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Assistant Professor, Department of Pathology
University of California San Diego (UCSD)
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EDUCATION

- 2013 M.D., Ph.D. University of Michigan, Ann Arbor, MI
 Advisor: Miriam Meisler, Ph.D., Department of Human Genetics
 Dissertation: Autophagy and cell-autonomy in mouse models of PI(3,5)P₂ deficiency
- 2003 B.A. *cum laude* with distinction in Music, Yale University, New Haven, CT

ACADEMIC POSITIONS

- 2022- *Member*, Neuroscience Graduate Program (NGP) at UCSD
 Member, Biomedical Sciences Graduate Program (BMS) at UCSD
- 2020- *Assistant Professor*, ladder-rank academic series (0.5 FTE), Department of Pathology,
 Neuropathology Division, UCSD
 Director, Ophthalmic Pathology, Department of Pathology, UCSD
- 2019-2020 *Instructor*, Department of Pathology & Immunology, Washington University, St. Louis, MO
- 2017-2019 *Postdoctoral Fellow*, Laboratory of Dr. Azad Bonni, Department of Neuroscience, Washington
 University, St. Louis, MO
- 2016-2020 *Physician-Scientist Training Program*, Department of Pathology & Immunology, Washington
 University, St. Louis, MO
- 2015-2017 *Fellow*, Division of Neuropathology, Department of Pathology & Immunology and Barnes-
 Jewish Hospital, Washington University, St. Louis, MO
- 2013-2015 *Resident*, Division of Anatomic Pathology, Department of Pathology & Immunology and
 Barnes-Jewish Hospital, Washington University, St. Louis, MO
- 2003-2005 *Intramural Research Training Award Fellow*, lab of Dr. Cynthia Dunbar, NHLBI, NIH, Bethesda,
 MD

HONORS & AWARDS

- 2022 Teaching Excellence Award, Department of Ophthalmology, UCSD
- 2003-2005 Predoctoral Intramural Research Training Award to train in the Laboratory of Dr. Cynthia
 Dunbar, NHLBI, NIH, Bethesda, MD
- 2003 Latin honors (*cum laude*), Yale University

LICENSURE, CERTIFICATIONS, PROFESSIONAL DEVELOPMENT

2022	National Center for Leadership in Academic Medicine (NCLAM) course
2020-	License, Medical Board of California (A170171)
2017-2020	License, Missouri State Board of Registration for the Healing Arts
2017-	Board Certified in Anatomic Pathology, American Board of Pathology
2017-	Board Certified in Neuropathology, American Board of Pathology

PUBLICATIONS

Peer-Reviewed Manuscripts

ORCID 0000-0002-1790-0086 • 31 original research papers • Total citations: 2522 as of June 2026 from Google Scholar
h-index 20 • i10 index 27

