

# NLM Training Program in Biomedical Informatics and Data Science:

## Current Trainees, and Former Trainees from 2002 – present

*The NLM Training Program began in 1992. Trainees from 2002 onwards are included here.*

## NLM Current Trainees – as of February 20, 2025

### Predoctoral Trainees (PhD students)

Trainee	Mentors	Project Title	Training Period
Lindsay Altidor, BCM (Baylor College of Medicine)	Miriana Maletic-Savatic, BCM; Jay Hennig, BCM	Decoding Neural Network Dynamics in Brain Organoids: Intelligence-on-a-dish for Precision Medicine and High-Throughput Drug Development	06/30/25 - 06/29/26
Isha Chakraborty, Rice University (Rice)	Ashutosh Sabharwal, Rice; Sameer Sheth, BCM; Nicole Provenza, BCM	Automated Visual Assessments in Healthcare: Using Explainable Computer Vision to Disentangle Motion Behavior Representations for Improving Clinical Outcomes	01/01/25 - 12/31/25
Ana Guadalupe Chavez, BCM	Benjamin Hayden, BCM; Krešo Josic, University of Houston	Neural Mechanisms of Language: Bridging Speech Encoding and Decoding for Restorative Communication	05/01/25 - 04/30/26
Matthew Cheung, Rice	Ashok Veeraraghavan, Rice; Guha Balakrishnan, Rice; Laurence Court, MDA (UT MD Anderson Cancer Center)	Effectively Communicating Uncertainties in Medical Image Reconstruction	06/16/23 - 06/15/26
Ryan Doughty, Rice	Todd Treangen, Rice; Michael Tisza, BCM	Understanding Population Level intra-host Viral Diversity and Evolution Via Petabase-scale DNA Sequence Analyses	12/01/24 - 11/30/25
Rongbin “Leon” Li, UTH (UT Health Science Center at Houston)	Wenjin Jim Zheng, UTH; Xiaoqian Jiang, UTH	Large Language Model in Drug Combination Prediction	06/30/23 - 06/02/25; 08/23/25 - 08/22/26
Justin Nguyen, UT Medical Branch at Galveston (UTMB)	George Golovko, UTMB; Slobodan Paessler, UTMB	Unraveling Natural and Vaccine-Elicited Immunity to Lassa Fever (UNVEIL)	01/01/25 - 12/31/25
Jared Slone, Rice	Lydia Kaviraki, Rice; Alexandre Reuben, MDA	TCR-pMHC Binding Affinity Prediction with Applications to Personalized Immunotherapy	05/01/23 - 04/30/26

Christina van Hal, UTH	Todd Johnson, UTH; Elmer Bernstam, UTH	Robust Assessment of Health Care Data Quality for Estimating Causal Effects	01/01/24 - 12/31/25
Ethan Woods, Rice	Meng Li, Rice; Gabriel Loor, BCM	Integer Regression for Medical Risk Scoring	06/01/25 - 05/31/26

## Postdoctoral Trainees

Trainee	Mentors	Project Title	Training Period
Amanda Alexander, UH (University of Houston)	Krešimir Josić, UH; Matthew Bennett, Rice (Rice University)	Mathematical Approaches to Understanding the Dynamics and Organization of Synthetic Multicellular Systems	05/01/24 - 04/30/26
Elisabeth Kong, MDA (UT MD Anderson Cancer Center)	Anil Korkut, MDA; Funda Meric-Bernstam, MDA	Genomic and Transcriptomic Analyses of Therapy Response Markers in Cancer	06/01/23 - 05/31/25
Austin Marshall, HMRI (Houston Methodist Research Institute)	Sonia Villapol, HMRI; Todd Treangen, Rice	Design and Implementation of Software for Use with Nanopore Amplicon Sequencing to Observe Alterations to the Gut Microbiome in Alzheimer's Disease Research	06/01/24 - 05/31/26
Saleh Ramezani, MDA	C. Dave Fuller, MDA; Cristian Coarfa, BCM (Baylor College of Medicine)	Development of a Probabilistic Deep Learning Model for Regional Lymph Node Assessment in Invasive Breast Cancer Using Multi-Modal Imaging	01/01/25 - 12/31/25
Meigen Yu, MDA	Xiaodong Cheng, MDA; Cristian Coarfa, BCM	Exploring Pseudogene and lncRNA Interactions in Gene Regulation: Implications for Sickle Cell Anemia and Cancer Therapy	05/01/24 - 04/30/26

Last updated 02/20/2025

## NLM Past Trainees

The NLM Training Program began in 1992. Trainees from 2002 onwards are included here.

