



Celebration of Life

Ru-Chih and PC Huang



Saturday, September 19, 2026
1:00 - 3:00 pm
MUDD Hall
Johns Hopkins University



Celebration of Life

RuChih and PC Huang

1932-2026

1931-2020

Welcome

Suber Huang, MD, MBA, FASRS - Son

Remembrances

Douglas Fambrough, PhD
Professor Emeritus, Department of Biology,
Johns Hopkins University

Van Moudrianakis, PhD
Professor of Biology and Biophysics,
Johns Hopkins University

Skip Grossman, MD
Professor of Oncology, Medicine, and Neurological
Surgery,
Johns Hopkins School of Medicine

CC Chang, PhD
Professor Emeritus, Department of Biology,
Johns Hopkins University

Hwai-Jong Cheng, PhD
Professor of Neuroscience,
Johns Hopkins University School of Medicine

Chien-Jen Chen, ScD
President, Academia Sinica;
Former Vice President and Premier of Taiwan

Karen Beemon, PhD
Professor Emerita of Biology,
Johns Hopkins University

Rememberances

Carl Wu, AM, PhD
Bloomberg Distinguished Professor of Biology and of
Molecular Biology and Genetics,
Johns Hopkins University

Ashani T. Weeraratna, PhD
E.V. McCollum Professor and Chair, Department of
Biochemistry and Molecular Biology; Bloomberg
Distinguished Professor; Associate Director of Laboratory
Research,
Johns Hopkins University

Vincent J. Hilser, PhD
Ralph S. O'Connor Chair; Professor and
Chair, Department of Biology,
Johns Hopkins University

Family Remembrances

Eulogy.

Suber Huang, MD, MBA, FASRS, Son

Your paragraph text
Reception in the Atrium to Follow



Program Speaker Biographies

Douglas M. Fambrough, PhD, Professor Emeritus
Department of Biology
Johns Hopkins University

Douglas M. Fambrough, PhD, is Professor Emeritus in the Department of Biology at Johns Hopkins University. A distinguished cell biologist, educator, and scientific leader, Dr. Fambrough has made important contributions to understanding the structure, function, and cellular trafficking of membrane proteins—molecules central to communication, transport, and signaling within and between cells. His research has encompassed ion transporters, neurotransmitter receptors, and lysosomal membrane proteins, helping to illuminate fundamental mechanisms relevant to neuroscience, muscle biology, and cellular homeostasis. His laboratory's work earned two Javits Neuroscience Investigator Awards from the National Institutes of Health, recognizing sustained contributions to neuroscience research.

Dr. Fambrough received his PhD in biochemistry from the California Institute of Technology in 1968. Before and alongside his long association with Johns Hopkins, he served at the Carnegie Institution of Washington's Department of Embryology. At Johns Hopkins, he taught introductory biology as well as courses in cellular and molecular neuroscience, helping generations of students build a rigorous foundation in modern biology.

Beyond his research and teaching, Dr. Fambrough has contributed extensively to the broader scientific community. He has served as Scientific Director of the Searle Scholars Program since 1996, supporting the development of promising early-career biomedical scientists. His professional service has included membership on the advisory board of the Muscular Dystrophy Association and editorial roles with journals and scholarly publications including *Physiological Reviews*, *Current Topics in Membranes*, and *Cell Biology Education*. A past president of the Society of General Physiologists and a former councilor of the American Society for Cell Biology, Dr. Fambrough has helped shape both scientific inquiry and professional service in the biological sciences. He remains listed as Professor Emeritus by the Johns Hopkins Department of Biology.

Evangelos “Van” Moudrianakis, PhD
Professor of Biology and Biophysics
Johns Hopkins University

Evangelos “Van” Moudrianakis, PhD, is a distinguished biologist and biophysicist at Johns Hopkins University whose pioneering research has helped define modern understanding of chromatin—the dynamic DNA-protein complex that packages, organizes, and regulates the genetic material in chromosomes. His work has provided a foundational structural framework for the field of epigenetics and for the study of how cells control access to genetic information.

Dr. Moudrianakis earned his bachelor’s degree from the University of Athens in Greece and came to Johns Hopkins University for graduate study, receiving his PhD there before completing postdoctoral work at the institution. He has built a long and influential career in the Johns Hopkins Department of Biology, where his research has focused on the principles of macromolecular assembly: how proteins and nucleic acids come together to form complex biological structures with distinctive functions.

A major focus of the Moudrianakis laboratory has been the nucleosome, the fundamental repeating unit of chromatin. His group established that the histone core is a tripartite structure, composed of two H2A-H2B dimers positioned around a central H3-H4 tetramer. The laboratory also achieved a crystallographic structure of the histone octamer at near-atomic resolution and helped characterize the histone fold, an important protein-assembly motif with broad relevance to DNA compaction, protein dimerization, and gene regulation.

In recognition of these landmark contributions, Dr. Moudrianakis received the 2009 Bodossaki Aristeio in Biomedicine, an honor often described as Greece’s equivalent of a Nobel Prize. The award recognized his lifelong work on chromatin structure and its implications for understanding chromosome function and the regulation of genetic information. He is also a member of the Academy of Athens.

In addition to chromatin biology, Dr. Moudrianakis has pursued research in bacterial and chloroplast bioenergetics, as well as protein stability and enzyme activity in archaea. Through his scientific leadership, mentorship, and structural insights into the architecture of the genome, he has made enduring contributions to molecular biology, biophysics, and genetics.

Stuart A. “Skip” Grossman, MD
Professor of Oncology, Medicine, and Neurological Surgery
Johns Hopkins University School of Medicine

Stuart A. “Skip” Grossman, MD, is a nationally recognized neuro-oncologist and clinical investigator at the Johns Hopkins University School of Medicine. He serves as Professor of Oncology, Medicine, and Neurological Surgery and is affiliated with the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins. Dr. Grossman’s career has focused on improving outcomes and quality of life for patients with primary and metastatic brain tumors, including glioblastoma, glioma, central nervous system lymphoma, leptomeningeal metastases, and cancer-related pain.

