



Kopchick
Symposium

2025 Kopchick Symposium

Overcoming Barriers in Science

2025 Symposium Program

November 3, 2025

THE UNIVERSITY OF TEXAS
MDAnderson
~~Cancer Center~~[®]

UTHealth[®]
Houston

Graduate School of Biomedical Sciences

Welcome,

We are thrilled to have you join us for this remarkable event, which was made possible through the \$10.5 million donation from alum John J. Kopchick, PhD '80, and Mrs. Charlene Kopchick. Thanks to their generous gift, a series of fellowships were established to recognize outstanding graduate students at The University of Texas MD Anderson Cancer Center UTHealth Houston Graduate School of Biomedical Sciences (GSBS). Additionally, their kind donation sought to fund a recurrent event aiming to unite exceptional scientists to showcase their groundbreaking research, fostering collaboration and strengthening our scientific community — the Kopchick Symposium.

This year's symposium is a celebration of “Overcoming Barriers in Science,” where we spotlight scientists who make breakthroughs across the spectrum of research, from fundamental discovery to translational science in fields such as cancer, neuroscience, immunology, microbiology, and more. Our goal is to not only showcase the incredible research our community engages in but also to celebrate the ways in which we overcome obstacles, embrace challenges, and persevere in the pursuit of discovery.

This special event is organized by the recipients of the Kopchick Fellowships, a group of dedicated students at the Graduate School who have demonstrated outstanding leadership, academic excellence, and the capacity to make a meaningful impact in their respective fields of research.

We invite you to learn new and exciting science, engage in insightful discussions, share your expertise, meet new people, and be part of this extraordinary event that we have curated over the past year. Your presence and participation enrich our symposium, and we look forward to an inspiring and enlightening experience together. Thank you for being a part of the 2025 Kopchick Symposium.

Sincerely,
The 2025 Kopchick Fellows

Meet the Dean



Alejandro Aballay, PhD

Professor, Department of Genetics, MD Anderson Cancer Center

Professor, Department of Microbiology & Molecular Genetics, UTHealth Houston

Dr. Aballay joined the Graduate School as Dean in January 2024, during its 60th anniversary year.

His lab has a broad research program encompassing genetics, functional genomics, and neurobiological approaches to study mechanisms involved in the control of immune responses against microbial pathogens. His work addresses the further need to understand immune activation since deficient or excessive inflammation can lead to cancer or other conditions such as Crohn's disease, rheumatoid arthritis, atherosclerosis, diabetes, and Alzheimer's disease.

Meet the Kopchicks



John J. Kopchick, PhD

Professor of Molecular Biology, Ohio University

Goll-Ohio Eminent Scholar

Mrs. Charlene Kopchick

Executive Director, K-12 Arts Educational Programming and Outreach and Professional Arts Partnerships, Ohio University

Mrs. Charlene Kopchick is passionate about student education as the Executive Director of K-12 Arts Educational Programming and Outreach and Professional Arts Partnerships.

Dr. John J. Kopchick completed his Bachelor of Science degree in Biology and Master of Science from Indiana University of Pennsylvania. He then started his graduate school journey at MD Anderson UTHealth Houston Graduate School of Biomedical Sciences, where he completed his dissertation research under the mentorship of Ralph Arlinghaus, PhD, professor and Hubert L. Stringer Chair in Cancer Research in the Department of Translational Molecular Pathology at MD Anderson.

Dr. Kopchick is known for his significant contributions to the field of molecular biology, particularly in the area of growth hormone and its effects on growth and aging. He has made significant advancements in understanding the role of growth hormone and insulin-like growth factor (IGF) in various biological processes. He is a co-inventor of the drug Somavert, which combats acromegaly, a growth hormone disorder. Dr. Kopchick has received numerous awards and honors for his scientific achievements. His work has not only contributed to our understanding of the molecular basis of growth and aging but also has potential implications for the treatment of various medical conditions.

Symposium Agenda

7:45 - 8:30	Registration & Breakfast	Morning Sessions
8:30 - 8:45	Welcome Remarks Dean, Alejandro Aballay, PhD	
8:45 - 9:45	Opening Session Dr. John and Charlene Kopchick	
9:45 - 10:00	Coffee break	
10:00 - 10:45	Beyond the Eureka Moment: The Long Road to Scientific Discovery Richard Behringer, PhD Jian Hu, PhD, and Kaylene Lu	
10:45 - 11:30	From Bench to Breakthroughs Seung-Hee (Sally) Yoo, PhD, and Mark Burish, MD, PhD Carmen Dessauer, PhD, and Chrystine Gallegos	Afternoon Sessions
11:30 - 12:00	Basic and Translational Research Panel Discussion	
12:00 - 1:00	<i>Lunch</i>	
1:00 - 2:00	Keynote Session Dr. Huda Zoghbi, Baylor College of Medicine	
2:00 - 3:15	From Big Data to Big Insights Jeffrey Chang, PhD Ken Chen, PhD Nicholas Navin, PhD, and Lei Yang	
3:15 - 3:45	AI Panel Discussion Panelists: Jeffrey Chang, Ken Chen, Nicholas Navin	
3:45 - 4:00	Coffee break	
4:00 - 4:45	The Future of Science: Advocacy and Outreach Meagan Choates, MS, CGC Hana Baroudi, PhD	
4:45 - 5:15	Advocacy and Outreach Panel Discussion Panelists: Meagan Choates and Hana Baroudi	
5:15 - 6:15	Poster and Networking Reception	

