



Georgia Tech

**Enterprise Innovation  
Institute**

## **Program Overview**

**Innovation and Technology Commercialization Course for  
Professionals in  
Tunisia**

**Prepared by:**

**Economic Development Lab**

Georgia Institute of Technology  
Enterprise Innovation Institute  
75 Fifth St. NW, Suite 3000, Atlanta, GA 30308

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### I. Introduction

The Enterprise Innovation Institute (EI<sup>2</sup>) of the Georgia Institute of Technology (Georgia Tech), The US Department of Commerce and the Agence National de la Promotion de la Recherche Scientifique (ANPR) in Tunisia, a public agency under supervision of the Ministry of Higher Education and Scientific Research, will collaborate on this project to deliver the online Information Technology Commercialization Professional Course – Associate Level for ANPR’s Technology Transfer Office (TTO) Managers in Tunisia. Through this project, Georgia Tech will provide the online introductory course the Innovation and Technology Commercialization Professional (ITCP) in English to the TTO managers in Tunisia.

The **Enterprise Innovation Institute (EI<sup>2</sup>)** is the Georgia Institute of Technology's economic development and business outreach organization. It is Tech's primary vehicle for economic impact at all levels: locally, regionally, and globally. EI<sup>2</sup> is the largest and most comprehensive university-based program of business and industry assistance, technology commercialization, and economic development in the United States. EI<sup>2</sup> is unique because it brings many areas of expertise into a single organization and is able to connect clients to multiple programs or services to meet their individual needs.

Reporting to the Executive Vice-President for Research at Georgia Tech, EI<sup>2</sup> serves startups, industry, the public sector, and students to improve competitiveness, turn ideas into viable businesses, and make a positive impact on the economy. In addition, EI<sup>2</sup> provides connections to Georgia Tech's vast resources, including world-class research, state-of-the-art facilities, internationally recognized experts, and upper-echelon students.

## II. The ITCP Program

The Associate Level Innovation and Technology Commercialization Professionals (ITCP) course has been created by the Enterprise Innovation Institute at Georgia Tech with the addition of the best practices and the APEC Handbook from ITTN, the International Technology Transfer Network. Delivered online, the course is intended to provide researchers, innovators, technology transfer professionals, technology commercialization professionals, and others in the field with a fundamental understanding of how to

- feed more innovation and talent into research institutions and the local innovation ecosystem,
- energize technology transfer practices with leading edge commercialization methods to ensure that more innovation is successfully commercialized in the market and society,
- nurture the growth of local innovation ecosystems across a country to stimulate commercialization between industry, academia, government, and startups, and
- foster cross-border collaborations to move innovation into global markets.

## III. Program Agenda

### Program Benefits

Participants in this course will acquire the working knowledge and skills to return to their respective organizations and become agents of change. After learning from the lectures, participants will put theory into practice, through engaging video lectures and reading materials

and will leave the program armed with the frameworks, methodologies, tools, and a mindset to create, support, sustain, and advance in technology commercialization.

Participants will:

- Broaden their knowledge of technology commercialization, methodologies, and techniques used in advanced and developing economies.
- Learn about the commercialization pathway from research and ideation to innovation to commercialization in the market or society.
- Learn skills to progress throughout their career
- Develop potential networking opportunities with others in this field (locally + globally)
- Receive professional certification showing their knowledge in the industry from Georgia Tech

## IV. Description of Program Activities

### **Program Welcoming Introduction & Overview Session**

The Program Introduction & Overview session provided a framework for the program. The goal is to clarify expectations and roles of program participants, and the Georgia Tech team. During this live session, the Georgia Tech team explained the program, important dates, and program calendar for the course.

### **Lectures**

Virtual lectures are either asynchronous (pre-recorded) or synchronous (live such as guest speakers and instructors' Q&A sessions) on Canvas platform. Learning elements during live lectures include discussions, and "Q&A," and learning elements for the asynchronous lectures are readings, case studies, practical quizzes and a final exam.

### **Innovation Ecosystem Guest Speakers**

The purpose of these live sessions is to create a virtual space for interaction with members of the innovation ecosystem from Georgia Tech and Atlanta. Students will hear from two guest speakers and will have the opportunity to interact with them. Guest speakers are invited from Georgia Tech's network and included an entrepreneur, and an incubation/acceleration program manager.

