



**13TH ANNUAL USC STEVENS
STUDENT INNOVATOR
SHOWCASE**

Friday, November 1, 2019 9AM-3PM

13TH ANNUAL USC STEVENS STUDENT INNOVATOR SHOWCASE

Now in its 13th year, the USC Stevens Student Innovator Showcase is held annually during Trojan Family Weekend. Student teams earn a spot in the Showcase based on their demonstrated success at creating scholarship with consequence by coming up with creative, viable solutions to global problems. During the daylong event held at USC's University Park Campus, student teams present and pitch their innovations, inventions, and startup ideas in all disciplines for awards that help them develop their ideas further.

From 2007 to 2018, over \$180,000 has been distributed through awards generously sponsored by the USC community, and over 1,000 students from all USC schools have competed. This year, USC students will compete for nearly \$28,000 in cash prizes and in-kind awards valued at over \$30,000 at the 2019 USC Stevens Student Innovator Showcase.

About Us

USC Stevens

Center for Innovation

The USC Stevens Center for Innovation is the technology transfer office for the University of Southern California. We facilitate the transfer of research, enabling inventors and companies to benefit society through products that develop from university innovations. The Stevens Center manages university-owned intellectual property (IP) stemming from over \$900 million in annual research funding in all areas of the university, including medicine, engineering, sciences, and the arts.



2019 Award Sponsors

USC Stevens
Center for Innovation

USC Marshall
*Diem Shotwell Metcalfe
Family Fund*

BK BROOKS
KUSHMAN
INTELLECTUAL PROPERTY AND
TECHNOLOGY LAW

pillsbury

DANIEL FLOERSHEIMER



Lloyd Greif Center
for Entrepreneurial Studies

USC Marshall
School of Business

Lunch Provided to Student Teams by:

AMI USC

Alfred E. Mann Institute for Biomedical Engineering

Awards



\$10,000 USC STEVENS BREAKTHROUGH INNOVATION AWARD

Project that best demonstrates a breakthrough industry-altering approach to solving a societal problem.

Funded by the USC Stevens Center for Innovation



\$10,000 BEST BUSINESS CONCEPT AWARD

Project with the best business model to be financially viable in the marketplace.

Funded by the Diem Shotwell Metcalfe Family Fund at the USC Marshall School of Business



\$4,000 GLOBAL IMPACT AWARD

Project with the most innovative idea to solve global social or environmental issues.

Funded by a Donation from Daniel Floersheimer through the USC Marshall School of Business



\$2,500 VENTURE VALIDATION AWARD

Project closest to market with the most progress gaining market traction including securing investors, funding, and marketing.

Funded by The Lloyd Greif Center for Entrepreneurial Studies at the USC Marshall School of Business



\$1,000 TROJAN FAMILY CHOICE AWARD

Project voted best of show by the attendees of Trojan Family Weekend.

Funded by the USC Stevens Center for Innovation



IN-KIND BROOKS KUSHMAN PATENTABILITY AWARD

Project that is deemed ready for intellectual property protection. Brooks Kushman will draft a complete patent application and file with the U.S. Patent Office. Prize value: over \$15,000.

Funded by Brooks Kushman P.C., a leading intellectual property and technology law firm



IN-KIND PILLSBURY MENTORSHIP AWARD

John Wetherell of Pillsbury will provide strategic counseling and draft a complete patent application for one finalist team. Prize value: over \$15,000.

Funded by Pillsbury Winthrop Shaw Pittman LLP, an international law firm that was founded in 1868

Event Schedule

9:00 AM - 11:00 AM	Student Innovator Showcase (24 teams)
12:00 PM	Keynote Speaker: Dr. Randolph Hall, "Breaking Tradition: Creating the Innovative University"
12:45 PM - 2:45 PM	Finalist Fast Pitch Round (10 teams)
1:30 PM	Voting Ends for Trojan Family Choice Award
2:45 PM	Winners Announced and Awards Ceremony
3:00 PM	Event Concludes

Master of Ceremonies



Len Lanzi
Executive Director
Los Angeles Venture Association (LAVA)

Leonard M. Lanzi has over 30 years of nonprofit organization management and fund development experience. He has been serving as the Executive Director of the Los Angeles Venture Association since 2007. In his capacity at LAVA, he works with the LAVA board of directors to direct the strategic plan and organize educational and informational programs within the venture funded business ecosystem in the greater Los Angeles region.

