CURRICULUM VITAE

GENERAL INFORMATION

Name: Eric J. Huang, MD, PhD

Position: Professor (Ladder Rank)
Department of Pathology
UCSF School of Medicine

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EDUCATION

1979 – 1986	National Taiwan University, Taipei, Taiwan	M.D.	Medicine
1988 – 1993	Cornell University/Sloan Kettering Institute, New York	Ph.D.	Molecular Biology
1993 – 1995	University of California San Francisco	Residency	Pathology
1995 – 1997	University of California San Francisco	Fellowship	Pathology
1997 – 2000	Howard Hughes Medical Institute	Postdoc	Neuroscience

LICENSES, CERTIFICATION

1995 – present California Medical Board, Physician and Surgeon

1997 – present Certified, American Board of Pathology (Anatomic Pathology and Neuropathology)

PRINCIPAL POSITIONS HELD

2000 – 2005	University of California San Francisco	Assistant Professor	Pathology
2005 – 2009	University of California San Francisco	Associate Professor	Pathology
2009 – present	University of California San Francisco	Professor	Pathology

OTHER POSITIONS HELD CONCURRENTLY

2000 – present	San Francisco VA Medical Center	Staff Pathologist
2001 – present	UCSF Medical Center	Attending Neuropathologist
2001 – present	BMS Graduate Program, UCSF	Member
2005 – 2014	Admission Committee, UCSF School of Medicine	Member
2005 – present	Neuroscience Graduate Program, UCSF	Member
2007 – 2009*	San Francisco VAMC, Pathology Service	Acting Chief
2009 – present*	San Francisco VAMC, Autopsy Service	Chief
2009 – present*	Pediatric Neuropathology Research Lab, UCSF	Director

2009 – 2015*	UC Pediatric Neuropathology Consortium	Director
2009 – 2015	NS201B UCSF Neuroscience Graduate Program	Course Director
2010 – present	UCSF Developmental Stem Cell Biology Program	Member
2010 – present*	TS Benedict Yen Memorial Lectureship Fund	Managing Faculty
2010 – 2014*	UCSF Graduate Education in Medical Sciences (GEMS)	Director
2011 – 2018	Admission Committee, Neuroscience Graduate Program	Member
2012 – 2017*	Neuroscience Graduate Program Core Curriculum	Director
2013 – 2018*	Neuroscience Graduate Program Executive Committee	Member
2016 – present*	Division of Experimental Neuropathology, Departments of Pathology, Neurology & Psychiatry & Weill Institute for Neurosciences	Director
2018 – present	Admission Committee, BMS Graduate Program	Member
2019 – present*	Dept of Pathology, UCSF	Vice Chair for Research

(**leadership position*)

HONORS AND AWARDS

1990 – 1991	Frank Lappin Horsfall, Jr. Fellowship	Sloan-Kettering Cancer Center
1991	Vincent du Vigneaud Award of Excellence	Cornell University
1997 – 1999	Postdoctoral Fellowship for Physicians	Howard Hughes Medical Institute
1998	Weil Award for the Best Paper in Experimental Neuropathology	AANP Annual Meeting
1999	Advanced Career Development Award	Dept of Veterans Affairs
2000	Young Investigator Award	NCIRE & SFVAMC
2000 – 2005	Presidential Early Career Award for Scientists and Engineers (PECASE)	Dept of Veterans Affairs
2000 – present	Merit Review Award	Dept of Veterans Affairs
2002 – 2007	Independent Scientist Award (K02)	NINDS, NIH
2009 – 2014	Mid-career Investigator Award (K26)	NCRR/NIH
2012 – 2014	Vice Chair (2012) & Chair (2014)	Gordon Research Conference, Molecular & Cellular Neurobiology
2015	Keynote Lecture Neurotrauma Symposium	University of Toronto, Canada
2016	DeArmond Lecture	AANP Annual Meeting
2017	Stowell Lecture	UC Davis
2018	Keynote Speaker	University of Virginia, Neuroscience Postdoctoral Fellow Symposium
2018	Keynote Speaker	27th Intl Complement Workshop
2018	Keynote Speaker	11th International Conference on Frontotemporal Dementias (ICFTD)

2019	BMS Mentoring Award	UCSF BMS Graduate Program
2019 – 2023	Vice President Elect (2019-20), Vice President (2020-21) President Elect (2021-22), President (2022-23)	AANP
2021	Organizer, Keystone Symposium on Neurodegenerative Diseases	Keystone Symposia

KEYWORS/AREAS OF INTEREST
Microglia, Neuroinflammation, Neurodegeneration, Autophagy, Endolysosomes, Neurodevelopmental Disorders, Neuronal Migration, Differentiation, Interneurons

CLINICAL ACTIVITY SUMMARY
I serve as an attending neuropathologist in the Autopsy Service at Moffitt-Long Hospital at UCSF Medical Center (5 months per year) and as the Director of the Autopsy Service at San Francisco VA Medical Center. Each year I attend 5 months of autopsy neuropathology service at Moffitt-Long Hospital, supervising 12-15 pathology residents and fellows. I have served in this capacity for the past 19 years.

CLINICAL SERVICES

2000 – present	Attending Neuropathologist, Autopsy Service, UCSF Medical Center	11 months/year
2010 – present	Chief, Autopsy Service, San Francisco VA Medical Center	5 months/year

PROFESSIONAL ORGANIZATIONS

1995 – present	American Association of Neuropathologists (AANP)
2000 – present	American Society of Cell Biology (ASCB)
2002 – present	Society of Neuroscience (SfN)

EDITORIAL SERVICES

2010 – present	Member, Brain Pathology, Editorial Board
2012 – 2018	Associate Editor, Journal of Neuroscience, Editorial Board
2016 – present	Associate Editor, Brain Research

SERVICE TO PROFESSIONAL PUBLICATIONS

2000	J Neuroscience, J Cell Biology (Ad hoc reviewer)
2001	J Cell Biology, Neuroscience, FEBS Letters, Neurocase (Ad hoc reviewer)
2002	Trends in Neuroscience (Ad hoc reviewer)
2003	Experimental Neurology (Ad hoc reviewer)
2004	J Cell Biology, Neurocase, J Comparative Neurology, Am J Pathology (Ad hoc reviewer)
2005	Experimental Neurology, Brain Research, Neuroscience, Cell Mol Neurobiology, Am J Pathology (Ad hoc reviewer)
2006	Am J Pathology, Development, Brain/Development/Evolution, J Neuroscience (Ad hoc reviewer)

