

BIOTECH BY THE LAKE 2021 INVESTOR SUMMIT



TARGETING NEUROLOGICAL DISORDERS

June 22, 2021

9:00 – 11:45 a.m.

Central Standard Time

Chemistry of Life Processes Institute

Oppenheimer & Co. Inc.

BioCentury, Inc.

SCHEDULE

WELCOME

9:00 a.m. [Neil H. Kelleher, PhD](#), Walter and Mary E. Glass Professor of Molecular Biosciences; Professor of Chemistry; and Professor, Biochemistry and Molecular Genetics and Medicine; Faculty Director, Northwestern Proteomics; and Interim Director, Chemistry of Life Processes Institute at Northwestern University

NORTHWESTERN FACULTY PRESENTATIONS

9:05 a.m. [Pembe Hande Ozdinler, PhD](#), Associate Professor of Neurology, Feinberg School of Medicine “Improving Success Rate of Clinical Trials by Proteomics”

9:25 a.m. [William Klein, MD](#), Professor of Neurobiology, Weinberg College of Arts and Sciences: “Next Generation Vaccines Targeting the Cause of Alzheimer’s Disease”

9:45 a.m. [Yevgenia Kozorovitskiy, PhD](#), Soretta and Henry Shapiro Research Professor of Molecular Biology; Associate Professor of Neurobiology, Weinberg College of Arts and Sciences “High Precision Screens for Pharmacological Traction of Neuroplasticity”

10:05 a.m. [Richard B. Silverman, PhD](#), Patrick G. Ryan/Aon Professor; Professor of Chemistry and Molecular Biosciences, Weinberg School of Arts and Sciences “Upper Motor Neuron Diseases and Alzheimer’s: Serious Diseases Addressed in the Silverman Group”

PANEL DISCUSSION | HOT TOPICS IN NEUROLOGICAL DISORDER THERAPEUTICS AND TECHNOLOGIES

10:25 a.m. [Lauren Martz](#), Senior Editor, Head, Translation and Clinical Development, BioCentury Inc. (Moderator)

[Sarah Bhagat, PhD](#), General Partner, Sofinnova Investments

[Ginger S. Johnson, PhD](#), Chief Executive Officer, Cello Health BioConsulting

[Norbert Riedel, PhD](#), Chief Executive Officer, Aptinyx, Inc. (APTX)

[Myung Shin, PhD](#), Executive Director and Head of Early Discovery Genetics, Genetics and Pharmacogenomics, Merck and Co, Inc. (MRK)

CORPORATE PRESENTATIONS

- 10:45 a.m. Sean M. Smith, PhD, Executive Director of Neuroscience Discovery, Merck & Co., Inc. (MRK)
- 11:05 a.m. Casper Hoogenraad, PhD, Vice President, Head of Neuroscience Research, Genentech (DNA)

PANEL DISCUSSION: MIDWEST BIOTECH INVESTMENT OUTLOOK

- 11:25 a.m. Jay Olson, CFA, Research Analyst, Oppenheimer & Co. (Moderator)
- Jamil M. Beg, Partner, 5AM Ventures
- Margarita Chavez, JD, Managing Director, AbbVie Ventures
- Michael Margolis, R Ph, Managing Director, Oppenheimer & Co.
- Jingwen Wang, PhD, Portfolio Manager, Verition Fund Management, LLC

CLOSING REMARKS

- 11:45 p.m. Neil H. Kelleher, PhD

PROGRAM

9:00 AM – WELCOME



Neil L. Kelleher, PhD

Interim Director, [Chemistry of Life Processes Institute](#)
Walter and Mary E. Glass Professor of Molecular Biosciences; Professor of Chemistry; and Professor, Biochemistry and Molecular Genetics and Medicine
Faculty Director, Northwestern Proteomics
Northwestern University

Neil L. Kelleher, PhD, is the Walter and Mary E. Glass Professor of Molecular Biosciences and professor of chemistry in the Weinberg College of Arts and Sciences and Interim Director of the Chemistry of Life Processes Institute. He is also a professor of medicine in the Feinberg School of Medicine. His primary research interests include top down proteomics, natural products discovery, and cancer biology. Kelleher is faculty director of Northwestern Proteomics and the Robert H. Lurie Comprehensive Cancer Center.