Keynote Speaker

Huda Yahya Zoghbi, MD

Professor, Molecular and Human Genetics, Baylor College of Medicine



Dr. Zoghbi is a world-renowned physician-scientist recognized for pioneering discoveries that have transformed our understanding of neurological and neurodegenerative disorders. Over her career, she identified *MECP2* mutations as the cause of Rett syndrome, co-discovered the gene responsible for spinocerebellar ataxia type 1, and revealed fundamental roles of *Atoh1* (*Math1*) in neurodevelopment. Her work has provided critical insights into disease mechanisms and opened therapeutic avenues for conditions ranging from rare pediatric syndromes to Alzheimer's and Parkinson's disease.

Dr. Zoghbi is Professor of Molecular and Human Genetics, Pediatrics, Neuroscience, and Developmental Biology at Baylor College of Medicine, Director of the Jan and Dan Duncan Neurological Research Institute at Texas Children's Hospital, member of the Dan L Duncan Comprehensive Cancer Center, Investigator of the Howard Hughes Medical Institute, and holds the Ralph D. Feigin, MD Endowed Chair at Baylor.

Speakers

Richard R. Behringer, PhD

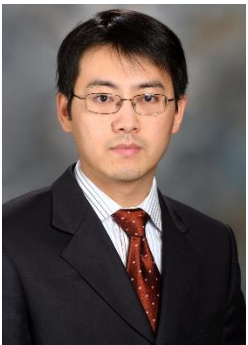
Professor, Department of Genetics
MD Anderson Cancer Center



Dr. Behringer is a distinguished Professor in the Department of Genetics, Division of Basic Science Research, at The University of Texas MD Anderson Cancer Center. His research explores the molecular and cellular mechanisms of mammalian embryogenesis — particularly how tissues and organs form during development — and the genetic underpinnings of developmental disorders. His lab employs genetic, embryological, and comparative approaches to understand organ morphology, reproductive biology, and evolutionary developmental biology across diverse vertebrate species, including marsupials and bats.

Jian Hu, PhD

Professor, Department of Cancer Biology
MD Anderson Cancer Center



Dr. Hu is a Professor in the Department of Cancer Biology, Division of Discovery Science at MD Anderson Cancer Center. His laboratory investigates stem cells and glial biology within the central nervous system, focusing on glioma and neurodegenerative diseases. His research spans glioblastoma, glioma-associated microglia/macrophages (GAMs), and demyelinating conditions — including multiple sclerosis and chemotherapy-related neurological damage — by delving into mechanisms of cell self-renewal, immune suppression, and myelin lipid metabolism.

Seung-Hee (Sally) Yoo, PhD

Associate Professor, Department of Biochemistry and Molecular Biology
McGovern Medical School



Dr. Yoo is an Associate Professor in the Department of Biochemistry and Molecular Biology at McGovern Medical School, UTHealth Houston. Her laboratory investigates regulatory and (patho) physiological mechanisms of mammalian circadian clocks, with a focus on the molecular underpinnings of how daily rhythms impact metabolic health and chronic disease. Using integrative approaches — including genetically engineered mouse models such as the *Per2::LucSV* reporter — her team explores roles of miRNAs in circadian robustness, the functions of circadian E3 ligases in heart failure-related muscle atrophy, and novel clock mutants discovered via genetic screens. Her long-term goal is to translate these fundamental insights into therapeutic strategies for chronic disorders.

Speakers



Mark J. Burish, MD, PhD

Assistant Professor, Vivian L. Smith Department of Neurosurgery
McGovern Medical School

Dr. Burish, is a neurologist and pain medicine specialist serving as Assistant Professor in the Vivian L. Smith Department of Neurosurgery at McGovern Medical School, UTHealth Houston. Board-certified in neurology and fellowship-trained in pain medicine, he is dedicated to treating neck pain, back pain, neuropathic pain, headaches, and facial pain. A cum laude graduate of Princeton University, Dr. Burish earned his MD/PhD through the Vanderbilt Medical Scientist Training Program and went on to complete his neurology residency and interventional pain medicine fellowship at University of California San Francisco, where he was co-chief resident and received the Core Clerkship Teaching Award for excellence in mentorship and patient care.



