

Ishmail Abdus-Saboor, PhD

Associate Professor, Department of Biological Sciences
Principal Investigator, Zuckerman Mind Brain Behavior Institute
Columbia University, New York, USA
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Appointments

2023–present Freeman Hrabowski Scholar, Howard Hughes Medical Institute
2023–present Associate Professor, Department of Biological Sciences, Columbia University (*tenured in 2025*)
2021–2023 Assistant Professor, Department of Biological Sciences, Columbia University
2018–2021 Mitchell and Margo Blutt Presidential Assistant Professor of Biology, University of Pennsylvania

Education

2014–2018 Postdoctoral Fellow, Wenqin Luo Lab, University of Pennsylvania
2012–2014 Postdoctoral Fellow, Ben Shykind Lab, Weill Cornell Medicine
2006–2012 Ph.D. in Cell and Molecular Biology, University of Pennsylvania (Advisor: Meera Sundaram)
2002–2006 B.S. in Animal Science, North Carolina A&T State University (*summa cum laude*)

Honors and Awards

- Lenfest Distinguished Faculty Award (2026)
- NIH Director’s Pioneer Award (2025)
- Kavli-Grossman Scholar (2025)
- One Mind Rising Star Award (2024)
- Cell *50 Scientists That Inspire* (2024)
- Young Investigator Award, Society for Neuroscience (2023)
- HHMI Freeman Hrabowski Scholar (2023)
- McKnight Scholar Award (2023)
- NIH New Innovator Award (2022)
- Pew Biomedical Scholar (2022)
- Chan Zuckerberg Initiative SDL Award (2022)
- Brain Research Foundation Seed Grant (2022)
- Alfred P. Sloan Fellow (2021)
- Kavli Fellow, National Academy of Sciences (2021)
- Rita Allen Foundation Scholar (2020)
- NIH Pathway to Independence Award (2017)
- Burroughs Wellcome Fund PDEP Fellowship (2015)
- Tom Kadesch Prize in Genetics (2012)
- Gloria Chisum Graduate Fellowship (2006)

Distinguished & Named Lectureships

- Martinez-Townsel Endowed Lecture, Marine Biological Laboratories (2026)
- Wayne E. Crill Lecture, University of Washington (2025)
- Presidential Lecture, Simons Foundation (2024)
- SFNova Lecture, Society for Neuroscience Annual Meeting (2023)

Keynote Lectures

- Keynote Lecture, Friedman Brain Institute at Mount Sinai, Neuroscience Retreat (2026)
- Keynote Lecture, Young Memorial Symposium, Emory University (2025)
- Keynote Lecture, UAB School of Medicine, Neuroscience Center Retreat (2025)
- Plenary Lecture, American Society for Cell Biology Annual Meeting (2023)
- Keynote Lecture, University of Pennsylvania, Cell & Molecular Biology Grad Group Symposium (2022)

Teaching**Columbia University:**

Instructor (75-150 students): BIOL UN3004 Neurobiology I: Cellular and Molecular Neurobiology (2022 – present)

University of Pennsylvania:

Instructor (150 students): BIOL 221: Molecular Biology and Genetics (2019 – 2021)