Kelleher's research group is focused on top-down proteomics, chromatin biology, and natural product biosynthesis and discovery. Contributing to both technology development and application of mass spectrometry in chemistry and biology, The Kelleher Research Group is interested in the biosynthesis and discovery of novel natural products with potential pharmacological activities. The lab leverages top-down proteomics—the analysis of intact proteins for precise localization of post-translational modifications — to advance and contribute to the understanding of chromatin and cancer biology.

Kelleher is both a pioneer and champion of the top-down approach and the Human Proteome Project (HPP), a global research initiative to weigh every protein in the human body—250,000 proteoforms in 4,000 different cell types. HPP will enable dramatic increases in the speed and efficiency by which investigators can identify higher-value protein-based markers of disease and spur game-changing advances in biomedical research, drug development and human health.

Kelleher received a BS and BA from Pacific Lutheran University in 1992, a Fulbright Fellowship the following year, and a PhD from Cornell University in 1997 completing his joint graduate work with Tadhg Begley and Fred McLafferty. In 1999, after a NIH Postdoctoral Fellowship at Harvard Medical School with Chris Walsh, Kelleher joined the faculty at University of Illinois at Urbana-Champaign where he established his research program in proteomics. In 2010, he joined the faculty at Northwestern University.

Kelleher is the recipient of many honors, including the Arthur P. Sloan Foundation Fellowship, Packard Fellowship, Dreyfus Award for New Investigators, Camille Dreyfus Teacher-Scholar Award, Lilly Analytical Chemistry Award, and NIH Career Transition Award. He was also a Burroughs Wellcome Fund Young Investigator and a Searle Scholar. In 2004, he received the Presidential Early Career Award for Scientists and Engineers, the nation's highest honor for professionals at the outset of their independent research careers.

Kelleher has written more than 300 publications. The ProSight software suite developed by Kelleher is used by more than 1,000 labs around the world. He is the founder and president of the Consortium for Top Down Proteomics.

“Improving Success Rate of Clinical Trials by Proteomics”



Pembe Hande Ozdinler, PhD

Associate Professor of Neurology
Feinberg School of Medicine
Northwestern University

Pembe Hande Ozdinler, PhD, is an Associate Professor at the Department of Neurology in the Feinberg School of Medicine at Northwestern University. She is a member of the Chemistry of Life Processes Institute. She is also a member of the Mesulam Cognitive Neurology and Alzheimer’s Disease Center, the Robert H. Lurie Comprehensive Cancer Center, and the Les Turner ALS Center.

Hande received a Master’s degree in a program spanning chemical engineering and molecular biology and genetics; focusing on biotechnology. She received a PhD in Cell Biology, Anatomy and Neuroscience from Louisiana State University (LSU) Health Sciences Center. She became a postdoctoral fellow at Neurosurgery Department of Massachusetts General Hospital-Harvard Medical School, prior to joining Northwestern as the founding director of the second Les Turner ALS Laboratory. Hande’s research is focused on understanding the cellular and molecular basis of selective vulnerability observed in neurodegenerative diseases.

The Ozdinler Lab primarily focuses on understanding the biology of upper motor neurons as well as the mechanisms that are responsible for their progressive degeneration, which is a hallmark in diseases such as amyotrophic lateral sclerosis, hereditary spastic paraplegia, and primary lateral sclerosis. Her research program extends from biomarker discovery to development of drug verification platforms, and generation of mouse models of diseases to identification of novel targets for gene delivery approaches. Her work has been supported by National Institutes of Health, National Institute of Aging, and foundations, such as Les Turner ALS Foundation, ALS Association, and A Long Swim.

Audience Q&A to follow presentation.

