***Curriculum vitae***

**Dr. Oliver Hobert**

**Professor of Biological Sciences, Columbia University, New York**

**Department of Biological Sciences**

**Investigator, Howard Hughes Medical Institute**

Phone: (212) 853 0063, e-mail: or38@columbia.edu, Lab Website: hobertlab.org, ORCID: 0000-0002-7634-2854

**Birth & Citizenship**

born 02.02.1967, Rotenburg an der Fulda, Germany; German & US citizen

**Education**

1996-1999 Postdoctoral Fellow, Harvard Medical School/Massachusetts General Hospital, Boston;

 Advisor: Prof. Gary Ruvkun

1992-1995 Dr. rer. nat. (Ph.D) Molecular Biology, Max Planck Institute for Biochemistry, Martinsried & University of Bayreuth, Germany; Advisor: Prof. Axel Ullrich & Prof. Gerhard Krauss

(incl. 1 year DAAD research fellowship at Sugen, Inc., Redwood City, CA, USA)

1987-1992 Diploma Biochemistry (Diplom Studiengang Biochemie), Universität Bayreuth, Germany;

 Advisor: Prof. Gerhard Krauss

1990 Summer Research Internship at Columbia University, Dept. of Biological Sciences;

 Advisor: Prof. Alberto Mancinelli

1989 Research Internship at German Cancer Research Center (DKFZ) Heidelberg;

Advisor: Dr. Hans-Dieter Royer

**Professional Experience**

2015-present Full Professor at Columbia University, Department of Biological Sciences (primary affiliation)

 Additional affiliations: Member, Neurotechnology Center, Columbia University;

 Affiliate Member, Zuckerman Mind Brain Behavior Institute, Columbia University

2014-present Full Professor, Department of Systems Biology, Columbia University Medical Center

2009-present Full Professor, Department of Biochemistry and Molecular Biophysics, Columbia University Medical Center

2005-present Investigator, Howard Hughes Medical Institute

2005-2009 Associate Professor (with tenure) in the Department of Biochemistry and Molecular Biophysics, Columbia University Medical Center

1999-2005 Assistant Professor in the Department of Biochemistry and Molecular Biophysics, Columbia University Medical Center, Co-Appointment in the Center for Neurobiology and Behavior

**Awards and Honors**

2018 Axel Ullrich Medal

2015 Jacob Javits Award in the Neurosciences

2014 Elected Fellow of the American Association for the Advancement of Science (AAAS)

2008 Harland Winfield Mossman Award in Developmental Biology

2001 McKnight Endowment for the Neurosciences Disease Award

2001 Rita Allen Foundation Scholar Junior Faculty Award

2001 Irma T. Hirschl Early Career Scientist Award

2000 Klingenstein Fellow

2000 Alfred P. Sloan Research Fellow

2000 Searle Scholar Junior Faculty Award

2000 Basil O’Connor Scholar Award

1999 Human Frontiers in Science 10th Anniversary Award

1998 Postdoctoral Fellowship Award from the MGH Fund For Medical Discovery

1997 Junior Investigator Award from the German Academy of Science “Leopoldina”

1996 Human Frontiers in Science Postdoctoral Fellowship

1994 Ph.D. scholarship from the DAAD for 1 year stay at Sugen, Inc.

1993-1995 Ph.D. scholarship from the "Studienstiftung des deutschen Volkes"

1989-1992 Undergraduate scholarship from "Studienstiftung des deutschen Volkes"

**Teaching Activities**

*At Columbia University:*

2017-present Director & Lecturer Advanced Undergraduate course “Neurogenetics”, Dept. of Biolog. Sciences

##### 2016-present Guest Lecturer Undergraduate course “Seminar in Modern Biology”, Dept. of Biolog. Sciences

##### 2008-present Guest Lecturer Graduate course "Molecular Genetics", Dept. of Microbiology and Immunology

##### 2001-present Guest Lecturer Graduate course “Developmental Neurobiology”, Dept. of Neuroscience

2013-2017 Guest Lecturer Graduate course “Advanced eukaryotic molecular genetics”, Dept.Genetics&Dev.

##### 2012 Guest Lecturer Graduate course “Genetics”, Dept. of Biological Sciences

##### 2009-2015 Guest Lecturer Graduate course "Professional Development for Neuroscientists", Dept. Neurosci.

##### 2007-2011 Director & Lecturer of “Stem Cells and Cell Lineage Specification” course

2002-2015 Guest Lecturer Graduate course “Principles of Developmental Biology”, Dept. of Genetics & Dev.

2001-2008 Co-Organizer Graduate Course “Developmental Neurobiology”, Center for Neurobiol. & Behavior

1999-2007 Guest Lecturer Graduate course “Biochemistry and Molecular Biology of Eukaryotes”, Dept. of Biochemistry & Mol. Biophysics

*Outside Columbia University:*

##### 2015 Guest lecturer in Cold Spring Harbor Course “Advanced Techniques in Molecular Neuroscience”

##### 2011 Guest lecturer MBL Course "Gene Regulatory Networks", Woods Hole

##### 2009,2013,2015 Guest lecturer EMBO Course "Developmental Neurobiology", King’s College London

##### 2009 Guest lecturer in Lipari Summer School "Computational Biology", Italy

##### 2006 Guest lecturer in Postgraduate Course on Developmental Biology at the Universidad de Chile

##### 2005 Guest lecturer at New Jersey Governor’s School in the Sciences, Drew University, NJ

##### 2004 Guest lecturer in “Developmental Neurosci.”, Graduate course at New York University

##### 2003,2004 Guest lecturer in “Developmental Neurosci.”, Graduate course at Albert Einstein College of Med.

##### 2002,2008,2010 Guest lecturer in Cold Spring Harbor Course "*C. elegans*", Cold Spring Harbor

2000 Guest lecturer in Cold Spring Harbor Laboratory, Course on “Adv. Genome Seq. Analysis”

**Training Activities**

*Graduate students:*

1999-present 29 past Graduate Students (5 currently Faculty Members; listed below)

*Postdoctoral fellows:*

1999-present 30 past Postdoctoral Fellows (20 currently Faculty Members/Group Leaders; listed below)

*Other:*

2007-2012 Program director NIH T32 Training Grant “Stem Cells and Cell Lineage Specification”

2006-present Training Mentor *Harlem Children Society*

2005-present Training Faculty of the Graduate Program in *Biological Sciences*

2004-present Training Faculty of the Graduate Program in *Genetics and Development*

1999-present Training Faculty of the Graduate Program in *Neurobiology and Behavior*

**Trainees**

**a) Past Postdoctoral Fellows (32 total, 22 with faculty/group leader positions in academia)**

1) 1999-2000 Zeynep Altun (M.D., Ph.D. Cornell U), now Assistant Professor of Clinical Psychiatry, Columbia University Irving Medical Center

2) 1999-2002 Oscar Aurelio (Ph.D. UC Irvine), now Scientist, Focus Diagnostics, Inc.

3) 1999-2004 Paula Loria (Ph.D. Univ Chicago), now Associate Research Fellow at Pfizer

4) 1999-2005 Hannes Buelow (Ph.D. Max Delbrück Center, Berlin), now: Professor of Genetics and Neuroscience at Albert Einstein College of Medicine

5) 2003-2004 Erik Runko (Ph.D. AECOM), now Program Analyst, Extramural Research Program, NIH

6) 2003-2004 Yael Feinstein (Ph.D. Weizmann Institute, Israel), now: Head of Bio-optics facility, Hebrew Univ.