Dr. Grossman earned his medical degree from the University of Rochester School of Medicine and Dentistry. He completed his internship and residency in internal medicine at Strong Memorial Hospital in Rochester, New York, followed by fellowship training in medical oncology at Johns Hopkins.

A leader in translational and clinical brain-cancer research, Dr. Grossman has directed and contributed to numerous Phase I, II, and III clinical trials investigating novel therapeutic strategies for adults with brain tumors. His work has explored approaches including anti-angiogenic therapies, gene therapy, radiation enhancement, local chemotherapy and radiation delivery, differentiating agents, and other investigational treatments designed to advance care for patients with difficult-to-treat central nervous system malignancies. Dr. Grossman has served as Principal Investigator and Director of the Central Operations Office for National Cancer Institute-funded brain-tumor consortia, including the New Approaches to Brain Tumor Therapy (NABTT) CNS Consortium and the Adult Brain Tumor Consortium. These collaborative, multicenter programs bring together leading academic brain-tumor centers to evaluate promising new therapies efficiently and rigorously.

Throughout his career, Dr. Grossman has also contributed to national guideline development, cooperative-group research, and the training of future neuro-oncology specialists. His longstanding commitment to collaborative clinical investigation has helped advance the development of new treatment strategies for patients facing some of the most challenging cancers of the brain and central nervous system.

Chia-Ching Chang, PhD

**Professor, Department of Biological Science and Technology;
Adjunct Professor, Department of Electrophysics, National Yang
Ming Chiao Tung University**

Research Fellow, Institute of Physics, Academia Sinica

Chia-Ching Chang, PhD, is a biological physicist and interdisciplinary researcher whose work brings together physics, molecular biology, materials science, and nanotechnology to investigate fundamental questions in protein behavior and to develop advanced bioanalytical technologies. He is a Professor in the Department of Biological Science and Technology and an Adjunct Professor in the Department of Electrophysics at National Yang Ming Chiao Tung University in Taiwan. He also holds a co-appointed Research Fellow position at the Institute of Physics, Academia Sinica.

Dr. Chang earned both his Bachelor of Science in Physics in 1992 and his PhD in Life Sciences in 1998 from National Tsing Hua University, Taiwan. His cross-disciplinary training established the foundation for a career focused on molecular biological physics—using quantitative and physical-science approaches to understand complex biological systems. During his doctoral training, he was a pre-doctoral fellow in the Department of Biology at Johns Hopkins University from 1997 to 1998.

Dr. Chang's research program focuses on soft condensed matter and biological physics, with particular interests in protein folding, biomaterials synthesis and characterization, biophotonics, biosensing, and bionanotechnology. His laboratory develops functional bio-nanomaterials and analytical platforms designed to examine protein structure, stability, and biological mechanisms. These efforts have implications for fundamental molecular research as well as applications in biomedical sensing, diagnostic technologies, and biotechnology.

After postdoctoral training at the Institute of Zoology, Academia Sinica, Dr. Chang began his academic career as an Assistant Professor of Physics at National Dong Hwa University in 2000 and was promoted to Associate Professor in 2004. He joined National Chiao Tung University in 2005, later becoming a full professor in 2008. Since the formation of National Yang Ming Chiao Tung University, he has continued to advance interdisciplinary research and education at the intersection of physical and life sciences. In addition to his research and teaching, Dr. Chang has held important academic and administrative leadership roles, including Chair of the Department of Biotechnology, Associate Vice President for International Affairs, and Chief Director of the Center for Environment Protection and Laboratory Safety. His career reflects a sustained commitment to innovation, scientific collaboration, and the translation of fundamental biophysical knowledge into useful technologies.

Hwai-Jong “HJ” Cheng, MD, PhD

Director and Distinguished Research Fellow, Institute of Molecular Biology, Academia Sinica; Professor Emeritus, University of California, Davis

Hwai-Jong “HJ” Cheng, MD, PhD, is an internationally recognized neuroscientist, physician, and developmental biologist whose research has advanced understanding of how neural circuits are formed, refined, and maintained across the lifespan. He serves as Director and Distinguished Research Fellow at the Institute of Molecular Biology, Academia Sinica, Taiwan’s leading national research institution. He is also Professor Emeritus in Neurobiology, Physiology and Behavior and in Pathology and Laboratory Medicine at the University of California, Davis.[chenglab+1](#)

Dr. Cheng received his MD from the College of Medicine at National Taiwan University in 1989 and his PhD in Cell and Developmental Biology from Harvard University in 1995. He subsequently completed postdoctoral research training at the University of California, San Francisco, and Stanford University, working in the laboratory of developmental neuroscientist Marc Tessier-Lavigne. This training established the foundation for his influential work in axon guidance and the molecular mechanisms that organize the nervous system.[chenglab+1](#)

A central focus of Dr. Cheng’s research is axon guidance: the highly coordinated process by which developing neurons extend axons to their correct targets and assemble into functional circuits. His laboratory combines mouse genetics, molecular and cellular biology, confocal and electron microscopy, and advanced imaging approaches to identify the external guidance signals and internal cellular mechanisms that direct growing axons during embryonic development.[neuroscience.ucdavis+1](#)

Dr. Cheng has also made important contributions to the study of adult hippocampal neurogenesis. The hippocampus continues to generate new neurons in adulthood, and these adult-born cells must integrate into existing neural circuitry to support learning and memory. His team investigates how aging affects this process and how impaired neuronal development, axon pruning, and circuit integration may contribute to conditions including Alzheimer’s disease, depression, epilepsy, age-related cognitive decline, schizophrenia, and autism.[neuroscience.ucdavis+1](#)

Previously, Dr. Cheng was a faculty member at UC Davis from 2002 through 2020 and chaired its Neuroscience Graduate Group. Through his research leadership, mentorship, and commitment to understanding neural development and plasticity, he continues to help illuminate the cellular foundations of brain health, aging, and neurological disease.

Chien-Jen Chen, ScD
President, Academia Sinica
Former Vice President and Premier of Taiwan

Chien-Jen Chen, ScD, is an internationally distinguished epidemiologist, geneticist, public-health leader, and statesman whose career bridges scientific discovery, academic leadership, and national service. He is President of Academia Sinica, Taiwan's premier research institution, and previously served as the 14th Vice President of the Republic of China (Taiwan) from 2016 to 2020 and as Premier from 2023 to 2024.