### Past Predoctoral Trainees (PhD students)

Trainee	Mentors	Project Title	Training Periods
Jayvee Abella, Rice (Rice University)	Lydia Kaviraki, Rice; Cecilia Clementi, Rice	Novel Computational Tools for the Conformational Analysis of Peptide-MHCs	01/01/16 - 11/17/17, 12/30/17 - 02/09/18; 03/01/18 - 02/28/19
Jonas Actor, Rice	Beatrice Rivière, Rice; David Fuentes, MDA	Physics-Based Machine Learning for Image Segmentation	06/30/18 - 05/15/21

	(UT MD Anderson Cancer Center)		
Behrang Amini, UTH (UT Health Science Center at Houston)	John Byrne, UTH; John Clark, Rice	A Neuronal Model of the Rat Respiratory System	01/01/02 - 06/30/04
Ben Bachman, BCM (Baylor College of Medicine)	Olivier Lichtarge, BCM; Ted Wensel, BCM	Finding Drug Targets by Evolutionary Trace Analysis of Protein Pathways	10/01/09 - 09/30/11 ARRA
Alex "Cito" Balsells, Rice	Beatrice Rivière, Rice; David Fuentes, MDA (UT MD Anderson Cancer Center)	Improving Data Acquisition with Semi-automatic Techniques	01/01/22 - 12/31/24
Ben Bammes, BCM	Wah Chiu, BCM; David Tweardy, BCM	Modulating the Interaction between the TRiC and STAT3	06/30/10 - 06/29/11
Rosa Banuelos, Rice	Suzanne Leal, BCM; Marek Kimmel, Rice	Methods for Detecting Complex Trait-Rare Variant Associations: Application to Next Generation Sequence Data	05/16/11 - 05/11/13
Michael Bolt, BCM	Mike Mancini, BCM; Marek Kimmel, Rice	A Systems Biology Level Analysis of Estrogen Receptor- $\alpha$ Transcription at the Single Cell Level	10/01/09 - 09/30/12
Juliana Brixey, UTH	Jiajie Zhang, UTH	A Study of Interruption in an Emergency Department	03/01/02 - 02/28/05
Matthew Burstein, BCM	Ching C Lau, BCM; Rudy Guerra, Rice	Molecular Classification of Ependymoma by Integrated Genomic Analysis	02/01/10 - 01/31/12
Craig Bush, UTMB (UT Medical Branch at Galveston)	A. Thompson, UTMB; Bruce Luxon, UTMB	Functional Annotation of Protein Structures	06/15/03 - 06/14/06
Lee Call, BCM	Douglas G. Burrin, BCM; Robert A. Britton, BCM	Multi-Omic Determinants of Necrotizing Enterocolitis	01/01/16 - 12/31/18
Varuna Chander, BCM	Richard Gibbs, BCM; Aleksandar Milosavljevic, BCM	Investigating Somatic Mosaicism In Blood For Cardiovascular Disease Risk	02/01/19 - 01/31/22
Nick Charron, Rice	Cecilia Clementi, Rice; Ankit Patel, Rice and BCM	Screening of MHC-II Mutants Using Data-Driven Molecular Models	01/01/19 - 12/31/20
Brian Chen, Rice	Lydia Kavradi, Rice; Olivier Lichtarge, BCM	Functional Annotation of Protein Structures	01/01/04 - 12/31/06
Jung-wei (Anna) Chen, UTH	Jiajie Zhang, UTH	A Process for Identifying and Reducing Functional Discrepancies - A Study Based on Electronic Dental Record Systems	06/15/06 - 06/14/08
Sharon Chiang, Rice	Marina Vannucci, Rice; Francesco Versace, MDA	A Hierarchical Bayesian Mixture Model to Identify Biomarkers Associated with Addiction	06/01/13 - 04/23/16
William Choi, BCM	Mirjana Maletic-Savatic, BCM; Zhandong Liu, BCM	Defining the Metabolome: An Integration of Biology and Bioinformatics	06/01/13 - 05/31/15