7) 2003-2006 Celia Antonio (Ph.D. EMBL, Heidelberg), now Clinical Study Manager at Novartis

8) 2004-2009 Claire Benard (Ph.D. McGill University), now: Assistant Professor at University Mass. Worcester

9) 2004-2009 Roger Pocock (Ph.D. Oxford University), now: Associate Professor, Monash University, Australia

10) 2005-2011 Vincent Bertrand (Ph.D. Univ. Marseille), now: Group Leader, University of Marseille

11) 2005-2011 Maria Doitsidou (Ph.D. MPI Biophys.Chemistry), now Group Leader (Chancellor’s Fellow), University of Edinburgh, Scottland

12) 2005-2012 Richard Poole (Ph.D. UC London), now: Principal Research Associate (Wellcome Trust Senior Fellow) at University College, London

13) 2006-2011 Nuria Flames (Ph.D. Neurscience Institute Alicante, Spain), now: Group Leader, Institute of Biomedicine of Valencia, Spain

14) 2006-2011 Baris Tursun (Ph.D. ZMNH, Germany), now: Group Leader at Max Delbrueck Center, Berlin

15) 2006-2012 Luisa Cochella (Ph.D. Johns Hopkins University), now: Group Leader IMP, Vienna, Austria

16) 2007-2009 Henry Bigelow (Ph.D. Columbia University), now: Computational Biologist, Amgen Inc.

17) 2008-2014 Ines Carrera (Ph.D. NYU), now: Assistant Professor, Universidad de la República, Montevideo, Uruguay

18) 2010-2012 Oded Rechavi (Ph.D. Tel Aviv University, Israel), now: Professor of Neurobiology, Tel Aviv University, Israel

19) 2010-2015 Paschalis Kratsios (Ph.D. EMBL, Germany/Italy), now: Assistant Professor, University of Chicago

20) 2010-2016 Kelly Howell (Ph.D. University of Pennsylvania), now: Scientist, Spinal Muscular Atrophy Foundation

21) 2010-2017 Marie Gendrel (Ph.D. Ecole National Superieure, Paris, France), now:Associate Professor, Ecole normale supérieure (ENS), Paris, France

22) 2012-2016 Meital Oren-Suissa (Ph.D. Technion, Haifa), now: Assistant Professor, Weizmann Institute, Israel

23) 2012-2017 Michael Hart (Ph.D. University of Pennsylvania), now: Assistant Professor, University of Pennsylvania School of Medicine, Department of Genetics

24) 2017-2018 Brett Marique (Ph.D., Washington University, St. Louis), ensuing position: Coordinator of Young Adult/Adolescent Services, NYC Health + Hospitals

25) 2009-2018 Esther Serrano (Ph.D. Centro de Biologia Molecular, Madrid, Spain), now: Cajal Fellow, Centro de Biologia Molecular Severo Ochoa, Madrid, Spain

26) 2011-2019 Laura Pereira (Ph.D. University of Illinois, Chicago), then Staff Scientist, NY Genome Center

27) 2012-2021 Abhishek Bhattacharya (Ph.D. Albert Einstein College of Medicine), ensuing position: Group Leader, National Center for Biological Science, Tata Institute of Fundamental Research, Bangalore

28) 2013-2021 Neda Masoudi (Ph.D. University of Dundee, Scotland), then Scientist, Prevail Therapeutics

29) 2014-2021 Haosheng Sun (Ph.D. Mt. Sinai School of Medicine), ensuing position: Assistant Professor, University of Alabama, School of Medicine, Department of Cell Developmental and Integrative Biology, Birmingham

30) 2012-2021 Eviatar Yemini (Ph.D., UCSD, Cambridge), ensuing position: Assistant Professor, UMass Medical School, Dept. Neurobiology

31) 2017-2022 Steven Cook (Ph.D, Albert Einstein Colleage of Medicine), ensuing position: Scientist, Allen Institute, Seattle

32) 2015-2022 Merly Vogt (Ph.D. Max Planck Institute, Universität Köln, Germany), ensuing position: Group Leader, Helmholtz Center, Institute for Diabetes and Cancer , Munich, Germany

33) 2017-2022 Sandeep Wonkatal (M.D./Ph.D., Albert Einstein College of Medicine), ensuing position: Assistant Professor, Johns Hopkins University, Dept. Pathology

b) Past Graduate Students:

1) 1999-2005 Katherine Berry (Integrated Program), then postdoc at Harvard Medical School

2) 2000-2003 Ephraim L. Tsalik (MD/PhD Program), now Associate Professor of Medicine, Duke University

3) 2000-2003 Nehal Mehta (Biochem. Program), now Senior Manager, Business Development, Daiichi Sankyo

4) 2000-2004 Adam S. Wenick (MD/PhD Program), now Assistant Professor, Johns Hopkins University

5) 2000-2004 Sarah Chang (Neurobiology Program), now Vice President, Medical and Scientific Services; Infusion Communication

6) 2001-2005 Robert J. Johnston (Biochemistry Program), now Assistant Professor, Johns Hopkins University

7) 2001-2005 Thomas Boulin (Ecole Normale Supérieure, Paris, France), now Group Leader, Université Lyon

8) 2003-2008 John Etchberger (Biochemistry Program), now Associate Director, Navigant Consulting, Inc.

9) 2004-2009 Christopher Ortiz (MD/PhD Program), now Resident at UCLA

10) 2004-2009 Dominic Didiano (Biochem. Program), now Research Assistant Professor, Vanderbilt University

11) 2004-2009 Eileen Flowers (Integrated Program), now Vice President, Biotech. Equity Research, Jefferies&Co

12) 2004-2010 Maggie O’Meara (Genetics Program), now Postdoctoral Fellow at U.Minnesota

13) 2004-2010 Sumeet Sarin (Genetics Program), now Postdoctoral Fellow at Harvard University

14) 2005-2010 Andrew Goldsmith (Genetics Program), now Senior Manager, Competitive Intelligence at Pfizer

15) 2006-2010 Enkelejda Bashllari (Integrated Program), now Co-Founder, Raw is Everything

16) 2007-2013 Heidi Smith (Biology Program), now Postdoctoral Fellow at University of Texas

17) 2008-2013 Feifan Zhang (Biology Program), now Biostatistician, Cardiovascular Research Foundation

18) 2009-2014 Patricia Gordon (Biochemistry Program), now Postdoctoral Fellow at University College London

19) 2009-2014 Gregory Minevich (Pathology Program), now CEO, Co-Founder, Bering

20) 2009-2015 Nikolaos Stefanakis (Biology Program), now Postdoctoral Fellow at Rockefeller University

21) 2010-2016 Tulsi Patel (Genetics Program), now Postdoctoral Fellow at CUMC

22) 2011-2016 John Kerk (Neuroscience Prg.), now Postdoctoral Fellowship Program, Regeneron, Inc.

23) 2011-2016 Peter Weinberg (Biological Sciences Program), now: Analyst, inThought Research

24) 2011-2018 Dylan Rahe, Biological Sciences Prg., now Postdoctoral Fellow at New York University

25) 2011-2018 Lori Glenwinkel, Biological Sciences Prg.

26) 2013-2019 Ulkar Aghayeva, Biological Sciences Prg.