Below, the number of citations is provided only for papers with >20 citations

- 2026 Abasi LS, Tea C, Bhakta R, Le D, Phan TM, Mittal J, **Ferguson CJ***, Debelouchina GT*. Ki-67 regulates heterochromatin organization in neurons and forms condensates with heterochromatic components. Accepted in June at *Nature Communications*. *co-corresponding author
- Wong B, Payne M, Silva A, Kurniawan E, Eidman AS, Pizzo D, Rajupalem R, Lenk GM, Paulo JA, Khan T, Eskelinen EL, Gygi SP, Brown NG, Meisler MH, Mendiola AS, Gassaway BM, **Ferguson CJ**. Early-onset neuroinflammation drives neurodegeneration caused by lysosomal PI(3,5)P₂ insufficiency. *Neurobiology of Disease* 226, 107467 (2026).
- 2025 Parmar A, Nigam SK, Cai K, Falah K, Ermakov VS, Wang KC, **Ferguson CJ**. Developmentally dynamic chromatin state at loci regulating organ crosstalk by remote sensing and signaling. *Epigenetics & Chromatin* 18, 82 (2025)
- Parmar A, Srinivasan A, Krockenberger L, Augustine A, Gong O, Bullard AC, Kalra R, Ledvin L, Pilz D, Tawil J, Tea CE, Wang KC, Urso O, Kaube LM, Sun Y, Sasik R, Gaulton KJ, Fisch KM, **Ferguson CJ**. Polycomb repressive complexes 1 and 2 independently and dynamically regulate euchromatin during cerebellar neurodevelopment. *PLoS Genetics*. 2025 Sep 29;21(9):e1011843.
- Zuraski C, Yoon JS, Lieu AC, Topilow N, Pizzo D, Korn BS, Kikkawa DO, **Ferguson C**, Liu CY. Periostin: a promising biomarker in nonspecific orbital inflammation and orbit-involving IgG4 disease. *Orbit*. 2025 Jun 11:1-8
- Chen H, **Ferguson CJ**, Mitchell DC, Risch I, Titus A, Paulo JA, Hwang A, Beck LK, Lin TH, Gu W, Song SK, Yuede CM, Yano H, Griffith OL, Griffith M, Gygi SP, Bonni A, Kim AH. The Hao-Fountain syndrome protein USP7 regulates neuronal connectivity in the brain via a novel p53-independent ubiquitin signaling pathway. *Cell Reports*. 2025 Feb 25;44(2):115231.
- 2023 Ledvin L, Gassaway BM, Tawil J, Urso O, Pizzo D, Welsh KA, Bolhuis DL, Fisher D, Bonni A, Gygi SP, Brown NG, **Ferguson CJ**. The Anaphase-Promoting Complex controls a ubiquitination-phosphoprotein axis in chromatin during neurodevelopment. *Developmental Cell*. 2023 Dec 4;58(23):2666-2683.e9.

Lee TC, Topilow NJ, Ting MA, Estrella M, Liu CY, Korn BS, **Ferguson CJ**, Kikkawa DO. Ectopic fibrous dysplasia presenting as a well-circumscribed orbital mass. *Ophthalmic Plast Reconstr Surg*. 2023 Mar-Apr;39(2):e40-43.

- 2022 **Ferguson CJ**, Urso OU, Bodrug T, Gassaway BM, Watson ER, Prabu JR, Lara-Gonzalez P, Martinez- Chacin RC, Brigatti KW, Puffenberger EG, Taylor CM, Haas-Givler B, Wu DY, Strauss KA, Jinks RN, Desai A, Gabel HW, Gygi SP, Schulman BA, Brown NG, Bonni A. APC7 mediates ubiquitin signaling in constitutive heterochromatin in the developing mammalian brain. *Molecular Cell*. 2022 Jan 6; 82(1):90–105.e.13.

Recommended by H1Connect (formerly Faculty of 1000) by Hiro Yamano and Kazuyuki Fujimitsu.

- 2021 McNulty SN, Scheweteye KE, **Ferguson C**, Storer CE, Ansstas G, Kim AH, Gutmann DH, Rubin JB, Head RD, and Dahiya S. *BRAF* mutations may identify a clinically distinct subset of glioblastoma. *Scientific Reports* 2021 Oct 8; **11**(1):19999.

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Reddy NC, Majidi SP, Kong L, Nemera M, **Ferguson CJ**, Moore M, Goncalves TM, Liu HK, Fitzpatrick JA, Zhao G, Yamada T, Bonni A, Gabel HW. CHARGE syndrome protein CHD7 regulates epigenomic activation of enhancers in granule cell precursors and gyrification of the cerebellum. *Nature Communications* 2021 Sep 29; 12(1):5702.

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- 2019 Maamari RN, Stunkel L, Kung NH, **Ferguson CJ**, Tanabe J, Schmidt RE, Dahiya S, Dhand A, Van Stavern GP, Rajagopal R, and Harocopos GJ. Acute posterior multifocal placoid pigment epitheliopathy complicated by fatal cerebral vasculitis. *Journal of Neuro-ophthalmology*. 2019 Jun; 39(2): 260-267.