Publications

1. **Abdus-Saboour I.** (2026). Neurobiology of social touch. *Annual Review of Neuroscience*. 49:61–78.
2. Zavitsanou AM, Toney SD, **Abdus-Saboour I.** (2026). Rapid and efficient labeling of lung innervating neurons. (*Cell Reports Methods*, in revision)
3. Bohic M, Salamone PC, Zuo W, Negm A, Fulton SL, Du S, Jayakumar S, Keating J, Soubeyre V, Gradwell MA, Upadhyay A, Duvernoy B, Inoue-Ueno Y, Mensch B, Peirs C, Gaetan Poulen G, Lonjon N, Vachiere-Lahaye F, Bauchet L, Bourinet E, Olausson H, **Abdus-Saboour I**, Tao Y, Boehme R, Abaira VE. (2026). Oxytocin modulation of spinal circuits drives therapeutic benefits of massage. *bioRxiv*
4. Lawen A, Succi I, Lichtman D, Peterka D, **Abdus-Saboour I**, Kahn I. (2026) Dopamine release effects on striatal blood oxygenation and whole brain plasticity underlying associative learning. *Science Advances*, in revision
5. Burdge J, Jhumka A, Khan A, Ogundare S, Baer N, Fulton S, Kaplan A, Bistis B, Foster W, Thackray J, Toussaint A, Li M, Morizawa YM, Nazarian J, Yadessa L, George AJ, Delinois A, Mayiseni W, Loran N, Yang G, Margolis DJ, Abaira VE, **Abdus-Saboour I.** (2025). Remote automated delivery of mechanical stimuli coupled to brain recordings in behaving mice. *eLife*, 13:RP99614.
6. Sur D, Zeng Y, Kobayashi H, Zhi X, Goetz MR, Müller CM, Zavitsanou AM, Picoli CC, Martel Matos AA, Pareja J, Savita BK, Lee T, Cunha-Junior JP, Amorim JH, Nikpoor AR, Dory A, Thanabalasuriar A, Galante PAF, Ma VT, James AW, Shepherd AJ, Oudin MJ, Bunimovich YL, Scheff NN, D'Silva NJ, Dixon KO, **Abdus-Saboour I**, Wang TC, Talbot S, Birbrair A. (2025). Entangled cellular and molecular relationships at the sensory neuron–cancer interface. *Neuron*, 113, 2760-2790.
7. Fulton S, Bendl J, DiSalvo G, Fullard J, Al-Kachak A, Lepack A, Stewart A, Singh S, Poller W, Bastle R, Hauberg M, Fakira A, Patel V, Chen M, Durand-de Cuttoli R, Gameiro-Ros I, Cathomas F, Ramakrishnan A, Gleason K, Shen L, Tamminga C, Milosevic A, Russo S, Swirski F, Slesinger P, **Abdus-Saboour I**, Blitzler R, Roussos P, Maze I. (2025). Major-depressive-disorder-associated dysregulation of ZBTB7A in orbitofrontal cortex promotes astrocyte-mediated stress susceptibility. *Neuron*, 113, 2656-2672.
8. Upadhyay A, Gradwell M, Vajtay T, Conner J, Sayal AA, Azadegan C, Patel KR, Thackray JK, Bohic M, Imai F, Ogundare S, Yoshida Y, **Abdus-Saboour I**, Azim E, Abaira V. (2025). The dorsal column nuclei scale mechanical sensitivity in naive and neuropathic pain states. *Cell Reports*, 44:115556
9. Liu D, Rahman M, Johnson A, Amo R, Tsutsui-Kimura I, Sullivan Z, Pena N, Talay M, Logeman BL, Finkbeiner S, Qian L, Choi S, Capo-Battaglia A, **Abdus-Saboour I**, Ginty DD, Uchida N, Watabe-Uchida M, Dulac C. (2025). A hypothalamic circuit underlying the dynamic control of social homeostasis. *Nature*, 640, 1000-1010.
10. Inclan-Rico JM, Napuri C, Lin C, Hung LY, Ferguson A, Wu Q, Pastore CF, Stephenson A, Femoe U, Rossi HL, Reed D, **Abdus-Saboour I**, Luo W, Herbert DR. (2024). MrgprA3 neurons drive cutaneous immunity against helminths through selective control of myeloid-derived IL-33. *Nature Immunology*, 25, 2068-2084.
11. Sgourdou P, Schaffler M, Choi K, McCall N, Burdge J, Williams J, Corder G, Fuccillo M, **Abdus-Saboour I**, Epstein D. (2025). Impaired pain in mice lacking first order posterior medial thalamic neurons. *Pain*, 166, 130-143.
12. Schwark R, Ogundare O, Sheng P, Foster W, Chang P, Tsai YY, Arnold A, **Abdus-Saboour I.** (2024). Social touch

