

Emel Adaligil, Ph.D. Senior Scientific Manager, Genentech



Emel got her PhD in Chemistry from Tufts University focusing on developing peptide antibiotics, then she completed her Postdoctoral Studies at Genentech working on elucidating solution structures of macrocyclic peptides by NMR and computational studies and designing cell-permeable mRNA Display libraries to expand the platform. She is currently leading the macrocyclic discovery group and mRNA Display platform at Genentech for both Genenetch and Roche projects. She also leads projects related to structure elucidation and computational calculations of macrocyclic peptides to tackle cell-permeability issues.



Sepideh Afshar, Ph.D. Senior Director Head of Peptide Therapeutics Genentech



Dr. Sepideh Afshar is an accomplished scientific leader specializing in therapeutic drug discovery and platform development. With deep expertise in peptides, protein engineering, and antibody therapeutics, she has led crossfunctional teams to deliver groundbreaking advancements in the field. Currently serving as the head of the Peptide Therapeutics Group at Genentech, Dr. Afshar has a proven track record of developing innovative solutions for challenging drug targets, including hard-to-drug protein-protein interactions and cargo delivery across biological barriers. Her work is characterized by technical excellence, strategic vision, and a commitment to fostering highperforming, collaborative teams.



Jane Aldrich, Ph.D. Professor of Medicinal Chemistry University of Florida

Jane Aldrich, Ph.D. is Professor of Medicinal Chemistry at the University of Florida. She has extensive expertise in peptide drug design, focusing on cyclic peptides primarily in CNS diseases and peptide optimization for in vivo activity. Jane is currently a Councilor for the Medicinal Chemistry Division of the American Chemical Society and a former president of the American Peptide Society. She also served as a co-Chair of the Chemistry and Biology of Peptides Gordon Research Conference.



Brandon Allgood, Ph.D. Chief Data Science Officer Parabilis Medicines



Brandon Allgood is a seasoned entrepreneur and researcher with close to two decades of expertise in leveraging machine learning and computational methods to enhance human health. As the Chief Data Officer at Fog Pharma, he spearheads the integration of data science and engineering within the Helicon discovery and development framework. Alongside his role at Fog Pharma, Brandon imparts his knowledge of machine learning as an instructor at UC Berkeley and contributes his expertise as a scientific advisor to numerous biotech and tech entities.



Othman Al Musaimi, Ph.D., FHEA Assistant Professor of Medicinal Chemistry Newcastle University



Dr Al Musaimi joined Newcastle University as a Lecturer in Medicinal Chemistry in September 2023, following his post as a Research Associate at Imperial College London. He holds a PhD in Pharmaceutical Chemistry from the University of KwaZulu-Natal (South Africa), specialising in innovative methodologies for peptide synthesis, green chemistry, and purification.

A translational scientist and entrepreneur, Dr Al Musaimi pioneered a groundbreaking reinvention of solid-phase peptide synthesis, creating a proprietary platform for first-in-class therapeutic peptides. This work underpins four key intellectual properties (IPs)—three of which he leads as principal inventor—and has culminated in a spin-out company set to launch in mid-2025. His contributions were recognised with the prestigious Royal Society of Chemistry (RSC) Emerging Technologies Competition – Change Makers prize in July 2024.



Zaid Amso, Ph.D. Associate Director, Chemistry Calibr-Skaggs Institute for Innovative Medicines



Zaid Amso received his Ph.D. in Chemistry from the University of Auckland, New Zealand, under the mentorship of Professor Dame Margaret Brimble. He began his career as a research scientist in analytical chemistry within the new product development division at Douglas Pharmaceuticals in Auckland, before relocating to the United States.

At Scripps Research, Zaid served as a postdoctoral fellow and subsequently as a research investigator, focusing on the discovery and development of long-acting macrocyclic peptides and regenerative medicines for the treatment of inflammatory and metabolic diseases. His research led to the identification of multiple lead compounds and the advancement of two candidates into clinical development. Zaid later held senior scientist positions at RayzeBio and Neurocrine Biosciences, where he led multiple peptide hit-to-lead optimization campaigns and worked at the interface of synthetic chemistry, chemical biology, and targeted drug delivery.

Zaid currently serves as Associate Director of Chemistry at Calibr-Skaggs, the drug development division of Scripps Research. In this role, he leads translational research initiatives focused on peptide libraries, oral macrocycles, and longacting injectables to advance innovative therapies for diseases with critical unmet medical needs.



Baptiste Aussedat, Ph.D. Co-founder & CEO Chemitope Glycopeptide



Baptiste is the CEO and co-founder of Chemitope Glycopeptide, a Brooklynbased biotechnology company specializing in the chemical production of glycopeptides for research and clinical development, with a focus on cancer, aging, and infectious diseases. He received his Ph.D. from Sorbonne University under Dr. Gerard Chassaing, where he focused on pseudo-peptides for intracellular drug delivery. In 2008, he joined Prof. Samuel J. Danishefsky's lab at MSKCC (NYC), where he completed the first assembly of a fully synthetic glycoprotein, the human Follicle-Stimulating Hormone, and designed glycopeptide immunogens for the Duke CHAVI-ID Consortium and the NIH Vaccine Research Center. He co-founded Chemitope Glycopeptide in 2018, where the first batch of complex glycopeptide to enter phase I clinical trials was produced. Over the last 16 years, he has dedicated his work to making complex glycopeptides widely available.



Stephanie Barros, Ph.D. Scientific Manager Global Discovery Chemistry Johnson & Johnson





Ashok Bhandari, Ph.D. EVP, Chief Drug Discovery and Preclinical Development Officer Protagonist Therapeutics

Dr. Ashok Bhandari has been serving as Executive Vice President, Chief Drug Discovery, and Preclinical Development Officer at Protagonist Therapeutics since January 2022. Previously, he served as Senior Vice President and Vice President of Chemistry and Process Research from 2017 to 2021. Dr. Bhandari has been instrumental in the discovery of novel oral and systemic peptide therapeutics through his contribution to the development of Protagonist's clinical pipeline since he joined in 2011. Before his tenure at Protagonist, Dr. Bhandari spent 14 years at Affymax, where he worked on various peptide drug discovery and development programs targeting protein-protein interactions. He earned his Ph.D. in organic chemistry from the Indian Institute of Chemical Technology (IICT) and completed his postdoctoral research at the University of California, Santa Barbara.

Entrepreneurial Business Network PDHC Member Highlight



Kaustav Biswas, Ph.D.

Sr. Principal Scientist/Sr. Director Discovery Chemistry Merck Research Laboratories



Kaustav Biswas, Ph.D., is currently a Sr. Principal Scientist/ Sr. **Director in Discovery Chemistry, Merck Research Laboratories in** Boston, MA. He is an experienced modality leader directing peptide-focused discovery teams to clinical candidate nominations, a strategy lead for peptides and member of early clinical development teams at Merck. In addition, he is a business development, academic collaboration and external outreach liaison for peptide science. Kaustav was previously at Amgen in Thousand Oaks, CA where he directed a team targeting ion channels for pain using peptides and peptideantibody conjugates and led small molecule teams in neuroscience, oncology and hematology, resulting in identification of development candidates for pain, schizophrenia and migraine. He obtained his Ph.D. with Prof. Daniel Kahne in Princeton University and was a postdoctoral associate with Prof. Samuel Danishefsky at Memorial Sloan-Kettering Cancer Center, New York in natural product synthesis.



Hannah Bolt, Ph.D. Head of Peptide Discovery, Director AstraZeneca

Hannah Bolt, Ph.D. leads the Peptide Chemistry team in AstraZeneca's Discovery Sciences organization. Hannah is an emerging leader in the medicinal chemistry design of peptides in the pharmaceutical industry and is passionate about expanding the accessible chemical space via novel peptidomimetic and peptoid building blocks. She has been a key contributor to numerous peptide therapeutics that are now moving through clinical phases. Hannah obtained her Ph.D. in Chemistry from Durham University and is a passionate STEM ambassador, mentoring the next generation of peptide scientists.



Danila Branca, Ph.D. Principal Research Investigator Peptide Chemistry Group IRBM

Danila Branca is a Principal Research Investigator in the Peptide Chemistry Group at IRBM (Pomezia, Italy).

She is a highly skilled and motivated medicinal chemist with extensive experience in leading Peptide Discovery Programs, including advancing peptide programs from hit finding through lead optimization and clinical candidate identification with a track record in the clinic. Danila started her career in the pharmaceutical industry joining IRBM-MRL in 2005, in the Medicinal Chemistry department. In 2008 she begun the journey in the peptide field, moving to the Peptide Center of Excellence at Merck.

She has more than **30** scientific disclosures including scientific articles, invited

lectures, patents, and poster presentations and in 2023 receiver of the Edison Patent Award for the contribution to the US patent "Preparation of Cyclic Peptides as PCSK9 Antagonist Compound". Danila possess and leverages deep knowledge and capabilities in peptides to deliver differentiated clinical candidates, including macrocycles incorporating multiple constraints, and peptides conjugated to fatty acids, cholesterol and radioligand chelators.

As project leader, she develops and implements strategies for peptide drug discovery programs, working in concert with partners in molecular and cellular biology, pharmacology, computational chemistry, ADME, structural biology, chemical development, and other key functions.



David Brayden, Ph.D. Full Professor of Advanced Drug Delivery University College Dublin



David Brayden is a Full Professor of Advanced Drug Delivery at University College Dublin (UCD). Following a Ph.D. in Pharmacology at the University of Cambridge (1989), and a post-doctoral research fellowship at Stanford University (1991), he set up Elan Corporation's pharmacology laboratory in Dublin (1991). At Elan, he was a coordinator of several of Elan's Joint-Venture drug delivery research collaborations. In 2001, he joined UCD and was appointed a Full Professor (2014). David completed a Principal Investigator Grant from Science Foundation Ireland (SFI) on the topic of oral delivery of novel mucoadhesive polymeric peptide conjugates (2005-2009). David was the Director of an SFI Research Cluster (The Irish Drug Delivery Research Network) from 2007-2013. He was then the Deputy Coordinator of an EU 7th Framework grant on oral nanomedicines, TRANS-INT, 2012-2017. In 2014, he was a co-Principal Investigator on the SFI Centre for Medical Devices (CURAM), which was renewed in 2021. He is the current coordinator of BUCCAL-PEP, an EU Horizon Consortium working on buccal peptide delivery (2023-2026). David is the author or co-author of more than 300 research publications and patents. In 2021 he was appointed the first Chief Editor of Frontiers in Drug Delivery. He served on the CRS Board of Scientific Advisors (2006-2009) and the CRS Annual Meeting Programme Committees (2015, 2016). David was elected as a Fellow of the CRS (2012) and the AAPS (2017), and as a member of the Royal Irish Academy (2024). In 2024, he was appointed by the Irish Minister of Health as Chairperson of the National Research Ethics Committee Chairperson of Clinical Trials Committee D.