## Learning Integration & Reflection Networking Session

The objective of the Learning Integration & Reflection is to help participants integrate the knowledge and tools they received during the [Innovation and Technology Commercialization for Professionals](#) program. This session will be held one week after the program. During this video conference, the Georgia Tech team guide program participants through a retrospective analysis and evaluation of the program experience and its learning outcomes. The goal is to integrate insights, knowledge, tools, and new opportunities to network.

## V. Innovation Technology Commercialization Course for Professionals (ITCP 1.0)

The following programmatic agenda is tentatively scheduled for 16 weeks starting from July 26, 2022 and ending on November 30, 2022. The recorded video sessions are held asynchronously, the time and date are recommended only, the sessions can be scheduled based on the time that best accommodate the schedule for the participants in Tunisia. The instructors’ and guest speakers’ sessions are going to be conducted live for one hour on Zoom Platform (link to be shared). Please note this agenda is subject to change.

Time and Date		Topic	Instructor(s)
<b>Course Starts on July 26</b>	Canvas Review	Students log in into Canvas and explore the platform	
<b>August 2, 9 a.m. – 10 a.m. Eastern Time</b>		Welcoming Session	Brandy Nagel and Viviana Montenegro
<b>August 1- August 7</b>	Module 1: Recorded Video	Overview of Certificate Course   How the certificate course is structured to convey the global value of technology commercialization in Research Institutions	Brandy Nagel (Recorded Lecture Video)
<b>August 7- August 15</b>	Module 2: Recorded Video	Introduction to Technology Commercialization   What is Technology Commercialization, and How does it differ from Technology Transfer	David Bridges (Recorded Lecture Videos)
<b>August 11, 9 a.m. – 10 a.m. Eastern Time</b>	Guest speakers’ Live Session	David Bridges, Vice President, Enterprise Innovation Institute, Georgia Tech Dr. Abdallah, Executive Vice President for Research, Georgia Tech Pete Mehravari, US IP Attaché for the MENA Region, US Department of Commerce	Live
<b>August 15- September 9</b>	Module 3: Recorded Video	Introduction to Feedstock for Technology Commercialization   How to stimulate research, talent, and	David Bridges, Brandy Nagel, Mónica Novoa, Carl



		innovation which feed technology commercialization outcomes	Rust, Jan Youtie (Recorded Lecture Videos)
<b>September 8, 9 a.m. – 10 a.m. Eastern Time</b>	Guest Speaker's Live Session	Brandy Nagel and Kirk Barnes (to be confirmed)	Live
<b>September 10-September 23</b>	Module 4: Recorded Video	Introduction to Traditional Technology Transfer Practice   How feedstock of commercialization is managed by Technology Transfer Offices in Research Institutions	Lynne Henkiel, Lauren Lange (Recorded Lecture Videos)
<b>September 22, 9 a.m. – 10 a.m. Eastern Time</b>	Instructors' Live Session	Lynne Henkiel and David Bridges	Live
<b>September 23-October 14</b>	Module 5: Recorded Video	Introduction to Technology Commercialization Stage 1   How Customer Discovery, Customer Validation, and Business Modeling Transform Technology Transfer within Research Institutions	Keith McGreggor (Recorded Lecture Videos)
<b>October 13, 9 a.m. – 10 a.m. Eastern Time</b>	Instructors' Live Session	Keith Mc Greggor and Brandy Nagel	Live
<b>October 14-October 31</b>	Module 6: Recorded Video	Introduction to Technology Commercialization Stage 2   How Technology Commercialization Broadens Pathways to Market and Society which benefit Research Institutions	Carl Rust (Recorded Lecture Videos)
<b>November 1-November 14</b>	Module 7: Recorded Video	Introduction to Technology Commercialization Opportunities for Research Institutions within Innovation Ecosystems and Across Borders   Why Research Institutions must look beyond the borders of its institution to support innovation ecosystem development and cross-border technology commercialization collaborations	David Bridges, Carl Rust, Jan Youtie (Recorded Lecture Videos)
<b>November 10, 9 a.m. – 10 a.m. Eastern Time</b>	Guest Speakers	Georgia Tech Transfer Office	Live

<b>November 14- November 18</b>	Module 8: Recorded Video	Concluding Review of ITCP Course   What you have learned and how you will demonstrate knowledge for your certificate completion	Brandy Nagel (Recorded Lecture Video)
<b>November 18- November 30</b>		Content Review/Study for Exam Exam	Self-Study
<b>November 30</b>		Course End Date	Live
<b>November 30, 9 a.m. – 10 a.m. Eastern Time</b>	Learning Integration and Reflection Session	ITCP Management Team	Xinying Lin, Brandy Nagel and Viviana Montenegro



## VI. ITCP Course Overview

### Module 1.0: Overview of Course

The 30-hour, on-line course contains six main modules which cover the commercialization pathway from research and ideation to innovation to commercialization in the market or society. The content is not specific to practitioners in any single country, but it applies globally to practitioners from across all countries.