27) 2015-2019 Emily Bayer, Biological Sciences Prg., then Postdoc at Biozentrum, Basel

28) 2015-2019 Emily Berghoff, Biological Sciences Prg., then Senior Analyst, Health Advances

29) 2016-2021 Molly Reilly, Biological Sciences Prg., then Postdoc at NY Genome Center/NYU

30) 2016-2022 Cyril Cros, Biological Sciences Prg, now Postdoc in the lab

31) 2016-2022 Maryam Majeed, Biological Sciences Prg, now Postdoc in the lab

32) 2016-2022 Tessa Tekieli, Biological Sciences Prg, now on maternity leave

**Institutional Committees**

2015-2018 Member of Search Committee Junior Faculty Recruitment for Department of Biological Sciences

2011-2012 Member of Search Committee Junior Faculty Recruitment for Columbia Stem Cell Initiative

2010 Member of Search Committee for Chairman, Ophthalmology Department

2007-2011 Ad hoc member of Tenure Advisory Committee

2006-2007 Member of Search Committee Junior Faculty Recruitment for Genetics Department

2006-2007 Member of Search Committee Junior Faculty Recruitment for Psychiatry Department

2005-2006 Chair, Search Committee Junior Faculty Recruitment for Biochemistry Department

2004-2011 Chair of the Graduate Admission Committee for the Graduate Program in Biochemistry

2001-2011 Member of Graduate Admission Committee for the Graduate Program in Neuroscience

**Editorships**

2012-present Reviewing Editor, *eLife*

2008-present Associate Editor; then Senior Editor, *Genetics* (Official journal of the Genetics Society of America)

2018 Guest Co-Editor special issue *Current Opinions in Neurobiology "Neuronal Identity”*

2012-2019 Associate Editor, *Wiley Interdisciplinary Reviews (WIREs): Developmental Biology*

2012-2013 Associate Editor, *Neural Development*

2009-2017 Editor, *WormMethods*

2009 Guest Co-Editor special issue *Current Opinions in Neurobiology "Development”*

2009 Guest Editor special issue *Current Topics in Dev. Biol. "Development of Neural Circuitry"*

2005 Editor, *WormBook*, Gene Expression Section

2002 Guest Editor special issue *Journal of Neurobiology "Genes and Behavior"*

**Editorial Boards**

2009-present Editorial board of *Current Biology*

2007-present Editorial board of *Developmental Biology* (Official journal of Society for Developmental Biology)

2006-present Editorial board of *Neural Development*

2006-present Editorial board of *Mechanisms of Development* (Official journal of the International Society of Developmental Biologists), now *Cells & Development* & sister journal *Gene Expression Patterns*

2003-present Editorial board of *Development*

2009-2015 Editorial board of *Developmental Dynamics* (Journal of the American Association of Anatomists)

**Other Board Activities**

2020-2023 Elected Board member Genetics Society of America (GSA)

2011-present Scientific Advisory Board WormBase

2016-2021 WormBoard, Secretary

2017 External Advisory Board “Developmental Genetics” graduate program, NYU

2015 Scientific and Clinical Steering Committee New York Genome Center

2011 Advisory Board "European Neuroscience Institute" Göttingen

2010 Harlem Children Society’s Executive Advisory Committee

2008-2014 Elected Board member of Society for Developmental Biology (Northeast Represent.; two terms)

**Professional Society Memberships**

American Asssociation of the Advancement of Sciences (Elected Fellow)

Genetics Society of America

Society for Developmental Biology

Society for Neuroscience

**Meeting Organization**

2019 Co-Organizer (with D. Arendt and others) EMBO meeting “Evolution of Cell Types”

2018 Co-Organizer (with K. Gunsalus and others) NYU Abu Dhabi Parasitic Nematode Workshop

2016 Co-Organizer (with S. Jarriault) Fondation des Treilles meeting “Plasticity of cellular identity”

2013 Co-Organizer (with M. Halpern) Satellite Symposium “**Making and breaking the left-right axis: Laterality in development and disease**” (**International Congress of Developmental Biology, 72nd Annual Meeting Society for Developmental Biology**), Cancun, Mexico

2011 Co-Organizer (with M. Sundaram) 18th International *C. elegans* meeting, Los Angeles

2011 Co-Organizer (with R. Kingston) Cell Press Conference "Epigenetics"

2006 Co-Organizer (with R. Parker) Mini-Symposium “RNA and Development” at Annual Meeting of American Society for Cell Biology

2005-2006 Co-Organizer RNAi Study Group NY Academy of Science

# Patents

2006 U.S. Utility Patent # 7125976 “Method of screening for agents inhibiting chloride intracellular

 channels”

**Grant support**

 *Active:*

2000-present National Institutes of Health R01NS039996, R37 Merit Award in 2015

2005-present Howard Hughes Medical Institute (next review: 2022)

2017-2022 National Institutes of Health R01NS100547 *“Discovery and analysis of the C. elegans neuronal gene expression network* *(CENGEN)”*  (CoPI)

2018-2022 National Insitutes of Health R01NS110391-01 “*The neuropeptidergic connectome of Caenorhabditis elegans*” (CoPI)

2019-2022 National Science Foundation (Collaborative Research in Computational Neuroscience) *“Topological and Dynamical Structures of Brain Development and Sexual-Dimorphism in C. Elegans”* (CoPI)

2019-2021 National Insitutes of Health R21NS115442

*Past:*

2018-2020 National Institutes of Health R21NS106909

2018-2020 National Institutes of Health R21NS106843

2017-2020 NSF NeuroNex “Live Imaging of the C.elegans Connectome” (NSF #1707401) (CoPI)

2016-2018 National Institutes of Health R21NS096343

2014-2017 National Institute of Health, BRAIN award U01MH105924

2004-2015 National Institutes of Health R01NS050266 (incl. 1 Supplement & 1 yr. no cost-extension)

2012-2014 CUMC Motor Neuron Center Pilot Grant

2012-2013 Helmsley Stem Cell Starter Grant

2011-2014 National Institutes of Health R21NS076191 Grant (incl. 1 yr. no cost-extension)

2010-2013 Muscular Dystrophy Association Research Grant

2011-2012 Michael J. Fox Foundation Rapid Response Award

2010-2011 CUMC Skin Disease Research Center Pilot Grant

2009-2011 National Institutes of Health R03NS067451 Grant

2009-2010 Michael J. Fox Foundation Rapid Response Award

2008-2010 National Institutes of Health R03NS064482 Grant

2005-2008 National Institutes of Health R03HD050334 Grant

2005-2008 Muscular Dystrophy Association Research Grant

2005-2007 National Institutes of Health R03NS052269 Grant

2001-2006 McKnight Endowment Fund for Neuroscience Brain Disorder Award

2001-2005 Rita Allen Foundation Fellowship

2001-2005 Irma T.Hirschl Trust

2000-2004 Searle Foundation

2001-2003 Muscular Dystrophy Association Research Grant

2000-2003 Klingenstein Foundation

2000-2003 March of Dimes Foundation Basil O’Connor Grant

2000-2003 Alfred P. Sloan Foundation

2001-2002 American Paralysis Association Research Grant

2000-2002 Whitehall Foundation Research Grant

# 2000 Bristol Myers Squibb Pilot Grant

# 1999-2000 Herbert Irving Cancer Center Squibb Pilot Grant

# 1999-2000 Culpeper Foundation Pilot Grant

1999-2002 Human Frontier Science Program Research Grant

**Grant Review Panels**

2017-2023 Permanent Member NIH study section “Synapses, cytoskeleton, trafficking (SYN)”

