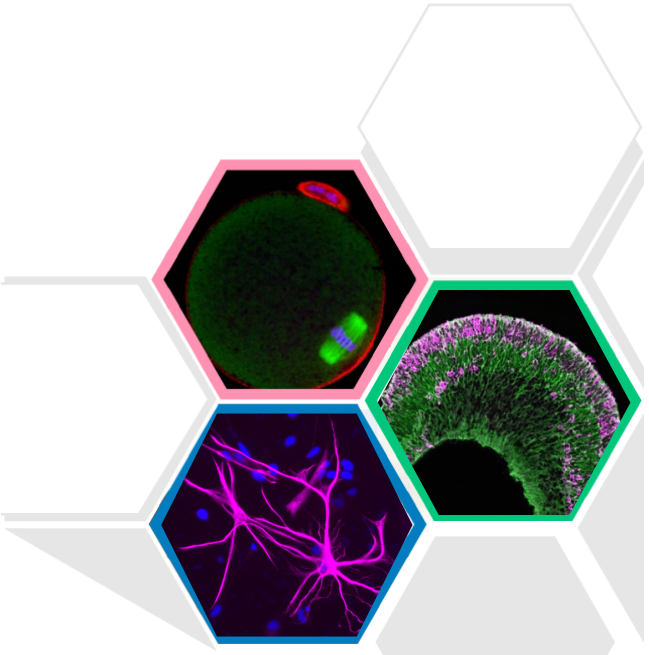
BTP

UMass Biotech Training Program

5TH ANNUAL BTP SYMPOSIUM

NEUROTHERAPEUTICS



Schedule

Time	Events
8:15 – 9:00	Check-In and Coffee
9:00 – 9:05	Introduction
9:05 – 9:45	Robin Kleiman, Biogen
9:45 – 10:10	Samantha Sarett, Eli Lilly
10:10 -10:35	Jan Stoehr, Abbvie
10:35 – 11:20	Coffee Break and Poster Session
11:20 – 11:45	Diana Mitrea, Dewpoint Therapeutics
11:45 – 12:00	Walk to Campus Center
12:00 – 1:30	Rotational Connections Lunch (By Invitation, Closed to Public) Marriott Campus Center 10th Floor
1:45 – 4:00	Biotech Battles (By Invitation, Closed to Public)
4:00-5:15	Presentations and Award Ceremony
5:15 – 6:15	Happy Hour and Social
6:30 – 8:00	Dinner (By Invitation, Closed to Public)

Robin Kleiman, PhD

Executive Director in the Translational Biology Group

Biogen

Keynote Speaker

Robin Kleiman, is an Executive Director in the Translational Biology group within Biogen's Research and Development organization where she is the head of Human Cell and Molecular Biology. Her group uses human genetic and genomic data to identify and validate new targets using translatable human in vitro models of disease. She was previously the Director of preclinical research in the Translational Neuroscience Center at Boston Children's Hospital where she was a co-founder of the Human Neuron Core. Prior to that she spent 13 years working in Pfizer's Neuroscience Research Unit developing small molecule drugs for a range of CNS disorders. She completed her post-doctoral work at UCSF working on BDNF signaling and her PhD at the University of Virginia in Neuroscience investigating the regulation of dendritic transport of RNA in neurons.