shapes communication and animal recognition in naked mole-rats. *bioRxiv*

13. Schwark R, Ogundare S Weinreb C, Sheng P, Foster W, Toussaint A, Chang P, Tsai W, Comfere M, Arnold A, Guadagnino A, McCloskey D, Schaffer E, Rajan K, Datta SR, **Abdus-Saboore, I.** (2024). Behavioral fingerprinting of the naked mole-rat uncovers signatures of eusociality and social touch. *bioRxiv*
 14. Bashkirova E, Klimpert N, Monahan K, Campbell CE, Osinski J, Tan L, Schieren I, Pourmorady A, Stecky B, Barnea G, Xie XS, **Abdus-Saboore I**, Shykind B, Marlin BJ, Gronostajski R, Fleischmann A, Lomvardas S. (2023). Opposing, spatially-determined epigenetic forces impose restrictions on stochastic olfactory receptor choice. *eLife*, 12:RP87445.
 15. Bohic M, Pattison L, Jhumka A, Rossi H, Thackray J, Ricci M, Foster W, Ogundare S, Twomey C, Hilton H, Arnold J, Mossazghi N, Yttri E, Tischfield, MA, Smith ESJ, **Abdus-Saboore I***, Abaira V*. (2023). Mapping the neuroethological signatures of pain, analgesia, and recovery in mice. *Neuron*, 111, 2811-2830. (*joint senior authors)
 - *Neuron*, 111, 18. "Painspotting."
 16. Elias L, Succi I, Schaffler M, Foster W, Gradwell M, Bohic M, Fushiki A, Upadhyay A, Ejoh L, Schwark R, Frazer R, Bistis B, Burke J, Saltz V, Boyce J, Jhumka A, Costa R, Abaira V, **Abdus-Saboore, I.** (2023). Touch neurons underlying dopaminergic pleasurable touch and sexual receptivity. *Cell*, 186, 577–590.
- Highlighted in over 30 media outlets around the world including some listed here:*
- *Nature*, 614, 10. "How sexual touch triggers pleasant sensations in mice."
 - *Washington Post*. "The power of social touch: How a loving caress really can ease anxiety."
 - *Current Biology*. "Socio-sexual touch: On the hunt for pleasure signal in the mouse brain."
 - *NPR*. "You don't need words to calm a grumpy kid. Parents around the world use magic touch." [print and radio]
 - *LeMonde*. "Causality between pleasurable touch and sexual receptivity."
17. Z. Anissa Jhumka, **Abdus-Saboore I.** (2022). Next generation behavioral sequencing for advancing pain quantification. *Current Opinion in Neurobiology*, 76:102598.
 18. Elias LJ, **Abdus-Saboore I.** (2022). Bridging skin, brain, and behavior to understand pleasurable social touch. *Current Opinion in Neurobiology*, 73:102527.
 19. Toussaint A, Foster W, Jones JM, Kaufmann S, Wachira M, Hughes R, Bongiovanni AR, Famularo ST, Dunham B, Schwark R, Karbalaei R, Dressler C, Bavley CC, Fried NT, Wimmer M, **Abdus-Saboore I.** (2022). Chronic paternal morphine exposure increases sensitivity to morphine-derived pain relief in male progeny. *Science Advances*, eabk2425.
 20. Inclan-Rico JM, Kim BS, **Abdus-Saboore I.** (2021). Beyond somatosensation: Mrgprs in mucosal tissues. *Neuroscience Letters*, 11;135689.
 21. Schaffler M, Johnson M, Hing B, Kahler P, Hultman I, Srivastava S, Arnold J, Blendy J, Hultman R, **Abdus-Saboore, I.** (2022). A critical role for touch neurons in a skin-brain pathway for stress resilience. *bioRxiv*
 22. Jones JM, Foster W, Twomey CR, Burdge J, Ahmed O, Pereira T, Wojick J, Corder G, Plotkin JB, **Abdus-Saboore I.** (2020). A machine-vision approach for automated pain measurement at millisecond timescales. *eLife*, 9:e57258.
 23. Fried NT, Chamessian A, Zylka MJ, **Abdus-Saboore I.** (2020). Improving pain assessment in mice and rats with advanced videography and computational approaches. *Pain*, 161,1420-1424.
 24. Rossi HL, See LP, Foster W, Pitake S, Gibbs J, Schmidt B, Mitchell CH, **Abdus-Saboore I.** (2020). Evoked and spontaneous pain assessment in a dental pulp injury model. *Scientific Reports*, 17:2759.
 25. Schaffler M, Elias L, **Abdus-Saboore I.** (2019). Mechanisms of tactile sensory phenotypes in autism: current understanding, and future directions for research. *Current Psychiatry Reports*, 5;21(12):134.
 26. Pitake S, Middleton LJ, **Abdus-Saboore I**, Mishra SK. (2019). Inflammation induced sensory nerve growth and pain

hypersensitivity requires the N-type calcium channel Cav2.2. *Front Neurosci*, 19;13:1009.

27. **Abdus-Saboor I**, Fried NT, Lay M, Burdge J, Swanson K, Fischer R, Jones J, Dong P, Cai W, Guo X, Tao YX, Bethea J, Ma M, Dong X, Ding L, Luo W. (2019). Development of a mouse pain scale using sub-second behavioral mapping and statistical modeling. *Cell Reports*, 28, 1623-1634.
28. Olson W, **Abdus-Saboor I**, Cui L, Burdge J, Raabe T, Ma M, Luo W. (2017). Sparse genetic tracing reveals regionally specific functional organization of mammalian nociceptors. *eLife*, 12;6:e29507.
29. Cui L, Miao X, Liang L, **Abdus-Saboor I**, Olson W, Fleming MS, Ma M, Tao YX, Luo W. (2016). Identification of early RET+ deep dorsal spinal cord interneurons in gating pain. *Neuron*, 91, 1-17.
30. **Abdus-Saboor I**, Al Nufal MJ, Agha MV, Ruinart de Brimont M, Fleischmann A, Shykind B. (2016). An expression refinement process ensures singular odorant receptor gene choice. *Current Biology*, 26, 1083–90.
31. **Abdus-Saboor I**, Fleischmann A., Shykind B. (2014). Setting limits: maintaining order in a large gene family. *Transcription*, 5:e28978.
32. Fleischmann A, **Abdus-Saboor I**, Sayed A, Shykind B. (2013). Functional interrogation of an odorant receptor locus reveals multiple axes of transcriptional regulation. *PloS Biology*, 11:e1001568.
33. **Abdus-Saboor I**, Stone CE, Murray JI, Sundaram MV. (2012). The Nkx5/Hmx homeodomain protein MLS-2 is required for proper tube cell shape in the *C.elegans* excretory system. *Developmental Biology*, 366, 298–307.
34. **Abdus-Saboor I**, Mancuso VP, Murray JI, Palozola K, Norris C, Hall DH, Howell K, Huang K, Sundaram MV. (2011). Notch and Ras promote sequential steps of excretory tube development in *C.elegans*. *Development*, 138, 3545–3555.