2015-present Life Sciences Research Foundation postdoctoral fellowship review panel

2015 Review panel NYU Abu Dhabi (NYUAD) Center for Genomics and Systems Biology

2010-2012 Chair of NIH study section “Neurogenesis and Cell Fate “(NCF)

2009 Spanish National Research Council (CSIC)

2009 Science Foundation Ireland (SFI)

2009 Simons Foundation

2008-2012 Permanent Member NIH study section “Neurogenesis and Cell Fate” (NCF); 2 years chair

2001-2008 Ad hoc reviewer for NIH study section Mol. Dev. Cell. Neuroscience (MDCN6), then NCF

 *Other review panels (ad hoc service):*

NIH (NDPR, NNB BSCT study sections), National Science Foundation (NSF), Human Frontiers in Science Program, Medical Research Council, UK, French Ministry of Research and Education, Natural Environment Research Council (NERC), UK, European Science Foundation, United States/Israel Binational Science Foundation (BSF), Israeli Science Foundation (ISF), NYU Abu Dhabi Center for Genomics, External Review committee, Biotechnology and Biological Sciences Research Council (BBSRC), UK

## **Publication Peer review activities**

- Nature - Science - Cell - eLife - Neuron - Mol.Cell - Dev. Cell

- Cell Reports - Nat.Comm. - Nat. Genetics - Nat. Neurosci. - Nat. Methods - Nat. Struct. Mol. Biol.

- PNAS - Curr. Biol. - Development - EMBO J. - J.Neurosci. - Trends in Neurosci.

- Mol.Biol.Cell - Genetics - Genes & Dev - Dev.Biol. - J.Mol. Biol. - Learning & Memory

- J.Cell Sci. - Mech.Dev. - Dev.Dyn. - Genome Biol. - Genome Res. - BioTechniques

- FEBS Letters - BMC journals - PloS Biology - PLoS One - PLoS Genetics- Nucleic Acids Res.