“Next Generation Vaccines Targeting the Cause of Alzheimer’s Disease”



William Klein, PhD

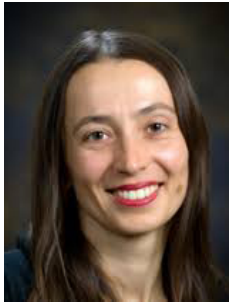
Professor of Neurobiology
Weinberg College of Arts and Sciences
Northwestern University

William Klein, PhD, is Professor of Neurobiology in the Weinberg College of Arts and Sciences at Northwestern. He is also a member of the Chemistry of Life Processes Institute. The Klein Lab is helping to lead the way toward a molecular basis for the cause, diagnosis, and treatment of Alzheimer’s disease. Alzheimer’s is a \$250 billion a year epidemic that will confront virtually all families. In an early breakthrough study, his lab introduced the idea that neuron damage leading to AD is instigated by small toxic oligomers of the A β peptide. This new idea emerged from their discovery that oligomers are potent CNS toxins that rapidly destroy synaptic memory mechanisms. His seminal paper (MP Lambert et al, PNAS 95:6448-6453, 1998) has been cited over 3,500 times (Google Scholar; see e.g., the review in Nature by Schnabel “Little Proteins, Big Clues,” Nature, 475, S12-14, 2011). Since then, his lab has collaborated internationally to publish more than 100 papers (with over 16,000 citations) investigating the oligomer hypothesis and how it might lead to mechanism-based diagnostics and therapeutics.

The Klein Lab’s research is highly collaborative and concerns five areas: (1) Therapeutics. A β O_s are excellent targets because of their early role in causing brain damage. Therapeutic monoclonal antibodies are nearing clinical trials due to partnering between pharma and Acumen, a biotech built on our past work. New programs for drug discovery focus on insulin signaling (to block A β O toxicity) and on high throughput screening using nanoscale synaptic membrane mimetics (to obtain compounds that prevent A β O binding to toxin receptors). (2) Diagnostics. A β O_s provide an optimal target for diagnostics because they appear early in disease and instigate the path to dementia. Ultrasensitive assays for clinical chemistry are being developed along with unique approaches to brain imaging by PET and molecular MRI. (3) Etiology. The cause of A β O build up in late-onset AD is a major unknown. Bill’s lab is taking new approaches using non-transgenic models to investigate metabolic factors such as high sugar and fat diets associated with diabetes and hypercholesterolemia. (4) Cell and molecular mechanisms of memory loss. How neuron damage is triggered by A β O_s is being investigated in brain cell culture systems and animal models. Experiments focus on early steps in the toxic mechanism. These include binding to toxin receptors, disrupted trafficking of ion channels and GPCRs, and altered signaling pathways. (5) Structural biology. State-of-the-art facilities are being used to discover the molecular organization of synthetic and brain-derived toxic oligomers. A β O structure is still poorly understood because of the difficulty in characterizing dynamic populations of oligomers in extremely dilute solutions. Approaches include cryoEM and unique native protein mass spectrometry.

Audience Q&A to follow presentation.

“High Precision Screens for Pharmacological Traction of Neuroplasticity”



Yevgenia Kozorovitskiy, PhD

Soretta and Henry Shapiro Research Professor of Molecular Biology
Associate Professor of Neurobiology
Weinberg College of Arts and Sciences
Northwestern University

Yevgenia Kozorovitskiy, PhD, is the Soretta and Henry Shapiro Research Professor of Molecular Biology and Associate Professor of Neurobiology in the Weinberg College of Arts and Sciences at Northwestern University. She is also a member of the Chemistry of Life Processes Institute.

The long-range goal of the Kozorovitskiy Lab is to accelerate the understanding of plasticity and neuromodulation in the brain. The vertebrate brain consists of millions of neurons wired together into complex circuits by trillions of tiny junctures, called synapses. These circuits communicate via electrical signals, mediated by fast excitatory or inhibitory neurotransmission, and a set of slower signals, known as neuromodulation. Without this, we could not pay attention, move, eat, sleep, or feel emotions. Kozorovitskiy Lab studies how neuromodulators act and interact in the brain as they regulate the creation and function of individual synapses and large-scale circuits.