- 2018 Binder ZA, Thorne AH, Bakas S, Wileyto EP, Bilello M, Akbari H, Rathore S, Ha SM, Zhang L, **Ferguson CJ**, Dahiya S, Bi WL, Reardon DA, Idbaih A, Felsberg J, Hentschel B, Weller M, Bagley SJ, Morrisette JJD, Nasrallah MP, Ma J, Zanca C, Scott AM, Orellana L, Davatzikos C, Furnari FB, O'Rourke DM. Epidermal growth factor receptor extracellular domain mutations in glioblastoma present opportunities for clinical imaging and therapeutic development. *Cancer Cell*. 2018 Jul 9; 34(1):163-177.e7.

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Akbari SHA, Somasundaram A, **Ferguson CJ**, Roland JL, Smyth MD, Strahle JM. Focal traumatic rupture of a dermoid cyst in a pediatric patient: case report and literature review. *Childs Nerv Syst*. 2018 Dec;34(12):2485-2490.

Kim AE, Kang P, Bucelli RC, **Ferguson CJ**, Schmidt, RE, Varadhachary AS, Day, GS. Autoimmune encephalitis with multiple autoantibodies: A diagnostic and therapeutic challenge. *Neurologist*. 2018 Mar;23(2):55-59.

Day GS, Gordon BA, Perrin RJ, Cairns, NJ, Beaumont H, Schweteye K, **Ferguson CJ**, Sinha N, Bucelli RC, Musiek ES, Ghoshal N, Rosana-Ponisio M, Vincent B, Mishra S Jackson K, Morris JC, Benzinger TS, Ances BM. In vivo [¹⁸F]-AV-1451 tau-PET imaging in sporadic Creutzfeldt-Jakob disease. *Neurology*. 2018 Mar 6;90(10):e896-e906.

Cited by 31. See also comment by Yuan and Hu, Neurology 2019 Jan 15;92(3):149.

Johanns TM, **Ferguson CJ**, Grierson PM, Dahiya S, Ansstas G. Rapid clinical and radiographic response with combined Dabrafenib and Trametinib in adults with BRAF-

- mutated high-grade glioma. *J. Natl. Compr. Canc. Netw.* 2018 Jan; 16(1): 4–10.
Cited by 76
- 2017 Kang P, Bucelli RC, **Ferguson CJ**, Corbo JC, Kim AH, Day GS. Teaching Neuro *Images*: Cerebral amyloid angiopathy-related inflammation presenting with isolated leptomeningitis. *Neurology* 2017 Aug 8;89(6) e66-67.
- 2016 Johanns TM, Miller CA, Dorward IG, Tsien C, Chang E, Perry A, Uppaluri R, **Ferguson CJ**, Schmidt RE, Dahiya S, Ansstas G, Mardis ER, Dunn GP. Immunogenomics of hypermutated glioblastoma: a patient with germline POLE deficiency treated with checkpoint blockade immunotherapy. *Cancer Discovery*. 2016 Nov;6(11):1230-1236.
Cited by 335
- Orandi AB, Eutsler E, **Ferguson C**, White AJ, Kitcharoensakkul M. Sarcoidosis presenting as granulomatous myositis in a 16-year-old adolescent. *Pediatr Rheumatol Online J*. 2016 Nov 10;14(1):59.
- 2014 Baulac S, Lenk GM, Dufresnois B, Ouled Amar Bencheikh B, Couarch P, Renard J, Larson PA, **Ferguson CJ**, Noé E, Poirier K, Hubans C, Ferreira S, Guerrini R, Ouazzani R, El Hachimi KH, Meisler MH, Leguern E. Role of the phosphoinositide phosphatase FIG4 gene in familial epilepsy with polymicrogyria. *Neurology*. 2014 82:1068-1075.
Cited by 105
- 2012 Zhang Y, McCartney AJ, Zolov SN, **Ferguson CJ**, Meisler MJ, Sutton MJ, Weisman LS. Modulation of synaptic function by VAC14, a protein that regulates the phosphoinositide PI(3,5)P₂. *EMBO Journal*. 2012 Aug 15;31(16):3442-56.
Cited by 78
- 2012 **Ferguson CJ***, Lenk GM*, Jones JM, Grant AE, Winters JJ, Dowling JJ, Giger RJ, Meisler MH. Neuronal expression of Fig4 is both necessary and sufficient to prevent spongiform neurodegeneration. *Human Molecular Genetics*. 2012 Aug 15;21(16):3525-34. *co-first author
Cited by 67
- 2011 Winters JJ*, **Ferguson CJ***, Lenk GM, Giger-Mateeva VI, Shrager P, Meisler MH, Giger RJ. Congenital CNS hypomyelination in the Fig4 null mouse is rescued by neuronal expression of the PI(3,5)P₂ Phosphatase Fig4. *Journal of Neuroscience*. 2011 Nov 30;31(48):17736-51. *co-first author
Cited by 55
- Nicholson G, Lenk GM, Reddel SW, Grant AE, Towne CF, **Ferguson CJ**, Simpson E, Scheuerle A, Yasick M, Hoffman S, Blouin R, Brandt C, Coppola G, Biesecker LG, Batish SD, Meisler MH. Distinctive genetic and clinical features of CMT4J: a severe neuropathy caused by mutations in the PI(3,5)P₂ phosphatase FIG4. *Brain* 2011 Jul;134(Pt 7):1959-71.
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- Lenk GM, **Ferguson CJ**, Chow CY, Jin N, Jones JM, Grant AE, Zolov SN, Winters JJ, Giger RJ, Dowling JJ, Weisman LS, Meisler MH. Pathogenic mechanism of the FIG4 mutation responsible for Charcot-Marie-Tooth disease CMT4J. *PLoS Genet*. 2011 Jun;7(6):e1002104.
Cited by 147
- 2009 **Ferguson CJ**, Lenk GM, Meisler MH. Defective autophagy in neurons and astrocytes from

