

# USC Viterbi

School of Engineering  
*Technology Innovation  
and Entrepreneurship*



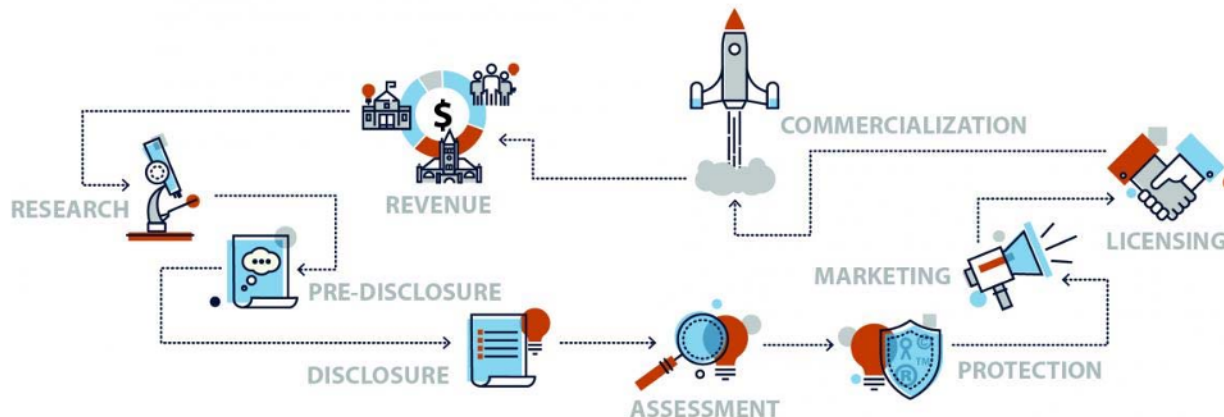
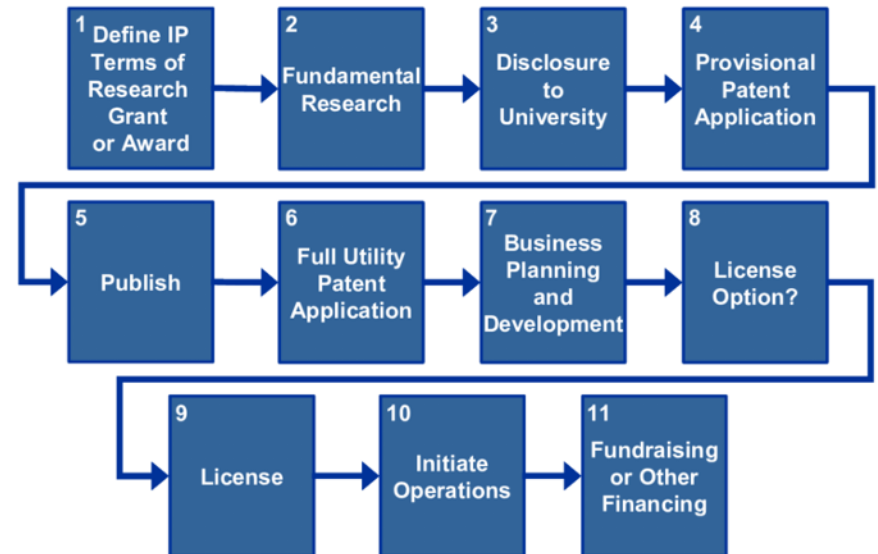
## ***Office of Technology Innovation and Entrepreneurship***

