

USC Viterbi

School of Engineering
*Technology Innovation
and Entrepreneurship*



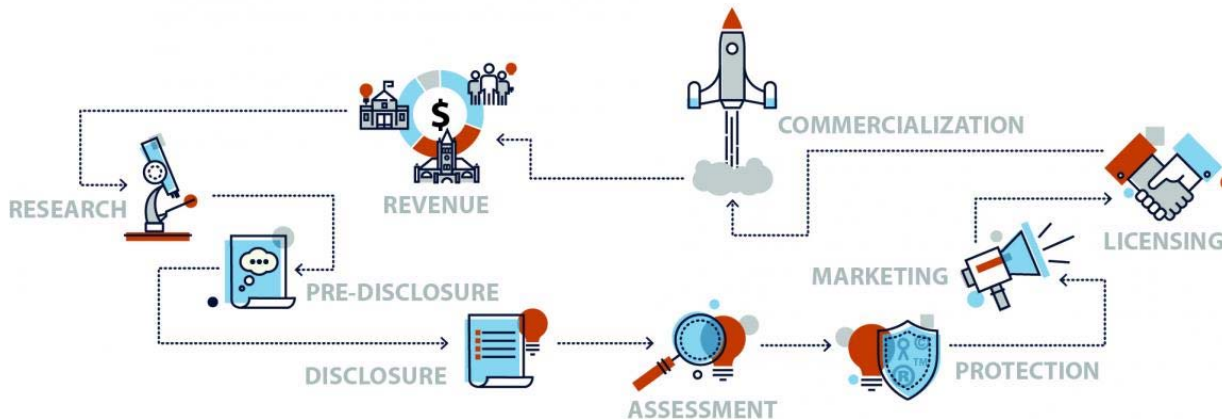
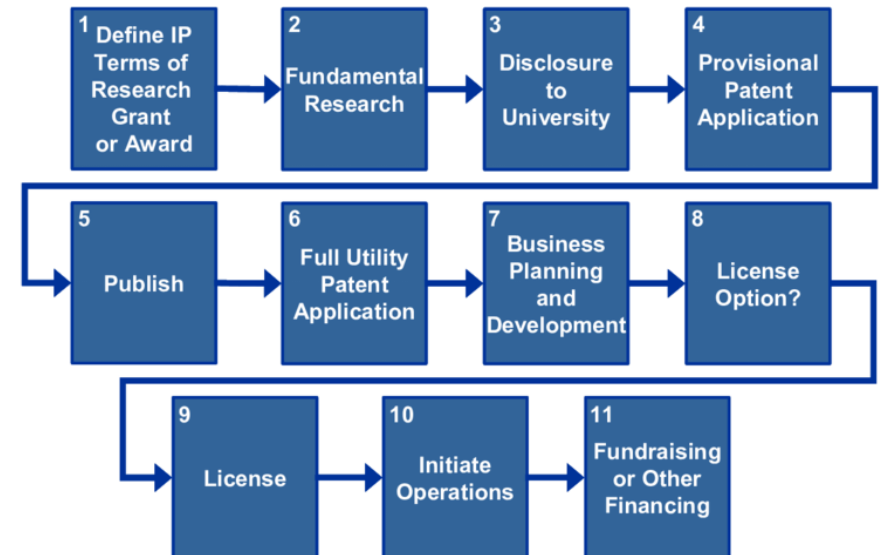
Office of Technology Innovation and Entrepreneurship

Ellis Meng

Vice Dean of Technology Innovation and Entrepreneurship
Shelly and Ofer Nemirovsky Chair in Convergent Biosciences
Professor Biomedical Engineering & Electrical and Computer Engineering
Biomedical Microsystems Laboratory

Commercialization is another way to achieve *impact* for your research portfolio

- Research results in 3P's: Publications, PhDs, *and Patents*
- Do you have provisional patents, patent applications, or issued patents?
- Consider intellectual property protection before publishing