Grant Support

Active grants

2026	NIH U24 Pilot Award	\$80,000 (total)
Role: PI	“Force-parameterized affective touch: real-time oxytocin dynamics and neural circuit mechanisms of affective touch.” (Co-PI: Victoria Abraira)	
2025–2030	NIH Director’s Pioneer Award (DP1AT013723)	\$5,757,500 (total)
Role: PI	“Role of social touch and social memory in organizing naked mole-rat colonies”	
2025–2026	Incite Institute at Columbia University Hard Questions Grant	\$75,000 (direct)
Role: PI	“How does the brain control social recognition and social memory?”	
2025–2028	Kavli-Grossman Scholar Award	\$225,000 (direct)
Role: PI		
2024–2027	One Mind Rising Star Award	\$300,000 (direct)
Role: PI	“Activating neurons in the skin to relieve symptoms of chronic stress”	
2023–2033	Freeman Hrabowski Scholar, Howard Hughes Medical Institute	~\$10,000,000 (direct)
2023–2026	McKnight Scholar Award	\$225,000 (direct)
Role: PI	“Skin-brain axis for rewarding touch behaviors”	
2023–2026	Ernest E. Just Faculty Mentor Award	\$465,783 (total)
Role: PI	Awarded to IAS to fund a postdoc	
2022–2027	Chan Zuckerberg Initiative Science Diversity Leadership Award	\$1,150,000 (total)
Role: PI	“Uncovering Peripheral and Central Neural Circuits for Inflammatory Pain”	

2022–2026 Pew Scholar in the Biomedical Sciences \$300,000 (direct)
 Role: PI “Elucidating Pain Sensation and Emotion from Circuits to Cells to Genes”

Completed grants

2022–2025 NIH/NINDS DP2 New Innovator Award (DP2NS130454) \$2,467,500 (total)
 Role: PI “Using mouse pain scales to discover unusual pain sensitivity and new pain targets.”

2024–2025 Columbia University Cancer Center & Arts and Science (Co-PI: Yvon Woappi) \$100,000 (direct)
 Role: PI “Do sensory neurons in the skin drive wound memory to promote squamous cell carcinoma?”

2022–2024 Brain Research Foundation Seed Grant \$80,000 (direct)
 Role: PI “Investigating a skin-brain neuronal pathway for rewarding social touch.”

2022–2023 Columbia University Provost Grant for Junior Faculty \$30,000 (direct)
 Role: PI “Does brain activity in the naked mole-rat govern cooperative social life?”

2021–2023 Alfred P. Sloan Research Fellowship in Neuroscience. \$75,000 (direct)
 Role: PI

2020–2023 Rita Allen Foundation Scholar in Pain Award \$150,000 (direct)
 Role: PI “Discovering behavioral signatures of pain at millisecond timescales.”

2017–2021 NIH K99/R00 Pathway to Independence Award (DE026807) \$1,116,555 (total)
 Role: PI “Functions of molecularly defined nociceptors in spinal and dental pain.”

2015–2018 Burroughs Wellcome Fund Postdoctoral Enrichment Program \$60,000 (direct)
 Role: PI “Defining the neural mechanisms mediating crosstalk between touch and pain.”

2016–2017 Burroughs Wellcome Fund Collaborative Travel Grant \$8,000 (direct)
 Role: PI “Optogenetic and brain imaging investigation of pain neural circuitry.”
 Co-I: Jin Lee, Stanford

2014–2017 NIH IRACDA Postdoc Fellowship (K12 GM081295) \$190,488 (total)
 Role: PI “Dissect neural mechanisms underlying the crosstalk between touch and pain.”

Patents:

- Abdus-Saboor, I, et al. Automated reproducible mechanical stimulation for animal experiments. US Patent Application 8/781,138 (pending).

Department Seminars and Conference Talks

2027

Arc Institute (affiliated with Stanford, Berkeley, UCSF) Science Seminar Series
 University of Utah, Neuroscience Seminar Series

2026

MIT Whitehead Institute Seminar
 MIT Biology Colloquium
 57th Naito Conference: Glia–Neuron Networks Orchestrating Brain and Systemic Function, Japan
 Janelia Conference: Functional Mapping of the Peripheral Nervous System
 Weill Cornell Medicine, Burke Neurological Institute Seminar Series
 New York University, Department of Molecular Pathology, Pain Research Center Seminar Series
 Howard University, Department of Biology Seminar Series
 NIH NeuronS_MATTR U24 Network Seminar Series
 Gulf Coast Consortium, Pain Seminar Series

University of Pennsylvania, Distinguished Seminar Series, Cell & Developmental Biology Department

2025

UC Berkeley, Neuroscience Seminar Series
Samsung Global Research Symposium: Brain-Body Interactions, Sweden
King Abdullah University of Science and Technology, Neuroscience Day, Saudi Arabia
Beckman Center of the National Academies at UC Irvine, Summer Conference on the Changing Brain
Columbia University Medical Center, Neuroscience Seminar Series
Lake Conference on Circuits Neuroscience: Sensation and Action. Lake Thun, Switzerland
University of Lausanne, Department of Neuroscience Seminar Series, Switzerland

