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Personal Data

- Born: July 5, 1965 in Lausanne, Switzerland
- Nationality: dual USA and German

Personal Statement

I am a molecular neurobiologist who studies how behaviors emerge from the integration of sensory input with internal physiological states. I am the Robin Chemers Neustein Professor, Head of the Laboratory of Neurogenetics and Behavior, and Director of the Kavli Neural Systems Institute at The Rockefeller University, and have been an investigator of the Howard Hughes Medical Institute since 2008. My group is known for our work on the genetic basis of chemosensory behavior in both insects and humans. My notable contributions to science include the discovery of the insect odorant receptors, and the elucidation of general principles of their function, expression, and the connectivity of the sensory neurons that express them to primary processing centers in the brain. Our research program in human olfactory perception has led to discoveries in the genetic basis of smell disorders, and how odor stimuli are converted to olfactory percepts. We are translating this work to produce a novel clinical test for smell dysfunction. Much of our current research is aimed at understanding the molecular neurobiology of host-seeking and blood-feeding in mosquitoes that spread dangerous infectious diseases. Since 2008, my group has established the *Aedes aegypti* mosquito as a genetic model organism. We were the first to use CRISPR-Cas9 genome-editing in this species and led the effort to resequence, assemble, and annotate the genome of this deadly vector mosquito. Our work has shed light on how these mosquitoes integrate sensory cues to hunt humans and we have developed small molecules that block mosquito biting behavior. I am a member of the board of bioRxiv, and a proponent of pre-prints and open science, as well as a strong supporter of initiatives to increase diversity in STEM. I received an A.B. in Biochemistry from Columbia University in 1987 and a Ph.D. from The Rockefeller University in 1993 working with Michael Young. Following postdoctoral work at Columbia University in the laboratory of Richard Axel, I joined the Rockefeller faculty in 2000 and have remained here since. I am the recipient of the 2008 Lawrence C. Katz Prize from Duke University, the 2010 DART/NYU Biotechnology Award, the 2011 Gill Young Investigator Award, and the 2020 National Academy of Sciences Pradel Research Award. I am an elected fellow of the American Association for the Advancement of Science and was elected to the National Academy of Sciences in 2015.

Education and Training

A.B., Biochemistry, 1983-1987
 Columbia College
 Columbia University in the City of New York
 John Jay Scholar

Ph.D., Molecular Genetics, 1987-1993
 The Rockefeller University
 Mentor: Michael W. Young
 Thesis Title: Regulated Nuclear Localization of the *Period* Protein of *Drosophila melanogaster* and its Role in Controlling Circadian Rhythms.

Postdoctoral Associate, Molecular Neurobiology, 1993-1997
 HHMI-Columbia University
 Mentor: Richard Axel
 Project: The Identification of *Drosophila* Odorant Receptor Genes

Research and Professional Experience

1982-1984	Summer research, Marine Biological Laboratory Mentors: Philip Dunham and Gerald Weissmann
1984	Undergraduate research, Columbia University Mentor: Eric Holtzman
1985	Undergraduate research, Columbia University Mentor: Martin Chalfie
1985-1987	Undergraduate research, New York University School of Medicine Mentor: Gerald Weissmann
1985	Graduate research, The Rockefeller University Mentor: Michael W. Young
1993-1997	Postdoctoral Research, HHMI-Columbia University Mentor: Richard Axel
1997-2000	Associate Research Scientist, HHMI-Columbia University Mentor: Richard Axel
1999	Participant, <i>Drosophila</i> Genome Annotation Jamboree, Celera Genomics
2000-2006	Annenberg Assistant Professor and Head of Laboratory, The Rockefeller University
2006-2010	Chemers Family Associate Professor and Head of Laboratory, The Rockefeller University
2005-2007	Faculty, Neural Systems and Behavior Course, Marine Biological Laboratory
2008-Present	Howard Hughes Medical Institute Investigator
2010-Present	Robin Chemers Neustein Professor and Head of Laboratory, The Rockefeller University

Professional Service**a. Editorial**

2018-Present	Deputy Editor, AAAS Science Advances
2015-2018	Associate Editor, AAAS Science Advances
2013-Present	Member, bioRxiv advisory board
2013-2017	Member, Simons Foundation Quanta Magazine board
2012-2019	Member, PLoS Biology Editorial Board
2008-2013	Associate Editor, Frontiers in Neural Circuits
2007-Present	Member, Chemical Senses Editorial Board
2010-2019	Member, BMC Biology Editorial Board
2007-2009	Member, PLoS ONE Editorial Board
2007-2012	Associate Editor, Journal of Neuroscience
2006-2010	Reviewing Editor, HFSP Journal
2005-2016	Associate Editor, The FASEB Journal
2005-Present	Editorial Board Member, Current Biology

b. Grant, Prize, and Association Committee Service

2019-Present	Member, Board of Directors, Helen Hay Whitney Foundation
2019-Present	Member, Lasker Prize Jury
2019-Present	Member, National Advisory Committee, Pew Biomedical Scholars
2018-Present	Member, Board of Directors, Wenner-Gren Foundation
2018-Present	Member, Board of Directors, McKnight Endowment Fund for Neuroscience
2018-Present	Member, Scientific Advisory Board, IGC Gulbenkian Institute
2018-Present	Chair, Section 24 (Molecular and Cellular Neuroscience), National Academy of Sciences
2018	Chair, National Academy of Sciences Neuroscience Prize Committee
2016-Present	Member, Pearl Meister Greengard Prize Committee
2016	Chair, National Academy of Sciences Lounsbery Award Committee
2016	Member, Group Leader Review Committee, HHMI-Janelia Research Campus
2016	Champalimaud Centre for the Unknown, Group Leader Review
2014-2018	Member, Society for Neuroscience Gerard Prize Committee
2012-2013	Member, Society for Neuroscience Young Investigator Award Committee
2012-Present	HHMI selection panel for Investigator, HHMI Early Career Scientist, Faculty Scholar
2011-2019	Member, Scientific Advisory Board, Institute of Molecular Pathology, Vienna Austria (Chair 2016-2019)
2010-2014	Member, Board of Scientific Counselors, NIH NIDCR
2008-2012	Member, Group Leader Selection Committee, HHMI-Janelia Research Campus
2008-Present	Jury Member, Vilcek Prize for Creative Promise
2008-2015	Member, McKnight Scholar Award Selection Committee
2008-2015	Member, Selection Committee, Alfred P. Sloan Research Fellowships in Neuroscience
2008-Present	External Reviewer, Radcliffe Institute Fellows Program