Genia’s research facilitates the development of therapeutic applications, harnessing the power of neuromodulators to functionally reconfigure, and sometimes even literally rewire, neural circuits. Research highlights of her lab include the discovery of activity-dependent “wiring rules” that guide neurons to integrate into appropriate neuronal circuits during postnatal development and revealing the mechanisms for how a rapidly acting antidepressant ketamine alters neuroplasticity and behavior.

The Kozorovitskiy Lab has developed and advanced multiple new methods for neuroscience applications, including oblique light-sheet microscopy and genetically targeted proteomics. They collaborate with researchers across disciplines to develop new optical techniques for peering deeper inside the mouse brain and imaging faster at higher resolution.

Genia received a BA and a PhD in Neuroscience & Psychology from Princeton University and completed a postdoctoral fellowship at Harvard Medical School/Howard Hughes Medical Institute, as a Junior Fellow of the Harvard Society of Fellows. Her honors and awards include Sloan Research Fellowship, Beckman Young Investigator Award, Rita Allen Scholar, Searle Scholar, and NSF CAREER Award, among others. Kozorovitskiy has disclosed three inventions and applied for four patents.

Audience Q&A to follow presentation.

“High Precision Screens for Pharmacological Traction of Neuroplasticity”



Richard B. Silverman, PhD

Patrick G. Ryan/Aon Professor

Professor of Chemistry and Molecular Biosciences, Weinberg School of Arts and Sciences

Northwestern University

Richard B. Silverman, PhD, is the inaugural Patrick G. Ryan/Aon Professor; Professor of Chemistry and Professor of Molecular Biosciences, Weinberg College of Arts and Sciences; and Professor of Pharmacology, Feinberg School of Medicine. He is also a member of the Chemistry of Life Processes Institute at Northwestern. Over the last 45 years at Northwestern University he has developed numerous projects related to the synthesis and evaluation of a variety of enzyme inhibitors and activators, particularly related to neurodegenerative and neurological diseases and cancer. One of the projects was very successful: he is the inventor of Lyrica™, a blockbuster drug marketed by Pfizer for epilepsy, fibromyalgia, and neuropathic pain.

Rick currently has a GABA aminotransferase inactivator that completed a Phase I clinical trial showing no adverse effects and is currently being used successfully to treat a child with infantile spasms; inhibitors of protein aggregation and toxicity from mutant SOD1 that are active in an ALS mouse model and stabilize upper motor neurons; inactivators of ornithine aminotransferase for hepatocellular carcinoma; selective inhibitors of neuronal nitric oxide synthase (nNOS) for neurodegenerative diseases and melanoma; and inhibitors of bacterial NOS active in combination with antibiotics as antibacterial agents.

Rick is the author or co-author of over 385 publications and holds 120 patents to date. The third edition of his textbook, *The Organic Chemistry of Drug Design and Drug Action*, was published by Elsevier/Academic Press in 2014. He has received many awards, more recently, the Creative Invention Award of the American Chemical Society (ACS) 2017; Fellow, National Academy of Inventors 2014; Fellow, American Academy of Arts & Sciences 2014; Northwestern University Trustee Medal for Faculty Innovation and Entrepreneurship 2014; Medicinal Chemistry Prize of the Israel Chemical Society 2014; and Fellow, Royal Society of Chemistry 2013.

Audience Q&A to follow presentation.

10:25 AM - PANEL DISCUSSION: HOT TOPICS IN NEUROLOGICAL DISORDER THERAPEUTICS AND TECHNOLOGIES



Lauren Martz (Moderator)

Senior Editor, Head, Translation and Clinical Development
BioCentury Inc.

Lauren Martz is a senior editor and head of translation & clinical development coverage at BioCentury, where she has written on emerging technologies and therapeutics since joining the company in 2007. As senior editor, she guides BioCentury's coverage of clinical development and has written extensively on new modalities including CRISPR, cell and gene therapies, the microbiome and gene control, as well as IP issues affecting the industry.

Lauren holds a B.S.E. in Bioengineering from the University of Pennsylvania and an MBA from Temple University.



