Curriculum Vitae

Margaret E. Johnson

Assistant Professor
Department of Biophysics
Johns Hopkins University

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EDUCATION AND PROFFESIONAL EXPERIENCE:

2013-Present	Assistant Professor, Johns Hopkins University Primary Appointment: Department of Biophysics, KSAS Joint Appointment: Department of Biology, KSAS Joint Appointment: Department of Chem. Biomolecular Engineering, WSE (since 2020)
2009-2013	Postdoctoral Fellow US National Institutes of Health, Bethesda, MD. *Advisor: Dr. Gerhard Hummer*
2004-2009	Ph.D in Bioengineering University of California, Berkeley Thesis: Understanding the interplay of structure and dynamics in liquids using coarse-grained models and experiment *Advisor: Prof Teresa Head-Gordon*
2000-2004	B.S. in Applied Math, *Magna Cum Laude* Columbia University, NY

HONORS AND AWARDS:

2020	*Future of Biophysics* Invited Speaker. Burroughs Wellcome Fund Symposium at the annual Biophysical Society Meeting, recognizing four young scientists performing cutting-edge research in biophysics.
2019	NIH MIRA Award to the Johnson Lab.
2018	NSF CAREER Award.
2017	Scialog Fellow. About 50 promising early career researchers were selected as fellows for the initiative *Molecules Come to Life.* Research Corporation for Scientific Advancement.
2011	NIH K99/R00 Pathway to Independence Award.
2011	Grand prize poster award, Berkeley Statistical Mechanics Meeting.
2010	NIH Fellow Award for Research Excellence (FARE)
2006	Outstanding poster award, American Chemical Society Conference.
2004	Tau Beta Pi, Columbia University.

PUBLICATIONS:

INDEPENDENT CAREER (*=corresponding, †=lab undergraduate, º=co-first author)

1. Fu, Y., Zeno, W., Stachowiak, J. & **Johnson, M.E.*** A continuum membrane model predicts curvature sensing by helix insertion. *Submitted to Biophysical Journal.* bioRxiv: 10.1101/2021.04.22.440963v1 (2021).
2. Guo, S., Sodt, A.J., & **Johnson, M.E.*** Nascent clathrin lattices spontaneously disassemble without sufficient adaptor proteins. *Submitted.* bioRxiv: 10.1101/2021.04.19.440502v1 (2021).
3. Duan, D.†, Hanson, M.†, Holland, D.O. & **Johnson, M.E.*** Integrating copy numbers and networks to quantify stoichiometry in clathrin-mediated endocytosis *In review PLoS Comp Biol.* bioRxiv: 10.1101/2020.10.29.361196v1 (2020).
4. Mishra, B. & **Johnson, M.E.*** Speed limits of protein assembly with reversible membrane localization. *J Chem Phys.* **154**, 194101 (2021).
5. Jhaveri, A., Maisuria, D.†, Varga, M., Mohammadyani, D. & **Johnson, M.E.*** Thermodynamics and free energy landscape of BAR-domain dimerization from molecular simulations. *J Phys Chem B.* **125,** 3739-3751 (2021).
6. **Johnson, M.E.*,** A. Chen†, J. Faeder, P. Henning, I. Moraru, M. Meier-Schellersheim, R. Murphy, T. Prustel, J. Theriot, A. Uhrmacher. Quantifying the roles of space and stochasticity in computer simulations of cell biology and cellular biochemistry. *Mol Biol of Cell.* V32, 186-210 (2021).
7. Varga, M.º, Fu, Y.º, Loggia, S.†, Yogurtcu, O.N. & **Johnson, M.E.*** NERDSS: a nonequilibrium simulator for multibody self-assembly at the cellular scale. *Biophysical J.* **118,** P3026-P3040 (2020).
8. Fu, Y., Yogurtcu, O.N., Kothari, R., Thorkelsdottir, G., Sodt, A.J. & **Johnson, M.E.*** An implicit lipid model for efficient reaction-diffusion simulations of protein binding to surfaces of arbitrary topology. *J Chem Phys.* **151,** 124115 (2019).
9. **Johnson, M.E.*** Modeling the self-assembly of protein complexes through a rigid-body rotational reaction-diffusion algorithm. *J Phys Chem B.* **122**, 11771 (2018).
10. Holland, D.O. & **Johnson, M.E.*** Stoichiometric balance of protein copy numbers is measurable and functionally significant in a protein-protein interaction network for yeast endocytosis. *PLoS Comp Biol.* **14**, e1006022 (2018).
11. Yogurtcu, O.N. & **Johnson, M.E.*** Cytoplasmic proteins can exploit membrane localization to trigger functional assembly. *PLoS Comp Biol.* **14**, e1006031 (2018).
12. Holland, D.O., Shapiro, B.H.†, Xue, P.†, & **Johnson, M.E.*** Protein-protein binding selectivity and network topology constrain global and local properties of interface binding networks. *Sci. Reports.* **7***,* 5631. (2017).
13. Yogurtcu, O.N. & **Johnson, M.E.*** Theory of bi-molecular association dynamics in 2D for accurate model and experimental parameterization of binding rates. *J. Chem. Phys.* **143**, 084117 (2015).
14. **Johnson, M.E.*** & Hummer, G. Free propagator reweighting integrator for single-particle dynamics in reaction-diffusion models of heterogeneous protein-protein interaction systems. *Phys. Rev. X* **4,** 031037 (2014).