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



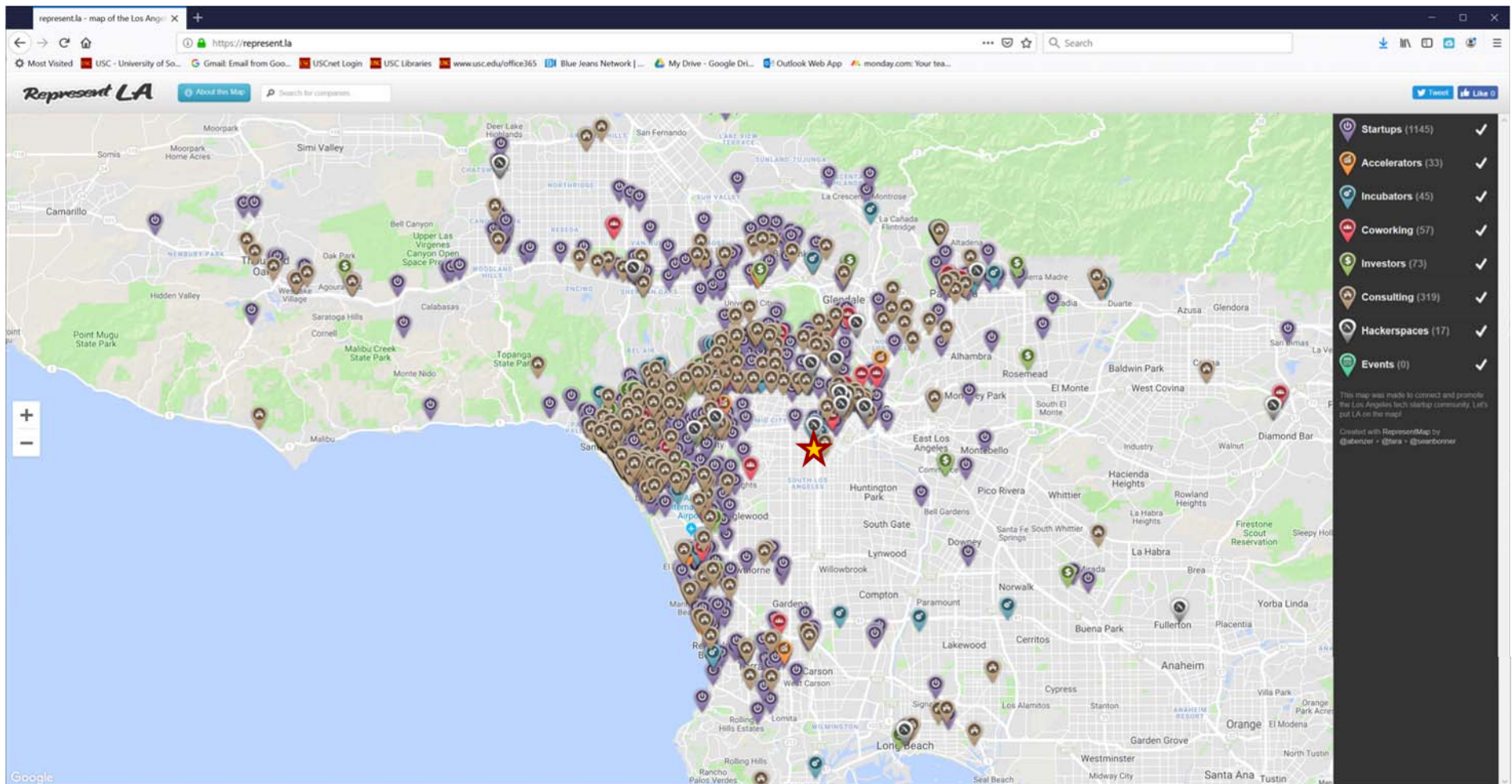
## Commercialization is a contact sport

- 