Ivan Coronado, UTH	Luca Giancardo, UTH; Sunil Sheth, UTH	Proxy Analysis of Neural Vascular System using Retina Imaging and Deep Neural Networks	01/01/21 - 12/31/23
Alexander Davis, MDA	Nicholas Navin, MDA; Luay Nakhleh, Rice	Methods for Accurate Inference of Tumor History From Single-cell DNA Sequencing Data	01/01/17 - 12/31/18
Caleb Davis, BCM	Ching C Lau, BCM; Richard A Gibbs, BCM	Detection and Mapping of Balanced Translocations by Sequence Capture	04/01/08 - 03/31/11
Nasos Dousis, Rice	Jianpeng Ma, BCM / Rice	Multi-scale Protein Structure Prediction and Refinement	06/15/06 - 06/14/09
Eva Dyer, Rice	Don Johnson, Rice; Rich Baraniuk, Rice	Structured Sparse Coding in the Striate Cortex (V1)	06/15/08 - 05/15/10
R. Leo Elworth, Rice	Luay Nakhleh, Rice; Michael Kohn, Rice	Accurate Trait Loci Mapping Through Phylogenomics	01/01/16 - 12/31/16
Jonathan Flynn, UTH	Harel Shouval, UTH; Nitin Tandon, UTH	Neural Activity in Cortex during Interval Training	01/01/14 - 12/31/14
Tzintzuni Inde Garcia, UTMB	A. Oberhauser, UTMB; Werner Braun, UTMB	Single Molecule Studies of beta-stranded Proteins	06/15/04 - 06/14/07
Evan Gates, MDA	David Fuentes, MDA; Dawid Schellingerhout, MDA	Imaging Based Predictions of Glioma Pathology and its Impact on Successful Surgery	01/01/19 - 12/31/20
Sarah Hall-Swan, Rice	Lydia Kaviraki, Rice; Greg Lizée, MDA	Computational Prediction of Cross-Reactivity with Applications to Personalized Immunotherapy	07/01/20 - 05/05/23
John Hays, UTMB	Stan Watowich, UTMB	The mechanism of activation of the TPR-MET oncoprotein	01/01/02 - 12/31/03
Emily Hendryx, Rice	Craig Rusin, BCM; Beatrice Rivière, Rice	Developing Predictive Mathematical Models from Patient Data	06/01/14 - 05/22/16; 08/16/16 - 08/15/17 (>Lister Hill supplement)
Stanley Hooker, BCM	Suzanne Leal, BCM; Marek Kimmel, Rice	Rare Variants and Disease Susceptibility: Method Development and Application in Exome Sequence Data for Admixed Populations	06/30/11 - 06/29/13
Jesse J. Howard, UH	B. Montgomery Pettitt, UH; Dar-Chone Chow, UH	Obtaining Solvent Distributions for Proteins and DNA in Solution at a Surface using Integral Equations	06/15/04 – 06/14/07
Corey Hryc, BCM	Wah Chiu, BCM; Jim Briggs, UH (Univ. of Houston)	Pushing towards Drug Discovery and Clinical Applications through Validation of Near-atomic Resolution Macromolecular Complexes	06/01/13 - 05/31/16
Amy Hurwitz, BCM	Tim Palzkill, BCM; Olivier Lichtarge, BCM	Development of Novel Phage-Displayed Reagents for the Detection of Norovirus Gastroenteritis	06/01/13 - 05/31/16
Ramiz Iqbal, MDA	Ken Chen, MDA; Elmer Bernstam, UTH	Clinical Phenotyping with Semantic Knowledge Graphs	01/01/19 - 12/31/21
Elizabeth Jones, BCM	Michael Mancini, BCM; Marek Kimmel, Rice	Development of Quantitative Single Cell Analysis of Cell Cycle Effects on Androgen Receptor Functions	06/15/07 - 06/14/10

Evan Jones, BCM	Rui Chen, BCM; Aleksandar Milosavljevic, BCM	Beyond the Exon: Understanding the Role of Non-coding and Regulatory Regions in Inherited Retinal Disease	03/01/16 - 11/12/17; 06/18/18 - 09/30/18
Venkata Jonnakuti, BCM	Zhandong Liu, BCM; Mirjana Maletic-Savatic, BCM	Inferring and Decoding Alternative Polyadenylation Signatures in Alzheimer's Disease	01/01/22 - 07/28/23
Bryce Kille, Rice	Todd Treangen, Rice; Fritz Sedlazeck, BCM (Baylor College of Medicine)	Elucidating Complex Genomic Variation Linked to Human Disorders and Disease Via Improved Algorithms for Large-scale Multiple Genome Alignment	12/01/21 - 11/30/24
Brian Kirk, Rice	Jianpeng Ma, BCM; Gabriel Lopez-Berestein, MDA	Molecular Theranostics: Integrated Computational and Experimental Study of Novel Anti-Cancer Inhibitors	06/15/07 - 06/14/10
Misha Koshelev, BCM	Scott Basinger, BCM; Marina Vannucci, RU	Computational Approaches to Behavioral Underpinnings of Social Exchange	10/01/09 - 06/30/11 ARRA
Pavan Kota, Rice	Rich Baraniuk, Rice; Rebekah Drezek, Rice	Nonspecific DNA Sensors for Scalable Microbial Diagnostics	01/16/19 - 01/15/22
David Kristensen, BCM	Olivier Lichtarge, BCM; Ted Wensel, BCM	Computational and Experimental Characterization of the Thermodynamic Determinants Governing the Structure/function Relationship of Proteins	07/01/01 - 06/30/04
Andrew Laitman, BCM	Zhandong Liu, BCM; Mirjana Maletic-Savatic, BCM	Integrating Multi-modal Neuroimaging and Genetics in Autism	01/01/15 - 12/31/17
Scott Larson, UTMB	Vince Hilser, UTMB	Computational & experimental modeling of the thermodynamic determinants governing structure function relationships of proteins	01/01/03 - 05/31/04
Christina Ledbetter, MDA	Wendt, MDA	Accelerated Brute Force Reconstruction of Magnetic Resonance Images	07/01/02 - 08/25/03
Scott Malec, UTH	Elmer Bernstam, UTH; Trevor Cohen, UTH	What Was Known and When? Using Time-indexed Knowledge Base to Evaluate Causal Discovery Methods Within Pharmacovigilance	07/01/17 - 06/30/18
Astrid Manuel, UTH	Zhongming Zhao, UTH; Assaf Gottlieb, UTH	Innovating Drug Repositioning Strategies for Drug Targets Linked Between Multiple Sclerosis and Cancers of the Blood	07/01/20 - 06/30/23
Rebecca Milman Marsh, MDA	J. Hazle, MDA	Obtaining Quantitative Measurements of Water Diffusion in the Human Brain using High Resolution Diffusion MRI and a Multi-Compartmental Model	06/15/03 - 06/14/06
Sarah May, UTH	Assaf Gottlieb, UTH; Thomas P. Giordano, BCM	Developing Models to Predict Risk of HIV Infection Using Electronic Health Record Data	02/01/19 - 01/31/22
Mary McGuire, UTH	Jack Smith, UTH; Devika Subramanian, Rice	Comparative Analysis of Biological Pathways - An Algebraic Approach	01/01/08 - 12/31/10