There are several reasons why this **course is different** from all other technology transfer courses. It discusses unique concepts such as:

- How governments, research institutions, industry, and entrepreneurial communities can infuse more quality innovation into the commercialization pathway for their country,
- How research institutions can revolutionize the structure, function, and commercialization output of traditional technology transfer offices,
- How research institutions can engage and build local innovation ecosystems around their institutions to enhance commercialization outcomes, and
- How research institutions participation in cross-border collaborations on research, talent development, innovation, and access to markets can improve global commercialization activity for the benefit of all.

### Module 2.0: Introduction to Technology Commercialization

This introductory lecture defines technology commercialization and its interrelationship with technology transfer. It describes the application of modern technology commercialization practices toward the optimization of commercialization activity in the market or society. Finally, it provides an overview of the importance of robust innovation ecosystems and cross-border collaborations in research, innovation, and commercialization.

### Module 3.0: Introduction to Feedstock for Technology Commercialization

This module is a series of six lectures on the essential feedstocks of commercialization: research, talent, and innovation. Topics covered include policy initiatives, government and industry research funding, government and industry collaborations, innovation approaches, innovation models, responsible innovation, and talent development. As a participant, you will gain an understanding of how ideas move from minds and labs toward something with commercial potential.

- A. Government and Industry Research – Sources of research funding, the relationship between research, innovation, talent, and commercial outcomes
- B. Innovation Approaches – How corporations, small and medium enterprises, and startups approach innovation

- C. Innovation Models - Review of several innovation models such as open innovation, disruptive innovation, frugal innovation, and innovation prizes
- D. Responsible Innovation – Overview of the definition and methodologies and an exercise on the practice of responsible innovation
- E. Nurturing Talent – Various approaches to developing innovation and entrepreneurial talent in communities, research institutions, and industry
- F. Talent Development – A review of creative approaches to developing and nurturing innovative ideas which include design thinking, agile development, and lean startup

#### **Module 4.0: Introduction to Traditional Technology Transfer Practice**

There are numerous organizations which will provide country specific training on technology transfer which is in keeping with country or regional laws. This field is very complex and its totality is not within the scope of this course. However, this series of four lectures provides a basic overview of the technology transfer process within a research institution, including ideas on how to set-up a technology transfer office. It is important for you, the participant, to understand these concepts, as technology transfer is an important part of the overall commercialization pathway from idea to market or society.

- A. What is Intellectual Property – A review of basic definition and concepts, plus an overview of variables to consider when forming a Technology Transfer Office
- B. Typical Process for Intellectual Property Protection – An overview of the process from in-reach into the laboratory to disclosure to protection
- C. Traditional Technology Transfer – Discusses transfer practices after intellectual property protection which includes assessment of the market, valuation, marketing, and the legal transfer
- D. Top Best Practices – The International Technology Transfer Organization (ITTN) has captured technology transfer practices from 100 research organizations from around the world which will be summarized in this lecture

#### **Module 5.0: Introduction to Technology Commercialization Stage 1 – From Innovation to License/ Spin-off**

In 2011, a new process was being piloted in the United States, to apply lean startup principles to the evaluation and often redirection of research and innovation towards a commercial or societal application. In short, these principles were being applied to increase the conversion of government research funding for research institutions into solutions that benefit society. Georgia Tech was one of the first two universities to undertake the pilot within its VentureLab faculty and student accelerator. These six lectures will cover important lean startups principles and how they can impact commercial outcomes. As a participant, you will be able to

understand the basic principles of lean startup and its application in the transformation of technology transfer into technology commercialization.