CAREER PRIOR TO JHU

1. **Johnson, M.E.** & Hummer, G. Evolutionary pressure on the topology of protein interface interaction networks. *J. Phys. Chem. B* **117,** 13098-13106 (2013)
2. **Johnson, M.E.*** & Hummer, G. Interface resolved network of protein-protein interactions. *PLoS Comput Biol.* **9,** e1003065 (2013)
3. **Johnson, M.E.** & Hummer, G. Characterization of a Dynamic string method for the construction of transition pathways in molecular systems. *J. Phys. Chem. B* **116,** 8573-8583 (2012)
4. **Johnson, M.E.** & Hummer, G. Nonspecific binding limits the number of proteins in a cell and shapes their interaction networks. *Proc. Nat. Acad. Sci. USA.* **108**, 603-608 (2011).
5. Ponder, J.W., Wu, C.J., Ren, P.Y., Pande, V.S., Chodera, J.D., Schnieders, M.J., Haque, I., Mobley, D.L., Lambrecht, D.S., DiStasio, R.A., Head-Gordon, M., Clark, G.N.I., **Johnson, M.E.**, Head-Gordon, T. Current status of the AMOEBA polarizable force field. *J. Phys. Chem. B.* **114,** 2549-2564 (2010)
6. **Johnson, M.E.***, Malardier-Jugroot, C. & Head-Gordon, T*. Effects of co-solvents on peptide hydration water structure and dynamics. *Phys. Chem. Chem. Phys.* **12,** 393-405 (2010)
7. Malardier-Jugroot, C., Bowron, D.T., Soper, A.K., **Johnson, M.E**., & Head-Gordon, T. Structure and water dynamics of aqueous peptide solutions in the presence of co-solvents. *Phys. Chem. Chem. Phys.* **12,** 382-392 (2010)
8. **Johnson, M.E.** & Head-Gordon, T. Assessing thermodynamic-dynamic relationships for waterlike liquids. *J. Chem. Phys.* **130,** 214510 (2009)
9. **Johnson, M.E.**, Malardier-Jugroot, C., Murarka, R.K. & Head-Gordon, T. Hydration water dynamics near biological interfaces. *J. Phys. Chem. B.* **113,** 4080-4092 (2009)
10. Malardier-Jugroot, C., **Johnson, M.E**., Murarka, R.K. & Head-Gordon, T. Aqueous peptides as experimental models for hydration water dynamics near protein surfaces. *Phys. Chem. Chem. Phys*. **10**, 4903-4908 (2008)
11. **Johnson, M.E.**, Head-Gordon, T. & Louis, A.A. Representability problems for coarse-grained water potentials. *J. Chem. Phys.* **126,** 144509 (2007).
12. Head-Gordon, T. & **Johnson, M.E**. Tetrahedral Structure or chains for liquid water. *Proc. Nat. Acad. Sci. USA* **103**, 7973-7977 (2006).