Sarah Bhagat, PhD (Panelist)

General Partner
Sofinnova Investments

Sarah Bhagat is General Partner at Sofinnova Investments, where she focuses on biopharmaceutical investments. Sarah is currently the chairwoman of Atsena and is a member of the board of directors for Inozyme (INZY) and Aeovian and a former board of director for Promedior, acquired by Roche for up to \$1.4B. Sarah additionally played a central role in Sofinnova's investments in Apellis (APLS), Pionyr, and YmAbs (YMAB). Most recently Sarah was recognized by Biocom in 2020 as one of ten life sciences trailblazers under 40.

Prior to joining Sofinnova in 2017, Sarah was a Venture Fellow for Canaan Partners. Sarah was also a postdoctoral fellow in neuroscience at Stanford University. As a graduate student at Yale, Sarah worked with Dr. Stephen Strittmatter, her thesis advisor and co-founder of Axerion Therapeutics, to identify novel targets and develop therapeutics for CNS injury and psychiatric disorders. Prior to Yale, Sarah worked as a research assistant for The Rockefeller University. Before her time at Rockefeller, Sarah was a Clinical Research Coordinator at Massachusetts General Hospital in the Bipolar Clinic and Research Program.

Sarah received her Ph.D. in Neuroscience from Yale University, where she was a National Science Foundation Graduate Research Fellow. Sarah is also an alumna of Stanford's Graduate School of Business Ignite Entrepreneurship and Innovation Program. Sarah is on the board of Stanford's Neuroscience Translate Oversight Committee.

10:25 AM - PANEL DISCUSSION: HOT TOPICS IN NEUROLOGICAL DISORDER THERAPEUTICS AND TECHNOLOGIES



Ginger S. Johnson, PhD (Panelist)

Chief Executive Officer
Cello Health BioConsulting

In addition to her responsibilities as CEO, Ginger S. Johnson, PhD, leads core assessment and strategic consulting engagements, with special emphasis on CNS-related categories.

Previously, Ginger was the Director of Life Science Research at Chase Capital Partners (now CCMP Capital), a multi-billion dollar global private equity firm, where Ginger's research and investment activities focused on high growth opportunities in new and emerging areas within the pharmaceutical, biotechnology and medical device industries. As Associate Director of the Center for Biotechnology at Northwestern University, Ginger helped to develop an innovative graduate program that combines the science and business of biotechnology.

Ginger spent eight years in basic and applied scientific research, primarily in the field of Alzheimer's disease, at the NIH and at Molecular Geriatrics, a start-up biotechnology company. Ginger has published multiple peer-reviewed articles and has been issued three patents.

She earned her Bachelor of Science degree in Molecular Biology from University of Tennessee, a Doctorate in Molecular Biology from George Washington University in Washington, DC, and has completed graduate studies at the Kellogg Graduate School of Management at Northwestern University.



Norbert Riedel, PhD (Panelist)

Chief Executive Officer
Aptinyx Inc.

Norbert Riedel, PhD, is CEO of Aptinyx, as well as a member of the company's board of directors. He was formerly president and CEO of Naurex, the predecessor company acquired by Allergan and from which Aptinyx and its technology were spun out. Prior to Naurex, he served various roles at Baxter International including corporate vice president and chief science and innovation officer. Previously, Norbert was head of worldwide biotechnology and held a number of scientific management positions at Hoechst Marion Roussel (now Sanofi). He serves on the boards of Jazz Pharmaceuticals, Cerevel Therapeutics, Eton Pharmaceuticals, and the Illinois Biotechnology Innovation Organization. He served on the board of directors of Ariad Pharmaceuticals until the company was acquired in February 2017.

Norbert is a member of the Austrian Academy of Sciences and served on Governor Pat Quinn's Illinois Innovation Council. He is an adjunct professor at Boston University School of Medicine and Northwestern University's Feinberg School of Medicine and, prior to moving into industry, was an associate professor of medicine at Boston University School of Medicine and a visiting professor at the Massachusetts Institute of Technology. He received a Diploma and PhD from the University of Frankfurt and was a postdoctoral fellow at Harvard University.