2007	PLoS Biology, J Cell Biology, J Neurochemistry, Developmental Neurobiology, Aging Cell, Development, J Neuropath Exp Neurol, FEBS Letters (Ad hoc reviewer)
2008	Developmental Neurobiology, J Neuropath Exp Neurol, European J Cancer, Neuroscience, Development, J Neuroscience (Ad hoc reviewer)
2009	Brain Pathology, Development, Developmental Dynamics, J Neuropath Exp Neurol, J Neuroscience, Molecular Cell Biology (Ad hoc reviewer)
2010	J Cell Biology, Brain Pathology, British J Cancer, J Neuroscience, J Neuropath Exp Neurol (Ad hoc reviewer)
2011	J Neurochemistry, J Neuroscience, J Neuropath Exp Neurol, Developmental Neurobiol, Brain Pathology (Ad hoc reviewer)
2012	Annals Neurology, Brain Research, Cerebral Cortex, Development, Developmental Neurobiol, Human Molecular Genetics, J Cell Biology, J Mol Cell Biology, J Neuroscience, Learning & Memory, Neural Development, PLoS One, PNAS (Ad hoc reviewer)
2013	Annals Neurology, Brain, Developmental Neurobiology, Human Molecular Genetics, J Comparative Neurology, J Neuroscience, J Neuropath Exp Neurol, Nature Comms, PLoS One (Ad hoc reviewer)
2014	Annals Neurology, Cell Reports, Developmental Neurobiology, J Cell Biology, J Neuroscience, J Neuropath Exp Neurology, Nature Comms, Neurobiology of Disease, Wired Developmental Biology (Ad hoc reviewer)
2015	Developmental Neurobiology, J Cell Biology, J Neuroscience, J Neuropath Exp Neurology, Neuron, Stem Cells (Ad hoc reviewer)
2016	Acta Neuropath, Brain, Brain Research, FASEB J, J Cell Biology, J Neuroscience, Neuron, Nature Comms (Ad hoc reviewer)
2017	Autophagy, Brain, Cell Reports, Development, eLife, J Neuroscience, J Neuropath Exp Neurology, Neuron, PNAS, Science Advances (Ad hoc reviewer)
2018	Brain, Cell Reports, Development, eLife, J Cell Biology, J Clinical Investigation, J Neuroscience, Nature Comms, NEJM, Neuron, Nature Neuroscience, PNAS, Science Signaling (Ad hoc reviewer)
2019	Brain, Cell Metabolism, Cell Reports, Molecular Psychiatry, Nature, Nature Comms, Science Translational Medicine (Ad hoc reviewer)
2020	Nature, Brain Comms, EMBO Reports, J Cell Biology, J Clinical Investigation, JCI Insights, J Neurosci, Neuron, Science Advance (Ad hoc reviewer)

INVITED PRESENTATIONS

INTERNATIONAL

2005	School of Pharmacy, China Medical University, Taiwan	Seminar Speaker
2006	National Cheng Kung University, Tainan, Taiwan	Visiting Scholar
2006	Institute of Biomedical Sciences, Academia Sinica, Taiwan	Seminar Speaker
2006	NGF2006, Hot Topics, Lyon, France	Speaker
2006	Dept of Biology, Ecole Normale Superieure, Paris, France	Seminar Speaker
2006	Gordon Research Conference, Molecular & Cellular Neurobiology, Hong Kong, China	Short Talk Speaker
2006	11th SCBA International Meeting, San Francisco, CA, USA	Session Speaker

2007	Neurology Grand Round, National Taiwan University, Taiwan	Speaker
2007	Institute of Pharmacology, National Taiwan University, Taiwan	Seminar Speaker
2007	Institute of Molecular Biology, Academia Sinica, Taiwan	Seminar Speaker
2008	National Health Research Institute, Taipei, Taiwan	Seminar Speaker
2008	Kanazawa University 21st Century Center of Excellence (COE) International Symposium on Innovative Brain Science for "Development, Learning, Memory and Autism", Kanazawa, Japan	Invited Speaker
2008	RIKEN Center for Developmental Biology, Kobe, Japan	Invited Speaker
2008	Gordon Research Conference on Molecular and Cellular Neurobiology, Hong Kong, China	Discussion Leader
2010	School of Regenerative Medicine, Karolinska Institute Stockholm, Sweden	Invited Speaker
2010	Gordon Research Conference on Molecular and Cellular Neurobiology, Hong Kong, China	Discussion Leader
2012	Gordon Research Conference on Molecular and Cellular Neurobiology, Hong Kong, China	Speaker & Vice Chair
2013	Gordon Research Conference on Dendrites Les Diablerets, Switzerland	Speaker
2014	Gordon Research Conference on Molecular and Cellular Neurobiology, Hong Kong, China	Chair
2015	Gordon Research Conference on Neural Circuits & Behaviors, Hong Kong, China	Speaker
2015	American Society for Investigative Pathology (ASIP) Symposium "Molecular and Cellular Basis of Disease: Neuropathology as a Paradigm for Disease Processes: Advances in the Understanding of Neural Development and Disease: Cells and Circuits".	Speaker
2015	3rd Annual Symposium: Research on Concussion Spectrum Disorders, University of Toronto, Toronto, Canada	Keynote Speaker
2017	Gordon Research Conference on Glial Biology, Ventura, CA	Speaker
2017	5th Venusberg Meeting on Neuroinflammation, Bonn, Germany	Speaker
2017	Institut du Cerveau et de la Moelle épinière (ICM) Brain and Spine Institute Paris, France	Seminar Speaker
2017	Grupo de Neurosciencias de Antioqua (GNA), Universidad de Antioquia, Medellin, Colombia	Symposium Speaker
2018	Gordon Research Conference on Myelin, Myelin Through the Ages: Evolution, Development, Degeneration and Disease", Ventura, CA	Speaker
2018	International Conference on Neurodegenerative Disorders Chang Gung Memorial Hospital, Taipei, Taiwan	Distinguished Speaker
2018	11th Hershey Conference, Asilomar Conference Center Monterey, CA	Speaker
2018	27th International Complement Workshop, Santa Fe, NM	Plenary Speaker
2018	11th International Conference on Frontotemporal Dementias	Keynote Speaker

	Sydney, Australia	
2019	Keystone Symposium on “Neural Environment in Disease: Glial Responses and Neuroinflammation”	Speaker
2019	Speaker, Keystone Symposium on “Neurodegenerative Diseases: New Insights and Therapeutic Opportunities”	Speaker
2019	Speaker, Recent Advances in Rare Diseases (RARD) 2019 Conference, Bogota, Colombia	Speaker
2020	Speaker, Annual Symposium, IBMS, Academia Sinica (Cancelled due to COVID-19)	Speaker
2021	Cold Spring Harbor Meeting on “Brain Barriers”	Speaker

INVITED PRESENTATIONS – NATIONAL

2000	Dept of Pathology, Baylor College of Medicine	Seminar Speaker
2000	Dept of Pathology, University of Washington	Seminar Speaker
2001	Research Seminar for PECASE awardees, Dept of Veterans Affairs Central Office, Washington, DC	Speaker
2001	Research Seminar, National Meeting of ACOS of Research, Dept of Veterans Affairs, Albuquerque, NM	Speaker
2001	Short Course, American Association of Neuropathologists	Invited Speaker
2001	American Association of Neuropathologists (AANP)	Platform Presentation
2002	Dept of Pathology & Neurobiology, St. Jude’s Children Research Hospital	Seminar Speaker
2003	Dept of Pathology, University of Alabama Birmingham	Seminar Speaker
2004	Amyotrophic Lateral Sclerosis Association Meeting, Boston, MA	Speaker
2005	Gordon Research Conference on Neurotrophins, Newport, RI	Short Talk Speaker
2005	Annual Meeting, Society of Neuroscience, Washington, DC	Session Speaker
2005	National Cancer Institute, National Institutes of Health	Seminar Speaker
2006	Research seminar, MIND Institute, UC Davis, Davis, CA	Speaker
2006	Grand Round, Dept of Pathology & Lab Medicine, UCLA, Los Angeles, CA	Speaker
2006	Grand Round, Dept of Neurology, UCLA, Los Angeles, CA	Speaker
2006	Speaker, Research Seminar, Dept of Pathology & Lab Medicine, University of Pennsylvania, Philadelphia, PA	Speaker
2007	Research Seminar, Dept of Pathology, Yale University, New Haven, CT	Speaker
2008	Research Seminar, Dept of Pathology & Lab Medicine, UC Irvine	Speaker
2008	Neurodegeneration Platform Presentation, Annual Meeting of AANP, San Diego, CA	Session Chair
2008	Research Seminar, Genentech, Inc., South San Francisco, CA	Speaker
2009	Short Talk/Hot Topics, Gordon Research Conference on Neurotrophic Factors, Newport, RI	Speaker