GRANTS:

CURRENT FUNDING

1. National Institutes of Health, NIGMS MIRA 1R35GM133644 PI: Johnson
   Mechanisms of Protein Self-Assembly Coupled to Membrane Mechanics in the Cell
   Dates: 7/1/19—6/30/24
   Total Amount: $1,250,000

2. National Science Foundation, CAREER 1753174 PI: Johnson
   CDS&E: Developing Reaction-Diffusion Models of Non-Equilibrium Virion Assembly and Budding
   Dates: 7/1/18 – 6/30/23
   Total Amount: $465,932

3. National Institutes of Health, Common Fund 1U01DK127432 PI: Taekjip Ha
   Chromatin Function During Transcription and DNA Repair at Single Molecule Resolution in Living Cells
   Dates: 9/1/20—8/31/25
   Total Amount: $3,500,000 Co-PIs: Wu, Johnson

4. National Science Foundation, MRI 1920103 PI: Dennice Gayme
   MRI: Acquisition of an Advanced Computing Instrument to Integrate Data-driven Research and Data intensive computing at Johns Hopkins
   Dates: 10/1/19-9/30/22
   Total Amount: $4,000,000 Co-PIs: Schatz, Hernandez, Johnson

COMPLETED FUNDING

1. National Institutes of Health, NIGMS K99/R00 R00GM098371 PI: Johnson
   Pathway to Independence Award: Modeling the nucleation of clathrin coated vesicles at the membrane
   Dates: 7/1/2013-6/30/2016
   Total Amount: $747,000

PRESENTATIONS:

INVITED TALKS (AS A PI):

1. UC Berkeley, Chemistry Department
   Date: Fall 2021
   Title: "*Self assembly at the right time and place*"
2. GRC Physical Virology, Castelldefels, Spain.
   Date: May 2021—POSTPONED COVID19
   Title: "Coupling self-assembly, membrane localization, and membrane bending to model viral escape"
3. APS March Meeting, Physics of emergent protein-complex assemblies, Virtual
   Date: March 2021
   Title: "*Active and stochastic triggering of protein self-assembly in cells"*
4. Los Alamos National Lab, Center for Nonlinear Studies, Los Alamos, NM.
   Date: March 2021
   Title: "*Self-assembly at the right time and place"*
5. University of Delaware, Physics Department
   Date: Oct 2020
   Title: "*Self-assembly at the right time and place"*
6. University of Akron, Chemistry Department

Date: June 2020
Title: "*Control of self-assembly in the cell"*

7. NSF Genome Architecture and Dynamics Workshop, MIT.
   Date: June 2020
   Title: "*Modeling nonequilibrium self-assembly in the cell, in the nucleus, and on the membrane"*
8. Telluride Science Research Center (TSRC), Workshop: Quinary Interactions: Structure, Dynamics, Function
   Date: June 2020
   Title: "Exploiting 3D to 2D localization to control protein self-assembly"
9. CECAM Workshop: Numerical Techniques for Nonequilibrium Steady-States. Mainz, Germany
   Date: May 2020—POSTPONED COVID19
   Title: "Reaction-diffusion algorithms for nonequilibrium self-assembly"
10. Yale University, Physics of Living Systems, POLS Workshop
    Date: April 2020—POSTPONED COVID19
    Title: "Control of self-assembly in the cell"
11. Future of Biophysics Burroughs Wellcome Fund Symposium, Biophysical Society Annual Meeting
    Date: Feb 2020
    Title: "*Exploiting 3D to 2D localization to control protein self-assembly*"
12. MIT, Biophysics Seminar Series
    Date: Nov 2019
    Title: "*Control of multi-protein self-assembly by membrane localization*"
13. University of Chicago, James Franck Institute
    Date: Oct 2019
    Title: "*Control of multi-protein self-assembly by membrane localization*"
14. University of Utah, Physics Department
    Date: Oct 2019
    Title: "*Control of multi-protein self-assembly by membrane localization*"
15. University of Dundee, Scotland, Department of Cell Biology
    Date: Sept 2019
    Title: "*Tuning multi-protein self-assembly by membrane localization*"
16. Sanger Institute, UK
    Date: Sept 2019
    Title: "*Evaluating stoichiometric balance of protein copy numbers to predict dynamics in clathrin-mediated endocytosis*"
17. CompBioMed Conference, London, UK
    Date: Sept 2019
    Title: "*Dynamics of nonequilibrium self-assembly through reaction-diffusion simulations*"
18. Rice University, q-Bio Summer School
    Date: July 2019
    Title: "*Modeling protein self-assembly with reaction-diffusion dynamics*"
19. NSF Genome Architecture and Dynamics Workshop and International Summer School, Varna, Bulgaria