2008-2009	Member, NINDS Basic Module Advisory Panel
2007-2014	Scientific Advisory Board Member, Max Planck Institute of Chemical Ecology
2007-2008	External Reviewer, TMF/Patterson Trust Fellowship Program in Brain Circuitry
2007	MRC Young Investigator Grant External Reviewer
2006-2009	Beckman Young Investigator Program Panelist
2006	HHMI International Research Scholar Program Panelist
2006-2012	External Reviewer, Human Frontier Science Program Organization
2006	External Reviewer, German Volkswagen Stiftung
2002-Present	NIH Grant Review: Ad Hoc Member, NIH CSR review panels (NIDCD ZDC1 SRB-S, NIDCD ZDC1 SRY-Y, NIDCD CDRC, NIH/CSR SCS, NIH SCS CBSS)
2002-2007	NSF Grant Review: MCB, IBN, and CAREER Award Reviewer
2002-2005	External Reviewer, Norwegian Technology Foundation

c. Conference Organization

2019	Co-organizer (with Michael Dickinson and Julian Dow) Journal of Experimental Biology Symposium 2019: Genome editing for comparative physiology
2019	Co-organizer (with David Stern and Adam Hantman) Janelia Research Campus Conference: New Genetic Tools for Non-Model Organisms
2017	Co-organizer (with Richard Benton and Detlev Arendt) EMBO EMBL Symposia 2017 - Neuronal Circuits
2016	Co-chair (with Kazushige Touhara and Wolfgang Meierhof), 17 th Annual ISOT International Symposium on Olfaction and Taste, Yokohama, Japan
2010	Organizer (with Kazushige Touhara), 2010 HHMI-Janelia Research Campus Conference: Form and Function of the Olfactory System
2009	Organizer (with Peter Mombaerts), 2009 Keystone Meeting: Chemical Senses: Receptors & Circuits
2007	Co-organizer (with Peter Mombaerts), 2007 Keystone Meeting: Chemical Senses: From Receptors to Perception
2006	Association for Chemoreception Sciences (AChemS) Election Committee Member
2004, 2005	Chemosensory Receptors Symposium Session Co-Chair, AChemS
2003, 2005	Sensory Systems Session Chair, Cold Spring Harbor Neurobiology of <i>Drosophila</i> meeting
2002	Olfaction Session Chair, Society for Neuroscience meeting
2001, 2006-2009	Program Committee Member, AChemS

d. Consulting

2011-2017	Member, Scientific Advisory Board, International Flavors and Fragrances, Inc.
2000-2004	Member, Scientific Advisory Board, Sentigen Biosciences

e. Honors and Awards

2020	National Academy of Sciences Pradel Research Award
2015	Election to the National Academy of Sciences
2014	Elected Fellow, AAAS (American Association for the Advancement of Science)
2013	Forbes Lecturer, Grass Laboratory, Marine Biological Laboratory
2012	Joshua Lederberg Lecturer, Marine Biological Laboratory
2011	Gill Young Investigator Award
2010	Dart/NYU Biotechnology Alumnae Achievement Award

2009	Lawrence C. Katz Memorial Prize Lecture, Duke University
2008	The International Society of Chemical Ecology Silverstein-Simeone Lecture Award
2007	Winner, New York Academy of Sciences Blavatnik Awards for Young Scientists
2005	NYC Mayor's Young Investigator Award for Excellence in Science and Technology
2005	Rockefeller University Teaching Award
2002	Presidential Early Career Award for Scientists and Engineers
2002	John Merck Fund Award
2001	Beckman Young Investigator Award
2001	National Science Foundation CAREER Award
2001	McKnight Scholar Award
1987	John Jay Scholar, Columbia College of Columbia University

Invited Departmental Seminars

2000

- UCLA Joint Seminars in Neuroscience

2001

- Skirball Institute, NYU School of Medicine
- Free University Berlin, Division of Neurobiology
- University of Tokyo
- Ohio State University
- Bard College
- Vanderbilt University
- Harvard Medical School, Department of Neurobiology

2002

- Carnegie Institute of Washington
- Institute of Molecular Pathology, Vienna

2003

- NIH/NIDCD
- Johns Hopkins University
- University of Georgia
- New York University
- Brooklyn College
- Yale University

2004

- Mount Sinai School of Medicine
- University of Florida
- Duke University
- Columbia University
- Firmenich, S.A., Geneva
- Cold Spring Harbor Laboratory
- University of Toronto
- Stanford University

2005

- Uppsala University
- Princeton University
- North Carolina State University

2006

- University of Pennsylvania
- Emory University
- UCLA
- Vollum Institute
- Duke University

2007

- Princeton University
- SUNY-Stony Brook
- Weill-Cornell Medical College
- University of Oregon
- NIH Neuroscience Seminar Series

2008

- Yale University
- Cold Spring Harbor Laboratory
- Bauer Lecture at Brandeis University
- Caltech
- New York University CNS Seminar Series
- New England Biolabs
- University of California, Berkeley Neuroscience Seminar Series
- Columbia University Neurobiology Department Seminar
- UMDNJ/Rutgers University
- Georgia State University, Brains and Behavior Distinguished Lecture
- New York University Honors Lecture

2009

- University of California, San Diego Biology Department Seminar
- UTSW Medical Center
- Duke University, Lawrence C. Katz Memorial Prize Lecture
- Brown University
- University of Chicago Committee on Neurobiology Seminar Series
- Albert Einstein College of Medicine, Serafin Fernandez Memorial Lecture, Department of Genetics
- University of Kansas
- University of California, San Francisco
- Harvard University

2010

- Cincinnati Children's Hospital
- Johns Hopkins School of Public Health
- Washington University

2011

- Stanford University
- University of Manchester Astra-Zeneca Lecture
- University College London
- Imperial College, London
- National Center for Biological Sciences, Bangalore
- Mt. Sinai School of Medicine, Rudin-Kase Dean's Lecture
- IRCM, Montreal
- Johns Hopkins University Neuroscience Series

- Max-Planck Institute for Neurobiology Distinguished Speakers Seminar
- University of Freiburg, Germany
- State University of New York, Albany

2012

- Princeton University, Department of Molecular Biology
- Oberlin College, Benzer Lecture
- Department of Pharmacology, Yale University
- Scripps Florida
- Marine Biological Laboratory, Lederberg Lecture
- Columbia University, Genetics Department

2013

- College de France, Paris
- Barnard College, Distinguished Women in Science Lecture
- Wesleyan University
- Duke University Program in Genetics & Genomics Distinguished Lecture Series
- Marine Biological Laboratory, Forbes Lecturer, Grass Foundation
- Marine Biological Laboratory, Special Lecturer, Neural Systems & Behavior
- Georgia State University Brains & Behavior Distinguished Lecture series