- A. Tech Transfer Revolutionized by Customer Inquiry - Topics include evidenced-based entrepreneurship, Lean Start-up, and the revolution for technology transfer offices which followed
- B. Technology Commercialization Outcomes – A review of various technology transfer outcomes, beyond licensing to existing firms, which were expanded by the adoption of lean startup principles: license to
- C. research institution spin-offs and co-development agreements between the research institution and industry or startups
- D. Discovery and Validation, Part 1 – The importance of intellectual property, finance, technology, market, and people in the process
- E. Discovery and Validation, Part 2 – A special focus on Business Model Canvas (BMC) elements of value proposition, minimal viable product, and product market fit
- F. Moving from Lab toward Market/ Society – A special focus on seed funding, milestones, and government policy
- G. Company Creation - A special focus on company creation, first customers, funding, production, and team development

### **Module 6.0: Introduction to Technology Commercialization Stage 2 – Pathways to Market/ Society**

Once an innovation leaves a research institution, it must survive the transition from lab to marketplace. There are various pathways to the market or society which depend on where the technology is licensed. In this series of four lectures, we will examine the different pathways that corporations, startups, governments, and non-profits take in getting to the market or society. As a participant, you will gain an understanding of the challenges faced by various types of entities which launch new innovations. This will give you a greater understanding of the larger context of the commercialization pathway, and how you may support this external effort.

- A. Various Pathways to Market or Society - Overview of possible pathways for societal non-profits, corporations, startups, and governments
- B. Special Focus on Corporate Commercialization – Discusses internal development, license, co-development, investment, and acquisition
- C. Special Focus on Startup Commercialization – A review of various company building strategies
- D. Special Focus on Societal non-profits – An overview of approaches and a case study

## **Module 7.0: Introduction to Technology Commercialization Opportunities for Research Institutions within Innovation Ecosystems and Across Borders**

There is a greater world beyond the boundaries of research institutions. Technology transfer and commercialization practitioners have an important role to play in local innovation and startup ecosystems and in cross-border collaborations. This grouping of five lectures will give you, the practitioner, an understanding of the broader role of research institutions in engaging with industry, startups, non-profits, entrepreneurs, and other universities locally and globally. The role of research institutions is no longer just to produce great students or new knowledge.

They must now connect and support economic development activities on a local and global scale to create jobs and improve the human condition.

- A. Research Institutions as Leaders in Innovation-led Economic Development – Discusses policy Influence, programs, outputs, and outcomes
- B. What are Innovation Ecosystems - Overview of attributes, geography, philosophy, and time scale for innovation ecosystems
- C. Role of Research Institutions in Innovation Ecosystems – Details the engagement opportunities for research institutions in innovation ecosystems beyond the borders of the institution
- D. Role of Research Institutions in Startup Ecosystems – Review of the opportunities for research institutions to engage in local startup ecosystems via programs, assets, mentors, investors, and a multi-sector alliance
- E. Cross-Border Engagement – How research institutions, corporations, startups, and governments can work across borders to maximize the commercialization of innovation for the benefit of all

## **Module 8.0: Demonstrating Knowledge**

Now that you have completed the course, we will review how to prepare for the exam. This exam will allow you to demonstrate the knowledge you have acquired and will serve as the basis for your certificate of completion.

## VII. Participant List

N°	Name	Institution
1	Zied Romdhane	Université de Monastir
2	Serge Baccoucha	Université de Monastir
3	Mohamed Zied Amara	Université de Sousse
4	Mahdi Ayadi	Centre de Recherche en Numérique de Sfax
5	Nadia Chaarana	Centre de Recherche de Microélectronique et Nanotechnologie
6	Hekma Ayadi	Centre de Biotechnologie de Sfax
7	Jamel Benrebah	Institution de la Recherche et de l'Enseignement Supérieur Agricoles
8	Mohamed Belhaj	Université de Sfax
9	Thouraya Ben Salem	Centre d'études et de Recherche des Télécommunication
10	Imen Dhaouadi	Centre de Recherche des Technologies des Eaux
11	Kalthoum Makhoulf	Centre de Recherche des Technologies de l'Energie
12	Besma Sioud	Centre de Biotechnologie de Borj Cedria
13	Mariem Trojette	Université de Carthage
14	Mohamed Amine Ben Hassena	Université de Carthage
15	Taysir Rezgui	Université de Carthage
16	Besma BEN MESBAH	DGVR
17	Mejda Bourguiba	Université de Gabes
18	Awatef Soltane	DGCI
19	Imene Taghouti	Université de Jendouba
20	Abid amaidi	DGRS
21	Maher bougobba	H2020
22	Adel Bahroun	Université de Kairouan
23	Leila Ben Soussi	DGET
24	Souad Boussaid	ANPR
25	Sonia Zgarni	ANPR
26	Dhouha Sbaoulgi	ANPR
27	Mariem Jaouadi	ANPR