Date: July 2019
Title: "*Exploiting dimensionality reduction to accelerate and promote protein assembly*"

20. Arizona State University, Physics Department
Date: April 2019
Title: "*Control of nonequilibrium self-assembly in the cell*"
21. OneChemistry Symposium, Molecular Machinery of Life, Johns Hopkins
Date: April 2019
Title: "*Control of nonequilibrium self-assembly in the cell*"
22. Johns Hopkins University, Department of Biology Colloquium
Date: Oct 2018
Title: "*Mechanisms of protein self-assembly coupled to membrane mechanics in the cell*"
23. Johns Hopkins University, Institute for Biophysics Research
Date: Sept 2018
Title: "*Clathrin-mediated endocytosis: molecular to network level dynamics*"
24. Max Planck Institute for Biophysics, Frankfurt, Germany.
Date: April 2018
Title: "*Protein self-assembly in the Cell: Spatial and temporal control through membrane localization*"
25. EMBO Workshop: Integrating Systems Biology, Heidelberg
Date: April 2018
Title: "*Evolution and dynamics in protein networks through integrating interfaces and copy numbers*"
26. Johns Hopkins University, *Chalk-it-up* Biophysics Seminar Series.
Date: Feb 2018
Title: "*Dimensionality Reduction: How membranes can drive protein self-assembly*"
27. Berkeley Statistical Mechanics Meeting, UC Berkeley.
Date: Jan 2018
Title: "*Protein self-assembly in the Cell: Spatial and temporal control through membrane localization*"
28. Surrogate Models and Coarsening Techniques, Institute of Pure and Applied Mathematics, UCLA
Date: Nov 2017—Declined, Maternity
29. Brandeis University, Physics Department
Date: Sept 2017
Title: "*Protein self-assembly in the Cell: Spatial and temporal control through membrane localization"*
30. University of Maryland, College Park, Chemistry Department
Date: May 2017
Title: "*Cytosolic Proteins can exploit membrane localization to trigger functional assembly"*
31. Scialog Conference, Molecules Come to Life, Tuscon AZ
Date: April 2017
Title: "Active designer matter: pluripotent materials"
32. Carnegie Institute for Science, Department of Embryology, Baltimore MD

Date: April 2017
Title: "*More than the sum of its parts: Understanding dynamic multi-protein assembly in the cell with computational modeling*"

33. National Institutes of Standards and Technology (NIST), NCNR.
    Date: Sept 2016
    Title: "*Mechanisms of protein assembly at the membrane: Insights from theory and reaction-diffusion simulation*"
34. University of Connecticut Health Center, Center for Cell Analysis and Modeling
    Date: May 2016
    Title: "*Mechanisms of protein assembly at the membrane: Insights from theory and reaction-diffusion simulation*"
35. NIMBioS Workshop, Improving Tools for Spatially Realistic Cell Simulations, Knoxville TN
    Date: Dec 2015
    Title: "*Modeling protein interactions and assembly at the cell-scale*"
36. CECAM Workshop on Molecular and Chemical Kinetics, Free University, Berlin, Germany
    Date: Sept 2015-Declined, Maternity
37. Telluride Science Research Center, Workshop on Macromolecular Crowding, Telluride, CO
    Date: June 2015
    Title: "*Optimizing protein interactions for the crowded cell*"
38. University of Pittsburgh, Department of Computational and Systems Biology
    Date: March 2015
    Title: "*Modeling protein interactions and assembly at the cellular length and timescales*"
39. George Mason University, Krasnow Institute for Advanced Studies
    Date: Feb 2015
    Title: "*Modeling protein interactions and assembly with single particle reaction diffusion and multi-scale methods*"
40. Banff International Research Station Workshop on Single Particle Reaction Diffusion Methods, Banff, Canada
    Date: Nov 2014
    Title: "*Free-propagator reweighting integrator (FPR) for single particle reaction diffusion in solution and on the membrane"*
41. Johns Hopkins University, Institute for Biophysics Research
    Date: Sept 2013
    Title: "*Modeling protein interactions and assembly processes in the cell*"