Leonard brings a well-rounded knowledge from such diverse human service organizations as the Community Kitchen of Santa Barbara, Court Appointed Special Advocates, Junior Achievement of Southern California and the Boy Scouts of America.

Leonard graduated from the University of Rochester with a Bachelor's degree in Psychology. He is an active member of the Rotary Club of Santa Monica where he served on its Board of Directors as VP Programs. Leonard also serves on the board of directors as Board Chair for Meals on Wheels West, as a director for Rotarians for Family Health and AIDS Prevention, Board Treasurer for the Santa Monica Chamber of Commerce and the Board of Governors for StartOut, a nationwide entrepreneurial organization for the LGBT community.

We welcome Len Lanzi as the Master of Ceremonies for the afternoon portion of today's programming.

Keynote Speaker & Judge



Randolph Hall **Vice President of Research** **University of Southern California**

Dr. Randolph Hall leads USC's \$900 million annual research enterprise, overseeing research advancement, administration, and ethics. Hall's experience includes serving as the founder for two national research centers, the Center for Risk and Economic Analysis of Terrorism, and the National Center for Metropolitan Transportation Research. As Vice President, Hall has led the creation of: policies and strategies to catalyze collaborative research, including changes in promotions and tenure,

research attribution, and shared repositories; funding programs for collaborative research; and infrastructure and events enabling digital scholarship, as well as standards for research transparency and reproducibility. He has helped create national research centers, built alliances with external research institutes, developed the Center for Excellence in Research, created the DC-based research advancement office, and built an integrated research office that encompasses contracts and grants, technology transfer, human subject protection, animal resources, research ethics, research training, research advancement and internal grant programs.

Hall is Professor in the Epstein Department of Industrial and Systems Engineering. He is the author of *Queueing Methods for Services and Manufacturing* and the editor of *Handbook of Transportation Science*, *Handbook of Healthcare System Scheduling* and *Patient Flow: Reducing Delay in Healthcare Delivery*. He is a board member for the USC Health System and the AMI Institute at USC, and President of ICT Productions, a USC subsidiary, and oversees major interdisciplinary institutes at USC, including the Institute for Creative Technologies and the Ming Hsieh Institute.

Hall served as chairman of the University Industry Demonstration Partnership, the national leader in developing standards for industry funded research in universities. He represents USC within the Association of Academic Health Centers, the Southern California Innovation Alliance and the Association of American Universities Senior Research Officer group, and he serves on the National Academies Roundtable for Aligning Incentives for Open Science and the AAU/APLU Science and Security Working Group.

Dr. Randolph Hall joins us today as Keynote Speaker and as Judge at the 13th Annual USC Stevens Student Innovator Showcase.

Judges



Jennifer Dyer **(USC Stevens Center for Innovation)**

Jennifer Dyer joined the USC Stevens Center for Innovation as Executive Director in March 2013. She has more than 25 years of experience and a strong record of success in technology commercialization, including serving as Director of Technology Development at The Scripps Research Institute for 11 years. At TSRI, she contributed to growth in both licensing activity and corporate sponsored research, including the management of major funding relationships with Novartis, Johnson & Johnson and PPG. She joined

USC Stevens from Life Technologies Corporation (now ThermoFisher), where she served as a Corporate Development Consultant, leading the negotiation of key licensing deals. Prior to Life Technologies, Dyer served as Vice President of Business Development for Wellspring Worldwide. Dyer is a Certified Licensing Professional and, since 1993, she has been an active member of the Licensing Executives Society (LES) and the Association of University Technology Managers (AUTM).



Julia S. Metcalfe

Julia Metcalfe is currently a freelance consultant and a researcher/writer about scaling new disciplines while moving fast with systems thinking. Previously, she spent 8 years at Facebook. She spent her last year at the company spinning up a product team in the Applied Machine Learning organization, focused on democratizing data annotation to meet the needs of the ever-scaling use of machine learning across the company. She spent her first 7 years at Facebook leading the Product Experience Analytics organization

for monetization products. She founded this team and scaled it to 60 people across 5 offices, evolving the discipline from operations to analysis and product management. Her team changed how Facebook understands fundamental advertiser needs by developing data-driven insights that help focus the organization on building trustworthy products. She's on the Board of Directors of the Points North Institute, which is a launch pad for the next generation of non-fiction storytellers. She earned a Bachelor's degree in International Business from the USC Marshall School of Business. She also runs ultra-marathons and is a former member of the USC Triathlon Team.