2009	Dept of Pathology, Brigham & Women's Hospital, Harvard Medical School, Boston, MA	Visiting Neuropathologist
2011	Research Seminar, Dept of Pathology, Columbia University, NY	Speaker
2011	RNA Binding Proteins in Neurological Diseases, SfN Satellite Symposium, Washington, DC	Speaker
2013	Speaker, Research Seminar, Genentech, Inc., South San Francisco, CA	Speaker
2014	Neurogenetics Seminar, UCLA, Los Angeles, CA	Speaker
2014	Dept of Pathology, Northwestern University, Chicago, IL	Seminar Speaker
2014	Minisymposium, "Neurodevelopment and Disease", American Society for Investigative Pathology, San Diego, CA	Speaker
2014	UC Neurotrauma Meeting, Carmel, CA	Speaker
2015	Platform Session 7 – Neurodegeneration: Aging, FTLD, WM Disease, Annual Meeting, American Association of Neuropathologists (AANP)	Session Chair
2015	Autism BrainNet – NIH NeuroBioBank Working Group Meeting, The Simons Foundation	Speaker
2016	Scientific Symposium: Advances in mouse models of ADRD neuropathology, 2016 Fall ADC Meeting, Baltimore, MD	Speaker
2016	Stanford Neuroscience Institute, Stanford University, CA	Speaker
2016	Mini-Symposium on Frontotemporal Dementia, Stanford Burnham Prebys Medical Discovery Institute, La Jolla, CA	Speaker
2016	Department of Pathology, University of California San Diego, La Jolla, CA	Speaker
2016	The DeArmond Lecture, Annual Meeting, American Association of Neuropathologists (AANP)	Speaker
2017	Special Course on Autism, Annual Meeting, American Association of Neuropathologists (AANP)	Speaker
2017	7th California ALS Research Summit, University of Southern California, Los Angeles, CA	Speaker
2017	Newborn Medicine Research Seminar, Boston Children's Hospital, Boston, MA	Speaker
2017	The Robert E. Stowell Lecture, Department of Pathology and Laboratory Medicine, University of California (UC) Davis Health Care System, Sacramento, CA	Speaker
2017	Department of Pathology and Laboratory Medicine, University of California Irvine, Irvine, CA	Speaker
2017	Grand Round, Department of Neurology, University of California Los Angeles, Los Angeles, CA	Speaker
2017	NeuroClub, Department of Molecular, Cellular and Developmental Biology, University of California Santa Cruz, Santa Cruz, CA	Speaker
2017	Department of Pharmacology and Toxicology,	Speaker

	School of Pharmacy, University of Kansas, Kansas City, MO	
2018	Department of Molecular and Cellular Biochemistry, University of Kentucky, Lexington, KY	Seminar Speaker
2018	Department of Cell Systems and Anatomy, University of Texas San Antonio, San Antonio, TX	Seminar Speaker
2019	Burke Neurological Institute, Weill Cornell Medical College, NY	Seminar Speaker
2019	Dept of Physiology & Biophysics, SUNY Buffalo, NY	Seminar Speaker
2019	Hydrocephalus Association Workshop, St. Louis, MO	Speaker
2020	Neuroscience Seminar, Ohio State University	Speaker
2020	Dept of Neurology Seminar, University of Massachusetts	Speaker
2020	Pathology Seminar, University of Michigan	Speaker
2021	Parkard Center for ALS Research Investigator Meeting	Speaker

INVITED PRESENTATIONS – REGIONAL AND OTHER INVITED PRESENTATIONS

2001	Research Seminar Series, San Francisco VAMC	Speaker
2002	Geriatric Research, Education, and Clinical Center (GRECC) Seminar, Palo Alto VA Medical Center	Speaker
2002	UCSF BMS Graduate Program, Faculty Talk	Speaker
2004	UCSF BMS Graduate Program, Faculty Talk	Speaker
2004	Society of Chinese Bioscientists in America (SCBA), Northern California Chapter, Annual Meeting	Speaker & Moderator
2004	Neuroscience Session, UCSF BMS Graduate Program Retreat, Granibaken, CA	Speaker
2005	Research Seminar, Palo Alto VA Medical Center	Speaker
2005	Research Seminar, San Francisco VA Medical Center	Speaker
2005	UCSF Neuroscience Graduate Program Retreat, Asilomar, CA	Speaker
2006	UCSF Neuroscience Graduate Program Retreat, Asilomar, CA	Speaker
2006	SCBA, Northern California Chapter, Annual Meeting	Vice Chair
2007	Research Seminar, Parkinson's Institute, Sunnyvale, CA	Speaker
2007	Department of Biology, City College of San Francisco	Seminar Speaker
2008	Faculty Lunch Seminar, UCSF Biomedical Sciences (BMS) Graduate Program, Granibaken, CA	Speaker
2008	SCBA, Northern California Chapter, Annual Meeting	Chair
2009	UCSF Neuroscience Graduate Program Retreat, Asilomar, CA	Session Chair
2011	UCSF Biomedical Sciences (BMS) Graduate Program Retreat	Speaker
2011	Faculty Lunch Seminar, UCSF Biomedical Sciences (BMS) Graduate Program	Speaker
2011	UCSF Neuroscience Graduate Program Retreat	Session Chair
2012	Neuroscience Breakfast, UCSF	Speaker

2012	Prion Review Meeting, UCSF	Speaker
2013	Research Seminar, San Francisco VAMC	Speaker
2014	UCSF Neuroscience Retreat, Asilomar, CA	Speaker
2015	UCSF Autism Symposium (co-organizers, with John Rubenstein and Matt State)	Co-Organizer
2017	"Neural Injury and Repair" Seminar, Newborn Brain Research Institute (NBRI), Department of Pediatrics, UCSF	Speaker
2018	Research Seminar, San Francisco VAMC	Speaker
2018	Brain Club, Department of Neurology, UCSF	Speaker
2018	ImmunoX, UCSF	Speaker
2019	Denali Therapeutics	Seminar speaker
2020	Alector Biosciences	Seminar speaker
2020	Neuroscience Seminar, Genentech	Seminar speaker