2014

- Brandeis University Life Sciences Lecture
- Harvard Medical School, Kuffler Lecture, Department of Neurobiology
- Salk Institute
- EPFL, Lausanne
- National Institutes of Health, Wednesday Afternoon Lecture Series

2015

- Queens College, Queens, NY, Battersby Lecture
- Stanford University, Frontiers in Biochemistry Lecture
- Columbia University Neuroscience Seminar
- Albert Einstein College of Medicine, Distinguished Lecture
- New York University, Honors Lecture
- University of Pittsburgh, Laureate Lecture
- Harvard School of Public Health
- Massachusetts Institute of Technology, Teuber Lecture
- Johns Hopkins University Neuroscience Retreat
- University of Colorado, Boulder
- Cornell University, Biology without Borders Seminar

2016

- Davidson College, Smith Lecture
- Harvard Medical School, Department of Biological Chemistry and Molecular Pharmacology
- Marian Koshland Lecture, University of California, Berkeley
- UCSF Neuroscience Seminar
- Institute of Genetics and Development of Rennes (IGDR) Frontiers in Biology lecture, Rennes

2017

- UTSW University Lecture
- UCSD Joint CMM/Biology Seminar
- Cold Spring Harbor Laboratory McClintock Lecture
- The Scripps Research Dorris Neuroscience Lecture
- UC Davis Storer Lecture

- Yale Nahum Lecture
- 2018**
 - Institut du Cerveau et de la Moelle Epinière (ICM), Paris
 - UCLA Distinguished Lecture Series
 - University of Colorado Denver Anschutz Dean's Distinguished Seminar
- 2019**
 - University of Illinois 2019 Distinguished Public Lecture in Genomics
 - University of Washington Crill Lecture
- 2020**
 - Thomas Jefferson University William Potter Lecture

Invited Conference Presentations

- 2001**
 - Banbury Conference: Molecular Biology of Chemosensory Receptors
 - Göttingen Neuroscience Meeting, Germany
 - Gordon Research Conference. Chemical Senses: Taste and Smell
 - European Symposium on Insect Taste and Smell, Villasimius, Italy
- 2002**
 - Gordon Research Conference: Floral Odors
- 2003**
 - Developmental Olfaction Meeting
 - SEB Meeting, Southampton, UK
 - Chemical Senses: Taste and Smell Gordon Conference
- 2004**
 - Genetic Manipulation of Insects Keystone Meeting
 - Aspen Center for Physics Symposium: Olfaction and Birdsong
 - McKnight Neuroscience Meeting
 - ISOT Meeting, Kyoto, Japan
 - Beckman Young Investigator Symposium
- 2005**
 - Nobel Forum/CEDB Meeting, Stockholm, Sweden
 - Plenary Lecture, East Coast Nerve Net
 - Plenary Lecture, Mt. Sinai School of Medicine Graduate Program Retreat
 - European Symposium on Insect Taste and Smell, Villasimius. Italy
- 2006**
 - CSHL Banbury Conference: Appetite and Feeding
 - Plenary Lecture, GSA *Drosophila* Conference
 - CNS-MMX Symposium on the Insect Olfactory CNS, Bäckaskog Castle, Sweden
- 2007**
 - Keystone Chemical Senses, Snowbird
 - HHMI-Janelia Research Campus Conference: "Neuroanatomy and Stereotypy of the Adult *Drosophila* Nervous System"
 - Gates Foundation Grand Challenges in Global Health Annual Meeting, Capetown, South Africa
- 2008**
 - IPSEN-Nature-Salk Symposium on Biological Complexity: Genes, Circuits, and Behavior, Salk Institute
 - Gordon Research Conference: Genes and Behavior, Lucca. Italy

- Wenner-Gren Foundation Symposium: Building complex brains, Fiskebäckskil, Sweden
- Asilomar Transgenic Insect Workshop
- Columbia University Integrated PhD Program Retreat-Plenary Lecture
- Sloan-Salk Conference Keynote Lecture, Princeton University
- Industry Symposium, ISOT meeting
- SDB meeting
- ISCE meeting: Silverstein-Simeone Lecture
- Gates Foundation Grand Challenges in Global Health Annual Meeting, Bangkok, Thailand
- HHMI Scientific Meeting: Computational and Systems Biology
- ASCB meeting: “Cell Biology of the Senses” symposium lecture

2009

- Keystone Chemical Senses
- Firmenich Symposium, Geneva, Switzerland
- International Symposium on Ecological Volatiles, Tokyo, Japan
- SDB Meeting
- International Society of Nephrology Meeting, Florence, Italy
- European Symposium on Insect Taste and Smell, Villasimius, Italy
- EMBO Conference: The assembly and function of neuronal circuits, Ascona, Switzerland
- Gates Foundation Grand Challenges in Global Health Annual Meeting, Arusha, Tanzania

2010

- Salk Institute/Nature/Fondation Ipsen Annual Symposium on Biological Complexity: Sensory Systems: Smell, Taste, Touch, Hearing, and Vision
- University of Southern California Symposium: Molecules, Cells, & Circuits
- AChemS Human Olfaction Symposium
- McKnight Conference on Neuroscience Special Lecture
- University of Lausanne CIG Symposium: Sensing the Environment
- Neurofly Meeting, Plenary Lecture, Manchester, UK
- UNC Neuroscience Symposium
- Society for Neuroscience, Special Lecture
- HHMI-Janelia Research Campus Conference, Neurons, Systems, and Neural Disease

2011

- Keystone Symposium on Mechanisms of Transmembrane Signaling
- International Society for Olfaction and Chemical Sensors Plenary Lecture
- Champalimaud Neuroscience Symposium, Lisbon, Portugal
- Gill Prize Symposium
- University of Cincinnati Graduate Student Research Symposium

2012

- University of Utah Brain Institute Neuroscience Symposium
- 14th International Neuroscience Winter Conference, Sölden, Austria
- ISOT Meeting, Stockholm, Sweden
- Oregon Health Sciences University Retreat Keynote Speaker
- FOMS-3 Meeting, Max Planck Institute of Biochemistry, Frankfurt, Germany
- Neuro-Workshop FP7 MBG-BRIDGE Project, Istanbul, Turkey
- Skin Microbiota Workshop
- University of Colorado Neuroscience Retreat Invited Speaker

2013

- Max Planck Institute of Brain Research Colloquium, Frankfurt, Germany
- NIAID Vectorbase Workshop

- UCLA Neurogenetics Symposium
- HHMI-Janelia Research Campus Conference: Insect Genome Modification Workshop,
- HHMI-Janelia Research Campus Conference: Sensory Signaling in Model Organisms
- UTSW Neuroscience Retreat Plenary Speaker
- Arthropod Genomics Symposium, Notre Dame University
- ECRO Meeting, Leuven, Belgium
- Stanford Genetics Retreat Plenary Speaker
- ESITO Meeting, Villasimius, Italy
- FNIH/NIAID Population Replacement Strategies for Malaria Vectors Workshop