James Kaiser (HOYA Ventures)

James Kaiser is the Director of Venture Capital, HOYA Ventures. His responsibilities include investing in startup companies to expand HOYA's areas of interest within the Life Care segment. Prior to this role at HOYA, he has over 15 years' experience working in the R&D labs of academia, startups, and Fortune 500 companies that he leverages to evaluate the potential and maturity of an investment target's technology. HOYA Corporation is a diversified, multinational company and leading supplier of innovative and indispensable high-tech and healthcare products. HOYA is active in two main business

segments: the Life Care segment encompasses health care areas such as eyeglass lenses and the operation of contact lens retail stores, as well as medical related areas such as intraocular lenses for cataract surgery, medical endoscopes, surgical equipment and artificial bones and implants. HOYA's Information Technology segment focuses on electronics products for the

Judges

semiconductor industry and LCD panels, glass disks for HDDs, and optical lenses for digital cameras and smartphones. The HOYA Group comprises over 100 subsidiaries and affiliates and over 37,000 people worldwide.



Hallie Kuhn (Alexandria Venture Investments)

Hallie Kuhn is a Principal at Alexandria Venture Investments where she focuses on life science and healthcare investments in the greater LA region. Formerly, Dr. Kuhn was a Principal at LS Polaris Innovation Fund, a Boston-based VC-fund specializing in early stage life science investments. Concurrently, she served as Chief of Staff for Amy Schulman, a partner at Polaris Partners, supporting operations and business development for several Polaris portfolio companies. She holds a Ph.D. in Systems Biology from Harvard University and was a

Churchill Scholar at Cambridge University. She is a recipient of a National Science Foundation Graduate Fellowship, National Defense Science and Engineering Fellowship and Harvard Ashford Fellowship. She holds a B.S. from Harvey Mudd College.



Karen Heidelberg (Deerfield)

As a Partner and Chief Partnership and Communications Officer at Deerfield, Karen Heidelberg is responsible for relationships with investors, partner companies, academic institutions and other interested parties. Prior to this role, she was a Trader at Deerfield for over a decade. Before joining Deerfield in 2002, Heidelberg was a Vice President in the Sales and Trading division of Merrill Lynch, and served as a Conflicts Coordinator in the Mergers and Acquisitions department. As Conflicts Coordinator, she was responsible for ensuring that Merrill Lynch was clear of legal and business conflicts

of interest before the firm was able to accept an assignment. Heidelberg has approximately 17 years of experience in healthcare and 24 years of experience in finance. She is involved in Deerfield's Break into the Boardroom and Women in Science programs, and currently serves on the Board of NewYorkBIO and the Cornell Institute for Healthy Futures. Heidelberg graduated from the Cornell University, School of Hotel Administration and earned her M.B.A. from Harvard Business School.



William Slattery (Deerfield)

Bill Slattery is a Partner on the Private Transactions team at Deerfield, which he joined in 2000. He began his professional career studying immune system complications associated with end stage renal disease. Prior to joining Deerfield, Slattery was a senior healthcare analyst between 1990 and 2000 at Amerindo Investment Advisors overseeing biotechnology investments. He has held various positions in research including those at National Medical Enterprises, Johnson & Johnson, and HMSS. He has a degree in Biology from State University of New York at Albany and completed coursework in Immunology at

the Graduate School-New Brunswick, Rutgers University.

