing opportunities in the elder market.*

^{viii} *Patenting and licensing activity represent only a subset of TTO activity. The session will provide an overview and analysis of various initiatives in the UK, Australia, and the U.S. to better measure the impact of technology transfer efforts above and beyond the normal metrics (e.g. licensing income) most commonly associated in the press with our profession.*

One of the most high profile and successful approaches has been the AUTM Better World Project, which was launched in 2005 to promote public understanding of how academic research and technology transfer benefits you, your community and millions of people around the world. Moreover, the AUTM survey has been tinkering with supplementary questions relating to impact, including new products launched, start-up companies, job creation, and many others. Other efforts have been made to measure the input efforts of TTO's that do not necessarily lead to a money outcome. Material transfer agreements and confidentiality agreements, for example, are indicators of outreach efforts that can meaningfully impact future collaborations and/or research dollars.

In the U.K and Australia there has been much discussion around measuring engagement between universities and research-users as well as assessing the "impact" of research, with both countries conducting impact assessment exercises. The UK has taken this furthest with 20% of university funding now based upon research impact, whilst Australia is deep in a heated debate around the relative importance of engagement versus impact. The session will explore what is meant by these terms and the pros and cons of the different approaches. Importantly, audience members will be asked and encouraged to provide examples utilized in their countries, which will be summarized and shared on the AUTM ASIA website after the conference.

^{ix} *The University of California, Davis strawberry licensing program is an example of successful university technology transfer both in terms of university licensing income and positive industry impact. Utilizing the UC Davis strawberry experience as a case study, the presentation will provide insight into university plant variety technology transfer. It will also highlight aspects of plant breeding and plant variety IP management within a US public university. Using the global nature of the US\$ 7.5 million UC Davis strawberry licensing program as a key example, the presentation will explore plant IP and licensing strategies in various locations worldwide, and will take account of the numerous public and private stakeholder considerations. The audience will gain insight into how various stakeholder interests are balanced within the context of a US public university. Finally, a central theme will be the linkage of plant IP protection and licensing activities with complementary aspects of knowledge transfer around strawberry production to the benefit of the agricultural sector worldwide.*

^x *Team University and Team Industry will negotiate a licensing deal based on a case. The moderator will give comments and suggestions each round of negotiations. The audience will witness the means and goal of negotiation.*

^{xi} *The Bayh-Dole Act of the United States has been a role model for nations with hope to energize invention ready to be transferred. It has been years since implement. We will hear the feedback of the technology commercialization promoting law from the Philippines, Korea and South Africa.*

Korea: There have been significant changes to the technology transfer landscape since the passage of the Korean Technology Transfer Promotion Act of 2000 (KTTTPA) (Korea “Bayh-Dole Act”). The presentation will cover some of the key policy initiatives together with how such initiatives together with the KTTTPA of 2000 have affected the technology commercialization landscape, especially in universities and public research institutes (PRO).

The Philippine Technology Transfer Act of 2009 (RA 10055), creates an environment for facilitating the technology transfer of government-funded research by making the implementing research and development institution (RDI), the default owner of IP rights generated by such research. While inspired by the Bayh-Dole Act of the US, the RA 10055, includes unique provisions for the due diligence of negotiated licensing agreements. We discuss the opportunities and challenges created by RA 10055 and the capability development that it requires from RDIs to foster widespread implementation.

South Africa’s IPR Act: five years on --South Africa’s “Bayh-Dole” Act, the Intellectual Property Rights from Publicly Financed Research and Development Act, turned five in August 2015. This Act has transformed the technology transfer and innovation management landscape in South Africa, particularly at publicly funded higher education institutions. In this presentation, some of the highlights and successes of the Act will be covered, as well as some of the gaps and issues that still need to be addressed. Specific comments on the Act, from the perspective of both government officials and technology transfer practitioners in South Africa, will be provided.

