

LA BIOSCIENCE **ECOSYSTEM** TWENTY22TM UCLA

THURSDAY MAY 26, 2022

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WELCOME

From all of us at UCLA Technology Development Group, we want to welcome you to LABEST 2022. We are excited that, after two challenging years, you are able to join us in person.

LABEST 2022 brings together hundreds of bioscience leaders and executives from across the US. We encourage you to attend the dozens of panels, presentations and pitches from the best and the brightest researchers and scientists in the LA region. Don't miss our UCLA research theme showcase with David Geffen School of Medicine professors and the opportunity to have informal Q&A sessions with our speakers.

Also, take time to visit our many exhibitors and engage with speakers directly at the Main Track Post Panel Q&A and the UCLA TDG New Ventures Networking Room.

Make sure you stop by the UCLA TDG Lounge to relax, recharge, and meet the staff.

There are so many ways to engage and connect today. I look forward to seeing you around Luskin.



Amir Naiberg

Associate Vice Chancellor, CEO & President **UCLA Technology Development Group**

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LUSKIN **CONFERENCE CENTER**

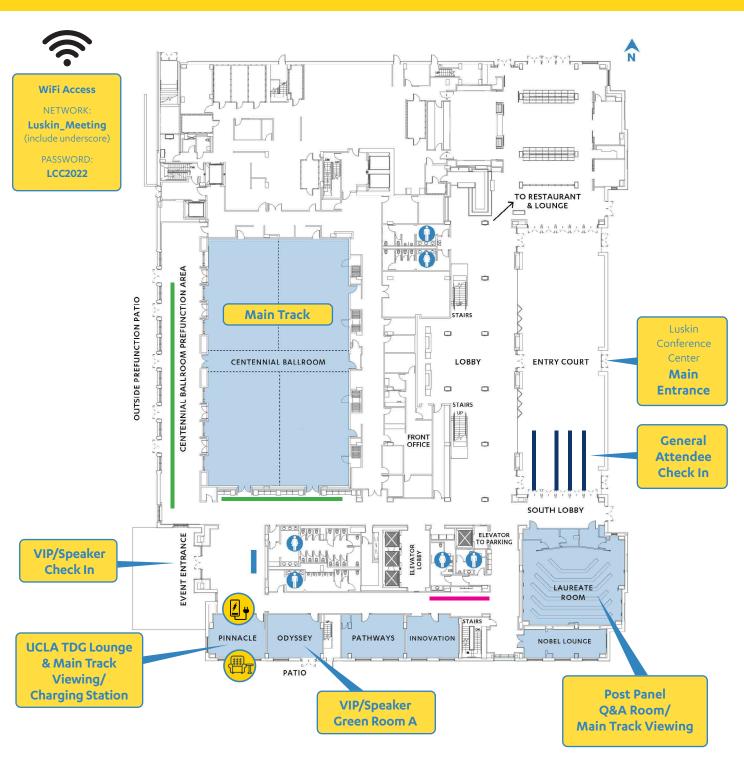


BIOSCIENCE ECOSYSTEM TWENTY22

LUSKIN **CONFERENCE CENTER**



MEETING SPACE: LEVEL 1





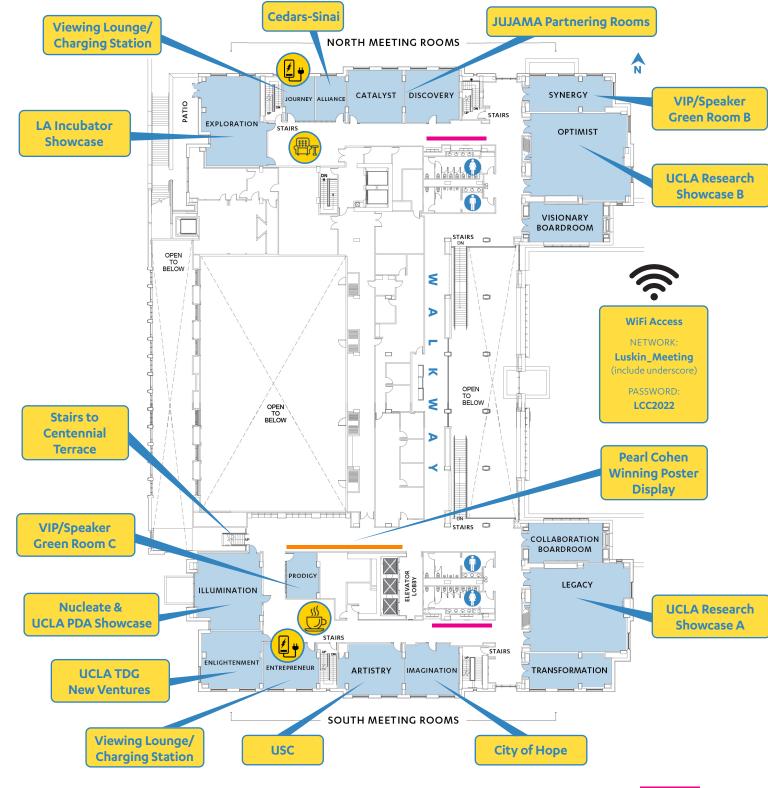




Refreshment Stations Complimentary drinks and snacks

Exhibitors

MEETING SPACE: LEVEL 2



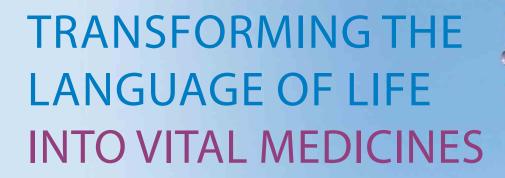






Refreshment Stations Complimentary drinks and snacks





At Amgen, we believe that the answers to medicine's most pressing questions are written in the language of our DNA. As pioneers in biotechnology, we use our deep understanding of that language to create vital medicines that address the unmet needs of patients fighting serious illness—to dramatically improve their lives.

For more information about Amgen, our pioneering science and our vital medicines, please visit www.amgen.com

Amgen is a proud sponsor of LABEST.



UCLA

WELCOME

Thursday, May 26, 2022 UCLA Meyer and Renee Luskin Conference Center

DINING AL FRESCO AT LABEST 2022

GOOD MORNING!

The Breakfast Buffet can be enjoyed on the CentennialOutdoor Patio, 1st Floor adjacent to the Main Ballroomfrom 8:00am – 9:00am

LUNCH ON THE TERRACE

There are 3 seating times for Lunch on the Centennial Terrace, 3rd Floor. Please check your wristband color and the guide/key for your seating time. Thank you for being considerate of your hungry fellow attendees.

CLOSING RECEPTION HOSTED BY SMBC

All solid color wristbands are welcome

WRISTBAND KEY



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Password LCC2022

SPECIAL SERVICES



TDG New Ventures/LARTA
Institute espresso bar and lounge
on the 2nd floor



Charging Stations

one on the 1st floor and two on the 2nd floor



Three Viewing Lounges to view the main ballroom

one on the 1st floor and two on the 2nd floor



HOW TO CONFERENCE AT LABEST 2022





HOW TO CONFERENCE AT LABEST 2022





BE SAFE AND PRACTICAL

KNOW the LABEST 2022 Health and Safety Protocols (see below)

REVIEW the MAP so you can find your way around the venue (see QR Code below)

STAY SAFE – If you see something, say something to any of our Event Staff or Luskin Staff



MAKE A PLAN

VIEW the Agendas Online or via the LABEST JUJAMA APP (see QR Code below)

READ details on ALL of our speakers and presenters in the Full Program Online (see QR Code below)

CREATE your custom schedule via the LABEST JUJAMA APP (see QR Code below)



HAVE FUN

RAFFLE GIVEAWAYS – We're raffling off cool prizes in the MAIN TRACK Sessions. Must be present to win. SCAVENGER HUNT – Join the scavenger hunt via the LABEST JUJAMA APP – Scan QR Code at each Exhibitor Table and be eligible for the Prize Drawing!



NETWORK AND CONNECT

DOWNLOAD the LABEST JUJAMA APP and set up on-site meetings (see QR Code below)

GO to the LABEST JUJAMA Partnering Room for your planned meetings (♥ Catalyst and Discovery, 2nd Floor)

MEET UCLA Researchers at the UCLA TDG New Ventures Networking Room (♥ Enlightenment, 2nd Floor)



ENGAGE IN PERSON

GO to the Post Panel Q&A's after the AI, CIRM and MEET THE LEADERS panels (♥ Laureate Room, 1st Floor) VISIT USC, City of Hope, Cedars-Sinai, and UCLA TDG Lounge SAY HI to our 26 Exhibitors and don't forget to scan each of the Scavenger Hunt QR Codes (♥ Outside Ballroom, 1st Floor)



RELAX AND RECHARGE

NEED A BREAK? There are many places at the conference to have some quiet time

UCLA TDG LOUNGE – Stop in and say hi, Relax, Hang Out, Charge Up (♥ Pinnacle Room, 1st Floor)

CHARGING STATION – Plug in and Chill (♥ TDG Lounge/Pinnacle Room, 1st Floor, Journey and Entrepreneur, 2nd Floor)

LUSKIN PATIOS – Step Outside for some fresh air (South Courtyard and Centennial Patio, 1st Floor)



FUEL AND HYDRATE

BREAKFAST on the Centennial Patio

LUNCH – Check your wristband color and have lunch at the allotted time (♥ Centennial Terrace, 3rd Floor) **REFRESHMENT STATIONS** – Grab a drink and a snack in between meals. Open and stocked from 9:00am – Noon and 2:00pm – 4:00pm (♥ 1st and 2nd Floors)

ESPRESSO BAR – Brought to you by UCLA TDG New Ventures and Larta Institute (outside Entrepreneur, 2nd Floor)



CELEBRATE

CLOSING RECEPTION – Now it's time to enjoy the reception! Open to ALL Solid Color Wristband Attendees! (♥ Centennial Terrace, 3rd Floor)



LABEST 2022 HEALTH AND SAFETY PROTOCOLS

LABEST is committed to creating a safe event for all attendees at the conference.



COVID-19 POLICY

To mitigate the risk of COVID-19 to University's staff, guests, and attendees, LABEST and Luskin Conference Center requires proof of full vaccination. Attendees must present a photo ID along with proof of CDC definition of being fully vaccinated against COVID-19. In addition, we are requiring all attendees to wear masks while indoors except when actively eating or drinking from the refreshment stations in the venue. Please note that University protocols, and those of local health authorities, may be updated periodically.



Jujuma app

Venue map



MAINTRACK UCLA TECHNOLOGY DEVELOPMENT GROUP







AGENDA

Main Ballroom, 1st Floor

AGENDA CONTINUED

REGISTRATION OPENS

REGISTRATION OPENS

BADGE PICKUP/BREAKFAST/NETWORKING

MAIN TRACK SCHEDULE

9:00am WELCOME

Emcee Judy Fortin, Interim Chief of Communications, UCLA Health and DGSOM at UCLA

UCLA Chancellor Gene D. Block

Mark Wisniewski, Sr Director, Bio Pharmaceuticals, **UCLA Technology Development Group**

AMGEN

Rachna Khosla, Sr VP Business Development

KITE, A GILEAD COMPANY

Christopher McDonald, Sr VP Manufacturing

UCLA TECHNOLOGY DEVELOPMENT GROUP

Amir Naiberg, Associate Vice Chancellor, CEO & President

9:44am KEYNOTE SPEAKER, ANDREI IANCU FROM THE UNIVERSITY TO THE MARKET:

WHY IP SAVES PATIENTS' LIVES

Former Under Secretary of Commerce for Intellectual Property and Director of the USPTO & Partner, Irell & Manella LLP; Chairman Elect, UCLA Technology Development Corporation

10:08am UCLA PROFESSOR SPOTLIGHTS

Intro: David Halstead, Partner, Foley Hoad

Jorge Torres, Professor in the Department of Chemistry and Biochemistry

Weizhe Hong, Associate Professor in the Department of Biological Chemistry and the Department of Neurobiology, **DGSOM**

Samantha Butler, Associate Professor in the Department of Neurobiology

Caius Radu, Professor in the Departments of Molecular and Medical Pharmacology and Surgery

10:24am ARTIFICIAL INTELLIGENCE (AI) FROM TARGET **VALIDATION TO PERSONALIZED HEALTH**

Moderator: Scott Skellenger, VP of Research and Development IS, Amgen

Ranju Das, CEO, Optum Labs

Steve Dubinett, Interim Dean, UCLA DGSOM

Joycelynne M. Palmer, Research Professor and Director of Biostatistics, Beckman Research Institute and City of Hope National Medical Center

Matt Thomson, Assistant Professor of Computational Biology, Heritage Medical Research Institute, Caltech

10:56am PEARL COHEN POSTER AWARDS ANNOUNCEMENT

Mark Cohen. Senior Partner & Chair of Life Science Practice Group. Pearl Cohen Zedek Latzer Baratz, LLP

11:03am UCLA PROFESSOR SPOTLIGHTS

Intro: Gina Shishima, US Chief Strategy and Operations Partner, Norton Rose Fulbright

Roger Lo, Professor of Medicine/Dermatology, Associate Chief of Dermatology and Director of the Dermatology STAR Program,

Bennett Novitch, Professor of Neurobiology and the Ethel Scheibel Chair in Neuroscience

11:20am HOSPITAL LEADERS INNOVATING FOR FUTURE SUCCESS

Moderator: Judy Fortin, Interim Chief of Communications,

UCLA Health and DGSOM at UCLA

Johnese Spisso, CEO, UCLA Hospital System Elaine Batchlor, CEO, MLK Community Healthcare

Chad Lefteris. CEO. UCI Health

Anish Mahajan, CEO and CMO, Harbor-UCLA Medical Center Richard Riggs, SVP of Medical Affairs and CMO, Cedars-Sinai

12:30pm DIVERSITY, EQUITY AND INCLUSION STRATEGIES FOR RECRUITMENT AND RETENTION IN LIFE SCIENCE

Moderator: Angela Talton, SVP and Chief Diversity, Equity and Inclusion Officer, City of Hope

John Balchunas, Workforce Director, NIIMBL

Helena Hansen, Professor and Co-Chair, Health Equity in

Translational Social Science (HETSS), UCLA

Tracy Johnson, Dean, Life Sciences Division, UCLA

Britt Kopping, Head of Recruiting Strategy for R&D Americas, Genentech

Perika Sampson, Global Head of Inclusion & Diversity, Gilead Sciences

CIRM STRATEGIC PRIORITIES AND OPPORTUNITIES IN NEUROPSYCH DISORDERS: CHALLENGES & OPPORTUNITIES

Moderator: Nelson Freimer, Director of the Center for Neurobehavioral Genetics, UCLA

Aparna Bhaduri, Assistant Professor, Biological Chemistry, UCLA Adam Leventhal, Director, USC Institute for Addiction Science and USC Health, Emotion, & Addiction Laboratory

Kelly Shepard, Associate Director, Scientific Programs, CIRM Marvin Southard, Founding Partner, Capstone Solutions Consulting Group

USC AND CEDARS-SINAI PROFESSOR SPOTLIGHTS

Intro: Vasiliki Anest, Sr Director, Business Development and Industry Relations, USC MESH Academy

Yali Dou, Professor of Medicine, Marion and Harry Keiper Chair in Cancer Research, USC

Megan McCain, Associate Professor of Biomedical Engineering, USC Evanthia Roussos Torres, Assistant Professor of Medicine-Oncology, USC

Cristina Zavaleta, Assistant Professor of Biomedical Engineering, USC Joshua Breunig, Associate Professor, Cedars-Sinai

MEET THE LEADERS IN THE BUSINESS OF LIFE SCIENCES

Moderator: Arie Belldegrun, Chairman, Bellco Capital David Chang, President, CEO and Co-Founder, Allogene

Therapeutics

SCIENCE

Bassil Dahiyat, President and CEO, Xencor

Cokey Nguyen, SVP, Chief Scientific Officer, Atara

Biotherapeutics

Ginna Laport, VP, Global Head of Lymphoma Development,

Genentech/Roche

Christi Shaw, CEO, Kite, a Gilead Company

3:36pm CITY OF HOPE PROFESSOR SPOTLIGHTS

Intro and Presenter: Steven Rosen. Provost and

Chief Scientific Officer

Saul Priceman, Associate Director of Translational Sciences & Technologies, T- Cell Therapeutics Research

Laboratories

John Williams. Professor. Molecular Medicine Andrea Bild, Professor, Molecular Pharmacology, Medical Oncology & Therapeutics Research

Edwin Manuel, Assistant Professor, Immuno-Oncology

4:00pm BREAK/NETWORKING

4:10pm **UCLA PROFESSOR SPOTLIGHTS**

Maie St. John, Professor and the Chair of Department of Head and Neck Surgery and Professor of Bioengineering

USC AND CALTECH PROFESSOR SPOTLIGHTS

Intro: Camilo Ansarah-Sobrinho, Associate Director, Business Development and Industry Relations, **USC MESH Academy**

Crystal Marconett, Assistant Professor of Surgery, USC

Julio Camarero, John A. Biles Professor,

Pharmaceutical Sciences, USC

Hussein Yassine, Kenneth and Bette Volk Endowed Chair of Neurology, USC

Vsevolod "Seva" Katritch, Associate Professor,

Quantitative and Computational Biology, USC

Matt Thomson, Assistant Professor, Computational Biology, David Van Valen, Assistant Professor, Biology and Biological

Engineering, Caltech

All times are Pacific Time. All times and speakers subject to change.

JJ Kang, CEO, Appia Bio **Brent Pfeiffenberger**, COO, Neogene Therapeutics

4:30pm EMERGING LA BIOPHARMA COMPANIES

Scott Foraker, CEO, A2 Bio

Sumant Ramachandra, CEO, ImmPACT Bio

Moderator: Hallie Kuhn. VP. Alexandria Venture Investments

5:00pm CLOSING REMARKS

All times are Pacific Time. All times and speakers subject to change

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MAIN TRACK VICLA



SPEAKERS AND PANELISTS



NIMBL

JOHN BALCHUNAS

Workforce Director, National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)

John Balchunas is the Workforce Director for the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) where he is responsible for guiding strategy around workforce and talent development for a federally-funded public-private partnership focused on transforming biopharmaceutical manufacturing. John has spent most of his career in the biopharma workforce and professional development. He was previously responsible for business development and industry partnership for the professional development program at North Carolina State University's Biomanufacturing Training and Education Center (BTEC).

Prior to joining NCSU, John served as the Director of Workforce Development for the North Carolina Biotechnology Center (NCBiotech). As part of NCBiotech's Education and Training Program for nearly 10 years, John forged an array of partnerships with industry to understand and communicate biopharmaceutical manufacturing workforce needs. John started his career as a technical writer in the biomanufacturing and medical diagnostic industries. John holds a Master of Science in Technical Communication and a Bachelor of Science in Microbiology from North Carolina State University and was selected as a Marano Fellow in the Aspen Institute's 2012-2013 Sector Skills Academy.





ELAINE BATCHLOR, MD, MPH

Chief Executive Officer, MLK Community Healthcare

Elaine Batchlor, MD, MPH, is the Chief Executive Officer of MLK Community Healthcare, a health system that includes a state-of-the-art private safety net hospital, the MLK Community Medical Group, community and population health programs, and a fundraising foundation. Dr. Batchlor's innovative work to increase access to quality healthcare for underserved populations has been recognized nationally, earning her membership in the prestigious National Academy of Medicine, an academy committed to advancing science and health equity. In 2019, she was recognized as an Irvine Foundation

Before assuming leadership of MLK Community Healthcare, Dr. Batchlor served as Chief Medical Officer of L.A. Care Health Plan, the nation's largest public health plan providing care for a safety net population. She has also served as Vice President at the California Health Care Foundation, where she developed and oversaw research, policy analysis, and programs aimed at improving health care financing and delivery in California. Early in her career, Dr. Batchlor served as Medical Director for the Los Angeles County Office of Managed Care and as a Chief Medical Officer for Prudential Health Care.

Dr. Batchlor holds a Bachelor of Arts degree from Harvard University, a Masters of Public Health from the University of California, Los Angeles, and a Doctorate of Medicine from Case Western Reserve University. She is board-certified in both internal medicine and rheumatology.

Dr. Batchlor is the proud mother of twin sons who are sophomores in college, and she is married to a criminal defense attorney who works for the Los Angeles County Public Defender. In her spare time, Dr. Batchlor is an avid reader of fiction and nonfiction and enjoys cooking for her family, walking, and playing bridge.

MAIN TRACK SPEAKERS AND PANELISTS #LABEST2022 | tdg.ucla.edu



BELLCO CAPITAL

ARIE BELLDEGRUN Chairman, Bellco Capital

Arie Belldegrun, M.D., is Research Professor, holds the Roy and Carol Doumani Chair in Urologic Oncology, and is Founder and Director of the UCLA Institute of Urologic Oncology at the David Geffen School of Medicine at UCLA.

Arie is also Executive Chairman and Co-Founder of Allogene, a clinical stage biotechnology company focused on pioneering the development of allogeneic chimeric antigen receptor T cell (AlloCAR T™) therapies for cancer. Arie founded and was Chairman, President & CEO of Kite Pharma, acquired in 2017 by Gilead just prior to approval of Yescarta® as the first CAR T therapy for non-Hodgkin lymphoma. Prior to Kite, Arie was closely involved with the founding and advancement of several biopharmaceutical companies including Cougar Biotechnology and Agensys. He currently serves as Chair of Two River Group, UroGen Pharma, Kronos Bio, and Bellco Capital, and as co-Chair of Breakthrough Properties LLC. He serves as director of IconOVir Bio, Inc., ByHeart and Gingko Bioworks and is also co-Founder and Senior Managing Director of Vida Ventures, a life science venture group.

Prior to joining UCLA, Arie was at the NCI/NIH as a research fellow in surgical oncology and immunotherapy under Dr. Steven A. Rosenberg. He completed his M.D. at the Hebrew University Hadassah Medical School in Jerusalem, his post-graduate studies in Immunology at the Weizmann Institute of Science, and his residency in urologic surgery at Harvard Medical School.



UCLA

APARNA BHADURI

Assistant Professor, Department of Biological Chemistry, UCLA

Dr. Aparna Bhaduri earned a B.S in Biochemistry and Cell Biology and a B.A in Political Science from Rice University in 2010. She completed her doctoral studies at Stanford University in Cancer Biology in 2016, where she focused on epithelial tissue differentiation and neoplasms She was a postdoctoral scholar at the University of California San Francisco in the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research, in the lab of Dr. Arnold Kriegstein. As a postdoctoral scholar, she has used single-cell RNA sequencing to characterize cell types in the developing cortex across cortical areas, in human and non-human primates, and in glioblastoma. Because experimental manipulations of the developing human cortex will require in vitro models, she has been using similar approaches to compare cells types in organoid models and primary tissues. Her long term interests to be pursued in her own independent laboratory at UCLA are in understanding how stem cells during cortical development give rise to the human brain, and how aspects of these developmental programs can be hijacked in cancers such as glioblastoma. One aspect of normal development and cancer that particularly interests her is the role of metabolism in regulating cell fate and tissue homeostasis. In order to explore these questions, Aparna uses single-cell genomics, informatic analysis, and organoid models.



UCLA

UCLA CHANCELLOR GENE D. BLOCK

A champion of high-quality, accessible public higher education, Gene Block has served as chancellor of UCLA — overseeing the university's three-part mission of education, research and service — since 2007.

Under Chancellor Block's leadership, UCLA has greatly enhanced its position as a national leader in enrolling undergraduates who come from low-income backgrounds, have been traditionally underrepresented in higher education or are among the first in their families to go to college. During his tenure, UCLA has also become the most applied-to university in the nation, has advanced in rankings in nearly every discipline, has significantly deepened its international partnerships and engagement with alumni, and now receives more than \$1.6 billion annually in research grants.

An expert in neuroscience, Chancellor Block holds faculty appointments in psychiatry and biobehavioral sciences in the David Geffen School of Medicine at UCLA and the UCLA College. His research focuses on the neurobiology of circadian rhythms.

Before becoming UCLA chancellor, Block spent 29 years at the University of Virginia, where he was most recently vice president and provost. He has served on the executive boards of several leading organizations, including the Association of American Universities and National Collegiate Athletic Association. He is currently chair of the Association of Pacific Rim Universities and is a member of the American Academy of Arts and Sciences and a fellow of the American Association for the Advancement of Science.



• Allogene

DAVID CHANG
President, CEO and Co-Founder, Allogene Therapeutics

David Chang, M.D., Ph.D., is the President, CEO and Co-Founder of Allogene. He previously served as Executive Vice President, Research & Development, and Chief Medical Officer of Kite, a Gilead Company. He has an industry-leading track record of innovation in the field of oncology drug development, including the development of Yescarta™ (axicabtagene ciloleucel), the first CAR T therapy approved for non-Hodgkin lymphoma. From 2002 to 2014, he held senior leadership roles at Amgen, including Vice President of Global Development and Head of Hematology-Oncology. During this time, David spearheaded personalized therapy strategies underlying the success of Vectibix® (panitumumab). He also provided therapeutic area leadership to pivotal projects for Blincyto® (blinatumomab), a bispecific T cell engager antibody in acute lymphocytic leukemia and for IMLYGIC™ (talimogene laherparepvec), a first-of-its-kind oncolytic immunotherapy in melanoma. Prior to joining Amgen, David held dual appointments as Associate Professor of Medicine and of Microbiology, Immunology and Molecular Genetics at the David Geffen School of Medicine at the University of California, Los Angeles. He obtained a B.S. in biology from the Massachusetts Institute of Technology and M.D. and Ph.D. degrees from Stanford University. David completed an internship and residency in internal medicine at Brigham and Women's Hospital and a fellowship in medical oncology at Dana-Farber Cancer Institute at Harvard Medical School, where he was a Howard Hughes Medical Institute postdoctoral fellow.



PEARL COHEN

MARK S. COHEN Senior Partner & Chair of Life Science Practice Group, Pearl Cohen Zedek Latzer Baratz, LLP

Mark S. Cohen is Senior Partner & Chair of Life Science Practice Group, Pearl Cohen Zedek Latzer Baratz, LLP and a member of the firm's executive committee. He is admitted to the New York bar, and he is a registered patent attorney before the United States Patent and Trademark Office. Mark's practice focuses on intellectual property management, strategic advice, patent prosecution, licensing, commercial transactions, opinion and due diligence matters in the bio/pharmaceutical, chemical and medical device areas. Mark was a board member of Masthercell Global Inc., a subsidiary of Orgenesis Inc. (Nasdaq: ORGS), a manufacturer, service provider and developer of advanced cell therapies which was acquired by Catalent Inc. Mark was vice chairman of Akari Therapeutics, Plc. (NASDAQ: AKTX), a biopharmaceutical company that is developing anti-complement and anti-inflammatory molecules. His clients that he represents range from start-up companies to Fortune 500 companies. Mark was named to IAM Strategy 300: The World's Leading IP Strategists 2021 and 2020, and New York Metro Super Lawyers for 2021, 2020, and 2019 as a top-rated IP lawyer in New York.



BASSIL DAHIYATPresident and CEO, Xencor

Bassil Dahiyat, Ph.D., has been Xencor's president and chief executive officer since its incorporation in August 1997, and is the co-founder of Xencor and co-inventor of Xencor's breakthrough XmAb® technology. He has led the Company in raising over \$700 million in public and private financing, creating a diverse portfolio of clinical-stage antibody programs for the treatment of life-threatening and debilitating diseases, and establishing alliances with leading biopharmaceutical companies that have resulted in three marketed antibody therapeutics. He has co-authored numerous scientific papers in the fields of protein design and drug delivery, is an inventor of over 30 U.S. and numerous foreign patents and has received scientific awards from the American Chemical Society, the Controlled Release Society, the Protein Society and Caltech. Dr. Dahiyat received a Ph.D. in chemistry from Caltech and B.S. and M.S.E. degrees in biomedical engineering from Johns Hopkins University.

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RANJU DAS CEO. Optum Labs

Ranju Das joined Optum Labs in 2021 as chief executive officer. He oversees technology, operations, research, and human capital, bringing a laser focus to the use of data and technology to create products that shape the UnitedHealth Group mission - To help people live healthier lives and to help make the health system work better for everyone.

Das came to Optum Labs from Amazon Web Services, where he was part of the technical leadership team. Pulling from over a decade of expertise in distributed systems, architecture, web-scale analytics, big data, machine learning, and high-performance computing, his team helped customers bring their ideas to life through technology.

He joined Amazon in early 2013, introducing significant new features and products to retail customers, such as Amazon Drive and Amazon Prime Photos. Das led the development of the Amazon Recognition and Amazon Textract Service from its inception.

Spending 12 years with Barnes & Noble, he focused on Nook Cloud engineering and played a key role in the delivery of Nook Tablet. Das led big-data and database development spearheading the first generation of algorithm-driven analytics and implemented the first comprehensive business intelligence system for marketing and research.

Das was founder of several startups including Scubes Technology in Princeton, NJ and Stealth in Seattle, WA. He received his bachelor's degree in civil and structural engineering from Annamalai University in Tamil Nadu, India.