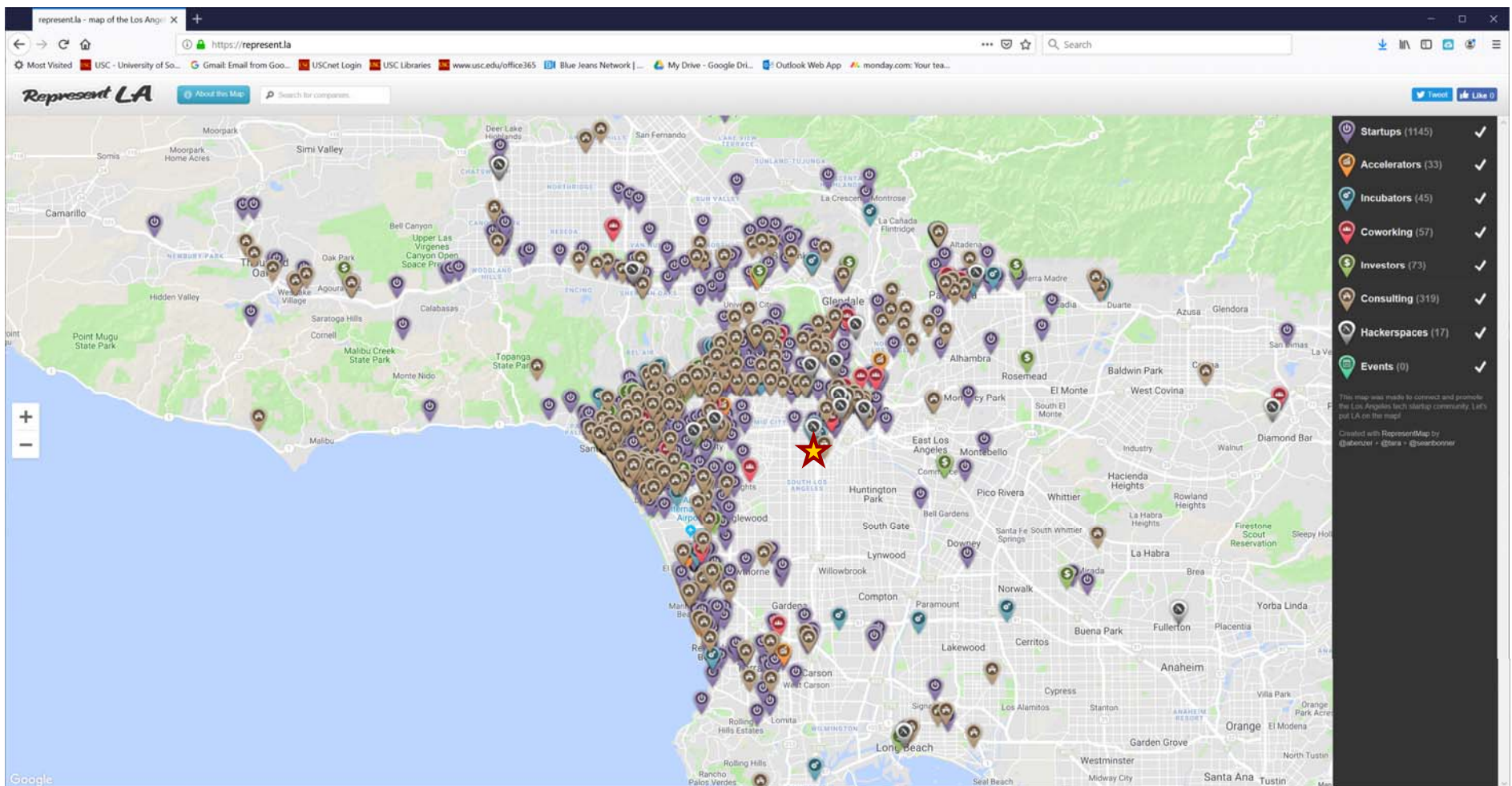
Commercialization is a contact sport

- Many pathways to commercialize inventions or other technologies from your research program
- Unless you are one of the rare few who have training in this area, be prepared for an adventure into the unknown
- Commercialization is unlike the merit-based world of academia – many things will take more time that you realize
 - Documenting your invention
 - Interacting with technology transfer office
 - Interacting with patent attorneys
 - Making sure the invention has a market
 - Fundraising beyond the university
- But commercialization can be very rewarding