10:25 AM - PANEL DISCUSSION: HOT TOPICS IN NEUROLOGICAL DISORDER THERAPEUTICS AND TECHNOLOGIES



Myung Shin, PhD (Panelist)

Executive Director and Head of Early Discovery Genetics
Genetics and Pharmacogenomics
Merck & Co., Inc.

Myung Shin, PhD, is an Executive Director and Head of Early Discovery Genetics within the Genetics and Pharmacogenomics Department (GpGx) at Merck & Co., Inc. His team's mission is to identify and validate targets based on Human Genetics for multiple disease areas at Merck including Cardiometabolic, Neuroscience and Immunology. He currently manages groups in US and Singapore. He has and continues to collaborate with scientists across the globe.

Prior to joining Merck, Myung was an associate member at the Fox Chase Cancer Center and PEW scholar in Biomedical Sciences. Over the years, he has led efforts to develop and implement innovative platforms for drug discovery at Merck including application of in vivo inducible shRNA, Genome Editing Tools (ZFN and CRISPR) for in vivo model development, development of human ES cell platform for safety studies and human iPSC-derived models for validating targets anchored in Human Genetics. He and his teams have generated key models and data for many drug development programs including several PCC and clinical programs.

Myung received his BA from Northwestern University and PhD from the University of California at Berkeley. He was a Jane Coffin Childs Postdoctoral Fellow in Shirley Tilghman's lab at HHMI/Princeton University. He is currently on the Executive Advisory Board for Chemistry of Life Processes Institute at Northwestern University.

Audience Q&A to follow panel discussion.



Sean M. Smith, PhD

Executive Director of Neuroscience Discovery
Merck & Co.

Sean M. Smith, PhD, is an Executive Director of Neuroscience Discovery at Merck in West Point, PA. He leads the Neurodegeneration and Symptomatic Therapeutics departments. In this role, he directs research for developing novel therapeutics to treat neurodegenerative, psychiatric, and neurological disorders from target identification through early clinical development. He also oversees clinical development programs for schizophrenia (Phase 2b), treatment resistant depression (Phase 2a), and cognitive impairment (Phase 1).

In his prior role, Sean was the chair of early clinical development teams for MK-8189 (Phase 2, schizophrenia) and MK-8719 (Phase 1, PSP). He did his postdoctoral training at the Salk Institute for Biological Studies in the laboratory of Dr Wylie Vale and received his PhD in Neuroscience from the University of Illinois at Urbana-Champaign.

Audience Q&A to follow presentation.



Casper Hoogenraad, PhD

Vice President, Head of Neuroscience Research
Genentech

Casper Hoogenraad, PhD, serves as Vice President, Head of Neuroscience at Genentech Research and Early Development in South San Francisco, California. In this role, he is head of the Neuroscience Department, responsible for research and drug discovery activities in Neuroscience and oversees Genentech's Neuroscience disease pipeline programs.

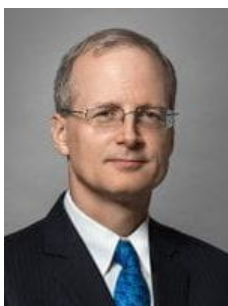
Prior to joining Genentech, he was full Professor of Molecular Neuroscience and served as for 10 years as Chair of the Cell Biology, Neurobiology and Biophysics Division at Utrecht University, The Netherlands. Casper received his Bachelor of Science in Biochemistry and Master of Science in Molecular Biology from Utrecht University, and his doctorate in Cell Biology from the Erasmus University Rotterdam, The Netherlands. Casper was a postdoctoral fellow at the Massachusetts Institute of Technology (MIT) in Cambridge, Massachusetts and joined the faculty of the Erasmus Medical Center Rotterdam in The Netherlands as an Associate Professor in the Department of Neuroscience.