UCLA David Geffen School of Medicine

STEVE DUBINETT

Interim Dean, David Geffen School of Medicine at UCLA

Steve Dubinett was named Interim Dean of the David Geffen School of Medicine at UCLA on September 1, 2021. He earned his medical degree from Rutgers New Jersey Medical School, followed by his residency in internal medicine at UCLA and a joint fellowship in pulmonary medicine at Massachusetts General Hospital and tumor immunology at Harvard Medical School. While in the Department of Pathology at MGH, he helped lead the first clinical trial using tumor-infiltrating lymphocytes to treat patients with cancer. After joining the UCLA faculty in 1988, he began his research program focusing on understanding why lung cancer patients were not responding to immunotherapy. He has received uninterrupted peer-reviewed federal funding for translational lung cancer research for more than 30 years. Building on original discoveries relevant to immunity and inflammation in the pathogenesis of lung cancer, he has developed a translational research program, which now utilizes these laboratory-based discoveries in the translational research and clinical environment. At the UCLA CTSI, he has been leading the development of research infrastructure supporting the translation of UCLA biomedical discoveries into medical products and health interventions. He also has helped develop programs to mentor junior scientists and increase grant funding, with results: 2,100 researchers who received CTSI support have produced nearly 4,000 publications and received extramural awards totaling \$1.3 billion since 2011. He was instrumental in developing UC Biomedical Research Acceleration, Integration, and Development (UC BRAID), which promotes collaborations across the UC academic biomedical campuses.



SCOTT FORAKER

CEO, A2 Biotherapeutics

Scott Foraker brings more than 25 years of leadership experience in the biotechnology industry to his role of president and chief executive officer.

Prior to joining A2 Bio, Scott served as a senior executive at Amgen for over two decades. At Amgen, he held leadership roles that included founder and general manager of a start-up biosimilar business with an estimated value of \$10-20 billion, as well as various R&D, commercial, business development, law and international management positions. Before that, Scott was an attorney at Latham & Watkins, specializing in mergers and acquisitions, securities law and finance.



Scott received his bachelor's degree in economics from the University of California, Berkeley, and a J.D. from the University of Southern California.



UCLA Health

JUDY FORTIN Interim Chief of Communications, UCLA Health and the David Geffen School of Medicine at UCLA

A veteran former broadcast journalist, Judy Fortin is Interim Chief of Communications for UCLA Health and the David Geffen School of Medicine in Los Angeles, California. She leads a team that is responsible for all media relations, reputation management, internal communications, content creation, and government relations at one of the top health systems in the United States.

Prior to joining UCLA in 2019, Judy served as Senior Director of Communications at Winship Cancer Institute of Emory University. Previously, she was National Director of Media Relations for the American Cancer Society. She spent 19 years as an anchor and correspondent at CNN and CNN Headline News in Atlanta. She won multiple national awards for her work as a CNN Medical Correspondent. Previously, she was a reporter for WCVB-TV in Boston and WMUR-TV in Manchester, New Hampshire.



UCLA

NELSON FREIMER

Director of the Center for Neurobehavioral Genetics and Professor of Psychiatry, Center for Neurobehavioral Genetics UCLA

Dr. Nelson Freimer is Director of the Center for Neurobehavioral Genetics and Professor of Psychiatry at UCLA and Associate Director for Research Programs of the Semel Institute for Neuroscience and Human Behavior. He also directs UCLA core facilities in genomics and neuroscience (The Informatics Center for Neurogenetics and Neurogenomics, The UCLA Neuroscience Genomics Core, and The Biological Samples Processing Core). He is Director of the NINDS-funded Postdoctoral Training Program in Neurobehavioral Genetics, and Co-Director of UCLA Neuroscience. Dr. Freimer received an M.D. degree from the Ohio State University, and completed residency training in psychiatry (at UC San Francisco) and a postdoctoral fellowship in human genetics (at Columbia University). He joined the UCLA faculty in 2000 after 10 years on the faculty at UC San Francisco.

The research in Dr. Freimer's laboratory aims to use large scale genomics methods to identify the genetic basis of complex traits, particularly neurobehavioral disorders including bipolar disorder, schizophrenia, depression, and Tourette Syndrome. He has also conducted large-scale genomics studies of metabolic phenotypes and cardiovascular disorders. His research group has pioneered in whole genome sequencing studies of such disorders as well as the application of large-scale genomics to our understanding of non-human primates.



UCLA

HELENA HANSEN Professor and Co-Chair of HETSS

Helena Hansen, an M.D., Ph.D. psychiatrist-anthropologist, is Professor and Chair of Research Theme in Translational Social Science and Health Equity, as well as Associate Director of the Center for Social Medicine at UCLA's David Geffen School of Medicine. She has published widely in clinical and social science journals ranging from JAMA and NEJM to Social Science and Medicine and Medical Anthropology, on faith healing of addiction in Puerto Rico, psychiatric disability under welfare reform, opioids and race, ethnic marketing of pharmaceuticals, and structural competency.

She is the recipient of the Robert Wood Johnson Health Policy Investigator Award, Kaiser Permanente Burche Minority Leadership Award, an NIH K01 Award, a Mellon Sawyer Seminar grant, the NYU Golden Dozen Teaching Award, the American Association of Directors of Psychiatry Residency Training Model Curriculum Award, and an honorary doctorate from Mount Sinai School of Medicine in New York.



IRELL & MANELLA

ANDREI IANCU

Partner, Irell & Manella LLP and Chairman Elect, UCLA Technology Development Corporation Former Undersecretary of Commerce for Intellectual Property and Director of USPTO

Andrei lancu is a partner at Irell & Manella LLP, where his practice focuses on intellectual property litigation and counseling. Prior to rejoining the firm in 2021, he served as the Undersecretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office. As head of the USPTO, lancu oversaw one of the world's largest IP offices with approximately 13,000 employees and a \$3.5 billion annual budget. Prior to his government service, he spent two decades at Irell and served as the firm's managing partner from 2012 to 2018, the maximum allowable tenure.

Throughout his career, Iancu has been widely recognized for his work, earning accolades from the Los Angeles Times, AIPLA, IEEE-USA, Intellectual Property Owners Education Foundation, Chambers USA, Intellectual Asset Management, Managing IP, Daily Journal, California Lawyer, Los Angeles Business Journal, Legal 500, and many others. In 2021, he was inducted into the IAM Hall of Fame.

In 2021, lancu co-founded the Renewing American Innovation Project at the bipartisan Center for Strategic and International Studies

lancu earned his J.D. from UCLA School of Law and an M.S. and B.S. from UCLA. Before his legal career, he was an engineer at Hughes Aircraft Company.



TRACY JOHNSON

Professor of Molecular, Cell and Developmental Biology; Cecilia and Keith Terasaki Presidential Endowed Chair; Howard Hughes Medical Institute Professor; Dean, Division of Life Sciences, UCLA

Dr. Tracy Johnson earned her bachelors degree from UCSD in Biochemistry and Cell Biology and her Ph.D. in Molecular and Cell Biology from UC Berkeley. She was a Jane Coffin Childs postdoctoral research fellow at the California Institute of Technology (Caltech). Dr. Johnson began her first faculty position at UCSD in and moved to UCLA to join the faculty in 2013. Her laboratory focuses on understanding mechanisms of gene regulation, particularly RNA splicing, chromatin modification and the intersection between these reactions.



Dr. Johnson has served on a variety of scientific boards including the Cold Spring Harbor Laboratories Board of Trustees, RNA Society Board of Directors, the HHMI Professors Executive board (Chair), the National Cancer Institute Board of Scientific Advisors, and served as the chair of the Molecular Genetics NIH study section. She is the Vice President of the Genetics Society of American and will assume the presidency in 2023. Dr. Johnson is the recipient of numerous awards including the NSF CAREER Award, the Presidential Early Career Award for Scientists and Engineers (PECASE), and in 2013 she was named of the Top 20 Women Professors in California. In 2022 she was awarded the Ruth Kirschstein Diversity in Science Award.

Dr. Johnson has been actively involved in a number of education initiatives to support the development of students, particularly those from underrepresented groups, including the HHMI Pathways to Success program, which fosters academic success for students, in part by early exposure to research. She is serves on the Steering Committee for the Annual Biomedical Research Conference for Minority Students (ABRCMS), one the largest professional conferences for underrepresented students. In 2017, Dr. Johnson received the 2017 Academic Senate Award for Career Commitment to Diversity, Equity, and Inclusion and in 2018 she received the Life Sciences Award for Excellence in Promoting Diversity, Equity, Inclusion.

Dr. Johnson became the Dean of Life Sciences at UCLA in September 2020.



MIKE JUNG

UC Presidential Chair in Medicinal Chemistry and Distinguished Professor of Chemistry, UCLA

Michael Jung received his BA in 1969 from Rice University and his PhD in 1973 from Columbia University, where he worked with Gilbert Stork as an NSF Fellow. After a one-year NATO postdoctoral fellowship with Albert Eschenmoser at the ETH in Zurich, he joined the faculty at UCLA in 1974, where he is now a Distinguished Professor of Chemistry. He currently consults for 20 industrial laboratories in both biotech and big pharma settings. He is an authority on synthetic organic and medicinal chemistry and has more than 80 patents and/or applications arising from both his consulting activities and his own research. Recently he has expanded his role in medicinal chemistry at UCLA and has more than 15 ongoing collaborations. Two compounds from his lab has been approved and are on the market: 1) Xtandi, approved 8/31/12 for the treatment of castration-resistant prostate cancer (CRPC), and 2) Erleada, approved 2/14/18 for the treatment of non-metastatic CRPC. He has supervised 92 PhD and 9 Masters theses and has taught 128 postdoctoral scholars. He has published more than 350 articles and given over 625 lectures on his research.



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JJ KANG CEO, Appia Bio

JeenJoo "JJ" Kang, Ph.D., is co-founder and chief executive officer of Appia Bio, an allogeneic cell therapy company launched in 2020 in Los Angeles. Dr. Kang is a Venture Partner at The Column Group since 2020, and serves on the board of directors of Tenaya Therapeutics and Escient Pharmaceuticals. She held various positions at The Column Group since joining in 2015 and last served as a Partner prior to joining Appia Bio. Previously, she worked at FibroGen in project management and corporate strategy. Dr. Kang earned a B.A. in chemistry from Harvard University and a Ph.D. in chemical biology at the California Institute of Technology.





AMGEN

RACHNA KHOSLA

Senior Vice President, Business Development, Amgen

Rachna Khosla serves as a Senior Vice President in Business Development at Amgen. Rachna is responsible for all business development activities across Amgen, including mergers and acquisitions, licensing/collaborations, search and evaluation, alliance management and Amgen Ventures. Rachna joined Amgen in 2013.

Rachna brings over 27 years of experience with a strategic mind-set for biotech and pharma deal-making. Previously, Rachna was a healthcare M&A banker at Lazard Freres & Co., Credit Suisse, JPMorgan and Salomon Brothers. Rachna also spent 2.5 years at Aventis Capital, Aventis' corporate venture capital arm, where she was a member of the investment committee and managed a portfolio of assets worth over a \$1B. She has been involved with announced deals over \$165B in total value

Rachna received her MBA from Columbia Business School and her BA from Barnard College, Columbia University. She also attended the London School of Economics for one year while at Barnard.

Rachna serves as a member on the Advisory Council for the Alliance for SoCal Innovation. Rachna also serves as a member of the Healthcare Sector Advisory Board for the Partnership Fund for New York City.



Genentech

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BRITT KOPPING

Head of Recruiting Strategy, Research and Development across the Americas, Roche/Genentech

Britt Kopping is the Head of Recruiting Strategyforthe Research and Developmentfunctions acrossthe Americas where she leads the region's talent attraction and hiring strategies. In this role, Britt empowers leaders to attractand hire diverse, top talents for theorganization.

With skills in Brand and Reimbursement, Learning and Talent Management, and Instructional Design, Britt is passionate about partnering for growth and impact. Sheis known for her strategic skillsas well asherability todevelop others and build for the future.

Britt holds a MA in Education and Instructional Design, and has 15 years of industry experience. She has received several innovator, developer and collaborator awards and sponsors several internal initiatives for both talent attraction as well as diversity, equity and inclusion. Britt represents Genentech on the Board of i4cp, an organization that helpsleaders anticipateand adapt to ourever-changing business environment. She is also on the Board and chairs the Programs Committee for Leadership California, an organization intent on increasing therepresentation and influence of diverse women leaders across California and the world.

Prior to Genentech, Britt has held positions as a Middle School Spanish teacher and was the Director of Marketing and Programs at the World Trade Center in North Carolina. Britt lives in Pacifica, CA with her husband, Neil, and their two children Jude, 13, and Cash, 11.



ALEXANDRIA.
Building the Future of Life-Changing Innovation

HALLIE KUHN

Vice President of Science & Technology, Alexandria Real Estate Equities, Inc.

Hallie Kuhn, PhD, is Vice President – Science & Technology at Alexandria Real Estate Equities, Inc., an S&P 500® urban office REIT (Alexandria), and Alexandria Venture Investments, the company's strategic venture capital platform. In her role, Dr. Kuhn oversees venture investments, tenant underwriting, and business development in Alexandria's San Diego and Greater Los Angeles clusters. Through Alexandria Venture Investments, Dr. Kuhn has led and manages more than 25 early- and growth-stage Southern California life science investments spanning therapeutics, research tools, and molecular diagnostics. Alexandria Venture Investments has been recognized by Silicon Valley Bank as the most active biopharma corporate investor by new deal volume for the last four consecutive years.

Formerly, Dr. Kuhn was a Principal at LS Polaris Innovation Fund, a Boston-based VC fund specializing in early-stage life science investments. She concurrently served as Chief of Staff for Polaris Partner Amy Schulman, supporting business development and operations for multiple companies, including Olivo Laboratories (acquired by Shiseido) and Lyndra Therapeutics. Prior to Polaris, she was a Senior Consultant at Clearview Healthcare Partners, where she engaged biopharma companies on strategic projects covering the full cycle of drug development and commercialization. Dr. Kuhn holds a PhD 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 BS from Harvey Mudd College.



Genentech

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GINNA LAPORT

VP, Global Head of Lymphoma Development, Genentech/Roche

Ginna Laport joined Genentech/Roche in Jan 2020 as the Global Head of the NHL/CLL Development Franchise in PD Hematology based in SSF where she leads the development of gloftimamb, mosunetuzumab, Polivy, Venclexta and Gazyva. Her prior industry experience includes 3 years as VP of Clinical Development at Corvus Pharmaceuticals where she directed early stage multicenter/multinational studies with small molecules and Mabs targeting the adenosine pathway in solid tumors and 1 year as Chief Medical Officer at Tempest Therapeutics leading clinical development of small molecules targeting immunometabolism within the tumor microenvironment. Prior to 2015, Ginna was a Professor in the Stanford University School of Medicine where she was a faculty member for 15 years. She is internationally known for her clinical/translational research in Bone Marrow Transplant and hematologic malignancies. Prior to Stanford, she held faculty positions within the Hematology/Oncology Divisions at The University of Pennsylvania and The University of Chicago. Ginna has also served as a reviewer for multiple journals including Blood, Journal of Clinical Oncology and Leukemia and Lymphoma. She has authored over 70 peer-reviewed publications and invited book chapters.



UCI Health

CHAD LEFTERIS

CEO, UCI Health

Chad T. Lefteris is the Chief Executive Officer of UCI Health. He oversees Orange County's only academic medical center and all clinical and patient- serving operations, including the UCI Medical Center in Orange and ambulatory sites across the county. Lefteris joined UCI Health on December 2018 as the Chief Operating Officer. In that role, Lefteris oversaw the daily business

operations of the UCI Medical Center, which includes the hospital and several specialty units, along with other UCI-operated health care centers throughout Orange County. He was also responsible for administrative functions, including general and ancillary support services, facilities management, design and construction, information technology, and special projects.

Prior to joining UCI Health, Lefteris served as the vice president of operations of UNC REX Healthcare, a private, not-for-profit health care system that is a key component of Chapel Hill, North Carolina-based UNC Health Care. He was responsible for the oncology service line and also supervised multiple operations and support services departments, ranging from patient experience and clinical engineering to facilities and construction. Prior positions within the UNC Health Care System included vice president, support services for UNC REX Healthcare and administrative director of operations for UNC Medical Center, a 900+ bed academic medical center and the health system's flagship hospital.

Lefteris received his bachelor's degree in business administration/healthcare management from Appalachian State University and his masters of health administration from Medical University of South Carolina.

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ADAM LEVENTHAL Director, USC Institute for Addiction Science and Health, Emotion, & Addiction Laboratory

Adam Leventhal, Ph.D., is a Professor, Population and Public Health Sciences and Psychology, Keck School of Medicine USC and USC Norris Comprehensive Cancer Center. He graduated from University of California, Santa Barbara and completed clinical psychology graduate studies at University of Houston. Dr Leventhal attended Brown University Medical School for his clinical psychology internship and post-doctoral training. He is Founding Director of the USC Institute for Addiction Science (IAS) which is draws upon over 80 faculty members across 10 different schools at USC to cultivate transdisciplinary collaborative research, foster training and education, facilitate community engagement, and provide clinical services to strengthen the field of addiction science, improve lives of those touched by addiction, and combat the addiction epidemic. Concurrently, Dr. Leventhal is the director of the USC Health, Emotion & Addiction Laboratory (USC-HEAL) which is a multidisciplinary team of researchers that examine the intersection between health behavior, mental health, and addiction. Having been awarded over \$40M in grant funding from the NIH and other agencies, Dr. Leventhal's laboratory's current areas of focus are: (1) adolescent and young adult tobacco, cannabis, and opioid use; (2) addiction among populations with mental illness, from racial/ethnic minority backgrounds, with socioeconomic disadvantage, and other groups subject to health disparities; (3) the development of medications to treat nicotine addiction; (4) science to inform public policies for regulating tobacco and other addictive consumer products; and (5) cancer and cardiovascular disease prevention.



ANISH MAHAJAN CEO and Chief Medical Officer, Harbor-UCLA Medical Center

Anish Mahajan is CEO and Chief Medical Officer of Harbor-UCLA Medical Center, a Level I trauma center and academic safety-net hospital serving south Los Angeles County. The hospital is part of the LA County Department of Health Services (DHS) safety net system, the second largest municipal health system in the nation. Anish also serves as an Associate Dean of the David Geffen School of Medicine and is responsible for the graduate medical education and academic affairs of 550 resident and fellow trainees and 300 full-time faculty physicians at Harbor-UCLA. From 2012 through 2016, he was Director of System Planning, Improvement, & Data Analytics for LA County DHS. At DHS, he helped lead organizational transformation under the Affordable Care Act and oversaw multiple system-wide units and Section 1115 Medicaid Waiver performance improvement initiatives. Since 2014, Anish has served as Chair of the Board of the L.A. Network for Enhanced Services (LANES), a 501(c)(3) Health Information Exchange. In 2009, he was appointed by President Obama to serve as a White House Fellow in the Office of Management and Budget (OMB), where he was a special advisor to OMB Director Peter Orszag during the lead-up to and passage of the Affordable Care Act. At OMB, he worked on health reform, rule development for the HITECH Act, and other health policy strategy and regulation.





CHRISTOPHER MCDONALD

Senior Vice President of Manufacturing, Kite, A Gilead Company

Chris McDonald is a global business leader who brings more than 30 years of biotech and pharmaceutical operations experience across various functions within Technical Operations to his role managing Kite's global manufacturing network.

Chris joined Kite in 2018 as Site Head of Cell Therapy Operations in Frederick, MD following a tenure at AstraZeneca, where he was Vice President & Site Head of Operations for the company's monoclonal antibody site. Previously, Chris spent ten years at Novartis in positions of increased responsibility, including Vice President & Site Head of Vaccines Operations, and Vice President & Global Head of Technical Operations Strategy. In this position, Chris was responsible for product life cycle management, long range production planning and manufacturing network strategy for a network operating in eight countries. Prior to his time at Novartis, Chris held various manufacturing and engineering leadership roles at Amgen.

Chris holds a bachelor's degree in Computer Science from Eastern Michigan University and master's degree in business from the Fugua School of Business at Duke University. He is also a frequent guest lecturer at Duke and North Carolina State Universities for operational excellence in biomanufacturing and biotechnology processing.





AMIR NAIBERG Associate Vice Chancellor and CEO & President, UCLA Technology Development Group

Amir Naiberg serves as Associate Vice Chancellor, and President & CEO of UCLA Technology Development Corporation. He leads the UCLA Technology Development Group, a campus wide resource that serves as a Gateway to Innovation, Research and Entrepreneurship at UCLA. Additionally, he leads the UCLA Technology Development Corporation as Chief Executive Officer and President, a non-profit technology company wholly-owned by UCLA focused on better protecting and optimizing the discoveries and inventions developed through UCLA research. Mr. Naiberg also works in concert with several on campus incubators and accelerators to further advance innovation, entrepreneurship and research at UCLA.

Prior to joining UCLA in August 2016, Mr. Naiberg worked at Yeda Research and Development Co, Ltd., In Rehovot, Israel, the technology transfercompany of the Weizmann Institute of Science, ranked as one of the top three technology transfer organizations in the world. At Yeda, he served for ten years as CEO, following five years as General Counsel. He led the organization's growth in licensing and business partnerships, while building an entrepreneurial ecosystem with local incubators, investors, and the Israeli government. Mr. Naiberg is one of the founders of the Israel Technology Transfer Organization (ITTN), a non-profit organization that unites various technology transfer offices throughout Israel. Before joining Yeda, he worked for a private law firm specializing in intellectual property, privacy and cyberspace law.

Mr. Naiberg holds law degrees from the Hebrew University School of Law and the University of Connecticut School of Law.



SVP, Chief Scientific Officer, Atara Bio

COKEY NGUYEN

Dr. Cokey Nguyen is a leader in the fields of cell therapy and oncology with significant experience in research and

development of cell therapies as well as oncology drug discovery and development in biotech. Dr. Nguyen serves as Chief Scientific Officer at Atara, where he is focused on leading the development of next-generation allogeneic cell therapies for cancer and autoimmune diseases. With his passion for delivering transformative therapies to patients, Dr. Nguyen is eager to both advance Atara's existing programs and further expand the pipeline through pioneering science, teamwork, and a commitment to excellence.



Dr. Nguyen received his undergraduate degree in biology from Harvard College and a Ph.D. in Immunology from Washington University in St. Louis. He was a Postdoctoral Associate at the Center for Cancer Research at the Massachusetts Institute of Technology (MIT), where he focused on the identification and characterization of BRCT domains as novel phospho-binding domains in DNA damage pathways.



JOYCELYNNE M. PALMER

Research Professor, Director, Biostatistics, Beckman Research Institute, City of Hope National Medical Center

Dr. Palmer is a Professor of Biostatistics and is the Director of the Division of Biostatistics at City of Hope National Medical Center; she also serves as the Biostatistics Core Director for the Hematologic Malignancies Research Institute at City of Hope. Dr. Palmer has a background in the biological sciences, training in biostatistics and epidemiology, and a 26-year history of collaboration in biomedical research spanning basic science, translational, and clinical studies. Dr. Palmer provides administrative and scientific oversight as well as statistical support to the Biostatistics Division and all hematology related research programs. Her research interests and effort support pre-clinical and clinical studies concerning the major obstacles to disease control/cure of hematologic malignancies and successful hematopoietic stem cell transplantation. In addition, she supports the CMV and HIV/AIDS laboratories working on translational research in designing and analyzing pre-clinical studies and early phase vaccine and gene transfer clinical trials. Her work also supports the Radioimmunotherapy and Cancer Immunotherapy Research Programs, designing (reporting and monitoring) first-in-human clinical trials.



neoøgene

BRENT PFEIFFENBERGER, PHARM.D., MBA Chief Operating Officer, Neogene

Brent Pfeiffenberger, Pharm.D., MBA, is the Chief Operating Officer at Neogene Therapeutics. At Neogene, Dr. Pfeiffenberger oversees the company's global business operations. Before joining Neogene, Dr. Pfeiffenberger most recently served as senior vice president, U.S. Oncology, at Bristol Myers Squibb where he oversaw an extensive oncology portfolio. Prior to that, Dr. Pfeiffenberger held several critical business leadership roles – both within and outside the U.S. at Bristol Myers Squibb – where he built, led and evolved commercial operations. He previously served as general manager of Australia/ New Zealand and led the Worldwide Commercial Oncology Organization, where he closely partnered with the Research and Development team on the creation and delivery of global development strategies for a large-scale oncology program. Dr. Pfeiffenberger received his Pharm.D. from Duquesne University and his MBA from the Wharton School of Business at University of Pennsylvania. He is based out of Neogene's U.S. headquarters in Santa Monica, California.

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IMPACT BIO

SUMANT RAMACHANDRA, MD, PHD President and CEO, ImmPACT Bio

Dr. Ramachandra joined ImmPACT in November 2021, Dr. Ramachandra was most recently Chief Science, Technology and Medical Officer for Baxter International since June 2017. In addition to these responsibilities, he was appointed President of Baxter Pharmaceuticals in mid-2019 and was appointed as Baxter's Chair for the Global Inclusion Council focused on inclusion and diversity. Prior to Baxter, he worked with Pfizer, most recently as Senior Vice President, Head of Research & Development, Pfizer Essential Health. He served as Chief Scientific Officer at Hospira from 2008 to 2015 prior to Pfizer's acquisition of Hospira in 2015. Earlier in his career, Sumant worked with Pfizer and Merck & Co. in various senior-level oncology global product development, medical affairs, and business development & licensing roles and as a clinical pharmacologist. Before entering the industry in 2000, he was an intern and resident physician, medical services, at Massachusetts General Hospital, Harvard Medical School. He received his certification from the American Board of Internal

Dr. Ramachandra completed his undergraduate degree in biochemistry, graduate degree (Ph.D.) in experimental pathology in the study of chronic lymphocytic leukemia (CLL) and his medical degree (M.D.) from Rutgers University. In addition, he earned his M.B.A. at the Wharton School at the University of Pennsylvania.



RICHARD RIGGS

Senior Vice President of Medical Affairs and Chief Medical Officer, Cedars-Sinai Health System

Richard V. Riggs, MD, has held numerous leadership positions at Cedars-Sinai, developing a reputation for spearheading initiatives that have significantly improved patient care. In his 25-year career at Cedars-Sinai, Riggs has built an impressive track record leading multidisciplinary teams and contributing to the success and growth of the organization.

As senior vice president of Medical Affairs and chief medical officer, Riggs oversees the clinical quality, medical standards, efficiency, and effective use of clinical resources for high-quality patient care at Cedars-Sinai Medical Center and Cedars-Sinai Marina del Rey Hospital. Riggs also collaborates with the medical leadership across the broader Cedars-Sinai health system.

Riggs previously served as vice president, chief medical information officer, and chair of Physical Medicine and Rehabilitation at Cedars-Sinai. His executive leadership skills were instrumental in the development and operation of the California Rehabilitation Institute. From 2015 to 2019, Riggs served as chief medical strategy officer and chief of staff at the California Rehabilitation Institute. Riggs is a clinical professor of Physical Medicine and Rehabilitation at Cedars-Sinai and a clinical professor of medicine at the David Geffen School of Medicine at UCLA.

Riggs earned his medical degree at the Medical College of Georgia in Augusta, Georgia, and completed his internship in internal medicine at the John Hopkins Health System. He completed his residency in physical medicine and rehabilitation at the University of Pennsylvania.



GILEAD

PERIKA SAMPSON

Global Head of Inclusion and Diversity, Gilead Sciences

Perika Sampson is the Global Head of Inclusion & Diversity at Gilead Sciences, leading a team of subject matter experts who provide advice, counsel, and leadership on inclusion and diversity strategies, programs, training, and practices. She partners with colleagues across the organization on matters related to health equity, community engagement, and talent acquisition. Perika also serves on Gilead's Corporate Responsibility/ESG Working Group.

Before accepting this position, Perika was the Senior Regional Diversity Officer for Morgan Stanley Wealth Management, where her responsibilities included driving diversity and inclusion, executing talent acquisition strategies, facilitating community engagement, and supporting business development initiatives – and national partnerships and Wealth Management's Return to Work initiative. Prior to joining Morgan Stanley, she founded and managed Dearborn Consulting Partners, a diversity and inclusion firm. Prior to her consulting career, she served as Vice President of Marketing and Strategy in the Private Client Services division of Bank One (now JP Morgan). Additional corporate roles included senior marketing manager at Charles Schwab & Co., Inc., institutional relationship manager at Jurika & Volyes LP, and RCM Capital Management in San Francisco, CA.

Perika is an alumna of the University of California Los Angeles. She recently served on the City of Los Angeles' Private Sector Taskforce on Race and Equity. Perika is committed to serving the communities in which she lives and works. She resides in Los Angeles, California.



CHRISTI SHAW CEO, Kite, a Gilead Company

Christi Shaw serves as Chief Executive Officer of Kite, a Gilead Company. Kite is the only company with global scale dedicated exclusively to the research, commercialization and manufacturing of cell therapy to treat cancer. Christi is driven by values, integrity, and a deep connection to people living with cancer and their loved ones after losing her mother and sister to cancer. Under Christi's leadership, Kite has received four FDA approvals for its CAR T-cell therapies in just four years for certain types of blood cancer and is working to bring CAR T to more patients. Kite recently released 5-year patient survival data, a significant milestone showing durable long-term survival and suggestive of a potential cure for these patients.

Christi currently serves on the board of directors of Avantor and the Healthcare Businesswomen's Association (HBA) and is on the executive committee and the board of directors of the Biotechnology Innovation Organization (BIO). Before joining Kite, Christi held senior executive positions at Eli Lilly & Co. and Novartis Corp. Her leadership has spanned a broad range of therapeutic areas, including oncology.