2024

88th Cold Spring Harbor Laboratory Symposium on Quantitative Biology: Brain Body Physiology
International Associate for the Study of Pain World Congress on Pain, Netherlands
Cold Spring Harbor Laboratory, Neuroscience Seminar Series
Columbia University, Psychiatry Grand Rounds
UC Davis, Neuroscience Seminar Series
New York University, Interdisciplinary Pain Research Program Seminar Series
Keystone Meeting: Mammalian Pain and Somatosensation
Johns Hopkins University, Department of Neuroscience Seminar Series

2023

Stanford University, Neuroscience Institute Seminar Series
Brown University, Neuroscience Seminar Series
Barnard College, Department of Biological Sciences Seminar Series
Columbia University, Dermatology Grand Rounds
Columbia University, HICCC Cancer-relevant Chemistry and Biology Symposium
Mount Sinai School of Medicine: Brain and Body Lecture Series
Oregon Health & Science University, Neuroscience Futures Seminar Series
Princeton University, Neuroscience Institute Seminar Series
Caltech, Chen Institute Neuroscience Symposium

2022

Rockefeller University, Symposium on the Social Brain
Yale University, Neuroscience Seminar Series
American College of Neuropsychopharmacology Annual Meeting
New York University, Department of Biology Seminar Series
UC Berkeley, Brain Imaging in the Bay Symposium
Albert Einstein College of Medicine, Neuroscience Seminar Series
Gordon Conference, Optogenetic Approaches to Neural Circuits and Behavior, Maine
Columbia University, Neurosurgery Grand Rounds
Washington University in St. Louis, Anesthesiology Research Seminar Series
Northwestern University, Department of Physiology and Pain Center Seminar Series
Brandeis University, M. R. Bauer Foundation Colloquium Seminar Series
University of Washington, Department of Biological Structure Seminar Series

2021

Harvard Medical School, Department of Neurobiology Seminar Series
Harvard University, Brain Science Initiative, Neurobiology of Pain Event
Johns Hopkins University, Department of Molecular and Comparative Pathobiology Seminar Series
Johns Hopkins University, Blaustein Pain Grand Rounds
University of California San Francisco, Neuroscience Seminar Series
Penn State College of Medicine, Neural and Behavioral Sciences Department Seminar Series
Brown University, Samuel M. Nabrit Conference for Early Career Scholars
Newcastle University (UK), Centre for Behaviour and Evolution Seminar Series
Brain Initiative Investigator's Meeting, Social Brain Symposium
Columbia University, Department of Biological Sciences Seminar Series
Salk Institute, Thursday Seminar Series

Williams College, Class of 1960 Scholar Speaker Series
University of Southern California, Neurobiology Seminar Series
Texas Pain Research Consortium, Seminar Series
George Washington University, IBS Neuroscience Seminar Series
University College London, Gatsby Computational Neuroscience Series
University of Chicago, Neuroscience Seminar Series
New York University School of Medicine, Marie Daly Speaker Series
Duke University, Department of Neurobiology Seminar Series
Allen Institute for Brain Science, Inaugural Black History Month Seminar Series
Middlebury College, Neuroscience Seminar Series
University of California San Diego, Neuroscience Seminar Series

2020

University of Michigan, Department of Molecular, Cell, Developmental Biology
Northeastern University, Biology Colloquium
Washington University in St. Louis, Anesthesiology Research Seminar Series
Weill Cornell Medicine, Frontiers in Neuropsychiatry Seminar Series
University of Pittsburgh & Carnegie Mellon University, CNBC ERC Series
UT Health San Antonio, Department of Pharmacology & Center for Biomedical Neuroscience
University of Iowa, Neuroscience Institute Seminar Series
Johns Hopkins University, Department of Biochemistry and Molecular Biology
Columbia University, Zuckerman Institute, Breakthroughs in Neuroscience Series
National Institutes of Health, Animal Genetics Consortium
Drexel University, Department of Neurobiology and Anatomy Seminar Series
Georgetown University, Department of Pharmacology and Physiology
National Institutes of Health, Early Career Investigators in Addiction Neuro Series
Johns Hopkins University, Department of Pharmacology & Molecular Sciences
Stanford University & Chinese Academy of Sciences; Neuro Zoom
University of Virginia, Neuroscience Department, Inaugural Juneteenth Lecture
Rowan University, Molecular and Cellular Biosciences Seminar Series
Temple University, Neuroscience Seminar Series
Keystone Symposium: Pain: Aligning the Target, Colorado
University of Pennsylvania, Dermatology Research Seminar Series
Johns Hopkins University, Department of Biology Seminar Series