Judges



Michael E. Meyers (T.R. Winston & Company)

Michael Meyers serves as Head of Investment Banking with T.R. Winston & Company, a merchant banking firm, where he is responsible for managing T.R. Winston's strategic advisory and venture capital businesses. Meyers serves as Interim CEO of Cell BT, Inc., an immuno-oncology company that was founded in partnership with researchers from the Norris Comprehensive Cancer Center and Keck School of Medicine at USC. Prior to joining T.R. Winston, Meyers was CEO of Arcoda Capital Management, a dedicated healthcare fund management company, and he served as a Partner

and Portfolio Manager with GoldenTree Asset Management. Between 2002 and 2006, Meyers was a Partner and Portfolio Manager with Trivium Capital Management. He also served as a Managing Director and Partner of Global Biomedical Partners, a life sciences venture capital firm located in New York and Zurich. Prior, Meyers served as Director of Biotechnology and Pharmaceutical Investment Banking with Merrill Lynch & Co. Meyers began his career as a Biotechnology and Medical Device Research Associate at Hambrecht & Quist. Meyers serves on the Board of Trustees of the Ronald Reagan UCLA Medical Center, and USC's Board of Councilors of the School of Dramatic Arts and Stevens Center for Innovation. Meyers received an M.P.H. in Health Policy & Management from Columbia University and an A.B. in Biology from Brandeis University.



James Proscia (Brooks Kushman)

James Proscia is Co-Chair of Brooks Kushman's chemistry practice group as well as the Chair of its life science group. He has over 15 years of patent prosecution experience and degrees in Chemical Physics (Ph.D., Harvard), Chemistry (BA, NYU), Biotechnology (MS, Johns Hopkins), Electrical Engineering (MS, Ohio University) and Physics (MA, Harvard). He has extensive experience in a broad range of industries that span across many products and technologies. For example, Dr. Proscia has experience in organic chemistry and has counseled clients in the chemical and pharmaceutical industries

in areas such as organometallic compounds; polymer science; thin-film chemistry; small molecule therapeutics; drug formulation and drug delivery technologies; and chemical process technologies. Technical areas of Dr. Proscia's patent prosecution work also include various sub-fields of physics and electrical engineering, including solid-state physics, optics, electricity and magnetism, mechanics, atomic and molecular physics. Previously, he was a research scientist at Ford Motor Company and an in-house patent attorney at Pfizer Inc. He also worked as an adjunct professor at Wayne State University where he supervised graduate students in chemical vapor deposition research.



Caleb Smith (Salem Partners)

Caleb Smith joined Salem Partners in 2007 and is focused on sourcing, evaluating and structuring transactions in the healthcare and life sciences sectors. While at Salem, he has been directly involved with companies such as Exemplar Pharma (sold to Allergan), Femasys (private), Neos Therapeutics (Nasdaq: NEOS), OncoNano Medicine (private), Sebacia (private) and ZS Pharma (sold to AstraZeneca). Before joining Salem, Smith was a director at Harvey & Company, a leading merchant banking firm based in Newport Beach.

Judges

Prior to Harvey & Company, he was a consultant with Public Health Foundation Enterprises and performed clinical research at Los Angeles County + USC Medical Center. Smith graduated with a Bachelor of Science from the University of Southern California.



John Wetherell (Pillsbury)

John Wetherell, Ph.D., is head of Pillsbury's San Diego Intellectual Property group and firm co-chair of the National Life Sciences Group. Dr. Wetherell has 25+ years' experience closing IP deals and securing U.S. and international patents for life science companies. He handles IP acquisitions, licensing and transactional due diligence; prosecutes patents; performs patent infringement and validity analyses; freedom-to-operate opinions; and provides strategic IP counseling.

Dr. Wetherell applies his background in microbiology/immunology research to help clients obtain patents in medical diagnostics, nanotechnology, molecular biology, pharmacology, and related fields. He also heads the firm's Stem Cell Outlook and Planning Effort, a multidisciplinary team that advises clients in this promising technology sector and is the author of the chapter on "Patent Protection of Stem Cell Innovations" in the latest edition of "Perinatal Stem Cells," published by Elsevier Press.

His experience at Pillsbury includes leading the team representing the Cystic Fibrosis Foundation in a record-setting \$3.3 billion sale of drug rights to Royalty Pharma following an intensive IP due diligence effort. He was also involved in achieving a favorable arbitration panel ruling for University of Kansas involving inventorship on National Institute of Health filed patents covering cancer drug formulations. He has completed over 70 pharma license monetization and financing deals with Morgan Stanley, a major client.

Dr. Wetherell has written and lectured extensively on patent law, strategy, and related transactional issues for many organizations and institutions around the world.