Kit Menlove, BCM	Jianpeng Ma, BCM/RU; Tim Palzkill, BCM	Identification of Polycomb Response Elements in Mammalian Embryonic Stem Cells and Cancer Cells	10/01/09 - 09/30/11 ARRA
Justin Mower, BCM	Trevor Cohen, UTH; Devika Subramanian, Rice	Machine Learning Approaches on PSI Represented Biomedical Text	06/30/15 - 06/29/18
Christopher Myers, BCM	B. Montgomery Pettitt, UH; Wah Chiu, BCM	Calculation of DNA Packaging Forces in Viral Capsids – Theoretical Approach Based on Non-linear Behavior of DNA	01/01/10 - 12/31/11
Risa Myers, Rice	Chris Jermaine, Rice; John Frenzel, MDA	Probabilistic Model of Patient Vital Signs to Classify Anesthetic Volatility using Bayesian Machine Learning Techniques	05/16/13 - 05/15/16
Edward Nguyen, Rice	Cesar Uribe, Rice; Sebastián Acosta, BCM	An Intelligent Monitoring System for Intensive Care Units	01/16/22 - 01/15/23
Danny Ochoa, UH (University of Houston)	George Fox, UH; Yuriy Fofanov, UH	Bacillus Pumilius Supragenome and the Basis of Extreme Resistance of Spores to UV Radiation	12/01/09 - 11/30/11 ARRA
Daniel Palacios, BCM	Zhandong Liu, BCM; Elmer Bernstam, UTH	Foundation AI Models and AutoML Approaches for Clinical Informatics	12/01/23 - 08/31/24
Christine Peterson, Rice	Marina Vannucci, Rice; Mirjana Maletic-Savatic, BCM	A Bayesian Graphical Model Approach to Inference on Metabolic Pathways for Huntington's Disease	05/01/11 - 04/30/14
Charles Puelz, Rice	Beatrice Rivière, Rice; Craig Rusin, BCM	Data Driven PDE Model of Hypoplastic Left Heart Syndrome	06/01/14 - 05/12/17
Catherine Putonti, UH	Yuriy Fofanov, UH; G. Fox, UH	Genome Space Fingerprinting	06/15/03 - 06/14/06
Imran Quraishi, Rice	Robert Raphael, Rice; John Clark, Rice	Homeostasis and Dynamics of the Cochlear Potassium Cycle	01/01/04 - 12/31/06
Deepa Ramachandran, Rice	John Clark, Rice; Tony Ma, BCM	Using a Human Cardiovascular-Respiratory Model to Study Mechanical Ventricular and Septal Dyssynchrony	01/01/08 - 12/31/10
Graham L. Randall, BCM	B. Montgomery Pettitt, UH; Lynn Zechiedrich, BCM	Multi-scale Molecular Simulations of Class-II Topoisomerase Activity	06/15/04 - 06/14/05
Ian Rees, BCM	Steve Ludtke, BCM; Irina Serysheva, UTH	EMEN2: A Data-mining Approach to Improving Cryo-EM Resolution	05/01/10 - 04/30/12
Ryan Rochat, BCM	Wah Chiu, BCM; Lennart Johnsson, UH	Reconstructing the Portal Complex in the herpes Capsid without Imposed Symmetry: Pushing the Limits of Computational Resources for Structure Determination of one of the Largest Human Viruses	10/01/09 - 09/30/12
Mark Rojas, UH	Yuriy Fofanov, UH; William Widger, UH	Heart Failure and Mitochondria	04/01/10 - 03/31/12