Carmen W. Dessauer, PhD

Chair, John P. and Kathrine G. McGovern Distinguished Chair
Professor, Integrative Biology and Pharmacology
McGovern Medical School

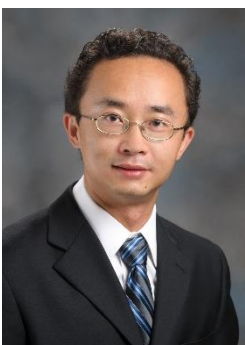
Dr. Dessauer is the John P. and Kathrine G. McGovern Distinguished Chair and Chair of the Department of Integrative Biology and Pharmacology at McGovern Medical School, UTHealth Houston. She also serves as Program Director for Training Interdisciplinary Pharmacology Scientists (TIPS). Her laboratory probes the regulation of adenylyl cyclase — the enzyme that generates the pivotal second messenger cyclic AMP — using structural, biochemical, live-cell imaging (e.g., FRET, FLIM), and molecular tools. Her team is uncovering how subcellular organization through scaffolding proteins like AKAPs sharpens signaling specificity. These insights are being translated into understanding and treating heart dysfunction and chronic pain, highlighting compartmentalized cAMP signaling in both the heart and the nervous system.



Jeffrey T. Chang, PhD

Associate Professor, Integrative Biology and Pharmacology
McGovern Medical School

Dr. Chang is an Associate Professor in the Department of Integrative Biology & Pharmacology at McGovern Medical School, UTHealth Houston, and a Cancer Prevention and Research Institute of Texas (CPRIT) Scholar. His lab deciphers complex cell-signaling programs in cancer, particularly the Ras network and E2F transcriptional modules. Using genomics, bioinformatics, and molecular biology, his team dissects signaling cascades into discrete gene expression modules to better understand cancer progression and inform rational treatment strategies. The lab also develops computational platforms — such as GATHER and SIGNATURE — to make their analytical tools accessible for oncogenic pathway analysis.



Ken Chen, PhD

Professor, Department of Bioinformatics and Computational Biology
MD Anderson Cancer Center

Dr. Chen is Co-Director of Quantitative Science in the Graduate School of Biomedical Sciences and Professor in both the Departments of Bioinformatics & Computational Biology and Systems Biology at The University of Texas MD Anderson Cancer Center. His laboratory develops powerful computational tools — such as BreakDancer, VarScan, and monoVar — to dissect structural variants, cancer heterogeneity, and tumor evolution through large-scale genomics and single-cell data. His work is applied to major initiatives like TCGA, the 1000 Genomes Project, and the Human Cell Atlas to enable precision cancer diagnosis and prognosis.

Speakers



Nicholas Navin, PhD

Professor and Deputy Chair, Department of Bioinformatics
MD Anderson Cancer Center

Dr. Navin is Professor and Chair of the Department of Systems Biology at The University of Texas MD Anderson Cancer Center. He serves as Director of the CPRIT Single Cell Genomics Center and Co-Director of the Advanced Technology Genomics Core. During his graduate and postdoctoral work at Cold Spring Harbor Laboratory, Dr. Navin pioneered the first single-cell DNA sequencing method — single-nucleus sequencing. His laboratory continues to lead in single-cell cancer genomics, revealing insights such as punctuated copy-number evolution in triple-negative breast cancer and the dynamics of tumor heterogeneity, invasion, metastasis, and treatment resistance by integrating experimental and computational methods.



Meagan Choates, MS, CGC

Assistant Professor, Department of Obstetrics, Gynecology and Reproductive Sciences
McGovern Medical School

Ms. Choates' research examines how prenatal genetic testing, including non-invasive prenatal testing (NIPT), is implemented and interpreted in clinical practice. Her work focuses on improving counseling strategies and understanding how genetic information influences patient care. By addressing these critical questions, her research enhances the delivery of personalized and informed prenatal care.

Kopchick Fellow Speakers



Kaylene Lu

Cancer Biology Program
MD Anderson UTHealth Houston Graduate School
2024/2025 Kopchick Research Award Recipient

Kaylene is a graduate student in the Jian Hu Laboratory at MD Anderson.

Research: Glioblastoma, lipid metabolism, cancer neuroscience, arginine methylation, glial cell biology



Chrystine Gallegos

Neuroscience Program
MD Anderson UTHealth Houston Graduate School
2024/2025 Kopchick Research Award Recipient

Chrystine is a graduate student in the Carmen W. Dessauer Laboratory at UTHealth Houston.

Research: satellite glial cells, dorsal root ganglion, signaling, chronic pain



Lei Yang

Quantitative Sciences Program
MD Anderson UTHealth Houston Graduate School
2025 Kopchick Research Award Recipient

Lei is a graduate student in the Nicholas Navin Laboratory at MD Anderson.