Simon Bushell, Ph.D. Innovation and Scientific Affairs Lead Orbit Discovery

Simon Bushell is Innovation and Scientific Affairs lead at Orbit Discovery, a UK-based peptide discovery company. Orbit's unique display platform enables the identification of high-efficacy binders to specific targets and allows for high-throughput direct functional screening against cells to discover novel peptide agonists. Simon joined **Orbit in 2019 as a Principal Scientist and became Head of Target Biology** in 2022. His background as a protein crystallographer, specialising in the structural biology of membrane proteins, has been instrumental in onboarding targets and guiding screening campaigns. Simon completed Monash University in Melbourne, Australia, his PhD before at undertaking postdoctoral research at the University of St Andrews and the University of Oxford.



Patrick Bryant, Ph.D. DDLS Fellow, Assistant Professor Stockholm University



Dr. Patrick Bryant is a leading researcher in protein and peptide design, with a particular focus on developing highaffinity binders for therapeutic applications. As the head of his own research group, Patrick has pioneered cutting-edge methods in computational binder design, including the development of cyclic peptide binders with sub-nanomolar affinity in a single shot. His work bridges protein engineering and drug discovery, with the goal of accelerating the development of novel peptide therapeutics.



Joe Cannon, Ph.D. Associate Director of Biotransformation Bristol Myers Squibb

Joe Cannon received his PhD in Biochemistry from the University of Maryland, College Park investigating novel approaches for proteomics, and continued to a post doctoral appointment at University of Texas at Austin to work on new methods in top down mass spectrometry. He then proceeded to a fellowship at Harvard Medical School in the Department of Cell Biology with a focus on neurodegenerative disease through the lens of quantitative proteomics. Currently, Joe is an Associate Director of Biotransformation in the Discovery DMPK group at Bristol Myers Squibb. Beyond providing biotransformation support across all modalities in the discovery pipeline, his research foci include target and modality exploration and selection, optimizing ADME properties and assays for Beyond Rule of 5 (BRo5) molecules including macrocyclic peptides, and novel mass spectrometry approaches. Prior to Bristol Myers Squibb, Joe was an ADME principal investigator and Biotransformation scientist at Merck for several years.



Gordon Carlson Vice President, Business Development Rilas Technologies

Gordon Carlson serves as the Vice President of Business Development at Rilas Technologies, a consultative CRO supporting scientists with advanced purification and analytical characterization services. His 18 years of experience in peptide chemistry includes bench work at Ipsen and Aileron, instrumentation expertise at Waters and Biotage, and bioanalytical lab operations at LabCentral, where he supported the daily scientific, ideational, and culinary discourse needs of over 150 startup companies and sponsoring instrumentation partners. Gordon earned his B.S. in Chemistry, with minors in Biology and Philosophy, from Union College and his M.S. in Engineering Management from Tufts University.



Joshua Carter, Ph.D. Owner & CEO Helix Biostructures, LLC

ELIX

Josh is a visionary leader and the entrepreneurial force behind Helix BioStructures. As the Co-Founder and CEO, Josh has been instrumental in shaping the company's strategic direction and driving its rapid growth since its inception in 2017. His leadership is characterized by a deep commitment to innovation, quality, and fostering a collaborative team environment.

Before founding Helix BioStructures, Josh played a pivotal role at Shamrock Structures LLC, where he was integral in developing a cutting-edge protein crystallographic service pipeline. His extensive expertise in X-ray crystallographic data collection, honed through working with synchrotron facilities worldwide, laid the foundation for Helix's core offerings. Josh's forward-thinking approach also led to the development of automated software for crystallographic data processing and structure solution, significantly enhancing the efficiency and accuracy of these processes.

As an entrepreneur, Josh is constantly seeking new opportunities to expand and refine Helix's service portfolio. His efforts have not only fueled the successful growth of the crystallographic and cryo-EM imaging business but also facilitated the company's expansion into protein production and biophysical characterization services. Josh's leadership style is characterized by a hands-on approach, guiding his team through complex challenges and fostering an environment where innovation thrives.



Charly Chahwan, Ph.D. Co-Founder & CSO, SyntheX

Charly has over 25 years of experience in oncology with a particular focus on the molecular genetic etiology of cancer. He co-founded SyntheX, Inc. in 2016 and has been serving the role of Chief Science Officer. SyntheX is working on developing new drug discovery technologies for challenging targets. Charly's current focus at SyntheX is on exploiting synthetic lethality and oncogene addiction to target cancer. Prior to SyntheX, he was a fellow at the Genome Damage and Stability Centre (GDSC), at the University of Sussex, UK, where he studied mechanisms of telomere end protection. Charly pursued doctoral studies at the University of Toronto that were focused on mechanisms of chromosome segregation and aneuploidy in cancer. Prior to Toronto, he pursued research focused on mechanisms of cell cycle control and DNA replication, repair, and recombination at the Scripps Research Institute in La Jolla, California. He is particularly passionate about the promise that peptide-based modalities hold for engaging 'difficult-todrug' intracellular synthetic lethality targets.



Hanson Chang Vice President & General Manager CSBio

Hanson Chang currently serves as Vice President and General Manager at CSBio, overseeing the instrumentation business and engineering. Based in the San Francisco Bay Area, he is an experienced cross functional leader in managing complex multi-million dollar projects from conception to delivery; optimizing technology, quality, delivery, and cost.

His expertise spans across automated pharmaceutical equipment and medical devices, holding several patents in innovations with peptide synthesizers and medical devices. His range of experience includes delivering on complex multimillion-dollar projects, overseeing product portfolios >\$250 million, managing R&D budgets up to \$10 million, a track record of P&L responsibilities with growing revenues by over 70%, and leading cross-functional teams in operations, R&D, and commercialization.

Previously, Hanson held senior roles at Intuitive Surgical, Altir Management, and St. Jude Medical, where he drove product development and operational excellence. He earned a Bachelor's in Mechanical Engineering from UC Irvine, a Master's in Medical Device and Diagnostic Engineering from University of Southern California, and an MBA from UCLA Anderson.

Entrepreneurial Advisory Board PDHC Member Highlight



Yuyan Chen, Ph.D. Director, Medicinal Chemistry BioDuro



Dr. Yuyan Chen, a medicinal chemist with 17 years at BioDuro, specializes in peptide synthesis, including linear, macrocyclic, fluorescent, and branched peptides.

She has extensive expertise in synthesizing unnatural amino acids, heterocycles, boronic acids, nucleotides, and beta-lactams. With a track record in library parallel synthesis, she has delivered over 10,000 library targets.

She also leads the central lab at the peptide drug discovery R&D center at BioDuro.



Philip Cistrone, Ph.D. Associate Director, Chemistry Vilya



Phil received his PhD from the Scripps Research Institute in 2019 under the mentorship of Prof. Phil Dawson, where he studied peptide and protein synthesis and bioconjugation method development. Following scientist and group lead roles at 1859 Inc, a solid-phase DEL company, Phil joined Vilya in 2023 to combine his peptide synthesis and automation expertise to direct the high-throughput peptide synthesis labs.



Jonathan Collins Vice President Business Development CEM Corporation

Jon Collins has been working in the peptide synthesis field since 2002. His work focuses on improving synthetic strategies and developing advanced instrumentation for peptide synthesis. This has included the development of microwave peptide synthesizers that are widely used for faster and more efficient production. His recent efforts have focused on green chemistry such as the elimination of washing for solid phase peptide synthesis at both research and production scales. He is committed to the advancement of the field by continuously searching for improvements in the overall efficiency of peptide manufacturing that aid the discovery and production of critical therapeutics. He earned his B.S. in Chemistry from the University of Florida, M.S. in Materials Science from Stanford University, and MBA from the Kellogg School of Management at Northwestern University.



Nathan Collins, Ph.D. Head of Strategic Alliances Synfini Inc.



Nathan is a co-founder of Synfini Inc., a startup that combines cutting edge AI and lab automation to accelerate drug discovery. Prior to this, Nathan held various roles at Stanford Research Institute (SRI) where he was most recently Chief Strategy Officer. He was responsible for the development of SRI's preclinical and clinical drug pipeline and managed traditional small molecule, peptide and biologics drug discovery programs. Dr. Collins also was Principal Investigator on his own research programs in automated molecular discovery, and design and screening of novel peptidomimetic polymers as therapeutics and catalysts. Prior to joining SRI, Nathan was Vice President of Chemistry Operations for Discovery Partners Intl (DPI), a drug discovery services company, where he ran the high-throughput chemistry business. He also established the NIH Roadmap Small Molecule Repository at DPI, creating the first pharma compound management services business. Nathan started his industrial career as a medicinal chemist at Arris Pharmaceuticals (later Celera Genomics) in the discovery and development of small molecule cytokine mimetics and protease inhibitors. He has a Ph.D. and B.Sc. (Honors) in organic chemistry from the University of Southampton in England and was a postdoctoral researcher under Victor Hruby at the University of Arizona.



David Craik, Ph.D., AO, FAA, FRS Professor, University of Queensland



David is a Professor of Chemistry at the Institute for Molecular Bioscience at The University of Queensland, Brisbane, Australia, and Director of the Australian Research Council Centre of Excellence for Innovations in Peptide and Protein Science. His work focuses on the discovery, structural characterization and applications of peptides from plants and animals with a particular focus on cyclic peptides and toxins in drug design. He is best known for his discovery of the cyclotide family of ultrastable macrocyclic peptides. He is author of 850 scientific publications and has trained 70 PhD students.



Christian Cunningham, Ph.D. CSO PeptiDream, Inc.

Christian is currently the Chief Scientific Officer of PeptiDream, Inc., a global leader in the discovery, development, and commercialization of peptide-based therapeutics, peptide-drug conjugates, and radiopharmaceuticals. In this role, he oversees PeptiDream's internal therapeutic portfolio, manages all ex-Japan peptide discovery collaborations, and oversees the technology development of our peptide discovery platform. Prior to this role, Christian was a Distinguished Scientist and Director of the Department of Peptide Therapeutics at Genentech. Christian received his Ph.D. from the University of California, San Francisco, and held a postdoc position at Stanford University. Christian has authored 16 publications on his work over the last 10 years and is a named inventor on 5 published patents.