Choose your battles and how you spend your time wisely

Vibrant tech startup scene in Los Angeles



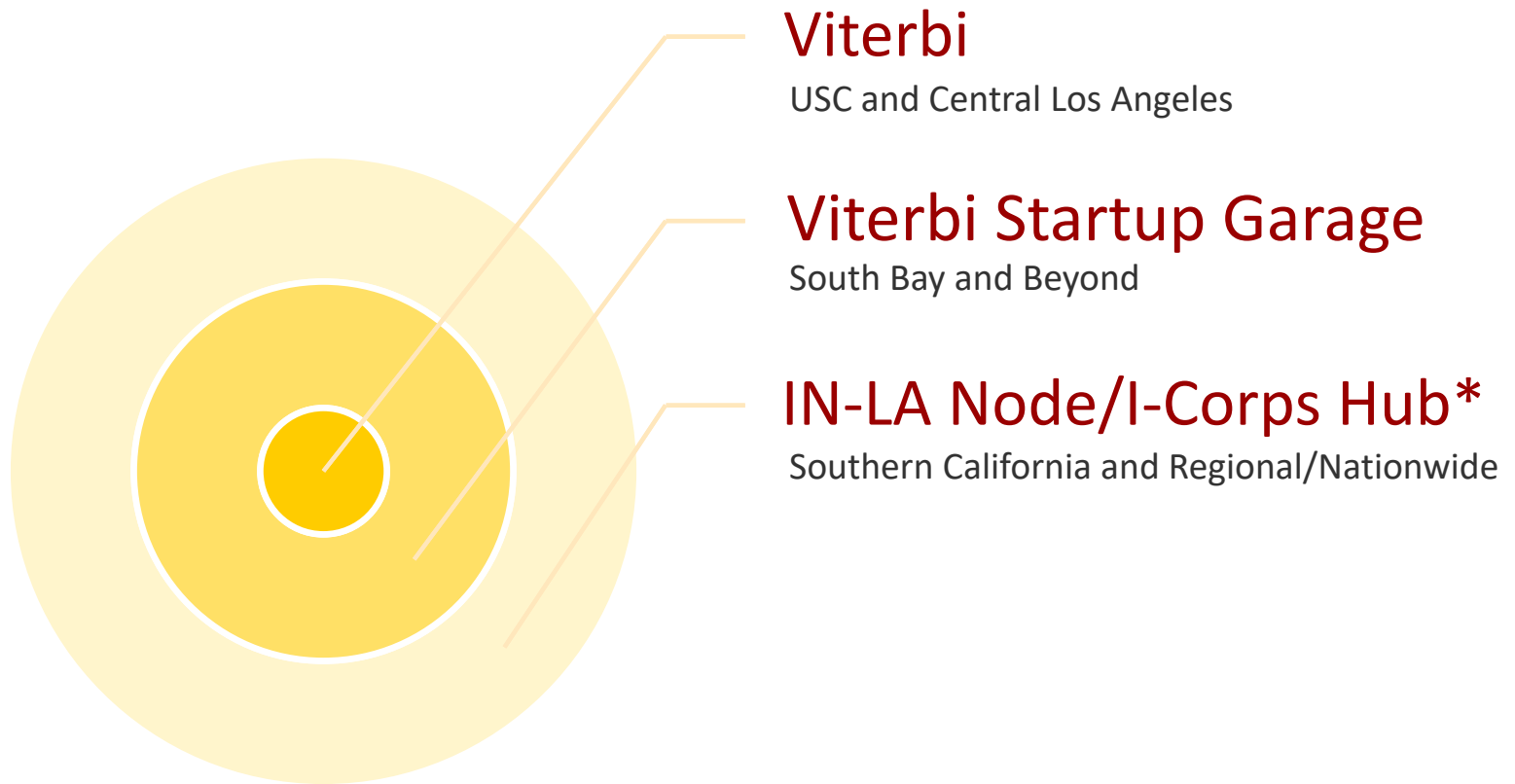
The Viterbi School Office of Technology Innovation and Entrepreneurship (OTIE) will:

- Educate engineers on strategies to invent, develop, integrate, and sustain technologies that address significant needs
- Launch ventures with meaningful social and economic impact based on USC faculty, staff, students, and technologies
- Promote an ethical and inclusive technology innovation and entrepreneurship ecosystem

We are separate from USC Stevens Center for Innovation which is our technology transfer office. All intellectual property flows through USC Stevens.