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





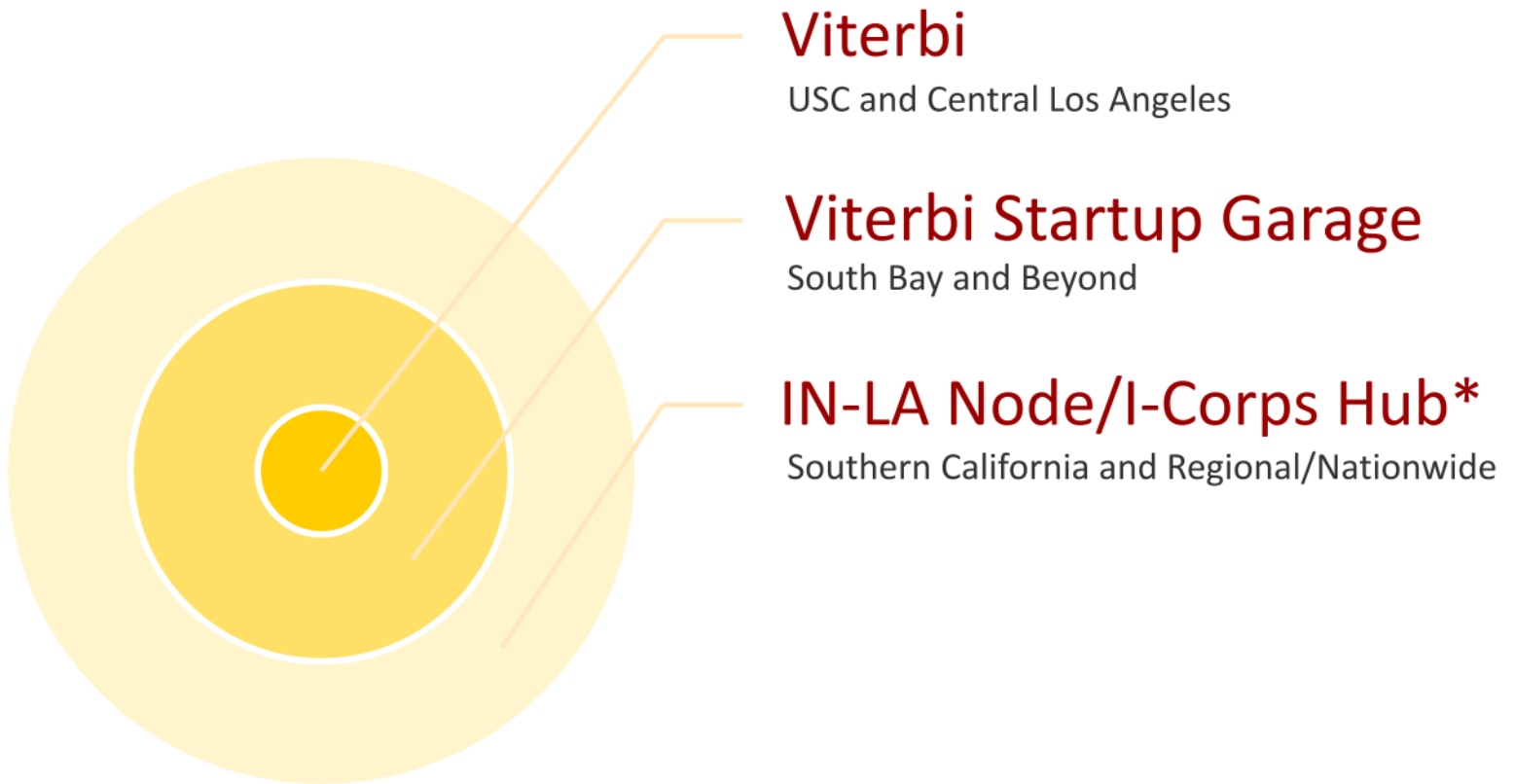
The Viterbi School Office of Technology Innovation and Entrepreneurship (OTIE) will:

- 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

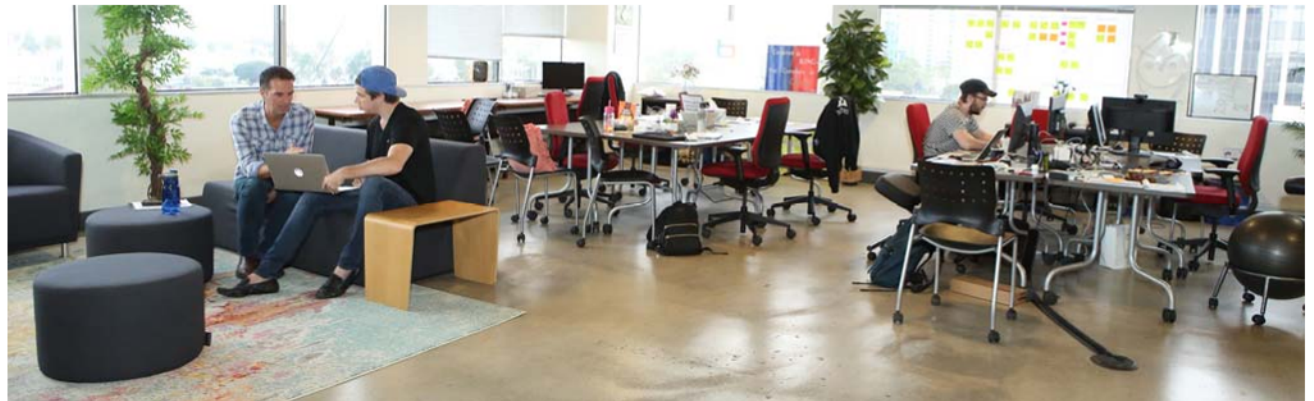


- Educational programs and competitions
  - For you and/or your entrepreneurial students
- Showcase participation
  - Professional coaching and opportunities to present to investors
- Mousetrap Fund
  - Funds “last mile” technology development; look for future cycles
- NSF Innovation Corps (I-Corps) 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/>





# The OTIE team

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



Programs, Teaching, Competitions\*, and Ecosystem

Competitions\*

# The OTIE team

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



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Competitions\*

# The OTIE team

Susan Angus – Min Family Challenge



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Competitions\*

# The OTIE team



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Gianluca Lazzi – Maseeh Prize

Competitions\*



# The OTIE team

Pai-Ling Yin – Maseeh Prize



Programs, Teaching, Competitions\*, and Ecosystem

Competitions\*

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Programs, Teaching, Competitions\*, and Ecosystem

Competitions\*

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



Operations, Budget, and Facilities

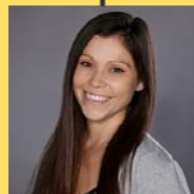
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Programs, Teaching, Competitions\*, and Ecosystem

Competitions\*

Arcelia Navarro – Viterbi Startup Garage Facilities Manager



Operations, Budget, and Facilities

# The OTIE team



Programs, Teaching, Competitions\*, and Ecosystem

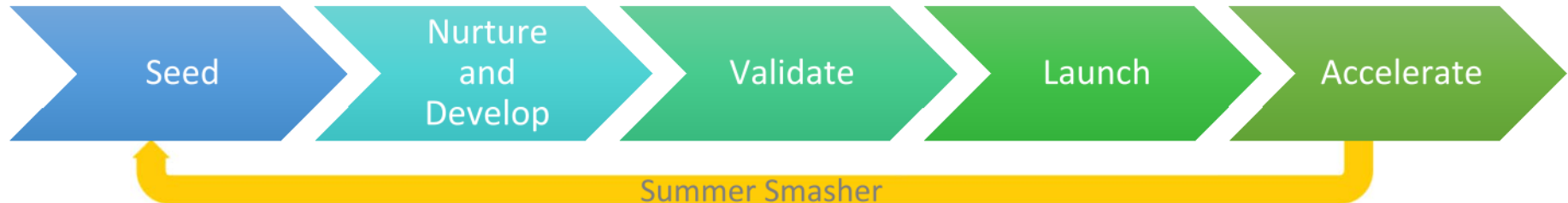
Competitions\*

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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