Elin Shaddox, Rice	Marina Vannucci, Rice; Nick Hanania, BCM	Integrated Inference of COPD Gene and Metabolite Pathways in COPD using Hierarchical Bayesian Graphical Models	04/01/17 - 03/31/19
Jiayi Monika Sun, BCM	Ching C Lau, BCM; Rudy Guerra, RU	Characterization of the Osteosarcoma Genome	06/30/11- 06/29/14
Lillian Thistlethwaite (née Ashmore), BCM	Aleksander Milosavljevic, BCM; Sarah Elsea, BCM	Integrating Metabolomic and Whole Exome Sequencing Data Using a Probability Diffusion Method	01/01/17 - 12/31/19
Suzanne Tomlinson, UTMB	Stan Watowich, UTMB; David Gorenstein, UTH	Identification of Dengue Virus Protease Inhibitors And Antiviral Optimization Utilizing QSAR	10/01/09 - 09/30/10 ARRA
Jesse Turner, Rice	Steve Cox, Rice	Modeling the Time Dependent Behavior of a Biochemical System with Applications to the lac Operon	01/01/05 - 12/31/07
Carlos Vera Recio, MDA	Wenyi Wang, MDA; Guillermina (Gigi) Lozano, MDA	Decomposition of Transcriptomic Data from in vivo Tumor Samples into Tumor, Stroma and Immune Subtypes	01/01/19 - 12/31/20
Muhammad F. Walji, UTH	Jiajie Zhang, UTH; Kathy Johnson Throop, UTH	Development of an Information Management System for Persuasive Interruptions	01/01/04 - 12/31/06
Ting Emily Wang, Rice	Marina Vannucci, Rice; Zulfi Haneef, BCM	A Bayesian Hidden Markov Model for Assessing Seizure Risk	01/01/20 - 12/31/21
R. Matthew Ward, BCM	Olivier Lichtarge, BCM	Extending Evolutionary Tracing from Structural Proteomics to Genomics	06/15/04 - 06/14/07
Tiffany Warth, BCM	B. Montgomery Pettitt, UH; Wah Chiu, BCM	Molecular Dynamics Simulations of Trichomonas vaginalis Ferredoxin	06/01/02 - 05/31/05
Jillian Webb, UTH	Jiajie Zhang, UTH; Jack Smith, UTH	Using Domain Ontological Modeling to Evaluate and Design Information Systems in Critical Care Settings: A Socio-Technical Approach	06/15/07 - 06/14/08
Meagan Whaley, Rice	Steve Cox, Rice; Nitin Tandon, UTH	Functional Human Language Pathways	06/01/13 - 05/31/15
Stephen Wilson, BCM	Olivier Lichtarge, BCM; Tim Palzkill, BCM	Creating a Personalized Multi-factor Network to Determine Translational Outcomes and Treatments in Cancer	01/01/15 - 12/31/18
Evan Yu, UTH	Cui Tao, UTH; Kayo Fujimoto, UTH	Utilizing Graph Neural Network for Modeling Transmission of Sexually Transmitted Infections	01/01/22 - 12/31/24
Sajid Zaidi, UH	Hien Van Nguyen, UH; Chandra Mohan, UH	Multimodal Artificial Intelligence for Nephropathology	12/01/23 - 06/30/24
Jacques Eric Zaneveld, BCM	Rui Chen, BCM; Olivier Lichtarge, BCM	Molecular Diagnosis of Stargardts Disease	06/01/13 – 05/31/14
Yongyi Zhao, Rice	Ashok Veeraraghavan, Rice; Ashutosh Sabharwal, Rice	Machine Learning Approach to Real-time Diffuse Optical Imaging	01/01/21 - 12/31/22

## Past Postdoctoral Trainees

Trainee	Mentors	Project Title	Training Periods
Macarena Aloj, BCM (Baylor College of Medicine)	Ramiro Salas, BCM Akane Sano, Rice (Rice University)	Circadian Rhythms and OUD: Using Brain Imaging and Machine Learning to Predict Outcomes in Opioid Use Disorder Patients	06/01/22 - 01/13/23
Jennifer Asmussen, BCM	Olivier Lichtarge, BCM; Devika Subramanian, Rice	Matrix Decomposition of Omics Data and Pathway Correlations	06/17/19 - 06/16/21
Mariah R. Baker, BCM	Wah Chiu, BCM; Irina Serysheva, UTH	Genome-scale analysis of cellular resolution gene expression patterns	10/01/09 - 09/30/11 ARRA
Matthew L. Baker, BCM	Wah Chiu, BCM; Ioannis Kakadiaris, UH	Integrated Modeling of a Skeletal Muscle Ca <sup>2+</sup> Channel, RyR1	03/01/02 - 02/28/05
Sebastian Berisha, UH (University of Houston)	David Mayerich, UH; Anil Sood, MDA	Using FTIR Spectroscopic Imaging to Identify Predictive Molecular Markers in Ovarian Tumor Biopsies	06/29/18 - 04/30/19; 08/03/19 - 08/23/19
Melia Bonomo, Rice	Rob Raphael, Rice; Santiago Segarro, Rice	Using Informatics and Deep Learning to Optimize Cochlear Implant Signal Processing of Music	05/01/21 - 04/30/23
Ahmad Borzou, UTMB (UT Medical Branch at Galveston)	Rovshan Sadygov, UTMB; Jonathan Hommel, UTMB	Matrix Decomposition of Omics Data and Pathway Correlations	01/01/19 - 08/31/20
Christie Buchovecky, BCM	Olivier Lichtarge, BCM; Curtis Pickering, MDA	Reasoning over Biological Networks to Make Personalized Drug Predictions in Cancer	06/30/15 - 06/22/16
James P. Carson, BCM	Wah Chiu, BCM; Joe Warren, Rice	Computational Identification of microRNAs and Their Targets	02/01/04 - 01/31/06
Han Chen, MDA (UT MD Anderson Cancer Center)	Han Liang, MDA; Gordon Mills, MDA	Overcoming Drug Resistance by Trapping Cancer Cells with Rationally Designed Drug Combinations	03/15/16 - 03/14/18
Wei Dai, BCM	Wah Chiu, BCM; Ioannis Kakadiaris, UH	A Structural Informatics Approach to Study Cynobacteria Carboxysome and Cyanophage Infection by Model-based Electron Tomography	05/01/10 - 04/30/12
Caleb Davis, BCM	Richard A Gibbs, BCM; David Wheeler, BCM	Fast and Accurate Detection of Actionable Structural Variation	06/01/13 - 05/31/15
Ninad Dewal, BCM	David Wheeler, BCM; Richard A Gibbs, BCM	Detecting Selection for Amplified Alleles in Tumor Exomes	01/01/12 - 12/31/12