William DeGrado, Ph.D. Professor, Pharmaceutical Chemistry, UCSF

William is the Toby Herfindal Presidential Professor of Entrepreneurship and Innovation in the Department of Pharmaceutical Chemistry at the University of California, San Francisco. Previously, he held the position of Professor in the Department of Biochemistry & Biophysics at the University of Pennsylvania (1996-2011) and was a Senior Director at DuPont Merck Pharmaceutical Company (1990-1996). William has been a pioneer of and contributed substantially to the field of protein design and coined the term de novo protein design. He has received numerous prestigious awards and honors throughout his career including but not limited to the du Vigneaud Award (1988), member of the American Academy of Arts and Sciences (1997), member of the National Academy of Sciences (1999), Merrifield Award (American Peptide Society, 2003), Hirschmann Award in Peptide Chemistry (American Chemical Society, 2008), Member of the National Academy of Inventors, U.S. (2014), and the Cope Scholar & Goodman Award (American Chemical Society, 2018). William received his Ph.D. in organic chemistry from the University of Chicago.



César de la Fuente, Ph.D. Presidential Assistant Professor University of Pennsylvania



César de la Fuente has completed his postdoctoral research at the Massachusetts Institute of Technology (MIT) and earned a PhD at the University of British Columbia (UBC). His research goal is to use the power of machines to accelerate discoveries in biology and medicine. Specifically, he pioneered the development of the first computer-designed antibiotic with efficacy in animal models, demonstrating the application of AI for antibiotic discovery and helping launch this emerging field. His lab has also been in the vanguard of developing computational methods for proteome mining, leading to the breakthrough discovery of a whole new world of antibiotics for the first time and have dramatically accelerated the time needed to discover preclinical candidates, from years to hours. His group was also the first to find therapeutic molecules in extinct organisms, launching the field of molecular de-extinction.



Elizabeth Denton, Ph.D. Regional Marketing Manager Biotage <image>

Elizabeth has recently transitioned to the Regional Marketing Manager at Biotage supporting peptide and small molecule synthesis workflows. She previously leveraged her skills as a peptide chemist to develop technologies that improve efficiency in the peptide synthesis workflow across a wide-scale range. As a Marketing Manager, Elizabeth will utilize her knowledge of the peptide workflow to facilitate academic and industrial collaborations, focusing primarily on new technologies and methodologies. She received her PhD in Chemistry from Yale University.



Ratmir Derda, Ph.D. Professor University of Alberta, CSO, 48Hour Discovery

Ratmir Derda received his B.Sci. in Physics from Moscow Institute of Physics and Technology and his Ph.D. in Chemistry from the University of Wisconsin-Madison under the supervision of Laura L. Kiessling. He received postdoctoral training at Harvard University under the supervision of George M. Whitesides and Donald E. Ingber. He started his independent position at the University of Alberta in 2011 where he is currently a Professor of Chemistry. In 2017, Ratmir founded 48Hour Discovery Inc. (48HD), a Canadian Biotechnology company located in Edmonton, AB, Canada. 48HD's platform technology, which was developed by Ratmir's research group, is a genetically-encoded library technology that rapidly searches libraries on a billion scale to access ligands for diverse molecular targets. This platform supports early lead discovery by providing rapid access to unique chemically-modified peptide scaffolds with high value-added lead optimization (e.g., stability, affinity, bioavailability, and delivery handles). 48HD recently committed multiple undisclosed targets to internal discovery program in the area of Oncology and Targeted Radio Pharmaceuticals (TRP), and with the goal of advancing preclincal TRP leads to INDfiling and FIH clinical studies by 2024-2026.



John Dwyer, Ph.D. Head of Protein Engineering, Sail Biomedicines

John is currently Head of Protein Engineering at Sail Biomedicines, a Cambridge-based biotech company using eRNA technology for the expression of peptides, proteins, and antibodies as well as immune reprogramming and vaccines. Prior to that, he was VP of Research at 48Hour Discovery and CEO of their spinout, 48HD BioPharma, both of which screened novel, chemically-modified macrocyclic peptides libraries using phage display. John was involved in the design and characterization of a GLP-2 agonist at Ferring Pharmaceuticals, which is now known as apraglutide and is in Phase 3 clinical development. He was also directly involved in the design of the HIV fusion inhibitor peptide TRI-1144 while at Trimeris, which successfully completed Phase 1. John earned his PhD in Biophysics from Johns Hopkins University and did his postdoc in the Protein Engineering group at Genentech under Tony Kossiakoff and Jim Wells.



Sean Ekins, Ph.D. Founder & CEO, Collaborations Pharmaceuticals Inc.



Dr. Ekins graduated from the University of Aberdeen where he received his M.Sc., Ph.D. in Clinical Pharmacology and D.Sc in Science. Sean was a postdoctoral fellow at Lilly Research Laboratories. Previously, he has worked as a senior scientist at Pfizer and Lilly Research Laboratories, Associate Director of Computational Drug Discovery at Concurrent Pharmaceuticals, Inc., Vice President of Computational Biology at GeneGo, CSO at Collaborative Drug Discovery and CEO and Co-Founder at Phoenix Nest. Sean has co-authored >365 peer reviewed scientific papers, over 40 book chapters and numerous patents as well as edited/co-edited five books. He has recently published his first book titled Winning Grants. He has received extensive support (> \$17M) from NIH, DOD and DTRA for projects on machine learning, drug discovery, rare and neglected disease and computational toxicology.



Maria Fawaz, Ph.D. Associate Principal Scientist Merck



Dr. Maria Fawaz is an Associate Principal Scientist in Pharmacokinetics, Dynamics, Metabolism & Bioanalytics at Merck Research Laboratories, West Point, PA. In her role as a DMPK principal investigator, Maria supports various chemical modalities, including peptides and small molecules by guiding structural design in the early discovery space and directing lead optimization while also supporting clinicalstage programs. Maria has extensive experience in cyclic peptide metabolite identification, where she co-discovered novel analytical strategies of unambiguously identifying regions in the cyclic peptide sequence susceptible to amide hydrolysis by proteases. This methodology is used in the discovery stage to guide medicinal chemistry designs. At Merck, she is also working with external collaborators and various funding organizations. Maria holds a PhD degree in Medicinal Chemistry from the University of Michigan. Her doctoral research was focused on the discovery of synthetic high-density lipoproteins (sHDL) composed of ApoA-I mimetic peptides and phospholipids for the treatment of Niemann-Pick diseases and atherosclerosis. Maria is passionate about mentoring junior scientists and she is actively engaged in student and postdoc career outreach at various universities.



Lauren Goodrich, Ph.D. Vice President Nimble Therapeutics

Lauren Goodrich is the VP of Therapeutic Discovery at Nimble Therapeutics where she leads a diverse team of scientists working to utilize Nimble's proprietary maskless array synthesis technology for the development of peptide-based therapeutics. She earned a PhD in chemistry from the University of Michigan. After completing graduate work, Lauren joined Roche as a postdoctoral fellow, where she focused on optimizing the synthesis of biopolymers on the company's microarray platform. Lauren continued with Roche as a scientist in the technology innovation group, holding increasing levels of responsibility, and ultimately leading an interdisciplinary team to further advance the peptide microarray platform and its applications. Notably, Lauren and her team developed the latest generation peptide synthesizer, bioinformatic tools, and assays that Nimble continues to build upon for the rapid discovery of specific, high-affinity peptide ligands to proteins.



Patrick Gleason, Ph.D. CEO & Founder Bioxel, Inc.



Patrick Gleason is the CEO and Founder of Bioxel, Inc., where he leads a pioneering team dedicated to the design and development of multivalent peptides and proteins targeting oligomeric receptors and other high-value targets. He holds a Ph.D. in Biochemistry with a focus on structural biology and computational protein design from Arizona State University. Following his doctoral studies, Patrick joined Oregon State University as a Post-Doctoral Research Fellow, focusing on the computational design of bispecific antibodies. Prior to founding Bioxel, Patrick gained extensive experience as Director of Protein Sciences at Amide Technologies, where he honed his expertise in biochemistry and peptide development. His work involved the design and synthesis of branched peptides, pairing agonists with other agonists to exploit synergistic effects. This innovative approach has positioned Bioxel to be first movers in a new class of multivalent drugs. Under Patrick's leadership, Bioxel is advancing its primary pipelines, including the development of molecules capable of targeting heteromeric GPCRs with agonist/antagonist pairs and the creation of cutting-edge systems for identifying these receptors of therapeutic interest. His commitment to leveraging novel computational and innovative wet lab techniques continues to drive rapid progress.



Vincent Guerlavais, Ph.D. Senior Director of Discovery Chemistry Sarepta Therapeutics



As the Senior Director of Discovery Chemistry at Sarepta Therapeutics, Vincent leads a team dedicated to improving the delivery of the FDA-approved PMO platform while broadening its applications to develop innovative RNA-based therapeutics for neurological, muscular, and cardiac diseases.

Before joining Sarepta, Vincent dedicated much of his research to designing bioactive, cellpermeable macrocyclic peptides. As a leader at Aileron Therapeutics, he played a key role in advancing Sulanemadlin (ALRN-6924), a first-in-class dual MDM2/MDMX inhibitor, into clinical development in collaboration with F. Hoffmann-La Roche. This novel therapy is currently being evaluated for the treatment of retinoblastoma (RB).

Prior to his work at Aileron, Vincent began his career at Medarex (now part of Bristol Myers Squibb), where he developed ultra-potent cytotoxic prodrugs conjugated to fully human antibodies. His contributions helped advance MDX-1203, the company's first Antibody-Drug Conjugate (ADC) clinical candidate.

Vincent earned his Ph.D. from the University of Montpellier under the mentorship of Professor Jean Martinez. His doctoral research led to the discovery of Macimorelin (JMV1843; AEZS-130), an orally available ghrelin agonist. Approved by the FDA in 2017 for diagnosing adult growth hormone deficiency (marketed as Macrilen[®] and Ghryvelin[®]), Macimorelin is now being explored as a potential treatment for Amyotrophic Lateral Sclerosis (ALS, also known as Lou Gehrig's disease).


Sevan Habeshian, Ph.D. Co-Founder & VP Platform Chemistry Orbis Medicines



Sevan is cofounder and VP of platform chemistry at Orbis Medicines, a recently founded company with the mission to develop orally available macrocycle therapeutics. At Orbis, Sevan leads the chemistry team responsible for discovery and optimization of drug-like macrocyclic peptides. He obtained his PhD in 2021 in Professor Christian Heinis' lab at the École Polytechnique Fédérale de Lausanne (EPFL) where he contributed to the development of a high-throughput macrocycle synthesis platform, which is currently in-use at Orbis. Prior to his PhD studies, Sevan worked for seven years at X-Chem, where he designed and synthesized DNA-encoded libraries, and contributed to off-DNA hit optimization. His expertise includes organic synthesis, screening library design, peptide synthesis & macrocyclization, DEL technology, beyond rule-of-5 permeability, and peptide drug discovery and development.