- Dev.Neurobiol. - Mol.Cell.Biol. - Neural Dev. - Genomics - Gene - others

#### Invited Talks

1. National Institute of Health, Laboratory of Mammalian Genes and Development, 02/1999

2. Rutgers University, Department of Molecular Biology & Biochemistry, 05/1999

3. Queens College, CUNY, Department of Biology, 09/1999

4. Annual Meeting of the Genetics Society, Munich, 10/1999

5. Genzentrum, Ludwig Maximilians Universität, München, Germany, 10/1999

6. Bio Center, Basel, Switzerland, 10/1999

7. Human Frontiers in Science Award 10th Anniversary Meeting, 12/1999

8. Albert Einstein College of Medicine, Department of Neuroscience, 12/1999

9. Genomic Development Biology Conference, USC, Los Angeles, 03/2000

10. Cold Spring Harbor Laboratory, Course on “Adv. Genome Seq. Analysis”, 03/2000

11. NIH, Laboratory of Mammalian Genes & Development, Airlie House Retreat, 05/2000

12. New York University Medical Center, Skirball Institute, Dev.Neuro. Program., 06/2000

13. International Society for Dev. Neuroscience, Annual Meeting, Heidelberg, 06/2000

14. Exelixis, Inc. San Francisco, 03/2001

15. Society for Developmental Biol., North-East section meeting Woods Hole, 04/2001

16. École Normale Supérieure, Paris, 05/2001

17. Weizmann Institute, Department of Cell Biology, Rehovot, 05/2001

18. Max Planck Institute for Molecular Genetics, Berlin, 02/2002

19. Society for Developmental Biol., North-East section meeting Woods Hole, 04/2002

20. Human Frontiers Science Program, Annual Meeting, Ottawa, 06/2002

21. Cold Spring Harbor Course "*C. elegans*", 08/2002

22. Stowers Institute, Kansas City, 11/2002

23. Harvard Medical School, Dept. Neurobiology, 12/2002

24. Boston University School of Medicine, Dept. Mol. Cell. Biol., 01/2003

25. Mass. General Hospital, Dept. Mol. Biol., Boston, 01/2003

26. MRC Laboratory of Molecular Cell Biology, UC London, 02/2003

27. New York University, Department of Biology, 02/2003

28. University of Marseille, IBDM, Marseille, 03/2003

29. Searle Scholar Annual Meeting, Chicago, 04/2003

30. McKnight Foundation, Annual Meeting, Aspen, 06/2003

31. Rockefeller University, 06/2003

32. Max Planck Institute for Medical Research, Heidelberg, 07/2003

33. Institute for Molecular Pathology (IMP), Vienna, 09/2003

34. EMBO workshop "Assembly of Neural Circuits" Varenna, Italy, 09/2003

35. Johns Hopkins School of Medicine, Dept.Neurosci., 10/2003

36. Max Planck Institute for Biochemistry, Martinsried, 11/2003

37. NYU Medical Center, Skirball Institute, Dev.Genetics program, 11/2003

38. Vanderbilt University Medical Center, Dept. Cell Dev. Biol., 12/2003

39. Central European *C. elegans* meeting, Basel, 01/2004

40. CSH Meeting “Systems Biology - Genomic Approaches to Transcriptional Regulation”, 03/2004

41. University of Oregon, Institute for Neuroscience, Eugene, 03/2004

42. Keystone Meeting “siRNAs and miRNAs”, 04/2004

43. Gordon Conference “Basement Membranes”, 06/2004

44. Israeli Society for Dev. Biology Meeting, Rehovot, 07/2004

45. CSH Meeting on Axon Guidance and Neural Plasticity (invited session chair), 09/2004

46. University of Chicago, Dev.Biol.seminar series, 10/2004

47. NY Academy of Science RNA silencing symposium, 10/2004

48. Yale University, Interdepartmental Neuroscience Program, 11/2004

49. University of Utah, Huntsman Institute, Dean’s Lecture Series, 12/2004

50. Cornell University, Molecular Biology & Genetics, 12/2004

51. Genzentrum, Ludwig Maximilians Universität, München, Germany, 01/2005

52. MRC Center for Dev.Neurobiol, London, 02/2005

53. Rutgers University, Dept. Molecular Biology and Biochemistry, 02/2005

54. University of Calgary, Genes and Development Depart., 02/2005

55. University of Utah, Depart. Biol., 03/2005

56. Memorial Sloan Kettering Cancer Institute, Dev.Biol. Program, 03/2005

57. Cold Spring Harbor Meeting “Global Regulation of Gene Expression”, 03/2005

58. Keystone Symposium Axonal Connections: Molecular Cues for Development and Regeneration, 03/2005

59. German society for developmental biology (GfE), Annual Meeting, Münster, Germany, 04/2005

60. Vollum Institute, 06/2005

61. Society for Developmental Biology Meeting, San Francisco, 07/2005

62. University of Massachusetts Medical School, Worcester, Program in Molecular Medicine, 10/2005

63. University of Miami Miller School of Medicine NeuroScience Program 11/2005

64. Annual Symposium, Center for Genomic Regulation, Barcelona, Spain, 11/2005

65. EMBL, Heidelberg, 12/2005

66. Universität Braunschweig, Genetics Department, 12/2005

67. Mount Sinai Medical School, Department of Molecular, Cell & Developmental Biology, 01/2006

68. Washington University, Dept. Anatomy and Neurobiology, St.Louis, 01/2006

69. UCSD Neuroscience Graduate Program, 01/2006

70. SUNY, Stony Brook, Department of Neurobiology and Behavior 02/2006

71. California Institute of Technology, Division of Biology, 02/2006

72. University of North Carolina, Neuroscience Center, Chapel Hill, 03/2006

73. Max Planck Institute for Developmental Biology, Tübingen 03/2006

74. Universität Freiburg, Germany, 03/2006

75. Society for Developmental Biology, Northeast section meeting, Woods Hole, 04/2006

76. University of Washington, Seattle, 05/2006

77. Cold Spring Harbor Meeting Quantitative Biology, Regulatory RNA, 05/2006

78. Zentrum for Molekulare Neurobiologie Hamburg, 09/2006

79. Max Planck Institut for Biophysical Chemistry, Göttingen, 09/2006

80. Hellenic Society for Neuroscience, Crete, 09/2006, **Keynote Speaker**

81. Stanford University, Department of Genetics, 10/2006

82. Case Western University, Department of Neuroscience, 11/2006

83. University of Albany, SUNY, Department of Biology, 11/2006

84. Universidad de Chile, Santiago de Chile, 11/2006

85. American Society for Cell Biology, invited Guest speaker & mini-symposium organizer, 12/2006

86. Hot Spring Harbor and 21. COE Symposium at Kyushu University, Japan, 12/2006

87. UCSF, Gladstone Institute of Neurological Disease, 01/2007

88. Kavli Institute for Theoretical Physics (KITP), 03/2007

89. Janelia Farm Research Conference “Neuronal Identity”, 03/2007

90. Janelia Farm Research Conference “Neural Circuits and Behavior in *C. elegans*”, 03/2007

91. Spring Symposium of the Molecular Biology Society of Japan, Kyoto, Japan, 04/2007

92. RIKEN, Center for Developmental Biology, Kobe, Japan, 04/2007

93. University of Iowa, Department of Molecular Physiology and Biophysics, 05/2007

94. Minisymposium “Protein Machines”, Max Planck Institute for Biochemistry, Martinsried, 05/2007

95. Gordon Research Conference on Developmental Biology, 06/2007

96. National Institutes of Health/NHLB, Genetics and Developmental Biology Center, 09/2007

97. Cold Spring Harbor Laboratories, 10/2007

98. Yale University Medical School, Department of Genetics, 10/2007

99. Children’s Hospital Boston, Program in Neurobiology, 10/2007

100. Samuel Lunenfeld Research Institute, Toronto, 11/2007

101. Cornell University Weill Medical College, Department of Cell and Developmental Biology 11/2007

102. Vanderbilt University, Department of Biological Sciences, 01/2008

103. NYU Skirball Institute, Developmental Genetics Program, 01/2008

104. Duke University, Department of Biology, 02/2008

105. National Academy of Sciences Sackler Colloquium *Gene Networks in Animal Development and Evolution,* 02/2008

106. Canadian Society for Developmental Biology meeting, 02/2008, **Keynote Speaker**

107. University of Wisconsin, Madison, Department of Biochemistry, 03/2008

108. New York Academy of Sciences Meeting “Neural Stem Cells: From Development to Function”, 03/2008

109. Keystone Symposium, RNAi, MicroRNA, and Non-Coding RNA, 03/2008

110. Janelia Farm Research Conference “The Logic of Gene Regulation”, 05/2008

111. Children's Hospital of Philadelphia/University of Pennsylvania, 05/2008

112. Society for Developmental Biology, Annual Meeting, Invited Plenary Speaker, 07/2008

113. Gordon Conference "Visual Development", Invited Speaker, 08/2008

114. Cold Spring Harbor Labs, *C. elegans* Course, 08/2008

115. Memorial Sloan Kettering, Developmental Biology Program, 09/2008

116. Brandeis University, Biology Department, 09/2008

117. University British Columbia, Vancouver, Life Science Center, 10/2008

118. Yale University, Department of Molecular, Cellular and Developmental Biology, 10/2008

119. Mt. Sinai School of Medicine, Dept. of Genetics and Genomic Sciences, 10/2008

120. Cincinnati Children's Hospital Research Foundation, Division of Developmental Biology, 11/2008

121. Keystone meeting Axonal Connections: Molecular Cues for Development and Regeneration, 02/2009

122. SUNY Downstate Medical Center, Neuroscience Seminar Series, 03/2009

123. University of California Berkeley, Department of Molecular & Cell Biology, 03/2009

124. Experimental Biology Meeting, New Orleans, Invited speaker 04/2009

125. Summer School “Lipari International School on *RNAs : structure, function and therapy*.”, 06/2009

126. EMBO Practical Course 'Developmental Neurobiology from Worms to Mammals', MRC, London, 07/2009

127. International Society for Developmental Biology Congress, Edinburgh, Symposium speaker, 09/2009

128. International Max Planck Research School for Molecular Biology, Symposium speaker, 09/2009

129. Cell Press/IPSEN Foundation meeting “‘Biology in Balance”, Buenos Aires, 10/2009

130. University of Illinois, Department of Cell and Developmental Biology. Urbana-Champaign, 10/2009

131. Stowers Institute, Kansas City, 11/2009

132. University of Texas, Institute of Cellular and Molecular Biology, Austin, 11/2009

133. Trinity College, Dublin, 12/2009

134. University of Pennsylvania, Neuroscience Program, 01/2010

135. 8th TLL Life Sciences Symposium (Singapore) "*Neurodevelopment, Behavior and Disease*", 02/2010

136. Max Planck Institute for Molecular Genetics, Berlin, 02/2010

137. University of California San Diego, Dept. Biology, 02/2010

138. Albert Einstein College of Medicine, Liver Center, 02/2010

139. Max Planck Institute for Biophysics, Göttingen, 03/2010

140. Institute of Molecular Biology (IMBA), Vienna, 03/2010

141. National Institute for Physiology, Okazaki, Japan, 04/2010

142. Drexel University, Biology Department 05/2010

143. University of Utah, Department of Genetics, Invited Speaker at Annual Retreat, 05/2010

144. New York University 9th annual Genomics Symposium, 05/2010

145. Universität Köln Symposium, Germany, 06/2010, **Keynote Speaker**

146. Universität Braunschweig, Germany, 06/2010

147. *C. elegans* Topic meeting "Neural Development, Function & Behavior", 06/2010**, Keynote Speaker**

148. Developmental Biology meeting Santa Cruz, Invited Plenary Speaker, 06/2010

149. Ludwig Maximilians Universität, München, Germany 07/2010

150. Gordon Conference Neuronal Development, Newport, 08/2010,

151. Society for Developmental Biology, Annual Meeting Albuquerque, 08/2010

152. Cold Spring Harbor Course *C. elegans*, 08/2010

153. Harvard University, Dept. Mol. Cell Biol., 10/2010

154. Janelia Farm Workshop "Development and Evolution of the Nervous System", 11/2010

155. University of Minnesota, Department of Genetics, Cell Biology, and Development, 02/2011

156. University of Michigan, 03/2011

157. University of Nice, Institute of Developmental Biology and Cancer Research, 03/2011

158. Centre for Organismal Studies (COS) Heidelberg, Germany 05/2011

159. ISREC, Swiss Institute for Experimental Cancer Research, Lausanne, 05/2011

160. Albert Einstein College of Medicine, Genetics Program Retreat**, 0**6/2011, **Keynote Speaker**

161. 13th Annual Samuel Lunenfeld Research Institute Symposium on “Neurobiology”, 06/2011, **Keynote Speaker**