28	Ahmed Gargouri	ANPR
29	Afifa Ben Ezzine	ANPR
30	Karim Azzabi	ANPR
31	Hanene Boussi	Tunis El Manar
32	Chahir Zouheir	Université de Sfax
33	Moez Otay	ANPR
34	Jamel Belhadj	Université de Tunis
35	Rim Khabouchi	Université Manouba
36	Amine Dhraeif	Université Manouba
37	Imtinen Ben Nasr	CRNSM
38	Med Salah allagui	Université de Gafsa
39	Imene Bhibah	Université Tunis El Manar
40	Ines Zidi	Université Tunis El Manar

## VIII. Georgia Tech Program Management Team

David Bridges, Vice President, Enterprise Innovation Institute at Georgia Institute of Technology; Vice President, Georgia Advanced Technology Ventures



David Bridges is the Vice President for the Enterprise Innovation Institute at Georgia Institute of Technology and Georgia Advanced Technology Ventures. Previously, David served as the Director of the EI<sup>2</sup>'s Economic Development Lab which advises governments and universities, both in the U.S. and around the globe, on innovation-led economic development initiatives (ILED). ILED activities foster collaborations among informal network players such as governments at all levels, universities, corporations, startups businesses, entrepreneurs, and entrepreneurial support organizations to drive the development of startup ecosystems. Our practice focuses on maximizing the building blocks of startups, sources of innovation and sources of talent, and focusing the collective effort required to enable the success of these valuable startups. As Associate Vice President for International Initiatives, he has been engaged in innovation ecosystem projects in Europe, Latin America, Africa, and Asia. Mr. Bridges has been a member of EI<sup>2</sup> for over 23 years. In that time, he has gained experience managing programs around technology commercialization, co-development research, SBIR grants, seed fund management, international commercialization, incubation, acceleration, proof-of-concept centers, cluster development, university innovation centers, and innovation ecosystem. In total, Mr. Bridges has led, co-led or advised on proposals resulting in over \$42 million in innovation related grants for Georgia Tech.

### Juli Golemi, Director, Innovation Ecosystems



Juli Golemi is the Director of Innovation Ecosystems at the Enterprise Innovation Institute (EI<sup>2</sup>). She is an economist with over fifteen years of experience in economic/fiscal impact analysis and compilation of qualitative and quantitative data for organizations with a focus on improving local and state economies. Juli has expertise in turning complex data into information that leads to strategic decisions and the realization of aggressive goals. She has been engaged in economic development projects for more than a decade and her recent work is focused on innovation-led economic development projects, focusing primarily on the assessment of

communities' innovation ecosystems and entrepreneurship programming needs. In her current role, Juli has led collaborative projects across EI<sup>2</sup> with the Advanced Technology Development Center (ATDC). Prior to joining EI<sup>2</sup>, Ms. Golemi was the Director and Economist of the Economic Strategy Center, an economic development research and analysis firm where she managed a variety of projects including economic and fiscal analysis, benchmarking analysis, and program performance evaluations.

### Lynne Henkiel, Interim Director of Economic Development Lab at EI<sup>2</sup>



Lynne is the Interim Director of Economic Development Lab at EI<sup>2</sup>. She has been involved in developing EI<sup>2</sup>'s innovative incubation practices, aiding communities to develop their entrepreneur base through research and education. She also has been the developer for the incubation assessments tool and instrumental in developing the community readiness programs. Her career at Georgia Tech has focused early on with commercializing innovations from NASA's Kennedy Space Center, Stennis Space Center, and Marshall Space Flight Center. Within her responsibilities of working with startup companies that licensed NASA technology, she worked in partnership with startup entrepreneurs to overcome many of the early pitfalls of starting a technology business.



### Doreen Kincaid, Program & Operations Manager



Ms. Kincaid joined the Economic Development Lab at EI<sup>2</sup> in 2018. She brings with her 10 plus years of experience in various project roles. At EI<sup>2</sup>, she has been responsible for managing the FEMA grant, Enterprise 6 and Innovation Intern programs, hosting delegations for workshops and immersion programs from Central America, South America and Africa, fostering the development of an internal customer relationship management system, and supporting EDL's continuing education programs. Prior to joining EI<sup>2</sup>, she worked for Georgia State University, ING Americas, Coca-Cola Company and Federal Reserve Bank. She holds a BS in Business Administration with a concentration in Project Management.