Mike Hamill, Ph.D. Chief Innovation Officer & Co-Founder Abiologics

Mike Hamill is the Chief Innovation Officer and Co-Founder of Abiologics, a Flagship Pioneering-founded company pioneering Synteins[™], a new class of supranatural biologics created through generative Al-driven protein design and chemical synthesis. At Abiologics, Mike is leading efforts to break free from the limitations of natural biologics, unlocking novel therapeutic modalities with enhanced efficacy, specificity, and bioavailability.

In addition to co-founding Abiologics, Mike is a Senior Principal at Flagship Pioneering, where he focuses on venture creation in life sciences driving the origination and development of groundbreaking bioplatforn companies. Previously, he served as VP and Head of Research at Axcella Therapeutics, where he played a key role in scientific and platforn development, helping the company advance multiple novel assets into late stage therapeutic development and through an IPO in 2019.

Mike holds a Ph.D. in Biochemistry from Boston University and a B.Sc. in Chemistry from Gettysburg College. Throughout his career, he has contributed to the invention of multiple patented therapeutics, published foundational scientific articles, and driven innovation at the intersection of computation, chemistry, and biology.



Robert Hammer, Ph.D. Director, Platform Chemistry NewCo

Robert P. Hammer received his B.S. in Chemistry with distinction from the University of Illinois-Urbana in 1985. He then attended graduate school at th e University of Minnesota where he worked under the direction of Professor George Barany on new methods for solid-phase peptide synthesis. After receiving his Ph.D. in 1990, Dr. Hammer worked at the Swiss Federal Institute of Technology (ETH) in Zürich, Switzerland on the synthesis and biophysical characterization of hexose-based nucleic acids. He joined the faculty of the Department of Chemistry at Louisiana State University in 1992 where he progressed through the ranks to Full Pr ofessor and held the title of William A. Pryor Professor of Chemistry. In 2008 Dr. Hammer moved to industry where he has held a number of positions including at Ra Pharmaceuticals/UCB where he co-invented and developed the peptide drug zilucoplan that was approved for treatment of the rare neuromuscular autoimmune disease myasthenia gravis. He has continued his work in the discovery and development of peptide-based drugs at PepGen with peptide-oligonucleotide conjugates for

"uromuscular diseases and Bicycle Therapeutics with phage discovered bicyclic peptide conjugates for immuno-oncology therapies. He is currently Director of Platform Chemistry at a stealth biotechnology company.



Nina Hartrampf, Ph.D. Assistant Professor University of Zurich

Nina studied chemistry and biochemistry at Ludwig-Maximilians-Universität Munich (Germany) and obtained her PhD in the field of natural product synthesis and chemical biology in the group of Dirk Trauner. She then moved to the group of Brad Pentelute at the Massachusetts Institute of Technology (USA) as a postdoctoral researcher, where she worked on the optimization of flow-based peptide synthesis using an automated synthesis platform. In 2020, she moved to the University of Zurich as an assistant professor. Her research group focuses on the development of new tools for flow-based peptide synthesis as well as the chemical synthesis of post-translationally modified peptides and proteins. Her work has been recognized with the 2019 Bert Schram Award from the American Peptide Society, the 2021 Bachem Award for Peptide Science, and the 2022 Thieme Journals Award.



Ryuji Hayashi, Ph.D. Group Head in Discovery Chemistry Department Chugai Pharmaceutical



Ryuji is currently a group head of the discovery chemistry department at Chugai Pharmaceutical. His current roles are to manage and lead a number of drug discovery projects associated with macrocyclic peptides, mainly in the oncology area, technology development of new modalities, and external research collaborations. In his early professional years, his research focused on technology development to establish Chugai's macrocyclic peptide drug discovery platform. This includes establishing synthetic protocols for highly N-alkylated cyclic peptide preparations and defining Chugai's original druglike criteria for macrocyclic peptides to be membrane-permeable and orally available. He has experience as a project leader for several oncology and rare disease drug discovery projects. Ryuji earned his Ph.D. in organic chemistry from North Dakota State University, where he studied Lewis acid and organometallic-mediated catalysis. His postdoctoral training at the University of Wisconsin-Madison focused on exploring new reactivity of allen-, yn-, and enamides and their application in tandem reactions to construct complex natural product scaffolds.



Christian Heinis, Ph.D. Associate Professor EPFL



The main goal of Christian Heinis' research is the development of therapeutics based on cyclic peptides. Towards this end, his laboratory is developing methods for synthesizing and screening large combinatorial libraries of cyclic peptides. Christian Heinis has studied biochemistry/chemistry at the ETH Zurich. After a PhD in the research group of Prof. Dr. Dario Neri at ETH, he did two postdocs, the first one with Prof. Dr. Kai Johnsson at the EPFL and the second one with Sir Gregory Winter at the LMB-MRC in Cambridge, UK. In 2008 he started as Assistant Professor at EPFL (supported with an SNSF professorship) and was promoted in 2015 to Associate Professor. Christian is a co-founder of Bicycle Therapeutics (BCYC) and Orbis Medicines.



Jerome Hochman, Ph.D. Consulting

Jerome Hochman holds a PhD in biochemistry from Michigan State University followed by postdoctoral training at The Johns Hopkins University. Jerome joined Merck and Co in 1988 where he applied principles of biochemistry, cell biology and physiology to understand barriers to absorption, exposure and target engagement for diverse therapeutic modalities. Initially this work entailed establishing in vitro models to study drug transport, metabolism and transporters for small molecules, and evolved into overseeing scientific strategies for ADME characterization of novel modalities (therapeutic antibodies, oligonucleotide therapeutics, and therapeutic peptides). Starting in 2013, Jerome took on scientific leadership for ADME evaluation of Merck's nascent peptide therapeutics efforts, supporting discovery and early development of a diverse portfolio of peptide drugs. In this role, Jerome established scientific strategies supporting characterization and optimization of oral and parenteral peptide drug exposure, and provided mentorship to build robust capabilities to peptide drug programs.



Nick Holliday, Ph.D. CSO, Excellerate Biosciences Associate Professor, University of Nottingham



Nick Holliday is Chief Scientific Officerof Excellerate Bioscience and an Associate Professor in Pharmacology at the University of Nottingham, UK, with expertise in the molecular and cellular pharmacology underlying peptidetarget interactions. Nick obtained his undergraduate and PhD degrees from the Universities of Cambridge and King's College London respectively, prior to an academic research career on peptide G protein- coupled receptors involved in metabolism, obesity and immune regulation. During this time he specialized in analysis of ligand-receptor pharmacology, including kinetics, orthosteric and allosteric interactions, and signalling bias, and gained an interest in innovative ligand binding and protein-protein interaction approaches to address the underlying mechanisms and improve preclinical compound profiling. Nick joined Excellerate in 2019 and has helped to expand the company as a leading specialist CRO, focused on delivering excellence in in vitro pharmacology services for drug discovery. Excellerate's projects and expertise span the preclinical pipeline from target validation to lead optimization and candidate mechanism of action, across an array of target classes and indications. Nick is a Fellow of the British Pharmacological Society.



Howard Huang Senior VP of Business Development CPC Scientific

Howard Huang is the Senior Vice President of Business Development at CPC Scientific, a leading peptide specialized integrated CRDMO. He joined CPC 12 years ago where he started as the Director of Corporate Alliances. Howard is passionate about his work in peptide chemistry platforms as well as providing an integrated CRDMO for the greater peptide community. CPC has experience of 13 commercial programs and over 130 INDs focused on synthetic peptides with GMP manufacturing sites in California and Hangzhou China. Howard has previously served as Leadership Team Member at AAPS (American Association of Pharmaceutical Scientists) PPB Section, Advisor and Co-Chair at CABS, SAPA, and fulfilled roles at other pharmaceutical societies. He majored in pharmaceutical engineering at Beijing University of Chemical Technology and received his M.Sc. from Texas A&M University in biotechnology. Outside of his professional work, Howard enjoys family time with his ten year old son, Edward, and four months old daughter, Eleanor.



Jennifer Johnston, Ph.D. Director, Modeling and Informatics Merck

Jennifer Johnston currently leads a cross-site team of computational chemists supporting discovery medicinal chemistry at Merck. This team spans a diverse portfolio of targets and multiple therapeutic modalities. Jennifer completed her undergraduate and graduate studies in the UK before moving to the US for postdoctoral training. She joined Merck in 2014, contributing valuable insights for GPCR and biocatalytic enzyme design programs. Since 2018, she has focused her research on macrocyclic peptide therapeutics, utilizing physics-based and machine learning computational approaches to advance programs toward the clinic. Jennifer and her team are responsible for defining and delivering on peptide modeling strategy across multiple therapeutic areas and pipeline stages. In recognition of her expertise, Jennifer was invited to present at the Young Investigator Symposium during the ACS National Meeting in 2022.



Wes Kazmierski, Ph.D. Senior Director of Chemistry Biohaven Pharmaceuticals



Wes Kazmierski received his Ph.D. degree at the University of Arizona in the laboratory of Victor Hruby. As a Post-Doctoral Fellow and Staff Member at UA, he continued his work on discovery and new chemistries leading to ultrapotent and selective somatostatin and opioid peptidomimetics. He then joined Selectide Corp to help implement the one-peptide one-bead library concept. After a stint as an Assistant Professor at the University of Rhode Island, Wes joined Burroughs Wellcome Co in RTP, NC (and its successor companies Glaxo Wellcome, GlaxoSmithKline, ViiV Healthcare). As GSK Fellow, he led and delivered multiple clinical and FDA-approved antivirals: HIV (drug Lexiva) and HCV as well as immunology. He received numerous internal awards for his antiviral research. Wes is currently a Senior Director of Chemistry at Biohaven Pharmaceuticals, where he is involved in discovery of degrader-based technologies and drugs and new ADC-enabling chemistries. He is credited with authoring and co-authoring more than 200 publications and patents.