CONTRIBUTED TALKS AND POSTERS (AS A PI):

1. APS March Meeting, Denver, CO
   Date: March 2020
   Title: "*Quantifying kinetics of multi-protein assembly, remodeling, and disassembly*"
2. Berkeley Statistical Mechanics Meeting, Berkeley, CA
   Date: Jan 2014, 2015, 2017, 2019, 2020.

Title: "*Quantifying kinetics of multi-protein assembly, remodeling, and disassembly*" (most recent)

3. National Institutes of Health, Structural Biology of HIV
   Date: June 2019
   Title: "*Study of Gag-Pol dimerization using reaction-diffusion simulation*"
4. APS March Meeting, Boston MA
   Date: March 2019
   Title: "*Modeling nonequilibrium self-assembly in the cell through reaction-diffusion simulation*"
5. Stochastic Physics in Biology Gordon Research Conference (GRC) Ventura CA
   Date: Jan 2019
   Title: "*Modeling nonequilibrium self-assembly in the cell through reaction-diffusion simulation*"
6. Statistical Mechanics Conference (120th), Rutgers, NJ
   Date: Dec 2018
   Title: "*Proteins can exploit membrane localization to trigger functional self-assembly*"
7. Lysosomes and Endocytosis GRC, NH
   Date: June 2018
   Title: "*Tuning the speed and stability of vesicle formation in clathrin-mediated endocytosis*"
8. q-Bio Conference, New Brunswick, NJ
   Date: July 2017
   Title: "*Cytoplasmic proteins can exploit membrane localization to trigger functional assembly*"
9. Biophysical Society Annual Meeting
   Date: Feb 2014, 2015, 2016, 2017
   Title: "*Cytoplasmic proteins exploit membrane localization to trigger functional assembly*" (most recent)
10. Stochastic Physics in Biology GRC, Ventura CA
    Date: Jan 2017
    Title: "*Cytoplasmic proteins exploit membrane localization to trigger functional assembly*"
11. Stochastic Physics in Biology GRC, Ventura CA
    Date: Jan 2015
    Title: "*Modeling reaction-diffusion processes in 2D and 3D with a novel single-particle integrator"*
12. Biophysical Society Thematic Meeting, Modeling of Biomolecular Systems Interactions, Istanbul, Turkey
    Date: June 2014
    Title: "*Multi-scale modeling of protein assembly in clathrin-mediated endocytosis"*
13. Lysosomes and Endocytosis GRC, NH
    Date: June 2014
    Title: "*Multi-scale modeling of protein assembly in clathrin-mediated endocytosis"*

SCIENTIFIC SERVICE AND OUTREACH

PEER REVIEW: *Cell, Nature Communications, PNAS, Phys Rev X, Biophysical Journal, Soft Matter, J Chem Phys, Chem Phys Lett, Phys Rev E, Scientific Reports, PLoS Comp. Biol*., *eLife.*

GRANT REVIEW:
1. US National Science Foundation (2017. Ad hoc, 2018, 2019).
2. US National Institutes of Health (2018, 2020)
3. Israeli Science Foundation (ad hoc, 2018, 2019)
4. European Research Council (ad hoc, 2019)
5. Pittsburgh Supercomputing Center Anton2 Allocations (2017, 2018, 2020)

GUEST EDITOR: *PLoS Comp. Biol* (2018).