2014

- CSHL Meeting: Neuronal Circuits from Structure to Function
- AChemS Symposium: Chemoreception in mosquitoes: evolution, genomics and control strategies
- Spitsbergen 2014: Neural Networks in the Arctic, Svalbard
- European Congress of Entomology, York, UK
- Max Planck Institute for Brain Research Opening Symposium, Frankfurt, Germany
- EMBO Workshop: Decoding neural circuit structure and function, Istanbul, Turkey
- Stony Brook University Neuroscience Graduate Symposium plenary lecture
- HHMI-Janelia Research Campus conference: Life in the aggregate: mechanisms and features of social dynamics

2015

- The Hebrew University, Brainy Days in Jerusalem, Jerusalem, Israel
- Plenary lecture, International Society for Neurochemistry, Cairns, Australia
- Plenary lecture, RECOMB ISCB Regulatory and Systems Genomics Conference with DREAM Challenges

2016

- Accelerating Science and Publication in Biology (ASAPbio) conference
- COSYNE16 Computational and Systems Neuroscience
- AChemS Symposium
- American Philosophical Society Annual Meeting
- ISOT2016, Yokohama, Japan
- UCL Neuroscience Symposium, London, UK
- Kavli Prize Symposium, Trondheim, Norway
- International Congress of Entomology
- Society for Neuroscience Special Lecture
- Kavli Salon, Havana, Cuba
- EMBO | EMBL Symposia 2017 - Neuronal Circuits, Heidelberg, Germany
- Yale Kavli Symposium
- ICTP Frontiers in Olfaction Workshop
- UC Berkeley Symposium on Genome Editing
- IMP Opening Symposium
- Wallenberg Centennial Symposium: "Molecular Life Science," Stockholm, Sweden
- Delwart Symposium: "Molecular and Cellular Mechanisms Underlying Mood: From Well Being to Disorders", Brussels, Belgium

2018

- Harvard University Symposium: "Metabolism and Life"
- Carnegie Institute of Washington Symposium "Molecular Mechanisms of Adaptation"
- 11th FENS Forum of Neuroscience, Plenary Lecture, Berlin, Germany

- Cornell NeuroNex: 2018 NeuroNex Technology Conference
- NIH 12th Comparative Medicine Resource Director's Meeting, Keynote Speaker
- Gairdner Foundation Symposium: "Let There Be Light: Optogenetics in Neuroscience and Beyond"
- University of Michigan Inaugural Sensory Science Symposium

2019

- Janelia Conference: New Genetic Tools for Non-Model Organisms
- Journal of Experimental Biology Symposium 2019: Genome editing for comparative physiology
- University of Michigan, Department of Molecular and Integrative Physiology Annual Research Forum, Keynote speaker
- New York University Neuroscience Retreat, Keynote speaker
- Association for Chemoreception Sciences (ACHEMS) Presidential Symposium
- Mortimer B. Zuckerman Mind Brain Behavior Institute of Columbia University Inaugural Symposium
- Gordon Research Conference. Neuroethology: Behavior, Evolution and Neurobiology

2020

- University of California Berkeley, Helen Wills Neuroscience Retreat, Keynote speaker

Current Trainees**Postdoctoral Fellows (6)****1. Meg Younger, PhD**

(2014-Present)

Grass Fellow

Leon Levy Fellow

Jane Coffin Childs Memorial Fund Postdoctoral Fellow

Kavli Neural Systems Institute Postdoctoral Fellow

2. Maria Elena De Obaldia, PhD

(2014-Present)

Harvey Karp Fellow

Helen Hay Whitney Foundation Postdoctoral Fellow

3. Trevor Sorrells, PhD

(2016-Present)

Jane Coffin Childs Memorial Fund Postdoctoral Fellow

Kavli Neural Systems Institute Postdoctoral Fellow

4. Takeshi Morita, PhD

(2016-Present)

Harvey L. Karp Discovery Award

Japan Society for the Promotion of Science Postdoctoral Fellow

5. Nadav Shai, PhD

(2018-Present)

EMBO Long-Term Postdoctoral Fellow

6. Leah Houry-Ze'evi, PhD

(2019-Present)

Women & Science Postdoctoral Fellow (The Rockefeller University)

Helen Hay Whitney Fellow (declined)

EMBO Long Term Postdoctoral Fellow (declined)

Junior Fellow of the Simons Society of Fellows

Graduate Fellows (5)

1. **Veronica Jové** (2015-Present)
NSF Graduate Research Fellowship
HHMI Gilliam Fellowship
2. **Nipun Basrur** (2016-Present)
The David Rockefeller PhD Program (The Rockefeller University)
3. **Krithika Venkataraman** (2016-Present)
The David Rockefeller PhD Program (The Rockefeller University)
David Rockefeller Graduate Fellow
Boehringer Ingelheim Fonds PhD Fellowship
4. **Margaret Herre** (2016-Present)
Tri-Institutional MD-PhD Program
F30 NIH/NIDCD Ruth L. Kirschstein Individual Predoctoral NRSA Fellowship
Kavli Neural Systems Institute Graduate Fellow
5. **Olivia Goldman** (2018-Present)
The David Rockefeller PhD Program (The Rockefeller University)
NSF Graduate Research Fellowship

Former Trainees (fellowships and current position)**Postdoctoral Fellows (18)**

1. **Mattias Larsson, PhD** (2002-2004)
Swedish Foundation International Cooperation in Research and Higher Education
Sweden-America Foundation Fellow
Current Position: Associate Professor, Department of Plant Protection Biology, Swedish University of Agricultural Sciences
2. **Silke Sachse, PhD** (2002-2005)
Presidential Postdoctoral Fellow (The Rockefeller University)
Current Position: Head of a BMBF Independent Research Group, Department of Evolutionary Neuroethology, Max Planck Institute for Chemical Ecology
3. **Andreas Keller, PhD** (2002-2016)
Marco S. Stoffel Fellow in Mind Brain and Behavior (The Rockefeller University)
Branco Weiss Society in Science Fellow
NARSAD Young Investigator Award
Current Position: Scientific Consultant
4. **Richard Benton, PhD** (2003-2007)
EMBO Long-Term Postdoctoral Fellow
Helen Hay Whitney Foundation Postdoctoral Fellow
Current Position: Associate Professor (tenured), Center for Integrative Genomics, University of Lausanne