Matt Kelker, Ph.D. VP Research & Development Xylogenics

Matt is an established biophysicist and protein chemistry expert with a long history establishing early-stage R&D programs. His experience encompasses both academic and industry appointments covering a wide range of topic areas. These include eukaryotic and prokaryotic protein expression covering strain development, optimization, expression, and purification from laboratory to pilot scale-up. In addition, he has in-depth familiarity with implementation of corporate structural biology program to assess structure/function relationship of biotechnology products, analytical fermentation analysis, as well as designing and commissioning of pilot scale-up protein production facilities. Matt received a Ph.D. in Biophysics & Structural Immunology from Scripps Research under Dr. Ian Wilson and completed his post-doc in NMR under Dr. Wolfgang Peti at Brown University Medical School. He has a BS in Molecular Biology from Purdue University.



Kamala Kesavan, Ph.D. Director of Discovery BD Evotec



Kamala is Director of Discovery BD with Evotec, a trusted partner for drug discovery and development based in sites across the US and Europe. She completed her PhD by studying lymphocyte tyrosine kinases at Purdue University. Kamala moved to the IMP, the primarily BI-funded research institute in Vienna, Austria for post-doctoral studies using genomics to elucidate Notch-1 functions in early T-cell development. After completion of her post-doctoral studies, Kamala moved to Boston Massachusetts to begin her drug discovery career in the realm of peptide therapeutics. Beginning this endeavor at Trans Molecular Inc., she was a member of the R&D team working on TM-601, a radio-labeled venom peptide in clinical development targeting a range of solid tumor types. Next, Kamala joined Aileron therapeutics as the lead biologist on the platform team identifying criteria and rules for intracellular delivery of therapeutic stapled peptides. She moved to her current role in business development at Evotec via roles at Third Rock Ventures, including Platform team and Champions Oncology/Corellia.Al where she was Director of Strategic Partnering. As member of the EAB at PDHC, Kamala is looking forward to connecting PDHC members and ideas with Evotec's capabilities and expertise to enable development of orally bioavailable peptide therapeutics.



Cyrus Khojasteh, Ph.D. Senior Director Genentech

Cyrus is a Senior Director and a Distinguished Scientist at Genentech. He leads the Biotransformation Function within the Drug Discovery Organization. He earned his Ph.D. in Medicinal Chemistry from the University of Washington under the direction of the late Professor Sidney Nelson. Cyrus's research centers on elucidating the mechanisms of biotransformation in drug discovery and development. His work particularly delves into the mechanisms of biotransformation concerning small molecules to macrocyclic peptides and drug payloads of antibody-drug conjugates.



Ralph Kirk, Ph.D. Associate Director Concept Life Sciences



Ralph is an Associate Director at Concept Life Sciences with expertise in early-stage drug discovery, particularly in antimicrobial peptides and PROTACs. He earned a PhD in Chemistry with Pharmacology from the University of Liverpool in 2010 and was awarded the Young Bionow Technologist of the Year in 2016. His career includes leadership roles at Charnwood Discovery, Redx Pharma, and CRUK Manchester, with experience leading integrated peptide programmes and managing PROTAC discovery platforms. He has contributed to approximately 14 peer-reviewed publications, reviews, and patents.



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Goran Krilov, Ph.D. Senior Director Schrödinger Therapeutics

Goran Krilov completed his undergraduate education at Drake University and obtained a Ph.D. in Chemical Physics at Columbia University. For the past twenty-five years, his work has focused on developing and applying cutting-edge computational chemistry techniques to problems in biophysics and drug discovery. Dr. Krilov has held senior positions both in industry, including IBM and Strand Life Sciences, as well as academia, where he held an assistant professorship in Chemistry at Boston College. He is currently a Senior Director in the Schrödinger Therapeutics group, where he co-leads multiple drug discovery projects, two of which have advanced to the clinic. He has authored over 35 scientific papers as well as a number of patents.



Joshua Kritzer, Ph.D. Professor of Chemistry Tufts University

Joshua Kritzer is a Professor of Chemistry at Tufts University in Medford, MA, with appointments in the Molecular Microbiology Program and the Cell, Molecular and Developmental Biology Program at Tufts University's School of Graduate Biomedical Sciences in Boston, MA. The Kritzer lab combines approaches from chemistry, biology, and biotechnology to solve foundational problems in drug discovery. Current projects include discovering constrained peptides for difficult-to-target proteins in autophagy, and measuring cytosolic penetration of peptide and oligonucleotide therapeutics. Prof. Kritzer has won numerous teaching and mentoring awards, and his academic awards include the Smith Family Award for Excellence in Biomedical Research, an NIH New Innovator Award, and a Sanofi iAward for projects involving cross-disciplinary solutions to pressing problems in chemical biology and drug development.



Yu-Shan Lin, Ph.D. Professor & Chair of Chemistry Tufts University

Yu-Shan Lin is a computational peptide chemist and currently Professor and Chair of Chemistry at Tufts University. She received her Ph.D. in Chemistry from the University of Wisconsin, Madison, in 2009, and she was a postdoctoral fellow at Stanford from 2009 to 2012. In 2012, Dr. Lin established her research group at Tufts University, where she received tenure in 2018. Her current research endeavors focus on using molecular dynamics simulation and machine learning to understand and design the structures and properties of peptides, in particular cyclic and other restrained peptides. Dr. Lin recently received the Machine Learning in the Chemical Sciences & Engineering Award from the Camille and Henry Dreyfus Foundation (2020) and the Rising Innovator Award from Tufts University (2023).



Jing Ling, Ph.D. Associate Principal Scientist Merck



Jing is an Associate Principal Scientist in discovery pharmaceutical sciences at Merck & Co., South San Francisco. She is recognized as a subject matter expert in oral peptide delivery. Jing's research focuses on macrocyclic peptide delivery, including the development of new permeation enhancers and other innovative methods to enable oral peptide delivery, building in vitro/in situ/ex vivo/in vivo platforms, and molecular investigation of permeation enhancers via advanced analytical tools. She graduated from the School of Pharmacy, Tongji Medical School in Huazhong University of Science and Technology in 2010, obtained a master's degree in biomedical engineering from New York University in 2012, and a Ph.D. in Industrial and Physical Pharmacy from Purdue University. Jing is a past chair of AAPS-BDAG, an editorial advisory board member in AAPS PharmSciTech, an industrial representative in CRS Skin & Mucosal Delivery (SMD), and a scientific advisor to the Editors of the Journal of Pharmaceutical Sciences.



Ewa Lis, Ph.D. CEO, Koliber Biosciences

Dr. Ewa Lis is the Founder and CEO of Koliber Biosciences, a pioneering computational biology company that leverages an advanced AI platform for the discovery and optimization of peptides. With a rich background in both computer science and biological sciences, Dr. Lis's expertise encompasses deep learning, data augmentation, graph networks, and various domains of biology and chemistry. Before establishing Koliber Biosciences in 2014, she held key positions at Life Technologies, Genomatica, and Reveal Biosciences, where she contributed to the development of diverse technologies ranging from algorithms for pathology tissue classification to tools for genome engineering research and sustainable microbial chemicals. Dr. Lis earned her BA in Chemistry from Cornell University and her Ph.D. in Biological Sciences from The Scripps Research Institute.



Theo Martinot, Ph.D. VP, CMC MapLight Therapeutics, Inc.

Theo Martinot heads CMC at MapLight Therapeutics. Theo's pharmaceutical experience spans nearly two decades of leadership in drug development from preclinical phase to New Drug Application at FogPharma, Infinity Pharmaceuticals, Merck & Co., and Vertex across small molecule and peptide modalities. Theo holds a Ph.D. in organic chemistry and a B.S. in chemistry from the University of Florida.



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Larry Mattheakis, Ph.D. Drug Discovery and Development Consultant & Co-founder Medikine Inc.

Larry is an advisor and consultant with over 30 years' experience developing peptide-based therapeutics. He was previously Sr. Vice President, Discovery Biology & Translational Research at Protagonist Therapeutics, where he led biology, pharmacology, DMPK and translational biomarkers for multiple peptide clinical assets including PN-943, JNJ-2113 (PN-235), and rusfertide. He began his career at Affymax Research Institute where he pioneered the development of ribosome display for screening large peptide libraries. Larry's additional experience includes CSO at Annexon Biosciences and cofounder of Medikine Inc, a company developing peptide mimetics of clinically relevant cytokines. Larry holds a PhD in Biochemistry from the University of Wisconsin-Madison and was a postdoctoral trainee at Harvard Medical School.



Kevin McDonnell, Ph.D. Senior Vice President MPM BioImpact Startup (Stealth Mode)

Kevin is Senior Vice President of Chemistry & Discovery at an MPM BioImpact funded startup company (currently in stealth mode). Previously he was VP Chemistry at Bicycle Therapeutics where he led the medicinal chemistry team to create novel therapeutics based on bicyclic peptides and led cross functional teams across various internal and collaboration programs in rare disease, immuno oncology and radiopharmaceuticals. Prior to Bicycle, he was Director of Chemistry at BIND Therapeutics and led the discovery of small molecule, peptide and protein-conjugated polymeric nanoparticles. He began his career in biotech at Syntonix Pharmaceuticals (acquired by Biogen) where he created novel peptide, peptidomimetic, peptide-protein fusions and contributed to the discovery of two marketed products (Alprolix and Eloctate). Kevin holds a B.Sc. in Chemistry & Biology from the University of New Brunswick and a Ph.D. in Chemistry & Biology from the Massachusetts Institute of Technology (MIT).



Amit Michaeli, Ph.D. CTO, Pepticom

Dr. Michaeli developed Pepticom's core technology and has extensive algorithm development experience in both the chemical and financial fields. In his Ph.D. research conducted at the Hebrew University in Jerusalem, Dr. Michaeli developed characterization of peptide and protein design and specialized in design optimization algorithms. In addition to a doctorate, he holds an M.Sc. in Human Genetics and a Master's in Business Administration (MBA), majoring in Finance.

Entrepreneurial Business Network PDHC Member Highlight



Prof. Ali Miserez, Ph.D.

President's Chair School of Materials Science & Engineering School of Biological Sciences Director Center for Sustainable Materials Nanyang Technological University (NTU), Singapore



Ali Miserez is a Full Professor of Biomimetic and Bioinspired Materials at Nanyang Technological University (Singapore), which he joined in 2009, with joint appointments in the School of Materials Science and Engineering and the School of **Biological Sciences. He obtained his PhD (2003) from EPFL** (Switzerland) in the field of composite and mechanics of materials. From 2004 to 2009, he was a post-doctoral fellow at UC Santa Barbara, where he expanded his research towards biomimetic engineering and biochemistry of extra-cellular tissues. Miserez's research aims at revealing the molecular, physico-chemical, and structural principles from unique biological materials, and at translating their molecular design into novel biomimetic materials, including for healthcare applications. At NTU, he is currently the founding Director of the "Center for Sustainable Materials". In recent years, his lab has pioneered the development of phase-separating peptide coacervates as a universal platform to deliver macromolecular therapeutics (proteins, antibodies, mRNA, CRISPR/Cas9, etc.) inside cells.