MEETING CO-ORGANIZER and ADVISING
1. Organizing Committee for TSRC Workshop: Quinary Interactions: Structure, Dynamics, Function. Telluride, CO. (2020)
2. Scientific Committee for 21st International Conference on Systems Biology, (ICSB) Hartford, CT. (2020—postponed COVID19)
3. Scientific Advisory Board, NIH R24 for Virtual Cell and COPASI software development. (2021)
4. Workshop Chair, Artificial Cells: Understanding and Engineering, Biophysical Society Meeting, Baltimore (2015)

UNIVERSITY SERVICE AND OUTREACH:

1. Co-Director of Undergraduate Studies, Department of Biophysics
   Dates: 2020-Present
2. Diversity Advocate and Liaison, Department of Biophysics
   Dates: 2016-2019
3. Co-founder, Lecture Series in Computational Biophysics at Johns Hopkins University
   Dates: 2016-Present
   Description: Bi-weekly seminar series, hosting post-doctoral, graduate, and undergraduate researchers across all JHU campuses, with periodic outside speakers.
4. Faculty mentor, STEM Achievement for Baltimore Elementary Schools (SABES). Johns Hopkins NSF Funded program
   Dates: 2014-Present.
   Description: In addition to acting as an afterschool mentor for the SABES program at Baltimore City Public School Margaret Brent Elementary once per month, recruited 4 undergraduate, 3 graduate students, and 2 post-docs to participate. Developed a new computer programming module using MIT Scratch, synergistic with the NSF CAREER.
5. Library Advisory Committee
   Dates: 2016-2017

TEACHING AND MENTORING

TEACHING

1. Modeling the Living Cell (AS 250.302) Developer and Instructor
   Dates: Spring 2015, 2016, 2017, 2018, 2019, 2020, 2021
   Enrollment increased from 2 (2015) to 30 students (2021).
2. Biophysics Graduate Program Intro Computing in Biology (AS.250.649). Co-organizer and co-instructor
   Dates: Fall 2014, 2018, 2019, 2020 (~15 students per year)
3. Physical Chemistry of Biological Macromolecules. (AS.250.689) Co-instructor
   Dates: Fall 2020. (12 students)
4. Quantitative Biology and Biophysics. Co-instructor, Spring semester (AS.020.674)
   Dates: Spring 2021. (25 students)

GRADUATE STUDENT COMMITTEE WORK

1. Graduate Board Oral Exam committee, Program in Molecular Biophysics and Jenkins Biophysics Program
   Dates: 2014, 2016, 2018, 2020
   Students: 4-5 per year
2. Graduate Board Oral Exam committee, Cell Molecular Developmental Biophysics (CMDB) Biology Graduate Program
   Dates: 2014 (1 student), 2015 (1), 2016 (1), 2017 (1), 2019 (1)
3. Thesis Committee Member (Biophysics, Biology—CMDB, Chemical and Biological Engineering—Chem BE graduate programs).
   a. Alma Playa-Rodriguez, Biophysics 2017-Present
   b. Basilio Cieza-Huaman, Biophysics 2017-Present
   c. Lior Schahaf, Biophysics 2016-Present
   d. Min Hyung Cho, CMDB (Biology) 2016-2020
   e. Chris Bohrer, Biophysics, 2015-2019
   f. Max Klein, Biophysics 2015-2019
   g. Alex Chin, CMDB 2014-2018
   h. Shourya Burman, Chem BE 2016-2018
   i. Nick Marze, Chem BE 2017
   j. Joshua Fern, Chem BE 2017
   k. John Zenk, Chem BE 2017

TRAINEES

GRADUATE STUDENTS

1. David O. Holland, Ph. D. in Biomedical Engineering.
   Dates: 2013-2017
   Current Position: Post-doc in Elnitski Lab at the NIH
2. Adip Jhaveri, Ph. D. Candidate in Biophysics
   Dates: 2020-Present

Expected Graduation: 2024

MASTERS STUDENTS

1. Adip Jhaveri, M.S. in Chemical and Biomolecular Engineering
   Dates: 2019-2020
   Current position: Graduate Student in our lab.
2. Yasmin Moghadamnia, M.S in Biophysics
   Dates: 2018-2020
   Current Position: Masters student at Univ. of Delaware
3. Benjamin Shapiro, Joint M.S./B.S. in Applied Mathematics
   Dates: 2014-2016
   Current Position: Brown University Medical School