Dr. Chen earned a Bachelor of Science in zoology and a Master of Public Health from National Taiwan University, followed by a Doctor of Science in epidemiology and human genetics from the Johns Hopkins University School of Hygiene and Public Health. He then returned to Taiwan, where he developed an influential academic career at National Taiwan University, serving as founding director of its Graduate Institute of Epidemiology and later as Dean of the College of Public Health. He also served as Vice President of Academia Sinica from 2011 to 2015 before assuming national office. Over more than four decades, Dr. Chen's research has shaped global approaches to environmental and infection-related disease prevention. His epidemiologic investigations established major health hazards associated with chronic arsenic exposure in drinking water, helping inform international standards to reduce arsenic contamination. His research on hepatitis B virus, Epstein-Barr virus, and human papillomavirus has clarified how persistent viral infection contributes to cancer risk and has supported the development of risk-prediction tools and preventive strategies.

Dr. Chen's public service has been equally consequential. As Taiwan's Minister of Health during the 2003 SARS outbreak, he helped direct the country's emergency response and strengthened disease-control infrastructure that later proved valuable during the COVID-19 pandemic. He also served as Minister of the National Science Council, advancing Taiwan's scientific and research enterprise.

A member of Academia Sinica and the World Academy of Sciences, a foreign associate of the U.S. National Academy of Sciences, and an academican of the Pontifical Academy of Sciences, Dr. Chen has received international recognition for translating rigorous population-health research into policy and prevention. His career exemplifies the vital connection between science, public service, and global health leadership

Karen Beemon, PhD
Professor Emerita of Biology
Johns Hopkins University

Karen Beemon, PhD, is Professor Emerita of Biology at Johns Hopkins University and an internationally recognized molecular biologist whose research has advanced understanding of retroviruses, RNA biology, and viral oncogenesis—the processes through which viruses can contribute to cancer. Her work has helped reveal how viruses regulate their genetic material and interact with host cells, providing insights with broad relevance to cancer biology and infectious-disease research.

Dr. Beemon's laboratory has investigated the molecular biology of retroviruses, including the mechanisms governing retroviral RNA stability, RNA processing, and gene expression. A central theme of her research has been how viral RNA sequences and host-cell factors work together to control the production of viral proteins and the progression of infection. Her work has also examined the oncogenic potential of viral genes and the roles of cellular pathways—including microRNAs and telomerase reverse transcriptase (TERT)—in tumor development.

Through these studies, Dr. Beemon has contributed to a deeper understanding of the relationship between RNA regulation and cancer. Retroviruses have long served as powerful tools for identifying genes and signaling pathways involved in cell growth, transformation, and malignancy. By investigating these systems at a molecular level, her research has helped clarify biological processes that remain relevant to both viral disease and cancer therapeutics. At Johns Hopkins, Dr. Beemon combined a productive research career with dedicated mentorship and teaching. She trained students and postdoctoral fellows in molecular virology, genetics, and experimental biology, helping prepare new generations of scientists to address major questions in biomedical research. Her scholarly contributions also extend to the scientific literature, where she has authored influential studies on RNA viruses and viral mechanisms of oncogenesis.

Dr. Beemon's career exemplifies the lasting impact of fundamental research. Her work on retroviral RNA and cancer-associated mechanisms continues to inform the study of gene expression, virus-host interactions, and the molecular basis of cancer.

Carl Wu, AM, PhD
Bloomberg Distinguished Professor of Biology and of Molecular
Biology and Genetics,
Johns Hopkins University

Carl Wu, AM, PhD, is a Bloomberg Distinguished Professor with appointments in the Department of Biology in the Krieger School of Arts and Sciences and the Department of Molecular Biology and Genetics in the Johns Hopkins University School of Medicine. He is an internationally recognized leader in chromatin biology, the field that investigates how DNA is packaged within cells and how that packaging regulates gene expression.

Dr. Wu earned his PhD in biology from Harvard University and completed postdoctoral training as a Harvard Junior Fellow. Before joining Johns Hopkins in 2016, he spent three decades as a Principal Investigator at the National Cancer Institute and later served as a member of the Transcription Imaging Consortium at the Howard Hughes Medical Institute's Janelia Research Campus.

His research has been instrumental in establishing chromatin remodeling as a central mechanism of gene control. Dr. Wu's laboratory studies how regulatory DNA within the compacted genome becomes accessible or inaccessible during the earliest stages of transcriptional regulation. Using biochemistry, genomics, proteomics, and advanced live-cell and single-molecule imaging, his group examines the molecular machinery that governs chromatin structure and gene activity.

A particular focus of his current work is the histone variant H2A.Z, which plays a major role in transcription and the function of promoters and enhancers. Understanding these processes has important implications for human health, since faulty chromatin regulation contributes to cancer and other diseases. Dr. Wu's work seeks to identify the pathways through which chromatin dysfunction arises and to clarify potential opportunities for therapeutic intervention.

Dr. Wu is a member of the U.S. National Academy of Sciences, National Academy of Medicine, American Academy of Arts and Sciences, Academia Sinica, and the European Molecular Biology Organization. Through groundbreaking discoveries, interdisciplinary scholarship, and scientific mentorship, he has helped elevate chromatin regulation into one of the most consequential areas of modern molecular biology.

Ashani T. Weeraratna, PhD

**E.V. McCollum Professor and Chair, Department of Biochemistry and Molecular Biology; Bloomberg Distinguished Professor; Associate Director of Laboratory Research, Sidney Kimmel Comprehensive Cancer Center
Johns Hopkins University**

Ashani T. Weeraratna, PhD, is an internationally recognized cancer biologist whose research has transformed understanding of how aging and the tumor microenvironment influence melanoma progression, metastasis, and resistance to treatment. She serves as the E.V. McCollum Professor and Chair of the Department of Biochemistry and Molecular Biology at the Johns Hopkins Bloomberg School of Public Health, a Bloomberg Distinguished Professor, and Associate Director of Laboratory Research at the Sidney Kimmel Comprehensive Cancer Center. She also holds an appointment as Professor of Oncology in the Johns Hopkins School of Medicine.