Gerhard Müller, Ph.D. CSO Spirochem

Gerhard has proven expertise in small-molecule drug discovery and strong entrepreneurial skills supported by 25 years of practical and managerial experience in the European pharmaceutical, transatlantic biotech, and CRO industries. He received his PhD in Organic Chemistry under the guidance of Prof. Dr. Horst Kessler. Throughout his career, Gerhard has worked on a wide range of different target classes in numerous disease areas and has **ko** ntributed to seven development candidates. His expert

owledge in medicinal chemistry allowed him to establish novel design paradigms for several target families, proven by over 80 peer-reviewed publications and more than 40 international patent applications. Gerhard co-founded two innovative biotech companies, i.e., Gotham Therapeutics in New York, and Anavo Therapeutics in Heidelberg. Gerhard raised close to \$100 million fr om venture capital for three biotech companies, namely Gotham Therapeutics, Anavo Therapeutics, and Axxima Pharmaceutical. Currently, Gerhard is CSO of SpiroChem.



Vikram K. Mulligan Ph.D. Research Scientist Co-head of Biomolecular Design Group, Center for Computational Biology, Flatiron Institute. Co-founder, Menten Al

Vikram K. Mulligan completed his Ph.D. under Avi Chakrabartty in the Department of Biochemistry at the University of Toronto, exploring the molecular mechanisms of misfolding in late-onset neurodegenerative diseases including ALS, protein Creutzfeldt-Jakob Disease, Alzheimer's. and using various time-resolved spectroscopic methods. He then worked under David Baker in the Department of Biochemistry at the University of Washington, to generalize computational methods developed for protein structure prediction and design, and to permit the rational design of foldamers built from non-canonical and heterochiral amino acids. Vikram's current research interests include the use of ML methods trained on physics-based simulations to provide fast estimates of observables from simulation to reduce the cost of *in silico* screening, the development of enhanced algorithms for classical and quantum computers for optimizing peptide and protein sequences, and the incorporation of quantum chemistry calculations into peptide and protein design pipelines. With more than ten years of experience as a senior developer on the Rosetta software project, Dr. Mulligan now devotes his efforts to developing the Masala software suite, a modern, extensible, and open-source set of tools for heteropolymer modelling.



Ravi P. Nargund, Ph.D. Principal, Calibrate MedChem Consulting

Ravi has over 34 years of experience in medicinal chemistry, drug discovery research, and management. He has been an advisor/consultant to a number of biotechs and pharma and previously was a senior leader at Johnson & Johnson Innovation/Janssen and Merck Research Laboratories. Ravi and his group advanced more than 25 clinical candidates into Phase 1B/2A/2B/3 studies for various therapeutic indications, of which six compounds were peptide- or protein-based. Ravi and his mentor, Arthur Patchett, devised a design concept called "peptidyl privileged structures" for identifying small molecule/peptidomimetic agonists for peptide hormone receptors and applied it successfully for delivering first-in-class development candidates for over six challenging targets. He has authored or co-authored 115 publications in refereed journals and is an inventor on over 60 issued U.S. patents and/or pending patent applications.



Matthew Naylor, Ph.D. Associate Principal Scientist VC-Backed BioTech NewCo

Matthew Naylor is a medicinal chemist pursuing peptide therapeutic discovery at a stealth biotech in Boston, MA, with prior experience at Ra Pharma and UCB. He earned his Ph.D. with Prof. Erik Sorensen at Princeton University and was an Eli Lilly & Co. LIFA postdoctoral fellow with Prof. R. Scott Lokey at UC Santa Cruz. Matthew has hands-on experience with most modern peptide discovery technologies—including high-throughput synthesis, mRNA and phage display, affinity selection-mass spectrometry, mass-encoded libraries, and one-bead-onecompound libraries— integrated tightly with computational methods in data science and molecular modeling. He has applied these tools to elucidate physicochemical determinants of passive permeability, design oral or intracellular therapeutics, mine large screening datasets for peptide binders, and develop peptideoligonucleotide conjugates.



Laura Nevola, Ph.D. CSO & COO IDP Pharma

Dr. Nevola received her degree in medicinal chemistry and a PhD in Pharmaceutical Sciences from the University of Rome "Sapienza" (Italy). In 2007 she joined Prof. Dr. Hamilton group at Yale University (USA), where she specialized in the design and development of peptidomimetic drugs. Back in Europe, she moved to the Biomedical Research Institute (IRB) in Barcelona, where she worked as a research associate in Prof. Dr. Giralt group. In 2015 she founded IDP Pharma, where led the operations and scientific vision of the company, building a pipeline of 5 innovative products for different types of cancer and other diseases. She has a Master in Marketing management from IMD Business School (Lausanne), is the inventor of 9 patents, author of 24 academic articles and more than 30 contributions in poster or oral presentation in international conferences. In 2019 Dr. Nevola has been awarded with the European Award for Women Entrepreneur thanks to the achievements of IDP Pharma. In 2022 she has been recognized in the space of "Women References for Innovative Entrepreneurship in Health" by the High Commissioner of Spain.



Atsushi Ohta, Ph.D. Head of Modality Technology Department Chugai Pharmaceutical Co.,Ltd.



Atsushi Ohta is the head of Modality Technology Department at Chugai Pharmaceutical Co., Ltd. He received his Ph.D. from The University of Tokyo, Japan, under the supervision of Hiroaki Suga in 2009. He then joined Chugai Pharmaceutical Co., Ltd. where he has been working on cyclic peptide drug discovery. Atsushi's expertise includes the incorporation of non-natural amino acids and in vitro selection. Currently, he is leading cyclic peptide drug discovery and AI-driven molecular design.



Toby Passioura, Ph.D. Co-founder & CSO Insamo

Toby Passioura is Chief Scientific Officer and Co-Founder of Insamo, and an honorary affiliate of the School of Chemistry at the University of Sydney, Australia. His work at Insamo focuses on the discovery and development of membrane-permeable macrocyclic peptides for a range of clinical applications. Prior to Insamo, he held positions at the University of Sydney and the University of Tokyo, and led commercial research teams in biotechnology and large pharmaceutical companies.



Jan Pawlas, Ph.D. Chemist PolyPeptide Laboratories

Jan Pawlas (ORCID) obtained a M.Sc. (hons) from Institute of Chemical Technology Prague (1998) and a Ph.D. from Royal Danish School of Pharmacy Copenhagen (2001). He worked for six years as a medicinal chemist developing therapeutics for CNS diseases prior to joining PolyPeptide in 2008 as a Scientist in the global development department. At PolyPeptide, Jan is involved in the advancement of methods for sustainable peptide manufacturing with a focus on aqueous synthesis, catalysis and more high quality and sustainable starting materials for peptide synthesis.



Dehua Pei, Ph.D. Professor of Chemistry & Biochemistry Ohio State University

Dehua Pei is Professor of Chemistry and Biochemistry at The Ohio State University. He received his PhD degree in organic chemistry from University of California, Berkeley, and conducted postdoctoral research at Harvard Medical School prior to joining the faculty at OSU. His research group is investigating the mechanisms by which biomolecules (e.g., peptides and

proteins) travel across various cell membranes and developing cellpermeable peptides and proteins as intracellular biologics against previously undruggable targets, such as intracellular protein-protein interactions. He is a Founder or co-Founder of Entrada Therapeutics (TRDA), Syneron Tech, Permeasis Therapeutics, and Scioto AgriTech.



Bradley L. Pentelute, Ph.D. CEO, Amide Technologies Professor of Chemistry, MIT

Bradley L. Pentelute is a Professor of Chemistry at MIT (<u>pentelutelabmit.com</u>), an Associate Member of the Broad Institute of Harvard and MIT, an Extramural Member of the MIT Koch Cancer Institute, and a Member of the Center for Environmental Health Sciences at MIT. He earned his undergraduate degrees in Psychology and Chemistry from the University of Southern California, followed by an M.S. and Ph.D. in Organic Chemistry from the University of Chicago under Professor Steve Kent. He completed postdoctoral training in Microbiology with Dr. R. John Collier at Harvard Medical School.

Brad is currently on sabbatical from MIT and serving as CEO of Amide Technologies, a company advancing commercial-scale rapid flow synthesis of peptides and small proteins.



Michael Poss, Ph.D. Senior Vice President of Chemistry Syneron



Michael A. Poss, Ph.D., is the Senior Vice President of Chemistry at Syneron. He oversees the design and synthesis of new program analogs, coordinates multiple CROs, and integrates AI technology to advance peptide therapeutics using next-generation Machine Learning BioDesign technology. Before joining Syneron, he spent 36 years at Bristol-Myers Squibb where he made significant contributions to the field of drug discovery and development. His achievements include critical contributions to several small molecule cardiovascular programs, developing a novel semi-synthesis of Taxol to produce clinical supplies, pioneering automated synthesis and combinatorial chemistry techniques that accelerated the medicinal chemistry process and included the discovery of JUXTAPID® (Iomitapide), spearheading early-phase screening and chemistry efforts which resulted in the identification of several promising drug candidates that lead to approved therapies such as SOTYKTU[®] (deucravacitinib), and most recently, advancing multiple peptide therapeutics into clinical trials.


Cameron Pye, Ph.D. CEO, Unnatural Products, Inc.

Cameron holds a PhD in organic chemistry from UC Santa Cruz. He is the CEO and co-founder of Unnatural Products, a company focused on macrocycle discovery using in silico and empirical methods to address undruggable targets and develop oral administration routes for drugs typically given by injection. Dr. Pye's work has resulted in several academic publications and patents. Since founding Unnatural Products, Cameron has raised significant venture capital and secured multiple R&D collaborations with top tier pharma partners.



Leo Qian, Ph.D. Co-Founder & VP Discovery Research, Entrada Therapeutics

Leo Qian, Ph.D. is co-founder and Vice President, Discovery Research at Entrada Therapeutics, a clinical-stage Boston-based biotechnology company dedicated to transforming the treatment of devastating diseases using intracellular therapeutics. Dr. Qian coinvented Entrada's Endosomal Escape Vehicle (EEV[™]) platform, which is based on a class of proprietary cyclic cell penetrating peptides. The platform has been further applied to the design and development of intracellular delivery of biological cargos, including oligonucleotides, proteins, and peptides. Leo obtained his Ph.D. in Organic Chemistry from Ohio State University.



Patrick Reid, Ph.D. CEO & President, PeptiDream, Inc.