Samantha Sarett, PhD

Senior Research Engineer

Eli Lilly and Company

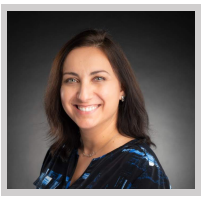
Sammy is a Senior Research Engineer with a decade of experience in nucleic acid delivery and formulation design. In her PhD work at Vanderbilt University, she designed several effective strategies for local or systemic delivery of small interfering RNA (siRNA). As a postdoctoral researcher at AbbVie, she focused on the delivery challenge posed by unconventional small molecule drugs, designing a high throughput system for synthesis and evaluation of diverse drug-loaded nanoparticles. This work was highly interdepartmental in nature, necessitating continual collaboration and communication with AbbVie's designated engineering group as well as groups interested in leveraging nanoparticles for disease-specific or discovery research. In her work as a Senior Scientist at the Chicago-based biotechnology company Exicure, she led a team focused on the optimization and innovation of the spherical nucleic acid (SNA) nanoparticle formulation. Her role at Exicure was dynamic, allowing her to gain both scientific and project management experience. Notably, she designed and coordinated the first studies to establish PK and PD of SNAs delivered to the central nervous system (CNS). This experience highlighted the particular challenge of delivery to the CNS as well as the high unmet need in that scientific space. In the New Therapeutic Modalities group at Eli Lilly, Sammy is driving the investigation and development of breakthrough nucleic acid delivery approaches to the CNS. She has active collaborations with departments across Lilly (including the Neuroscience Next Generation Therapeutics, ADME and PK / PD modelling groups, and Drug Delivery and Devices teams) as well as contract research organizations (CROs), academic partners, and external biotechnology companies. Sammy emphasizes and embodies a collaborative, team-based approach to scientific progress.

Jan Stoehr, PhD

Head of Biology Parkinson's Disease

Abbvie

Jan Stoehr is currently the Head of Parkinson's Disease Discovery at AbbVie, working in AbbVie's Foundational Neuroscience Center in Cambridge, Ma. Dr. Stoehr arrived at AbbVie following a tenure as Head of non-Alzheimer's disease proteinopathies at AC Immune, a Swiss biopharma company, where he led a department charged with developing therapeutics and diagnostics for synucleinopathies, frontotemporal lobar degeneration and neuroinflammation. Before that he worked in academia as an assistant professor together with Nobel laureate Dr. Stanley Prusiner at the Institute for Neurodegenerative Diseases, University of California, San Francisco. During his tenure at UCSF he led studies for structural and functional characterization of protein aggregates and supported UCSF's therapeutic development efforts for neurodegenerative diseases. Some of his pre-AbbVie projects included studies on understanding the governing principles of self-propagating tau and amyloid-β aggregates; structural and biological characterization misfolded tau and amyloid-β aggregates from familial and sporadic Alzheimer's disease patients; development of passive immunotherapies targeting alpha-synuclein and TDP-43, discovery and first in human trials of novel Parkinson's disease PET ligands. He has published more than 30 original articles and book chapters in peer-reviewed journals, and been a frequent presenter, organizer, or co-chair at several international conferences.



Diana Mitrea, PhD

Group Leader Biochemistry

Dewpoint Therapeutics

Diana was born and raised in Romania, in the mountains of Transylvania. She earned her BS degree in Biochemical Engineering from Babeş-Bolyai University in Cluj-Napoca, Romania. Prior to her senior year in college, Diana hopped across the Atlantic for a SURF (Summer Undergraduate Research Fellowship) at SUNY Update Medical University in Syracuse NY, working on the structure-function of visual receptors in Dr. Barry Knox's group. The following year she joined the Graduate Studies program to pursue a PhD degree in Biochemistry and Molecular Biology. Under Dr. Stewart Loh's mentorship, Diana developed protein engineering designs that couple protein folding and unfolding to modulate function. Following a short postdoctoral stint in Stewart's lab and welcoming her baby into the world, Diana moved across the country to Memphis TN and joined St. Jude Children's Research Hospital (St. Jude). As a postdoctoral fellow at St. Jude, under the mentorship of Dr. Richard Kriwacki, she discovered that the multifunctional, non-ribosomal protein nucleophosmin (NPM1) plays a central role in the formation of liquid-like, complex macromolecular networks. These networks represent the structural basis for the assembly of the granular component of the nucleolus, and likely contribute to regulation of ribosome biogenesis and stress sensing. In amyotrophic lateral sclerosis, or ALS, a debilitating neurodegenerative disease, these molecular networks in the nucleolus are disrupted, causing neuronal cell death. Diana transitioned into a Staff Scientist position in Richard's lab; under this role she managed collaborations, manuscript and grant writing, mentored students and postdoctoral fellows, and generated new projects focused on the study of the biophysics and structure-function of biomolecular condensates. In 2019, Diana joined Dewpoint Therapeutics – the first biotech company focused on targeting biomolecular condensates as a therapeutic strategy, as a Research Investigator. Since 2020, Diana is a Group Leader for Biochemistry in the Integrated Platform Technology team.