- 5. Matthieu Louis, PhD** (2003-2007)
Belgian American Educational Foundation Fellow
Revson Senior Fellow in Biomedical Sciences
Current Position: Assistant Professor, University of California, Santa Barbara
- 6. Jennifer Mehren, PhD** (2005-2007)
Marco S. Stoffel Fellow in Mind Brain and Behavior (The Rockefeller University)
Current Position: Health Science Program Manager, Office of Program Planning and Analysis, National Eye Institute, National Institutes of Health
- 7. Mathias Ditzen, PhD** (2005-2008)
Henry and Marie-Josée Kravis Postdoctoral Fellow (The Rockefeller University)
Current Position: Director of Business Development, Clinical Studies, Parexel International GmbH
- 8. Takao Nakagawa, PhD** (2005-2011)
Japan Society for the Promotion of Science Postdoctoral Fellow
Current Position: Research Scientist, Biological Laboratory, KAO Corporation
- 9. Eléonore Réal, PhD** (2008-2009)
NARSAD Young Investigator Award
Women & Science Postdoctoral Fellow (The Rockefeller University)
Current Position: Assistant Professor, University of Strasbourg
- 10. Gabriel Gasque, PhD** (2007-2013)
Pew Latin American Scholars Award Postdoctoral Fellow
Current Position: Senior Editor, PLoS Biology
- 11. Michael Crickmore, PhD** (2007-2013)
Marco S. Stoffel Fellow in Mind Brain and Behavior (The Rockefeller University)
Helen Hay Whitney Foundation Postdoctoral Fellow
Current Position: Assistant Professor, Boston Children's Hospital
- 12. Carolyn McBride, PhD** (2008-2014)
Howard Hughes Medical Institute Research Associate
K99/R00 NIH Pathway to Independence Award
Current Position: Assistant Professor, Princeton University
- 13. Matthew DeGennaro, PhD** (2009-2014)
Howard Hughes Medical Institute Research Associate
Current Position: Assistant Professor, Florida International University
- 14. Conor McMeniman, PhD** (2009-2015)
Henry and Marie-Josée Kravis Postdoctoral Fellow (The Rockefeller University)
Human Frontier Science Program Postdoctoral Fellowship
Current Position: Assistant Professor, Johns Hopkins University, Bloomberg School of Public Health
- 15. Nilay Yapici, PhD** (2009-2016)
Human Frontier Science Program Postdoctoral Fellow
Current Position: Assistant Professor, Cornell University
- 16. Julien Hsieh, MD** (2014-2016)
Clinical Scholar Award

Current Position: Medical Resident, Otorhinolaryngology Department, Université de Genève Hospital, Switzerland

17. Ben Matthews, PhD (2010-2019)

Henry and Marie-Josée Kravis Postdoctoral Fellow (The Rockefeller University)

Jane Coffin Childs Memorial Fund Postdoctoral Fellow

Current Position: Assistant Professor, University of British Columbia

18. Laura Duvall, PhD (2013-2019)

Women & Science Postdoctoral Fellow (The Rockefeller University)

American Philosophical Society Postdoctoral Fellow

Current Position: Assistant Professor, Columbia University

Graduate Students (12)

1. Ana Domingos, PhD (2000-2006)

Gulbenkian PhD Programme in Biology and Medicine (PDGM)

Current Position: Associate Professor of Neuroscience, University of Oxford; HHMI International Scholar

2. Elane Fishilevich, PhD (2001-2007)

F31 NIH/NIDCD Ruth L. Kirschstein Individual Predoctoral NRSA Fellowship

Current Position: Visiting Scientist, Dow AgroSciences

3. Walton Jones, PhD (2003-2006)

The David Rockefeller PhD Program (The Rockefeller University)

Current Position: Assistant Professor, Department of Biological Sciences, Korea Advanced Institute of Science and Technology (KAIST)

4. Kenta Asahina, PhD (2003-2008)

The David Rockefeller PhD Program (The Rockefeller University)

Current Position: Assistant Professor, The Salk Institute

5. Maurizio Pellegrino, PhD (2005-2010)

The David Rockefeller PhD Program (The Rockefeller University)

Current Position: Senior Scientist, Mission Bio, Inc.

6. Shelli Farhadian, MD, PhD (2006-2010)

Paul and Daisy Soros Fellowship for New Americans

F30 NIH/NIDCD Ruth L. Kirschstein Individual Predoctoral NRSA Fellowship

Current Position: Resident Physician, Department of Internal Medicine, Yale-New Haven Hospital

7. Jeff Liesch, PhD (2008-2013)

F31 NIH/NIDCD Ruth L. Kirschstein Individual Predoctoral NRSA Fellowship

Current Position: Senior Consultant in Life Sciences, Navigant Consulting

8. Jennifer Bussell, PhD (2008-2014)

The David Rockefeller PhD Program (The Rockefeller University)

Current Position: Simons Foundation Junior Fellow, Laboratory of Richard Axel, Department of Neuroscience, HHMI-Columbia University

9. Lindsay Bellani, PhD

(2010-2015)

NSF Graduate Research Fellowship

Current Position: Data Scientist, Dow AgroSciences

10. Roman Corfas, PhD

(2010-2016)

The David Rockefeller PhD Program (The Rockefeller University)

Current Position: Postdoctoral Fellow, Laboratory of Michael Dickinson, Caltech

11. Emily Dennis, PhD

(2011-2018)

F31 NIH/NIDCD Ruth L. Kirschstein Individual Predoctoral NRSA Fellowship

Current Position: Hanna H. Gray Fellow, Laboratory of Carlos Brody, Princeton University

12. Molly Liu, PhD

(2014-2019)

The David Rockefeller PhD Program (The Rockefeller University)

Current Position: Postdoctoral Fellow, Paloma Gonzalez-Bellido, University of Minnesota

FULL BIBLIOGRAPHY**Peer-Reviewed Publications****High School Work on Cell Aggregation and Neutrophil Signaling**

[1] Dunham P, L Nelson, **L Vosshall**, and G Weissmann. 1982. Effects of enzymatic and nonenzymatic proteins on *Arbacia* spermatozoa: reactivation of aged sperm and the induction of polyspermy. Biol Bull 163:420-430

[2] Rich AM, G Weissmann, C Anderson, **L Vosshall**, KA Haines, T Humphreys, and P Dunham. 1984. Calcium dependent aggregation of marine sponge cells is provoked by leukotriene B4 and inhibited by inhibitors of arachidonic acid oxidation. Biochem Biophys Res Commun 121:863-870 PMID: 6331432

[3] Dunham PB, **L Vosshall**, CA Bayer, AM Rich, and G Weissmann. 1985. From Beaumont to poison ivy: marine sponge cell aggregation and the secretory basis of inflammation. Fed Proc 44:2914-2924 PMID: 3932096