mice deficient in PI(3,5)P₂. *Human Molecular Genetics*. 2009 Dec 15;18(24):4868-78.
Cited by 247

- 2006 Bauer TR Jr, Hai M, Tuschong LM, Burkholder TH, Gu YC, Sokolic RA, **Ferguson C**, Dunbar CE, Hickstein DD. Correction of the disease phenotype in canine leukocyte adhesion deficiency using ex vivo hematopoietic stem cell gene therapy. *Blood*. 2006 Nov 15;108(10):3313-20.
Cited by 53

Seggewiss R, Pittaluga S, Adler RL, Guenaga FJ, **Ferguson C**, Pilz IH, Ryu B, Sorrentino BP, Young WS, Donahue RE, von Kalle C, Nienhuis AW, Dunbar CE. Acute myeloid leukemia is associated with retroviral gene transfer to hematopoietic progenitor cells in a rhesus macaque. *Blood*. 2006 May 15;107(10):3865-7.
Cited by 151

- 2005 Calmels B, **Ferguson C**, Laukkanen MO, Adler R, Faulhaber M, Kim HJ, Sellers S, Hematti P, Schmidt M, von Kalle C, Akagi K, Donahue RE, Dunbar CE. Recurrent retroviral vector integration at the Mds1/Evi1 locus in nonhuman primate hematopoietic cells. *Blood*. 2005 Oct 1;106(7):2530-3.
Cited by 179

- 2004 Hematti P*, Hong BK*, **Ferguson C***, Adler R, Hanawa H, Sellers S, Holt IE, Eckfeldt CE, Sharma Y, Schmidt M, von Kalle C, Persons DA, Billings EM, Verfaillie CM, Nienhuis AW, Wolfsberg TG, Dunbar CE, Calmels B. Distinct genomic integration of MLV and SIV vectors in primate hematopoietic stem and progenitor cells. *PLoS Biology*. 2004 Dec;2(12):e423. *co-first author
Cited by 331

Reviews

- 2010 **Ferguson CJ**, Lenk GM, Meisler MH. PtdIns(3,5)P₂ and autophagy in mouse models of neurodegeneration. *Autophagy*. 2010 Jan 1; 6:1,1-2. *Cited by 44*
- 2005 **Ferguson C**, Larochelle A, Dunbar CE. Hematopoietic stem cell gene therapy: dead or alive? *Trends in Biotechnology*. 2005 Dec;23(12):589-97. *Cited by 34*