10,000 foot view of OTIE



*Future effort

- Core activities
 - Competitions: ABC, MEPC, MFC, Mousetrap
 - Courses and programs: EHP – Innovation track, VSEE in ENGR 102, ENGR 100, ENGR 461/499, ENGR 493
 - Co-curricular activities: MEPC, MFC, Summer Smasher
 - K-12: TIE Summer program
 - VSG and VVF
- Related Viterbi activities
 - Courses: CE 499 Innovation in Engineering Design for Global Challenges, CSCI 599 Innovation in Defense Applications
 - Programs and certificates: ITP Digital Entrepreneurship minor, Marshall Technology Commercialization certificate
 - Student organizations: Code the Change, Corpus Callosum, Design for America, Hack SC, LavaLab, Spark SC, Athena Hacks, and more!

Maseeh Entrepreneurship Prize Competition (MEPC)

- Flagship competition
- \$50,000 grand prize
- Participate in workshops to help launch your startup
- Free legal services to top teams
- Must have Viterbi student involved



Min Family Challenge (MFC)

- Focus: support student use of engineering and technology to develop sustainable and effective solutions for global problems, positively affecting the greater society
- Alignment with NAE Grand Challenges and the United Nations 2030 Sustainable Development Goals
- \$50,000 grand prize
- Participate in workshops and seminars
- Free legal services to top teams
- Must have Viterbi student involved

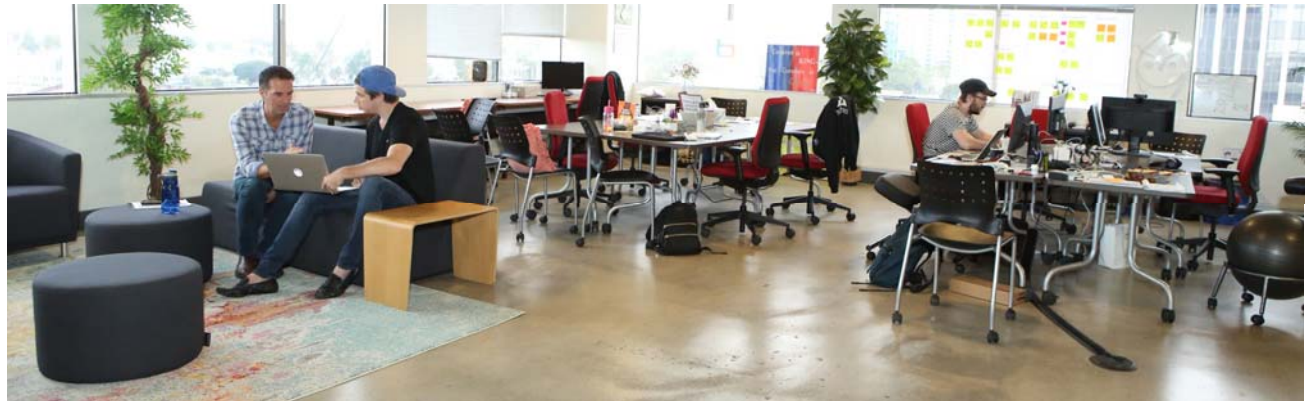


- Educational programs and competitions
 - For you and/or your entrepreneurial students
- Showcase participation
 - Professional coaching and opportunities to present to investors
- Mousetrap Fund
 - Funds “last mile” technology development; look for future cycles
- NSF Innovation Corps (I-Corps) grants
 - Get \$50k from NSF to validate your concept in the marketplace!

Viterbi Startup Garage



- Year-round program – currently in virtual mode
- “International waters” – can be your startup’s home
- Additional programs to support your team, including student interns
- Conference facility, etc. as needed
- Faculty spinoffs from USC, CHLA, UCI, UCLA, Caltech, Purdue as residents or associates

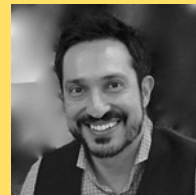


NSF Innovation Corps ("I-Corps")

- Support to commercialize technologies developed in universities
- \$30,000 grant from our Node
- \$50,000 grant from the National Science Foundation
- Must have intellectual property (no apps)
- ZAP! training can be used to qualify for the national program
- ZAP! also enables you to present at annual Technology Scouting Workshop (speakers from Amazon, Boeing, Google, Dow, NASA, Virgin Orbit, J&J JLABS, and more!)
- <http://lanode.org/zap/>