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Book Chapters

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3. SERVICE, MENTORING, TEACHING

Rockefeller University Academic Service

- RU Neuroscience Search Committee 2000-2003
- RU Centennial Video Committee, 2001
- RU Honorary Degree Committee, 2001
- RU Neuroscience Retreat Director: 2002, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019
- RU HOL Forum Co-Organizer: 2001-2003

- RU Friday Lecture Committee, 2004-2013
- RU Vice Chair (Neuroscience) Faculty Search Committee, 2005-2011, 2013, 2018
- RU Mid-Career Hiring Committee 2012-Present
- RU Postdoctoral Awards Review Committee 2009-Present
- RU Open Faculty Search Committee, 2009-2011, 2013-2015, 2016 (chair), 2018
- Tri-Institutional Postdoctoral Breakout Award Committee 2015-Present
- Co-Director, Rockefeller University Diversity Initiative (RUDI) 2015-2017
- Associate Director, Kavli Neural Systems Institute 2015-2016
- Director, Kavli Neural Systems Institute 2016-Present

Rockefeller University Administrative Service

- RU Academic Council, 2001-2004; 2010-2012; 2013 (chair), 2019-2022
- RU DNA Sequencing Resource Center Committee, 2002-2004
- RU Committee to Revise Appointment and Promotion Policy, 2004
- RU Core Strategic Planning Committee, 2004-2005
- RU Student and Faculty Club Committee, 2004-Present
- RU IT Committee, 2005-Present
- RU Welsh Hall Renovation Committee, 2007-2009
- RU Strategic Planning Committee, 2011-2012, 2018-2019
- RU Staff Scientist Appointment Working Subcommittee 2014
- RU Presidential Search Committee 2016
- RU Precision Instrumentation Technologies Resource Center Advisory Committee 2018-Present
- RU Library Advisory Committee 2019-Present
- RU Bioinformatics Resource Center Advisory Committee 2019-Present

Education

- RU Graduate Admissions Committee 2000-2010, 2013-Present
- Tri-Institutional MD-PhD Program Screening Committee 2001-2002
- Tri-Institutional MD-PhD Program Interviewing 2003-2010
- RU Graduate Education Committee, 2006-Present

TEACHING AND MENTORING

Internal Teaching

- Tri-Institutional Ethics Course, 2001-2002
- Tri-Institutional Second Year MD-PhD Frontiers Course, 2002-2006, 2009, 2010, 2014
- RU Cell Biology Course, 2002, 2004, 2006, 2008, 2014, 2016
- RU Behavioral Neuroscience Course, 2004, 2006, 2008
- RU Experiment & Theory Course, 2002-2004, 2006-2010
- RU Outreach STRAW Course, 2002-2004
- RU Hospital CCTS Course, 2008-Present

External Teaching

- Lecture in Developmental Neuroscience Course, New York University, 2001-2004
- Lecture on Sensory Systems to Cold Spring Harbor Neurobiology of Drosophila course, 2002, 2011
- Faculty, Neural Systems & Behavior Course, Marine Biological Laboratory, Woods Hole, MA, 2005-2007

- Lecture L'Oreal Women in Science Career Seminar, 2008
- NYU ITP Course Lecture, Visualizing the Five Senses, 2008
- *Drosophila* Genetics and Genomics, Wellcome Trust Genome Campus, Hinxton, Cambridge, UK, 2009

Scientific Outreach Activities

- Research lecture to Prospective RU PhD Students, 2001; 2002; 2006
- Lecture to Columbia School of Journalism Students, 2002-2004
- Lecture to Human Resources, Diversity Recruitment Day, 2003
- Vosshall Laboratory Tour for Child & Family Center Teachers, 2004
- Presentation to S&P/Moody's for RU Bond Rating Evaluation, 2005
- Women & Science Breakfast Lecture: 2005
- Women & Science Luncheon Panel: 2007; 2009
- Women & Science Luncheon Lecture, 2011
- Secret Science Club Public Lecture, 2008
- Vosshall Laboratory Tour for Board of Trustees, 2008, 2012
- New York Academy of Sciences Public Lecture, 2008
- Experimental Cuisine Collective Symposium, 2009
- Manchester, UK Science Day, 2011
- Dialogues of Discovery, HHMI-Janelia Research Campus, 2011
- Observer Effects: Conversations on Art & Science, EMPAC, Troy, NY 2012
- TedX Leuven Salon, 2013
- Science Saturday, The Rockefeller University, 2014
- HHMI Food For Thought Lecture, 2014
- Feature film: The Fly Room (color, 83 minutes, role: Edith Wallace) 2014
- Secret Science Club North Public Lecture (New York, NY) "What's That Smell?" 2016
- New York Spa Alliance Symposium "The Science of Scent," 2016
- Museum of Modern Art (New York, NY) "Is Fashion Modern? An Abecedarium," 2016
- Workshop on Sensory logic of the Gastronomic Brain. Co-organized by the restaurant Mugaritz (Errenteria, Spain), the Basque Culinary Center (San Sebastian, Spain) and the Centre for Genomic Regulation (Barcelona, Spain) 2016
- Presentation to CCNY-affiliated senior organization Quest - A Community for Lifelong Learning, "Fascinating Attraction: The biology of human scent and mosquitoes," 2016
- American Museum of Natural History Teen SciCafe "No More Mosquitoes?" 2017
- American Museum of Natural History (New York, NY) SciCafe "Modifying Mosquitoes with CRISPR." 2017
- Rockefeller University Women & Science Annual Luncheon Lecture: "From A to Zika: Global Health is Local Health." 2017
- Speaker Metro-NY Chapter of Women in BIO: "Female Leadership in Science." 2017
- Rockefeller University "Talking Science" presentation to high school students 2018
- Quanta Magazine Podcast 2019
- Clear+Vivid Podcast with Alan Alda 2019
- Person Place Thing with Randy Cohen 2019
- 92nd Street Y: 92Y Science Salon with Claudia Dreifus

