Last Name	First Name	Institution	Research Interest
Alabi	Zaccheaus	University of Houston	My research interest seeks to understand the dynamics of integrin adhesion and de-adhesion from its ligands using biochemistry, biophysical and computational tools.
Baker	Jocelyn (preference - Jocie)	Rice University, Bioengineering	My research interests include investigation of cytoskeletal protein complex and tumor microenvironment interactions, dynamics and underlying mechanisms in metastatic osteosarcomas. These investigations involve the use of on-chip tissue engineered microenvironment models, single cell nano-devices and microbiology techniques for cellular protein quantification and cellular complex characterization.
Berner	Mariah	Baylor College of Medicine	I am studying the metabolic adaptations in chemoresistant TNBC. I am interested in the transportation of proteins into and within the mitochondria. I would like to learn more about this group.
Boice	Ashley	Baylor College of Medicine	I am interested in studying diseases with complex a pathogenesis and marked challenges in developing therapeutics, such as cancer and neurodegenerative diseases. My interest in this scholar program is to better understand these types of diseases from a cellular and molecular biophysics perspective and to get new microscopy and imaging technique ideas.
Bose	Ritwika	Baylor College of Medicine	I primarily work on RNA structural biology, specifically developing a tool/platform to study RNA structure in conjunction with localization. Overall, my main interests are developing molecular tools, broadly chemical biology to enable research.
Chang	Caleb	Rice University	Interested in understanding the catalytic processes that occur within metalloenzymes such as polymerases and nucleases with enzyme kinetics and X-ray time-resolved crystallography. I'm also passionate in translating these mechanistic findings and in rendering the captured enzymatic intermediate states into 3D movies for the general public.
Churion	Kelly	Texas A&M IBT	I study bacterial proteins and their interaction with human host proteins where we analyze the thermodynamic and kinetic parameters of such interactions.
Contessoto	Nayara	Rice University and SÃ£o Paulo State University	Expand what I have done during my phD, trying to understand biophysical effects on cancer cells by anti-cancer agents, through AFM's pure signals and given meaning to observable in corroboration to others well established parameters.
Dumbali	Sandeep	UT Health	Mechanobiology: I am interested to investigate the role of fluid shear stress in the metabolic pathways involved in endothelial to hematopoietic transition.
El Sayed	Razan	UTH - Houston / Mcgovern Medical School	Traumatic Brain Injury , Stem Cell Therapy . Safety and efficacy of Stem cell therapy in the management and prevention of neuroinflammation , Chronic Neurodegeneration after traumatic brain injury.
Enriquez	Jose	UT MD Anderson Cancer Center	The usage of non-invasive metabolic imaging for the detection and progression monitoring of different cancer systems. Metabolic imaging using Hyperpolarized MRI and PET.
Farmer	Stephen	University of Texas Health Science Center at Houston (UTHealth)	I am interested in studying the molecular basis of Huntington's disease (HD). I am currently investigating the role Huntingtin/HAP40 complex in HD pathogenesis, specifically, in the endosomal pathway using Drosophila and structural bioinformatics .
Flores	Victoria	University of Texas Medical Branch	I am interested in understanding how bacterial lifestyles (infectious and latent) affect chromosomal structure using super-resolution microscopy techniques.
Gagliano	Gabriella	Rice University	I'm a graduate student in the Gustavsson lab where my research focuses on using 3D single-molecule super-resolution imaging and tracking to answer biophysical and biomedical questions. Specifically, I am focused on understanding the molecular mechanisms occurring in Hutchinson-Gilford Progeria Syndrome (HGPS) and on improving the understanding of HGPS disease progression. I am interested in the application of physics to develop tools that will positively impact society and improve our understanding of disease pathogenesis and other biomedical questions.
Galis Vivante	Anat	The University of Texas Medical Branch (UTMB)	My research interests are to better understand the connection between the mechanics of the cells, the structure of genomes and the function of the cells, in order to provide new ways to modify cell behaviors without drugs, which may enable treatment of many disorders including cancer.
Gard	Joel	University of Houston	I am interested in computational and theoretical approaches to understanding the behavior of biological systems through the lens of physics. My present work is focused on the behavior of semi-flexible biopolymers within confined geometries.
Gonzalez	Cuauhtemoc	University of Texas Health Science Center	I study the structure and function of the ionotropic glutamate receptors which are membrane channels important in the brain. Specifically, I use electrophysiology and fluorescence techniques to investigate the trans-synaptic complex created by the interaction between ionotropic glutamate receptors and their presynaptic partners.
GUPTA	AYUSH	University of Houston	I am interested in studying the LLPS of IDPs via computational methods. Currently, I am working on accelerating the MD simulations, and optimizing the coarse grained models of IDPs via AI techniques.
Hood	Kara	Houston Methodist Research Institution	I am interested in analyzing the structure and dynamics of the LiaFSR three-component signaling system and its effectors to understand how these contribute to the development of daptomycin resistance in Enterococcus faecalis.
Idowu	Kehinde	Texas Southern University	My research interest focuses on drug development on viral diseases and cancer, employing both molecular and computational techniques.
Jin	Shikai	Rice University	I'm a fifth-year Ph.D. student work in computational biophysics and I was a speaker in 3rd Annual GCC CMB Conference. I want to bring my knowledge into the CMB and contribute to the discussion and organization.
Kadamangudi	Shrinath	UTMB	Dementia and Alzheimer's Disease
Khan	Uffaf	Texas A&M University	Translational research in clinical field, neuroscience, genetics and biotechnology.
Koleilat	Mohamad Karim	UT MD Anderson Cancer Center	My interests lie in translation and basic cancer biology and I am interested in investigating the biophysical processes involved specifically in cancer signaling.