162. 2011 European zebrafish meeting, Edinburgh, 07/2011, **Keynote Speaker**

163. French and British Societies for Developmental Biology, Nice, 09/2011, **Keynote Speaker**

164. Janelia Farm Conference " Control of Neuronal Identity", 10/2011, **Keynote Speaker**

165. Biomedical Symposium at St. Jude Children’s Research Hospital, 10/2011

166. Invited guest speaker MBL Woods Hole course "Gene regulatory networks for Development" 10/2011

167. Cell Press Symposium " Epigenetics and the inheritance of acquired states", 11/11 (organizer and speaker)

168. Cornell University Weill Medical College, Neuroscience Program 12/2011

169. University of Pennsylvania, Mahoney Institute of Neurological Science Seminar, 01/2012

170. Seminar Stanford University, Frontiers in Bioscience Lecture series, 02/2012

171. Princeton University, Lewis-Sigler Institute, 02/2012

172. Gordon Research Conference "Cellular Reprogramming", Galveston, Texas 02/2012

173. University of California Los Angeles, Seminar in Neuroscience, 02/2012

174. Mount Sinai Friedman Brain Institute Translational Neuroscience Seminar Series, 03/2012

175. University of Montpellier, 04/2012

176. Young Researchers in Life Sciences Meeting, Paris, 2012, 05/2012, **Keynote Speaker**

177. UT Southwestern Neuroscience Seminar Series, 05/2012

178. Washington University, St. Louis, Dev. Biol. Retreat, 05/2012, **Keynote Speaker**

179. 10th Annual Meeting International Society for Stem Cell Research, Yokohama, Japan, 06/2012

180. Chang Gung University, Department of Biomedical Sciences, Taoyuan, Taiwan 06/2012

181. East Asia Worm meeting, Taiwan, 6/2012, **Keynote Speaker**

182. Arolla Conference, Cell and Developmental Systems, 8/2012

183. The MicroRNA Revolution, The 2012 Dr. Paul Janssen Award Symposium, 09/2012

184. University of Wyoming, Department of Molecular Biology, 9/2012

185. University of Wisconsin, RNA club, Madison, 10/2012

186. Georgia State University Brains and Behavior (**Distinguished Lecture Series**), 12/2012

187. Goethe University Frankfurt, 12/2012

188. UMDNJ-New Jersey Medical School, 01/2013

189. UCSF Neuroscience Program, 01/2013

190. California Institute of Technology, Division of Biology, 01/2013

191. Memorial Sloan Kettering Cancer Center (**President's Lecture**), 02/2013

192. Cold Spring Harbor Laboratory, “From Base Pair to Body Plan**”** (Celebration of the 60th anniversary of the

discovery of the double helix), 02/2013

193. Nordic *C. elegans* Meeting, Copenhagen, 03/2013, **Keynote Speaker**

194.Developmental Biology Symposium, University of Helsinki, 03/2013

195. National Cancer Institute, Symposium "Epigenetics in Development", 04/2013

196. Society for Developmental Biology, Northeast Meeting, 04/2013

197. Albert Einstein College of Medicine, Dept. of Neuroscience, 04/2013

198. Annual Meeting International Society for Stem Cell Research, Boston, Satellite symposium "New Avenues for Brain Repair: Programming and Reprogramming the Central Nervous System", 06/2013

199. 17th **International Congress of Developmental Biology, 72nd Annual Meeting Society for Developmental Biology, Satellite Symposium "Making and breaking the left-right axis: Laterality in development and disease", 06/2013**

200. EMBO Practical Course 'Developmental Neurobiology from Worms to Mammals', UCL, London, 07/2013

201. MRC Laboratory of Molecular Biology (LMB), Cambridge, 07/2013

202. Harvard Medical School, Dept. of Neurobiology, 09/2013

203. Case Western Reserve University, Dept. of Neurosci., 09/2013

204. Harvard Medical School, Dept. of Genetics, 10/2013

205. Yale University RNA Center Retreat 11/2013, **Keynote speaker**

206. Scripps Research Institute, Dorris Neuroscience Center, San Diego, 11/2013

207. Cincinnati Children's Hospital Research Foundation, 12/2013

208. Max Planck Institute for Molecular Genetics, Symposium “Current Trends in Genetics", 01/2014

209. French Society of Developmental Biology (SFDB) & EFOR network meeting, Paris, 02/2014

210. NYU Abu Dhabi “Genomics and Systems Biology” Conference, Abu Dhabi, 02/2014

211. Carnegie Institution, Department of Embryology, Baltimore 03/2014

212. New York University, Department of Biology, 04/2014

213. Johns Hopkins University School of Medicine, Dept. of Neuroscience, 05/2014

214. Society for Developmental Biology, Mid-Atlantic Regional Meeting Baltimore, 05/2014, **Keynote speaker**

215. European Molecular Biology Laboratory (EMBL), Heidelberg (**Distinguished Visitor Lecture Series**), 06/2014

216. Exzellenzcluster NeuroCure at the Charité - Universitätsmedizin in Berlin, NeuroColloquium, 06/2014

217. Gordon Research Seminar, Hong Kong, 06/2014, **Keynote Speaker**

218. Gordon Research Conference "Molecular and Cellular Neurobiology" Hong Kong, 06/2014

219. Annual Meeting Society for Developmental Biology, Seattle, 07/2014

220. Gordon Research Conference “Developmental Neurobiology”, Newport, RI, 08/2014

221. National Institute of Biological Sciences (NIBS), Beijing, 09/2014

222. Institute of Biophysics, Chinese Academy of Sciences, Beijing, 09/2014

223. Shanghai Institute of Neuroscience, 09/2014

224. Cold Spring Harbor Asia Meeting "Neurobiology: Diverse species and conserved principles" Suzhou, China, 09/2014, **Keynote speaker**

225. Janelia Farm Seminar Series, 10/2014

226. Baylor College of Medicine, Department of Molecular and Human Genetics, 10/2014

227. Janelia Farm Research Conference “High-Throughput Sequencing for Neuroscience”, 10/2014

228. Janelia Farm Research Conference “Neural Circuits Controlling Sexual Behavior”, 11/2014

229. University of Pennsylvania, Department of Genetics, 01/2015

230. New York Area Worm Meeting, 01/2015

231. Princeton University, Department of Molecular Biology, 02/2015

232. New York University **Honors Program Lecture**, 04/2015

233. University of Massachusetts Medical Center, Department of Neurobiology, 04/2015

234. Imperial College London, MRC Clinical Sciences Centre, 05/2015

235. Cell Press Symposium “RNAs in the Nervous system”, 07/2015

236. 4th Annual Sc2.0 and Synthetic Genomes Conference, NY Genome Center, 07/2015 (Panelist)