Service on Rockefeller University Thesis Committees

- Catharine Boothroyd—Young Lab
- Dylan Chan—Hudspeth Lab

- Lucia Chemes—Hudspeth Lab
- M. Eugenia Chiappe—Hudspeth Lab
- Svetlana Ghorokova—Heintz Lab
- Doruk Golcu—Gilbert Lab
- Veronique Haegeli—Strickland Lab
- Daylon James—Brivanlou Lab
- Erica Keen—Hudspeth Lab
- Trudy McCall—McEwen Lab
- Leopoldo Petreanu—Nottebohm/Alvarez-Buylla Labs
- Valentin Piech—Gilbert/Reeke Labs
- Joanna Spencer—McEwen Lab
- Carine Waase—Shaham Lab
- Perrin Wilson—Hatten Lab
- Genevieve Yuen—McEwen Lab
- Carl Procko—Shaham Lab
- Emily Rhodes Lowry—Strickland Lab
- Geulah Livshits—Fuchs Lab
- Justin McManus—Gilbert Lab
- Suchit Patel—Hudspeth Lab
- Tian He—Sakmar Lab
- Laura Winzenread—Bargmann Lab
- Katherine Leitch—Hudspeth lab
- Christine Cho—Bargmann Lab
- Meghan Lockhard—Bargmann Lab
- Sean McKenzie—Kronauer Lab
- Laura Seeholzer—Ruta Lab
- Samantha Larson—Fuchs Lab
- Aylesse Sordillo—Bargmann Lab
- Zikun Wang—Young Lab
- Emily Lorenzen—Sakmar Lab
- Paul Muller—Mucida Lab
- Vikram Chandra—Kronauer Lab
- Thomas Hart—Kronauer Lab
- Lindsay Cantin—Jarvis Lab
- Gregory Gedman—Jarvis Lab
- Jazz Weissman—Maimon Lab
- Anoj Ilanges—Friedman Lab
- Evan Witt—Zhao Lab
- Samuel Khodursky—Zhao Lab
- Anna Ryba—Ruta Lab
- Audrey Harnagel—Bargmann Lab
- Tyler Lewy—Rice Lab

Service on External Thesis Committees

- Joseph Osborne—Richard Axel, Columbia University
- Jennifer Power—Richard Axel, Columbia University
- Marcus Stensmyr—Bill Hansson, SLU/Alnarp, Sweden
- Sean O'Donnell—Richard Axel, Columbia University

- Allan Wong— Richard Axel, Columbia University
- Roscoe Brady— Richard Axel, Columbia University
- Esteban Mazzoni—Claude Desplan, New York University
- Sean Luo—Larry Abbott/Richard Axel, Columbia University
- Kyle Honegger—Glen Turner, Cold Spring Harbor Laboratory
- Kim Simpson— Richard Axel, Columbia University
- Joshua Hagen—Eric Lai, Sloan Kettering Institute
- Nathalie Neric—Claude Desplan, New York University
- Erik Duboue— Richard Borowsky, New York University
- Juliet Zhang—Julia Kaltschmidt, Sloan-Kettering Institute
- Sudha Ragavalli Guttikonda—Lorenz Studer, Sloan-Kettering Institute
- Hershy Fischman—Charles Zuker, Columbia University

4. EXTERNAL SUPPORT AND PATENTS

Current

HHMI Investigator Award

Title: Modulation of Behavior by Internal Physiological State

Agency: Howard Hughes Medical Institute

Project period: 7/1/2008 – 8/31/2025

P.I.: Leslie B. Vosshall

Goal: To understand how internal physiological state alters behaviors

NIH RO1 Award

Title: Neuropeptide Regulation of Mosquito Host-Seeking Behavior

Agency: National Institute of Deafness and Other Communication Disorders

Grant Number: 1R01DC014247

Project period: 12/1/2014 – 11/30/2019

P.I.: Leslie B. Vosshall

Goal: To identify neuropeptide signaling mechanisms that modulate female mosquito

Robertson Therapeutic Development Fund (RTDF) 2019 Advanced Proposal

Title: Small Molecule GPCR Agonists to Block Mosquito Biting Agency: Robertson Therapeutic Development Fund

Project period: 10/1/2019 – 9/30/2021

P.I.: Leslie B. Vosshall

Goal: To develop new chemical entities that are potent agonists of NPYLR7, for use in controlling mosquito biting behavior

Robertson Therapeutic Development Fund (RTDF) 2019 Pre-Clinical Lead Optimization Proposal

Title: Development of a Digital Olfactory Test Device

Agency: Robertson Therapeutic Development Fund

Project period: 12/1/2019 – 11/30/2020

P.I.: Leslie B. Vosshall

Goal: To develop a new clinical smell test for diagnosis of olfactory dysfunction

Completed

Robertson Therapeutic Development Fund (RTDF) 2018 Pilot Proposal

Title: Development of a Universal Smell Test of Olfactory Dysfunction

Agency: Robertson Therapeutic Development Fund

Project period: 5/1/2018 – 10/31/2019

P.I.: Leslie B. Vosshall

Goal: To develop hardware and software for a new smell test

Robertson Therapeutic Development Fund (RTDF) 2016 Advanced Proposal

Title: Small Molecules to Prevent Arthropod Biting Behavior

Agency: Robertson Therapeutic Development Fund

Project period: 10/1/2016 – 9/30/2018

P.I.: Leslie B. Vosshall

Goal: To develop small molecules that inhibit biting behavior of disease-vectoring arthropods

The Quadrivium Award for Innovative Research in Epigenetics

Title: Epigenetic Regulation of Mosquito Behavior

Agency: The Quadrivium Foundation

Project period: 3/1/2017 – 2/28/2018

P.I.: Leslie B. Vosshall

Goal: To understand the role of epigenetic and transcriptional changes in suppression of female mosquito host-seeking behavior

NIH RO1 Award

Title: Perceptual effects of genetic variation in human odorant receptors

Agency: National Institute of Deafness and Other Communication Disorders

Grant Number: 1RO1 DC013339

Project period: 7/12/2013 – 6/30/2016

P.I.: Joel Mainland (Leslie B. Vosshall, co-PI)

Goal: To examine the relationship between variation in odorant receptor genes and human smell perception

Robertson Therapeutic Development Fund (RTDF) Pilot Award

Title: Small Molecule Inhibitors of Mosquito Biting Behavior

Project Period: 08/01/2015 – 01/31/2016

Vosshall (PI)

Goal: To find novel small molecule agonists of the mosquito receptor NPYLR7 to inhibit female host-seeking behavior

Klarman Family Program in Eating Disorders Research

Title: G Protein-Coupled Receptors Regulating the Sensation of Hunger and Satiety

Agency: The Klarman Family Grant Foundation

Project period: 6/1/2012 – 5/31/2014

P.I.: Leslie B. Vosshall

Goal: To understand how GPCRs participate in the sensation of hunger or satiety and the promotion or suppression of feeding

Grand Challenges in Global Health Award

Title: Molecular Approaches to Alter Olfactory-driven Behaviors of Insect Disease Vectors

Agency: Bill and Melinda Gates Foundation/FNIH

Grant Number: 798

Project period: 9/15/2005 – 9/14/2013

P.I.: Richard Axel, M.D.