Dave Eastman – Viterbi Startup Garage & NSF I-Corps Node Director



Programs, Teaching, Competitions*, and Ecosystem

Competitions*

The OTIE team

Trina Gregory – Associate Director, Min Family Challenge, ABC Prize, Viterbi Student Entrepreneurship Education



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Competitions*

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Alice Liu – Assistant Director, Maseeh Entrepreneurship Prize Competition, Engineering Honors Program, High School Program



Programs, Teaching, Competitions*, and Ecosystem

Competitions*

The OTIE team

Ellis Meng – Vice Dean for Technology Innovation and Entrepreneurship



Programs, Teaching, Competitions*, and Ecosystem

Competitions*

The OTIE team

Cliff Neuman – Hacking for Defense course

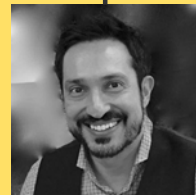


Programs, Teaching, Competitions*, and Ecosystem

Competitions*

The OTIE team

Farzin Samadani – Hacking for Defense course



Programs, Teaching, Competitions*, and Ecosystem

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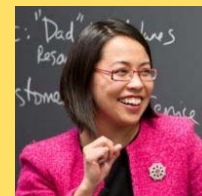
Susan Angus – Min Family Challenge



Programs, Teaching, Competitions*, and Ecosystem

Competitions*

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Programs, Teaching, Competitions*, and Ecosystem

Gianluca Lazzi – Maseeh Prize

Competitions*

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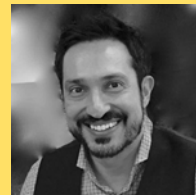
Pai-Ling Yin – Maseeh Prize



Programs, Teaching, Competitions*, and Ecosystem

Competitions*

The OTIE team



Programs, Teaching, Competitions*, and Ecosystem

Competitions*

Precious McClendon – Program Coordinator, NSF I-Corps Node TA



Operations, Budget, and Facilities

The OTIE team



Programs, Teaching, Competitions*, and Ecosystem

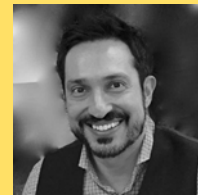
Competitions*

Arcelia Navarro – Viterbi Startup Garage Facilities Manager



Operations, Budget, and Facilities

The OTIE team



Programs, Teaching, Competitions*, and Ecosystem

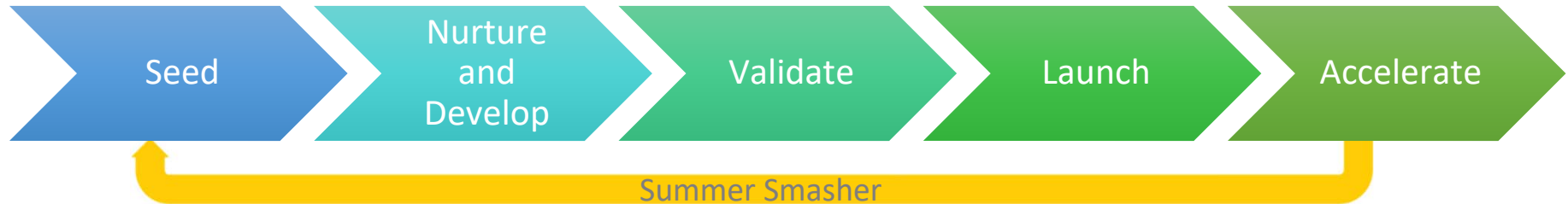
Competitions*

Jason Ordonez – Program finances, Research administrator



Operations, Budget, and Facilities

Questions?



- VSEE: entrepreneurial mindset in Freshman Academy
- ENGR 100, 461, 493, 499; ISE 585; H4D; and other courses
- Summer Smasher: immersive experience with start-ups
- TIE Summer Program

- Competitions (incl. MEPC, MFC, ABC Prize, Mousetrap, NAE)
- External pitch competitions
- Engineering Honors Program – Innovation Track
- Seminars
- Office Hours

- NSF I-Corps Programing (incl. ZAP, BOOM, LAUNCH, BLITZ, National I-Corps)
- Summer Innovation Fellowship

- Synchrotron, VSG accelerator program
- Technology Scouting Workshop
- Faculty seminars

- Full-time residency at the Viterbi Start-up Garage
- Viterbi Venture Fund

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