237. City College, New York, Department of Biology, 09/2015

238. Rockefeller University Postdoc Retreat 09/2015, **Keynote speaker**

239. Max Planck for Brain Research, Symposium "Molecular and Cellular Mechanisms of Homeostasis”, 10/2015

240. Universität Köln, Germany, 11/2015

241. Utrecht University, Netherlands, 11/2015

242. University of Texas Health Science Center at San Antonio, Physiology Department, 11/2015

243. Fred Hutchinson Cancer Research Center, Seattle, 12/2015

244. Fondation des Treilles meeting “Plasticity of cellular identity”, 05/2016

245. Genetics Society of America, The Allied Genetics Conference, Orlando, Florida, 07/2016, **Keynote speaker**

246. *C. elegans* Neuro (CeNeuro) Meeting, Nagoya, Japan, 07/2016, **Keynote speaker**

247. National Institute of Genetics, Mishima, Japan, 07/2016

248. Max Planck Institute for Biophysical Chemistry, Göttingen, 08/2016

249. Max Delbrück Center, Berlin, 08/2016

250. University of Chicago, Annual Neuroscience Retreat, 09/2016, **Keynote speaker**

251. Mt. Sinai School of Medicine, Department of Developmental and Regenerative Biology, 09/2016

252. Brown University, Department of Neuroscience, 10/2016

253. Brandeis University, Department of Biology, 10/2016

254. National Institutes of Health, Neuroscience Seminar Series, 11/2016

255. Georgia Tech, Neuro seminar series, 12/2016

256. Keystone meeting “Neurogenesis during Development and in the Adult Brain”, Olympic Valley, 01/2017

257. University of Chicago, Program in Genetics, Genomics & Systems Biology, 03/2017

258. ABCAM meeting “Programming and Reprogramming the Brain”, München, 04/2017

259. Ludwig Maximilians Universität München, Cell & Developmental Biology, 04/2017

260. NYU Developmental Genetics Program, 4/2017

261. Janelia Farm Conference "Control of Neuronal Identity II", 5/2017

262. Korean Society for Biochemistry and Molecular Biology, Annual Meeting, Busan, Korea 5/2017

263. Daegu Gyeongbuk Institute of Science and Technology (DGIST), Korea, 5/2017

264. Seoul National University, Korea, 5/2017

265. Society for Developmental Biology, Satellite Symposium “Neuro(R)evolution: New Approaches for Studying Neurodevelopment”, 7/2017

266. Nature Conference “Neurogenetics”, New York University, 8/2017

267. Woods Hole, Grass Fellows Invited Lecture, 8/2017

268. EMBO meeting “Gene regulatory mechanisms in neural fate decisions”, Alicante, Spain, 9/2017

269. Conference “Reverse Engineering the Developing Brain”, Campus Biotech, Geneva, 9/2017

270. Conference “Synapse formation, specification, and elimination: from molecules to circuits”, International University of Andalusia (UNIA), 9/2017

271. Weizmann Institute, Israel, **Life Sciences Colloquium**, 10/2017

272. Washington University St. Louis, Department of Neuroscience, 11/2017

273. Northwestern University, Distinguished Lecture in Developmental and Regenerative Biology, 12/2017

274. New York University Abu Dhabi, Nematode Parasite conference, 01/2018 (**Co-Organizer**)

275. Max Planck Institute Göttingen, Fassberg Seminar, 02/2018

276. Harvard University, Department of Systems Biology, 03/2018

277. Society for Developmental Biology, Northeast Regional meeting, Woods Hole, **Keynote Speaker**, 04/2018

278. Northeastern University, Center for Complex Network Research (CCNR), 04/2018

279. Florida Worm Meeting, **Keynote Speaker**, 05/2018

280. UC San Diego Neurosciences Graduate Program Seminar Series, 05/2018

281. *C. elegans* Topic meeting “Development, Cell Biology & Gene expression”, Barcelona, **Keynote Speaker**, 06/2018

282. Developmental biology minisymposium; Graduate School in Biomedicine and Biotechnology of the Tallinn University of Technology, in Tallinn, Estonia, 09/2018

283. Peking University (PKU), School of Life Sciences, Undergraduate Honor Program in Biology, China 10/2018

284. ShanghaiTech University, School of Life Science and Technology, Shanghai, China 10/2018

285. Neuroscience Program of Academia Sinica (NPAS), Taipei, Taiwan, 10/2018

286. TzuChi University, HuaLien, Taiwan, 10/2018

287. Society for Neuroscience Annual Meeting, San Diego, **Special Lecture**, 11/2018

288. Max Planck Institute für Biochemie, Martinsried, **Axel Ullrich Lecture** 11/2018

289. Universität Bayreuth, 11/2018

290. University of California, Los Angeles, Department of Biological Chemistry & Brain Research Institute, 12/2018

291. EMBO Workshop “Molecular neuroscience: From genes to circuits in health and disease”, Bangalore, India, 02/2019

292. Tata Institute of Fundamental Research, Mumbai, India, 02/2019

293. University of Albany, Department of Biology, **Rickmenspoel Lecture,** 03/2019

294. Istituto di Bioscienze e Biorisorse - Sezione di Napoli, Italy, 03/2019

295. Pasteur Institute, Department of Developmental Biology, 04/2019

296. University of Santa Barbara, MCB program (Student invitation), 05/2019

297. EMBO Workshop “Evolution of Cell types” (**Co-Organizer**), EMBL Heidelberg, Germany 05/2019

298. Institute of Neuroscience Alicante, 20th Anniversary Symposium, Spain, 07/2019

299. Rockefeller University's Neuroscience Seminar Series, 09/2019

300. Montefiore Medical Center Grand Rounds, 10/2019

301. Cell Symposium “Transcription in Evolution, Development, and Disease”, Chicago, **Keynote Speaker** 10/2019

302. University of Illinois, Chicago, 10/2019

303. Developmental Biology Symposium, Graduate Student Alliance, University of Georgia, **Keynote Speaker**, 11/2019

304. “International Leaders in Neuroscience" Seminar at the Queensland Brain Institute, Brisbane, Australia, 11/2019