Sara Di Rienzi, BCM	Robert A. Britton, BCM; Oleg Igoshin, Rice	Diet-induced Evolution of the Human Microbiome: The Impact of Dietary Sugars on Gut Health	06/26/17 - 06/25/19
Ryan Leo Elworth, Rice	Lauren Stadler, Rice; Todd Treangen, Rice	Comprehensive Community Monitoring of Infectious Diseases with Wastewater	06/07/21 - 04/08/22
Serkin Erdin, BCM	Olivier Lichtarge, BCM; Ted Wensel, BCM	Marrying Evolution and Energetics Towards the Rational Identification of Therapeutic Targets and Drug Design	06/15/08 - 06/14/10
J. Mark Ettinger, UTH (UT Health Science Center at Houston)	Mohammad Rahbar, UTH; Moshe Vardi, Rice	Rigorous Privacy for Biomedical Databases	10/01/09 - 09/30/10 ARRA
Salma Ferdous, BCM	Rui Chen, BCM; Ken Chen, MDA	Single Cell Spatial Atlas of the Human Retina Transcriptome	01/01/21 - 12/31/22
Ana Ferreira de Mesquita, BCM	Gad Schaulsky, BCM; Rui Chen, BCM	Transcriptional Patterns of Allorecognition Mediated by rasD	06/01/22 - 07/04/23
Ernesto Fontenla, BCM	Wah Chiu, BCM; Richard Baraniuk, Rice	Accurate Reconstruction of Cryo-Electron Tomography of Cells for Diagnostics of Platelet Pathology	06/01/15 - 05/31/16
Bryant Gipson, Rice	Lydia Kavraki, Rice; Steve Ludtke, BCM	Constrained Conformational Analysis: Protein Motion Planning With Cryo-Electron Microscopy	10/01/10 - 09/30/12
Pavel Govyadinov, UH	David Mayerich, UH; Jordan Miller, RU; Guoning Chen, UH	Segmentation, Classification, and Visualization of Large Microvascular Networks in the Rodent Brain	01/01/20 - 12/31/21
Randall Hayes, UTH	John Byrne, UTH; Cox, Rice	Computational models of an adaptive neural circuit	08/01/03 - 02/15/04
Jochen J. Heyd, BCM	Stefan Birmanns, BCM; Michael Schmid, BCM	RuBisCO, Carboxysomes, and Carbon Dioxide: Towards a Better Understanding of Carbon Fixation	06/15/07 - 05/08/09
Parisa Imanirad, MDA	Gordon Mills, MDA; Han Liang, MDA; Pralhad Ram, MDA	Genome, Transcriptome, and Proteome Alterations Regulating Delayed Recurrence of ER+ Breast Cancer: A Critical Step in Development of Effective Biomarkers and Therapies	04/01/17 - 03/31/19
Ben G. Janesko, Rice	Gustavo Scuseria, Rice; John Weinstock, BCM ; Jianpeng Ma, BCM	Simulating Nanostructured Substrates for Surface Enhanced Spectroscopy of Biomolecules	06/15/06 - 06/14/08
Yifeng Jiang, UH	Ioannis Kakadiaris, UH; Ananth Annapragada, BCM	The Development of Image-based Signatures for Early Stage Alzheimer's Disease Using Novel Nanoparticle Contrast Agents	01/01/12 - 12/31/12