Dr. Weeraratna's laboratory investigates why cancer cells become more aggressive and why treatments that initially work can lose effectiveness. Her research emphasizes the tumor microenvironment—the surrounding cells, tissues, signaling molecules, and extracellular structures that shape tumor behavior. In particular, she has demonstrated that normal age-related changes in the microenvironment can promote melanoma progression, metastasis, and resistance to therapy.

Her work integrates cancer biology, aging research, immunology, cell signaling, and translational oncology. Dr. Weeraratna has studied melanoma metastasis, Wnt signaling, and cellular mechanisms of therapy resistance, with the goal of identifying vulnerabilities that can be targeted to improve patient outcomes. Her research is especially significant because it recognizes that cancer is not driven by tumor cells alone; the biological context surrounding those cells can strongly influence whether a tumor grows, spreads, or responds to treatment. Prior to joining Johns Hopkins, Dr. Weeraratna was the Ira Brind Professor and co-program leader of the Immunology, Microenvironment and Metastasis Program at The Wistar Institute. She now co-leads the Cancer Invasion and Metastasis Program at Johns Hopkins and serves on the National Cancer Advisory Board.

Through influential research, institutional leadership, and mentorship, Dr. Weeraratna continues to advance a more comprehensive and clinically relevant understanding of cancer metastasis and therapeutic resistance. Her work is helping shape approaches to precision oncology that account for both the tumor and the aging biological environment in which it develops.

Vincent J. Hilser, PhD**Ralph S. O'Connor Chair; Professor and Chair, Department of Biology, Johns Hopkins University**

Vincent J. Hilser, PhD, is the Ralph S. O'Connor Chair and Professor and Chair of the Department of Biology at Johns Hopkins University. A leading biophysicist, Dr. Hilser studies how the dynamic behavior of proteins—their continuous fluctuations among different structural states—governs biological function, adaptation, evolution, and disease.

Proteins are often depicted as fixed three-dimensional structures, but Dr. Hilser's research emphasizes that they are dynamic molecular systems. Even under ordinary physiological conditions, proteins continuously sample a range of conformations. These structural fluctuations can determine how proteins bind partners, transmit signals, respond to environmental changes, and carry out their biological roles. Dr. Hilser's work has been particularly influential in understanding intrinsic disorder and allosteric signaling, two concepts that have reshaped thinking about protein function.

Allostery refers to the process by which an event at one location in a protein affects activity at a distant site. Dr. Hilser's research explores how conformational ensembles and thermodynamic principles enable this communication within proteins. These insights have implications across biology and medicine, including for the study of genetic variants, protein misfolding, cellular signaling, and diseases caused by altered protein regulation.

Dr. Hilser received his PhD from Johns Hopkins University. Before returning to Johns Hopkins, he held leadership roles at the University of Texas Medical Branch, including Director of the Sealy Center for Structural Biology and Molecular Biophysics. At Johns Hopkins, he leads an interdisciplinary research program that brings together biophysics, molecular biology, structural biology, thermodynamics, and computational approaches.

As department chair, educator, and mentor, Dr. Hilser also supports the next generation of scientists while helping guide a department known for excellence in fundamental biological research. His work illustrates how basic physical principles can reveal the dynamic molecular foundations of health, disease, and biological evolution.

PC and Ru-Chih Obituaries
Provided by Johns Hopkins
University and
Institute of Molecular Biology,
Academia Sinica

Longtime Johns Hopkins biochemistry scholar P.C. Huang dies at 89

He spent 55 years on the faculty at the Bloomberg School of Public Health, co-edited the field-defining book 'Genetic Issues in Public Health and Medicine'

By Hub staff report

Published Aug 11, 2020

Pien-Chien "P.C." Huang, an expert on stress-inducible genes who served on the faculty of the Johns Hopkins Bloomberg School of Public Health for 55 years, died Aug. 3. He was 89. Huang, a professor of biochemistry and molecular biology known for his buoyant personality, charmed students and colleagues alike.

"Every interaction with him made me smile," said [Ashani Weeraratna](#), chair of the Department of Biochemistry and Molecular Biology. "Every email he sent was pure poetry, and his brilliance and kindness shone through everything he did," Huang studied the metallothionein family of proteins, which bind transition metals and are thought to regulate metal homeostasis and detoxification in the body. These proteins play important roles in carcinogenesis.

Born on July 13, 1931, in Shanghai, China, Huang earned a BS in genetics from National Taiwan University. Later, he would forge ties between Hopkins and NTU. He earned an MS in genetics from Virginia Polytechnic Institute and a PhD in genetics and biochemistry from Ohio State University.

At Virginia Tech, he met another Chinese student, [Ru Chih Chow](#). On their graduation day in 1956, the couple married in the university president's office, with just the president and two witnesses, since they knew no one else in the U.S.

P.C. and Ru Chih, both geneticists, had tandem academic careers: They completed PhDs at Ohio State and postdoctoral fellowships at the California Institute of Technology before joining the Johns Hopkins faculty in 1965. Ru Chih was appointed to the [Department of Biology](#) at Homewood and P.C. to what was then the Department of Biochemistry.

Roger McMacken, the late chair of the Department of Biochemistry and Molecular Biology, once described Huang as a "hotshot" who wowed his colleagues in his first decade at Hopkins with seminal papers on DNA analysis and replication, use of plant model systems, and DNA interactions and chromatin structure. Former department chair [Pierre Coulombe](#) observed, "The depth, the breadth, and the quality of the work P.C. was doing is just sort of mind-boggling."

Huang authored more than 170 peer-reviewed articles and edited or co-edited six books. With colleagues Abraham M. Lilienfeld and Bernice H. Cohen, he co-edited the field-defining 1978 text *Genetic Issues in Public Health and Medicine*. The book gave medical and government decision-makers the first overview of the impact of genetics on social, political, legal, economic, and ethical questions.

During the 2003 SARS outbreak, Huang guided Taiwanese students at the Bloomberg School in devising a novel preventive protocol that involved temperature monitoring and achieved an 82% participation rate among the populace.