Goal: To use the insect odorant receptors as targets for the discovery of novel insect repellents useful in the fight against mosquitoes and the human infectious diseases they spread

NIAID Vectorbase Driving Biological Projects Subcontract

Title: Comparative Neurotranscriptome of *Aedes aegypti*

Agency: NIH/NIAID Grant Number: 798

Project period: 10/01/2010 – 9/30/2012

P.I.: Leslie B. Vosshall, Ph.D.

Goal: To use the RNAseq techniques with Illumina technology to decode the transcriptome of neural tissues of the yellow fever mosquito under different regimes of host-seeking behavior

NIH RO1 Award

Title: Molecular Biology of the Odorant Receptors

Agency: National Institute of Deafness and Other Communication Disorders

Grant Number: 5RO1 DC008600

Project period: 12/4/2006 – 11/30/2011

P.I.: Leslie B. Vosshall

Goal: To examine the relationship between insect odorant receptor structure and function

Klarman Family Program in Eating Disorders Research

Title: Identification of Novel Genes and Circuits in an Animal Model of Binge Eating Disorder

Agency: The Klarman Family Grant Foundation

Project period: 6/1/2008 – 5/31/2010

P.I.: Leslie B. Vosshall

Goal: To study feeding behavior and its regulation by genetic and chemical disruption in *Drosophila*

NIH RO1 Award Supplement

Title: Molecular Biology of the Odorant Receptors

Agency: National Institute of Deafness and Other Communication Disorders

Grant Number: 3R01DC008600-02S1

Project period: 12/05/2007 – 11/30/2009

P.I.: Leslie B. Vosshall

Goal: This supplement was granted under the US-Japan Brain Research Collaborative Program (BRCP) and was used in July 2009 for travel of Vosshall Lab members to Tokyo to collaborate with the laboratory of Kazushige Touhara.

NIH RO1 Award Supplement

Agency: National Institute of Deafness and Other Communication Disorders

ARRA (American Recovery and Reinvestment Act of 2009)

Grant Number: 3R01 DC008600-03S1

Project period: 7/19/2009 – 6/30/2010

P.I.: Leslie B. Vosshall

Goal: This supplement will be used to create a Laboratory Technician position to support our ongoing research program on the mechanism of action of the insect repellent DEET and to fund the testing of novel compounds that block insect odorant receptors.

NIH RO1 Award

Title: Genetics of Olfactory Coding in *Drosophila*

Agency: National Institute of Deafness and Other Communication Disorders

Grant Number: RO1 DC006711A1

Project period: 12/01/2004 – 11/30/2009

P.I.: Leslie B. Vosshall

Goal: To study odor coding in the *Drosophila* larva using molecular genetic approaches, including the selective ablation and rescue of identified neurons expressing a given odorant receptor gene

Monique Weill-Caulier Trust Scholar Award

Title: The Evolution of Human Perceptual Differences

Agency: Irma T. Hirschl Foundation

Project period: 1/1/2005 – 12/31/2009

P.I.: Leslie B. Vosshall

Goal: To associate specific olfactory phenotypes, including specific anosmia, with specific perturbations in human odorant receptor gene sequences

CTSA Pilot Grant

Title: Genetic basis of sex steroid-derived odor perception

Agency: National Institutes of Health/ National Center for Research Resources

Grant Number: 1 UL1 RR024143-01

Project period: 1/1/2007 – 6/30/2007

P.I.: Barry Collier

Goal: This pilot grant was used to set up feasibility studies for our IRB-approved protocol entitled "Physiological Effects of Androstadienone Exposure," in particular the protocol for distributing home ovulation kits and to purchase and test equipment used to measure skin conductance in human volunteers.

John Merck Fellowship Award

Title: Olfactory Perception and the Encoding of Preference

Agency: The John Merck Fund

Project period: 6/1/2002 – 5/31/2006

P.I.: Leslie B. Vosshall

Goal: To analyze the circuitry and function of neurons eliciting behavioral attraction and repulsion in *Drosophila*

Beckman Young Investigator Award

Title: Chemical Specificity of *Drosophila* Odorant Receptors

Agency: Arnold and Mabel Beckman Foundation

Project period: 9/1/2001 – 8/31/2004

P.I.: Leslie B. Vosshall

Goal: To identify candidate ligands for the *Drosophila* odorant receptors

NIH RO1 Award

Title: Formation of an Olfactory Sensory Map

Agency: National Institute of Deafness and Other Communication Disorders

Grant Number: 5RO1 DC05036

Project period: 8/1/2001 – 12/31/2006

P.I.: Leslie B. Vosshall

Goal: To examine the role of the odorant receptor in establishing the olfactory sensory map in the brain

McKnight Scholar Award

Title: The Molecular Biology of Odor Recognition in *Drosophila*

Agency: McKnight Endowment Fund for Neuroscience

Project period: 7/1/2001 – 6/30/2004

P.I.: Leslie B. Vosshall

Goal: To study the functional link between olfactory wiring and behavior

NSF CAREER Award

Title: Role of a Ubiquitous Odorant Receptor in Olfactory Perception

Agency: National Science Foundation

Grant Number: IBN 0092693

Project period: 4/1/2001 – 3/31/2006

P.I.: Leslie B. Vosshall

Goal: To determine the function of Or83b, the odorant receptor that is widely but selectively expressed in the *Drosophila* olfactory system

Patents

Nuclear localization factor associated with circadian rhythms. 1999. US patent US5885831A. Inventors: Young, Michael W; Sehgal, Amita; **Vosshall, Leslie B**; Price, Jeffrey L; Myers, Michael P

Genes encoding insect odorant receptors and uses thereof. 1999. US Patent US7241881B2. Inventors: **Vosshall, Leslie B**; Amrein, Hubert O; Axel, Richard

Insect chemosensory receptors and methods of use thereof. 2005. Provisional patent application: P-8027-USP. Inventors: Jones, Walton D; **Vosshall, Leslie B**

Compositions and methods for characterizing and regulating olfactory sensations. 2008. US Patent US8298781B2. Inventors: Matsunami, Hiroaki; Keller, Andreas; Zhuang, Hanyi; Chi, Qiuyi; **Vosshall, Leslie B**

Insect odorant receptor antagonists. 2011. PCT/US2011/065536. Inventors: Nakagawa, Takao; **Vosshall, Leslie B**

SMELL-S and SMELL-R: olfactory tests not influenced by odor-specific insensitivity or prior olfactory experience. 2017. PCT/US2017/62/528,420. Inventors: Hsieh, Julien Wen; Keller, Andreas; **Vosshall, Leslie B**

Compositions and methods to inhibit arthropod host-seeking behavior. 2019. PCT attorney docket 2877.032P1. Inventors: Duvall, Laura; **Vosshall, Leslie B**