Stephen L. Jones, UTH	Todd Johnson, UTH; Jiajie Zhang, UTH	Development of Quantitative Single Cell Analysis of Cell Cycle Effects on Androgen Receptor Functions	06/15/08 - 06/14/10
Ken J. Kalafus, BCM	Aleksander Milosavljevic, BCM; John Weinstock, BCM	Improving Pash: Better Sequence Comparison through Positional Hashing	06/01/05 - 05/31/06
Peter V. Killoran, UTH	Jiajie Zhang, UTH; Sriram Iyengar, UTH	Designing a Human-Centered Visualization Platform for Anesthesia Preoperative Assessment	03/01/11 - 02/28/13
Sangbae Kim, BCM	Rui Chen, BCM; Yongtao Guan, BCM	Identifying Novel Genetic Variants Associated With Glaucoma	01/01/16 - 12/31/16; 04/01/17 - 03/31/18
Alexander Kunin, BCM	Xaq Pitkow, BCM; Krešo Josic, UH	Discovering Structure-Function Relationships in Cortex Using Novel Network Analyses	01/01/20 - 12/31/22
Courtney Lane, Rice	Don Johnson, Rice; Rob Raphael, Rice; Steve Cox, Rice	Optimal hearing aid design using computational neuronal models	06/15/05 - 06/14/06
Maia Larios-Sanz, Rice	Janet L Siefert, Rice; Dan Graur, UH	Experimental Determination of the Impact of Horizontal Gene Transfer on Gene Expression and Proteome Function	2005 - 2006
Thanh Le, UH	Kevin Garey, UH; Todd Treangen, Rice	Resistance Development to C. difficile RNA Polymerase Antibiotics	06/01/23 - 05/31/24
Kevin Liu, Rice	Luay Nakhleh, Rice; Michael Hans Kohn, Rice	Linking Adaptive Hybridization to Phenotype and Function in the Mouse Genome	01/01/12 - 12/31/12; 05/01/13 - 04/30/14
Yasmin Lyons, MDA	Anil Sood, MDA; Prahlaad Ram, MDA	Targeting Adaptive Changes in the Tumor Microenvironment	06/30/15 - 06/29/17
John Magnotti, BCM	Michael Beauchamp, BCM; Genevera Allen, Rice	Discovering the Multisensory Feature Space of Human Speech Recognition	06/01/15 - 05/31/17
Rupali Mankar, UH	Rohith Reddy, UH; Carlos Bueso-Ramos, MDA; Cheng Cameron Yin, MDA	Comprehensive Evaluation of Myelofibrosis in Bone Marrow Using Infrared Imaging and Deep Learning	06/01/19 - 05/31/21
David Marciano, BCM	Olivier Lichtarge, BCM; Tim Palzkill, BCM	Using Sequence Information to Predict and Control Structure-function Relationships in the LexA Repressor of the Bacterial SOS Response to DNA Damage	10/01/10 - 09/30/12
Kirt Martin, BCM	John Weinstock, BCM; Kim Worley, BCM	Prokaryotic Genome Organization	01/01/03 - 12/31/03
Susan McGovern, BCM	Wah Chiu, BCM; John Weinstein, MDA	Developing a web-based algorithm for protein structure mapping of nsSNP data from The Cancer Genome Atlas	10/01/10 - 09/30/11 ARRA
Angela Medvedeva, UTH	Nitin Tandon, UTH; Xaq Pitkow, BCM	Decoding Speech From Neural Activity By Developing A Novel Neural Network Approach	06/01/20 - 10/31/21

Natasha Mehdiabadi, Rice	Joan Strassmann, Rice; David Queller, Rice; Shaw, BCM	The evolution of cooperation and conflict in the social amoeba, Dictyostelium discoideum	01/01/03 - 12/31/03
Rose Mikulski, BCM	Timothy Palzkill, BCM; Rudy Guerra, Rice	Analysis of Metallo-Beta-Lactamase Sequence Constraints at High Resolution	06/01/13 - 05/31/15
Bartlett D. Moore IV, UTH	Nitin Tandon, UTH; Xaq Pitkow, BCM	Spectro-spatial Topography of Human Cerebral Cortex	06/01/14 - 05/31/16
Dan Morgan, BCM	Olivier Lichtarge, BCM; Timothy Palzkill, BCM	Focused Optimization of Peptide Inhibitors of Protein-Protein Interactions	10/01/09 - 12/16/10
Tyler Moss, MDA	Prahlad Ram, MDA; Deepak Nagrath, Rice	Modeling Metabolic Activity of Tumors	05/01/14 - 04/30/15
Achuth Nair, UH	Kirill Larin, UH; David Mayerich, UH; Michael Twa, UH	Patient Specific Corneal Biomechanics Guided by Machine Learning	06/30/22 - 06/29/24
David Noren, Rice	Amina Qutub, Rice; Steven Kornblau, MDA	The Proteomics of Acute Myeloid Leukemia: Linking Protein Signatures to Patient Prognosis	01/01/14 - 12/31/16
Michael Nute, Rice	Todd Treangen, Rice; Tor Savidge, BCM	Understanding Susceptibility to Intestinal Infection in High-Risk Patients Using Annotation-Agnostic Structural Features of the Gut Microbiome	12/01/20 - 11/30/21
Elizabeth Ostrowski, Rice	Joan Strassman, Rice; David Queller, Rice	Uncovering Patterns of Selection on Social Genes in Dictyostelium Discoideum	01/01/07 - 12/31/08
Matthew I. Peña, Rice	George Bennett, Rice; Lydia Kavraki, Rice	Pathfinding and Evaluating Novel Biosynthetic Routes to Pharmaceuticals	01/01/16 - 12/31/16
David Power, UTMB (UT Medical Branch at Galveston)	David Gorenstein, UTMB; Bruce Luxon, UTMB	Analysis of the catalytic mechanism of human APE1 by ONIOM calculations and site-directed mutagenesis	06/01/02 - 08/31/03
Zhihua Qi, BCM	Yongtao Guan, BCM; Rui Chen, BCM	Predicting Tissue-specific Gene Expression and Gene-level Association	04/01/17 - 03/31/18
Christian JJ Ray, Rice	Oleg Igoshin, Rice; Robert Azevedo, UH	Evolutionary Selection on the Biophysics of Molecular Networks and Gene Expression	06/15/08 - 06/14/10
Jeffrey Gordon Reid, UH	B. Montgomery Pettitt, UH; George Fox, UH; John Miller, BCM	Computational Identification of microRNAs and Their Targets	01/01/04 - 06/30/06
Gustavo Rodriguez, BCM	Ted Wensel, BCM; Olivier Lichtarge, BCM	Evolution-Guided Receptor Engineering	06/15/04 - 06/14/06
Rafael Rosengarten, BCM	Gad Shaulsky, BCM; Rui Chen, BCM	Transcription Network Analysis in Dictyostelium discoideum	06/01/13 - 05/31/15