Rarely without a student in his office, Huang was renowned across Hopkins for his mentoring and teaching skills. Madhura Shah, a Hopkins neuroscience alumna, credited him with teaching "the most unique class at Hopkins, using his uncanny intuition for predicting future Nobel laureates to bring undergrads face to face with them across dinner."

Iconic biologist Ru Chih Huang dies at 94

The first female tenure-track professor hired at Johns Hopkins in the physical sciences, Huang led discoveries into chromosomal RNA synthesis, viral replication, and cancer development in humans

By Rachel Wallach

Published Jun 9

Biochemist and molecular biologist [Ru Chih Huang](#), world-renowned for her discoveries in chromosomal RNA synthesis, viral replication, and cancer development in humans, died May 31 at her home in Baltimore. The retired McElroy Honorary Research Professor in the Department of Biology was 94.

"Ru Chih has been an icon to the biology department not only for her science, but for her relentless efforts to build a culture of cooperation and camaraderie in the department," said [Vincent Hilser](#), chair of the Department of Biology. "It is hard to think of somebody who has contributed more to the positive culture of our department than Ru Chih, because as fantastic a scientist as she was, she was an even more spectacular human being. We were lucky to have had the opportunity to benefit from her wisdom for 61 years."

The first female tenure-track professor hired at Johns Hopkins in the physical sciences, Huang was an innovative researcher throughout her life beginning with her seminal 1962 paper, "Histone, A Suppressor of Chromosomal RNA Synthesis." Later named a Citation Classic, the paper set the stage for a new approach to the study of gene expression, influencing generations of researchers who helped to refine an understanding of the central process of transcription.

The paper grew from research Huang conducted during a 1960–65 postdoctoral fellowship with James Bonner at the California Institute of Technology. The two developed a groundbreaking way to study how cells manage genetic information and convert selected gene signals to instructions for the synthesis of proteins required to build specialized tissues. Their new methods to rapidly and efficiently purify large quantities of the genetic material that makes up chromosomes—a complex of DNA with special proteins called histones—led to their discovery that histones inhibit transcription, and simultaneously opened the field to the broader scientific community.

Their findings also made an appearance in Isaac Asimov's *The Genetic Code*, published the same year as the paper.

After Huang joined Hopkins in 1965, her lab became the first to transcribe, purify, and translate in vitro the genetic message for the protein immunoglobulin, a critical molecule of the immune system. In the 1980s, Huang began to apply her research to clinical treatment, beginning with viral infections including HIV. In the 1990s, she added a major focus on gene regulation in cancer, a direction she pursued through the rest of her life. Her lab led the development of Terameprocol, which has been shown in lab and mouse studies to be an effective cancer treatment.

[Carl Wu](#) first crossed paths with Huang in 1975 when he took a course with her and her late husband, [P.C. Huang](#)—professor in the Bloomberg School of Public Health's Department of Biochemistry and Molecular Biology, who served there 55 years before his passing in 2020—at Woods Hole, Massachusetts. A Harvard graduate student, he then spent a month as a summer student in their joint lab.

"As fantastic a scientist as she was, she was an even more spectacular human being."
Vincent Hilser, Chair, Department of Biology

"As a novice, I learned the fundamentals of nucleic acid and protein biochemistry directly from them, and that life-changing experience laid the foundation for my studies at Harvard, at the NIH, and now at Hopkins," said Wu, Bloomberg Distinguished Professor in the Department of Biology. "Ru Chih and P.C. were passionate, dedicated, selfless mentors who viewed biomedical research in molecular biology as a way of life and their students and colleagues as an extension of family. By their example, they inspired countless students who entered their labs to follow a path to research for the common good."

Over her lifetime, Huang authored or co-authored more than 300 papers, the most recent appearing in April. She held 16 patents—the last, relating to mechanisms of pathologic neoplasia, was awarded in 2022—and trained more than 30 doctoral students and 100 postdocs. A believer in the power of collaboration, she was noted for her warmth, caring, and devotion to building and sustaining a sense of community within her department.

"Ru Chih was an inspiration to many of us—her cheerful optimism, dedication to her work, and love for the biology department were unmatched," said Rejji Kuruvilla, professor in the Department of Biology and vice dean for natural sciences. "She will be sadly missed. I will miss running into her in the hallway, having her walk into my office to chat, and her happy presence at so many colloquium seminars and dinners."

Huang earned a bachelor's degree from National Taiwan University in 1953, a master's from Virginia Polytechnic Institute in 1956, and a PhD from The Ohio State University in 1960. She joined Hopkins in 1965 as assistant professor, was named full professor in 1975, and became McElroy Honorary Research Professor in 2018.

Huang was inducted into the National Academy of Inventors, received an Outstanding Asian-American Scientist Award and an Outstanding Scientist Award from the Chinese Medical Association in the U.S., and was recognized by American Women in Science. She was honored by the Nation's Most Respected Teachers two years in a row. She was a member of the American Biophysical Society, the American Society of Biological Chemists, and the Chinese Academy of Science. At Academia Sinica, where she was the second woman to be elected, she was a co-founder, director, and executive board member of the Institute of Molecular Biology, and Choh Hao Li memorial lecturer. She also served as visiting chair professor at National Central University.

In 2018, the biology department named its monthly colloquium series in her honor. She was an active participant at its most recent session just two weeks before her death. Survivors include her son, Suber Huang, A&S '80, who completed his residency in ophthalmology at the Wilmer Eye Institute in 1989; her daughter, Suzanne Huang Rexing; her daughter-in-law and son-in-law; three grandchildren; and a great-granddaughter.

Founding Mother of the Institute of Molecular Biology: The Science and Life of Academician Ru-Chih C. Huang

Academician Ru-Chih C. Huang is an internationally renowned molecular biologist and a Research Professor at Johns Hopkins University. Together with her husband, Academician P. C. Huang, she dedicated herself to introducing life sciences to Taiwan. She played an indispensable and critical role in promoting the establishment and development of the Institute of Molecular Biology (IMB) at Academia Sinica, earning her the revered title of "Founding Mother of IMB".