Meeting Abstracts, Posters

- 2019 **C Ferguson**, Azad Bonni. Ubiquitin signaling in the epigenetic regulation of neuronal development. *Journal of Neuropathology & Experimental Neurology* 78(6), 528.
- 2017 Gregory S Day, Brian A Gordon, Richard J Perrin, Nigel J Cairns, Katherine E Schwetye, **Cole J Ferguson**, Namita Sinha, M Rosana Ponisio, Benjamin D Vincent, Helen Beaumont, Robert C Bucelli, Nupur Ghoshal, Erik S Musiek, John C Morris, Tammie LS Benzinger, Beau M Ances. [IC-P-180]: Flortaucipir Tau-PET specificity is maintained in patients with pathologically confirmed Creutzfeldt-Jakob Disease. *Alzheimer's & Dementia* 13, 7S part 2:134.
- 2016 Tanner Johanns, Chris Miller, Ian Dorward, Arie Perry, **Cole Ferguson**, Robert Schmidt, Sonika Dahiya, George Anstas, Christina Tsien, Elaine Mardis, Gavin Dunn. Evolution of clonal architecture and neoantigen landscape in an ultramutated glioblastoma treated with immunotherapy: a case report of a patient with a germline POLE deficiency. *Neuro-Oncology*

18:26

- 2015 **C Ferguson**, K Schweteye, J Luo, S Dahiya. Analysis of TCGA gene expression data set in glioblastoma tumors that harbor mutation of EGFR or BRAF. *Journal of Neuropathology & Experimental Neurology* 74(6), 636-7
- 2011 Y Zhang, A McCartney, S Zolov, **C Ferguson**, M Meisler, M Sutton, L Weisman. VAC14, a Protein that Regulates the Phosphoinositide PI (3, 5) P2, Localizes to Synapses and Regulates Synaptic Function. *Molecular Biology of the Cell* Vol. 22.
- 2005 Ruth Seggewiss, Stefania Pittaluga, Rima Adler, **Cole Ferguson**, Elio F Vanin, Patrick F Kelly, Robert E Donahue, Brian P Sorrentino, Arthur W Nienhuis, Cynthia E Dunbar. 387. Myeloid sarcoma associated with gene marking of hematopoietic stem cells in a rhesus macaque. *Molecular Therapy* 11:150
- B Calmels, **C Ferguson**, R Adler, S Sellers, C Dunbar. Recurrent retroviral vector integration at the MDS1-EVI1 locus in rhesus long-term repopulating haematopoietic stem cells. *Bone Marrow Transplantation* 35, S17-S17
- 2004 Rima L Adler, Peiman Hematti, Boris Calmels, **Cole J Ferguson**, Keyvan Keyvanfar, Colin Wu, Dean Follmann, Cynthia E Dunbar. Analysis of Clonal Contributions to T Lymphoid and Myeloid Lineages during Early Hematopoiesis Following Autologous Transplantation in the Rhesus Macaque. *Blood* 104(11):2672
- Boris Calmels, **Cole Ferguson**, Rima Adler, Stephanie Sellers, Mikko Laukkanen, Peiman Hematti, Robert Donahue, Cynthia Dunbar. Recurrent retroviral vector integration at the MDS1-EVI1 locus in Rhesus long-term repopulating haematopoietic stem cells. *Blood*, 104(11):292.

RESEARCH SUPPORT

Ongoing

- 2024-2029 R01NS138924 (NINDS): Regulation of phase separation in neuronal heterochromatin
Role: PI
- 2024-2026 R21NS139210 (NINDS): Recognition and ubiquitination of neurodevelopmental chromatin regulators
Role: PI
- 2023-present T32 GM145427: Genetics Training Grant (supports Challana Tea, doctoral student)

Completed

- 2019-2024 K08 HD099314 (NICHD): Ubiquitin signaling in epigenetic regulation of neuronal development
Role: PI
- 2008-2010 Systems and Integrative Biology Training Grant, Molecular & Integrative Physiology Department (T32 GM008322)

2003-2005 Predoctoral Intramural Research Training Award (IRTA) for studying hematopoiesis in the laboratory of Dr. Cynthia Dunbar, NHLBI, NIH, Bethesda, MD

INVITED TALKS

2024 “Targeted and unbiased approaches to understand neurologic disease in mutant mice.” Department of Chemistry & Biochemistry, Brigham Young University, Provo, UT. September 12.