Christi holds a bachelor's degree in business administration from Iowa State University and an MBA from the University of Wisconsin. She resides with her husband and son in Santa Monica, California.



KELLY SHEPARD

Associate Director of Scientific Programs, California Institute for Regenerative Medicine (CIRM)

Kelly Shepard serves as Associate Director of Scientific Programs at the California Institute for Regenerative Medicine (CIRM), where her responsibilities include scientifically administering a large portfolio of early and translational stage research awards, overseeing CIRM's state-wide research training programs, and curating CIRM's progress and outcomes for public dissemination.

Before joining CIRM in 2009, Kelly used a variety of multidisciplinary approaches to investigate biological mechanisms underlying cell behavior and function, ranging from the regulation of mitochondrial inheritance and morphology to the study of RNA localization as means of gene regulation. After leaving academia, Kelly led an effort at Parallel Synthesis Technologies, Inc. to adapt a new optical encoding platform for use by biologists in high throughput screening applications. She has also acted as an independent contractor and biotechnology consultant. Kelly received her Ph.D. from UCSD and conducted postdoctoral studies at UCSF as a fellow of the Jane Coffin Childs Memorial Fund for Medical Research.



SCOTT SKELLENGER

Vice President, Research and Development Informatics, Amgen

Scott Skellenger leads Digital, Technology, and Innovation (DTI) for Amgen's Research and Development function and serves on the DTI and R&D leadership teams. In his role, Scott ensures the reliability and resiliency of Amgen's scientific technology and data assets across R&D and Business Development. Scott started his career at Amgen in the late 1990's, leaving in 2008 to lead and scale the information systems function at Illumina as Next Generation Sequencing (NGS) was gaining traction. After 5 years at Illumina, Scott spent the next several years company building as the senior technology executive developing health and life sciences commercial products in startup companies at the intersection of genomics and oncology. He is applying his product development experiences and industry knowledge in artificial intelligence, deep learning, real world data, phenotype/omics data integration and analysis, and precision oncology laboratory operations to accelerate the innovation and delivery of differentiated digital capabilities at Amgen.

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Gapstone Solutions
Transformational Consulting

MARVIN SOUTHARD, DSW, CSWM

Founding Partner, Patient Advocate, Capstone Solutions Consulting Group

Dr. Marvin Southard is the former Director of the largest county-run mental health services organization in the United States, the Los Angeles County Department of Mental Health (LACDMH), with a budget approaching \$3 billion, serving more than a quarter of a million persons annually. DMH supports innovative co-located services within schools, courts, other County departments, and community organizations.

In this role at LACDMH, Marv assembled a ground-breaking team that accomplished creative and inclusive work with communities including regional mental health urgent care centers, crisis response teams, children and older adult systems of care, Health Neighborhoods, and partnerships with faith communities to further social justice.

Marv has focused his career on empowering urban and rural communities to strengthen recovery from mental health and substance use challenges. He served for a decade as a leader of community behavioral health services in East Los Angeles. He has been a leader of numerous organizations and acted in another county government leadership role as Kern County Director of Mental Health.

On leaving government service, Marv served as a Professor of Practice at the University of Southern California (USC), where he developed the Professional DSW degree program, mentoring the next generation of community service leaders. After leaving USC he and several colleagues formed Capstone Solutions Consulting Group. He is also on the Board of five California and two national non-profit organizations.



UCLA Health

JOHNESE SPISSO

President, UCLA Health, CEO, UCLA Hospital System, Associate Vice Chancellor, UCLA Health Sciences

Johnese Spisso assumed the position of President of UCLA Health, CEO of UCLA Hospital System and Associate Vice Chancellor of UCLA Health Sciences in 2016. She is a nationally recognized academic healthcare leader with more than 35 years of experience, and oversees all operations of UCLA's hospitals and clinics as well as the health system's regional outreach strategy.

Before coming to UCLA, Spisso spent 22 years at UW Medicine in Seattle, Washington, where she was promoted from Chief Nursing Officer to Chief Operating Officer to Chief Health System Officer and Vice President of Medical Affairs for the University of Washington.

Spisso is active in community leadership and has served as the Los Angeles Community Chair for the Leukemia and Lymphoma Society Light the Night Walk as well as the Los Angeles Community Chair for the American Heart Association's Go Red for Women Luncheon. She has received numerous awards and recognition throughout her career, recently being named to Modern Healthcare's Top 25 Most Influential Women Leaders in 2019, LA Business Journal's 500 Most Influential Leaders in Los Angeles in 2020, Modern Healthcare's Top 50 Clinical Leaders of 2020 in the U.S., and the Los Angeles Business Journal Women of Influence Award for Health Care in 2021 and 2022.





ANGELA TALTON

Senior Vice President and Chief Diversity, Equity and Inclusion Officer, City of Hope

Angela L. Talton, MBA, joined City of Hope as senior vice president and chief diversity, equity and inclusion officer in January 2021. Talton serves as a member of City of Hope's executive leadership team leading the development of a vision and strategy for advancing diversity, equity, and inclusion, ensuring measurable accountability and commitment to initiatives as she works closely with administrative, clinical, and research leaders across the organization. Her broad expertise in diversity and inclusion encompasses leadership development, recruitment, and retention of talent, communication strategy, philanthropic giving, supplier diversity, and analytics.

Talton has successfully advised national clients through her firm, ALTalton Consulting. From 2012 to 2019, Talton held diversity and inclusion leadership roles at Nielsen as Chief Diversity Officer and SVP, Global Diversity and Inclusion. At Nielsen she crafted a five-pronged strategy focused on accountability, career development, talent retention, supplier diversity, and education. Her work solidified Nielsen's reputation as a recognized leader in corporate diversity and inclusion, with six consecutive years of improved ranking on Diversity Inc's list of Top 50 companies and receiving a Human Rights Campaign's Corporate Equality Index rating of 100%. Additionally, her strategy led to Nielsen ranking as one of the top companies in D&I with Disability:IN, Diversity MBA, Working Mother & AVATAR (India), Inclusive Top 50 UK Employers, Fortune, and Forbes.

Talton received her Master of Business Administration from the Kellogg School of Management at Northwestern University and her Bachelor of Science in Business Administration from the University of North Carolina at Chapel Hill.



MATT THOMSON

Assistant Professor of Computational Biology, Heritage Medical Research Institute, Caltech

Matt Thomson is an Assistant Professor of Computational Biology at the California Institute of Technology, where his research group develops computational and mathematical methods for modeling the development and self-organization of tissues. He is applying models to engineer and rewire cellular physiology and to synthesize new types of cells that do not exist in nature.

Matt received his AB in Physics and Ph.D. in Biophysics from Harvard University. Before Caltech, Matt was an independent faculty fellow at UCSF. His work has been recognized with a Packard Fellowship (2019), an Okawa Research Award (2019), The Merrimack Prize in Systems Biology (2016), and an NIH Early Independence Award in 2011.



MARK WISNIEWSKI

Senior Director, Bio Pharmaceuticals, UCLA Technology Development Group

Mark Wisniewski is the Senior Director of Biopharmaceuticals. He is responsible for the life science and biopharma intellectual property developed at UCLA, including managing licensing and marketing staff, financial management of the portfolio, and outreach to inventors and industry. He is also responsible for the successful planning and execution of LABEST, UCLA TDG's premier event.



His career has spanned multiple roles in biotech management, entrepreneurship, and product commercialization from start-ups to Fortune 100 companies. Prior to his role at UCLA TDG, Mark was the Head of Special Projects at Prolacta Bioscience, a producer of human milk nutritional products for premature infants in the neonatal intensive care unit, leading the strategic planning and business development functions. He was also a Principal Advisor to the National Institutes of Health and National Cancer Institute's Commercialization Accelerator Programs, which provide business strategy, product commercialization, fundraising, and strategic partnership guidance to hundreds of early-stage biotech and life science companies. Mark began his career at Baxter Healthcare where he held positions in business development, strategic planning, marketing, and R&D.

Mark received his MBA from the UCLA Anderson School of Management and his Masters of Immunology and Microbiology from the UCLA School of Medicine.



OWEN WITT

Founding Director, Eli & Edythe Broad Center of Regenerative Medicine & Stem Cell Research Presidential Chair, Developmental Immunology

Professor, Department of Microbiology, Immunology and Molecular Genetics, UCLA

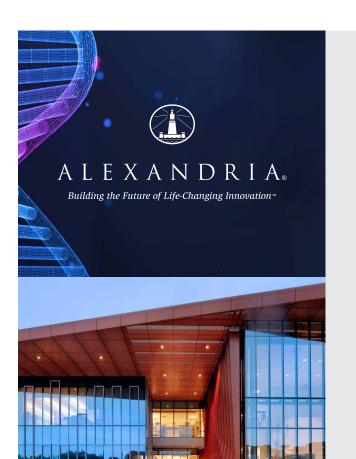
Owen Witte, M.D., has made significant scientific contributions to understanding human leukemias, immune disorders, and epithelial cancers. His research laid the groundwork for the development of the targeted leukemia therapy Gleevec and the lymphoma therapy Ibrutinib.

Dr. Witte's current research focuses on prostate cancer, taking several independent approaches to pinpoint specific biologic functions of castration-resistant prostate cancer, with the intent to improve survival and reduce side effects.



Dr. Witte is the founding director of the Eli & Edythe Broad Center of Regenerative Medicine & Stem Cell Research at UCLA, a presidential chair in Developmental Immunology, and a professor of the Department of Microbiology, Immunology, and Molecular Genetics. In 2016, he was appointed a University Professor by the University of California Board of Regents, an honor reserved for scholars of the highest international distinction. He is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, and the Institute of Medicine.

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PROFESSOR SPOTLIGHTS



PRESENTERS



Caltech

MATT THOMSON

Assistant Professor of Computational Biology, Heritage Medical Research Institute, Caltech

Matt Thomson is an Assistant Professor of Computational Biology at the California Institute of Technology, where his research group develops computational and mathematical methods for modeling the development and self-organization of tissues. He is applying models to engineer and rewire cellular physiology and to synthesize new types of cells that do not exist in nature.

Matt received his AB in Physics and Ph.D. in Biophysics from Harvard University. Before Caltech, Matt was an independent faculty fellow at UCSF. His work has been recognized with a Packard Fellowship (2019), an Okawa Research Award (2019), The Merrimack Prize in Systems Biology (2016), and an NIH Early Independence Award in 2011.



Caltech

DAVID VAN VALEN

Assistant Professor, Division of Biology and Bioengineering, Caltech

David Van Valen, Ph.D., is an Assistant Professor in the Division of Biology and Bioengineering at Caltech. His research group's long-term interest is to develop a quantitative understanding of how living systems process, store, and transfer information to unravel how this information processing is perturbed in human disease states. To that end, his group leverages and pioneers the latest advances in imaging, genomics, and machine learning to produce quantitative measurements with single-cell resolution as well as predictive models of living systems.

Before joining the faculty at Caltech, he received his B.S. in mathematics and B.S. in physics at the Massachusetts Institute of Technology, his Ph.D. in applied physics at Caltech, and a M.D. in medicine at the David Geffen School of Medicine at UCLA.



JOSHUA BREUNIG

Associate Professor, Cedars-Sinai Medical Center

Joshua Breunig, Ph.D., is an Associate Professor at Cedars-Sinai Medical Center with a joint appointment in the Department of Medicine at the David Geffen School of Medicine at UCLA.

Dr. Breunig received his Ph.D. from Yale University in the lab of Dr. Pasko Rakic, co-recipient of the inaugural Kavli Prize in Neuroscience—where he also completed postdoctoral work. The Breunig lab has recently created a new methodology for creating "personalized" tumors in immunocompetent animal models and human organoids—termed mosaic analysis with dual recombinase-mediated cassette exchange (MADR). These MADR tumor models are employed as pre-clinical platforms for the discovery, testing, and validation of novel therapeutics, including small molecules and immunotherapies. Dr. Breunig has been supported by funding from the American Cancer Society, DoD, NINDS, and NCI; and was recently designated as a "Nextgen Star" by the American Association of Cancer Research in 2020.



PROFESSOR SPOTLIGHTS PRESENTERS

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ANDREA RILL

Professor, Division of Molecular Pharmacology, Department of Medical Oncology & Therapeutics Research, City of Hope

Dr. Andrea Bild, Ph.D., is a professor in the Division of Molecular Pharmacology, Department of Medical Oncology & Therapeutics Research at City of Hope. Before coming to City of Hope, Dr. Bild was an associate professor and director of Genome Sciences at the University of Utah. Dr. Bild obtained her B.S. at the University of Florida, her Ph.D. at the University of Colorado, and completed her postdoctoral training at Duke University. Her research program focuses on cancer and uses large-scale translational genomic and pharmacological studies to interrogate and treat tumor heterogeneity and evolution to refractory states. She has led multiple collaborative groups intending to characterize and treat cancer.

As a member of the National Cancer Institute's Cancer Systems Biology Consortium and principal investigator of multi-institutional grants, her team focuses on the development and application of multi-omic tools in the clinic for cancer prevention and treatment. With clinician collaborators, Dr. Bild's team has initiated and carried out multiple clinical trials that use systems biology and genomic characterization of patient tumors to prevent cancer resistance and progression.



Cityof

EDWIN MANUEL

Assistant Professor, Department of Immuno-Oncology, City of Hope

Edwin Manuel, Ph.D., is an assistant professor for the department of immuno-oncology. He received his B.S. in Microbiology at San Diego State University and his Ph.D. in virology from Harvard University. Dr. Manuel has developed a versatile, Salmonella Typhimurium (ST)-based platform that utilizes shRNA plasmid technology to target the expression of proteins known to contribute to immune suppression. Another focus of Dr. Manuel's research includes the use of checkpoint inhibitors to improve the efficacy of cancer immunotherapies, specifically, therapeutic vaccines encoding for tumor antigens such as survivin and Wilms' tumor antigen 1 (WT1).



Cityof Hope

SAUL PRICEMAN

Associate Director of Translational Sciences & Technologies, T- Cell Therapeutics Research Laboratories, City of Hope

Dr. Saul Priceman, Ph.D., is an assistant professor and associate director of Translational Sciences & Technologies in the T Cell Therapeutics Research Laboratories at City of Hope, as well as a trained tumor immunologist with expertise in T cell biology and cancer immunotherapy. He is developing chimeric antigen receptor (CAR)-based T cell immunotherapy primarily for solid cancers, with a strong focus on metastatic disease in breast, prostate and pancreatic cancer.

Dr. Priceman received his B.S. in microbiology at University of California Santa Barbara, and his Ph.D. in molecular and medical pharmacology at University of California Los Angeles.

Dr. Priceman is a principal investigator on a Prostate Cancer Foundation Young Investigator award, a co-principal investigator on a Prostate Cancer Foundation Challenge Award, and a principal investigator on a National Comprehensive Cancer Network Young Investigator award, leading the development of HER2-specific CAR T therapy for metastatic breast cancers and working with his team optimizing new CAR T cell therapies for various other solid cancers.





STEVEN T. ROSEN

Provost and Chief Scientific Officer, City of Hope

Dr. Steven T. Rosen, M.D., is Provost and Chief Scientific Officer for City of Hope and a member of City of Hope's Executive Team. He is also Director of the Comprehensive Cancer Center and holds the Irell & Manella Cancer Center Director's Distinguished Chair and the Morgan & Helen Chu Director's Chair of the Beckman Research Institute. Following his graduation with distinction from Northwestern University Medical School's Six-Year Honors Program in Chicago, Illinois, Dr. Rosen completed his residency in internal medicine at Northwestern and a fellowship in medical oncology at the National Cancer Institute in Maryland.

Before joining City of Hope, Dr. Rosen was the Genevieve Teuton Professor of Medicine at the Feinberg School of Medicine at Northwestern University in Chicago and served for 24 years as the Director of the Robert H. Lurie Comprehensive Cancer Center at Northwestern University Feinberg School of Medicine. Dr. Rosen has also served on the external advisory boards of more than two dozen NCI-designated comprehensive cancer centers. Dr. Rosen's laboratory research focuses on experimental therapeutics and hematologic malignancies; he has published more than 400 original reports, editorials, books, and book chapters and is the current editor-in-chief of the textbook series "Cancer Treatment & Research." Dr. Rosen is the chair of the Medical Science Committee of the LLS and serves on its Board. He also serves on the Board of the American Society of Clinical Oncology's Conquer Cancer Foundation.



JOHN WILLIAMS

Professor, Department of Molecular Medicine, City of Hope

Dr. John Williams, Ph.D., is a Professor in the Department of Molecular Medicine. He received his B.S. at University of California Santa Cruz, and his Ph.D. at Columbia University.

Dr. Williams was the Co-Founder and Scientific Advisor of Xilio (Akriveia) Therapeutics, Inc. and of Meditope Biosciences, Inc. He is also the Co-Director of Drug Discovery and the Director of the X-ray Crystallography Core at COH. Dr. Williams specializes in the use of X-ray crystallography to study protein-protein and drug-protein interactions for the design of novel therapeutic agents for the treatment of cancer.



SAMANTHA BUTLER

Associate Professor, Department of Neurobiology, UCLA Broad Stem Cell Research Center Member, UCLA

Samantha Butler is an Associate Professor in the Department of Neurobiology and a member of the UCLA Broad Stem Cell Research Center since 2013. She received a Ph.D. in Molecular Biology from Princeton University in 1996. As a graduate student with Yash Hiromi at Princeton University, Dr. Butler studied the genetic mechanisms that establish neural identity in the Drosophila eye during development. Dr. Butler then trained as a postdoctoral fellow with Dr. Jane Dodd at Columbia University, where she focused on understanding the molecular identity of the factors that guide axons into their stereotyped trajectories in the developing spinal cord. Dr. Butler showed that molecules previously identified as morphogens, specifically the Bone Morphogenetic Protein (BMP) family of growth factors, can act as axon guidance signals.



In her laboratory, Dr. Butler has focused on determining how neurons translate morphogens, such as the BMPs, over time to mediate strikingly different processes in the generation of neural circuits. During the course of these studies, she identified a critical mechanism by which the rate of axon outgrowth is controlled during development. The Butler laboratory is now examining how this process can be harnessed to accelerate axon growth in a regenerative context to stimulate the repair of neural circuits. The successful implementation of this technology could result in significantly improved recovery times for patients with damaged nervous systems.

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UCLA

WEIZHE HONG Associate Professor, Department of Biological Chemistry and the Department of Neurobiology, UCLA

Dr. Weizhe Hong is an Associate Professor in the Department of Biological Chemistry and the Department of Neurobiology at UCLA David Geffen School of Medicine.

Dr. Hong received a B.S. degree in biological sciences at Tsinghua University. When he was in high school and college, he worked on mechanisms of protein folding and microbial stress response. He received his Ph.D. degree in 2012 at Stanford University, under the guidance of Liqun Luo. His Ph.D. research focused on the cellular and molecular mechanisms of wiring specificity during olfactory system development. He was a Helen Hay Whitney Postdoctoral Fellow at the California Institute of Technology, working with his advisor David Anderson on neural mechanisms underlying social and emotional behaviors. Dr. Hong received the Genetics Society of America's Larry Sandler Memorial Award for the best Ph.D. dissertation on the Drosophila research and presented the Larry Katz Memorial Lecture at the Cold Spring Harbor Conference for the best Ph.D. dissertation on neural circuit research.



UCLA

ROGER LO
Director, Melanoma Clinic in Dermatology, UCLA

The Lo Lab studies therapeutic resistance in metastatic melanoma in order to build rationales for clinical trials and to develop novel treatment combinations or treatment regimens. In their studies of cancer resistance, they focus on foundational therapies (i.e., MAPK pathway- and immune checkpoint-targeted therapies) that are highly active against advanced melanoma but whose long-term clinical or survival impacts are still limited by difference forms of resistance (innate, adaptive, acquired). Findings from their work have served as key rationales for several clinical trials, including the successful development of BRAF and MEK inhibitor combo.



UCLA

BENNET NOVITCH

 ${\bf Professor, Neurobiology; Ethel \, Scheibel \, Chair \, in \, Neuroscience, \, UCLA}$

Dr. Novitch is currently a Professor of Neurobiology and holds the Ethel Scheibel Chair in Neuroscience. Dr. Novitch joined the UCLA faculty from the University of Michigan, where he was an Assistant Professor of Cell and Developmental Biology. He earned his Master's degree in Medical Sciences in 1993 from Harvard Medical School and his Doctoral degree in Biological Chemistry and Molecular Pharmacology in 1998 from Harvard University. He also completed postdoctoral training at the Center for Neurobiology and Behavior at Columbia University. Dr. Novitch's work is funded by the National Institute of Neurological Disorders and Stroke, the National Institute of Child Health and Human Development, the California Institute of Regenerative Medicine, the March of Dimes Birth Defects Foundation, and the Muscular Dystrophy Association

The primary goal of Dr. Novitch's laboratory research is to determine the molecular pathways that direct the differentiation of neural stem and progenitor cells (NPCs) and the assembly of neural circuits, particularly those that control motor functions such as locomotion and breathing. To achieve this goal, we focus on identifying the growth factor signals, transcriptional networks, and downstream effectors that control the formation of neurons and glial cells in the spinal cord and brain. Insights into these fundamental mechanisms are essential for determining the function of NPCs in both normal development and diseased states and for developing new methods to manipulate NPCs to facilitate the repair of damaged neural tissues.





CAIUS RADU

Professor, Department of Molecular and Medical Pharmacology and Department of Surgery, UCLA

Caius Radu is a Professor in the Department of Molecular and Medical Pharmacology and the Department of Surgery at the University of California Los Angeles (UCLA). He also serves as Vice Chairman of the Department of Molecular and Medical Pharmacology and Co-Director of the Cancer Molecular Imaging, Nanotechnology, and Theranostics Research Program (CMINT) at the Jonsson Comprehensive Cancer Center. Dr. Radu received his M.D. from the University of Medicine, Craiova, Romania, and completed his postdoctoral training in immunology and cancer biology at the University of Texas Southwestern Medical Center in Dallas and at UCLA with Dr. Owen Witte.

Dr. Radu's group aims to advance the understanding of fundamental biological processes at the interface between metabolic, signal transduction, and immune networks in cancer to leverage this knowledge towards the development of new diagnostic and therapeutic approaches. Additional areas of focus include studies of novel mechanisms that regulate nucleotide metabolism in cancer, identification of targetable co-dependencies in pancreatic and prostate cancers, and the use of nucleoside imaging probes as non-invasive predictive biomarkers for treatment responses.



UCLA

MAIE ST. JOHN

Professor and Chair, Department of Head and Neck Surgery; Professor, Bioengineering, UCLA

California's highly renowned surgeon, scientist, and educator, Dr. St. John is a Professor and the Chair of the Department of Head and Neck Surgery and a Professor of Bioengineering at UCLA. She also holds the Thomas C. Calcaterra, M.D., Chair in Head and Neck Surgery and is Co-Director of the UCLA Head and Neck Cancer Program. Dr. St. John's laboratory studies the mechanisms of tumor progression and metastasis in head and neck cancer and seeks to identify and study novel genes and pathways for future targeted therapies, while actively incorporating the results of their laboratory-based research into the development of novel therapeutics.

Dr. St. John received her B.S. from Stanford University and M.D. and Ph.D. degrees from Yale University. She completed residency and postdoctoral training at UCLA and served previously as Chief of Head and Neck Surgery at Harbor-UCLA Medical Center.

Dr. St. John's clinical expertise is in intraoperative tumor margin delineation in the resection and treatment of head and neck cancers to allow for precision surgery. Her laboratory research is translational with a focus on improving therapies and outcomes for patients with head and neck cancer. Her efforts have helped in the development of strong interdepartmental research programs in Head & Neck Surgery and Bioengineering. This work has led to clinical trials and patent applications and has been consistently funded by the NIH, charitable foundations, and industry.



JORGE TORRES

Professor, Department of Chemistry and Biochemistry, UCLA

Dr. Torres received his B.S. in Molecular, Cellular, and Developmental Biology from the University of California at Santa Barbara in 1998, where he conducted research under the mentorship of Dr. Eduardo Orias. He obtained his Ph.D. in Molecular Biology from Princeton University in 2004 under the direction of Dr. Virginia A. Zakian. He conducted his postdoctoral work in the laboratory of Dr. Peter K. Jackson at the Stanford University School of Medicine and Genentech Inc. until 2009 when he joined the faculty in the Department of Chemistry and Biochemistry at UCLA.



The lab's major focus is to understand how multiple mechanisms and enzymatic activities coordinate the formation of the mitotic microtubule spindle during cell division. We are interested in identifying and characterizing novel proteins that are required for proper mitotic spindle assembly. Among these are molecular motors, phosphatases, methyltranferases, and ubiquitin ligases. We use human cell lines and in vitro systems along with a combination of approaches, including biochemistry, molecular biology, cell biology, chemical biology, and microscopy to determine the mechanism of action of these proteins.

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JULIO A. CAMARERO

John A. Biles Professor, Pharmaceutical Sciences, University of Southern California

Julio A. Camarero's current research interests are focused on the development of new bioorganic approaches using protein splicing and synthetic protein chemistry for studying biological processes involved in bacterial pathogenicity and how they can be modulated or inhibited by small molecules. The Camarero lab is developing novel protein-based therapeutics based on the cyclotide scaffold.

Dr. Camarero began his studies in chemistry at the University of Barcelona, received his master's degree in 1992, and completed his Ph.D. in Organic Chemistry there in 1996. He subsequently joined the group of Professor Tom W. Muir at the Rockefeller University as a Burroughs Wellcome Fellow. There, he contributed to the development of new chemoselective ligation techniques for the chemical engineering of proteins. In 2000, he moved to the Lawrence Livermore National Laboratory as a Distinguished Lawrence Fellow, where he became staff scientist and head of laboratory prior to joining USC in 2008 as an Associate Professor. Dr. Camarero has authored over 100 peer-reviewed publications and five invited book chapters. He is the recipient of numerous prestigious awards, including an NIH Big Idea Award for his research to develop a new generation of antibody substitutes. He is a member of the USC Norris Comprehensive Cancer Center Translational and Clinical Sciences program.

USC University of Southern California

YALI DOU

Professor of Medicine, Marion and Harry Keiper Chair in Cancer Research, University of Southern California

Yali Dou, Ph.D., leads a lab that uses multidisciplinary approaches to study the establishment and maintenance of gene regulatory networks, focusing on how chromatin modifications exert temporal and spatial gene regulation. The Dou lab is also interested in the role of chromatin modifications in the regulation of other important cellular processes, including cellular metabolism, genome stability, and 3D chromatin organization.

Dr. Dou received her Ph.D. in Molecular Biology and Genetics from the University of Rochester. She completed her postdoctoral training at the Rockefeller University, focusing on gene expression and chromatin modifications. Prior to joining USC, Dr. Dou was a Professor of Pathology and Biological Chemistry at the University of Michigan, Ann Arbor. She currently serves as Co-Leader of the Genomics and Epigenetic Regulation (GER) program at Norris Comprehensive Cancer

Dr. Dou has received a number of prestigious awards, including the Leukemia & Lymphoma Society Scholar Award (2012), Stand Up to Cancer IRG Award (2011), AACR Gertrude B. Elion Cancer Research Award (2010), and Dean's Award in Basic Science at University of Michigan (2014). She is a member of the American Association of Cancer Research and the American Chemical Society. Her group has published over 100 papers, including many in high-impact journals such as Cell, Cancer Cell, Molecular Cell, Cell Stem Cell and Nature.



USC University of Southern California

VSEVOLOD "SEVA" KATRITCH

Associate Professor, Department of Quantitative & Computational Biology; Department of Chemistry, University of Southern California

Dr. Vsevolod "Seva" Katritch is a computational biologist and computational chemist focused on deciphering the molecular function of membrane proteins, specifically the superfamily of G protein-coupled receptors (GPCRs). This knowledge is applied to the structure-based discovery of ligands and in vivo probes for GPCRs and other challenging targets, exploring giga- and tera-scale chemical space for drug discovery. His work has led to eight patents and more than 120 papers, including most recently the V-SYNTHES approach to giga-scale screening published in Nature, as well as seminal reviews on GPCR structure and function. He is named among Web of Science Highly Cited Researchers in two categories: pharmacology/ toxicology and biology/biochemistry.

Dr. Katritch received his Ph.D. from the Moscow Institute of Physics and Technology, followed by postdoctoral training at Rutgers University and The Scripps Research Institute. Before joining USC in 2015, he served as a director of computational chemistry at SIGA Technologies and held research faculty positions at the University of California, San Diego, and the Scripps Research Institute.

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USC University of Southern California

CRYSTAL MARCONETT

Assistant Professor of Surgery, University of Southern California

Crystal Marconett, Ph.D., leads a lab focused on the cellular and molecular origins of lung cancer. Specifically, Dr. Marconett's research group is studying molecular alterations that lead to lung adenocarcinoma development through understanding the roles long non-coding RNAs play in the regulation of DNA fidelity. To this end, her group has characterized a novel role for the lncRNA LINCO0261 as a mediator of the DNA damage signaling and is translating these results into therapeutic applications. In addition, her group is interested in the cellular origins of lung cancer, including which cell types and under what conditions account for the wide discrepancies seen in survival and overall patient outcomes between different patient cohorts.