Casper continues his basic research as a Senior Fellow at Genentech to study the molecular and cellular mechanisms that regulate the development and function of the brain and aims to translate these findings into potential therapies for neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease, and multiple sclerosis. Throughout his career, he discovered new molecular mechanisms and cell biological processes that control cytoskeleton remodeling and cargo trafficking. Work from his lab has characterized in detail the cytoskeleton and transport events required to 'build' and 'wire' neurons, including the early developmental stages of axon formation and neuronal polarization, assembly of the axon initial segment, dendrite outgrowth and spine plasticity. He has also contributed to the development of new molecular methods and imaging tools to study intracellular dynamics in living cells. Casper's scientific accomplishments are well recognized in the field having published over 230 research papers, scientific reviews and book chapters. He is an elected member of the European Molecular Biology Organization (EMBO), Young Academy of Europe (YAE), FENS-Kavli Network of Excellence and 'The Young Academy' of the Royal Netherlands Academy of Sciences, as well as the recipient of the 10th International Brain Research Organization (IBRO) and Kemali Prize.

Casper is actively involved in promoting public awareness and understanding of basic science. In 2013, his laboratory made an animation movie, named 'A Day in the Life of a Motor Protein', which has received >1 million views on youtube.

Audience Q&A to follow presentation.

11:25 AM - PANEL DISCUSSION: FINANCING AND INVESTING IN NEUROLOGICAL SCIENCE BIOTECH



Jay Olson, CFA (Moderator)

Research Analyst
[Oppenheimer & Co.](#)

Jay Olson, CFA, is Managing Director and Senior Analyst covering Biotechnology since 2016. Prior to joining Oppenheimer, Jay covered SMID-cap names and worked on the Large Cap Pharmaceuticals team at Goldman Sachs for four years after four years on the #1 II-ranked Large Cap Pharmaceuticals team at Sanford Bernstein. Prior to Wall Street, Jay spent 18 years in the pharmaceutical industry, working mostly for Pfizer in finance, marketing and business development. Jay received an MBA in Finance and an MS in Chemical Engineering, both from MIT, and a BS in Chemical Engineering from Tufts University. He also holds the CFA designation.



Jamil M. Beg, MBIotech MBA (Panelist)

Partner
[5AM Ventures](#)

Jamil M. Beg joined 5AM Ventures in 2017 as a Principal and was promoted to Partner in 2020. Since joining 5AM, Mr. Beg has been involved with investments in Akouos (NASDAQ: AKUS), Aprea (NASDAQ: APRE), Pear Therapeutics, RallyBio, and 5AM's 4:59 Initiative stepping into operating roles. Prior to 5AM, Mr. Beg was at Sage Therapeutics (NASDAQ: SAGE) where he contributed to building the company through business development, corporate strategy, medical affairs, health economics & outcomes research and commercialization roles.

Previously, Mr. Beg was an investment professional at Quaker Partners and contributed to investments in the firm's portfolio companies including EKR Therapeutics (acquired by Cornerstone Therapeutics), Transave Inhalation Therapeutics (acquired by Insmid), NuPathe (NASDAQ: PATH, acquired by Teva) and Cempra (NASDAQ: CEMP). Mr. Beg started his career at Cambridge Pharma Consultancy (acquired by IMS Health) with a focus on pricing, market access and health economics outcomes research strategies for the biopharma industry. Mr. Beg earned his B.S.E. in Bioengineering and Master of Biotechnology degrees from the University of Pennsylvania.

He earned his M.B.A. in Healthcare Management and Entrepreneurial Management from The Wharton School of the University of Pennsylvania where he was a recipient of the Henry J. Kaiser Family Foundation Merit Award. Mr. Beg is based in the Boston, MA office.

11:25 AM - PANEL DISCUSSION: FINANCING AND INVESTING IN NEUROLOGICAL SCIENCE BIOTECH



Margarita Chavez, JD (Panelist)

Managing Director
AbbVie Ventures

Margarita Chavez, JD, is Managing Director at Abbvie Ventures. Margarita has lead investments in over a dozen biotech companies in the US and Europe and is responsible for AbbVie's investments in Alector, Morphic Therapeutics, Palleon Pharmaceuticals, eFFECTOR Therapeutics, CARISMA Therapeutics, Jnana Therapeutics and Magnolia Neurosciences. Margarita brings over 20 years of dealmaking experience, with over a decade in biotech M&A, licensing, and venture.