2024 “-Omics approaches to study neurologic disease in mutant mice.” Department of Pathology & Immunology, Washington University School of Medicine, St. Louis, MO. May 24.

2024 “Understanding the pathogenesis of neurologic disease through -omics approaches in mutant mice.” Neurobiology Department seminar series, University of Alabama-Birmingham, AL. January 11.

2021 “Biopsy evaluation of pigmented choroidal tumors.” Ophthalmology Grand Rounds. UC San Diego. April 26.

2020-2022 *COVID pandemic*

2019 “Ubiquitin Signaling in the Epigenetic Pathogenesis of a Novel Neurodevelopmental Disorder.” 95th Annual Meeting of the American Association of Neuropathologists. Atlanta, GA, June 6-9.

2010 “Impaired Macroautophagy in Neurodegeneration due to Altered PI(3,5)P₂ Signaling,” Gordon Research Conference on Autophagy. Lucca, Italy. April 25-30.

2005 “Analysis of Common Integration Sites into the Genome of Rhesus Macaque Long-Term Repopulating Cells,” American Society of Gene Therapy 8th Annual Meeting, Minneapolis, MN, June 1-5.

UNIVERSITY LECTURES

2021 “Biopsy evaluation of pigmented choroidal tumors.” Ophthalmology Grand Rounds. UC San Diego. April 26.

2021 “Regulation of chromatin by ubiquitin signaling in the brain” Pathology Research Lecture Series. April 21.

UNIVERSITY SERVICE

2020- Interviewer for applicants to Anatomic and Neuropathology (AP/NP) residency/fellowship

2025-2026 Admissions committee, Medical Scientist Training Program (MSTP), M.D./Ph.D. program

2023-2025 Primary Representative to UCSD Academic Senate for the Pathology Department

2022-2026 Research Retreat Committee, Pathology Department

2024 Search committee for computational biologist, Pathology Department

2022-2024	Admissions committee, BMS Ph.D. program
2022-2024	Admissions committee, NGP Ph.D. program
2021-2024	Moderator, Undergraduate Research Conference

PROFESSIONAL SERVICE

2026-present	Director, Target ALS Neuropathology Core at UCSD
2025	Reviewer, <i>Proceedings of the National Academy of Sciences (PNAS)</i>
2023	Guest Editor, Special issue in <i>Diagnostics</i> entitled, “Current Diagnostic Concepts of Eye Pathology”

TEACHING

2026–	<i>Lecturer</i> , Advanced topics in Neuroscience for doctoral students (NEUG221) - Epigenetics and Gene Regulation in the Brain). Elective seminar for doctoral students in Neuroscience (~12 students). Deliver 1 research lecture per year followed by paper discussion.
2023–	<i>Co-Director</i> , Genetics and Genomics (BIOM252). Required course for doctoral students in Biomedical Sciences (BMS) concentrating in genetics and graduate students enrolled in the Genetics training grant (T32 GM145427). Deliver 1 lecture per year, organize an additional 9 weeks of faculty presentations (20-25 students)
2023–	<i>Lecturer</i> , Basic Cellular and Molecular Neuroscience for doctoral students (NEUG200A). Required course for doctoral students in Neuroscience (~30 students). Deliver 1 research lecture per year followed by paper discussion.
2023	<i>Discussion leader</i> , Neurosciences Graduate Program Research Rounds (NEUG276). Required course for doctoral students in Neuroscience. Led discussions of 2 student research talks per week (1 hour per week for 10 weeks)
2020-2025	Board preparation for Ophthalmology and Pathology residents (~10 hours of lectures per year).
2020-2025	Case-based teaching of Anatomic Pathology residents and Neuropathology fellows on the eye pathology service (40 weeks per year as attending physician)
2020-2026	Four-week Ophthalmic Pathology 4 th year medical student elective (PATH427). Designed student-specific curricula in eye pathology (~12 weeks of medical student enrollment per year)
2020-2026	Two-week Ophthalmic Pathology 3 rd year medical student selective (PATH412). Designed student-specific curricula in eye pathology (~8 weeks of medical student enrollment per year)
2020–	Mentoring up (BIOM203). Required course for graduate students in the BMS program (~15

students). Case-based interactive discussion (3 hour-long session each year)