GOVERNMENT & OTHER PROFESSIONAL SERVICE

2004	National Science Foundation	Ad hoc reviewer
2004, 2007	The Wellcome Trust (Neuroscience/Mental Health Section)	Ad hoc reviewer
2005 – 2007	NIH, Neurogenesis and Cell Fate Study Section	Ad hoc reviewer
2006	NIH, Cell Death in Neurodegeneration Study Section	Ad hoc reviewer
2009	NIH, ARRA Challenge Grant Study Section	Ad hoc reviewer
2007 – 2011	NIH, Neurogenesis and Cell Fate Study Section	Member
2010	Barrow Neurological Institute	External grant reviewer
2010, 2015	VA Merit Review, RRD6 (Aging & Neurodegeneration)	Ad hoc reviewer
2010, 2014	MRC, National Institute for Medical Research, UK	Ad hoc reviewer
2010 – 2015	Michael J. Fox Foundation for Parkinson's Research	Ad hoc reviewer
2013 – 2015	NIH, ZRG1, F03A-N, Neurodevelopment, Synaptic Plasticity and Neurodegeneration	Member
2013	Committee on Sports-Related Concussion in Youth Institute of Medicine, National Academy of Sciences	Member
2014	NIH SEP, ZRG1 MDCN-Q (03): Mechanisms of Neurodegenerative and Neurometabolic Disease and Injury	Ad hoc reviewer
2015 – 2019	NURE Study Section, VA BLR&D	Chair
2016 – present	Neural Oxidative Metabolism & Death (NOMD) Study Section	Member
2018 – 2020	Neural Oxidative Metabolism & Death (NOMD) Study Section	Alternate Chair
2016 – 2018	HHMI Medical Fellows Review Panel	Member
2018	NIH SEP, ZRG1 MDCN-E (52): Exosomes: From Biogenesis and secretion to the pathogenesis of Alzheimer's disease & MDCN-E (56): Molecular and cellular causal aspects of Alzheimer's disease	Ad hoc reviewer
2018 – 2019	Canada Research Chairs	Ad hoc reviewer

2020	Institute of Biomedical Sciences (IBMS), Academia Sinica	Reviewer
2020 – 2022	Neural Oxidative Metabolism & Death (NOMD) Study Section	Chair
2021	Academia Sinica Grand Challenge Proposal	Reviewer

SERVICE ACTIVITY SUMMARY

My university service has been primarily devoted to the Neuroscience (NS) and the Biomedical Science (BMS) Graduate Programs. In addition, I have served as a member of the UCSF School of Medicine Admission Committee. A major goal our mission is toward the recruitment and retention of underrepresented minority students into graduate programs and the School of Medicine at UCSF.

UNIVERSITY SERVICE

NS Graduate Program Service: My primary graduate program affiliation has been with the NS Graduate Program. As such, I have long-term service on numerous committees in the NS Graduate Program, including as (1) the course director of NS201B, one of the three core courses for the 1st year students (2010 – 2017), (2) the director of the NS core curriculum (2012 – 2017), (3) member of the Qualifying Exam Committee (since 2007), (4) Seminar Planning Committee (2013 – 2015), (5) a member of the Admission Committee (2010 – 2018), (5) a member of the Executive Committee (2014 – present).

BMS Graduate Program Service: I have served in several capacities in the BMS Graduate Program, including (1) faculty reader of the Admission Committee (2014 – present), (2) member of the Admission Committee (starting from 2018 – 2019 admission cycle), (3) faculty interviewer for BMS Admission (2005 – present), and (4) faculty advisor for the 1st and 2nd year graduate students (2014 – present).

School of Medicine: I served a 5-year term on the UCSF School of Medicine Admission Committee from 2009 to 2014. In this capacity, I serve as a screener for secondary and tertiary applications (100 – 150 application packets per year). Each year, I interviewed ~15 candidates and participated in 4 – 6 committee meetings to select the acceptance list.

Commitment to Promote Diversity in Science: Since the establishment of my lab in 2000, I have served as a faculty host and mentor for the UCSF and San Francisco Unified School District Science and Health Education Partnership (SEP). This program provides a 10-week internship for high school students from the under-privileged socio-economic background from San Francisco, and prepares them for a college career in science and technology.

UCSF CAMPUSWIDE SERVICE

2000 – present	Faculty Host & Mentor, UCSF and San Francisco Unified School District Science and Health Education Partnership (SEP)
2011	Faculty Host & Mentor, UCSF Amgen Scholars Program (Student: Hansen Lui, UCLA)
2014	Faculty Host & Mentor, UCSF Summer Research (SRTP) Training Program (Student: Karen Balczar, Cal State University Fullerton)
2016	Faculty Host & Mentor, UCSF Summer Research (SRTP) Training Program (Student: Tiani Louis, San Jose State University)

SCHOOL OF MEDICINE

2009 – 2014	Reader and interviewer, UCSF School of Medicine Admission Committee

2007 – present Member, Qualifying Exam & Thesis Committees

2010 – 2017 Director, NS201B (Molecular, Cellular and Developmental Neuroscience curriculum)

2011 – 2012 Member, Weintraub Award Selection Committee

2012 – 2017 Director, Neuroscience Core Curriculum for 1st and 2nd year students

2012 – 2017 Chair, Neuroscience Curriculum Committee

2010 – 2018 Member, Neuroscience Admission Committee

2013 – 2015 Member, Neuroscience Formal Seminar Committee

2014 – 2018 Member, Neuroscience Graduate Program Admission Committee

2016 – 2018 Member, Neuroscience Graduate Program Executive Committee

UCSF BMS Graduate Program

2005 – present Interviewer, BMS Graduate Program Admission

2014 – present Reader, BMS Graduate Program Admission

2014 – present Advisor, 1st and 2nd year students in BMS Graduate Program

2018 – present Member, BMS Graduate Program Admission Committee

DEPARTMENTAL SERVICE

2009 – present Interviewer, Anatomic Pathology/Neuropathology Residency Program

2011 – present Member, Pathology Bridge Funding Committee

2013 – present Chair, Selection Committee for Dr. T.S. Benedict Yen Memorial Lectureship

2015 – 2015 Chair, Department of Pathology Faculty Search Committee for Experimental and Liver/GI Pathologist (Recruited Dr. Aras Mattis)

2016 – present Director, Division of Neuropathology Research, co-sponsored by the Departments of Pathology, Neurology and Psychiatry. In this capacity, I manage a $1 million dollars Experimental Neuropathology Endowment to promote research and other academic activities of the Division of Neuropathology Research

2017 – Chair, Department of Pathology Faculty Search Committee for Experimental Neuropathologist with expertise in Autism (No faculty successfully recruited)

2018 – Chair, Department of Pathology Faculty Search Committee for Experimental Pathologist with expertise in Genomic Medicine (JPF01758). (This search has recruited a highly qualified Harvard-educated physician-scientist, Dr. Matt Stachler.)

2018 – Co-Chair, Departments of Pathology & Neurology, UCSF Weil Institute for Neurosciences, Joint Search Committee for Experimental Neuropathologist on Neuroinflammation and Neurodegeneration (this search is ongoing)

CONTRIBUTIONS TO DIVERSITY

Recruitment of Underrepresented Minority (URM) Trainees, Trainees with Disabilities, and Trainees from Disadvantaged Background

As a faculty at UCSF, I am firmly committed to increasing diversity at every level. To this end, I have a substantial and long-standing track record of commitment to the recruitment of underrepresented minority students and trainees to my laboratory. These efforts are reflected in my participation in the UCSF Summer Research Training (SRTP) Program. As an active faculty in this program, my lab has hosted three URM

undergraduate students, Hansen Lui (2011), Karen Balcazar (2014) and Tiani Louis (2016). In collaboration with UCSF Science and Health Education Partnership (SEP) Program, my lab has a long tradition of hosting under-represented minority students from the San Francisco Unified School District since 2000. All of the students I mentored went on to 4-year college/universities and majored in science or liberal arts related majors. In our participation in training the next generation academic leaders, we emphasize minority recruitment and recruitment of female applicants that share minority and/or gender status, and by actively addressing the needs and opportunities available for trainees during the interview process. This philosophy is also reflected in my involvement in the leadership of the UCSF Neuroscience Graduate Program, in which we share the same philosophy and are strongly committed to recruiting qualified underrepresented racial/ethnic applicants to seek successful careers in research in graduate careers. The same approaches to increase the diversity of our training program are also implemented in the selection process of residents and fellows in the Department of Pathology and Division of Neuropathology at UCSF.