### Lauren Lange, Program Manager, Enterprise Innovations Institute



Lauren Lange is a program manager on the Economic Development Lab Team. She supports the Innovation and Technology Commercialization Professional Course by teaching guest lectures and hosting interactive sessions for clients. Additionally, Lauren facilitates the ITCP internship program, allowing multilingual Georgia Tech students to gain valuable career experience in innovation while earning academic credit. She joined the team after seven years of working in entrepreneurial education at the Advanced Technology Development Center, Georgia's state startup incubator.

Lauren earned her undergraduate degree in International Affairs and Chinese from the Sam Nunn School at Georgia Tech. While completing her bachelor's, she interned at the Georgia Department of Economic Development and The Carter Center. In December 2021, she earned her master's degree from Georgia Tech in International Affairs, specializing in global development and technology.

### Xinying Lin, Associate Program Manager, Enterprise Innovations Institute



Xinying is an associate project manager of the Innovation and Technology Commercialization Professionals (ITCP) Program of Enterprise Innovation Institute (EI<sup>2</sup>) at Georgia Institute of Technology. In this role, she assists projects that foster and develop professionals in technology transfer and commercialization in innovation ecosystems in different regions.

Xinying obtained an M.S. degree in Global Media and Culture and a B.S. degree in Global Economics and Modern Languages from Georgia Institute of Technology.

#### Viviana Montenegro, Program Manager, Enterprise Innovation Institute



Viviana is a Program Manager in the Economic Development Lab of the Enterprise Innovation Institute (EI<sup>2</sup>) at the Georgia Institute of Technology, where she assists with projects that foster and strengthens innovation ecosystems, entrepreneurship, technology commercialization, and economic development in different regions. Prior to joining to EI<sup>2</sup>, Ms. Montenegro was a Senior Research Analyst at G3ict, The Global Initiative for Inclusive Technologies, where she oversaw the data collection, data analysis and the development and implementation of the DARE (Digital Accessibility Rights Evaluation) Index.

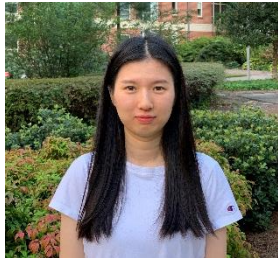
#### Brandy Nagel

Research Faculty at the Atlanta Minority Business Development Agency (MBDA)



Brandy Stanfield-Nagel is a Program Manager and Faculty Researcher at the Atlanta Minority Business Development Agency (MBDA) and the Southeast MBDA Growth Innovation Hub as well as offering business assistance to Minority Business Enterprises (MBEs). She has been involved in university commercialization programs since 2012, working with students, faculty and staff on spinning up technology-based startups. In addition to her work with early-stage entrepreneurs, she nurtures mentor networks and faculty learning communities focused on entrepreneurship and innovation. Her recent projects include teaching a faculty development program on innovation and entrepreneurship, delivering a workshop on business model canvas and customer discovery, developing a mentor network to support a community of entrepreneurs, and establishing an entrepreneurship support program at an underserved community center.

Ci Song, Associate Program Manager, Enterprise Innovations Institute



Ci Song is an Associate Project Manager in the Enterprise Innovation Institute (EI<sup>2</sup>) at Georgia Institute of Technology, where she obtained her M.S. degree in Global Media and Cultures in 2020. Ci mostly works for the ITCP China-based program by building and maintaining the Canvas courses, liaising with clients and partners, and translating course related materials.

Born in China, Ci also holds a B.A. degree in Broadcasting and TV editing from Liaoning University and an M.A. degree in Journalism and Communication from Shenzhen University. Ci's expertise is in the field of international affairs, translation, learning management system, and media production.

## IX. Instructors

Our instructors are not just recognized academic experts, they also have experience as practitioners – such as co-founders and investors in startups, leaders of incubators and accelerators, facilitators of industry-university collaboration, developers of innovation parks, and professionals with expertise transferring technologies from research labs to the marketplace.