Patrick C. Reid (Ph.D.) is currently the President and CEO, and Representative Director at PeptiDream Inc., (Tokyo Stock Exchange Prime Section 4587), a global leader in the discovery and development of innovative macrocyclic peptide-based medicines. PeptiDream has an extensive global network of discovery and development partners driving the development and commercialization of a broad and diversified pipeline of investigational therapeutics. PeptiDream markets and sells radiopharmaceutical and radiodiagnostic products in Japan, through its wholly owned subsidiary, PDRadiopharma.PeptiDream has over 700 employees and is headquartered in Kawasaki, Japan. Prior to the formation of PeptiDream in 2006, Dr. Reid held the position of Associate Professor in both the Department of Chemistry and Biotechnology as well as the Department of Molecular Biology and Medicine at the University of Tokyo. He has published in a variety of research fields including atherosclerosis, inflammation, metabolism, neurological disease, and cancer. Dr. Reid has been located in Japan since 2004. He received his Ph.D. in Biochemistry from Dartmouth Medical School.



Oliver Reimann, Ph.D. Head of Sales Intavis Peptide Services

After earning his PhD in the field of Synthetic Biology in the lab of Prof. Christian Hackenberger, Oliver co-founded Belyntic, where he took part in the development and commercialization of an innovative manufacturing technology for complex peptide structures.

Following a successful exit of this technology asset, he transitioned to advancing a novel peptide delivery platform aimed at therapeutic and prophylactic vaccination (immunotherapy). This work integrates AI-based epitope prediction with next-generation antigen delivery, and is currently being applied in the early preclinical development of two drug candidates.

Most recently, Oliver assumed the role of Head of Sales at Intavis Peptide Services GmbH, a specialized peptide CMO with deep expertise in peptide manufacturing. In this role, he oversees the production workflow of synthesizing cutting-edge peptides and mimetics—technologies with the potential to transform outcomes for a wide range of patient populations.



Jörg Scheuermann, Ph.D. Principal Investigator DNA-encoded chemical libraries ETH Zürich, Switzerland



Jörg Scheuermann studied Chemistry at the University of Heidelberg (Germany) and at the ETH Zurich (Switzerland). He performed his Ph.D. studies at the ETH Zurich under the supervision of Prof. Dario Neri working on the identification of novel small binding molecules to markers of angiogenesis. In 2002, with the renaissance of the idea of DNAencoded Chemical Libraries, together with Dario Neri he pioneered DNA-encoded Chemical Library (DEL) technology with the setup and development of Encoded Self-Assembling Chemical (ESAC) Libraries. He continued working with Dario Neri on innovating DEL technology, he co-authored >80 peer-reviewed publications on DEL (together with Dario Neri he holds the highest publication track record in the field) and he is co-inventor of 3 DEL-related patents. In 2018 he wrote his habilitation thesis on "DNA-Encoded Chemical Library Technology for Drug Discovery", he received his Venia legendi and teaches various classes at ETH Zurich in the fields of Drug Discovery and Gene Technology. Jörg currently is Principle Investigator at the ETH Zurich heading the group "DNA-encoded libraries/DEL technology" with 1 senior scientist, 2 postdoctoral fellows and 5 PhD students. Jörg is co-founder and organizer of the "International Symposium on **DNA-Encoded Chemical Libraries", a yearly alternating event between ETH** Zurich/Switzerland, Boston/US and Shanghai/China. Jörg's main research interests lie in the innovation of DEL technology, e.g., the development of novel DEL architectures, selection methodologies and the tailored construction of DELs for difficult targets. Recently, he conceived and published a novel DEL technology ("PureDEL"), which allows for creating very large and diverse libraries of chemically synthesized macrocycles.



Joshua Schwochert, Ph.D. Co-founder and CSO Unnatural Products, Inc.

Joshua (Josh) Schwochert is Chief Scientific Officer (CSO) and Co-founder of Unnatural Products (UNP), which was founded after he graduated with a PhD in Chemistry from the lab of Dr. Scott Lokey at University of California at Santa Cruz. UNP was founded based on novel insights by Josh and his cofounder Cameron Pye. UNP is focused on delivering cyclic peptide drug therapeutics via mechanisms of action and routes of administration that address unmet medical need. UNP approaches this by solving the inherent limitations of cyclic peptides, in particular their physiochemical and pharmacokinetic properties. As CSO of UNP, he has led multiple successful collaborations with pharma partners, both large and small, as well as discovered lead peptides against several targets that were traditionally considered undruggable. Lastly, Josh oversees the parallel synthesis platform as well as the biochemistry, cell biology, and pharmacology teams.



Ishita Shah, Ph.D. CEO & Co-Founder Matrubials Inc.



Ishita M. Shah, PhD is the CEO and co-founder of Matrubials, a spin-out from UC Davis, Foods for Health Institute and an infectious diseases scientist by training. As the Associate Director (Microbial Programs) at the Foods for Health Institute (UC Davis), she investigated the role of milk components in human health, specifically in terms of infectious diseases, leading to the founding of Matrubials. Previously, Dr. Shah has worked at Genentech (Senior researcher, Infectious Diseases) and Columbia University (Postdoctoral scientist) receiving several awards (PhD thesis prize UMBC '05, Nat Sternberg outstanding thesis award/ key researcher Genentech/ speaker).



Daniel Smith, Ph.D. H Chief Technology Officer Achira

Daniel Smith, Ph.D., is currently the Head of Computation at Abiologics, where he guides teams specializing in machine learning, computational analysis, and laboratory data automation. In his previous role as the Co-founder and Director of Software at lambic, Daniel played a pivotal role in establishing the company's foundational digital framework, integrating machine learning and lab automation to create a seamless, closed loop, platform. Drawing from his expertise in quantum mechanics, Daniel has developed scientific software tools like lambic Envision, Psi4, opt_einsum, QCArchive, and other solutions that have impacted the scientific community.



Tyler Stukenbroeker, Ph.D. Principal Consultant Telescope Scientific Consulting

Tyler Stukenbroeker, Ph.D., is the principal consultant at Telescope Scientific Consulting, providing biotech expertise to a venture capital client. He previously worked at MIT, managing the technical and programmatic direction of a DARPA-funded project for microbial plastic upcycling. He obtained his Ph.D. in Chemistry from Stanford University and completed a postdoc at ESPCI Paris.



Hiroaki Suga, Ph.D. Professor at University of Tokyo/ Founder of MiraBiologics



Hiroaki Suga has been a Professor in the Department of Chemistry, Graduate School of Science at the University of Tokyo since 2010. He received a Ph.D. inChemistry from MIT (1994). Hiroaki was a tenured Associate Professor at the State University of New York at Buffalo (1997-2003) and Professor in the Research Center for Advanced Science and Technology at the University of Tokyo (2003-2010). He is the recipient of many national and international awards, including Akabori Memorial Award (2014), Max-Bergmann Medal (2016), Vincent du Vigneaud Award (2019), MIT TY Shen Lecture (2022), ETHZ Prelog Medal (2022), Research Award of the Alexander von Humboldt Foundation (2020), Hisayuki Matsuo Award (2022), Wolf Prize in Chemistry (2023), and Japan Academy Prize (2024). Hiroaki is also a founder of PeptiDream and MiraBiologics in Japan.

PEPTIDE RUGBRITUM

ENTREPRENEURIAL ADVISORY BOARD MEMBER SPOTLIGHT

Meritxell Teixidó, Ph.D. CEO/CSO Gate2Brain S.L.

Meritxell Teixidó holds a PhD in Organic Chemistry from the University of Barcelona (UB) and an eMBA in Entrepreneurship, Innovation and International Business from the Open University of Catalonia (UOC). Her scientific expertise and research focus includes peptide synthesis and drug delivery, with an emphasis on developing peptides capable of crossing biological barriers. Meritxell was responsible for this research at the Institute for Research in Biomedicine (IRB) Barcelona for more than a decade. At IRB Barcelona, she co-directed 10 doctoral theses, published more than 50 articles and participated in 9 patents. After dedicating 15 years to biomedical research at IRB Barcelona, Meritxell decided to cross through a new barrier of her own and become the CEO/CSO of Gate2Brain SL, a company focused on improving the delivery of drugs to the brain by crossing the ever so resilient blood-brain barrier (BBB). For Meritxell, bringing BBB drug delivery technology closer to patients is both a challenge and an honor. Jumping barriers is perhaps the common thread that describes her, combining science and innovation with a new vision of leadership, as exemplified by her receiving the Spanish Woman Startup Award 2022 - Inspiration.



Tom Tice, Ph.D. Senior Director Global Strategic & Technical Marketing Evonik Nutrition & Care GmbH



Dr. Tice is internationally recognized for his research and product development of complex parenterals, using various drug delivery dosage forms based on bioabsorbable polymer excipients. He is known for his accomplishments over the years regarding long-acting injectable microparticles (made with bioabsorbable lactide/glycolide polymers) designed for systemic and local drug delivery. He was a team leader and core inventor in the development of the first commercial, injectable, and extended release microparticle product. This product, a one-month LHRH formulation indicated for the treatment of prostate cancer (Decapeptyl[®] SR), is still on the market today. Dr. Tice has served on various US Pharmacopeia expert committees for the past 19 years and is currently on both the General Chapters Dosage Forms Expert Committee and Excipient Joint Committee. He currently serves on the Board of McWhorter School of Pharmacy at Samford University. At Evonik, Dr. Tice, provides scientific support to the innovation, sales, product development, research, intellectual property, and M&A teams. He holds 50 US patents along with many foreign equivalents, and has more than 230 publications, presentations, and invited lectures to his credit. He has 45 years of experience with long-acting injectables and lactide/glycolide polymers. He has had experiments carried on two Space Shuttle flights.



Peter Timmerman, Ph.D. Head of Peptide Science Biosynth (NL)

Peter Timmerman is Head of Peptide Science at Biosynth and responsible for scientific developments and further advances for Biosynth's Peptide Discovery Platform. He is an inventor of the CLIPS TM technology and held a chair as Professor (by special appointment) in Protein Mimetic Chemistry at the University of Amsterdam (UvA) from 2007 to 2022. He studied Chemistry at the Vrije Universiteit (Amsterdam, 1984-89), and obtained his PhD cum laude from the University of Twente (1994, Prof. David N. Reinhoudt). In 1995, he was recipient of the annual Backer Prize for the best Dutch thesis in Organic Chemistry. He did post-doctoral research at the ETH in Zürich/CH (1994-95, Prof. Francois N. Diederich) and was Assistant Professor in Supramolecular Chemistry & Technology (SMCT) at the University of Twente (1995-2001). He is co-author of > 100 peer-reviewed scientific articles and co-inventor on >10 patents.