TEACHING & MENTORING

TEACHING SUMMARY

My teaching efforts have been primarily in the School of Medicine and the Graduate Division at UCSF. In addition, in my capacity as an attending neuropathologist at the UCSF Medical Center, San Francisco General Hospital and the San Francisco VA Medical Center, I provide education to residents and fellows from the Depts of Pathology and Neurology. The followings are more detailed descriptions to my teaching responsibilities.

Teaching in the UCSF School of Medicine. For the past 10 years, I had served as an instructor in Pathology 102, and, beginning in 2002, have been a Small Group Leader in Basic Pathology Segment of Pathology 101 and in Neuropathology Small Group for Brain, Mind and Behavior. As a small group leader, I used several different teaching modalities to introduce the general concepts of pathology to second-year medical students. I used multiheaded microscope, projection device and autopsy cases as tools to expose the students to fascinating images of pathological processes. Meanwhile, I also encouraged the students to think about pathology in the bigger context of human diseases and to establish a rigorous thinking process when faced with live cases. This experience as a small group leader has been extremely rewarding and the feedback from the students has been excellent.

Teaching in the UCSF Graduate Division. As a member of the UCSF BMS Graduate Program, I have participated in the laboratory of Tissue and Organ Biology course and served as the coordinator for the neurobiology section. My roles in these laboratory sessions are to introduce the graduate students to the general field of neuroscience and to provide them with hands-on experience in neuroscience research and diseases involving human brain. Beginning in 2005, I also participate in the lecture series on Stem Cell Biology. In 2005, I became a member of the Neuroscience Program and have participated in the interview of applicants and qualifying exams for current students. For the Spring 2008 semester, I am the organizer of a mini-course on "The Dopaminergic System". This mini-course has become an integral part of the neuroscience curriculum for second year graduate students. Beginning in 2009, I become a member of the organizing committee for NS201, the neuroscience core curriculum for the first year graduate students. The part of NS201 curriculum that I help organize is on the molecular, cellular and developmental neuroscience. This part of the NS201 runs for about 2 and a half months, from November to January every year. My responsibility include recruiting faculty for the lectures, designing problem sets for discussion, monitoring progress during classes, and grading for final exam.

Teaching in the UCSF Medical Center and Affiliated Hospitals. As a neuropathologist, I have sign-out responsibilities with residents in autopsy pathology and neuropathology, both at the San Francisco VA Medical Center, San Francisco General Hospital, and at UCSF Moffitt Hospital. Starting in July 2002, I have been heavily involved in autopsy brain sign-out (9 months per year) at UCSF Moffitt Hospital. During these occasions and other formal sessions, I provide teaching materials to introduce the residents to the general field of neuropathology. Furthermore, I participate in didactic lectures for medical student and residents on selected topics in developmental neuropathology.

Teaching for the Science and Education Partnership Program. Finally, as a scientist, I am deeply committed to fostering science education in the community. In addition to my teaching responsibilities at UCSF and VAMC, I have actively participated in the Science and Education Partnership program in San Francisco since 2000. My laboratory provides opportunity for talented high school students to pursue research experience in the summer. During their internship, the students are introduced to the basic principles of biomedical research. They are provided with ample opportunities to have hands-on experiences in my lab. Toward the end of the internship, students will have formal oral and poster presentations to showcase this unique educational experience. Perhaps the most rewarding part of this experience has been to see these talented students develop a high affinity for biomedical research and to eventually pursue a career in health professions. Indeed, essentially all of my students major in science-related disciplines in major universities, such as UC Berkeley, UCLA, UCSD, UC Davis, and University of Chicago.

MENTORING

MENTORING SUMMARY

As a faculty at UCSF, I am firmly committed to mentoring trainees at every level. As indicated in the "Contributions to Diversity" section above, I have a substantial and long-standing track record of commitment to the recruitment of underrepresented minority students and trainees to my laboratory. These efforts are reflected in my participation in the UCSF Summer Research Training (SRTP) Program. As an active faculty in this program, my lab has hosted three URM undergraduate students, Hansen Lui (2011), Karen Balcazar (2014) and Tiani Louis (2016). In collaboration with UCSF Science and Health Education Partnership (SEP) Program, my lab has a long tradition of hosting under-represented minority students from the San Francisco Unified School District since 2000. All of the students I mentored went on to 4-year college/universities and majored in science or liberal arts related majors. In our participation in training the next generation academic leaders, we emphasize minority recruitment and recruitment of female applicants that share minority and/or gender status, and by actively addressing the needs and opportunities available for trainees during the interview process. This philosophy is also reflected in my involvement in the leadership of the UCSF Neuroscience Graduate Program, in which we share the same philosophy and are strongly committed to recruiting qualified underrepresented racial/ethnic applicants to seek successful careers in research in graduate careers. The same approaches to increase the diversity of our training program are also implemented in the selection process of residents and fellows in the Department of Pathology and Division of Neuropathology at UCSF.

Finally, I have mentored many PhD or MD/PhD students at UCSF by serving as the chair or as a member of their Qualifying Exam Committees and/or Thesis Advisory Committees. I am also actively engaged in mentoring Pathology, Neurology and Neurosurgery residents and fellows by serving as their mentors or as a member of the advisory board for their career development (K) awards. In this role, I am deeply committed to the career development of physician scientists at all levels, especially academic neuropathologists interested in the pursuit of high-quality basic and translational research.

PREDOCTORAL TRAINEE HONORS AND AWARDS:

2005	Dean’s Prize for Research, UCSF SOM	Medical Student Mentored: Stephen Ku
2007-08	Summer Student Research Fellowship Disease Foundation	Students Mentored: Ben Crittenden Parkinson (2007)
2011	UCSF Amgen Fellowship	Student Mentored: Hansen Lui
2012-15	Irene & Eric Simon Brain Research Foundation Summer Fellowship	Students Mentored: Hansen Lui (UCLA, 2012), Alan Hwang (Rice, 2013), Amanda Cabajal (SFSU, 2015)
2014	UCSF SRTP Fellowship	Student Mentored: Karen Balcazar
2015	UCSF GEMS-CTSI Award	NS Student Mentored: Sarah Luo
2015	Robert Terry Award for the Best Paper on	AANP Annual Meeting, Med Student

	Neurodegenerative Diseases	Mentored: Hansen Lui
2015	Honorable Mention, Excellence in Alzheimer's Science, Alzheimer's Association	MS Mentored: Hansen Lui
2016	UCSF SRTP Fellowship	Student Mentored: Tiani Louis
2018-19	NINDS Research Diversity Supplement	Student Mentored: Cristina Mora
2019-2020	American Heart Association (AHA) Predoctoral Fellowship	Student Mentored: Jiapei Chen
2019	Discovery Fellow, UCSF Graduate Division	Student Mentored: Jiapei Chen

POSTDOCTORAL TRAINEE HONORS AND AWARDS:

2012	UCSF GEMS-CTSI Award	PDF Mentored: Haiyan Qiu, PhD
2012	Alzheimer's Association Awards for Young Scientists	PDF Mentored: Haiyan Qiu, PhD
2014	Moore Award for the Best Paper in Pathological Correlations	AANP Annual Meeting, NP Fellow Clinico-mentored: Jennifer Cotter, MD
2014-16	NINDS R25 Award	Mentee: Jennifer Cotter, MD
2015-20	K08 Mentored Career Development Award	Mentee: Mercedes Paredes, MD, PhD
2017-18	CIRM Fellowship	Mentee: Elizabeth Crouch, MD, PhD
2018-20	Pediatric Scientist Dev Program (K12 Award)	Mentee: Elizabeth Crouch, MD, PhD
2018-19	Japan Society for the Promotion of Science	Mentee: Kei Hashimoto, PhD
2019-20	Glenn Foundation for Medical Research Postdoctoral Fellowship in Aging Research	Mentee: Elise Marsan, PhD
2020-22	Japan Society for the Promotion of Science	Mentee: Kei Hashimoto, PhD
2020-21	UCSF CTSI Fellowship	Mentee: Jeffrey Hofmann, MD, PhD
2020-21	A.P. Giannini Fellowship	Mentee: Elizabeth Crouch, MD, PhD
2020-22	BrightFocus Postdoctoral Fellowship	Mentee: Elise Marsan, PhD
2020-25	NINDS K08 Award	Mentee: Elizabeth Crouch, MD, PhD
2020-25	UCSF PSSP Scholar	Mentee: Elizabeth Crouch, MD, PhD
2021-23	Pediatric Scientist Dev Program (K12 Award) & Child Neurology Career Development Program (CNCDP) Award	Mentee: Jeffrey Russ, MD, PhD

RESEARCH AND CREATIVE ACTIVITY SUMMARY:

As a board-certified neuropathologist with expertise in autopsy neuropathology, I have had a long-standing interest in directing my research focus to uncover fundamental biology regarding mechanism, pathogenesis and potential therapeutics for neurodevelopmental and neurodegenerative diseases. Currently, there are two areas of research in my lab, both supported by extramural funds. The first area uses the state-of-the-art single-cell transcriptomics and high resolution imaging technologies to uncover the molecular and cellular mechanisms that regulate neurogenesis, angiogenesis and neuronal migration in prenatal and early postnatal human brain. To this end, we have developed a concerted effort to build a large collection of prenatal, perinatal and early postnatal human brain that serve as critical resources to reveal previously unappreciated mechanisms that regulate the neurogenesis and migration of young GABAergic neurons from the human ganglionic eminences. In addition, we have focused our attention to the intersection between neurogenesis, angiogenesis and how these two interconnected processes are regulated by microglia, the brain innate immune cells.

The second area of research in my lab focuses on the molecular mechanisms of neurodegenerative diseases, including frontotemporal lobar degeneration (FTLD) and amyotrophic lateral sclerosis (ALS). To this end, we have developed and characterized several mouse models that greatly improve our understanding of the diverse disease mechanisms for FTLD and ALS. We have made the seminal discovery that microglial and complement activation are the major disease-driving factors for the pathogenesis of FTLD in mouse models

and in human patients with Progranulin (PGRN) deficiency (FTLD-GRN). This line of research has expanded into a full-fledged project that directly investigates some of the critical issues related to the role of neuroinflammation as a major driver of neurodegenerative diseases. Aside from our work on FTLD, we are the first group to report two independent transgenic mouse line that model familial ALS with mutations in RNA binding protein FUS. Building on these successful projects, we are hoping to expand our research to uncover the contributions of neuroinflammation to late-onset Alzheimer's disease.

As a board-certified neuropathologist, one major effort in my laboratory has been to connect our research in animal models with human neurodevelopmental and neurodegenerative diseases. To this end, I have spearheaded the efforts to establish two major brain tissue banking systems at UCSF, namely the UC Pediatric Neuropathology Consortium. For more than 10 years, we have made these high quality brain samples widely available to collaborators within and outside UCSF. These studies provide many important insights to the cellular and molecular mechanisms of neurodevelopmental diseases. The success of these endeavors is underscored by our extensive collaborations with colleagues within and outside UCSF, which lead to many high profile publications in *Cell*, *Nature*, *Science*, *Neuron*, *Nature Neuroscience*, etc. Most importantly, these studies revealed previously unrecognized role of neural circuit dysfunctions in neurodevelopmental and neurodegenerative diseases, and re-define our approaches toward understanding the molecular and cellular pathways and finding potential therapeutic targets for these devastating diseases.

RESEARCH SUPPORT

ACTIVE:

1 R01 NS098516-05 (PI: Huang) 07/01/2016 – 06/30/2021 1.8 Cal Months
NIH/NINDS $218,750/yr
Mechanism of HIPK2 in Neurodegeneration
The goals are to (1) determine if inhibition of HIPK2 can mitigate mitochondrial damage, neuronal cell death and prolong survival in preclinical models of ALS, and (2) characterize the broader role of HIPK2 in other ALS models.

1 R01 AG057462-04 (MPI: Huang [contact] & Debnath) 09/01/2017 – 08/31/2022 2.4 Cal Months
NIH/NIA $420,231/yr
Autophagy-dependent exosome loading and biogenesis in AD and FTD
The goal of this project is to test the hypothesis that the autophagy machinery mediates LC-3 dependent recruitment and packaging of specific intracellular cargo for their secretion via exosomes.

1 R01 AA027074-03 (MPI: Huang [contact] & Kriegstein) 09/15/2018 – 08/31/2023 1.8 Cal Months
NIAAA & NIH Blueprint for Neuroscience $400,000/yr
Single Cell Analyses of Neuroimmune Dysfunctions in the Thalamocortical Circuit in FTLD
The goal of this project is to use single cell transcriptomic approach to investigate glia-neuron interaction in mouse models of frontotemporal lobar degeneration (FTLD) caused by progranulin (*Grn*) mutations.

R01 AG068290-01 (PI: Huang) 08/01/2020 – 07/31/2025 1.2 Cal Months
NIH/NIA $250,000/yr
Progranulin deficiency and microglia senescence in neurodegeneration
This proposal will determine the molecular mechanism that promote cellular senescence in progranulin-deficient microglia. Specific areas of focus include the role of integrin $\alpha v\beta 3$ and TGF-β in cellular senescence in *Grn*$^{-/-}$ microglia, characterizing the secretory phenotype in *Grn*$^{-/-}$ microglia, and elucidate the impact of *Grn*$^{-/-}$ microglia in neurodegeneration in brain tissues from FTLD and AD patients.

U01MH105989-01 (MPI: Kriegstein [contact] & Huang) 09/01/2017 – 08/31/2022 1.2 Cal Months
NIMH & NIH BRAIN Initiatives $1,045,900/yr
A Cellular Resolution Census of the Developing Human Brain

The purpose of this research project is to create a single cell resolution map of the developing human neocortex in order to establish how many distinct cell types are present and to unravel their complex developmental history.

P01 NS083513-06 (PI: Alvarez-Buylla) 07/01/2014 – 06/30/2024 1.2 Cal Months
NIH/NINDS Total: $860,000/yr
(Huang: Core B Director & Co-PI for Projects 1 & 3) Core B: $200,000/yr
Regulation of Cellular Pathways in Human Brain Development
This Program Project will determine structural and functional correlates of early human brain maturation and network organization using state-of-the art neuropathological and neuroscience techniques and cellular and genetic studies in human, ferret and rodent systems.