Japanese government enacted the Act on Reinforcement of Industrial Competitiveness of 1999 in the year following the TLO Law. The Japanese Bayh-Dole Act was incorporated in this act, which actually started to function in 2004 when national universities legally became corporate entities. There was significance in establishing this act in advance. The US Bayh-Dole Act was enacted in 1980, which accelerated the collaboration between industry and academia in the US. I won’t take time to explain the details of the law here. The biggest point of this act was that if a university obtained national government funds for specific research, patent and other intellectual property rights as achievements of such research were attributed to the university. In the US, this Bayh-Dole Act instantly leap-frogged the momentum of industry-academia collaboration, in which universities performed research, acquired intellectual property rights for their achievements, licensed them to industry and earned royalty income. As a result, Japanese government decided to follow the US and attributed achievements for research projects funded by the government to universities. The reason why this did not effectively function until 2004 was because the universities did not have the status of a legal entity until then and were unable to become the owner of rights. Today many countries have the Bayh-Dole Act enacted.

^{xii} *One of the most exciting types of early stage discoveries to manage is that of “disruptive innovation”—an idea that challenges existing industries and ways of doing business. The potential of disruptive innovation by nature means that multiple commercialization paths and multiple outputs are possible. This session will go over several approaches to managing disruptive innovation, including how to identify whether an idea is really disruptive, licensing strategies (building on the day 1 of the pre-conference workshop), why revolutionary products may not be disruptive, and why feedback from existing companies may provide a inaccurate view of the idea’s future.*

^{xiii} *Collaborative research involves two or more parties bringing their own know-how, technology and IP and creating and testing new ideas, knowledge and IP. Many issues of IP management arise, including disclosure and protection of trade secrets and confidential information, ownership of foreground and background IP, and for researchers in academia, the issue of publication as well.*

^{xiv} *Learn falls and rises from start-up founders. These founders are creators of the products of their companies. How do they from start-ups? What are the goals they had in mind back then?*

LUMICKS is bringing to market the innovative CTFM technology, which is based on a patented integration of: a microfluidic laminar-flow device, optical tweezers, and confocal or super-resolution fluorescence microscopy. The CTFM is a game-changing approach and instrument for real-time studies of nucleic acid - protein interactions under real-life conditions. The interaction between nucleic acids (DNA and RNA) and proteins comprises a pivotal role in the molecular biology of the cell, being at the heart of DNA replication, transcription, organization and repair. Not only is studying these processes fundamental to understanding life in itself; it is also

necessary for generating key insights into disease mechanisms. Through ERC-funded research, Prof. Wuite developed the CTFM technology as a method and instrument that enables direct visualization of DNA-protein interactions in real-time, at the single-molecule level, at super-resolution, under conditions similar to the cellular environment. The CTFM that combines different research technologies into an integrated platform, could represent the future of quantitative biological research, focused on unraveling the complete and detailed mechanisms of DNA-protein interactions. Recognizing the commercial value of this development, LUMICKS was founded on a clear valorization strategy — based on elemental business insights that permit estimation of commercial and financial feasibility and business modeling and planning. Besides, a sound intellectual property (IP) strategy was defined. In parallel, the CTFM technology was physically prepared for marketing, translating the current prototype into a robust and user-friendly design accompanied by product sheets, control and analysis software, and user manuals. Finally, the LUMICKS team has assemble a business team, started discussions with potential strategic partners and financiers. By doing so, LUMICKS build a strong assets for market introduction. Uptake of CTFM's by the market started in the second half of 2015 and is continuing to build fast.

Kamchai Poomkate is the founder of a start-up company "gold silk by art" under support from Buriram Rajabhat University. From the local wisdom silk that has been inherited from generation to generation, he creates new ideas and then adapts look and feel of silk to have added value by doing research to further recognition of silk in both domestic and foreign market. His products are exported to Cambodia, Laos, Australia and America. You can also find it in the King Power Duty Free at Suvarnabhumi Airport.

GISSCO is a startup company in Thailand commercializing a breakthrough technology for the metal casting industry. The technology was invented in 2003 when the founder was at MIT, USA. Then, research and development work had been carried out in Thailand by the founder and his research team at Prince of Songkla University for more than 5 years before GISSCO was founded in 2009. After 6 years of product development and marketing, GISSCO is now selling the technology to the international market.

^{xv} In the early stage of intellectual property management, litigation seems not to be a point of concern. The truth is even granted patent can be invalidated!