2019

University of Washington, Neuroscience Seminar Series
University of Pennsylvania, Neuroscience Graduate Group Public Lecture on Pain
University of Pennsylvania, Psychology Department Colloquium Series
Annual Biomedical Conference for Minority Students (ABRCMS), California
University of Texas at Dallas, School of Behavioral and Brain Sciences
Lasalle University, Department of Biology
University of Illinois at Chicago, Integrative Neuroscience Seminar Series
Fox Chase Cancer Center, Molecular Therapeutics Department
University of Pennsylvania, SUIP Faculty Research Seminar
University of Maryland Baltimore County, Departments of Biology; Chemistry/Biochemistry
North Carolina A&T State University, Department of Biology
University of California Santa Cruz, Department of Molecular, Cell, Developmental Biology

2018

Rockefeller University, Sense to Synapse Conference
Gordon Conference, Molecular and Cellular Neurobiology, Hong Kong
St. Joseph's University, Department of Biology
University of Pennsylvania, Center for Neurobiology and Behavior Seminar
Mid-Atlantic Pharmacology Society Meeting, Philadelphia, PA
University of Pennsylvania, mindCORE Seminar Series
National Institutes of Health, Pain Consortium Symposium
Meharry Medical College, Department of Biochemistry and Cancer Biology

Bryn Mawr College, Chemistry Colloquia Series
 Duke University, Department of Pharmacology
 New York University, Department of Oral Surgery
 University of Pennsylvania, Department of Biology

Media

- “The Joy of Why.” Quanta Magazine (2026). (Podcast)
- Interview. “This paper changed my life: Ishmail Abdus-Saboor on balancing the study of pain and pleasure.” The Transmitter, Simons Foundation (2026)
- “50 Scientists that Inspire” 50th Year Anniversary Issue. Cell (2024)
- “From Lab to Life: The Science of Touch.” Pew Charitable Trusts (2024). (Podcast)
- “Pleasure or pain? He maps the neural circuits that decide.” Quanta Magazine (2024).
- “This Trailblazing Neurobiologist Studies the Science of Pleasure and Pain.” Columbia University (2022). <https://www.youtube.com/watch?v=sD4vv4co6uU&t=5s>
- “Q & A: Ishmail Abdus-Saboor”. Neuron (2021)
- “Beyond the CV: Stories from Faculty.” University of Pennsylvania MindCORE (2021) <https://www.youtube.com/watch?v=-oeJTI1fewY>
- “The Science of Sensations” Penn Today (2019)
- Television Feature and lab visit, CBS News (2018). “Central High School Graduate Hoping to Make Impact with New Lab at Penn Medicine” https://www.youtube.com/watch?v=_DkApUni3MA

Columbia University Service

2025–present	Member, Executive Committee, Department of Biological Sciences
2025–present	Member, ARC Review Committee, Department of Biological Sciences
2025–present	Lecturer Review Committee, Department of Biological Sciences
2024–present	Member, PhD Graduate Committee, Department of Biological Sciences
2024	Member, Department of Neuroscience Chair Search Committee
2023–present	Member, Executive Committee, Department of Biological Sciences
2023–present	Faculty Advisor, BUMP Biology
2023	Organizer (with Laura Duvall), Department of Biological Sciences Annual Retreat
2021–2022	Faculty Search Committee, Zuckerman Mind Brain Behavior Institute

Thesis Advisory Committees

Current (9)

2026–present	Pauline Affatato (Tosces lab – Biological Sciences graduate program)
2026–present	Audrey Wang (Zuker lab – Biological Sciences graduate program)
2026–present	Hanye Wang (Zuker lab – Biological Sciences graduate program)
2025–present	Claire Chen (Yang lab – Biological Sciences graduate program)
2025–present	Aniekan Umoren (Tomer lab – Biological Sciences graduate program)
2025–present	Ruihuan Yu (Zuker lab – Biological Sciences graduate program)
2024–present	Sherry Li (Aronov & Paninski labs – Biological Sciences graduate program)
2023–present	Abby Wood (Grueber lab – Neurobiology & Behavior graduate program)
2022–present	Nova Qi (Grueber lab – Cell & Molecular Biomedical Studies graduate program)

Former (8)

2021–2025	Eliza Jaeger (Tosces lab – Biological Sciences graduate program)
2021–2025	Yasmin Ramadan (Hobert lab – Biological Sciences graduate program)
2021–2024	Aaron Limoges (Tejeda lab – Biological Sciences graduate program)
2022–2024	Erin Jean (Herbert lab – Immunology graduate program)
2020–2024	Brandon Bastien (Hart lab – Neuroscience graduate program)
2020–2022	Michelle Klima (Betley lab – Neuroscience graduate program)
2019–2021	Melina Gyparaki (Lakadamyali lab – Biology graduate program)
2019–2021	Bishwas Sharma (Gregory lab – Biology graduate program)

Professional Service

Scientific Advisory Boards

2024–present	Co-Founder and Scientific Consultant, Tactorum Inc.
2022–present	Advisory Board, Burroughs Wellcome Fund PDEP Postdoctoral Fellowship
2022–2025	Scientific Advisory Board, Doloromics Inc.
2021–present	Editorial Board, Neurobiology of Pain
2020–present	Editorial Board, Cell Reports
2020–2023	Board of Reviewing Editors, eLife