### David Bridges

Vice President, Enterprise Innovation Institute at Georgia Institute of Technology; Vice President, Georgia Advanced Technology Ventures



David Bridges is the Vice President for the Enterprise Innovation Institute at Georgia Institute of Technology and Georgia Advanced Technology Ventures. Previously, David served as the Director of the EI<sup>2</sup>'s Economic Development Lab which advises governments and universities, both in the U.S. and around the globe, on innovation-led economic development initiatives (ILED). ILED activities foster collaborations among informal network players such as governments at all levels, universities, corporations, startups businesses, entrepreneurs, and entrepreneurial support organizations to drive the development of startup ecosystems. Our practice focuses on maximizing the building blocks of startups, sources of innovation and sources of talent, and focusing the collective effort required to enable the success of these valuable startups. As Associate Vice President for International Initiatives, he has been engaged in innovation ecosystem projects in Europe, Latin

America, Africa, and Asia. Mr. Bridges has been a member of EI<sup>2</sup> for over 23 years. In that time, he has gained experience managing programs around technology commercialization, co-development research, SBIR grants, seed fund management, international commercialization, incubation, acceleration, proof-of-concept centers, cluster development, university innovation centers, and innovation ecosystem. In total, Mr. Bridges has led, co-led or advised on proposals resulting in over \$42 million in innovation related grants for Georgia Tech.

### **Lynne Henkiel**

Lynne Henkiel, Interim Director of the Economic Development Lab of the Enterprise Innovation Institute (EI<sup>2</sup>)



Lynne is the Interim Director of Economic Development Lab at EI<sup>2</sup>. She has been involved in developing EI<sup>2</sup>'s innovative ecosystems development practices, aiding communities to develop their entrepreneur base through research and education. She also has been the developer for the incubation health assessments tool and instrumental in developing the Georgia Tech Soft Landings program for international companies looking to grow into the US market. Her career at Georgia Tech has focused early on with commercializing innovations from NASA's Kennedy Space Center, Stennis Space Center, and Marshall Space Flight Center. Within her responsibilities of working with startup companies that licensed NASA technology, she worked in partnership with startup entrepreneurs to overcome many of the early pitfalls of starting a technology business. She also managed the dual-use industry partnerships for NASA Marshall involving both large and startup businesses. She has also been the Primary Investigator for the U.S. Economic Development Administration's University Center program for over 10 years a program that helps develop entrepreneurial education throughout communities in the southeastern US. Lynne also sits on the executive board of the Technology Association of Georgia's International Society, as well as the International Business Innovation Association. Lynne holds a Master of Science in Technology Management from the University of Miami.

## Lauren Lange

Program Manager in the Economic Development Lab of the Enterprise Innovation Institute (EI<sup>2</sup>)



Lauren Lange is a program manager on the Economic Development Lab Team. She supports the Innovation and Technology Commercialization Professional Course by teaching guest lectures and hosting interactive sessions for clients. Additionally, Lauren facilitates the ITCP internship program, allowing multilingual Georgia Tech students to gain valuable career experience in innovation while earning academic credit. She joined the team after seven years of working in entrepreneurial education at the Advanced Technology Development Center, Georgia's state startup incubator. Lauren earned her undergraduate degree in International Affairs and Chinese from the Sam Nunn School at Georgia Tech. While completing her bachelor's, she interned at the Georgia Department of Economic Development and The Carter Center. In December 2021, she earned her master's degree from Georgia Tech in International Affairs, specializing in global development and technology.

## Keith McGregor

Director, VentureLab



Keith McGregor, VentureLab's director, also serves as the lead instructor for the [NSF Innovation Corps \(I-Corps\)](#) program for Georgia Tech, a founding node in the I-Corps network. He is also a member of the NSF I-Corps curriculum committee and gives frequent invited talks on the foundations of evidence-based-entrepreneurship philosophy.

Keith has been an entrepreneur for the last three decades. His first company, Artificial Intelligence Atlanta, was the first AI company in the southeast, which led to a gig in robotics for Lockheed. He has been a founder or co-founder of six software companies.

Keith wrote and shipped the first 3D program and first color paint program for the Macintosh. He developed the color architecture for the Macintosh, wrote substantial portions of the graphics system, and managed the graphics group at Apple Computer in Cupertino. A stint as co-founder of an internet company in the mid-1990s led to Keith becoming a director of engineering at Yahoo! in 1999.

Keith holds a BS, MS, and PhD in computer science from Georgia Tech, and is an instructor of Georgia Tech's new StartupLab for undergraduates in the College of Engineering. In addition to

his role at VentureLab, Keith holds an appointment as Professor of the Practice in the [School of Interactive Computing](#) at Georgia Tech and is the Associate Director of Georgia Tech's [GVU](#).