Dr. Marconett received her Ph.D. in Molecular and Cell Biology with an emphasis on cell and developmental biology from the University of California, Berkeley. She completed her postdoctoral training at USC, where she focused on molecular and bioinformatics analysis of lung differentiation and disease. Dr. Marconett is currently a member of the USC Norris Comprehensive Cancer Center Genetics and Epigenomic Regulation program and sits on the Scientific Advisory Board of the Hastings Center for Pulmonary Research.



USC University of Southern California

MEGAN L. MCCAIN

Chonette Early Career Chair, Associate Professor of Biomedical Engineering, University of Southern California

Megan McCain, Ph.D., is the Chonette Early Career Chair and Associate Professor of Biomedical Engineering at the University of Southern California. She also holds a joint appointment in the Department of Stem Cell Biology and Regenerative Medicine. Dr. McCain's research group, the Laboratory for Living Systems Engineering, engineers novel "Organ on Chip" platforms by integrating microfabricated surfaces and devices with human stem cell derivatives and then implements them for human disease modeling and drug screening, with a focus on cardiac and skeletal muscle.

Dr. McCain is a recipient of an NSF CAREER Award and a Scientist Development Grant from the American Heart Association. She has also been recognized as a Top Innovator Under 35 by MIT Technology Review and a Young Innovator in Cellular and Molecular Bioengineering by the Biomedical Engineering Society. She earned her B.S. in Biomedical Engineering from Washington University in St. Louis and her Ph.D. in Engineering Sciences from Harvard University, followed by a postdoctoral position at the Wyss Institute for Biologically Inspired Engineering at Harvard University.



USC University of Southern California

EVANTHIA ROUSSOS TORRES

Assistant Professor of Medicine, Oncology, University of Southern California

Evanthia Roussos Torres, M.D., Ph.D.'s research interests are focused on understanding how immunotherapy can be maximally efficacious in breast cancer. In addition to drug efficacy, the Roussos Torres lab focuses on the discovery of mechanisms behind response and uncovering biomarkers that can be used clinically.

Dr. Roussos Torres is passionate about her research, her care of patients with cancer, and the training of fellows to become compassionate and knowledgeable physicians. She is driven to make memorable contributions to the field of cancer research given her personal experience advocating for her mother, who died from metastatic breast cancer in 2016. Dr. Roussos Torres felt passionate about having an impact on the field of breast cancer before her mother's diagnosis but learning about the devastation of metastatic disease as the family member of a patient provided a different perspective and drive for novel treatment options.

Dr. Roussos Torres received her M.D., Ph.D. from the Albert Einstein College of Medicine. She completed her internal medicine residency at the Hospital of the University of Pennsylvania and began her hematology/oncology fellowship training at the University of Pennsylvania. She subsequently transferred to complete her fellowship training at Johns Hopkins University to pursue her research interests under the mentorship of Dr. Elizabeth Jaffe. Dr. Roussos Torres is a member of the USC Norris Comprehensive Cancer Center Tumor Microenvironment program.



USC University of Southern California

HUSSEIN YASSINE

Kenneth and Bette Volk Endowed Chair of Neurology, University of Southern California

Hussein Yassine, M.D., leads an NIH funded lab that specializes in how changes in lipid metabolism and nutrition affect cognition and the risk of developing Alzheimer's disease (AD). The Yassine lab has an interest in studying how carrying the APOE4 allele, the strongest genetic risk factor for developing AD, affects lipid metabolism, and the response to the diet by combining basic science, clinical trials, and brain imaging studies.

Dr. Yassine is the Kenneth and Bette Volk Endowed Chair of Neurology at USC. He directs the Roybal AD Research program focused on understanding how obesity, diabetes, and vascular risk factors in Los Angeles's Latinx population affect cognition and AD risk using longitudinal studies with cerebrospinal fluid and brain imaging biomarkers. He is currently leading PREVENTE4, a randomized clinical trial (NCT03613844) testing whether high dose omega-3 supplementation can delay cognitive decline associated with APOE4. Dr. Yassine received his M.D. from Beirut Arab University. He completed his residency in Internal Medicine at Case Western Reserve University with post-doctoral training in the Schwartz Center of Aging. He completed his fellowship in Endocrinology at the University of Arizona College of Medicine.



USC University of Southern California

CRISTINA ZAVALETA

Assistant Professor of Biomedical Engineering, University of Southern California

Cristina Zavaleta's research interests bring together chemistry, engineering and biology to develop new nano-based molecular imaging strategies to provide clinicians with better functional imaging tools. Recently, Dr. Zavaleta has focused on the clinical translation of the unique molecular imaging strategy she developed as a postdoctoral fellow at Stanford University in Professor Sanjiv Sam Gambhir's Multimodality Molecular Imaging Laboratory—involving the development of novel Raman imaging tools in conjunction with tumor-targeting Raman nanoparticles for the ultrasensitive detection of various cancer biomarkers.

Dr. Zavaleta received her B.S. in Nuclear Medicine from the University of Incarnate Word in San Antonio, TX, spending a year doing clinical rotations in the Nuclear Medicine Department at Brooke Army Medical Center. She completed the Medical Physics graduate program at the University of Texas Health Science Center, focusing on utilizing a novel theranostic approach to administering (186Re) liposomes for the treatment of peritoneal ovarian metastases, utilizing various preclinical molecular imaging modalities (SPECT/PET/CT) to monitor their localization. Dr. Zavaleta is an associate member of the USC Norris Comprehensive Cancer Center Translational and Clinical Sciences Program.



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UCLA RESEARCH THEME SHOWCASE A



AGENDA



10:05am METABOLISM OF AGING AND CANCER AND METABOLISM

Theme Lead: Orian Shirihai, Chair and Professor, Endocrinology, Diabetes and Hypertension

Ming Guo, Professor, Neurology, Molecular and Medical Pharmacology

Anthony Covarrubias, Assistant Professor, Microbiology, Immunology and Molecular Genetics

David Shackleford, Associate Professor, Pulmonary and Critical Care Medicine

11:10am NEUROSCIENCE BREAKTHROUGHS: FROM MOLECULES **TO PATIENTS**

Theme Lead: S. Lawrence Zipursky, Professor, Biological Chemistry

Molecules: Drug Receptor Structures

Hong Zhou, Professor, Microbiology, Immunology, and Molecular Genetics

Cells: Human Organoids

Aparna Bhaduri, Assistant Professor, Biological Chemistry

Circuits: Brain Maps and Circuits Hongwei Dong, Professor, Neurobiology

Behavior: Social Interactions

Weizhe Hong, Associate Professor, Biological Chemistry and Neurobiology

Computation: Decision Making

Anne Churchland, Professor, Neurobiology

Disease: Aging and Neurodegeneration

Ming Guo, Professor, Neurology, Molecular and Medical Pharmacology

ROUNDTABLE DISCUSSION

S. Thomas Carmichael, Chair and Professor, Department of Neurology

Nelson Freimer, Professor, Department of Psychiatry and Semel Institute

Baljit Khakh, Professor of Physiology

S. Lawrence Zipursky, Professor, Biological Chemistry

12:45pm LUNCH/NETWORKING

INTRODUCTION TO HETSS - HEALTH EQUITY TRANSLATIONAL SOCIAL SCIENCE

The newest UCLA Research Theme introduces their work.

Theme Leads:

Rochelle Dicker, Vice Chair for Critical Care and the Co-Chair, HETSS

Helena Hansen, Professor and Co-Chair, HETSS

Overview of HETSS

Rochelle Dicker and Helena Hansen

PASE - Program for the Advancement of Surgical Equity as Model for Integrating Social Technologies into Clinical Care

Catherine Juillard, Associate Professor-in-Residence, Surgery

Community Participatory Research as a Social Technology Keith Norris, Professor, Medicine, UCLA Division of General Internal Medicine and Health Services Research

The Social Forces Shaping Inequities in Biomedical Technologies

Terence Keel, Associate Professor, Department of African American Studies and the UCLA Institute for Society and Genetics

BREAK/NETWORKING 2:50pm

3:00pm **PRECISION HEALTH**

Theme Leads:

Daniel Geschwind, Distinguished Professor, Neurology, Psychiatry and Human Genetics; Senior Associate Dean and Associate Vice Chancellor, Precision Health Clara Lajonchere, Deputy Director, UCLA Institute for Precision Health; Co-Director, Clinical Neurogenomics Research Center

Moderator: Clara Lajonchere

UCLA ATLAS Community Health Initiative and Successful Biopharma Collaborations

Daniel Geschwind

California Center for Rare Diseases

Stanley Nelson, Professor and Vice Chair, Human Genetics; Professor, Psychiatry

Health Record Research

Bogdan Pasaniuc, Associate Professor, Pathology and Laboratory Medicine, Human Genetics, Computational Medicine

The UCLA Center for Smart Health

Alex Bui, Co-Director, Center for SMART Health, Director of the UCLA Medical & Imaging Informatics

Drug Discovery for Neurodegeneration Using Big Data **Daniel Geschwind**



UCLA RESEARCH THEME SHOWCASE B





UCLA RESEARCH THEME SHOWCASE B



AGENDA

Optimist, 2nd Floor

AGENDA CONTINUED

10:05am THE GLOBAL REACH OF 13T RESEARCH: INNOVATION FOR CURRENT AND EMERGING INFECTIONS

Theme Lead: Gay Crooks, Director, UCLA I3T - Immunology, Inflammation, Infection and Transplantation Research

International Study of Zika Virus and COVID-19
Karin Nielsen, Professor of Pediatrics, Division of Infectious
Diseases

Collaborating for COVID-19 Research Vaithi Arumugaswami, Adjunct Associate Professor, Molecular and Medical Pharmacology

Enterovirus Novel Compound

Paul Krogstad, Professor, Department of Pediatrics and Department of Molecular and Medical Pharmacology

11:10am CARDIOVASCULAR INNOVATION

Theme Lead: Arjun Deb, Professor, Cardiology; Molecular, Cell and Developmental Biology; Director, UCLA Cardiovascular Medicine Research Theme

Tzung Hsiai, Professor of Medicine and Bioengineering; Program Director, NIH Caltech/UCLA Cardiovascular Engineering Training Program; Cady Maud Guthman Endowed Term Chair in Cardiology

Ali Nsair, Director, Heart Transplantation and Mechanical Circulatory Support Program

Jake Lusis, Professor, Medicine, Human Genetics, Microbiology, Immunology & Molecular Genetics Thomas Vallim, Associate Professor, Departments of Medicine/Cardiology and Biological Chemistry; Director, Gene Regulation, Epigenomics and Transcriptomics (GREAT) Home Area

Elizabeth Tarling, Associate Professor, Cardiology **Thomas Vondriska**, Professor of Anesthesiology, Medicine and Physiology; Vice Chair for Research and Director of Division of Molecular Medicine, Anesthesiology

René Packard, Assistant Professor, Medicine and Physiology

PANEL DISCUSSION

Arjun Deb, Tzung Hsiai, Jake Lusis, Ali Nsair, Rene Packard, Elizabeth Tarling, Thomas Vallim and Thomas Vondriska

12:45pm LUNCH/NETWORKING

1:45pm CANCER: IMMUNO-ONCOLOGY

Theme Lead: Michael Teitell, Professor, Departments of Pathology and Laboratory Medicine; Latta Endowed Chair in Pathology; Director, UCLA Jonsson Comprehensive Cancer Center; President, UCLA Jonsson Cancer Center Foundation Overview of the UCLA Jonsson Comprehensive Cancer Center, Commercial Activities and Past Successes Michael Teitell

Company Creation as Integral Part of Academic Research Antoni Ribas, Professor, Medicine, Surgery & Molecular and Medical Pharmacology; Director of the Tumor Immunology Research Program; UCLA Jonsson Comprehensive Cancer Center; Director of the Parker Institute for Cancer Immunotherapy at UCLA

Stem Cell-Engineered Off-The-Shelf iNKT Cells for Cancer Immunotherapy

Lili Yang, Associate Professor, Microbiology, Immunology & Molecular Genetics; Member, Tumor Immunology Research Program; UCLA Jonsson Comprehensive Cancer Center; Member, Eli & Edythe Broad Center for Regenerative Medicine & Stem Cell Research

Current Progress, Emerging Opportunities, and Challenges in Immuno-Oncology and Immunotherapy

Moderator:

Gay Crooks, Professor and Rebecca Smith Endowed Chair, Department of Pathology and Laboratory Medicine; Director, UCLA Jonsson Comprehensive Cancer Center and Stem Cell Biology Program Area; Co-Director, Eli & Edythe Broad Center for Regenerative Medicine & Stem Cell Research

Panelists:

Theodore Nowicki, Clinical Instructor, Pediatrics, Hematology/ Oncology; Member, Tumor Immunology Research Program, UCLA Jonsson Comprehensive Cancer Center

Cristina Puig-Saus, Assistant Professor, Medicine, Hematology/ Oncology; Member, Tumor Immunology Research Program, UCLA Jonsson Comprehensive Cancer Center

Caius Radu, Professor, Molecular & Medical Pharmacology; Co-Director, Cancer Molecular Imaging, Nanotechnology and Theranostics Research Program, UCLA Jonsson Comprehensive Cancer Center; Member, Ahmanson Translational Imaging Division

Antoni Ribas, Professor, Medicine; Surgery; Molecular and Medical Pharmacology; Director, Tumor Immunology Program, UCLA Jonsson Comprehensive Cancer Center; Chair, Melanoma Committee, SWOG

Lili Yang, Associate Professor, Microbiology, Immunology and Molecular Genetics; Member, UCLA Jonsson Comprehensive Cancer Center

Closing Remarks: Gay Crooks

3:15pm BREAK/NETWORKING

3:30pm REGENERATIVE MEDICINE

Scientists in the Regenerative Medicine Theme session will highlight successes in translating basic stem cell biology into therapeutics, either directly as cellular therapies or indirectly using stem cell-based models of disease for drug screening.

Theme Lead: Thomas Rando, Director, Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research April Pyle, Professor and Vice Chair, Department of Microbiology, Immunology and Molecular Genetics Arjun Deb, Professor, Cardiology; Molecular, Cell and Developmental Biology; Director, UCLA Cardiovascular Medicine Research Theme

Bill Lowry, Associate Director of Education and Technology Transfer, UCLA Broad Stem Cell Research Center; Professor, Molecular, Cell and Developmental Biology

Lili Yang, Associate Professor, Microbiology, Immunology & Molecular Genetics

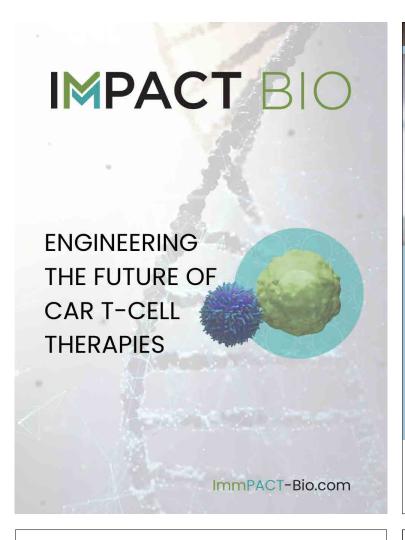
Brigitte Gomperts, Associate Director, Translational Research, UCLA Broad Stem Cell Research Center; Professor, Pediatrics; Pulmonary Medicine

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UCLA RESEARCH THEME SHOWCASE A,B



SPEAKERS AND PANELISTS (Listed in order of appearance)

SHOWCASE A: METABOLISM OF AGING AND CANCER AND METABOLISM



ORIAN SHIRIHAI

Chair and Professor, Endocrinology, Diabetes and Hypertension

Orian Shirihai received his M.D. and Ph.D. from the Technion - Israel Institute of Technology in 1997. He is currently a Professor of Medicine at the University of California, Los Angeles where he serves as Director of the UCLA Metabolism Research Theme. The Shirihai laboratory focuses on mitochondrial structure. The lab has made key contributions to mitochondrial biology including the discovery of the life cycle of the mitochondria and the relationship between mitochondrial architecture and nutrient utilization in metabolic diseases. Another focus of the Shirihai lab is the development of novel approaches for the study of mitochondrial function and dynamics in metabolic diseases.



MING GUO

Professor, Neurology, Molecular & Medical Pharmacology

Ming Guo, M.D., Ph.D. is the P. Gene and Elaine Smith Chair in Alzheimer's Disease Research, and a Professor of Neurology and Pharmacology at UCLA David Geffen School of Medicine.

A board-certified neurologist, Dr. Guo sees patients with neurological disorders, with an emphasis on neurodegenerative diseases, such as Alzheimer's (AD) and Parkinson's disease (PD). She draws referrals from California and nearby states, as well as China, Taiwan, India, Hong Kong, and Southeast Asia. She also runs a basic and translational research laboratory aiming to understand the cause of the diseases and to find cures for these currently incurable disorders. Her lab was the first worldwide to discover that two PD genes function together to control mitochondrial quality and health. Her landmark work has shown that defects in mitochondrial function are an important cause of PD. This work, along with her subsequent observations in the field have far-reaching implications for finding therapies for aging-related diseases, including PD, AD, cancer, diabetes, heart disease, and muscle frailty. She is a sought after speaker, both nationally and internationally.

Dr. Guo is actively involved in the medical and scientific communities. She served as Chair of the Board of Scientific Counselors at the National Institute of Neurological Disorders and Stroke (NINDS).



ANTHONY COVARRUBIAS

Assistant Professor, Microbiology, Immunology and Molecular Genetics

Anthony J. Covarrubia obtained his PhD from the Harvard T.H. Chan School of Public Health, where his work focused on the role of nutrient sensing pathways in the regulation of macrophage polarization. Macrophages are essential immune cells that belong to the innate immune system and are key orchestrators in the initiation and resolution stages of inflammation and can polarize to distinct subsets such as the pro-inflammatory M1 state or the anti-inflammatory M2 state. Next, during his postdoctoral fellowship in the lab of Eric Verdin (UCSF, Gladstone Institute, and the Buck Institute) his work focused on how aging-related inflammation impacts metabolite levels such as NAD and other novel mechanisms contributing to aging-related inflammation and disease.

As an independent and principal investigator at UCLA, his laboratory research explores the cross-talk between inflammation and metabolism in the setting of disease states driven by chronic inflammation.



DAVID SHACKLEFORD

Associate Adjunct Professor, Pulmonary and Critical Care Medicine

My research focuses on understanding how mutations in the AMPK and mTOR signaling pathways lead to altered metabolism and cell growth in human tumors. The AMPK-mTORC1 pathways lie at the intersection of oncogenic signaling and tumor metabolism. I am interested in understanding at a molecular level how loss of function and gain of function mutations in these signaling pathways alter growth signals and metabolic pathways to fuel tumor growth. The accelerated rate of growth in aggressive tumors creates a dependence on sustaining high metabolic rates, which also represents the tumor?s Achilles? heel. During my current work on lung and brain tumors I have focused on exploiting the tumor?s Achilles? heel, by disabling the machinery that drives tumor metabolism with drugs traditionally used to treat metabolic disease. Drugs such as biguanides are able to induce catastrophic metabolic stress and preferentially induce cell death in tumors. These studies open up the very real possibility of using therapeutics that were originally designed to treat metabolic disease as anti-cancer drugs.

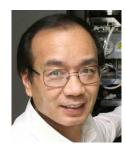
SHOWCASE A: NEUROSCIENCE BREAKTHROUGHS: FROM MOLECULES TO PATIENTS



S. LAWRENCE ZIPURSKY

Distinguished Professor, Biological Chemistry

Distinguished Professor, Biological Chemistry Investigator, Howard Hughes Medical Institute. Lawrence Zipursky is interested in how neural circuits are formed during development – specifically, how different neuronal cell types are interconnected by precise patterns of synaptic connections. Zipursky and his team work to identify the cellular recognition molecules that specify interactions between neurites, axons, and dendrites, ultimately leading to the formation of circuits connected at synapses. Working in fruit flies and mice, the team employs a variety of approaches in their studies, from genetic tools and live imaging to high-throughput RNA sequencing and CRISPR technology. Their findings could shed light on abnormal neural circuit development in some neuropsychiatric diseases.



HONG ZHOU

Professor of Microbiology, Immunology, and Molecular Genetics

Z. Hong Zhou, Ph.D. Professor Hong Zhou is a Professor in the Microbiology, Immunology, and Molecular Genetics department. His group studies the structures and functions of membrane proteins, protein-nucleic acid complexes and microbes using cryo electron microscopy (cryoEM) and cryo electron tomography (cryoET). He combines expertise in structural biology, microbiology, computational biology, and bioinformatics to address fundamental questions in biology. Recent efforts have focused on membrane protein structures and mechanisms of gene replication and transcription. Dr. Zhou was a Pew Scholar in the Biomedical Sciences, received numerous awards, including the Basil O'Connor Scholar Award, the Established Investigator Award of American Heart Association, the Burton award, and the KH Kuo Award of Distinguished Scientist.

Professor Hong Zhou's lab focuses on 3D structural studies of biological complexes using cryo-electron microscopy (cryoEM) and cryo-electron tomography (cryoET). These emerging methods are particularly suitable for structure determination of large molecular complexes, viruses, cellular machineries and bacterial cells. Recent efforts have focuses on developing and applying advanced cryoEM and cryoET techniques to visualize the dynamic processes of microbial infections and to decipher the mechanisms of fundamental biological processes. Dr. Zhou's group is at the forefront in pushing the envelope of cryoEM reconstruction to atomic resolution.



APARNA BHADURI

Assistant Professor, Department of Biological Chemistry

Dr. Aparna Bhaduri earned a B.S in Biochemistry and Cell Biology and a B.A in Political Science from Rice University in 2010. She completed her doctoral studies at Stanford University in Cancer Biology in 2016, where she focused on epithelial tissue differentiation and neoplasms She was a postdoctoral scholar at the University of California San Francisco in the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research, in the lab of Dr. Arnold Kriegstein. As a postdoctoral scholar, she has used single-cell RNA sequencing to characterize cell types in the developing cortex across cortical areas, in human and non-human primates, and in glioblastoma. Because experimental manipulations of the developing human cortex will require in vitro models, she has been using similar approaches to compare cells types in organoid models and primary tissues. Her long term interests to be pursued in her own independent laboratory at UCLA are in understanding how stem cells during cortical development give rise to the human brain, and how aspects of these developmental programs can be hijacked in cancers such as glioblastoma. One aspect of normal development and cancer that particularly interests her is the role of metabolism in regulating cell fate and tissue homeostasis. In order to explore these questions, Aparna uses single-cell genomics, informatic analysis, and organoid models.



HONGWEI DONG

Professor Neurobiology Behavior

The long-term objective of my research is to map the interconnections among all delineated regions of the C57Bl/6 mouse brain, to generate a corresponding comprehensive connectome map that represents the connections in a common neuroanatomic frame, and to understand how the different brain regions assemble into functional networks based on their connections to affect behavioral output (http://brain.neurobio.ucla.edu/). By integrating connectomics with genetics, 3D high resolution imaging, and artificial intelligence, we hope to uncover the fundamental architecture and functional organization of the central nervous system. A second major direction of my research is to classify cell types of the mouse brain and spinal cord based on their anatomic locations, neuronal connectivity, neuronal morphology, and their molecular and physiological properties. Identifying and enumerating cell types in the nervous system will allow for their selective manipulation and a better understanding of an individual cell's function in health and disease. The derived knowledge and technologies from our work can be directly applied to characterize connectivity disruptions that potentially underlie symptomatology in mouse models of neurodegenerative diseases such as Alzheimer's and Huntington's Disease. Finally, my lab also is dedicated to developing microscopy and histological technologies for mapping connections of the human brain at the axonal and cellular resolution as part of our motivation to advance toward translational research.



WEIZHE HONG

Associate Professor, Department of Biological Chemistry and the Department of Neurobiology

Dr. Weizhe Hong is an Associate Professor in the Department of Biological Chemistry and the Department of Neurobiology at UCLA David Geffen School of Medicine.

Dr. Hong received a B.S. degree in biological sciences at Tsinghua University. When he was in high school and college, he worked on mechanisms of protein folding and microbial stress response. He received his Ph.D. degree in 2012 at Stanford University, under the guidance of Liqun Luo. His Ph.D. research focused on the cellular and molecular mechanisms of wiring specificity during olfactory system development. He was a Helen Hay Whitney Postdoctoral Fellow at the California Institute of Technology, working with his advisor David Anderson on neural mechanisms underlying social and emotional behaviors. Dr. Hong received the Genetics Society of America's Larry Sandler Memorial Award for the best Ph.D. dissertation on the Drosophila research and presented the Larry Katz Memorial Lecture and the Cold Spring Harbor Conference for the best Ph.D. dissertation on neural circuit research.



MING GUO
Professor, Neurology, Molecular & Medical Pharmacology
See page 45 for full bio

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ANNE CHURCHLAND
Professor, Neurobiology Disease

Anne Churchland is a professor of neurobiology in the David Geffen School of Medicine at the University of California, Los Angeles. She received her Ph.D. in neuroscience from the University of California, San Francisco in 2003. She completed her postdoctoral training at the University of Washington from 2004 to 2010 and was a principal investigator in neuroscience at Cold Spring Harbor Laboratory from 2010 until she joined the UCLA faculty in May 2020.

Churchland's laboratory investigates the neural circuits that support decision-making. When making decisions, humans and animals can flexibly integrate multiple sources of information before committing to action. The ability to flexibly use incoming information distinguishes decisions from reflexes, offering a tractable entry point into more complex cognitive processes defined by flexibility, reasoning and problem-solving.

To understand the neural mechanisms that support decision-making, the Churchland lab measures and manipulates neurons in cortical and subcortical areas while animals make decisions about sensory signals. To connect the neural responses with behavior, her lab uses mathematical analyses aimed at understanding what information is represented at the level of neural populations, both at a given moment and over time. Understanding neural population activity will bolster the lab's long-term goal of understanding cognitive processes that integrate inputs from our multiple senses, stored memories and innate impulses.



S. THOMAS CARMICHAEL
Chair, Department of Neurology

S. Thomas Carmichael is a neurologist and neuroscientist in the Department of Neurology at the Geffen School of Medicine at UCLA. Dr. Carmichael is a Professor with active laboratory and clinical interests in stroke and neurorehabilitation, and how the brain repairs from injury. He received his M.D. and Ph.D. degrees from Washington University School of Medicine in 1993 and 1994, and completed a Neurology residency at Washington University School of Medicine. Dr. Carmichael was a Howard Hughes Medical Institute postdoctoral fellow at UCLA from 1998-2001, studying mechanisms of axonal sprouting, with a clinical emphasis on neurorehabilitation and stroke. He has been on the UCLA faculty since 2001. Dr. Carmichael's laboratory studies the molecular and cellular mechanisms of neural repair after stroke and other forms of brain injury. This research focuses on the processes of axonal sprouting and neural stem cell responses after stroke, and on neural stem cell transplantation. Dr. Carmichael is an attending physician on the Neurorehabilitation and Stroke clinical services at UCLA.



NELSON FREIMER
Director of the Center for Neurobehavioral Genetics and Professor of Psychiatry,
Center for Neurobehavioral Genetics UCLA

Dr. Nelson Freimer is Director of the Center for Neurobehavioral Genetics and Professor of Psychiatry at UCLA and Associate Director for Research Programs of the Semel Institute for Neuroscience and Human Behavior. He also directs UCLA core facilities in genomics and neuroscience (The Informatics Center for Neurogenetics and Neurogenomics, The UCLA Neuroscience Genomics Core, and The Biological Samples Processing Core). He is Director of the NINDS-funded Postdoctoral Training Program in Neurobehavioral Genetics, and Co-Director of UCLA Neuroscience. Dr. Freimer received an M.D. degree from the Ohio State University, and completed residency training in psychiatry (at UC San Francisco) and a postdoctoral fellowship in human genetics (at Columbia University). He joined the UCLA faculty in 2000 after 10 years on the faculty at UC San Francisco.

The research in Dr. Freimer's laboratory aims to use large scale genomics methods to identify the genetic basis of complex traits, particularly neurobehavioral disorders including bipolar disorder, schizophrenia, depression, and Tourette Syndrome. He has also conducted large-scale genomics studies of metabolic phenotypes and cardiovascular disorders. His research group has pioneered in whole genome sequencing studies of such disorders as well as the application of large-scale genomics to our understanding of non-human primates.



BALJIT KHAKH
Vice Chair, UCLA Neuroscience

Baljit S. Khakh received a Ph.D. degree from the University of Cambridge in 1995. During his graduate studies, he also spent some time at the Geneva Biomedical Research Institute. Dr. Khakh completed a postdoctoral fellowship in the laboratory of Dr. Graeme Henderson at the University of Bristol, followed by a fellowship at the California Institute of Technology, working in the laboratories of Drs. Henry A. Lester and Norman Davidson as a Wellcome Trust International Prize Traveling Research Fellow, and Senior Research Fellow in the Division of Biology. In 2001, Dr. Khakh returned to Cambridge in the Division of Neurobiology at the MRC Laboratory of Molecular Biology as a Group Leader. Dr. Khakh joined UCLA in April 2006, where he is now Professor of Physiology and Neurobiology. Since 2014, Dr. Khakh has been a Visiting Scientist at the Janelia Research Campus.