Faculty Mentorship

2026–2028 Faculty mentor to junior faculty through NIH R25 Faculty Access Program

Grant Review Panels

- Standing member, NIH Neurobiology of Pain and Itch Study Section (2025 – present)
- Standing member, Burroughs Wellcome Fund PDEP Postdoctoral Fellowship (2023 – present)
- Ad hoc reviewer, HHMI Hannah Gray Fellowship (2024)
- Ad hoc reviewer, Simons Foundation Autism Research Initiative (SFARI) “Cross-Species Studies of ASD” (2023)
- Ad hoc reviewer, NIH BRAIN Initiative R01 review panel (2022)
- Ad hoc reviewer, Chan Zuckerberg Biohub Investigators San Francisco review panel (2021)

Meeting Organization

Keystone Meeting: Mammalian Somatosensation (with Diana Bautista & Becky Seal) (2024)

Northeast Pain Meeting (with Vanna Zachariou and Victoria Abreira) (2023 – present)

Journal Reviewer

Nature, Cell, Science, Neuron, Nature Neuroscience, Nature Methods, eLife, Cell Reports, Science Advances, Nature Communications, JNeuro, PNAS (guest editor and reviewer), etc.

Mentorship:

Current

Postdoctoral Fellows

- 1) 2024 – present Anna Zhukovskaya
- 2) 2024 – present Yuki Haba (Leon Levy Fellow)
- 3) 2023 – present Aleksander Kaplan
- 4) 2023 – present Briana Nixon (HHMI-LSRF Fellow)
- 5) 2023 – present Sasha Fulton (HHMI Hannah Gray Fellow)
- 6) 2022 – present Anastasia-maria Zavitsanou (Simons Junior Fellow)

Doctoral Students

- 1) 2025 – present Tate Yawitz (Neurobiology & Behavior)
- 2) 2024 – present Viviana Vinci (Biological Sciences)
- 3) 2024 – present Yu-Young Wesley Tsai (Biological Sciences)
- 4) 2023 – present William Foster (Neurobiology & Behavior)
- 5) 2023 – present Preston Sheng (Biological Sciences)
- 6) 2023 – present Isabella Succi (Biological Sciences)
- 7) 2022 – present Brittany Bistis (Biological Sciences)

Technician

- 1) 2025 – present Simon Downes Toney

Undergraduates

- 1) 2026 – present Mayssam Mohamed, Neuroscience and Behavior
- 2) 2025 – present Ali Jomadi, Neuroscience and Behavior
- 3) 2025 – present Vivian Babich, Neuroscience and Behavior
- 4) 2025 – present Jerry Lyu, Neuroscience and Behavior
- 5) 2025 – present Wiam Alhumood, Neuroscience and Behavior
- 6) 2025 – present Berra Köse, Neuroscience and Behavior
- 7) 2025 – present Emmanuel Okeke, Neuroscience and Behavior

- 8) 2025 – present Carolina Abascal, Neuroscience and Behavior
- 9) 2025 – present Erin Yoo
- 10) 2023 – present Ashar Khan, Neuroscience and Behavior

Alumni (→ last known position)

Postdoctoral Fellows

- 1) 2022 – 2024 Andre Toussaint → Adjunct Instructor
- 2) 2021 – 2024 Anissa Jhumka → unknown
- 3) 2018 – 2021 Heather Rossi → Senior Research Investigator at UPenn

PhD Completions

- 1) 2020 – 2024 Ryan Schwark → Curation Scientist, Fulgent Technologies
- 2) 2020 – 2024 Justin Burdge → Co-Founder and CEO of Tactorum Inc.
- 3) 2018 – 2022 Melanie Schaffler → Regular Writer at Novo Nordisk
- 4) 2018 – 2022 Leah Elias → Jane Coffin Child Postdoctoral Fellow at Johns Hopkins University

Technicians

- 1) 2023 – 2024 Alexis Knight → Clinical research associate at Columbia University
- 2) 2022 – 2023 Victoria Saltz → PhD student at Columbia University
- 3) 2021 – 2022 Jared Boyce → MD-PhD student at Wisconsin-Madison
- 4) 2020 – 2022 Isabella Succi → PhD student in the Abdus-Saboor lab at Columbia University
- 5) 2018 – 2021 William Foster → PhD student in the Abdus-Saboor lab at Columbia University
- 6) 2018 – 2020 Jessica Jones → PhD at University of Washington → Senior scientist at Genentech