The following sections detail Academician Ru-Chih C. Huang’s contributions to the establishment and development of IMB, her academic achievements, as well as her family life and memorable anecdotes:

1. Dedicating All Efforts to Promoting the Institute of Molecular Biology

Ru-Chih C. Huang once remarked, "If we as a couple have made any contribution to Taiwan, it was helping to establish molecular biology."

During the preparatory and foundational stages of IMB, she demonstrated visionary leadership and selfless dedication.

Igniting Domestic Biotechnology Development: In early 1982, she returned to Taiwan to organize the "Genetic Engineering Symposium." She subsequently served as an advisory committee member for the preparatory office of the Molecular Biology Laboratory (the predecessor of IMB). She returned to Taiwan multiple times to participate personally in laboratory preparation and design, and partnered with Academician P. C. Huang to advocate for the "laboratories without walls (open lab concept)" design to foster maximum academic interaction.

The "Lexington Declaration" and Team Relay: In 1985, recognizing that IMB faced bottlenecks in recruiting local talent during its early stages, Ru-Chih C. Huang, along with P. C. Huang and Academician Ray Wu, met with Academician James C. Wang in Boston. Proactively, she proposed that this group of senior overseas Chinese professors take turns during their sabbaticals to return to Taiwan in a relay format to lead the institute. James C. Wang agreed immediately to serve as the first director, an agreement famously known as the "Lexington Declaration."

Serving as the Second Director and Setting Multiple Records: Ru-Chih C. Huang assumed the position of the second director in September 1987. During her tenure, she actively expanded research capabilities, recruiting eight new faculty members within 16 months, inviting 10 professors from top universities of the U.S. to form a powerful visiting team based at IMB, and inviting many distinguished scholars, including three Nobel laureates, to visit IMB and gave seminars.. Furthermore, she set several "firsts" during her time in IMB:

The first to offer molecular biology courses at the Central National Library, opening them to graduate students nationwide.

The first to organize the IMB PI Retreat in the famous resort The One Nanyuan to review research progress.

The first director of IMB to deliver an academic report at the Presidential Office.

Initiated the "Gate of Wisdom" cross-disciplinary lecture series with P. C. Huang to promote dialogue between science and the humanities.

By the time she stepped down, IMB had grown to include 13 PIs and over a hundred researchers, solidifying the foundation of molecular biology research in Taiwan.

2. A Fulfilling Family Life and a Fairytale Couple

Ru-Chih C. Huang hailed from a scholarly family; her father, Yi-kui Zhou, served as Dean of the Taiwan Provincial College of Law and Commerce (the predecessor of National Taipei University). She and P. C. Huang were not only a rare "Academician Couple" at Academia Sinica (and the first couple both of whom had graduated from National Taiwan University), but also soulmates who accompanied each other for half a century.

Love Bloomed at NTU's "Poultry Club": While studying in the Department of Agronomy at National Taiwan University, Ru-Chih C. Huang joined the "Poultry Club" founded by P. C. Huang, where they met and fell in love. She travelled by ship to the United States for graduate studies in 1954, and P. C. Huang followed her closely behind the next year. They married in 1956 and both earned their doctoral degrees from The Ohio State University.

The Perfect Woman in Her Husband's Eyes: Academician P. C. Huang once described his beloved wife with high praise: "A great daughter, good sister, sweet lover, devoted wife, loving mother, dedicated scientist, caring teacher, lasting friend, and a trusting colleague." Ru-Chih C. Huang also reflectively stated that fifty years of research career passed in the blink of an eye, yet their romance remained as fresh as ever.

A Large, Accomplished, and Joyful Family: They raised a son and a daughter. Their son, Si-Bo (Suber) Huang, is a top ophthalmologist, while their daughter, Si-Shen (Suzanne) Huang, specializes in epidemiology and public health. Their grandchildren are equally outstanding, with most graduating from Johns Hopkins University. Bringing together three generations of cultural fusion, their life was filled with creativity and warmth.

3. Celebrated Anecdotes of Her Life

Academician Ru-Chih C. Huang was not only a rigorous scientist; her humanistic cultivation and zest for life brought many heartwarming stories to the academic community:

Securing the First Director with "A Bowl of Fish Soup": Ru-Chih C. Huang was well-known in the international academic community for her exquisite culinary skills. It is said that in 1985, when she was lobbying Professor James C. Wang of Harvard University in Boston to return to Taiwan as the first director of IMB, one of the conditions for his readily agreeing was "Ru-Chih C. Huang would cook fish soup for him." This story of using fine cuisine to aid Taiwan's scientific development remains a celebrated tale to this day.

Bringing Music and Street Food into the Laboratory: She placed great emphasis on communication between the humanities and sciences, becoming the first director to hold a chamber music concert within IMB, even inviting scholars like Academicians Hsing-Jien Kung and Michael Lai to perform. To strengthen team cohesion, she was also the first to introduce Taiwanese street food into the IMB basement for a New Year's party, filling the originally rigid scientific laboratory with laughter and human warmth.

A Female Scholar Amidst a Sea of Books: Ru-Chih C. Huang's knowledge was not confined to science. She and her husband possessed thousands of books in their home in the States, covering literature, history, philosophy, art, and music. This profound humanistic foundation shaped her scholarly style, perfectly blending scientific rationality with humanistic care.

Written Remembrances

Ru Chih Huang was my Ph.D. advisor. My time in Ru Chih's lab was among the happiest times in my life. She changed my life because I learned what scientific research is, how to do it, and also to love it. I chose Ru Chih's lab because her research interests were very exciting. Ru Chih was a dedicated and enthusiastic advisor, and she led me to a really great project, maybe the best in my career. We had a wonderful collaboration. When we had our first really good results, she jumped up and down and hugged me!

Ru Chih always supported me, and never criticized me, at least that I remember. Also, once (?) when experiments didn't go as hoped, and I went home all dejected, the next day I came to lab to see that Ru Chih had cleaned up my lab bench! That cheered me up and made me feel optimistic again. Ru Chih was like a mother to me; for example, giving me advice (which I followed) to have a child during postdoc years. I tried to live up to her standards of kindness when I became a PI, but not sure I succeeded. She and PC were so generous to both Ed and me.