ROCHELLE DICKER
Vice Chair for Critical Care and Co-Director of HETSS

Dr. Rochelle Dicker is Professor of Surgery and Anesthesia and Vice Chair for Critical Care at UCLA. She is the Co-Director of the Program for the Advancement of Surgical Equity. Her surgical residency was spent at UC San Francisco and the University of Vermont. She then went on to complete her Trauma and Critical Care fellowship at UCSF. During this time, she also completed a Fellowship in Violence Prevention through the California Wellness Foundation. In 2004 she started the Wraparound Project at San Francisco General Hospital when she joined the UCSF faculty. Wraparound is one of the founding members of the Health Alliance for Violence Intervention, a network of now over 40 nationwide hospital-based violence intervention programs and she serves as the Board Chair. Dr. Dicker is the Vice Chair of the American College of Surgeons COT Injury Prevention and Control Committee and leads the efforts for a committee charged with Improving the Social Determinants to Attenuate Violence (ISAVE). In addition to the injury prevention work, Dr. Dicker is involved in global surgery and has a long-standing partnership in Soroti, Uganda to aid in research and capacity building for their regional referral hospital. She has contributed to over 90 peer-reviewed publications and several book chapters.



HELENA HANSENProfessor and Co-Chair of HETSS

Helena Hansen, an MD, Ph.D. psychiatrist-anthropologist, is Professor and Chair of Research Theme in Translational Social Science and Health Equity, as well as Associate Director of the Center for Social Medicine at UCLA's David Geffen School of Medicine. She has published widely in clinical and social science journals ranging from JAMA and NEJM to Social Science and Medicine and Medical Anthropology, on faith healing of addiction in Puerto Rico, psychiatric disability under welfare reform, opioids and race, ethnic marketing of pharmaceuticals, and structural competency.

She is the recipient of the Robert Wood Johnson Health Policy Investigator Award, Kaiser Permanente Burche Minority Leadership Award, an NIH K01 Award, a Mellon Sawyer Seminar grant, the NYU Golden Dozen Teaching Award, the American Association of Directors of Psychiatry Residency Training Model Curriculum Award, and an honorary doctorate from Mount Sinai School of Medicine in New York.



Associate Professor, Department of African American Studies and the UCLA Institute for Society & Genetics

Terence Keel is an Associate Professor at the University of California, Los Angeles where he holds a split appointment in the Department of African American Studies and the UCLA Institute for Society & Genetics. Keel is the Founding Director of the Lab for Biocritical Studies—an interdisciplinary space committed to studying how discrimination, inequality, and resilience are embodied in human and nonhuman life.

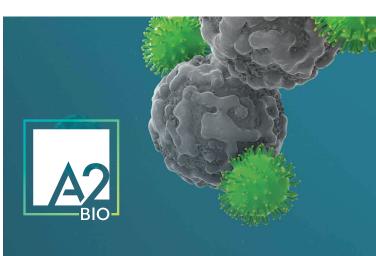
His teaching, research, and community engagement are concerned with the social, political, and ethical conditions that produce and abolish discrimination within society. Keel earned a BA in Theology from Xavier of Louisiana, a Masters of Theological Studies from Harvard Divinity School, and a PhD from Harvard University. For more information, please visit www.terencekeel.com



CATHERINE JUILLARD
Associate Professor-in-Residence, Surgery

Catherine Juillard, MD, MPH, FACS is a trauma surgeon and critical care physician at the University of California, Los Angeles. She received her undergraduate degree from Stanford University and her medical degree from UCLA, where she also completed her general surgery residency training. Dr. Juillard went to the University of California, San Francisco for her fellowship training, where she was the trauma and critical care fellow at San Francisco General Hospital. While on the faculty at UCSF, Dr. Juillard was the Director of the Center for Global Surgical Studies and the San Francisco Wraparound project before she was recruited to UCLA in 2018.

She is currently the Co-Director for the Program for the Advancement of Surgical Equity (PASE) at UCLA. Her primary research in global surgery seeks to improve access for quality surgical care in low- and middle-income countries, primarily through a long-standing partnership with the University of Buea in Cameroon.



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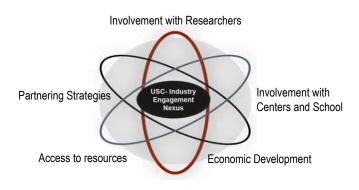




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Research and Development

We are rapidly turning breakthrough therapies into lifesaving treatments.



- We have three on-site cGMP manufacturing facilities.
- We have a powerful in-house research incubator.
- We were awarded \$184 million in research grants
- We filed 131 IND applications last year.
- We earned \$2.9 billion in royalties and licensing over
- We hold more than 450 patents for technology







KEITH NORRIS

Professor, Medicine, UCLA Division of General Internal Medicine and Health Services Research

Dr. Keith C. Norris is an internationally recognized clinician scientist and health policy leader who has been instrumental in shaping national health policy and clinical practice guidelines for chronic kidney disease (CKD). A board certified nephrologist, in 1995, he was invited to join the inaugural National Kidney Foundation Kidney Disease Outcomes Quality Initiative, and was a founding member of the subsequent Medicare End-Stage Renal Disease (ESRD) continuous Performance Measures workgroup. He presently serves as a member of the Forum of ESRD Networks, Medical Advisory Board. He also co-directs the Center for Kidney Disease Research, Education and Hope (CURE-CKD), a Providence St. Joseph Health/UCLA partnership using electronic health record data to examine outcomes and quality of care for over 2.7 million patients with CKD and/or at risk for CKD (hypertension, diabetes, pre-diabetes).

He has made major contributions to diversity, equity and inclusion while addressing disparities in contemporary society. He was the Principal Investigator for the multi-site NIH-NIDDK funded African American Study of Kidney Disease and Hypertension (AASK) and the AASK Cohort Study, the largest comparative drug intervention trial focusing on renal outcomes conducted in African Americans. Dr. Norris was the founding Principal Investigator for the first national translational research network dedicated to reducing health disparities, the NIH-Research Centers in Minority Institutions Translational Research Network.

SHOWCASE A: PRECISION HEALTH



DANIEL GESCHWIND

Senior Associate Dean and Associate Vice Chancellor, Precision Health

Dr. Geschwind is the Gordon and Virginia MacDonald Distinguished Professor of Human Genetics, Neurology and Psychiatry at UCLA. In his capacity as Senior Associate Dean and Associate Vice Chancellor of Precision Health, he leads the Institute for Precision Health (IPH) at UCLA, where he oversees campus precision health initiatives. In his laboratory, his group has pioneered the application of systems biology methods in neurologic and psychiatric disease, with a focus on autism spectrum disorders (ASD) and neurodegenerative conditions.

Dr. Geschwind is a pioneer in the transcriptomic and functional genomic analyses of the nervous system. His laboratory showed that gene co-expression has a reproducible network structure that can be used to understand neurobiological mechanisms in health and disease. He led the first studies to define the molecular pathology of autism and several other major psychiatric disorders and has made major contributions to defining the genetic basis of autism. He demonstrated the utility of using gene network approaches to discover new pathways involved in neurodegeneration and new approaches to facilitate neural regeneration. More recently, his laboratory demonstrated how knowledge of 3-dimensional chromatin structure can be used to understand the functional impact of human genetic variation.

Dr. Geschwind has trained over 70 graduate students and post-doctoral research fellows and is among the highest cited scientists in neurology, neuroscience and genetics (H index > 140).



CLARA LAJONCHERE

Deputy Director, UCLA Institute for Precision Health

Dr. Lajonchere is the Deputy Director for the UCLA Institute for Precision Health and Adjunct Professor in the Department of Neurology at the David Geffen School of Medicine at UCLA. Her background reflects a wide range of professional, clinical, and research experience across CNS disorders. She has spent her career on cross-cutting issues in psychiatric genetics and translational medicine. Through the Institute, Dr. Lajonchere worked collaboratively with thought leaders across the state of California to advance precision medicine and improve outcomes for patients. Prior to UCLA, Dr. Lajonchere held faculty appointments at USC where she conducted her own NIH research, and served as VP of Clinical Programs for Autism Speaks. More recently, she served as the Chief Scientific Officer for Cognoa, Inc, a digital healthcare company in Palo Alto and consults for several tech start-ups in the autism space focused on AI, robotics, and targeted therapeutics.



STANLEY NELSON

Professor and Vice Chair of Human Genetics and Professor of Psychiatry

Stanley F. Nelson, MD is Professor and Vice Chair of Human Genetics and Professor of Psychiatry within the David Geffen School of Medicine at UCLA where he has been on faculty since 1993. He was trained in Pediatrics and Pediatric Hematology-Oncology at UCSF School of Medicine, and subsequently trained as a postdoctoral fellow with Patrick Brown from 1990-1993 where he developed genomic mismatch scanning and initiated the lab development of DNA microarrays for genomic applications. At UCLA, Prof. Nelson has continued to be interested in technology development and application of genomics to cancer biology and common human diseases with active research areas in Autism, ADHD, vertigo and brain cancers. He led the whole genome expression array analysis for the NIH Neuroscience Blueprint. He formed the Center for Duchenne Muscular Dystrophy in 2007 with Drs. Miceli and Spencer that has grown into a unique center that provides coordinated patient care, access to clinical trials, translational and basic research, and educational opportunities on campus. In 2014, he initiated with others, the Undiagnosed Diseases Network UCLA Clinical Site to improve diagnosis of individuals with difficult to diagnose genetic disorders. His laboratory continues to develop and use genomic technology to pursue biological insights that lead to new therapeutic interventions in humans.



BOGDAN PASANIUC

$Associate\ Professor,\ Pathology\ and\ Laboratory\ Medicine,\ Human\ Genetics,\ Computational\ Medicine$

Dr. Bogdan Pasaniuc develops and applies statistical and computational methods that integrate vast amounts of genomic data across millions of individuals to identify how genes cause disease, and how to leverage the genetic code of disease to improve treatment decisions in personalized medicine. Dr. Pasaniuc focuses on approaches that integrate different types of genomic data (from inherited genetic variation to the 3D-structure of the human genome to disease risk) to identify causal genes for common diseases. A main focus of interest is in mapping genes for prostate, breast, and ovarian cancers, and in mapping the shared and distinct genetic code of brain-related traits, such as schizophrenia and bipolar disorder. Dr. Pasaniuc earned a Ph.D. from the University of Connecticut and completed postdoctoral training at the University of California, Berkeley; the Harvard School of Public Health; and the Broad Institute of MIT and Harvard.



ALEX BUI

Co-Director, Center for SMART Health, Director of the UCLA Medical & Imaging Informatics

Dr. Bui received his Ph.D. in Computer Science in 2000, upon which he joined the UCLA faculty. His research includes informatics and data science for biomedical research and healthcare in areas related to distributed information architectures and mHealth; development, evaluation, and translation of Al-based methods (e.g., machine learning, reinforcement learning) for healthcare; and data visualization. His work bridges contemporary computational approaches with the opportunities arising from the breadth of biomedical observations and the electronic health record (EHR), tackling the associated translational challenges.

Dr. Bui has a long history of leading extramurally funded research, including from multiple different NIH institutes (NCI, NLM, NINDS, NIBIB, NIMHD). He was Co-Director for the NIH Big Data to Knowledge (BD2K) Centers Coordination Center; Application Lead for the NSF-funded Expeditions in Computing Center for Domain-Specific Computing (CDSC), exploring cutting-edge hardware/software techniques for accelerating algorithms used in healthcare; and Director of the NIH-funded Los Angeles PRISMS Center, a U54 focused on mHealth informatics. He is also a Program Director of two separate NIH T32s at UCLA in the areas of biomedical informatics, and data science; Director of the Medical & Imaging Informatics (MII) Group; and is Co-Director of UCLA CTSI's Informatics Program.

SHOWCASE B: I3T



GAY CROOKS

Director, UCLA I3T - Immunology, Inflammation, Infection and Transplantation Research

Gay M. Crooks is the Rebecca Smith Professor in the Department of Pathology & Laboratory Medicine and Professor of Pediatrics in the David Geffen School of Medicine, UCLA. She is Co-director of the Broad Stem Cell Research Center and Director of the Cancer and Stem Cell Biology Program, Jonsson Comprehensive Cancer Center at UCLA.

Dr Crooks graduated from medical school at the University of Western Australia and completed her FRACP (pediatrics) at Princess Margaret Hospital for Children prior to her fellowship training in Pediatric Hematology-Oncology at Childrens Hospital Los Angeles (CHLA). In 1993, she joined the faculty of the University of Southern California and established her laboratory and clinical programs in the Division of Research Immunology and Bone Marrow Transplantation at CHLA. In 2009 her research program moved to UCLA, where in addition to running her research program, Dr. Crooks is a pediatric bone marrow transplant physician in the Division of Pediatric Hematology-Oncology at Mattel Children's Hospital, UCLA.



KARIN NIELSON

Professor of Pediatrics, Division of Infectious Disease

Dr. Karin Nielsen is a Professor of Pediatrics in the Division of Infectious Diseases at UCLA Children's Hospital and a member of the UCLA faculty since 1996. She is an attending physician for Pediatric Infectious Diseases at Mattel Children's Hospital and co-director of the Care4Families HIV clinic at UCLA. Dr. Nielsen is a physician-scientist, originally from Rio de Janeiro, Brazil where she graduated in medicine from the University of Rio de Janeiro and completed pediatric residency training at the Hospital dos Servidores do Estado, also in Rio. At UCLA since 1991, she completed both clinical and research fellowships in pediatric infectious diseases and obtained a master's degree in Public Health/Epidemiology. Dr. Nielsen's main area of research has been pediatric infections particularly in the area of HIV and congenital infections. She is an internationally recognized expert in the field of pediatric HIV and Zika.

Dr. Nielsen has worked extensively in international clinical studies on both prevention of perinatal and sexual transmission of HIV and has published extensively on the treatment of this disease in children, adolescents and adults. She is a leading investigator in a number of studies conducted by NIH sponsored HIV networks such as IMPAACT, HPTN, ATN and ACTG, developing clinical trials in North and South America, Sub-Saharan Africa and Asia, many of which have changed management guidelines for HIV and more recently Zika.



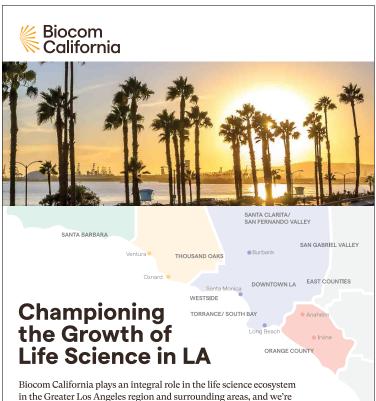
VAITHI ARUMUGASWAMI

Associate Professor, Department of Pharmacology

My laboratory focuses on understanding the pathogenic mechanisms of Flaviviridae family of viruses, Hepatitis C Virus, Zika Virus (ZIKV) and Dengue Virus. Globally over 3 billion people are at risk of contracting these viral pathogens through mosquito vectors and contact with contaminated blood and bodily fluids. ZIKV, a major human pathogen, causes congenital eye disease and microcephaly. ZIKV is transmitted by Aedes species of mosquitoes and through sex. Currently, there is no vaccine or treatment available against ZIKV. Our main research focus is to develop a potent recombinant vaccine to prevent Zika virus infection. We have developed a reverse genetics system to engineer attenuating mutations in the Zika viral genome and animal models to test the safety and immunological profiles of these engineered vaccine candidates. In addition, we are investigating the differing impact of sexual (vaginal and rectal routes) and mosquito vector modes of transmission in infected adults on fetal outcome. For modeling congenital ZIKV eye disease, we are utilizing human pluripotent stem cells derived ocular progenitor cells and 3D optic cup organoids. In these human cell-based systems, we have observed differential activation of signaling pathways and long non-codling RNAs (IncRNAs) by various Zika viral pathotypes. We are evaluating the genetic and molecular basis of these specific cellular perturbations, which can allow for understanding the basic biology of eye development and identifying novel therapeutic interventions.







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PAUL KROGSTAD

Professor, Molecular and Medical Pharmacology

Paul A. Krogstad, MD is a Professor with a joint appointment in the Departments of Pediatrics and Molecular and Pharmacology, and serves as the Fellowship Director for the Pediatric Infectious Diseases Fellowship Program. Dr. Krogstad's laboratory focuses on molecular virology and the pathogenesis of viral diseases. Major areas of interest include studying the role that cellular proteins play in promoting the assembly of viral proteins into infectious HIV particles, and their release from lymphocytes and other infected cells. His studies of HIV pathogenesis currently include the impact of HIV on T cell production and turnover in HIV infected children and adolescents. These studies may suggest new forms of therapy for HIV infection which target viral-cellular interactions, and in new approaches to the reversing immunological impact of HIV on immunological ontogeny. Dr. Krogstad's laboratory research also includes molecular approaches to the identification of novel agents involved in idiopathic liver failure, and cellular factors involved in Coxsackie myocarditis. In addition, he has lead and collaborated in several studies of new drugs for the treatment of HIV, and leads the instruction of the module in the David Geffen School of Medicine on anti-infective agents. Dr. Krogstad has received numerous teaching awards (including The Robert C. Neerhout Teaching Award in 2003) and was the recipient of the Pediatric AIDS Foundation Scholar Award.

SHOWCASE B: CARDIOVASCULAR INNOVATIONS



ARJUN DEB

Director, UCLA Cardiovascular Medicine Research Theme

Arjun Deb, M.D., treats patients with advanced heart disease and studies the basic mechanisms that regulate wound healing in the heart and other organs. Through this research, he strives to develop innovative treatment methods for a wide range of common diseases that are associated with wounds not healing properly, such as diabetes, chronic kidney disease and heart attacks.

Reversing or preventing scar tissue from forming after a heart attack remains one of the major challenges of cardiovascular medicine; scar tissue is a leading cause of irregular heartbeat, heart failure and sudden cardiac death. Deb aims to reduce heart failure rates by developing new drugs that reduce scarring as well as cell therapies that utilize heart stem cells to generate new heart muscle cells instead of scar tissue.

Deb and his collaborators have discovered that cardiac fibroblasts—the heart cells that form scars—present in the heart's injured regions have the ability to become endothelial cells, which form blood vessels. Delving deeper into this phenomenon, Deb discovered a drug that can encourage this transition during a limited period of time after a heart attack occurs, which led to less scarring and more complete healing of the heart in pre-clinical studies. Deb is now evaluating whether this drug could be used to benefit humans.



ALI NSAIR

Director, Heart Transplantation and Mechanical Circulatory Support Program

Dr. Nsair is the Director of the Heart Transplantation and Mechanical Circulatory Support Program at UCLA. As well, he is a member of the Interventional and structural program at UCLA. He received his MD from the University of Alberta, where he also completed his Internal Medicine residency and Cardiology fellowship. He received advanced training in Advanced Heart Failure and Interventional Cardiology at UCLA Medical Center and a post-doctoral fellowship in Regenerative Therapies. His research interests include cardiovascular regenerative and rejuvenation therapies, as well as advanced studies of mechanical circulatory support devices in cardiogenic shock and novel heart failure medical therapies.

Dr. Nsair has strong interest in sports medicine and extensive expertise in managing cardiovascular disease in patients of all athletic levels. As well he is a skilled proceduralist in coronary and structural heart interventions. Current research interest focuses on implantable and wearable technologies in heart failure patients and athletics. Furthermore, his research interest involves mechanical circulatory support in patients with advanced heart failure and cardiogenic shock. He is involved in multiple clinical and translational trials and is the PI for a basic and translational research lab.



JAKE LUSIS Vice Chair, Human Genetics

Jake Lusis received his Ph.D. in Biophysics from Oregon State University. He was a postdoctoral fellow with Kenneth Paigen in the Molecular Biology Department, Roswell Park Memorial Institute, Buffalo, NY. Since 1979, he has been on the faculty at the University of California, Los Angeles, where he is presently Professor in the Departments of Microbiology and Medicine. He has a secondary appointment in the Department of Human Genetics, where he is also Vice Chairman. He has served on advisory panels for the National Institutes of Health, the American Heart Association, and various private companies and organizations. Presently, he serves on the Board of Scientific Counselors, NHLBI. Among his awards are the Bristol-Myers Squibb Award for Distinguished Achievement in Research, the American Heart Association Duff Award, and the NAVBO



THOMAS VALLIM

Associate Professor, Departments of Medicine/Cardiology and Biological Chemistry Director, Gene Regulation, Epigenomics and Transcriptomics (GREAT) Home Area

Dr. Vallim is an Assistant Professor in the Department of Biological Chemistry and in the Department of Medicine, Division of Cardiology at UCLA. Dr. Vallim was born in Brazil and emigrated to England as a teenager. In England, Dr. Vallim received his M.Sci and Ph.D from the University of Nottingham. As an undergraduate Ph.D student, Dr. Vallim's research focused was on the transcriptional regulation of genes in lipid metabolism by dietary factors. In 2008, Dr. Vallim came to UCLA for his post-doctoral studies in the laboratory of Peter Edwards. At UCLA, Dr. Vallim's research was focused on identifying molecular mechanisms that underlie the regulation of bile acid metabolism, the major pathway of cholesterol excretion from the body. In 2013, Dr. Vallim was promoted to Assistant Professor in the Division of Cardiology at UCLA, and in 2016, Dr. Vallim also joined the Department of Biological Chemistry.



An international leader in biomedical research, Cedars-Sinai ranks among the nation's top nonuniversity hospitals for competitive research funding from the National Institutes of Health.

Brain tumor vaccines, drugs and better ways to tackle inflammatory bowel disease are just a few of the innovations currently in the Cedars-Sinai research pipeline.

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ELIZABETH TARLING Associate Professor, Medicine-Cardiology

Dr. Elizabeth Tarling is an Associate Professor in the Department of Medicine-Cardiology at UCLA. In 2008 she moved to UCLA, and joined the laboratory of Dr. Peter Edwards, where my research was focused on investigating the role of the ATP Binding Cassette Transporter ABCG1 in lipid metabolism, inflammation, atherosclerosis and innate immunity. In 2013, she was promoted to Assistant Professor in the Division of Cardiology at UCLA, and in 2018 to Associate Professor. Her research interests are understanding and identifying mechanisms that control cellular and whole body cholesterol homeostasis, with a focus on pulmonary lipid homeostasis, immunity and disease.



TZUNG HSIAI Director, Cardiovascular Engineering Research Laboratory

Dr. Hsiai received his undergraduate education from Columbia University and his MD from the University of Chicago. He completed his internship, residency and NIH-funded cardiovascular fellowship at UCLA School of Medicine, during which he also obtained a PhD in Biomedical Engineering in 2001. Dr. Hsiai is board certified by the American Board of Internal Medicine and Cardiovascular Disease. He also holds a joint appointment with the Henry Samueli School of Engineering and Applied Science at the Department of Bioengineering. His research program is funded by the National Institutes of Health and American Heart Association. He is the Chair of the American Physiological Society Joint Meeting with Biomedical Engineering Society, Member of the American Society for Clinical Investigation, a Fellow of Americal College of Cardiology, and the recipient of an NIH Physician-Scientist Career Development Award and an American Heart Association John J. Simpson Outstanding Research Achievement Award.



THOMAS VONDRISKA Professor of Anesthesiology

Professor of Anesthesiology, Medicine and Physiology in the David Geffen School of Medicine at UCLA .He trained at West Virginia University (BS in Biology), the University of Louisville (PhD in Physiology) and UCLA. His lab studies epigenomic mechanisms of cardiovascular disease with the goal of discovering new therapies and cures. They also are focused on understanding the basic principles of genome organization and chromatin structure. His lab has many ongoing collaborations with investigators at UCLA and other institutions.

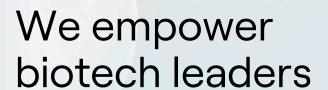
The goal of his research is to advance the field toward genomic medicine for common forms of heart failure—a syndrome resulting from complex genetic predisposition and environmental / lifestyle factors.



RENÉ PACKARD Assistant Professor, Medicine, Assistant Professor, Medicine, Physiology and Bioengineering

Dr. Packard is an Assistant Professor of Medicine, Physiology, and Bioengineering at UCLA, and a clinical and imaging cardiologist at the Ronald Reagan UCLA Medical Center and the West LA VA Medical Center. Dr. Packard graduated from Voltaire College (Geneva, Switzerland) and the Faculty of Medicine at the University of Geneva (Switzerland). He completed a research fellowship in the laboratory of Dr. Peter Libby at the Brigham and Women's Hospital/Harvard Medical School. He then went on to be a medicine resident at the University Hospitals of Cleveland/Case Western Reserve University, followed by a cardiology fellowship at UCLA where he graduated from the STAR program, earning a PhD in Molecular, Cellular, and Integrative Physiology. Dr. Packard's research has been recognized through multiple awards, including from UCLA, the Cardiovascular Research Foundation of Southern California, the American Society of Nuclear Cardiology, and the Society of Nuclear Medicine and Molecular Imaging, and his work has been supported by the NIH, the AHA, and the VA.



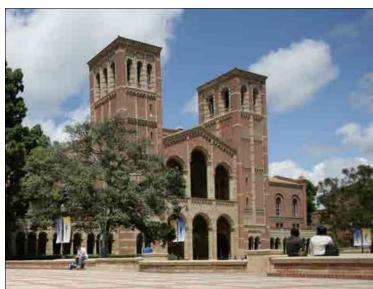


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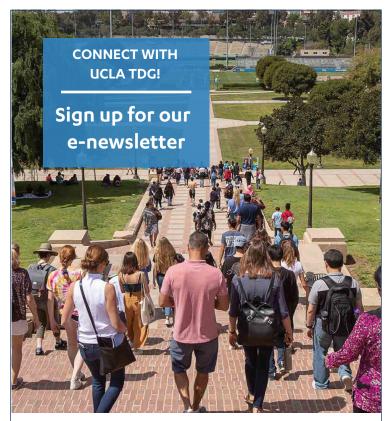




UCLA PDA (Post Doc Association) is a volunteer organization run by postdocs that aims to build, enrich, and support the larger community of postdoctoral scholars at UCLA

POSTDOCTORAL ASSOCIATION at UCLA

pda.ucla.edu







SHOWCASE B: CANCER: IMMUNO-ONCOLOGY



MIKE TEITELL

Director, UCLA Jonsson Comprehensive Cancer Center

Following an extensive national search, Michael Teitell, MD, PhD was appointed as the director of the UCLA Jonsson Comprehensive Cancer Center on August 8, 2017. Teitell holds the Latta Endowed Chair in Pathology and is a full professor in the Departments of Pathology and Laboratory Medicine, with joint appointments in the Departments of Pediatrics and Bioengineering. He serves as Physician and Chief of the Division of Pediatric and Neonatal Pathology and he has been a member of the cancer center since 1999. Teitell is also a member of the Molecular Biology Institute, the Broad Center of Regenerative Medicine and Stem Cell Research, AIDS Research.

Board certified in anatomic, clinical and pediatric pathology, Teitell joined the UCLA faculty as an assistant professor in 1999, and rose to the rank of full professor by 2008. He is director of the David Geffen School of Medicine Cancer Research Theme, co-director of the UCLA Tumor Immunology Training Program, co-director of the Broad Stem Cell Research Center Bioengineering Core, and an associate director of the UCLA-Caltech Medical Scientist Training Program (MD, PhD) Institute, and the California NanoSystems Institute at UCLA.



LILI YANG

Associate Professor, Microbiology, Immunology & Molecular Genetics

Dr. Lili Yang is currently an Associate Professor at UCLA. She received her B.S. degree in Biology from the University of Science & Technology of China (USTC) in 1997, her M.S. degree in Biomedical Sciences from the University of California, Riverside (UCR) in 1999, and her Ph.D. degree in Biology from the California Institute of Technology (Caltech) in 2004. She obtained her Ph.D. training at the Laboratory of David Baltimore. Post graduation, she stayed at Caltech and led a multi-institutional Engineering Immunity Program from 2004 to 2012, developing gene- and cell-based immunotherapies for cancer and HIV/AIDS. She joined the University of California, Los Angeles (UCLA) as an Assistant Professor in 2013. Her laboratory at UCLA studies tumor immunology and cancer immunotherapy, with a special focus on stem cell-based and gene-engineered immunotherapy for cancer. Her work has resulted in over 35 peer-reviewed publications (in prestigious journals including Nature, Nature Biotechnology, Cell Stem Cell, PNAS, J Exp Med, J Clin Invest, Blood, etc.), 15 patents, 2 clinical trials, and 2 biotech startups.

In recognition of her scientific achievements, Dr. Lili Yang has received multiple prestigious awards, including the TR35 (Innovators Under 35) Award from the MIT Technology Review Magazine, the Forbeck Scholar Award, the Director's New Innovator Award from the National Institute of Health (NIH).



THEODORE NOWICKI

Assistant Professor-in-Residence, Pediatrics

Theodore Scott Nowicki is a Clinical Instructor Division of Pediatric Hematology/Oncology and Department of Pediatrics. Dr. Theodore Nowicki's area of interest is in T-cell-based cancer immunotherapy, determining biological differences between responders and non-responders to these therapies, and using this information to further improve these cellular immunotherapeutics. The clinical paradigms with which he has been most interested previously were transgenic TCR adoptive cell therapy, immune checkpoint inhibition via blockade of CTLA-4, PD-1, and PD-L1, and the combination of both modalities to further optimize cellular therapies. He has trained with Dr. Antoni Ribas, a worldclass expert in both of these modalities.



CRISTINA PUIG-SAUS

Assistant Adjunct Professor of Hematology and Oncology

Cristina Puig-Saus completed her undergraduate degree at the Autonomous University of Barcelona and received her MS and PhD in Biomedicine by the University of Barcelona working with oncolytic adenoviruses.