P01 AG002132-37 (PI: Prusiner) 04/15/2018 – 03/31/2023 0.5 Cal Months
NIH/NIA
Degenerative and Dementing Diseases of Aging
Dr. Huang is serving as the co-Director of Neuropathology Core in this PPG.

I01 BX001108-08A1 (PI: Huang) 07/01/2011 – 06/30/2020 0.6 Cal Months
VA BLR&D Merit Review Award $100,000/yr (NCE)
Mechanisms of ER Stress and Neurodegeneration in Amyotrophic Lateral Sclerosis
This award proposes to investigate the signaling pathway involving HIPK2 during ER stress-induced cell death in midbrain dopamine neurons.

The Bluefield Project to Cure FTD 01/01/2009 – 12/31/2021 0.6 Cal Months
(PI: Huang) $137,500/yr (yrs 11-12)
Mechanism of Neuroinflammation in Progranulin Deficiency
The major goals of this project are to study the mechanism of PGRN in microglia activation in mouse model of PGRN deficiency.

PEER REVIEWED PUBLICATIONS (Featured Published Highlighted in Yellow):

1. **Huang E**, Nocka K, Beier DR, Chu TY, Buck J, Lahm HW, Wellner D, Leder P, Besmer P. The hematopoietic growth factor KL is encoded by the Sl locus and is the ligand of the c-kit receptor, the gene product of the W locus. Cell. 1990 Oct 5;63(1):225-33. PubMed PMID: 1698557.

2. **Huang EJ**, Nocka KH, Buck J, Besmer P. Differential expression and processing of two cell associated forms of the kit-ligand: KL-1 and KL-2. Mol Biol Cell. 1992 Mar;3(3):349-62. PubMed PMID: 1378327; PubMed Central PMCID: PMC275535.

3. Pandiella A, Bosenberg MW, **Huang EJ**, Besmer P, Massagué J. Cleavage of membrane-anchored growth factors involves distinct protease activities regulated through common mechanisms. J Biol Chem. 1992 Nov 25;267(33):24028-33. PubMed PMID: 1385433.

4. Manova K, Bachvarova RF, **Huang EJ**, Sanchez S, Pronovost SM, Velazquez E, McGuire B, Besmer P. c-kit receptor and ligand expression in postnatal development of the mouse cerebellum suggests a function for c-kit in inhibitory interneurons. J Neurosci. 1992 Dec;12(12):4663-76. PubMed PMID: 1281492.

5. Besmer P, Manova K, Duttlinger R, **Huang EJ**, Packer A, Gyssler C, Bachvarova RF. The kit-ligand (steel factor) and its receptor c-kit/W: pleiotropic roles in gametogenesis and melanogenesis. Dev Suppl. 1993:125-37. Review. PubMed PMID: 7519481.

6. **Huang EJ**, Manova K, Packer AI, Sanchez S, Bachvarova RF, Besmer P. The murine steel panda mutation affects kit ligand expression and growth of early ovarian follicles. Dev Biol. 1993 May;157(1):100-9. PubMed PMID: 7683280.

7. Manova K, **Huang EJ**, Angeles M, De Leon V, Sanchez S, Pronovost SM, Besmer P, Bachvarova RF. The expression pattern of the c-kit ligand in gonads of mice supports a role for the c-kit receptor in oocyte growth and in proliferation of spermatogonia. Dev Biol. 1993 May;157(1):85-99. PubMed PMID: 7683286.

8. **Huang EJ**, Wright TL, Lake JR, Combs C, Ferrell LD. Hepatitis B and C coinfections and persistent hepatitis B infections: clinical outcome and liver pathology after transplantation. Hepatology. 1996 Mar;23(3):396-404. PubMed PMID: 8617417.

9. Tajima Y, **Huang EJ**, Vosseller K, Ono M, Moore MA, Besmer P. Role of dimerization of the membrane-associated growth factor kit ligand in juxtacrine signaling: the Sl17H mutation affects dimerization and stability-phenotypes in hematopoiesis. J Exp Med. 1998 May 4;187(9):1451-61. PubMed PMID: 9565637; PubMed Central PMCID: PMC2212272.

10. **Huang EJ**, Wilkinson GA, Fariñas I, Backus C, Zang K, Wong SL, Reichardt LF. Expression of Trk receptors in the developing mouse trigeminal ganglion: in vivo evidence for NT-3 activation of TrkA and TrkB in addition to TrkC. Development. 1999 May;126(10):2191-203. PubMed PMID: 10207144; PubMed Central PMCID: PMC2710120.

11. **Huang EJ**, Zang K, Schmidt A, Saulys A, Xiang M, Reichardt LF. POU domain factor Brn-3a controls the differentiation and survival of trigeminal neurons by regulating Trk receptor expression. Development. 1999 Jul;126(13):2869-82. PubMed PMID: 10357931; PubMed Central PMCID: PMC2710123.

12. Fan G, Copray S, **Huang EJ**, Jones K, Yan Q, Walro J, Jaenisch R, Kucera J. Formation of a full complement of cranial proprioceptors requires multiple neurotrophins. Dev Dyn. 2000 Jun;218(2):359-70. Erratum in: Dev Dyn 2002 Dec;225(4):602. PubMed PMID: 10842362.

13. Kim WY, Fritzsch B, Serls A, Bakel LA, **Huang EJ**, Reichardt LF, Barth DS, Lee JE. NeuroD-null mice are deaf due to a severe loss of the inner ear sensory neurons during development. Development. 2001 Feb;128(3):417-26. PubMed PMID: 11152640; PubMed Central PMCID: PMC2710102.

14. **Huang EJ**, Liu W, Fritzsch B, Bianchi LM, Reichardt LF, Xiang M. Brn3a is a transcriptional regulator of soma size, target field innervation and axon pathfinding of inner ear sensory neurons. Development. 2001 Jul;128(13):2421-32. PubMed PMID: 11493560; PubMed Central PMCID: PMC2710107.

15. Chen TT, Brown EJ, **Huang EJ**, Seaman WE. Expression and activation of signal regulatory protein alpha on astrocytomas. Cancer Res. 2004 Jan 1;64(1):117-27. PubMed PMID: 14729615.

16. Doxakis E, **Huang EJ**, Davies AM. Homeodomain-interacting protein kinase-2 regulates apoptosis in developing sensory and sympathetic neurons. Curr Biol. 2004 Oct 5;14(19):1761-5. PubMed PMID: 15458648.

17. Wiggins AK, Wei G, Doxakis E, Wong C, Tang AA, Zang K, Luo EJ, Neve RL, Reichardt LF, **Huang EJ**. Interaction of Brn3a and HIPK2 mediates transcriptional repression of sensory neuron survival. J Cell Biol. 2004 Oct 25;167(2):257-67. Epub 2004 Oct 18. PubMed PMID: 15492043; PubMed Central PMCID: PMC2172556.

18. **Huang EJ**, Li H, Tang AA, Wiggins AK, Neve RL, Zhong W, Jan LY, Jan YN. Targeted deletion of numb and numblike in sensory neurons reveals their essential functions in axon arborization. Genes Dev. 2005 Jan 1;19(1):138-51. Epub 2004 Dec 14. PubMed PMID: 15598981; PubMed Central PMCID: PMC540232.

19. Ishikura N, Clever JL, Bouzamondo-Bernstein E, Samayoa E, Prusiner SB, **Huang EJ**, DeArmond SJ. Notch-1 activation and dendritic atrophy in prion disease. Proc Natl Acad Sci U S A. 2005 Jan 18;102(3):886-91. Epub 2005 Jan 7. PubMed PMID: 15640354; PubMed Central PMCID: PMC545568.