Michelle Lynn Hall, PhD

Senior Director, New Therapeutic Modalities

Eli Lilly and Company

Michelle Lynn Hall graduated Summa Cum Laude with her B.S. in Chemistry in 2006 from the University of Texas at Austin. She completed her Ph.D. at Columbia University in 2011 where she studied quantum chemistry. She subsequently completed a joint post-doc at the Novartis Institutes for Biomedical Research and Yale University where she studied structure- and ligand-based small-molecule drug design. She worked as a Principal Scientist at Schrödinger from 2012-2016 where she researched molecular simulation and computational chemical biology. She then joined Moderna where she led the Molecular Engineering and Modeling team and explored everything from mRNA design, protein engineering and lipid nanoparticle delivery. Michelle served as an elected officer of the American Chemical Society's Computers in Chemistry division from 2018-2020. She joined Eli Lilly a year ago, where she leads the New Therapeutic Modalities Innovation team in Cambridge, MA exploring all things related to nucleic acids and their delivery. She is passionate about equity, diversity, inclusion, and awareness in science, technology, engineering and math (STEM) and has served as a mentor, champion and advocate for women and minorities throughout her career. Michelle is an unabashed cat lady, nature nerd, and bookworm.

Gilberto Soler-Llavina, PhD

Principal Scientist II

Novartis

Gilberto (Gil) Soler-Llavina is a Principal Scientist in the Neuroscience Division, Novartis Institutes for Biomedical Research (NIBR). His group is responsible for initiating and establishing drug discovery programs to address Central Nervous System diseases. During his 6 years at NIBR, Gil has led small molecule and gene therapy programs seeking to modulate synaptic and circuit activity to develop treatments or cures for indications in both psychiatry and genetically validated neurodevelopmental disorders. Prior to joining Novartis, Gil was a Scientist at the Allen Institute for Brain Science. His work focused on understanding the fine details of neuronal connectivity in the mouse visual cortex. Gil completed his doctoral work in Neuroscience at Harvard Medical School and obtained postdoctoral training in the Department of Psychiatry and Behavioral Sciences at Stanford University.

Poster #	Poster Title
1	**A 3D Brain-Mimicking Hydrogel as a Model System to Study Brain Injury** Rebecca Huber
2	**Generating Polarized Organoids Using Morphogen-Gradient Induced Brain Organoid system** Narciso Pavon
3	**GABAergic Signaling in Locomotor Behavior** Wayne Barnaby
4	**Interrogating the Impacts of Bone Marrow Adipocyte Chemotherapeutic Sequestration and Secretion on Disseminated Tumor Cell Relapse** Jun-Goo Kwak
5	**Understanding the Function of UCHL3** Fangying Huang
6	**An Algorithmic Approach to Program Sequential Logic in Probiotic Bacterial Strains for In Vivo Diagnostics** Matthew Lebovich
7	**3D Tissue Engineered Models of the Bone to Study Bone Cancer Metastasis** Patrick Ryan
8	**Investigating the Functions of Neurexin-1 in Early Forebrain Development** Rebecca Sebastian
9	**Maternal Preconception Exposure to PFOS Alters Growth and Nutrition of Offspring** Marjorie Marin

Poster #	Poster Title
10	**Investigating the Role of CASK in Cortical Development and Synapse Function Using Human Induced Neuronal Cells** Danny McSweeney
11	**Studying a Novel Form of Chemosensory Processing Using State-of-the-Art Technologies** Julia LaValley
12	**Nano GPS: Antibody Polymer Conjugates to achieve Targeted Delivery** Pintu Kanjilal
13	**Virus Inspired Decationization Approach for RNA Delivery** Ritam Das
14	**Neurexin-1 Splice Variants in Autism Spectrum Disorders** Jay English
15	**Interrogating the Interactions of K48 Linked Ubiquitin Chains with UCH37 by NMR Spectroscopy and Molecular Modelling** Sandor Babik

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