Following the completion of her PhD, Puig-Saus moved to the U.S. to join Dr. Antoni Ribas's team at UCLA as a postdoctoral researcher. During her postdoctoral experience, she focused on developing new adoptive cell therapy strategies using hematopoietic stem cells. She led the preclinical effort that culminated in the opening of a clinical trial at UCLA to co-administer stem cells and T-cells genetically modified to express a NY-ESO TCR for the treatment of melanoma, multiple myeloma and sarcoma. She is now an Associate Project Scientist in the same lab and her efforts are focused on designing novel T-cell therapies. This includes leading a multicenter effort to understand the natural neoepitope-specific T-cell responses induced after immune checkpoint blockade therapy and use this knowledge to improve the design of personalized T-cell therapies. Her interests are also focused on developing novel CAR-based adoptive T-cell therapies for solid tumors and on the improvement of T-cell gene editing strategies.



CAIUS RADU

Professor, Department of Molecular and Medical Pharmacology and Department of Surgery

Caius Radu is a Professor in the Department of Molecular and Medical Pharmacology and the Department of Surgery at the University of California Los Angeles (UCLA). He also serves as Vice Chairman of the Department of Molecular and Medical Pharmacology and Co-Director of the Cancer Molecular Imaging, Nanotechnology, and Theranostics Research Program (CMINT) at the Jonsson Comprehensive Cancer Center. Dr. Radu received his M.D. from the University of Medicine, Craiova, Romania, and completed his postdoctoral training in immunology and cancer biology at the University of Texas Southwestern Medical Center in Dallas and at UCLA with Dr. Owen Witte.

Dr. Radu's group aims to advance the understanding of fundamental biological processes at the interface between metabolic, signal transduction, and immune networks in cancer to leverage this knowledge towards the development of new diagnostic and therapeutic approaches. Additional areas of focus include studies of novel mechanisms that regulate nucleotide metabolism in cancer, identification of targetable co-dependencies in pancreatic and prostate cancers, and the use of nucleoside imaging probes as non-invasive predictive biomarkers for treatment responses.



ANTONI RIBAS

Professor, Medicine, Surgery and Molecular and Medical Pharmacology

Antoni Ribas, MD, PhD is Professor of Medicine, Professor of Surgery, and Professor of Molecular and Medical Pharmacology at the University of California Los Angeles (UCLA), Director of the Tumor Immunology Program at the Jonsson Comprehensive Cancer Center (JCCC) and the Chair of the Melanoma Committee at SWOG. Trained at the University of Barcelona, with postdoctoral research and clinical fellowships at UCLA. Dr Ribas is a physician-scientist who conducts laboratory and clinical research in malignant melanoma, focusing on gene engineered adoptive cell transfer (ACT) therapies, anti-CTLA4 antibodies, anti-PD-1 antibodies, BRAF and MEK inhibitors and nanoparticle-siRNA.

His NCI, State of California and private foundation-supported research laboratory develops models of disease to test new therapeutic options and studies mechanism of action of treatments in patients. He has been instrumental in the clinical development of several agents approved by the FDA, including pembrolizumab (Keytruda), vemurafenib (Zelboraf), cobimetinib (Cotellic), dabrafenib (Tafinlar) and trametinib (Mekinist). He is an elected member of the American Society of Clinical Investigation (ASCI), the recipient of the AACR Richard and Hinda Rosenthal Award and a National Cancer Institute (NCI) Outstanding Investigator Award.



GAY CROOKSDirector, UCLA I3T - Immunology, Inflammation, Infection and Transplantation Research

See page 53 for full bio

SHOWCASE B: REGENERATIVE MEDICINE



THOMAS RANDO

Director of the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research

Thomas Rando, M.D., Ph.D., is the director of the UCLA Broad Stem Cell Research Center. In this role, he seeks to build on the Center's strengths and to promote a culture of scientific excellence, academic integrity and interdisciplinary collaboration. He also works to establish partnerships with the larger scientific community—including other institutions and private companies—to address the most urgent challenges of medicine with the shared goal of improving human health.

His pioneering studies of the regulation of aging in mice showed that old tissues could be rejuvenated by exposure to young blood. These studies have formed the basis of an expanding area of research in the aging field and led to clinical trials of novel therapies for Alzheimer's disease and other neurodegenerative diseases. Rando's muscle regeneration and muscular dystrophy research informed the development of novel tools that enable non-invasive assessment of disease progression and therapeutic response in preclinical models of muscular dystrophies.

Prior to joining UCLA, Rando was a professor of neurology and neurological sciences at the Stanford University School of Medicine, where he also served as director of the Glenn Center for the Biology of Aging. Within the broader Stanford University community, he was deputy director of the Stanford Center on Longevity.



APRIL PYLE

Vice Chair in the Department of Microbiology, Immunology and Molecular Genetics

Dr. Pyle received her Ph.D. from the University of Tennessee in 2002 and completed her postdoctoral fellowship work with Peter Donovan in 2006 at Johns Hopkins University. She is currently an Associate Professor in the Department of Microbiology, Immunology and Molecular Genetics at UCLA and a member of the Eli and Edythe Broad Stem Cell Center, the Center for Duchenne Muscular Dystrophy and the Jonsson Comprehensive Cancer Center at UCLA. Dr. Pyle's lab uses multi-disciplinary approaches to study human pluripotent stem cell biology and differentiation of these cells for use in regenerative medicine. Dr. Pyle's lab studies both basic aspects of stem cell biology as well as more translational aspects of human pluripotent stem cell differentiation towards skeletal muscle for use in therapeutic approaches for patients with muscular dystrophy.



ARJUN DEB
Director, UCLA Cardiovascular Medicine Research Theme

See page 55 for full bio



BILL LOWRY

Professor, Molecular, Cell and Developmental Biology

William Lowry, Ph.D., uses human pluripotent stem cells to study the process by which the ectoderm, the outermost layer of cells in the early embryo, splits into two distinct lineages of cell types: the cells that comprise the nervous system and the cells that make up the outer surface of the body including skin, hair and nails. Through examining how the ectoderm gives rise to these two stem cell types, Lowry hopes to gain an understanding of how the development process can go awry, leading to intellectual disability syndromes such as autism in the case of neural cells, or a predisposition to cancers like carcinoma in the case of skin cells.

Lowry's interest in stem cell research was born from a desire to understand how a small number of cells in the developing embryo can create all of the cells in the body. Early in his career, Lowry focused his research on the stem cells that reside in the skin because they are easily accessible and share many characteristics with the stem cells of the nervous system. Although these two groups of cells perform vastly different functions, their physiology is quite similar because they both arise from the ectoderm during embryonic development.

Through this work, he hopes to identify the causes of neurological disorders in order to develop novel treatment strategies.



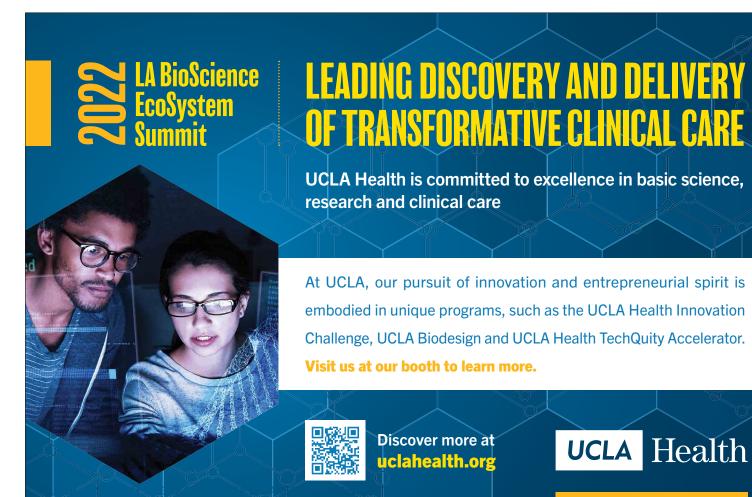
LILI YANGAssociate Professor, Microbiology, Immunology & Molecular Genetics
See page 59 for full bio



Associate Professor of Pediatrics and Pulmonary Medicine

Brigitte Gomperts, M.D., treats young children with cancer and blood diseases. Observing the side effects that chemotherapy, radiation therapy and bone marrow transplant had on her patients' lungs, Gomperts became interested in lung repair and regeneration. Her scientific research focuses on the role stem cells play in repairing and regenerating the lungs after injury. As part of this work, she studies how this repair process can go awry, which can lead to cancer, asthma, idiopathic pulmonary fibrosis and other lung diseases. The ultimate goal of Gomperts' research is to develop novel targeted therapies and prevention strategies that help lung tissue heal following injury or disease.

Because of the lung's complexity, growing lung cells in two-dimensions in the laboratory doesn't always provide a clear picture of lung disease. To overcome this challenge, Gomperts' lab uses stem cells to create three-dimensional lung-like organoids that mimic the air sac structures of actual lungs. Gomperts and her team were the first to create these lung-like organoids, which represent the initial steps toward generating patient-specific transplantable lung tissue in the future. In the meantime, the organoids are useful for disease-in-a-dish modeling, high-throughput drug screening and testing for compounds that could be toxic to the lungs.





LOS ANGELES INCUBATOR SHOWCASE by the Lundquist institute



AGENDA



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10:05am	WELCOME BY THE LUNDQUIST INSTITUTE	2:20pm	BIOLABS LA	
10:08am	PASADENA BIO COLLABORATIVE	2:23pm	Proteas Bioanalytics Inc.	
10:11am	Poseidon LLC	2:38pm	Karma Biotechnologies	
10:26am	Ophidion	2:53pm	Analytomix	
10:41am	BCN Biosciences	3:08pm	BREAK/NETWORKING	
10:56am	SCALEHEALTH	3:18pm	MAGNIFY AT CNSI	
10:59am	Rabble Health	3:21pm	Dalton Bioanalytics, Inc.	
11:14am	Quantgene	3:36pm	Partillion Bioscience	
11:29am	Preveta	3:51pm	Pluto Immunotherapeutics, Inc.	
11:45am	LUNCH/NETWORKING	4:06pm	LABLAUNCH	
12:45pm	INCUBATOR PANEL HOSTED BY BIOCOM CA	4:09pm	Salve Therapeutics	
	Winning the LA Space Race: Finding the Ideal Place to Grow	4:24pm	PathoGene	
1:30pm	STARBURST	4:39pm	Paradigm Immunotherapeutics	
1:32pm	LA BIOSPACE	4:54pm	CONCLUDING REMARKS	
1:35pm	Synova Life Sciences		The Lundquist Institute SMBC	
1:50pm	SPG Therapeutics	5:00pm	END OF PROGRAM	
1.50pm	31 d Merapeaties	3.00piii	LITE OF TROOKAM	

All times are Pacific Time. All times and speakers subject to change.

2:05pm Cern Corporation

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by The Lundquist Institute

SPEAKERS AND PANELISTS



Biocom

California

STEPHANIE HSIEH

Executive Director and Head of the Los Angeles office, Biocom California

Stephanie Hsieh is executive director and head of the Los Angeles office of Biocom California, the state's premier trade association for the life science industry. Before joining Biocom California, Ms. Hsieh was CEO of Meditope Biosciences, a local early-stage immune-oncology company based in Pasadena, where she continues to serve as a board director. Ms. Hsieh has enjoyed a 30-year career in biotechnology, specializing in building corporate strategies built heavily on the intersection of new drug product planning, patent portfolio creation, and navigation of the regulatory landscape.

As head of Biocom California's Los Angeles office, Ms. Hsieh is at the leading edge of transforming the Los Angeles region into a premier life sciences hub, devising, and executing impactful strategies and initiatives for ensuring growth and sustainability of the industry for improved health outcomes and economic health of our region.

Ms. Hsieh graduated Sigma Xi, Phi Beta Kappa, and magna cum laude from Wellesley College, majoring in Biological Chemistry. She also holds a J.D. from Columbia Law School, graduating as a Harlan Fiske Stone Scholar, and an M.B.A. from Stanford's Graduate School of Business.



PASADENA BIO

ROBERT (BUD) BISHOP

President, Pasadena Bio Collaborative Incubator

Bud Bishop has been the pro bono President of Pasadena Bio Collaborative for the last five years. He has helped to refurbish it, grow bigger and become financially sound. Concurrently, he has also served on the Board of Directors for both Regenesis Bioremediation Products and Jericho Road Pasadena and has become Chairman of the Board for Anivive Lifesciences, Inc.

His experience in the healthcare industry started more than fifty years ago, beginning in hospital products research at Baxter and then diagnostic products research for American Hospital Supply Corporation (AHSC). Bud moved into management at AHSC, where his last position was Division President. Allergan purchased his division, and he went with it, later becoming the Division President of Allergan Pharmaceuticals. In 1992, Bud left Allergan to build and take public AutoImmune Inc. which was based on the principle of oral tolerance. He managed to get two products into Phase III trials, and when both failed, converted one of these into a nutritional supplement that made it to market.

Bud has served on the Boards at Millipore, MFS Investment Management, Caliper Life Sciences, and Quintiles Transnational, to name a few. He holds a B.A. in Psychology and a Ph.D. in Biochemistry from the University of Southern California and an M.B.A from the University of Miami.



LINDSAY BOURGEOIS

LOS ANGELES INCUBATOR SHOWCASE SPEAKERS AND PANELISTS

Director, BioLabs at the Lundquist Institute

Lindsay Bourgeois joins us with several years of experience developing startups as both Site Manager and Director of Operations for Lake Pharma and Director of Program Management at BioRasi. She brings knowledge of both hands-on lab bench experience in research and development, managing laboratory operations, and supervising project management and lab staff. Lindsay is currently helping develop the LA bioscience ecosystem as Director of BioLabs LA at the Lundquist Institute.





LLEWELLYN COX CEO, Lab Launch

Llewellyn Cox is the founder and CEO of Lab Launch. A serial entrepreneur and venture investor, Llewellyn received his Ph.D. in Molecular and Cell Biology at Cardiff University before accepting a postdoctoral research appointment in Neuroscience at Weill Cornell Medical College. He is also an adjunct professor at the Department of Translational Genomics, Keck School of Medicine of USC, where he teaches translational biology and science communications. Llewellyn is a General Partner in MarsBio Fund I and the Los Angeles County Bioscience Investment Fund.

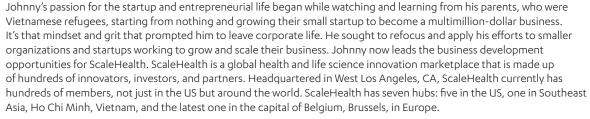




JOHNNY LAM

Vice President, Business Development, ScaleHealth

Johnny is a Southern California native, growing up in the San Gabriel Valley. Before joining ScaleHealth, Johnny had previously spent some time at UPS, Wells Fargo, and Intel. Even though Johnny has worked at some of the largest companies in the world, he has always been an entrepreneur, and founder, at heart.



Amongst his many passions, he loves connecting amazing people and companies doing extraordinary things.



MAGNIFY

SCALE

NIKKI LIN

Director, Entrepreneurship and Commercialization, Magnify Incubator, California NanoSystems Institute, UCLA

Nikki Lin is the Director of Entrepreneurship and Commercialization for the UCLA California NanoSystems Institute (CNSI), overseeing the Magnify Incubator. Nikki works with partners within and outside of UCLA to coordinate and integrate CNSI's entrepreneurship activities, fostering the development of Magnify's innovation and start-up ecosystem. She also oversees the operations of the Magnify program, facilities management, business development, and implementation of best practices.

Nikki has worked with the UCLA CNSI since 2006, having joined the organization when the 188,000 sq. ft. research facility was under construction. As a cornerstone of the Institute's operations and strategy, she has contributed over the years to program development, creating a platform for transdisciplinary scientific exchange, CNSI and UCLA member and student engagement, strategic communications, and marketing, and most recently furthering the CNSI's infrastructure for innovation and entrepreneurship through the incubation of early-stage deep tech start-up companies.

Nikki holds over 18 years of experience in the world of higher education, 16 of them facilitating scientific research. Previously, she served in the UCLA Samueli School of Engineering's Department of Bioengineering and Northwestern University's School of Education and Social Policy. Nikki earned a BA from Loyola University in Chicago and an MBA from the University of Southern California.



HOWARD XU

LOS ANGELES INCUBATOR SHOWCASE SPEAKERS AND PANELISTS

Director of Incubator Development and Programming, Cal State LA

Howard Xu is the director of incubator development and programming and a professor of microbiology. He leads the development of the LA BioSpace incubator at Cal State LA. Howard helps oversee the University's initiatives in promoting a strong bioscience innovation ecosystem. He has helped secure funding from L.A. County and the U.S. Economic Development Administration. Howard was honored with the California State University (CSU) systemwide 2011 Andreoli Faculty Service Award and 2018 Faculty Research Award by CSUPERB (California State University Program for Education and Research in Biotechnology). He was also awarded Outstanding Professor at Cal State LA in 2019.



Howard received his Ph.D. in Microbiology from the University of Minnesota, followed by a postdoctoral fellowship at The Ohio State University. Dr. Xu spent seven years in the biotechnology industry, engaging in discovering novel antibiotics. In 2004, Dr. Xu joined the faculty at Cal State LA. His research group is pursuing the discovery of novel antibiotics and elucidation of mechanisms of pathogenesis of bacterial pathogens.





by The Lundquist Institute

COMPANY SUMMARIES



LOS ANGELES INCUBATOR SHOWCASE



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COMPANY SUMMARIES



The Lundquist Institute

AREAS OF FOCUS:

- ► Cancer Biology and Immunotherapeutics
- ▶ Health Services and Outcomes Research
- ▶ Infection and Immunity
- ► Metabolic Diseases and Endocrinology

- Neurotherapeutics
- ▶ Respiratory Medicine and Exercise Physiology
- ▶ Translational Genomics
- ▶ Women's and Children's Health

INCUBATOR CONTACTS:

Rubayath Mohsen

rubayath.mohsen@lundquist.org

Keith Hoffman

keith.hoffman@lundquist.org

COMPANY DESCRIPTION:

The Lundquist Institute for Biomedical Innovation is a 501(c)3 independent non-profit biomedical research organization that was founded in 1952. The Institute has over more than 120 principal investigators and 400 researchers in total — MDs, MD/PhDs, and PhDs — working on 600 research studies. Our investigators are academically affiliated with UCLA and work in partnership with the Harbor-UCLA Medical Center. Our research is funded by many sources including grants from the NIH and other government entities, Industry and teaching contracts and royalties, as well as private donors and other non-profit foundations.

- ▶ The Lundquist Institute is one of the foremost independent, non-profit research institutes in the U.S.
- ▶ You have likely benefited at some point in your life from innovations by The Lundquist Institute.
- ▶ We developed the training for (and coined the term) "Paramedics"
- ▶ The profession of Nurse Practitioner had its beginning on our campus
- ▶ We have generated new paradigms, diagnostics, therapies, and devices, in use all over the world.
- ▶ We take on the challenge of devising treatments for debilitating and fatal rare inherited diseases.



Pasadena Bio Collaborative (PBC)

AREAS OF FOCUS: Early-stage companies that need cost effective wet laboratory facilities including BSL -1,

BSL-2, fume hoods and/or a broad range of shared use instruments

INCUBATOR CONTACTS: Bud Bishop, PhD

bud.bishop@pasadenabio.org

Facility Tours, Business Decisions, Equipment/Instrument Selection

Wendie Johnston, PhD

wendie.johnston@pasadenabio.org

Safety, Onboarding Tenants, Workforce Development

Judy Villacorte

judy.villacorte@pasadenabio.org

Tenancy Applications, Tenant Support, Operations Management

INCUBATOR DESCRIPTION:

PBC is a non-profit organization that opened its doors in 2004. Located at 2265 East Foothill Blvd in Pasadena, it occupies 12,600 sf and provides laboratory space, office space, conference rooms, and a wide variety of shared-use instruments/equipment. We are open 24 hours a day, every day of the week. PBC leases on a 30-day basis to avoid tenants having to make a long-term commitment and we do not request equity or royalties. We also don't have a time limit on how long a company can stay with us. Tenant benefits include a Lunch & Learn program, six CITI educational programs, CAD/CAM with SolidWorks, and data analysis software. We also provide high-speed fiber optic internet, networked printers, mail sorting, and package receiving.

SoCalBio provides our tenants with a free membership, including access to its discount purchasing plan for several companies, including VWR. We also belong to Biocom and have a program with ThermoFisher. Most importantly, more than half of the tenants that have come to Pasadena Bio reached the point where they needed to leave to get bigger!

Poseidon LLC

TECH TITLE: Beyond antibodies: A simplified protein structure for solid tumors

PRESENTER: Rajika Perera, PhD

rajika@poseidon-laboratory.com

INCUBATOR AFFILIATION: Pasadena Bio Collaborative

COMPANY DESCRIPTION:

Poseidon LLC is a preclinical stage company developing a patented platform technology to develop novel therapeutics using a non-immunogenic protein modality. Unlike conventional or bi-specific antibodies, our protein technology can bind multiple targets to increase valency, which should improve the therapeutic index.

The solid tumor market is estimated to grow by over \$400 billion by 2027, with an estimated compound annual growth rate of 15%. We believe the size and the format of our approach is an ideal candidate for targeting solid tumors where conventional therapeutic antibodies fall short due to insufficient tumor penetration. In contrast to other biologics, our simplified design can be produced in large quantities at a low cost in a therapeutic ready format. We're looking to raise funds to generate pre-clinical animal studies as well as strategic partnerships to drive the evolution of this platform technology to the next stage.





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COMPANY SUMMARIES

COMPANY SUMMARIES

Ophidion

TECH TITLE: Treating Neurodegenerative Diseases: Leveraging a Novel Brain Drug Delivery Platform

Technology

Habib@ophidionbio.com

PRESENTER: Yacoub Habib

INCUBATOR AFFILIATION: Pasadena Bio Collaborative

COMPANY DESCRIPTION:

Ophidion is a private company with a pipeline to treat various neurodegenerative diseases by silencing culprit genes in the brain using various gene-silencing cargoes (such as siRNAs or ASOs), complexed to a patented Trojan horse technology to enable intravenous delivery. We are unique in our ability to deliver these various cargoes to the brain following intravenous administration (as opposed to more invasive technologies focusing on intra-thecal or intra-cranial delivery). Our lead program, targeting Huntington's disease, has already established preclinical proof of concept in Humanized Huntington's mice and we are looking to raise \$19M in Series A round in Q4, 2022 to finance the IND-enabling studies and Phase 1a, in Huntington's disease, together with advancing multiple pipeline products to the preclinical proof of concept including Glioblastoma Multiforme, ALS, Alzheimer's disease, and Parkinson's disease.

In addition to developing our pipeline products, our platform technology is available for out-licensing to enable third-party biotech and pharmaceutical companies to deliver multiple classes of drugs, including gene therapeutics, siRNAs, ASOs, and peptides to the brain following intravenous administration.

BCN Biosciences

TECH TITLE: Precision Therapeutics for KRAS Mutant Cancers

PRESENTERS: Sudip Chakrabortty sudip@bcnbio.com

Andrew Norris PhD

andrew@bcnbio.com **INCUBATOR AFFILIATION:** Pasadena Bio Collaborative

COMPANY DESCRIPTION:

BCN Biosciences is an IND stage life sciences startup developing therapies for cancers bearing specific mutations. KRAS mutant cancers represent almost 30% of all cancers and a significant portion of epithelial cancers like colorectal, pancreatic, lung, and ovarian cancers. They are hard to treat, as the specific mutations make it easier for the cancer cells to evade chemotherapy and immunotherapies. To address this big unmet medical need, BCN is developing a platform of novel small molecule precision therapeutics, targeting oncogenic KRAS. We have two classes of over 50 small molecules under the composition of matter IP, each targeting specific KRAS mutations in addition to wild-type KRAS cancers.

Our lead molecule BCN077 focuses on Colorectal & Pancreatic cancers through a new mechanism in oncogenic KRAS signaling. This novel mechanism restores the expression of a protein known as PTEN, thereby inducing rapid and potent apoptosis in the tumor cells. BCN Biosciences has other novel innovations including small molecule immune checkpoint inhibitors preventing immune oncology resistance. Because of such a broad impact, we believe it's critical to bring these therapies to clinic and give these patients a fighting chance.

ScaleHealth

SCALE

AREAS OF FOCUS: Health innovation marketplace connecting future forward health solutions.

INCUBATOR CONTACT: Johnny Lam

johnny@scalehealth.com

INCUBATOR DESCRIPTION:

ScaleHealth is a Health Innovation Marketplace where we use our proprietary technology platform and leading health experts to connect top health organizations with the world's best innovative solutions. Our process has the unique ability to provide industryleading insight coupled with hand-in-glove delivery of future-forward solutions.

Through ScaleHealth, decision makers at leading health organizations find tailored solutions through market-leading analytics, unique industry insight, and enhanced delivery. Innovators can utilize ScaleHealth to find business development opportunities and line-cutting access to customers, investors, partners, and service providers. Let us help you get to your next milestone. Let ScaleHealth accelerate your innovative solution. Looking forward to working with you and your team soon!

Rabble Health

TECH TITLE: myRabble PRESENTER: Aubrey Kelly

aubrey@rabblehealth.com

INCUBATOR AFFILIATION: ScaleHealth

LOS ANGELES INCUBATOR SHOWCASE COMPANY SUMMARIES

COMPANY DESCRIPTION:

Rabble Health is a Southern California-based, cancer-focused, digital health company that is about to close out its seed round to support a phase one commercial launch. As a CDC (Centers for Disease Control) Foundation award-winning platform, myRabble (available on iOS, google play, and web app) serves as a holistic digital navigator for cancer patients and their loved ones. Key features include a private social feed and the ability to access evidence-based information, relevant services, symptom tracker, mood tracker, and peer communities. By attracting a broad cohort of cancer patients, myRabble offers pharma clients a consented, engaged, and disease-specific population for education campaigns and clinical trial recruitment services. The initial commercial launch is aimed to improve the effectiveness of patient education campaigns and accelerate clinical trial recruitment, with growth possibilities to expand into additional cancer types and commercial revenue channels.

Aubrey Kelly, Founder & CEO, brings 15 years of pharma expertise with a deep and personal passion to help those diagnosed with cancer and their loved ones access the information, services, and resources they need to live their best journey forward.





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COMPANY SUMMARIES

COMPANY SUMMARIES

Quantgene

TECH TITLE: Unlocking the new era of Genomic Medicine

PRESENTER: Jo Bhakdi

jb@quantgene.com

INCUBATOR AFFILIATION: ScaleHealth

COMPANY DESCRIPTION:

Quantgene's mission is to extend the healthy human lifespan by ten years within the next ten years. Quantgene started in 2015 in a small UC Berkeley Lab under the leadership of Jo Bhakdi. Jo's theory was that most diseases can be detected far earlier by introducing quantitative science and incorporating a new level of precision into medical practice. Jo and his team at Quantgene have spent years building the industry's best team of pioneers and developing the Apollo medical intelligence system using Deep Human Genome sequencing. This system enables us to profile cfDNA in a patient's blood with near-absolute precision by allowing us to see mutational patterns of the disease down to a single molecule. This helps inform early cancer detection, prediction of disease onset as well as non-invasive treatment monitoring for longer healthier lives.

To date, no available technology has been able to fully utilize the life-saving information contained within the Deep Human Genome. We are determined to build a future, with our innovative technology, to save lives through early detection, better prevention, and more effective cures for all diseases, starting with cancer.

Preveta

TECH TITLE: Al Care Navigation

PRESENTER: Shirley Lee

shirley.lee@preveta.com

INCUBATOR AFFILIATION: ScaleHealth

COMPANY DESCRIPTION:

Preveta is a VC-backed care navigation software platform for specialty care. The platform operationalizes care pathways by upskilling nurses, medical assistants, and other staff to collect key real-world evidence data, for both clinical and patient experience insights. This data is used by Life-Science firms to improve patient access and outcomes. Examples of these insights include barriers to treatment, adherence to risk factors, and patient sentiment to treatments and adverse events.

Preveta's analytics identifies patients who are at risk of falling off their treatment journey. Once identified, the software guides users on how to contact these patients and provides them with a summary of what is needed to get them back on track. Guided workflows also prompt users to ask pertinent questions during remote patient interactions. This generates relevant data for providers to identify patients who could qualify for new treatments or need additional support to stay on existing treatments. Providers benefit further by having the data at a population level to risk segment and drive improved outcomes, while Life-Science firms get real-time insights into why patients do or do not stay on treatment.

Starburst

AREAS OF FOCUS:

Space Health encompasses everything that supports our ability to live in and travel long distances through space from regenerative medicine (cellular stress/repair/radiation/aging research, stem cell therapy, 3d bioprinting) to pharma (drug discovery and manufacturing) to synthetic bio (organic compounds/new medicines, modified foods, gene therapy, nutritional therapy) to wearables (health monitoring, medical devices, Al asst diagnosis) to precision medicine (big data, genomics, Al/ML).

And pharma companies are very interested in space because microgravity allows for the production of better crystal structures (tied to drug delivery/efficacy) and purity-critical medicines that can't be produced terrestrially.

INCUBATOR CONTACT:

INCUBATOR DESCRIPTION:

Elizabeth Reynolds, Program Director cis@starburst.aero

The Care In Space Challenge ("CIS Challenge") is a newly launched program supporting the development and commercialization of technologies and solutions that will make space accessible and safe for all of humanity. The CIS Challenge is a partnership between Starburst Aerospace, Axiom, and Boryung, supported by NASA's Human Research Program, Translational Research Institute for Space Health, BioServe Space Technologies, UC Space Health, Stanford, MIT, Harvard, Georgia Tech, California Life Sciences, Space for Humanity, AstroAccess, and many more.