Malekzadeh	Karim	University of Houston	RNA structure and dynamics in a variety of contexts, ranging from ribonucleoprotein assemblies to viral replication, using high-resolution computer models and advanced sampling techniques.
Mattos	Marlon	Baylor College of Medicine	Neural circuit formation during development to uncover new developmental mechanisms. CAMs in neurological development and neurodegeneration.
McPherson	Jacob	University of Houston College of Pharmacy	Infectious Diseases, Antimicrobial Resistance, Microbiome-Host Interactions, Receptor Theory Pharmacology, Structural Biology
Mello	Matheus	Rice University	My work focuses on the investigation of chromosome behavior and structure and their influence on gene activity. By using coarse-grained models, we study chromatin phase separation and inter-chromosome interactions in systems with multiple chromosomes, seeking to have a deeper understanding of how they affect each other and how the nucleus behaves as a whole during interphase.
Molden	Tatiana	Houston Methodist Research Institute	Exploring RNA-protein and rna-rna interactions for design of cancer therapeutics.
Mondal	Ananya	University of Houston	I am a 6th-year graduate student working in theoretical and computational polymer physics with relevance to problems in biology. My research interests are: -Molecular Dynamics and Monte-Carlo simulations to predict the statistics of charged biopolymers such as DNA, with applications to next-generation gene-sequencing techniques and single-molecule force-extension experiments. -Mathematical modeling of biological problems, for example, protein-DNA interactions in histone, using statistical tools from polymer physics like path integrals, mean-field models, and coarse-grained modeling. -Modeling physical properties of active, non-equilibrium systems such as crosslinkers/motors interacting with cytoskeletal filaments like F-actin. -Leveraging my skills in polymer physics to study the environmental impact and interactions of polymers and creating sustainable solutions.
Nair	Vinay	UT MD Anderson Cancer Center	Computational chemist conducting research towards discovery and development of impactful small-molecule anti-cancer drugs.
Najm	Lubna	McMaster	My Master's research focuses on manufacturing of biosensors for diagnostics. I work with ELISAs, DNAzyme printing, hydrogel formation and optimization of manufacturing process.
Paparella	Alyssa	Baylor College of Medicine	Through work in two labs, I am studying an oncohistone through a biology and chemistry lens. More specifically, I am interesting in exploring how the epigenetic PTM landscape is driven by an oncohistone and how this drives underlying biology.
Perez	Ross	Baylor College of Medicine	I am interested in neuronal connectivity in the developing mouse retina and the cellular and molecular mechanisms behind it.
Poncha	Karl	Baylor College of Medicine	My research interest lie at the intersection of computational biology and the epigenetics of histone modifications. In our lab, we marry together sophisticated top-down proteomic methods with novel computational scores to understand histone post-translational modification crosstalk (how the presence of one PTM either potentiates or precludes the presence of another PTM on the same histone tail)
Potolitsyna	Evdokiia	BCM	I am interested in the biology of nucleoli, their physical properties, and how they behave in processes such as cell differentiation.
Rahimi	Kosar	University of Houston	I am interested in the atomistic simulation of RNAs and proteins. More specifically, my research seeks efficient advanced sampling methods for RNA- protein simulations.
SAFIARIAN	MOHAMMAD	Baylor College of Medicine	I have an extensive background in biochemistry and biophysics, especially in the fields of photochemistry and spectroscopy. My research at BCM is focused on the development and optimization of techniques used for superresolution imaging of subcellular compartments.
Scott	Anthony	MDS	Pizza, Computers
Steimle	Jeff	Baylor College of Medicine	I am interested in understanding cardiac genetics and transcriptional regulation.
Stojsin	Rastko	UTHealth School of Biomedical Informatics	deep learning in single-cell omics.
Tareq	Abu Montakim	University of Houston	I am working on Plasmon-Induced Intracellular Delivery
Thomas	Naiju	University of Texas Medical Branch	My research focuses on understanding the impact of aberrated transcriptional machinery on the genome organization.
Trivedi	Rakesh	M D Anderson Cancer Center	I am an Experimental Biologist turned Bioinformatician who likes to decipher the role of players of central dogma of biology in context to biological complexity and diseases.
Van Riper	Justin	Baylor College of Medicine	Structure, function, and regulation of RNA Binding proteins
WANG	XIANLONG	Baylor college of medicine	Novel role for CHD7 in the regulation of microtubules beyond its canonical chromatin remodeling activity.
Wang	Xiang	baylor college of medicine	single cell tumor develoment
Watson	Tiara	Houston Methodist Research Institute	My research interests are entomology and RNA
Woods	Mae	Baylor College of Medicine	Mathematical model building of biological systems
Xu	Hongting	Baylor College of Medicine	My research interests are in the field of hepatocellular carcinoma (HCC), which is ranked first in cancer mortality and there is little effective FDA approved drug/therapy available. I am currently identifying driver oncogenes for HCC progression using genome-wide unbiased CRISPR screening.

Xu	Hongting	Baylor College of Medicine	With an increasing number of adults suffering from diabetes and non-alcoholic fatty liver disease, hepatocellular carcinoma (HCC) is expected to affect one million patients by the year 2025. To identify novel drug targets and regulatory mechanisms for HCC development, I am currently performing genome-wide unbiased CRISPR screening.
Yadav	Deepa Kumar	Houston Methodist	structure-based design of RNA therapeutics
Zahid	Khadija	Rice University	I am very much interested in knowing more about the molecular biophysics and its impact. I am looking forward to know more about the protein folding, protein structure prediction and the study of spectroscopy to know the dynamics of biomolecules.