Michael Arciero (USC Stevens Center for Innovation)

Michael Arciero, J.D., is the Director of Technology Licensing and New Ventures at the USC Stevens Center for Innovation with over 15 years of experience in academic, foundation, and industry technology transfer. Arciero was previously Interim Director of the University of California, Riverside (UCR) Office of Technology Commercialization where he worked closely with faculty, staff, and students to help identify and commercialize their research. Prior to UCR, Arciero was counsel for the E.O. Wilson Biodiversity Foundation, and served as a licensing attorney

at Diversa Corporation (now BASF), where he focused on licensing the company's industrial enzymes portfolio and supported the business development groups in monetizing access to their proprietary environmental sequence libraries.

Arciero started his career in biotechnology as a researcher at LXN Corporation (now Johnson & Johnson) where he worked on the development of the first portable diagnostic device for diabetes management that allowed patients to measure both blood glucose and glycated protein (fructosamine). Arciero earned a Bachelor of Science in Biology from the University of California, San Diego and a J.D. from the University of San Diego School of Law.

Student Team Training

To prepare for the USC Stevens Student Innovator Showcase, student teams received pitch and presentation coaching in a workshop at USC taught by **Patrick Henry, Assistant Professor of Clinical Entrepreneurship, USC Marshall School of Business** and **Luke Brown, Visiting Scholar, USC Marshall School of Business**. The USC Stevens Center for Innovation is grateful for their support of our Showcase.



Patrick Henry

**Assistant Professor of Clinical Entrepreneurship
Lloyd Greif Center for Entrepreneurial Studies
USC Marshall School of Business**

Patrick Henry's expertise is in applying theories of social networking into career and business development efforts for professionals. He received Marshall's Golden Apple Award in 2006 and 2012. He also received the Ivan C. Thompson Award for Mentoring of Students. Professor Henry has headed Maverick Angels, a group of angel investors that has invested in several Trojan Ventures. He also heads

the Annual University Venturing & Angel Summit in which the top 20 ventures from nine local universities pitch for human and capital resources. In addition, he is a board member, investor, and advisor to The Network for Teaching Entrepreneurship, Trojan Storage, Puroast Coffee, and College Zoom.



Luke Brown

**Visiting Scholar at Lloyd Greif Center for
Entrepreneurial Studies
USC Marshall School of Business**

Luke Brown is the founder and CEO of Eruppd, a SaaS platform for online arbitrage. This is his fourth entrepreneurial venture, with his previous companies in the banking, telecommunication, and distribution industries. He also serves as an advisory board member for more than a dozen companies.

Prior to founding Eruppd, Brown spent seven years as a management consultant with an investment bank, focusing on raising capital and strategic growth initiatives for companies with \$3 million to \$50 million in yearly revenue, primarily in the technology, healthcare, and e-commerce sectors. Before that, he was the Director of Client Services for Tony Robbins and Chet Holmes at Business Breakthroughs International.

Since 2014 he has been a Visiting Scholar at the Lloyd Greif Center for Entrepreneurial Studies in the Marshall School of Business at the University of Southern California. He teaches business planning using the Business Model Canvas and Lean Startup methods. He has worked with students in the USC Stevens Student Innovator Showcase, USC Entrepreneur Club, USC Summer Accelerator, New Venture Seed Competition, and Blackstone Launchpad. In addition, he was a mentor at South by Southwest Vegas to Venture.

Brown earned a Bachelor of Science degree in Management with a minor in Psychology from Pepperdine University, a certificate with distinction in Venture Capital from the Foundry Group, and a certificate in Internet Marketing from HubSpot's Inbound Marketing University.

Student Teams



Atomus

1. Atomus

Creating the itunes of 3D printing.

Team leader: Joel Joseph, USC Viterbi School of Engineering



2. Beamlink

Beamlink makes small, portable cell towers that can be quickly and cheaply deployed after natural disasters or in rural areas.

Team leader: Arpad Kovcsdy, USC Viterbi School of Engineering



3. Black Sand Research and Development

The M890 FIRE is a general-purpose firefighting artillery munition. It is used for direct air support of wildfire fighting operations.

Team leader: Trey Hunt Cranney, USC Viterbi School of Engineering



4. Bookstack

A platform that allows users to create interactive, multimedia flashcards and learning materials.