Research: Technology development, single-cell sequencing, tumor microenvironment



Hana Baroudi, PhD

Medical Physics Program
MD Anderson UTHealth Houston Graduate School
2023/2024 Kopchick Research Award Recipient

Hana is a postdoc in the Laurence E. Court Laboratory at MD Anderson.

Research: Automated radiotherapy treat planning, breast cancer, medical physics

Poster Presenters

Jack Adams

Advisor: Ali Azhdarinia, PhD
UTHealth Houston

Ha Tran

Advisor: Charles Manning, PhD
and E. Scott Kopetz, MD, PhD
MD Anderson Cancer Center

John Sanchez

Advisor: Deepa Sampath, PhD
MD Anderson Cancer Center

Mirrah Bashir

Advisor: Daniel Frigo, PhD
MD Anderson Cancer Center

Hsiang-Ching Tseng

Advisor: Kuang-Lei Tsai, PhD
UTHealth Houston

Yueh-Ming (Camellia) Shyu

Advisor: Kendra Carmon, PhD
UTHealth Houston

Paula Bender

Advisor: Kristin Eckel-Mahan, PhD
UTHealth Houston

Sydney Wilbon

Advisor: Mikhail Kolonoin, PhD
UTHealth Houston

Abraham Sianoya

Advisor: Alemayehu Gorfe, PhD
UTHealth Houston

Elissa Bloom

Advisor: Hui-Wen Lo, PhD and
Catherine Denicourt, PhD
UTHealth Houston

Wei-Chieh Yu

Advisor: Lo Yuan-Hung, PhD
MD Anderson Cancer Center

Sabona Simbassa

Advisor: Jayhun Lee, PhD
UTHealth Houston

Taylor Brinson

Advisor: Federica Pisaneschi, PhD
UTHealth Houston

Cara Biddle

Advisor: Kendra Carmon, PhD
UTHealth Houston

Shraddha Subramanian

Advisor: Kendra Carmon, PhD
UTHealth Houston

Yuhan Cao

Advisor: Qingchun Tong, PhD
UTHealth Houston

Bhargavi Brahmendra Barathi

Advisor: Jason Huse, MD, PhD
MD Anderson Cancer Center

Mitheera V

Advisor: Guillermina Lozano, PhD
MD Anderson Cancer Center

Joshua Cha

Advisor: Hui-Wen Lo, PhD
UTHealth Houston

Vicky Chuong

Advisor: Fabricio Do Monte, DVM, PhD
UTHealth Houston

Ivana William

Advisor: Michael Curran, PhD
MD Anderson Cancer Center

Yen-Tzu Chang

Advisor: Wen Jiang, MD, PhD
MD Anderson Cancer Center

Shane Cristy

Advisor: Michael Lorenz, PhD
UTHealth Houston

David Won

Advisor: Cassian Yee, MD
MD Anderson Cancer Center

Ece Kilinc

Advisor: Jian Hu, PhD
MD Anderson Cancer Center

Maria Gacha Garay

Advisor: Tingting Mills, PhD
UTHealth Houston

Koichiro Haruwaka

Advisor: Long-Jun Wu, PhD
UTHealth Houston

Tala Noun

Advisor: Humam Kadara, MD, PhD
MD Anderson Cancer Center

Sophia Huang

Advisor: Vihang Narkar, PhD
UTHealth Houston

Gloria Lee

Advisor: Emil Schueler, Ph.D, DABR
MD Anderson Cancer Center

Ahmed Shatta

Advisor: Guillermina Lozano, PhD
MD Anderson Cancer Center

Mariana Najjar

Advisor: Hui-Wen Lo, PhD
UTHealth Houston

Yue Liang

Advisor: Long-Jun Wu, PhD
UTHealth Houston

Cheng-En Shen

Advisor: Yuan Pan, PhD and
Jian Hu, PhD
MD Anderson Cancer Center

Julianna Quinn

Advisor: Jun Wang, PhD
UTHealth Houston

Shunyi Zhao

Advisor: Long-Jun Wu, PhD
UTHealth Houston

Candise Tat

Advisor: Vincent Bernard, MD, PhD
MD Anderson Cancer Center

Mya Rodriguez

Advisor: Andrea Stavoe, PhD
UTHealth Houston

2025 Kopchick Symposium

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Skylar Gay

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Advisor: Laurence Court, PhD
Medical Physics Program

Bridgitte Palacios

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Advisor: Jian Hu, PhD
Neuroscience Program

Special thanks to all the GSBS staff who
helped with this event, especially...

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Advisor: Jay Hun Lee, PhD
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Stephen Farmer

2024/2025 John J. Kopchick Fellowship
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Genetics & Epigenetics Program

Lei Yang

2025 John J. Kopchick Fellowship
Advisor: Nicholas Navin, PhD
Quantitative Sciences Program

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