MENTORING

Graduate Students

- 2025– Jai Ramchandra, doctoral student in Biomedical Sciences.
Project: Histone ubiquitination control of DNA methylation in the brain.
- 2023– Challana Tea, doctoral candidate in Chemistry & Biochemistry (unanimously and enthusiastically advanced to candidacy).
Project: BAP1 regulation of chromatin in the brain.
Special skills: Hi-C genome folding; established the lab's embryonic stem cell facility.
Awards: Genetics Training Grant (T32).

Neuropathology Fellows

- 2025 Kari Hird, MD, now clinical faculty in the UCSD Department of Pathology
- 2024 Connor Zuraski, MD, MBA, recruited back from Stanford as an attending neuropathologist at UCSD
- 2023 Melanie Estrella, DO, currently an attending in the San Diego Medical Examiner's office
- 2022 Vanessa Goodwill, MD, currently an attending neuropathologist at UCSD
- 2022 Ian Dryden, MD, currently an attending pathologist at the Mayo Clinic

Thesis committees

- 2025– Melina Brunelli, regulation of chromatin-modifying enzymes, Sam Myers lab at the La Jolla Institute for Immunology, Biomedical Sciences Ph.D. Program
- 2025– Jeffrey Keller, chromatin regulation in neurons, Hiruy Meharena lab at UCSD, Biomedical Sciences Ph.D. Program
- 2025– Isabella Ruud, engineering enzymes to clear toxic protein aggregates, Alejandro Chavez lab at UCSD, Biomedical Sciences Ph.D. Program
- 2025– Rushabh Bhakta, phase separation of heterochromatin, Galia Debelouchina lab at UCSD, Chemistry & Biochemistry Ph.D. Program
- 2023– Minerva Contreras, how astrocytes tune plasticity in the visual cortex, Nikola Allen lab at the Salk Institute, Neurosciences Ph.D. Program

Minor proposal committees

- 2025 Parwana Khazi, BMS and M.D./Ph.D. programs, Chair of minor proposal committee
- 2024 Reema Apte, BMS Ph.D. program, Chair of minor proposal committee
- 2023 Jeff Keller, BMS Ph.D. program, Chair of minor proposal committee

High School student volunteer researcher

2022-2026 Addison Bullard

Undergraduates (UCSD unless otherwise noted)

Table for the 22 undergraduates begins on the next page

Years	Name	Degree / major	Project in the lab	Publications & Awards	Current position
2016–22 (WashU & UCSD)	Olivia Urso	B.S., Neuroscience	APC ubiquitin signaling in neurodevelopment	Ferguson et al., <i>Mol Cell</i> , Ledvin et al., <i>Dev Cell</i> 2023, Parmar et al., <i>PLoS Genet</i> 2025	UC Davis School of Veterinary Medicine
2020–24	Anjali Srinivasan	B.S., Bioinformatics & Systems Biology; Senior Honors thesis	Polycomb computational genomics	Parmar et al., <i>PLoS Genet</i> 2025	Ph.D. student, Bioinformatics & Systems Biology, UCSD
2020–23	Leya Ledvin	B.S., Neurobiology	APC/Aurora B chromatin signaling in neurodevelopment	Ledvin et al., <i>Dev Cell</i> 2023; NSF Graduate Research Fellowship	Ph.D. student, Neurosciences Graduate Program, UCSD
2020–22	Larissa Kaube	B.S., Biochemistry	Computational chromatin genomics	Parmar et al., <i>PLoS Genet</i> 2025	Researcher, Conrad Prebys Center for Chemical Genomics, Sanford Burnham
2020–22	Lena Krockenberger	B.S., Bioinformatics, <i>magna cum laude</i> ; Senior Honors thesis	Computational chromatin genomics	Parmar et al., <i>PLoS Genet</i> 2025	Ph.D. candidate, Bioinformatics, UCLA
2020–22	Dylan Pilz	B.S., Bioinformatics	Computational chromatin genomics	Parmar et al., <i>PLoS Genet</i> 2025	Programmer, Andersen Lab at the Scripps Research Institute; recently won Best Poster at the Wastewater & Environmental Surveillance Meeting 2026, Ghana
2022–25	Jonathan Tawil	B.S., Human Biology	APC ubiquitin signaling in neurodevelopment	Ledvin et al., <i>Dev Cell</i> 2023 Parmar et al., <i>PLoS Genet</i> 2025	Medical school
2022–24	Riya Kalra	B.S., Bioinformatics	Polycomb computational genomics	Parmar et al., <i>PLoS Genet</i> 2025	M.S., Biostatistics, Columbia University
2022–24	Owin Gong	B.S., Bioinformatics and Math–Computer Science	Polycomb computational genomics	Parmar et al., <i>PLoS Genet</i> 2025	Master’s program (bioinformatics)