Team leader: Andrew Hariri, USC Viterbi School of Engineering



5. dorkaholics.com

dorkaholics is a media company providing news coverage and videos to address the lack of representation for minorities.

Team leader: Neil K. Bui, USC Marshall School of Business



6. Duet

Duet is a micro philanthropic platform that leverages tech to match refugees with donors to rekindle humanity in both giving and receiving.

Team leader: Rhys Richmond, USC Viterbi School of Engineering

Student Teams



7. eLOQ

eLOQ allows workers to keep dangerous sources of energy locked to prevent accidental injury, even at a distance.

Team leader: Nelson Abreu, USC Iovine and Young Academy



8. FootVision

FootVision empowers diabetics with an inexpensive system to image the soles of their feet and transmit those images to a healthcare team.

Team leader: Mark Swerdlow, Keck School of Medicine of USC



9. iMidas Touch

iMidasTouch is an app that lets people exchange all social media, professional backgrounds, and contact information in one touch.

Team leader: Michael Gurayah, USC Marshall School of Business



10. Infinity Box

A fleet of reusable, collapsible, tech enhanced boxes for knowledge pooling of luxury, fragile, and signature-required items.

Team leader: Donielle Sullivan, USC Iovine and Young Academy



11. Influence Hunter

We believe that influencer marketing is for everyone. We connect our clients to micro-influencers who post in exchange for a free product.

Team leader: Aaron Kozinets, USC Annenberg School for Communication and Journalism



12. Lumeum

Pediatric centered assessment tool to prepare fearful children about to undergo an MRI and train them to stay still.

Team leader: Max Orozco, USC Iovine and Young Academy

Student Teams



13. Microscope

Microscope is an image portal that revolutionizes and accelerates the way biomedical researchers visualize, share, and discover images.

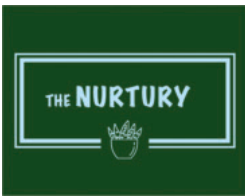
Team leader: John Francis, USC Viterbi School of Engineering



14. Momento

Momento is an experiential platform for VR storytelling that enables users to embed their memories into immersive multi-media experiences.

Team leader: Awu Chen, USC School of Cinematic Arts



15. The Nurtury

The Nurtury is about connecting people to plants they will love and providing the tools to make growing together easy.

Team leader: Ana Chimayan, USC Marshall School of Business



16. Oculaxy

Oculaxy is a platform where everyone can realize and share their fantasy by launching their own AR games attached with economic values.

Team leader: Farzad Salimi Jazi, USC Viterbi School of Engineering



17. Overlooked

Our mission is to build the social news network that ends fake news.

Team leader: Daniel Huynh, USC Annenberg School for Communication and Journalism



18. Project Sunrise

Project Sunrise introduces a novel esports title by merging First-person Shooter and Real-time Strategy into one holistic experience.

Team leader: Ryota (Ike) Dan, USC Viterbi School of Engineering

Student Teams



19. Prospoly Small Business Consulting

Prospoly links underserved small businesses with affordable business consulting services in a variety of disciplines with recent graduates.

Team leader: Maria Sim, USC Marshall School of Business



20. SwimGuard

SwimGuard: safeguarding what matters most. We use off-the-shelf cameras to monitor swimming pools to quickly identify drowning.

Team leader: Ryan Walton, USC Iovine and Young Academy



21. Tele Assist

The system will provide blind individuals with a way of actually perceiving the environment around them through a pair of "smart eyes."

Team leader: Devansh Agarwal, USC Viterbi School of Engineering



22. Thali

Thali is a program that aims to reduce social isolation in older adults by providing a viable community space to enjoy cooking with others.

Team leader: Rahil Khasgiwale, USC Leonard Davis School of Gerontology



23. Trill Project

Trill is a social network that connects users to a safe and supportive community where they can freely express themselves.

Team leader: Ariana Isabel Sokolov, USC Iovine and Young Academy



24. ZIM

ZiM is a social marketplace for personal care that curates product and reviews by hair and skin type.

Team leader: Kristina Williams, USC Iovine and Young Academy

 /USCStevens

 @USCStevens

 @USCStevens

USC Stevens

Center for Innovation

<http://stevens.usc.edu>