Martin Tremblay, Ph.D. VP of Medicinal Chemistry Abiologics

Martin is Vice-President of Medicinal Chemistry at Abiologics. Martin has over two decades of experience in discovery chemistry and early drug development. Prior to joining Abiologics, Martin served as Vice-President of Medicinal Chemistry at Parabilis Medicines, where his team discovered FOG-001, a first-in-class hyper-stabilized stapled-peptide β-catenin/TCF inhibitor. Prior to Parabilis Medicines, Martin held positions at Tesaro, Infinity Pharmaceuticals, and Eisai Co. While at Infinity, he has been a scientific and organizational leader for the discovery and early CMC development of investigational new drugs including the PI3K-gamma selective inhibitor IPI-549 (eganelisib) and the Smoothened antagonist IPI-926 (patidegib). Martin holds a B.S. in biochemistry from Laval University, a Ph.D. in physiology-endocrinology (medicinal chemistry) from Laval University and was a postdoctoral fellow in chemistry at the Scripps Research Institute.



Thomas Tucker Principal Scientist, Merck



Tom Tucker is a Principal Scientist in the Modalities Chemistry Team at Merck Research Laboratories in West Point, PA. He has 35+ years of drug discovery experience in small molecule, siRNA, conjugate, and peptide therapeutics discovery. Tom was a key contributor to the FDA approved HIV drugs Efavirenz and Doravirine and played a key role in the design and discovery of the oral macrocyclic PCSK9 inhibitor MK-0616, which is now in Phase 3 clinical trials for the treatment of elevated LDL-cholesterol and cardiovascular disease. Tom has broad scientific management, people management, and project leadership experience in the small and large molecule space. Tom is an author of over 40 publications and is and inventor on 65 patents and has presented at various external meetings. Tom's current research interests are focused on the design and development of novel peptide therapeutics, and the role of structure-based drug design in peptide therapeutic design and optimization.



ENTREPRENEURIAL ADVISORY BOAR

İlke Ugur Marion, Ph.D. Co-founder & CEO Meddenovo Drug Design

Dr. İlke Ugur Marion, Co-founder and CEO of Meddenovo, is an expert in computational drug design. She earned her Ph.D. from Université de Lorraine and completed postdoctoral research at the Technical University of Munich. With a robust background in drug development, scientific research, and project management, she led numerous drug development projects. At Meddenovo, she and her team leverage AI and molecular modeling to harness the untapped potential of cyclic peptides, aiming to fill a significant gap in drug development with advanced AIpowered technology for designing and testing new therapeutics. Dr. Marion is also a strong advocate for women in STEM, promoting diversity and inclusion in the scientific community.



Sijie Wang, Ph.D. Senior Scientist, mRNA Display Screening, Peptide Discovery Platform WuXi AppTec

Sijie obtained his PhD from Purdue University (Co-principal Investigators [Co-PIs]: Casey Krusemark and Emily Dykhuizen) and pursued his postdoc training at Stanford University (PI: Matthew Bogyo). Sijie's drug discovery expertise is focused on genetically encoded libraries (DEL, mRNA display, and phage display) and covalent drug discovery. Before joining WuXi, Sijie worked on DEL technology and covalent chemistry (tyrosine warhead) at Purdue. During his postdoc training at Stanford, he piloted two major screening platforms for covalent macrocyclic peptide drug discovery: (1) targeting challenging protein-protein interactions (PPIs) by functional screening with covalent phage display and (2) developing covalent macrocyclic imaging probes using covalent mRNA display. Sijie joined WuXi AppTec (Boston site) and is currently piloting technological innovation in genetically encoded libraries to expand the peptide discovery capacity at WuXi.



Ola Wlodek, Ph.D. CEO Constructive Bio

Ola is the CEO of Constructive Bio, a spinout from Jason Chin's lab in Cambridge, UK. The company is dedicated to broadening the range of building blocks for peptides and proteins produced recombinantly, leveraging cutting-edge synthetic genomics and engineered translation to unlock new possibilities for biopharma and beyond. Ola holds a PhD in Biological Sciences from the University of Cambridge and an Executive MBA from Warwick Business School, combining deep scientific expertise with strategic leadership skills. Her scientific career has been driven by a fascination with designing and producing 'unnatural' products through biological means—transforming synthetic biology from exploration to purposeful innovation.



Anastasia Velentza, Ph.D. VP & Head of Biology Vilya



Anastasia Velentza currently serves as VP and Head of Biology at Vilya, a biotechnology company. Vilya's platform is focused on the computational design and development of novel macrocycles against difficult targets with the ultimate goal of addressing unmet medical need. She is also the owner and Founder of AVeNew Insights, a consulting company providing service and advice across all aspects of drug discovery. Previously, Anastasia was the Head of Discovery Technology at Plexium, a targeted protein degradation company, and held positions of increasing responsibility at Novartis, Dart Neuroscience and Ferring Pharmaceuticals. Overall, she has more than 20 years of drug discovery experience with expertise in discovery biology and molecular pharmacology across multiple therapeutic areas, modalities and targets.

Anastasia was an NIH Research Award scholar in a drug discovery training program at Northwestern University in Chicago, IL. She earned her Ph.D. in Bioorganic Chemistry at the University of Patras in Greece, where she received funding from a competitive scholarship and EU programs. Anastasia has received awards for her research at national and international conferences and has more than 25 publications, patents, and abstracts.



Chandra Verma, Ph.D. Head, Division of Biomolecular Structure to Mechanism Bioinformatics Institute, A*STAR

Chandra Verma leads a group that applies physics-based models to understand the links between protein sequence, structure and biological function. His group works closely with academics, biotech, pharma and clinicians. A major activity of the group is designing peptides and small molecules (through virtual screening) both for interrogating biology as well as for therapeutic purposes. He has several publications and patents in oncology and antimicrobials. He obtained his undergraduate degree at the Indian Institute of Technology (Kanpur, India) and his D. Phil at the University of York. He has co-founded a spinoff (Sinopsee Therapeutics) and a startup (Aplomex). Sinopsee Therapeutics utilizes both a humanized yeast- based platform and modelling (through colleagues at A*STAR) to screen for and develop new molecules against oncological and ophthalmological targets. At Aplomex, services include the general area of computational biochemistry as well as the design of small molecules, peptides, proteins/enzymes and antibodies.



Matteo Villain, Ph.D. V.P. & Global Peptides Technical Lead Piramal Pharma Solutions

Matteo is currently the Vice President and Global Peptides Technical Lead at Piramal Pharma Solutions, where he oversees interactions with customers for peptide projects, ensuring client satisfaction and project alignment. He also leads the R&D team for peptide development and provides guidance to implement state-of-the-art commercial peptide manufacturing processes. Prior to this role, Matteo was the Vice President of CMC Development at Bachem Americas, Inc., where he oversaw API development, CMC activities and coordinated crossdepartmental efforts throughout the API Life Cycle up to DMF filing. In his previous roles as VP of Manufacturing and VP of R&D at Bachem, he acquired extensive experience in GMP peptide manufacturing, process development, and commercial manufacturing under ICH Q7 guidelines. Matteo is a skilled leader of multidisciplinary teams for dynamic CDMO projects and was a member of Bachem's Global Research Committee. He has authored numerous publications and patents related to peptide synthesis and development. Matteo received his Doctorate in Medicinal Chemistry and Pharmaceutical Science from the University of Milano, Faculty of Pharmacy.



Thomas von Erlach, Ph.D. Co-Founder and CSO, Vivtex



Dr. von Erlach co-founded Vivtex and joined as its Chief Scientific Officer when Vivtex was formed as a MIT spin-off in 2018. Prior to that he led the interdisciplinary efforts around gastrointestinal model systems for oral drug delivery applications in the Laboratory of Prof. Robert Langer and Prof. Giovanni Traverso, at MIT. Thomas obtained a PhD from Imperial College London in Bioengineering and a BSc and MSc in Biochemistry and Biotechnology from ETH in Switzerland. His research interests include advanced in vitro model systems for drug development, oral drug delivery and gastrointestinal pharmacology. His work is published in several high impact journals including Nature Materials, Nature Biomedical Engineering and Nature Communications.



Semen Yesylevskyy, PhD, DSc. Chief Scientific Officer, Co-founder Receptor.AI

Dr. Semen Yesylevskyy is the Co-founder and Chief Scientific Officer at Receptor.AI, with 25 years of experience in molecular modeling, computational drug discovery, and scientific software development. He holds a PhD and Doctor of Science in Biophysics, and currently also serves as a researcher at IOCB Prague and Palacký University Olomouc. Semen is the author of pioneering techniques in simulating curved and asymmetric lipid membranes, as well as innovative methods of ensemble docking and predicting drug selectivity. He has worked on various peptide drug discovery programs targeting protein-protein interactions and on elucidating the molecular mechanisms of cell-penetrating peptides and peptide-mediated membrane remodeling. He is the developer of Pteros and MolAR open-source molecular modeling libraries.



Liling Zeng, Ph.D. Cofounder & CEO PeptiFinder Biotech



Liling is the cofounder and CEO of PeptiFinder Biotech, a Massachusetts-based startup focusing on mRNA display technology. She brings extensive expertise in peptide discovery and development, particularly in overcoming challenges related to the target-to-hit and hit optimization phases of peptide-based drugs. Liling holds a PhD in Molecular Medicine from Boston University. She has built a solid foundation through extensive early discovery experience at Novartis Institute for Biomedical Research and development roles at Intergalactic Therapeutics, prior to founding PeptiFinder. As a member of the EAB, Liling is keen to connect PeptiFinder's expertise and capabilities with the greater peptide drug discovery community in order to advance groundbreaking peptide modality medicines.



Genwei Zhang, Ph.D. Head of Peptide Research XtalPi



Genwei Zhang earned a Ph.D. in Biochemistry and a Master's degree in Computer Science from the University of Oklahoma. He completed postdoctoral research in the laboratory of Professor Bradley Pentelute in the Department of Chemistry at the Massachusetts Institute of Technology (MIT).

Zhang's main expertise includes automated peptide/protein synthesis, the design and pharmacological screening of peptidebased drugs, and the application of artificial intelligence in biopharmaceutical research and development. He has accumulated substantial industry experience and has published over 30 SCIindexed scientific papers. Currently, he serves as the Senior Director of XtalPi's peptide research platform, PepiX[™], an AIpowered integrated peptide research platform. This end-to-end platform provides capabilities for rapid and accurate discovery of peptide drug candidates, turning Al insights into potent, stable, and clinically viable peptides-faster than ever before.