I also want to take this opportunity to say how great the education I obtained at Johns Hopkins was. I think the graduate program was outstanding and the professors were outstanding. I loved graduate school. I am very thankful to Ru Chih and the other Professors in the Biology Department at Homewood.

When it came time to graduate, I didn't want to go to the ceremony, but Ru Chih insisted we take a photo of me in her Ph.D. gown, and we took a lovely photo, which is here. This shows Ru Chih and me in the spring of 1972.

- Janet Stavnezer



Auntie RuChih Huang was a very special person in our family, and her passing in May 2026 at the age of 94 leaves us with many wonderful memories and a deep sense of gratitude. In 1976, when my family—my mom, Helen, my dad, Harry, my older brother Richard, my younger sister Anne, and I—immigrated to the United States, we were teenagers and everything was new and unfamiliar. Auntie RuChih and Uncle PC Huang played such an important role in helping our family begin our new life in America. They guided us through those early days, including helping us understand the local school system and assisting my mom in finding a job at the Johns Hopkins School of Hygiene.

But their kindness went far beyond practical help. They made sure that we children felt welcomed and that our new life in America was filled with happy memories. They often invited our family, along with two other relatives' families, the Hos and the Hus, to holiday gatherings. Those Christmas celebrations were especially memorable. I still remember the very first pair of mittens Auntie RuChih gave me. I treasured them so much that I kept them for more than 30 years. Something as simple as a pair of mittens has remained a precious reminder of her warmth and generosity.

Auntie RuChih was a devoted and accomplished scientist who loved her work as a biological scientist. But her talent that I admired most was her exquisite cooking. I can still picture those holiday gatherings years ago, when more than 20 of us would sit around the dining table. While we were enjoying each other's company, Auntie RuChih would be working tirelessly in the kitchen, single-handedly preparing and bringing out one beautiful, banquet-quality dish after another. She somehow made it all look effortless. Those meals were about much more than food—they were about family, love, generosity, and bringing people together.

As the years passed, we all grew up and eventually left Baltimore to pursue our own careers and build our own lives. Yet we stayed in touch. Auntie RuChih continued to be caring and thoughtful, always interested in how we were doing. She often told us how proud she was to see all of us children grow up and become accomplished in our own fields. Her words meant a great deal to us.

My mom, Helen, would like to share something from her heart:

“RuChih, I think of you often and will always be grateful for everything you and PC did for our family. The last time I saw you was around Christmas in 2024. I am so grateful that we had that time together, and I will treasure that memory. I will miss you dearly and will always carry you in my heart.”

When I look back today, I realize just how profoundly Auntie RuChih and Uncle PC changed the course of our lives. If they had not encouraged my parents to immigrate to the United States and helped our family take those first steps in a new country, our lives might have been very different. Because of their encouragement, generosity, and support, we were given opportunities and an education that shaped the lives we have today. For that, my mom and all of us will always be deeply grateful.

Auntie RuChih, thank you for welcoming us, guiding us, caring for us, feeding us, and giving us so many beautiful memories. Your kindness touched our entire family and will continue to live on through all of us.

We miss you dearly, Auntie RuChih. May you rest in peace, and may you always be remembered with love.

With Love,

Jane, Richard, Anne & Helen

An Enduring Legacy of Rigor and Grace: In Loving Memory of Dr. P.C. Huang and Dr. Ru-Chih C. Huang

As the first and last PhD student co-advised by Professor P.C. Huang and Dr. Ru-Chih C. Huang at National Tsing Hua University, my journey with them began in 1992. Under P.C.'s wise guidance, I gradually and steadily built my own research and teaching career, eventually becoming a Professor at National Yang Ming Chiao Tung University. P.C. was a visionary scholar and mentor whose enthusiasm for education shaped not only my life but the entire academic landscape of Taiwan. His contributions were monumental—helping establish the College of Life Science and the Department of Medical Science at National Tsing Hua University, as well as the Institute of Biological Science and Technology at National Chiao Tung University.

Beyond their profound institutional impact in Taiwan, crossing paths with both P.C. and Ru-Chih during our journey to Johns Hopkins University remains the greatest fortune of our youth. On our academic path, they truly embodied a "loving father and a demanding mother." In the lab, they held us to the highest standards, providing rigorous and foundational guidance. Yet, the moment they welcomed us into their home, they showered us with the unconditional care and devotion one reserves for their own children. To this day, Jenny and I deeply miss Dr. Ru-Chih's exquisite cooking. We were fortunate enough to attend a few of her famous "Gourmet Gatherings for Scientists," where the brilliant sparks of scientific minds met culinary excellence—a priceless memory from our time in the United States.

Dr. Ru-Chih's lifelong passion for science made her a living inspiration. Remarkably, just last summer at the age of ninety-three, she was still at the forefront of cancer research, actively investigating and lecturing. Even when mobility became a challenge, her daily insistence on going to the office deeply moved everyone around her, including her drivers, who were inspired by her tireless work ethic.

Through their extraordinary lives, P.C. and Ru-Chih showed us the true integrity of scholars and the boundless warmth of parents. All colleagues and students of the institutions they helped build deeply appreciate their immense contributions. Their teachings and their memory will remain etched in our hearts forever, and we express our deepest sorrow and condolences to their family.

– *Professor Chia-Ching Chang, PhD Student Co-advised by PC and Ru-Chih*

Dr. Ru-Chih C. Huang was my predoctoral mentor at Johns Hopkins University, and she was the person who first opened the door for me to come to the United States and pursue science at the highest level. I will forever be grateful for the chance she took on me and for the trust she placed in me when I was just beginning my scientific journey.

What I remember most about Ru-Chih was the warmth and generosity that lived inside her science. She taught me that rigor and kindness are not opposing forces in a laboratory — they are the same discipline. She created an environment where curiosity felt safe and ambition felt possible, especially for a young international trainee far from home.

I carry pieces of Ru-Chih into every experiment I run today — in the way I read a figure carefully before believing it, in the way I try to mentor others with patience, and in the way I remind myself that a scientific career is ultimately about the people we lift along the way. She gave me my start in this country, and every question I chase forward carries a thread of her legacy.