### Brandy Nagel

Research Faculty at the Atlanta Minority Business Development Agency (MBDA)



Brandy Stanfield-Nagel is a Program Manager and Faculty Researcher at the Atlanta Minority Business Development Agency (MBDA) and the Southeast MBDA Growth Innovation Hub as well as offering business assistance to Minority Business Enterprises (MBEs).

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### Monica Novoa

Guest Instructor



Monica is the Member Board of Directors for Women In Business and a PhD Candidate in Public Policy, Georgia Tech. Prior to that, Monica was a Research Faculty in the Economic Development Lab of the Enterprise Innovation Institute (EI<sup>2</sup>) at the Georgia Institute of Technology. In this role, she led projects in Latin America and the Caribbean to strengthen regional innovation economies. Her practice areas include applying evidence based-entrepreneurship principles and technology extension concepts for the development of innovation ecosystems that support entrepreneurs and strengthen the industrial base of communities, countries and regions. She has managed projects for diverse entities such as universities, university business incubators, non-profit organizations, economic development agencies and the private sector in Puerto Rico, Chile, Colombia, Perú, and Panamá, among other countries.

Monica's 15-year career encompasses economic development, entrepreneurship education, and private sector management. Prior to joining Georgia Tech, Monica was Associate Director at the Stanford University's Graduate School of Business (GSB), where she led Stanford Ignite, an innovation and entrepreneurship program. Before Stanford, Monica served as Director at the



School of Management of the University of San Francisco, leading a portfolio of entrepreneurship education and consulting programs. She also worked as Finance Manager for a boutique intellectual property law firm in California.

Monica holds a MBA in Finance and Marketing from the University of San Francisco in California and a Bachelor's Degree in Systems Engineering from Universidad de Oriente, Venezuela.

### **Carl A. Rust** Guest Instructor



Carl A. Rust is the Executive Director of Industry Engagement and Business Development at the University of Massachusetts System. Previously, he was the Principal Director in the Office of Industry Collaboration at the Georgia Institute of Technology where he was responsible for pursuing the university's industry-university collaboration, entrepreneurship, commercialization, innovation, and economic development goals. He also served as the Innovation Ecosystem Director for the Center for Cell

Manufacturing Technologies (CMaT), an Engineering Research Center (ERC) of the National Science Foundation (NSF).

His prior industrial experience includes serving as an engineering manager at Texas Instruments and co-founding four technology-based start-up companies. He has a bachelor's degree in electrical engineering from The Citadel and has seventeen publications. Carl was a 2014 Fulbright award recipient to study the higher education and research system of France. He sits on the advisory boards of the Center for the Development and Application of Internet of Things Technologies (CDAIT), Southeastern Nanotechnology Infrastructure Corridor (SENIC), and The Citadel's Department of Electrical and Computer Engineering.

## Jan Youtie

Director of Policy Research Services



Jan Youtie, PhD is Director of Policy Research Services in the Enterprise Innovation Institute at Georgia Institute of Technology. She is the director of the Technology Policy Assessment Center and co-directs the Program in Science, Technology, and Innovation Policy. Her research focuses on advanced manufacturing, innovation and research systems assessment, emerging technology identification, bibliometric and patent analysis, and innovation and knowledge measurement and evaluation. Her work has been sponsored by the U.S. Department of Commerce, National Science Foundation, European Commission, Expertenkommission Forschung und Innovation, U.N. Development Program, and the Georgia Research Alliance among others.

Dr. Youtie was a country correspondent for the European research and innovation policy networks ERAWATCH and PROINNOWATCH, TrendChart (2007-2013). She co-led the project Institutions for Technology Diffusion (2015) for the Inter-American Development Bank. She was a co-author for the OECD 2017 report The Next Production Revolution: Implications for Governments and Business, (243-270). She was moderator and expert providing input to the National Science Foundation's innovation survey workshop (2018).

Dr. Youtie's research received the Lang Rosen Gold Award for best article by the Journal of Technology Transfer, and it also has appeared in Research Policy, Economic Development Quarterly, Technovation, Research Evaluation, Nature Nanotechnology, and other journals. She has been recognized as one of the top authors in technology and innovation management research by the International Association of Management of Technology. She holds a doctorate in political science from Emory University.