Margarita was previously a Director with Abbott's Global Pharmaceutical Licensing & Acquisitions. Among others, Margarita was involved in the in-licensing of Elagolix, the acquisition of Immugen, and the acquisition of the Lupron franchise. Before joining Abbott, Margarita practiced as a corporate and securities lawyer in Silicon Valley with the firm of Brobeck Phleger & Harrison, advising in equity financings, M&A and IPOs.

Margarita currently serves on the Boards of the New England Venture Capital Association and the MidAmerica Healthcare Investors Network and on the Advisory Board of the Santa Clara University School of Law.

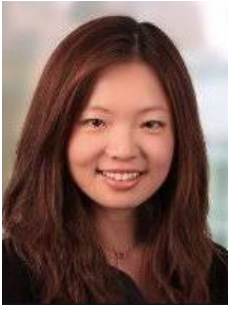


Michael Margolis, RPh (Panelist)

Managing Director
Oppenheimer & Co.

Michael Margolis, RPh, joined Oppenheimer & Co. Inc. in 2017 where he currently serves as Co-Head of Healthcare Investment Banking. He has over two decades of Investment Banking experience in the Life Sciences sectors. Prior to joining Oppenheimer, Michael served as the Head of Healthcare Investment Banking at Roth Capital Partners, LLC, and as a Managing Director at Merriman Holdings, Inc. (also known as Merriman Curhan Ford Group Inc.). Before becoming an Investment Banker, Michael worked at Novartis Pharmaceuticals Corporation in several roles and at Ursus Capital. He began his career at Eli Lilly & Company as a Senior Pharmaceutical Representative. Michael is a registered Pharmacist and holds an MBA from New York University's Stern School of Business and a Pharmacy Degree from Rutgers University, College of Pharmacy.

11:25 AM - PANEL DISCUSSION: FINANCING AND INVESTING IN NEUROLOGICAL SCIENCE BIOTECH



Jingwen Wang, PhD (Panelist)
Portfolio Manager
Verition Fund Management, LLC

Jingwen Wang, PhD, manages the global healthcare therapeutics portfolio at Verition. She is a Columbia-trained neuroscientist with experience in healthcare across academic research, technology transfer, management consulting and public/private investing. Prior to Verition, she worked as an investment analyst at Balyasny Asset Management, Surveyor Capital (part of Citadel), and was an associate partner in McKinsey's healthcare practice.

Audience Q&A to follow panel discussion.

11:45 AM - CLOSING REMARKS

PROGRAM SUPPORTERS



Chemistry of Life Processes Institute is where new therapies and diagnostics for complex diseases begin. Drawn by the Institutes' extraordinary expertise and facilities for innovation and translation, researchers from across Northwestern University converge here to develop fresh insights and approaches to neurological disease, cancer and other disorders. Together, we accelerate the delivery of groundbreaking discoveries that advance science and transform human health.

clp.northwestern.edu



For more than 130 years, Oppenheimer & Co. Inc. has provided our clients with the financial expertise and insight to help achieve their goals. Oppenheimer's proud tradition of providing innovative, customized solutions to our clients sets us apart from our competitors. We believe in independent thinking that leads to innovative strategies tailored to the needs of our clients. Oppenheimer is proud of its reputation as a Firm that helps individuals, families, corporate executives, foundations and endowments, charities, pension plans, businesses, and institutions.

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BIOCENTURY

Since 1993, BioCentury, Inc. has been internationally recognized as the leading provider of value-added information, analysis and data for biotechnology and pharmaceutical companies, investors, academia and government on the strategic issues essential to the formation, development and sustainability of life science ventures. BioCentury employs a fully integrated multimedia platform — including publications, video, online data solutions and conferences — to provide its audience with authoritative and up-to-date intelligence about corporate strategy, partnering, emerging technology, clinical data, public policy and the financial markets.

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ACKNOWLEDGEMENT

We would like to express our gratitude to the members of the Chemistry of Life Processes Institute's **Executive Advisory Board (EAB)** for their enthusiastic support for the Biotech by the Lake Investor Summit series.

Our special thanks to EAB member **Sujal Shah**, President and CEO of **CymaBay Therapeutics (CBAY)**, whose vision, guidance and leadership made this investor series possible.