Leila Saadatifard, UH	Badri Roysam, UH; Pramod Dash, UTH	Comprehensive Analysis of Cellular Alterations in the Alzheimer's Disease Brain	06/17/19 - 06/16/21
Gerda Saxer Quance, Rice	Joan Strassmann, Rice; Yuriy Fofanov, UH	Assessing Genetic Variation in Dictyostelium discoideum at the Genome and the Gene Level Using New Sequencing Technology	06/15/08 - 06/14/10
Manmohan Singh, UH	Kirill V. Larin, UH; Manoop Bhutani, MDA; David Mayerich, UH	High-Throughput Optical Coherence Elastography for Colorectal Cancer Detection	06/30/18 - 06/29/20
Jonathan Starkey, UTMB	Bruce Luxon, UTMB; Ronald G Tilton, UTMB	Metabonomics of Diabetic Nephropathy	01/21/09 - 01/20/11
Franklin P. Tamborello, UTH	Hongbin Wang, UTH; Jiajie Zhang, UTH	Modeling Spatial Cognition in Complex Environments	10/01/09 - 06/24/11
Len Y. Tanaka, UTH	Elmer Bernstam, UTH; Noriaki Aoki, UTH (deceased 01/05/14)	Qubec: A Research Platform for Optimizing Searching the Biomedical Literature	06/15/06 - 06/14/07
Morgan Taylor, MDA	Anil Sood, MDA; Wah Chiu, BCM	Platelet Forms and their Chemoevasive Functions	05/01/13 - 04/30/14
Christian Seishin Uehara, UH	Ioannis Kakadiaris, UH; Peter Saggau, BCM	A Mathematical Model of the Control of Ventilation	06/26/02 - 06/25/04
Gary V. Walker, MDA	Dean Sittig, UTH; Thomas Buchholz, MDA	Improving Adherence to Oncology Quality Guidelines using Integrated Clinical Decision Support in an Electronic Health Record	06/30/13 - 06/29/14
Yong (Tony) Wang, MDA	Nicholas Navin, MDA; Gordon Mills, MDA; Wenyi Wang, MDA	Investigating Normal Breast Tissue Mosaicism and Tumor Initiation in TNBC Patients	06/15/16 - 02/16/17
Angela Wilkins, BCM	Olivier Lichtarge, BCM; Tim Palzkill, BCM	Sequence and Structure Continuity of Evolutionary Importance Improves Protein Functional Site Discovery and Annotation	06/20/09 - 06/21/11
Jingping Xu, UTH	Hongbin Wang, UTH; Todd R Johnson, UTH	Influences of Positive Affect on Decision Making: A Neurocomputational Positive Psychology Approach	10/01/09 - 09/30/10 ARRA
Di Zhang, BCM	Suzanne Leal, BCM; Marek Kimmel, Rice	SEQSpark: A Complete Analysis Tool For Large-scale Rare Variant Association Studies Using Whole Genome and Exome Sequence Data	04/01/17 - 03/31/18
Yili Zhang, UTH	John Byrne, UTH; Steve Cox, Rice	Computational Modeling of the Molecular Mechanisms Contributing to Long-Term Memory	10/01/09 - 09/30/11

## Short Term Trainees

Trainee	Mentors	Project Title	Training Periods
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Drew Bryant, Rice (Rice University)	Lydia Kavradi, Rice		06/05/05 - 08/12/05
Michael Cannon, Texas Southern U	Ananth Annapragada, UTH (UT Health Science Center at Houston)		06/05/05 - 08/12/05
Linda Geng, Rice	Yousif Shamoo, Rice		06/05/05 - 08/12/05
Robert Ortman, Rice	Clark, Rice		06/05/05 - 08/12/05
Matthew Peña, UT Austin	Beckingham, Rice; Kevin MacKenzie, Rice		06/05/05 - 08/12/05

*Last updated 02/20/2025*