This program is the first of its kind, leveraging the extreme conditions of space to not only drive innovation but to build viable businesses at the intersection of commercial space and biomedical science. It is increasingly evident that space, and in particular microgravity, has profound impacts on the speed of drug discovery, improvements in medical devices, and advancements related to regenerative medicine and life sciences. The application period for the inaugural CIS Challenge runs from 04/18/22 to 06/17/22. A Pitch Day event on 07/28/22 will afford selected applicants the opportunity to showcase their capabilities to aerospace and bioscience and bio/medtech industry experts who will assess entrepreneurial acumen and the scientific merit, business model viability, and overall feasibility of their solutions.

LA BioSpace

AREAS OF FOCUS:

- ▶ Biotherapeutics
- ► Medical Device
- ▶ Pharmaceuticals
- ▶ Digital Health

INCUBATOR CONTACT:

Howard Xu, Incubator Development and Programming

hxu3@calstatela.edu

Tariq Marji, Business Operations & Partnerships

tmarji@calstatela.edu

INCUBATOR DESCRIPTION:

LA BioSpace is leading Cal State LA's mission to promote a thriving bioscience ecosystem in the heart of Los Angeles. We provide emerging entrepreneurs with facilities, resources, training, and knowledge to launch startup ventures and spur regional economic development. LA BioSpace has 20,000 square feet of space, including coworking and private labs, coworking and private offices, and conference rooms. Centrally located within a short distance to USC, Caltech, and City of Hope, we have more than \$1 million of state-of-the-art, shared lab equipment, with the opportunity for additional shared resources/facilities and collaboration on the Cal State LA campus.

LA BioSpace believes that diversity positively impacts innovation and creates better organizations. We are actively looking for entrepreneurs who represent the gender, ethnic, and socioeconomic diversity of Los Angeles while inspiring entrepreneurship through programming in the Los Angeles region. Opening to new companies in August 2021, LA BioSpace is the region's premier incubator for life science venture creation. Our objective is to create industry-defining startups that improve human health while nurturing inclusive innovation within Cal State LA and the surrounding community.



LOS ANGELES INCUBATOR SHOWCASE



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COMPANY SUMMARIES

COMPANT SUMMARIE

Synova Therapeutics

TECH TITLE: Automated Cell Therapy Platform for Processing Fat to Stem Cell

PRESENTER: John Chi

jchi@synovalife.com

INCUBATOR AFFILIATION: ScaleHealth

COMPANY DESCRIPTION:

Synova Life Sciences helps people live longer and healthier lives by making it possible for everyone to get their stem cells. Stem cells have the potential to reverse chronic damage in the body: heart attack, stroke, osteoarthritis, and much more. People have 500 - 2500 times more stem cells in their fat than anywhere else in the body. Synova's patented device makes getting those stem cells out easy, getting rid of a complex 3-hour chemical procedure with a simple 3-minute chemical-free process that gets 1.5x more cells. Synova has a \$60B market opportunity in cosmetics and orthopedics and is working with some of the largest providers in those spaces. Additionally, Synova has created a platform for cell therapy that covers point-of-care, tissue engineering, stem cell banking, and clean-meat segments.

John Chi is a Stanford Electrical Engineer with a Master's in Biotechnology through Cal State LA, Pomona, and Fullerton, with 10+ years of experience working with stem cells. Rob Kent has 20+ years in medical devices and has brought 10 class 2 medical devices to market. Michel Haddad has secured over \$4 million in deals for Synova and built the channels that will allow Synova to scale quickly.

SPG Therapeutics

TECH TITLE: A New PROTAC Therapy for Treatment of Hidradenitis Suppurativa and Hormonally

Mediated Hair and Skin Conditions

PRESENTER: Zory Shaposhnik, PhD

zory.shaposhnik@ucla.edu

INCUBATOR AFFILIATION: LA BioSpace

COMPANY DESCRIPTION:

SPG Therapeutics was founded to disrupt the way dermatologists treat common but debilitating hormonal hair and skin conditions, including the orphan disease Hidradenitis Suppurativa and androgenetic alopecia using a novel topical therapeutic approach.

In aggregate, we are addressing a \$13B market opportunity where there has been little innovation in decades and the standard of care consists of generic drugs of limited efficacy and major safety issues with black box warnings. We are using a virtual development model along with an experienced team of dermatology experts to bring our lead compound SPG-3 to clinical proof-of-concept studies in hidradenitis using a very capital efficient strategy that would allow us to be able to exit to a strategic investor within 3 years and an \$8M investment or obtain FDA approval within 5 years.



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COMPANY SUMMARIES

CERN Corporation

TECH TITLE: Low Level Microbicidal Light for Treatment of Fungal and Bacterial Vaginosis, Without

<u>Drugs</u>

PRESENTER(S): Melanie Rena Santos, MD, FACOG, FPMRS

MelaniesantosMD@cerndevice.com

INCUBATOR AFFILIATION: LA BioSpace

COMPANY DESCRIPTION:

Cern Corporation is developing a non-drug treatment for fungal and bacterial vaginosis using low-level microbicidal light in the visible spectrum. The device addresses a significant unmet need for an effective science-based approach, not dependent on drugs/chemistries, to aid a population unable, or have a preference to, avoid conventional drug-based treatments which may not be appropriate based on condition. The Cern Device™, a prescription drug, is designed for home use, when needed, based on familiar, recurrent symptoms, and may act as a platform for telemedicine. Utility and Design Patents are granted with "Freedom to Operate" and validation includes in vitro/ex vivo, as well as in vivo safety.

The team includes Gregg Klang CEO, Founder/Inventor, Dr. Melanie Santos as CMO (Director of Pelvic Health at Providence), Luis De Taboada as CTO, Todd Peterson PhD, Chief Science Advisor (former Chief Science Officer, The Allen Institute). The Board of Directors includes Annette Walker, President of City of Hope (Top 100 people in healthcare) Dr. David Lagrew, MD OBGYN, Executive Medical Director, Women's Services Providence. A key clinical advisor is Dr. Jack Sobel, Dean of Medicine at Wayne State, Michigan, the foremost authority globally for research and treatment of fungal and bacterial GYN indications.



THE LUNDQUIST INSTITUTE

BioLabs LA at The Lundquist Institute

AREA(S) OF FOCUS: ▶ Biotechnology

LOS ANGELES INCUBATOR SHOWCASE COMPANY SUMMARIES

Pharmaceutical

▶ Health sciences

INCUBATOR: Lindsay Bourgeois, Director

lbourgeois@biolabs.io

INCUBATOR DESCRIPTION:

BioLabs LA at The Lundquist Institute, an 18,000 square foot flexible and state-of-the-art co-working lab and office space, is currently home to 30 companies and 95 resident scientists. Located on the third floor of an 80,000 sq ft research facility filled with more than \$1.5 million worth of shared equipment at The Lundquist Institute, members also have access to the amenities and resources of the entire institute, located on the Harbor-UCLA Medical Center in Torrance.

BioLabs LA tenants have access to over \$1.5 million of shared laboratory equipment, including quantitative PCR, high-performance liquid chromatography, freezers, fume hoods, plate readers, scales, centrifuges, microscopes, and more. The facility also offers member companies capital connections to industry-leading partners, as well as pre-eminent legal, regulatory, and scientific consultants.



LOS ANGELES INCUBATOR SHOWCASE



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COMPANY SUMMARIES

COMPANY SUMMARIES

Proteas Bioanalytics Inc.

TECH TITLE: The New Gold Standard in proteomics powered by the Proteas proprietary platform

PRESENTER(S): Spiros D. Garbis, PhD

s.d.garbis@proteas-bioanalytics.com

INCUBATOR AFFILIATION: BioLabs LA at the Lundquist Institute

COMPANY DESCRIPTION:

Proteas Bioanalytics Inc.'s mission is the development of transformative precision medicine platforms enabling unsurpassed analytical performance from a drop of blood and a single cell. Diseases are predominately triggered, not by heredity, but by the effects of sustained environmental and lifestyle factors on thousands of individual proteins. Being able to observe and quantify these proteins in human blood and single cells derived from tissue biopsy constitutes the most useful means of detecting active disease and response to treatments. We know of no other proteomics analysis that performs anywhere near this level. Currently used proteomics technologies do not meet stringent FDA performance criteria because their methods cannot effectively coanalyze human blood, tissue, and single cells.

Proteas Bioanalytics Inc., however, has developed proteomics platforms to detect human diseases at their earliest stage, before the onset of symptoms, from a single drop of blood. Our advanced technologies will also provide objective guidance regarding treatment options and efficacy. We intend to dramatically reshape early diagnosis and treatment across multiple diseases.

Karma Biotechnologies, Inc.

TECH TITLE: Precision immunotherapies to treat autoimmune diseases

PRESENTER(S): Andrew Gray, PhD

andrew@karmabiotech.com

INCUBATOR AFFILIATION: BioLabs LA at the Lundquist Institute

COMPANY DESCRIPTION:

Karma Biotechnologies is a Los Angeles startup dedicated to solving autoimmunity, allergies, and food sensitivities with our Xavine™ precision immunotherapy platform. General immune suppression is still the standard of care for most autoimmune disease patients; there is a critical unmet need to develop antigen-specific therapies that inhibit only the disease-causing rogue immune cells. To meet this need, Karma is leveraging expertise in immunology and lipid nanoparticle engineering to develop tolerogenic immunotherapies that elicit antigen-specific immune tolerance in vivo.

The first three Xavines™ in development are designed to treat and prevent the autoimmune diseases myasthenia gravis, multiple sclerosis, and autoimmune encephalitis. Karma expects to open a Series A round in Q3 2022 to facilitate IND-enabling studies for these first three products, expand the Xavine™ pipeline beyond them, and build out a dedicated R&D facility and corporate headquarters. Karma anticipates carrying out first-in-human clinical trials by 2025.

Analytomix

TECH TITLE: Smart molecules for healing

PRESENTER(S): Mohammed Atefi & Carlos Pereira

guto@gpspar.com.br, matefi@analytomix.com

INCUBATOR AFFILIATION:BioLabs LA at the LundquistInstitute

COMPANY DESCRIPTION:

Our purpose is to develop novel smart molecules, through the combination of several innovative and novel techniques, that can be used for therapeutic and diagnostic applications. Our smart molecules target cancer cells by binding to specific cancer cell markers with high affinity and specificity. These molecules are smaller, easier to produce, and more cost-efficient than antibodies and other peptide agents.

Our smart molecules can deliver currently available drugs directly to cancer cells, enhancing the function and extending the life of current cancer drugs. Our technology can be adapted to make different smart molecules that recognize and bind a wide range of cancer targets, making them versatile cancer therapeutic agents.



Magnify Incubator (CNSI at UCLA)

AREA(S) OF FOCUS: The Magnify Incubator serves scientific start-ups from all sectors including:

▶ Pharmaceuticals

► Medtech

► Sustainability

Advanced materials

INCUBATOR: Contact the Magnify Team to learn more about our application process, space availabilities, or to connect with our companies at magnify@cnsi.ucla.edu

INCUBATOR DESCRIPTION:

The Magnify Incubator offers entrepreneurs a unique opportunity to grow their businesses at the California NanoSystems Institute (CNSI), within the preeminent research ecosystem of the UCLA campus. Magnify is located adjacent to the schools of engineering, physical sciences, life sciences, and medicine and houses physical space for companies and affords entrepreneurs utilization of our robust technical and administrative infrastructure.

Magnify's co-working laboratory and office spaces are designed to quickly launch startups off the ground. Flexible laboratory spaces feature lab benches, private lab suites, and equipment rooms. Shared BSL-2 tissue culture rooms offer access to biosafety cabinets, incubators, and freezers in addition to a variety of shared equipment. Other amenities include innovative facilities featuring fume hoods, autoclaves, glass wash facilities, hazardous waste disposal, and more. The office area provides dedicated workstations, hot desks, and private offices for administrative activities. Magnify companies can host clients and investors in one of many professional meeting spaces.

Magnify companies also have access to state-of-the-art scientific equipment and advanced instrumentation through CNSI's Technology Centers, which include the UCLA NanoLab, the Molecular Screening Shared Resource Lab, and a suite of imaging facilities specializing in advanced light microscopy/spectroscopy, electron imaging, and nano and pico characterization.



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COMPANY SUMMARIES

Dalton Bioanalytics, Inc.

TECH TITLE: Omni-MS®

PRESENTER(S): Seungjun Yeo

Seungjun.yeo@daltonbioanalytics.com

INCUBATOR AFFILIATION: Magnify Incubator (CNSI at UCLA)

COMPANY DESCRIPTION:

Dalton Bioanalytics is a seed-stage company formed in 2019 to accelerate the world's transition into preventative healthcare. Understanding global biochemical composition is essential to evaluating overall health conditions. However, global profiling of biochemicals has been considered infeasible due to the wide biochemical diversity even in a single sample.

Dalton Bioanalytics' Omni-MS® platform analyzes nearly all major classes of bio-relevant molecules at a fraction of the costs required by traditional multi-omic assays. Utilizing computational analysis of large data sets generated by tried-and-true liquid chromatography-mass spectrometry (LC-MS), Dalton Bioanalytics enabled accurate identification and quantification of protein, lipids, metabolites, electrolytes, nutrients, environmental chemicals, and other small molecules in a high-throughput single-shot analysis. Their Omni-MS® is commercialized in the research market to generate data and revenue to enter the clinical market to save lives.

Partillion Bioscience

Nanovials – Single-Cell Analysis Platform TECH TITLE:

PRESENTER(S): Joe de Rutte

joe@partillion.com

INCUBATOR AFFILIATION: Magnify Incubator (CNSI at UCLA)

COMPANY DESCRIPTION:

Partillion Bioscience is a life science research tools company whose mission is to democratize advanced single-cell assays. Realizing the large barrier to translating traditional microfluidic technologies to commercial products, Partillion's co-founders Dr. Joseph de Rutte and Dr. Dino Di Carlo set out to create a new approach that unlocks multi-omic cell biology at the level of individual cells, while leveraging instruments that researchers already have in their labs. Their solution, coined "nanovials," enables researchers to load single cells into millions of cell-sized particles that act as both Petri dishes and sensors to measure single-cell activity. Realizing the transformative potential of the technology and reinforced by winning the top Innovation Award from the Society for Laboratory Automation and Screening (SLAS) in early 2020, Drs. de Rutte and Di Carlo incorporated Partillion Bioscience in April 2020.

Less than two years after incorporation, Partillion launched its first commercial product in February of 2022, won the Best New Product Award at SLAS 2022, and secured two of the top ten biopharmaceutical companies as early customers. Partillion's products are driving the next wave of discoveries for advanced cell and monoclonal antibody therapies and improving cell line development for scaling of biologic manufacturing.



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COMPANY SUMMARIES

Pluto Immunotherapeutics, Inc.

TECH TITLE: Cell therapy, unlimited.

PRESENTER(S): Amelie Montel-Hagen, PhD amelie@plutoimmuno.com

INCUBATOR AFFILIATION: Magnify Incubator (CNSI at UCLA)

COMPANY DESCRIPTION:

Pluto Immunotherapeutics, Inc. produces tumor-targeted T cell therapies entirely in vitro from pluripotent stem cells (PSC) using a platform technology that the company's founders co-developed at UCLA, the artificial thymic organoid (ATO) system. This approach will allow access to therapy that is immediately available with a range of functional characteristics to enhance efficacy and safety against solid tumors. Unlimited generation of "off-the-shelf" T cell therapies is the future of cellular immunotherapy and will allow these treatments to be not only more effective across a wide range of cancers, but also more accessible to those who need them.



LabLaunch

INCUBATOR: Llewellyn Cox

LOS ANGELES INCUBATOR SHOWCASE COMPANY SUMMARIES

llewellyn@lablaunch.org

INCUBATOR DESCRIPTION:

Lab Launch creates and operates affordable, quality laboratories for the life sciences industry. We run our laboratory for startup biotech companies in Monrovia, CA, and we work with other organizations to help them develop and operate their own shared lab spaces. Founded by scientists, for scientists, we bring over 15 years of experience and a detail-focused approach to developing and running the most effective facilities to support the innovation and commercialization of biotechnology.

Both in our self-operated facilities and in the spaces we build and run for others, our focus is on providing an environment where scientists enjoy coming to work.



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COMPANY SUMMARIES

Salve Therapeutics

TECH TITLE: VirCAD©: an HPC-powered, AI/ML-capable bioCAD platform for viral bioengineering

PRESENTER(S): Stefan N. Lukianov, AM MS Stefan.lukianov@salvetx.com

INCUBATOR/INSTITUTION AFFILIATION: Lab Launch, Inc./The Johns Hopkins University

COMPANY DESCRIPTION:

Current gene therapies are mostly limited to plasmid-based and Adeno-associated virus variants with inefficient response rates and limited use. Better viral delivery methods would expand the available gene therapy tool kit to produce precision medicines for intractable and incurable diseases.

We are building VirCAD® (Virus Computer-Aided Design), an HPC-powered, cloud-accessible, AI/ML-capable bioCAD platform to mine, design, model, and simulate new viral drugs for better cell and gene therapies, vaccines, oncolytics, and antibiotics. These modalities will treat and potentially cure the many inherited and acquired genetic disorders afflicting patients due to their therapeutic specificity, efficiency, and customizability.

PathoGene

TECH TITLE: PathoGene AutoIVD platform & AutoIVD sepsis test panel

PRESENTER(S): Joseph Mickel

JosephMickel@PathoGene.com

INCUBATOR AFFILIATION: LabLaunch

COMPANY DESCRIPTION:

PathoGene, Inc. is a private, seed-stage precision MedTech startup headquartered in Los Angeles, with R&D operations located in Monrovia, California. We are developing a sample-to-answer in vitro diagnostic medical device that detects and identifies all known microscopic human pathogens along with their antimicrobial resistance profiles on a single 6-hour test panel. To do this, we leverage robotic automation, metagenomic nanopore sequencing, and cloud computing technologies to report a molecular diagnosis to care providers and disease surveillance systems in real-time. Our goal is to deliver the necessary diagnostic tools for doctors and medical staff to make optimal treatment decisions that can ultimately improve public health as a whole, and we believe that our sample-to-answer technology can become the global standard of care for diagnosing infectious diseases.

The current global standard of care for infectious disease diagnostics and antimicrobial resistance profiling in hospitals is microbiological culture with sensitivity testing. It has a 60-hour turnaround time and a high false-negative rate, which leads to increased patient mortality, longer hospital stays, and higher healthcare costs for patients. Our tests will address these problems by providing clinicians with actionable information to help them select the best antimicrobial drugs to prescribe to patients promptly.



LOS ANGELES **INCUBATOR SHOWCASE**



by The Lundquist Institute

COMPANY SUMMARIES

Paradigm Immunotherapeutics

LOS ANGELES INCUBATOR SHOWCASE COMPANY SUMMARIES

TECH TITLE: SARS CoV-2/COVID-19 "Virtual Mask"/Prophylactic and therapeutic for PASC/"Long

COVID"

PRESENTER(S): Dr. Neil Bodie

drbodie@paradigmimmunotherapeutics.com

INCUBATOR AFFILIATION: Lab Launch Monrovia

COMPANY DESCRIPTION:

Paradigm Immunotherapeutics has developed several ACE2 chimeric mAbs to provide passive sterilizing immunity for immunocompromised individuals and other high-risk groups from being infected with SARS CoV-2/COVID-19. Paradigm's mAbs have been optimized for picomolar affinity against the SARS CoV-2 Receptor Binding Domain (RBD), blocking the binding of multiple variants (Alpha, Delta, and Omicron) from binding to the SARS CoV-2 receptor, ACE2.

Paradigm has demonstrated that its mAbs are effective in BIACore SPR, surrogate Viral Neutralization Test (sVNT), and against live SARS CoV-2 in PRNT assays. Human organoid testing is pending. These mAbs have been optimized to be extremely variant resistant, both to all current VOCs, but extensive in silico modeling against possible future variants. In addition, as prophylactic mAbs, Paradigm's mAbs are utilizing the newest, most advanced IgG Fc silencing technology to "do no harm," while also optimizing Paradigm's mAbs for extended half-life. Since most of the SARS CoV-2 VOC have arisen due to chronic infections (>100 days) in immunocompromised people, protecting this venerable population may prevent future SARS CoV-2 VOCs and help protect all of us from future SARS CoV-2 variants. Paradigm is also developing treatments for PASC/"Long COVID."



NUCLEATE AND UCLA PDA SHOWCASE



PROGRAMS ESPECIALLY FOR POSTDOCS AND GRADUATE STUDENTS



SCIENCE SUMMIT TWENTY22

NUCLEATE AND UCLA PDA SHOWCASE



PROGRAMS ESPECIALLY FOR POSTDOCS AND GRADUATE STUDENTS

AGENDA

SPEAKERS AND PANELISTS (Listed in order of appearance)

10:00am FROM ACADEMIA TO INDUSTRY: HOW TO ORIENT YOURSELF TO PHARMA AND BIOTECH JOB MARKETS

Pejman Azarmina, Director, Physician-Scientist Career Development Office, DGSOM; Former Senior Medical Director, Pfizer

10:30am WORKSHOP WITH AUTOBAHN LABS: STRATEGIES FOR **DISCOVERY AND DEVELOPMENT OF NOVEL THERAPIES**

Tom Novak, CSO

(A Samsara BioCapital/Evotec Incubator)

A CAREER JOURNEY INTO WHITE SPACE

Laurens Kruidenier, CSO, Cellarity (A Flagship Pioneering Company)

12:00pm WORKSHOP WITH PEARL COHEN LLP: FTO/DUE DILIGENCE

FROM AN INVESTOR PERSPECTIVE

Mark Cohen, Senior Partner & Chair of Life Science Practice Group, Pearl Cohen Zedek Latzer Baratz, LLP

12:30pm DIVERSITY, EQUITY AND INCLUSION STRATEGIES FOR

RECRUITMENT AND RETENTION IN LIFE SCIENCES Main Ballroom

Moderator: Angela Talton, SVP and Chief Diversity, Equity and Inclusion Officer, City of Hope

John Balchunas, Workforce Director, NIIMBL Helena Hansen, Professor and Chair, Health Equity in Translational Social Science (HETSS), UCLA

Tracy Johnson, Dean, Life Science Division, UCLA

Britt Kopping, Head of Recruiting Strategy for R&D Americas, Genentech

Perika Sampson, Global Head of Inclusion & Diversity, Gilead Sciences

LUNCH/NETWORKING

PITCH SHOWCASE: NUCLEATE ACTIVATOR PROGRAM

INTRODUCTION & OVERVIEW OF NUCLEATE'S

ACTIVATOR PROGRAM Alex Kim, UCLA

Bryan Gerber, Caltech

2:30pm PITCH 1: REBREATHE

G-Protein Coupled Receptor Stimulation for Opioid Addiction Treatment Evgeny Bondarenko, UCLA

Anjali Vahalia, KGI

PITCH 2: LYMPHAGEN

Retinoic Acid to Prevent Post-Surgical Lymphedema

Alex Wong, City of Hope Tiffany Tran, UCLA

Matt Chenoweth, UCLA Fielding Matthew Bleich, UCLA Anderson

PITCH 3: GAMMUNITY

Memory CAR-Gamma Delta T Cells Against Solid Tumors

Derek Lee, UCLA Yang (Alice) Zhou, UCLA Zach Dunn, USC Yifan (Anna) Ma, USC Marshall

PITCH 4: CURIT BIOTECH-LA

Anti-CD64 Human Cytolytic Fusion Proteins (hCFPs) for the Treatment of Acute Myeloid Leukemia

Fleury Nsole Biteghe, Cedars-Sinai

Stefan Barth, UCT Anuksha Arsh Gulati, KGI Olusiji Alex Akinrinmade, UCT

PITCH 5: COGITO BIOSYSTEMS

Focused Ultrasound Delivery of RNA Therapeutics

Joseph Alzagatiti, UCLA/UCSB

Victor Yu, UCLA

Catherine Sim, UCLA Anderson, Takeda

PITCH 6: ORAFAY

Microneedle Therapy for the Treatment of Reverse Gum

Deterioration

Cher Zhang, UCLA Samueli Crystal Xiao, UCLA Samueli Raul Hernandez, UCLA Anderson Martin Keyt, UCLA Anderson

BREAK/NETWORKING

4:10pm PANEL DISCUSSION: LIFE SCIENCE ENTREPRENEURSHIP,

THE STARTUP JOURNEY, AND BEYOND

Moderator: Amelia Palermo, UCLA Bassil Dahiyat, President and CEO, Xencor

Helen Kim, Senior Managing Director, Vida Ventures Sarkis Mazmanian, Luis B. and Nelly Soux Professor of

Microbiology, Caltech

Bryan Yoo, CEO, Nuanced Health

PROGRAM DESCRIPTIONS

NUCLEATE a free collaborative student-run organization that facilitates the formation of pioneering life science companies UCLA PDA (POSTDOC ASSOCIATION) a volunteer organization run by postdocs that aims to build, enrich, and support the larger community of postdoctoral scholars at UCLA



UCLA

PEJMAN AZARMINA

Director, Physician-Scientist Career Development Office, DGSOM; Former Senior Medical Director, Pfizer

Dr. Pejman Azarmina is the Director of the Physician Scientist Career Development Office at the DGSOM's Dean's Office and a faculty at the Department of Medicine. Prior to joining UCLA in 2020, most of his career was in the industry, most notably at Pfizer for 10 years in roles ranging from Outcomes and Evaluation Lead, US Medical Director and US Medical Lead supporting a highly diverse portfolio of products. He also served as a Senior Medical Director at CardioDx, a genomic diagnostic company based in the Bay Area and Avanir Pharmaceutical, a subsidiary of Otsuka. In his career, Dr. Azarmina interviewed hundreds of applicants for various industry roles and provided mentorship, preceptorship and career coaching to applicants and peers at various stages of their careers. He has delivered workshops on "Academia to Industry Career Transitions" in New York, San Francisco and London to graduate students, postdocs and early career MDs and scientists.



TOM NOVAK

CSO, Autobahn Labs

Dr. Tom Novak is the Chief Scientific Officer of Autobahn Labs. Prior to joining Autobahn Labs, he was Vice President of Life Sciences Business Development at Cellular Dynamics International (CDI), the world's leading supplier of stem cell-derived, terminally differentiated cells. In addition, he was the Principal Investigator on CDI's \$16MM grant from the California Institute for Regenerative Medicine (CIRM) to reprogram samples from 3000 patients with a variety of multigenic disorders. As part of CIRM's "Human iPSC Initiative" he was also the PI on CDI's \$6.3MM subcontract with the Coriell Institute for Medical Research to provide stocks of iPSC clones for commercial sale. Prior to joining CDI in 2012, Dr. Novak was Senior Vice President of Research and Development at Fate Therapeutics, a San Diego-based biotech developing small molecules and biologics to induce proliferation and differentiation of adult stem cells to replace tissue lost to aging or disease. From 2001 to 2010, Dr. Novak held a number of positions at Roche Palo Alto, including Senior Director and Head of Discovery Technologies. In 2009, he was chosen to lead a global team of scientists to evaluate opportunities to utilize stem cells as research tools. This ultimately led to the initiation of three collaborations (CDI, iSTEM, and Harvard Stem Cell Institute) centered around nonclinical safety, neuroscience, and cardiovascular diseases, respectively,

Dr. Novak earned an AB in biology and chemistry, magna cum laude, from Amherst College (Amherst, MA) and received his Ph.D. in molecular biology and immunology from Caltech (Pasadena, CA). After completing post-doctoral training in immunobiology at Yale University, he began his pharmaceutical career in 1994 as a research scientist at Wyeth-Ayerst in Princeton, NJ.

NUCLEATE AND UCLA PDA SHOWCASE

PROGRAMS ESPECIALLY FOR POSTDOCS AND GRADUATE STUDENTS



BIOSCIENCE ECOSYSTEM SUMMIT TWENTY22

NUCLEATE AND UCLA PDA SHOWCASE



PROGRAMS ESPECIALLY FOR POSTDOCS AND GRADUATE STUDENTS

SPEAKERS AND PANELISTS

SPEAKERS AND PANELISTS



Cellarity

LAURENS KRUIDENIER

CSO, Cellarity

Laurens Kruidenier joined Cellarity in December 2021 as CSO. Bringing over 25 years of experience in discovery research, both in academic settings as well as in the life sciences industry, Laurens leads the continued evolution of Cellarity's platform and pipeline. Laurens also oversees cross functional integration across all aspects of computation, drug discovery and optimization and he contributes to reinforce Cellarity's external presence in the scientific and investor community.

Laurens was previously CSO at Prometheus Biosciences (formerly Precision IBD) in San Diego CA, the first precision medicine company in the immune-mediated disease space. At Prometheus, he helped mature the company from an early, seed-stage Cedars-Sinai-spinout into a Nasdaq-listed (RXDX), platform-driven portfolio company with 3 active Ph2 clinical trials.