20. Lynn S, **Huang EJ**, Elchuri S, Naeemuddin M, Nishinaka Y, Yodoi J, Ferriero DM, Epstein CJ, Huang TT. Selective neuronal vulnerability and inadequate stress response in superoxide dismutase mutant mice. Free Radic Biol Med. 2005 Mar 15;38(6):817-28. PubMed PMID: 15721992.

21. Kauppinen TM, Chan WY, Suh SW, Wiggins AK, **Huang EJ**, Swanson RA. Direct phosphorylation and regulation of poly(ADP-ribose) polymerase-1 by extracellular signal-regulated kinases 1/2. Proc Natl Acad Sci U S A. 2006 May 2;103(18):7136-41. Epub 2006 Apr 20. PubMed PMID: 16627622; PubMed Central PMCID: PMC1459030.

22. Zhang J, **Huang EJ**. Dynamic expression of neurotrophic factor receptors in postnatal spinal motoneurons and in mouse model of ALS. J Neurobiol. 2006 Jul;66(8):882-95. PubMed PMID: 16680759; PubMed Central PMCID: PMC3600432.

23. Zhang J, Pho V, Bonasera SJ, Holtzman J, Tang AT, Hellmuth J, Tang S, Janak PH, Tecott LH, **Huang EJ**. Essential function of HIPK2 in TGFbeta-dependent survival of midbrain dopamine neurons. Nat Neurosci. 2007 Jan;10(1):77-86. Epub 2006 Dec 10. PubMed PMID: 17159989; PubMed Central PMCID: PMC3578579. [*Featured in News & Views*]

24. Laposa RR, **Huang EJ**, Cleaver JE. Increased apoptosis, p53 up-regulation, and cerebellar neuronal degeneration in repair-deficient Cockayne syndrome mice. Proc Natl Acad Sci U S A. 2007 Jan 23;104(4):1389-94. Epub 2007 Jan 17. PubMed PMID: 17229834; PubMed Central PMCID: PMC1783131.

25. Wei G, Ku S, Ma GK, Saito S, Tang AA, Zhang J, Mao JH, Appella E, Balmain A, **Huang EJ**. HIPK2 represses beta-catenin-mediated transcription, epidermal stem cell expansion, and skin tumorigenesis. Proc Natl Acad Sci U S A. 2007 Aug 7;104(32):13040-5. Epub 2007 Jul 31. PubMed PMID: 17666529; PubMed Central PMCID: PMC1936219.

26. Spilman P, Lessard P, Sattavat M, Bush C, Tousseyn T, **Huang EJ**, Giles K, Golde T, Das P, Fauq A, Prusiner SB, Dearmond SJ. A gamma-secretase inhibitor and quinacrine reduce prions and prevent dendritic degeneration in murine brains. Proc Natl Acad Sci U S A. 2008 Jul 29;105(30):10595-600. doi:10.1073/pnas.0803671105. Epub 2008 Jul 22. PubMed PMID: 18647832; PubMed Central PMCID: PMC2492499.

27. Tang M, Miyamoto Y, **Huang EJ**. Multiple roles of beta-catenin in controlling the neurogenic niche for midbrain dopamine neurons. Development. 2009 Jun;136(12):2027-38. doi: 10.1242/dev.034330. Epub 2009 May 13. PubMed PMID: 19439492; PubMed Central PMCID: PMC2685724. [*Featured In This Issue: Dopaminergic progresses with β-catenin*]

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30. Munesue T, Yokoyama S, Nakamura K, Anitha A, Yamada K, Hayashi K, Asaka T, Liu HX, Jin D, Koizumi K, Islam MS, Huang JJ, Ma WJ, Kim UH, Kim SJ, Park K, Kim D, Kikuchi M, Ono Y, Nakatani H, Suda S, Miyachi T, Hirai H, Salmina A, Pichugina YA, Soumarokov AA, Takei N, Mori N, Tsujii M, Sugiyama T, Yagi K, Yamagishi M, Sasaki T, Yamasue H, Kato N, Hashimoto R, Taniike M, Hayashi Y, Hamada J, Suzuki S, Ooi A, Noda M, Kamiyama Y, Kido MA, Lopatina O, Hashii M, Amina S, Malavasi F, **Huang EJ**, Zhang J, Shimizu N, Yoshikawa T, Matsushima A, Minabe Y, Higashida H. Two genetic variants of CD38 in

subjects with autism spectrum disorder and controls. Neurosci Res. 2010 Jun;67(2):181-91. doi: 10.1016/j.neures.2010.03.004. Epub 2010 May 1. PubMed PMID: 20435366.

31. **Huang EJ**, Zhang J, Geser F, Trojanowski JQ, Strober JB, Dickson DW, Brown RH Jr, Shapiro BE, Lomen-Hoerth C. Extensive FUS-immunoreactive pathology in juvenile amyotrophic lateral sclerosis with basophilic inclusions. Brain Pathol. 2010 Nov;20(6):1069-76. doi: 10.1111/j.1750-3639.2010.00413.x. Epub 2010 Jun 23. Erratum in: Brain Pathol. 2010 Nov;20(6):1119. PubMed PMID: 20579074; PubMed Central PMCID: PMC2951498.

32. Tang M, Villaescusa JC, Luo SX, Guitarte C, Lei S, Miyamoto Y, Taketo MM, Arenas E, **Huang EJ**. Interactions of Wnt/beta-catenin signaling and sonic hedgehog regulate the neurogenesis of ventral midbrain dopamine neurons. J Neurosci. 2010 Jul 7;30(27):9280-91. doi: 10.1523/JNEUROSCI.0860-10.2010. PubMed PMID: 20610763; PubMed Central PMCID: PMC3578394.

33. Min SW, Cho SH, Zhou Y, Schroeder S, Haroutunian V, Seeley WW, **Huang EJ**, Shen Y, Masliah E, Mukherjee C, Meyers D, Cole PA, Ott M, Gan L. Acetylation of tau inhibits its degradation and contributes to tauopathy. Neuron. 2010 Sep 23;67(6):953-66. doi: 10.1016/j.neuron.2010.08.044. Erratum in: Neuron. 2010 Nov 18;68(4):801. PubMed PMID: 20869593; PubMed Central PMCID: PMC3035103.

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35. Silbereis JC, **Huang EJ**, Back SA, Rowitch DH. Towards improved animal models of neonatal white matter injury associated with cerebral palsy. Dis Model Mech. 2010 Nov-Dec;3(11-12):678-88. doi: 10.1242/dmm.002915. PubMed PMID: 21030421; PubMed Central PMCID: PMC2965396.

36. Chang EI, Carlson GA, Vose JG, **Huang EJ**, Yang GP. Comparative healing of rat fascia following incision with three surgical instruments. J Surg Res. 2011 May 1;167(1):e47-54. doi: 10.1016/j.jss.2010.12.019. Epub 2011 Jan 22. PubMed PMID: 21324486.

37. Zhou J, Tan T, Tian Y, Zheng B, Ou JH, **Huang EJ***, Yen TS. Krüppel-like factor 15 activates hepatitis B virus gene expression and replication. Hepatology. 2011 Jul;54(1):109-21. doi: 10.1002/hep.24362. PubMed PMID: 21503941; PubMed Central PMCID: PMC3125411. [*corresponding author]

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