Undergraduates

- 1) 2024–2025 Simon Toney → technician in the Abdus-Saboor lab at Columbia University
- 2) 2023–2025 Amanda Arnold → Fulbright Scholar
- 3) 2023–2025 Leah Yadessa → Intern at Pfizer
- 4) 2023–2025 Sofia Marin-Quiros → tech startup
- 5) 2023–2024 Olaedo Udensi
- 6) 2023–2024 Maximillian Comfere
- 7) 2022–2024 Jake Kothandaraman
- 8) 2022–2024 Melody Gomez → technician at Columbia University
- 9) 2022–2024 Sarah Sorensen Ogata → Medical Assistant - Street Medic on Skid Row
- 10) 2022–2024 Abednego Delinois → technician at Yale University
- 11) 2023 –2024 Sevilla Duran → Master’s student at Stanford University
- 12) 2023–2024 Aishat Bakare
- 13) 2021–2024 Simon Ogundare → MD-PhD student at Columbia University
- 14) 2022–2023 Alexis Knight → technician at Columbia University
- 15) 2022–2023 Jonathan Etricks → CBO Analyst at Mount Sinai Health System
- 16) 2021–2023 Alexis Marshall → PhD student at University of Arizona
- 17) 2021–2023 Wadzanayi Michelle Mayiseni → post-bac at Yale University
- 18) 2021–2023 Phaelen Chang → post-bac at Memorial Sloan Kettering
- 19) 2019–2021 Justin Arnold → MD student at Northwestern University
- 20) 2019–2021 Lucie Pham → MD student at Rutgers University
- 21) 2019–2020 Samuel Kaufmann → Research Fellow at Silver Lining
- 22) 2015–2019 Justin Burdge → PhD student in Abdus-Saboor lab → Co-Founder and CEO of Tactorum Inc.
- 23) 2019 Emma Lu
- 24) 2018–2019 Migyana Thomas

Summer Interns

- 1) 2026 Massiel Velarde Perez; SPURS Intern,
- 2) 2026 Sayed Hassan, Colgate University, Leadership Alliance Intern
- 3) 2025 Sheldon Garrick II, Fordham University, HHMI SURP Intern
- 4) 2025 Lesley Iyamu, Columbia University; BUMP Intern
- 5) 2024 Tyla Mcaffitty, Howard University, EE Just Scholar
- 6) 2024 Jonathan Bryson-Harvey, Columbia University, SURF Intern

- 7) 2024 Joshua Samuels, St. Paul's School
- 8) 2024 Meley Haile, Columbia University; SPURS Intern
- 9) 2024 Marianna Liistro, University of Edinburgh
- 10) 2023 Zennetta Hinojosa, UT San Antonio, Leadership Alliance Intern
- 11) 2023 Noah Loran, University of Southern California, Leadership Alliance Intern
- 12) 2023 Misha Nair, Harvard University; SPURS Intern
- 13) 2023 Francesca Whitecross, Middlebury College
- 14) 2023 Alexa Cuvilly, high school student; BRAINYAC Scholar
- 15) 2023 James Reed, high school student; BRAINYAC Scholar
- 16) 2022 Teresa Osorio, Rutgers Camden University MARC Scholar → PhD student at Johns Hopkins
- 17) 2022 Adetokunboh Osineye, Morehouse College; EE Just Scholar → Technician at SUNY Downstate
- 18) 2022 Ralph Anderson Jr., Morehouse College; EE Just Scholar
- 19) 2022 Ziad Eltabakh, LaGuardia High School; BRAINYAC Scholar
- 20) 2020 Kayla Dennis, Penn Lens program high school student
- 21) 2020 Camille Harrison, North Carolina A&T State University; SUIP intern → PhD student at UPenn
- 22) 2020 Meghan Wachira, Rutgers Camden University. → MD student at Temple University
- 23) 2019 Isabella Succi, St. Joseph's University → PhD student in the Abdus-Saboor lab
- 24) 2019 Syphane Gibbs, North Carolina A&T U, SUIP intern; → PhD at University of Virginia
- 25) 2019 Racquel Amadi, Xavier University in Louisiana; DAPPG intern → Law student at Texas Southern U.
- 26) 2019 Mariatu Fayia, Penn Lens program high school student → Masters student at Thomas Jefferson

Fellowships Awarded to Trainees

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| 2025–2028 | Leon Levy Scholar in Neuroscience to Yuki Haba (postdoctoral fellow) |
| 2025–2033 | HHMI Hannah Gray Fellowship to Sasha Fulton (postdoc to faculty fellowship) |
| 2024–2027 | HHMI-LSRF Fellowship to Briana Nixon (postdoctoral fellow) |
| 2024–2027 | Simons Junior Fellowship to Anastasia Zavitsanou (postdoctoral fellow) |
| 2024–2027 | Burroughs Wellcome Fund PDEP to Sasha Fulton (postdoctoral fellow) |
| 2023–2024 | NIH NRSA Predoctoral Fellowship to Justin Burdge (graduate student) |
| 2023–2025 | NIH D-SPAN Fellowship to Sasha Fulton (postdoctoral fellow) |
| 2022–2024 | Simons Junior Fellowship to Andre Toussaint (postdoctoral fellow) |
| 2022–2024 | Burroughs Wellcome Fund PDEP to Andre Toussaint (postdoctoral fellow) |
| 2021–2022 | NIH NRSA Predoctoral Fellowship to Melanie Schaffler (graduate student) |
| 2020–2022 | NIH NRSA Predoctoral Fellowship to Leah Elias (graduate student) |