UNDERGRADUATE STUDENTS

1. Adam Nachurski, Senior Biophysics
   Dates: 2021-Present
2. Jackie Chang, Junior Biophysics
   Dates: 2020-Present
3. Spencer Loggia, Senior Computer Science and Neuroscience
   Dates: 2018-Present
4. Yian Qian, Sophomore Applied Math and Biophysics
   Dates: 2020-Present
5. Nomongo Dorjsuren, Senior Biophysics
   Dates: 2019-Present
6. Nandan Kulkarni, Junior Biology and Mathematics
   Dates: 2019-Present
7. Meretta Hanson, Amgen Scholar, Luther College
   Dates: Summer 2019
   Currently: Neuroscience Ph.D Candidate Ohio State University
8. Jack Simone, Senior Biophysics
   Dates: 2019-2020
9. Wilson Hu, Junior Physics and Biophysics
   Dates: 2019-2020
10. Noah Lu, Freshman Biomedical Engineering
    Dates: 2019-2020
11. Dhruw Maisuria, Applied Math and Biophysics
    Dates: 2018-2020
    Currently: Teach for America, Little Rock AK
12. Christopher Leung, Biophysics
    Dates: 2018-2020
    Currently: Research Technician, Stanford University
13. Daisy Duan, Applied Math and Biophysics
    Dates: 2016-2019
    Currently: Biophysics Ph.D Candidate, Yale University
14. Benjamin Shapiro, Applied Math
    Dates: 2014-2016

Currently: M.D. Student at Brown University
15. Athena Chen, Applied Math and Biophysics
    Dates: 2015-2017
    Currently: Ph.D Candidate at JHU School of Public Health
16. Pei Xue, Biophysics
    Dates: 2014-2015

HIGH SCHOOL STUDENTS
1. Nevonah Darden, Biophysics Research for Baltimore Teens (BRBT) Baltimore Polytechnic High School, Baltimore, MD
   Dates: Summer 2019
2. Taqeeya Cason: (BRBT) Western High School, Baltimore, MD
   Dates: Summer 2018
3. Mekhi Closson: (BRBT) Baltimore Polytechnic High School, Baltimore, MD
   Dates: Summer 2017
   Currently: Undergraduate at Howard University

POSTDOCTORAL RESEARCHERS
1. Yiben Fu, Ph.D. Physics, Chinese Academy of Sciences Beijing
   Dates: 2018-Present
2. Sikao Guo, Ph.D. Physics, Chinese Academy of Sciences Beijing
   Dates: 2020-Present
3. Bhavya Mishra, Ph.D. Physics, Indian Institute of Tech. Kanpur
   Dates: 2019-Present
4. Matthew Varga, Ph.D. Chemistry, University of Arizona
   Dates: 2017-2019
   Currently: Ambry Genetics
5. Osman Yogurtcu, Ph.D. Mechanical Engineering, Johns Hopkins University
   Dates: 2013-2017
   Currently: Staff Scientist, Food and Drug Administration (FDA), Center for Biologics Evaluations and Research
6. Dariush Mohammadyani, Ph.D. Bioengineering, Univ. Pittsburgh
   Dates: 2016-2018
   Currently: Janssen, Pharmaceutical Company of Johnson & Johnson
7. Sewwandi Rathanayake, Ph.D. Molecular Biology Kent State University
   Dates: 2016-2019
   Currently: Post-doc at University of Nebraska
8. Raza Ul-Haq, Ph.D. Biochemistry, Uppsala University
   Dates: 2015-2016

ROTATION STUDENTS
1. Andrew Bortvin, CMDB (2021)
2. Mankun Sang, Biophysics (2021)
3. Samuel Canner, Biophysics (2021)
4. David Wang, CMDB/NIH Graduate Partner Program (GPP)—Must choose a PI from the NIH (2021)

5. Lucas Shen, Biophysics (2020)
6. Ifunanya Nwogbaba, Biophysics (2019)
7. Liana Islam, Biophysics (2019)
8. Daniel Evans, Biophysics (2018)
9. Justin Gray, CMDB/NIH GPP (2018)
10. Brice Lapin, Masters Program BME (2018)
11. Yasmin Moghadamnia, Biophysics (2017)
12. Basilio Cieza-Huaman, Biophysics (2016)
13. Min Hyung Cho, CMDB (2016)
14. Allison Dennis, CMDB/NIH GPP (2015)
15. Elizabeth Potter, CMDB/NIH GPP (2015)
16. Cameron Avelis, Biophysics (2014)
17. Ryan McQuillen, Biophysics (2014)
18. David Holland, Biomedical Engineering (2013)