Thank you, Ru-Chih, for everything. May your memory be a blessing to all of us who were lucky enough to learn from you.

– *Maria Velez Brochero, PhD candidate at Rutgers University, Dr. Ru Chih – Previous Mentor*

Aunt RuChih was an extraordinary person, and her intellect, dedication, generosity, and kindheartedness touched me greatly. She meant a great deal to me and my family, and we miss her dearly.

Over the years, she taught me so much about biological science and research through our collaboration in Erimos Pharmaceutical's drug development projects. Many of our meetings and discussion left a lasting impression on me, and I will always be grateful for her guidance, encouragement, and mentorship. Her passion for discovery and her unwavering commitment to finding treatments for cancer were truly inspiring.

I would very much like to honor RuChih's achievements and celebrate her remarkable contributions to our work. I remain committed to the broader mission that RuChih cared so deeply about in advancing her vision and potentially benefit cancer patients in the future.
- Jeffrey Khoo CEO, Erimos Pharmaceuticals LLC

In talking about Ru Chih's importance to science, her trainees and Johns Hopkins, I'm going to let others talk about such important points as her significant research and the role she played as a pioneering woman in science and at Hopkins. Instead, I want to talk about the spirit with which she infused the Department of Biology. I remember so clearly when I was being recruited here 27 years ago, how Ru Chih and PC hosted such a beautiful dinner at their amazing home—with drinks in the courtyard and then course after course of delicious food, all prepared by Ru Chih herself. I was struck by Ru Chih's generosity, and how this spirit was transferred to the entire faculty gathered there. Then I found out that this was a regular occurrence—Faculty Colloquium—where they all gathered for dinner, often at the home of Ru Chih and PC. This was a huge factor in my decision to join Hopkins and remained one of my favorite aspects of the department and a very important part of my life here. I have many, many fond memories of gathering at their home, helping Ru Chih in the kitchen and in serving the meal (always course after course after course, of course!). On the occasions that I hosted the Colloquium dinner or other faculty events with my wife at our home, I always did my best to “channel Ru Chih” and create a meal and an atmosphere that honored her tradition (even if nowhere near as well!). Later on, I was very pleased when I proposed that we name the Colloquium series in her honor, and this was immediately approved by the faculty. On a personal level, I adored Ru Chih—she was like my mom in the department—and she never failed to have a hug and a kind word for me. She was an amazing person and I truly feel honored to have had her in my life.

- Mark Van Doren, Professor of Biology, JHU , Colleague at Hopkins Biology

Ana Pombo; Bloomberg Distinguished Professor, Department of Biology, KSAS, JHU; 3. I had the opportunity to meet and interact with RuChih during my recent recruitment to JHU and the impressive faculty symposium series that she spearheaded. RuChih has shaped the Department of Biology in unique ways to bring together the faculty, research community and students, and I look forward to her legacy being preserved for many years to come.

- Ana Pombo; Bloomberg Distinguished Professor, Department of Biology, KSAS, JHU

I had the privilege of first meeting RuChih Huang in 1998, shortly after I matriculated at Johns Hopkins University as a graduate student and began working in Robert Schleif's lab. At the time, my daily commute was a high-speed mission through the second-floor left wing of Mudd Hall on JHU's Homewood campus. Since Bob's lab was at the far end of the hallway, I had to pass RuChih's lab every day—and RuChih, being both observant and appropriately serious, quickly noticed my habit of treating the hallway like a racetrack.

She often reminded me to slow down, which, in retrospect, was excellent advice for both graduate school and life. On more than one occasion, she also caught me lingering in the autoclave room—partly because it was warm, and partly because it offered the perfect level of privacy for taking a call on my brand-new “cell phone,” which was very cutting-edge at the time. Although I didn't interact with her often in those early years, RuChih made a strong impression. She was clearly brilliant, disciplined, and someone who expected excellence from herself and everyone around her. Frankly, I was a little intimidated—and rightly so.

Fast forward to roughly 2010–2015, when I had the opportunity to reconnect with RuChih in my role as Technology Licensing Manager for her extensive invention portfolio at JHU. My colleague Alevtina had already been working with her, and I was newly assigned to the portfolio. I approached the work with optimism and a modest plan: “Let's talk with RuChih, and I'll learn as we go.” That plan lasted about as long as a grad student's lunch break.

RuChih remembered me immediately—apparently my hallway sprinting days had made an impression. Then she did what only RuChih could do: she produced a stack of publications in actual paper form and began asking me questions that made it abundantly clear I had some catching up to do. It was, in its own way, a master class. Thankfully, she also had a sense of humor and kindly let me know I had time to get up to speed. She was right, of course. Over the following years, we worked together in a professional capacity, and I came to deeply appreciate the importance of understanding her science thoroughly in order to help share it with companies, investors, and others who could bring it into the world.

I also had the honor of attending an event recognizing RuChih for her outstanding contributions at JHU. There, I learned that she had been the first female faculty member on the Homewood campus—and that she was initially denied access to the all-male faculty lounge. It is difficult to overstate the significance of that barrier, and even more remarkable is the way she navigated it: with intelligence, dignity, resilience, and impeccable style.

RuChih did not merely break barriers; she did so while looking effortlessly polished, which, in my opinion, is a rare and formidable combination.

I later had the privilege of attending her retirement celebration at Mudd Hall, where I learned more about her early journey to JHU. Each new story deepened my admiration for her. She was a woman of extraordinary ingenuity, diligence, grit, and grace. Even in her later years, though her body grew weaker, her mind remained sharp and fully engaged. She always had a folder with “her papers,” and there was never any doubt that a detailed scientific discussion was still very much on the agenda.

RuChih Huang will always be remembered by me as incredibly smart, engaging, kind, and funny. She was a truly phenomenal woman, and I feel fortunate to have known her across two very different chapters of my life. Rest well, RuChih.

- Nakisha Holder, Associate Director Licensing, Johns Hopkins Technology Ventures

Videos

Ru-Chih 85th Birthday Celebration

This video was provided by
Hwai-Jong Cheng, IMB