Previously, Laurens was Vice President of Discovery at Second Genome (San Francisco, CA), where he was responsible for a portfolio of microbiome programs. Before that, he served as Head of GI Immunology Research at Takeda Pharmaceuticals (San Diego, CA), where he was responsible for developing the global discovery research and business development strategy into inflammatory diseases of the bowel. Earlier in his career, Laurens held various positions at various discovery units at GlaxoSmithKline (London, UK), where he led preclinical teams and projects in immuno-inflammation, epigenetic and protein degradation drug discovery. He completed his post-doctoral training at the University of London (UK). Over the years, his research has resulted in multiple publications in top tier scientific journals, including Nature.

Laurens holds an M.Sc. in Medical Biology from Utrecht University and a Ph.D. in Mucosal Immunology from Leiden University, both in the Netherlands. In his spare time, Laurens enjoys modern & contemporary art, 1970s movies, hiking, sailing, and black & white photography.



PEARL COHEN

MARK S. COHEN
Senior Partner & Chair of Life Science Practice Group, Pearl Cohen Zedek Latzer Baratz, LLP

Mark S. Cohen is Senior Partner & Chair of Life Science Practice Group, Pearl Cohen Zedek Latzer Baratz, LLP and a member of the firm's executive committee. He is admitted to the New York bar, and he is a registered patent attorney before the United States Patent and Trademark Office. Mark's practice focuses on intellectual property management, strategic advice, patent prosecution, licensing, commercial transactions, opinion and due diligence matters in the bio/pharmaceutical, chemical and medical device areas. Mark was a board member of Masthercell Global Inc., a subsidiary of Orgenesis Inc. (Nasdaq: ORGS), a manufacturer, service provider and developer of advanced cell therapies which was acquired by Catalent Inc. Mark was vice chairman of Akari Therapeutics, Plc. (NASDAQ: AKTX), a biopharmaceutical company that is developing anti-complement and anti-inflammatory molecules. His clients that he represents range from start-up companies to Fortune 500 companies. Mark was named to IAM Strategy 300: The World's Leading IP Strategists 2021 and 2020, and New York Metro Super Lawyers for 2021, 2020, and 2019 as a top-rated IP lawyer in New York.



⊘xencor

BASSIL DAHIYAT
President and CEO, Xencor

Bassil Dahiyat, Ph.D., has been Xencor's president and chief executive officer since its incorporation in August 1997, and is the co-founder of Xencor and co-inventor of Xencor's breakthrough XmAb® technology. He has led the Company in raising over \$700 million in public and private financing, creating a diverse portfolio of clinical-stage antibody programs for the treatment of life-threatening and debilitating diseases, and establishing alliances with leading biopharmaceutical companies that have resulted in three marketed antibody therapeutics. He has co-authored numerous scientific papers in the fields of protein design and drug delivery, is an inventor of over 30 U.S. and numerous foreign patents and has received scientific awards from the American Chemical Society, the Controlled Release Society, the Protein Society and Caltech. Dr. Dahiyat received a Ph.D. in chemistry from Caltech and B.S. and M.S.E. degrees in biomedical engineering from Johns Hopkins University.











Caltech

SARKIS MAZMANIAN

Luis B. and Nelly Soux Professor of Microbiology, Caltech

Sarkis K Mazmanian, PhD, is the Luis & Nelly Soux Professor of Microbiology in the Division of Biology & Biological Engineering at the California Institute of Technology (Caltech). He is a Phi Beta Kappa graduate from the University of California, Los Angeles, where Dr. Mazmanian also received his doctoral training in microbiology and immunology studying the mechanism by which Gram-positive pathogens anchor surface protein adhesins during bacterial infection. He was a Helen Hay Whitney Post-doctoral Fellow at Harvard Medical School where he studied how symbiotic bacteria promote healthy maturation of the immune system. He was promoted to assistant professor at Harvard Medical School in 2006, and later that year moved to Caltech to start his independent laboratory. His laboratory currently focuses on the study of beneficial bacterial molecules from the human gut microbiome as novel therapies for immunologic and neurologic disorders. This research has led to identification of novel drug candidates being developed for Inflammatory Bowel Disease, Autism Spectrum Disorder, and Parkinson's disease. He is a founder of three biotech companies and serves on the Scientific Advisory Board of over a dozen companies, academic centers and not-for-profit foundations. Most importantly, Dr. Mazmanian has trained numerous students and fellows who have gone on to successful independent careers in academia, industry, and medicine.





BRYAN YOO CEO, Nuanced Health

Bryan Yoo received his undergraduate degree from Stanford University and his PhD at Caltech. Prior to his PhD, he worked as an early stage startup operator for Zepp Labs and SportzPeak which developed sports and exercise consumer technologies. During his PhD, he spent a summer as a fellow at Flagship Pioneering where he was involved in the ideation of new biotech ventures.

At Caltech, he was in Sarkis Mazmanian's lab studying physiological interactions between the gut microbiome and the host in health and disease. He and Sarkis co-founded Nuanced Health in 2020 with the thought that all drug discovery and development should consider how the microbiome fundamentally alters underlying mechanisms of disease and drug responses. Nuanced Health is reprogramming mouse models to reinvent the drug development process to discover, develop, and evolve therapeutics through the lens of the microbiome. By systematically reintroducing human microbial variability back into mouse models of disease, we believe that we can elucidate the complex molecular, cellular, and physiological impact of the microbiome.



NUCLEATE AND UCLA PDA SHOWCASE



PROGRAMS ESPECIALLY FOR POSTDOCS AND GRADUATE STUDENTS



NUCLEATE AND UCLA PDA SHOWCASE PROGRAMS ESPECIALLY FOR POSTDOCS AND GRADUATE STUDENTS



COMPANY SUMMARIES

Cogito Biosystems

SHORT DESCRIPTION: Focused Ultrasound Delivery of RNA Therapeutics

PRESENTERS: Joseph Alzagatiti (UCLA/UCSB)

Catherine Sim (UCLA Anderson, Takeda)

Victor Yu (UCLA)

UNIVERSITY/INSTITUTE AFFILIATIONS: UCLA, UCSB

COMPANY DESCRIPTION: Focused Ultrasound Delivery of a natural protein carrier of RNAs. FUDA achieves specific RNA therapeutic delivery to neurons by reversibly opening the blood-brain barrier in humans via focused ultrasound for delivery of RNA packaged in protein carriers naturally expressed in humans. Specifically, we focus on tailored production of natural protein carriers with custom RNAs for non-invasive and non-viral delivery into the brain with focused ultrasound machines (think: mass production capability and safety of producing human insulin from bacteria, but for brain therapeutics).

Orafay

SHORT DESCRIPTION: Microneedle Therapy for the Treatment of Reverse

Gum Deterioration

PRESENTERS: Cher Zhang (UCLA Samueli)

Crystal Xiao (UCLA Samueli) Raul Hernandez (UCLA Anderson) Martin Keyt (UCLA Anderson)

UNIVERSITY/INSTITUTE AFFILIATIONS: UCLA

COMPANY DESCRIPTION: To address the clinical need for periodontal treatment and regeneration, we created a microneedle therapy that can stop and reverse gum deterioration.

ReBreathe

SHORT DESCRIPTION: G-Protein Coupled Receptor Stimulation for Opioid

Addiction Treatment

PRESENTERS: Evgeny Bondarenko (UCLA)

Anjali Vahalia (KGI)

UNIVERSITY/INSTITUTE AFFILIATIONS: UCLA, KGI

COMPANY DESCRIPTION: We have discovered the activation of 3 different excitatory G-protein coupled receptors effectively increases opioid tolerance, yet these receptors are unlikely to be commercialized due to lack of IP or ligand's inability to cross the blood-brain barrier. We're awaiting NIH funding to sequence neurons in both regions to determine the expression of all existing excitatory G-protein coupled receptors. Once we identify successful candidates, we will obtain IP for these receptors and will commence drug discovery to develop an effective therapeutic.

COMPANY SUMMARIES CONTINUED

curIT Biotech-LA

SHORT DESCRIPTION: Anti-CD64 Human Cytolytic Fusion Proteins (hCFPs) for the

Treatment of Acute Myeloid Leukemia

PRESENTERS: Fleury Nsole Biteghe (Cedars-Sinai)

Anuksha Arsh Gulati (KGI) Olusiji Alex Akinrinmade (UCT)

Stefan Barth (UCT)

UNIVERSITY/INSTITUTE AFFILIATIONS: Cedars-Sinai, KGI, UCT

COMPANY DESCRIPTION: A novel anti-CD64-based targeted therapy for the treatment of Acute Myeloid Leukemia (AML; is a type of cancer of the blood and bone marrow which account for 62% of all leukemia-related deaths in the USA). This technology offers a promising new strategy for the targeted treatment of CD64-positive leukemia.

Lymphagen

SHORT DESCRIPTION: Retinoic Acid to Prevent Post- Surgical Lymphadema

PRESENTERS: Alex Wong (City of Hope)

Tiffany Tran (UCLA)

Matt Chenoweth (UCLA Fielding)
Matthew Bleich (UCLA Anderson)

UNIVERSITY/INSTITUTE AFFILIATIONS: City of Hope, UCLA

COMPANY DESCRIPTION: Lymphedema is a debilitating condition characterized by swelling and pain in regions of the body caused by damage or blockage of the lymphatic system. This most commonly occurs in cancer patients who have had surgical removal of lymph nodes or tumors near lymphatic vessels as part of their treatment. Post-surgical lymphedema affects an estimated 3 million people in the United States alone. Dr. Alex Wong's laboratory discovered that treatment of mice with 9-cis retinoic acid (RA) prevented post-surgical lymphedema, promoted lymphangiogenesis, and does not cause tumor metastasis in mice. With proven efficacy in mice and as an already FDA-approved drug, RA is a promising therapy for post-surgical lymphedema in cancer patients.

Gammunity

SHORT DESCRIPTION: Memory CARGamma Delta T Cells Against Solid Tumors

PRESENTERS: Derek Lee (UCLA)

Yang (Alice) Zhou (UCLA) Zach Dunn (USC)

Yifan (Anna) Ma (USC Marshall)

UNIVERSITY/INSTITUTE AFFILIATIONS: UCLA, KGI

COMPANY DESCRIPTION: Gamma delta $(\gamma\delta)$ T cells are a unique subpopulation of T cells, composing 1-5% of peripheral T cells, that recognize phosphoantigens rather than peptidemajor histocompatibility complexes (pMHC) and specifically lyse numerous solid and liquid cancers. Using our novel approach to engineering and culturing T cells, we can generate CAR- $\gamma\delta$ T cells that exhibit reduced exhaustion, enhanced persistence, and a less differentiated memory status compared to CAR- $\gamma\delta$ T cells produced by current methods. Our CAR- $\gamma\delta$ T cell products possess TCR and CAR-dependent functionality and tumor-killing, with potent antibody-dependent cellular cytotoxicity (ADCC) in a CD16-dependent mechanism, as well as limited immunogenicity.



In Memoriam BRIAN ROE

Brian Roe, director of the industry research and material transfer team at the UCLA Technology Development Group, died March 23. He was 41.

A member of the the group since 2008, Roe was dedicated to his work as an industry contracts officer and by 2012, he was promoted to director. In this role, Roe oversaw the operations of Industry Sponsored Research and Material Transfer, a team of 12. He helped navigate the potential risks and complex transactions that come with the industry partnerships that support UCLA's research ecosystem.

Some of Roe's major achievements included leading the collaborations between Apple and the UCLA Depression Grand Challenge and the UCLA and Amazon Science Hub for Humanity and Artificial Intelligence.

"Brian will be sorely missed by peers and faculty alike," said Amir Naiberg, associate vice chancellor, CEO and president of the UCLA Technology Development Group. "In recent years, his leadership brought significant achievements and new highs to UCLA's collaborative work with Industry. He will be missed, but the results of his work will be with us for many years to come."

Roe was an avid sports fan who played high school football and was a triathlete. He earned his bachelor's degree in political science from UC San Diego and his law degree from Loyola Law School.

He is survived by his mother, Irini Pappas, his stepfather James Pappas and his younger brother, Nick Pappas.

In lieu of flowers, the family requests that **donations** be made in his name to the Los Angeles-based **AIDS** Healthcare Foundation.

The LABEST 2022 Team dedicates this event to Brian. His kind and generous spirit will always be remembered.

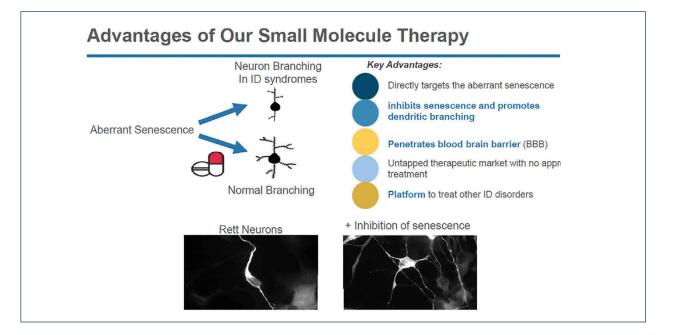


FEATURED UCLA TECHNOLOGIES



Treatment for Intellectual Disability Syndrome (Case ID: 2019-720 and 2020-777)

Inventors: Bill Lowry; Mike Jung; Bennett Novitch; Valerie Arboleda



INNOVATION

Intellectual Disability (ID) affects more than 100 million people globally and imposes a heavy economic burden of \$14.7 billion annually on families and health systems. IDs, including Rett syndrome, Down syndrome, and fetal alcohol syndrome, are caused by mutations in epigenetic regulatory proteins. Recently these mutations have been implicated in causing the premature aging, or senescence, of neurons primarily located in the brain. However, drug development to treat such disorders has been significantly hindered by the difficulty in developing therapeutic compounds that are able to reach neurons in the brain. This is because of a tightly regulated cellular barrier that divides the vascular system from the central nervous system called the blood-brain barrier (BBB). Therefore, towards the development of curative drugs for IDs, crossing the BBB is of crucial importance.

UCLA researchers, led by Dr. William Lowry and Dr. Michael Jung, have discovered a library of compounds with the potential to reverse neuronal senescence and treat ID. Focusing on Rett syndrome for their studies, they developed Rett-derived human organoid models that allow screening of senescence inhibitors in the context of ID. Applying these models, they screened 45 molecules for senescence inhibition and identified 14 that successfully inhibited senescence, promoted dendritic branching, and restored brainwaves. Of those molecules, one novel compound was found to effectively penetrate BBB in-vivo in murine models.

These results indicate that compounds that reverse neuronal senescence and penetrate BBB could be effective for treating Rett syndrome. While other ID syndromes are caused by mutations in different epigenetic regulatory proteins, they all present with similar types of neuronal stress and similar neurological phenotypes. Therefore, the compounds identified here that reverse neuronal stress in models of Rett Syndrome could also alleviate ID syndrome symptoms in a wide variety of disorders.

POTENTIAL APPLICATIONS

- ▶ Novel long-term therapy for ID
- Human organoid models can be utilized in high-throughput platforms to develop novel therapeutic strategies for ID and broader CNS diseases
- ► High therapeutic value of anti-senescence drugs towards treating age-related diseases such as Alzheimer's or atherosclerosis

ADVANTAGES

- Compounds directly target the root cause of ID by reversing senescence
- ► Compounds serve an untapped therapeutic market with no currently approved treatment
- ▶ Organoids are physiologically relevant in vitro models

For more information, contact:

John Lambert
Business Development Officer
john.lambert@tdq.ucla.edu

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FEATURED UCLA TECHNOLOGIES



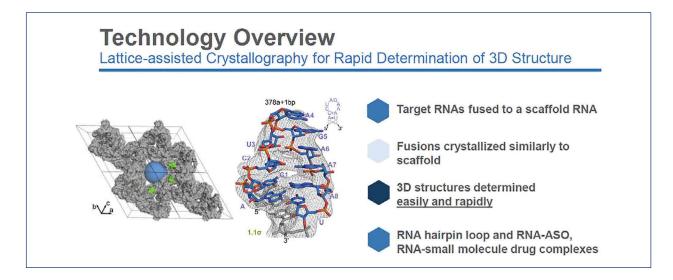


FEATURED UCLA TECHNOLOGIES



Antisense oligonucleotide drugs (Case ID: 2018-717 and 2020-916)

Inventors: Feng Guo; Carrie Miceli; Yan Li; Florian Barthélémy



INNOVATION

RNA molecules play a critical role in the development of many diseases, such as cancers and RNA viral infections, making them excellent therapeutic targets. Technologies of targeting RNAs open new opportunities for therapeutic intervention, especially for genes that produce proteins previously deemed to be undruggable. Antisense oligonucleotides (ASOs) are single-stranded synthetic oligonucleotides that specifically bind target RNAs and elicit desired biological and therapeutic effects.

Recently, several ASO drugs have been approved by the FDA; however, current ASO Designs target RNA as a linear string i.e., 1D design strictly follows the rule of Watson-Crick (WC) base pairing. However, viral RNAs often fold into secondary and tertiary structures that can interfere with ASO hybridization. Key challenges of current ASO designs include variable binding affinity and specificity, relying on high-volume screening to identify leads, limitations in affinity and specificity resulting in narrow therapeutic windows, and the requirement for high concentration contributes to delivery problems.

UCLA researchers led by Dr. Feng Guo and Dr. Carrie Miceli have developed a three-dimensional (3D) structured-based method for designing ASOs. This new approach enables ASOs to bind with enhanced affinity and specificity; thus, allowing structured RNA to be targeted.

APPLICATIONS

▶ Treat a host of diseases that are specifically regulated by almost any target RNAs

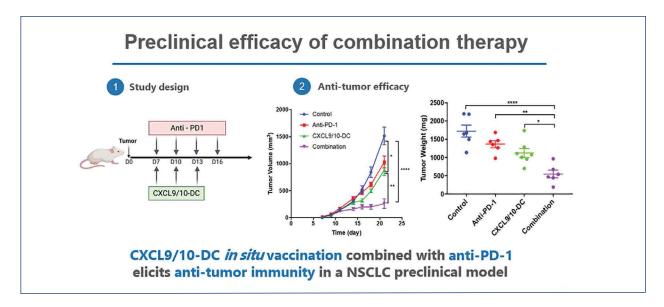
ADVANTAGES

- ▶ Enhanced binding affinity and specificity to target RNAs
- ► Easy and rapid determination of 3D structures
- ▶ Wide applicability across a variety of diseases

For more information, contact:

John Lambert Business Development Officer john.lambert@tdg.ucla.edu In situ vaccination with CXCL9/10 gene modified dendritic cells for advanced stage non-small cell lung cancer (Case ID: 2018-912 and 2019-601)

Inventors: Steven Dubinett; Bin Liu; Raymond Lim



INNOVATION

Lung cancer is the leading cause of cancer death worldwide, with a 5-year overall survival rate of 17% and 6% for metastatic disease. While lung cancers are responsive to PD-1 checkpoint blockade therapy, only 20% of patients respond to anti-PD-1 monotherapy due to primary, adaptive, or acquired resistance to the treatment. Thus, effective cancer immunotherapy requires methods to restore deficits in tumor antigen presentation and functional antitumor effector activities.

CCL21 is a secondary lymphoid chemokine that, upon binding to the CCR7 gene receptor, functions as a chemo-attractant for mature dendritic, naïve, and memory T cells, enhancing cell-mediated immunity against tumor cells. Intratumoral administration of CCL21 gene-modified dendritic cells (AdCCL21-DC) leads to increases of CD4+, CD8+, and CD11c+DEC205+ DCs infiltration of the tumor, decrease of immune-suppressive molecules in the tumor microenvironment, as well as reduction of tumor burden in the murine lung cancer model. More importantly, intratumoral administration of AdCCL21-DC also enhances CD8+ T cell infiltration and increased tumor PD-L1 expression in advanced non-small cell lung cancer (NSCLC) patients.

Researchers at UCLA have shown that advanced NSCLC patients with baseline PD-L1 expression benefit the most from anti-PD-1 treatment, suggesting responses to PD-1/PD-L1 blockade are more likely in the setting of tumor PD-L1 expression and a pre-existing T lymphocyte infiltration of the tumor. Indeed, UCLA researchers have shown that AdCCL21-DC and anti-PD-1 combination therapy outperforms both mono-therapies in syngeneic murine lung cancer models. Specifically, the combination therapy significantly enhances the cytolytic activity of tumor-infiltrating lymphocytes (TILs) against the tumor, accompanied by a significant reduction in tumor volume and tumor growth.

APPLICATIONS

▶ Immunotherapy for NSCLC, melanoma, and other types of solid tumors

ADVANTAGE

- ▶ Improve clinical response to anti-PD-1/PD-L1 therapy
- ▶ Boosts local and systemic immune responses
- ▶ Reduce tumor burden and tumor growth

For more information, contact:

Tariq Arif Business Development Officer tariq.arif@tdq.ucla.edu

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FEATURED UCLA TECHNOLOGIES



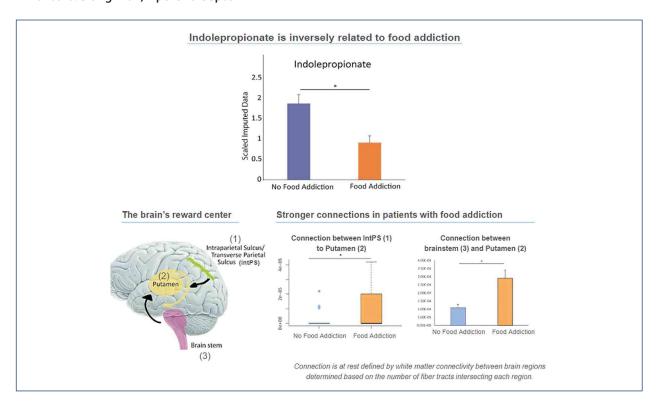


FEATURED UCLA TECHNOLOGIES



Leveraging the Gut Microbiome to Combat Obesity and Food Addiction (Case ID: 2020-129)

Inventors: Dong Tien; Aparana Gupta



INNOVATION

Obesity is a problem affecting millions with no widely available solutions. Obesity and its comorbidities pose a serious global health crisis. In 2016, about 2 billion adults, 18 years and older, were overweight. Of these, over 650 million were obese. This accounts for 39% of adults being overweight, and 13% being obese. These numbers are projected to continue to increase with rates as high as half of Americans being obese by 2030 and as high as 80% by 2050.

Food addiction is a major cause of obesity. Studies have shown that 30-50% of those who are overweight or obese have a food addiction. Food addiction is eating highly palatable foods (processed foods high in fat, sugar, and salt) when you are not hungry, as diagnosed using the Yale Food Addiction Scale. The diagnostic criteria for food addiction is based on the same criteria for other substance use disorders (i.e., alcohol, drugs, smoking). Food addiction affects the same regions of the brain as other addictive disorders.

A new pathway to combat both obesity and food addiction is through the brain-gut axis. UCLA researchers have shown there are 3 biological features of food addiction evident in the brain-gut axis. Using an untargeted metabolite assay examining >1000 different metabolites, food addiction was inversely associated with 1 metabolite: a neuroprotective metabolite called indolepropionate. Stronger connections in the brain's reward center, visible via MRI. Because indolepropionate is only created by our gut bacteria, UCLA researchers examined the microbiome of patients with food addiction and found a reduction in 3 protective bacteria.

APPLICATIONS

- ▶ Therapeutic Drug target
- ▶ Non-invasive diagnostic screening tool to rule out obesity and type 2 Diabetes
- ▶ Obesity and Food Addiction Treatment
- Probiotics
- ▶ Biomarker screening

ADVANTAGES

- A potential compound used to alter gut microbiome to progress obesity
- ▶ Develops a screen to identify patients with food addiction
- ▶ First of its kind compound for patients with food addiction

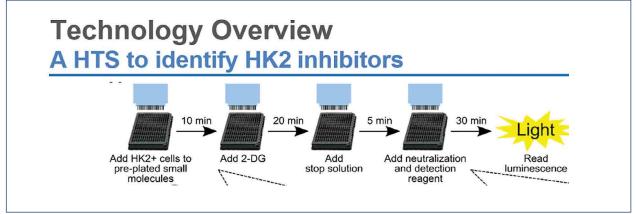
For more information, contact:

Earl Weinstein Business Development Officer earl.weinstein@tdq.ucla.edu

Inventors:

A Hexokinase 2 Inhibitor to Treat Hepatocellular Carcinoma (Case ID: 2020-788)

Inventors: Peter Clark; Robert Damoiseaux; Varghese John; Richard Finn



INNOVATION

Hepatocellular carcinoma (HCC) has a 5-year survival rate of <15%. The current standard of care for HCC includes chemotherapies such as atezolizumab/bevacizumab, sorafenib/Lenvatinib, and/or immunotherapy regimen of nivolumab, pembrolizumab, nivolumab + ipilimumab). However, none of the current therapies have biomarkers to allow for patient selection. Thus, new therapies are needed to treat HCC. Hexokinase 2 (HK2) is a well-validated target in HCC i.e., up to 40% of HCC express high levels of HK2, which is required for the growth of these tumors.

UCLA researchers led by Dr. Peter Clark have developed a small molecule inhibitor of Hexokinase 2 (HK2), an essential enzyme in over 40% of HCC, to treat HCC. They have developed and validated a high-throughput assay (based on a commercial assay) for identifying small molecule inhibitors of HK2. The cellular screen allows them to identify compounds that block HK2 activity through mechanisms other than direct binding to the enzymatic pocket.

APPLICATIONS

- ▶ Precision medicine approach i.e., enables targeting of select patient-population that would benefit from targeting Hexokinase 2
- ▶ 18F-FDG PET can be used to non- invasively measure hexokinase activity in patient tumors

ADVANTAGES

- ▶ Identifies selective hexokinase inhibitors
- ▶ The assay is reproducible and precise
- ▶ Targets an orthogonal pathway to current therapies
- Cost-effective

FOR MORE INFORMATION, CONTACT:

Mark Wisniewski or Pooja Bhayani mark.wisniewski@tdg.ucla.edu or pooja.bhayani@tdg.ucla.edu

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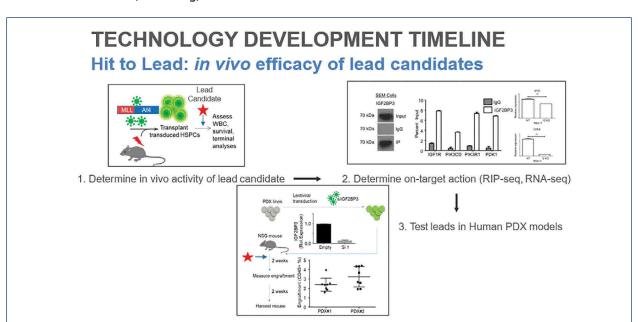
SCIENCE SUMMIT TWENTY22

LABEST 2022 RECEPTION



Targeting RNA Binding Proteins in Cancer Cells (Case ID 2019-831)

Inventors: Dinesh Rao; Neil Garg; Robert Damoiseaux



INNOVATION

Chromosomal rearrangements of mixed-lineage leukemia (MLL/KMT2A) gene are recurrently found in a subset of acute lymphoblastic leukemia (ALL), acute myeloid leukemia (AML), and rarely in acute leukemia of ambiguous lineage. Despite recent advances in therapeutic approaches, patients with MLL-rearranged (MLLr) leukemia have poor outcomes, a high risk of relapse, and show resistance to novel targeted therapies.

UCLA researchers led by Dr. Dinesh Rao have identified a novel RNA binding protein, IGF2BP3, which is overexpressed in multiple cancer types and not expressed in normal tissues. Preclinical studies conducted by Dr. Rao and colleagues showed that:

- ▶ On knocking out IGF2BP3 gene expression in-vitro and in-vivo
- Leukemic cell growth decreased in-vitro
- MLL-driven leukemia reduced, which increases survival in-vivo
- Normal hematopoiesis was not affected in-vivo
- ▶ Overexpression of IGF2BP3 gene in vivo led to an increase in white blood cell (WBC) lineages

The above suggests that IGF2BP3 played a critical role in B acute lymphoblastic leukemia (B-ALL) with MLL translocations, thus making IGF2BP3 an important therapeutic target for rB-ALL MLL translocations. Dr. Rao and colleagues are currently developing a novel small molecule IGF2BP3 inhibitor that targets a pathway orthogonal to existing therapies, making it ideal for patients with refractory disease.

▶ Orthog can be used to treated patients with refractory disease

ADVANTAGES

- ▶ Greater ease of adoption than existing therapies (i.e., CD-19 CAR-T)

For more information, contact:

Mark Wisniewski or Pooja Bhayani mark.wisniewski@tdg.ucla.edu or pooja.bhayani@tdg.ucla.edu

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Greetings

Amir Naiberg, Associate Vice Chancellor, CEO & President, UCLA Technology Development Group

Andrei lancu, Former Under Secretary of Commerce for Intellectual Property and Director of the USPTO & Partner, Irell & Manella LLP; Chairman Elect, UCLA Technology Development Corporation

Fireside Chat

Dr. Mike Jung, UC Presidential Chair in Medicinal Chemistry and Distinguished Professor of Chemistry, UCLA

Dr. Owen Witte, University Professor, University of California

Entertainment: The Matthew Wilson Quartet

Matthew Wilson, bass, Henry Baskin, quitar, Artie Fitch, drums and Caden Potter, piano

PROFESSOR SPOTLIGHT RECOGNITION AWARDS PRESENTED BY SBMC / SMBC



Announcer: Mark Cabato CFA, Director | Healthcare Corporate and Investment Banking, SMBC Group

Dr. Heather Maynard, UCLA Dr. William Lowry, UCLA Dr. Baljit Khakh, UCLA Dr. Elaine Hsiao, UCLA

Dr. Sophie Deng, UCLA

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