Years	Name	Degree / major	Project in the lab	Publications & Awards	Current position
2022–24	Abijith Augustine	B.S., Bioinformatics	Polycomb computational genomics	Parmar et al., <i>PLoS Genet</i> 2025	Master's program (bioinformatics)
2023–26	Kelly Wang	B.S./M.S., Molecular & Cell Biology, minor in Chemistry; PATHS scholar	BAP1 and the formation of chromatin identity	First author, study under review at <i>Mol Cell</i> ; Parmar et al., <i>PLoS Genet</i> 2025 and <i>Epigenetics & Chromatin</i> 2025	Research associate, Broad Institute of MIT and Harvard
2023–26	Bridget Wong	B.S., Chemistry	Lysosomal PI(3,5)P2 and neuroinflammation	Wong et al., <i>Neurobiol Dis</i> 2026	Lab manager, lab of Ardem Patapoutian lab at Scripps Research Institute
2023–26	Aditya Parmar	B.S., Bioengineering: Bioinformatics	Polycomb/H2Aub and organ-crosstalk chromatin; computational method development	Parmar et al., <i>PLoS Genet</i> 2025 and Parmar et al., <i>Epigenetics & Chromatin</i> 2025	M.S., Bioinformatics & Systems Biology, UCSD (Mali lab)
2023–24	Taimur Khan	B.S., Neurobiology	Lysosomal proteomics	Wong et al., <i>Neurobiol Dis</i> 2026	undergraduate
2024–25	Donald Le	B.S., Biochemistry	Ki-67 and heterochromatin (biochemistry)	Abasi et al., <i>Nat Commun</i> 2026	—
2025–	Zakir Alibhai	B.S., Bioinformatics	Genome-folding and DNA-tagging analysis; built analysis pipelines and a chromatin-mapping web application	—	undergraduate researcher
2025–	Ayana Perera	B.S., Biology: Bioinformatics	Chromatin mapping of the histone variant H2A.z	—	undergraduate researcher
2025–	Milo Lin	B.S., Biology: Bioinformatics	Chromatin mapping of the histone variant H2A.z	—	undergraduate researcher
2025–	Shreya Kashyap	B.S., Bioengineering: Bioinformatics; PATHS scholar	Chromatin regulation in stem cells	—	undergraduate researcher
2025–	Zhendong Song	B.S., Human Biology	Mice lacking the H2Aub writers Ring1A/Ring1B	—	undergraduate researcher

Years	Name	Degree / major	Project in the lab	Publications & Awards	Current position
2025–	Rachael Cui	B.S., Biology, minor in Cognitive Science and History	Introducing patient BAP1 mutations into human stem cells	—	undergraduate researcher
2025–	Emma Kurniawan	B.S., Molecular & Cellular Biology, minor in Chemistry	Lysosomal lipid pathway in neuroinflammation and neurodegeneration	Wong et al., <i>Neurobiol Dis</i> 2026	undergraduate researcher