305. King Abdullah University of Science and Technology, Saudi Arabia, 01/2020

306. Yale University, Department of Neuroscience, 02/2020

307. TAGC 2020 (The Allied Genetics Conference), Washington DC 04/2020

308. University of Connecticut Medical School, Department of Neuroscience, 10/2020

309. EMBO Conference “Neuroepigenetics”, Heidelberg 11/2020

310. UK *C. elegans* Meeting, 12/2020

311. World Wide Neuro Seminar Series, 1/2021

312. Concordia University, Montreal, Department of Biology, 02/2021

313. Washington University in St. Louis, Department of Genetics, 02/2021

314. Institute for Molecular Pathology, Vienna, 3/2021

315. University of Massachusetts Medical Center, Department of Neurobiology, 03/2021

316. EMBO Symposium “The Identity and Evolution of Cell Types”, 05/2021

317. Gurdon Institute, Cambridge, UK, 05/2021

318. American Society for Neurochemistry Annual Meeting, St. Charles, **Presidential Lecture**, 06/2021

319. University of Pennsylvania, Mahoney Institute of Neurosciences, 12/2021

320. Paris ENS-ESPCI weekly biophysics seminar, 01/2022

321. Johns Hopkins University, Dept. Mol Biology & Genetics, 02/2022

322. Ascona meeting “*Neurogenesis in health and disease*”, Switzerland, 03/2022

323. Sydney Brenner Memorial Meeting, Cold Spring Harbor, 03/2022

324. Conference *“Sexual dimorphism of neuronal circuits and behavior״,* Weizmann Institute, Israel, 04/2022

325. Hebrew University, Edmond and Lily Safra Center for Brain Sciences (ELSC), 04/2022

326. Université Claude Bernard Lyon, Institut NeuroMyoGèn, 05/2022

327. Institute of Genetics and Molecular and Cellular Biology, Strasbourg, 05/2022

328. Annual Meeting Revson Postdoctoral Fellows, 05/2022, **Keynote Speaker**

329. Asia Pacific Worm Meeting, Taiwan, 7/2022, **Keynote Speaker**

330. Basel Area Worm meeting, 9/2022, **Keynote Speaker**

331. Golgi Meeting, Château de Suduirat, Bordeaux, 09/2022

332. Nick Spitzer Festschrift UCSD, 11/2022

333. Lewis Memorial Lecture, Columbia University Medical Center, 12/2022

334. EMBO Meeting *“Mechanisms of Neuronal Remodeling”,* Weizmann Institute, Israel, 03/2023

335. Instituto de Biomedicina de Valencia, Spain, 04/2023

337. Cajal Institute, Madrid, 04/2023

338. International C. elegans Meeting, Glasgow, Plenary Speaker, 06/2023

**Publications**

*Reviews & Essays*

1. **Hobert, O** and Ruvkun, G (1998)."A Common Theme for LIM Homeobox Gene Function Across Phylogeny?" MBL & NASA Symposium on "Genetic Regulatory Networks in Embryogenesis and Evolution” ***Biol. Bulletin*** 195, 377-380.

2. **Hobert, O** and Ruvkun, G (1999) "Pax genes in *Caenorhabditis elegans*: A new twist” ***Trends Genet****.* 15, 214-216.

3. **Hobert, O**, Johnston, RJ and Chang, S (2002) “ Left/right asymmetry in the nervous system: The *C. elegans* paradigm”, ***Nature Rev. Neurosci****,* 3(8), 629-640

4. **Hobert, O** (2003) “Behavioral plasticity in *C. elegans*: Paradigms, Circuits, Genes” ***J.Neurobiol***54, 203-223 (special issue: *Genes and Behavior*) + Editorial Overview "Behavioral Genetics - The third century"

5. **Hobert, O** and Bülow, HE (2003) "Development and maintenance of neuronal architecture at the ventral midline of *C. elegans*” ***Curr. Opin. Neurobiol*** 13, 70-78 (Invited Review)

6. Rougon, G and **Hobert, O** (2003) “Newinsights into the diversity and function of neuronal immunoglobulin superfamily molecules” ***Annu. Rev. Neurosci****.* 26,207-238 (Invited Review)

7. **Hobert, O** (2004) “Common logic of transcription factor and miRNA action” ***Trends Biochem Sci.*** 29(9), 462-468

8. Bülow, HE and **Hobert, O** (2006) “The Molecular Diversity of Glycosaminoglycans shapes Animal Development” ***Annu. Rev. of Cell Dev. Biol.***22, 375-407 (Invited Review)

9. **Hobert, O** (2006) “Architecture of a microRNA-controlled gene regulatory network that diversifies neuronal cell fates”, ***Cold Spring Harb Symp Quant Biol****: Regulatory RNAs*, Volume 71, 181-188

10. **Hobert, O** (2008) “Gene regulation by transcription factors and microRNAs” ***Science*** 319, 1785-1786 (Invited Review)

11. **Hobert, O** (2008) " Regulatory logic of neuronal diversity: Terminal selector genes and selector motifs" ***Proc. Natl. Acad. Sci.* USA** 105(51):20067-71 (Invited Review)

12. **Hobert, O** (2010) “The impact of Whole Genome Sequencing on model system genetics: Get ready for the ride” ***Genetics****,* 184: 317–319 (Perspective)

13. Bertrand, V and **Hobert, O** (2010) "Lineage programming : navigating through transient regulatory states via binary decisions" ***Curr. Opin. Genet. & Dev*** 20:362–368 (Invited Review)

14. **Hobert, O,** Carrera, I and Stefanakis, N (2010) "The molecular and gene regulatory signature of a neuron" ***Trends Neurosci.***, 33, 435-445

15. **Hobert, O** (2011) "Maintaining a memory by transcriptional autoregulation" ***Curr. Biol***. 21(4), R146-147 (Primer)

16. Flames, N and **Hobert, O** (2011) "Transcriptional Networks Determining Monoaminergic Fate" ***Annu. Rev. Neurosci.*** 34, 153-84 (Invited Review)

17. **Hobert, O** (2011) " Regulation of terminal differentiation programs in the nervous system" ***Annu. Rev. Cell Dev. Biol.*** 27, 681-696 (Invited Review)

18. Boulin, T and **Hobert, O** (2012) "From Genes to Function: The *C. elegans* Genetic Toolbox" ***WIREs Dev. Biol.****,* 1:114–137 (Invited Review)

19. **Hobert, O** (2014) " Development of left/right asymmetry in the *Caenorhabditis elegans* nervous system: From zygote to postmitotic neuron" ***genesis*** 52:528–543

20. Deneris, E and **Hobert, O** (2014) “Maintenance of postmitotic neuronal cell identity”, ***Nature Neurosci.***17, 899-907

21. Arlotta, P and **Hobert, O** (2015) “Homeotic transformations of neuronal cell identities”, ***Trends Neurosci.***38, 751-762

22. **Hobert, O** (2016) “A map of terminal regulators of neuronal identity in *C. elegans*”, ***WIREs Dev. Biol.*** 5, 474-498 (Invited Review)

23. **Hobert, O** and Kratsios, P (2019) “Neuronal identity control by terminal selectors in worms, flies and mice” ***Curr. Opin. Neurobiol.*** 56:97–105 (Invited Review)

24. Leyva-Díaz, E, Masoudi, N, Serrano-Saiz, E, Glenwinkel :and **Hobert, O** (2020) “Brn3/POU-IV-type POU homeobox genes - paradigmatic regulators of neuronal identity across phylogeny” ***WIREs Dev. Biol.***9:e374

25. Goodwin, SF and **Hobert, O** (2021) “Molecular mechanisms of sexually dimorphic nervous system patterning in flies and worms” ***Annu. Rev. Cell Dev. Biol.***37:519–47

26. **Hobert, O** (2021) “Homeobox genes and the specification of neuronal identity”, ***Nature Rev. Neurosci****,* 22(10):627-636

26. Sun, H and **Hobert, O** (2022) “Temporal transitions in the postembryonic nervous system of the nematode Caenorhabditis elegans: Recent insights and open questions”, ***Sem Cell Dev Biol***in press (Invited Review)

*Book chapters:*

1. Westphal, H and **Hobert, O** (2001) “LIM homeodomain proteins” ***Wiley Encyclopedia of Molecular Medicine***, John Wiley & Sons, Inc., p.1922-1925.

2. **Hobert, O** (2005) “Specification of the Nervous System” ***WormBook***, ed. The *C. elegans* Research Community, WormBook, doi/10.1895/wormbook.1.12.1, http://www.wormbook.org

3. Boulin, T, Etchberger, J and **Hobert, O.** (2005) “Reporter gene fusions”***WormBook***, ed. The *C. elegans* Research Community, doi/10.1895/wormbook.1.106.1, http://www.wormbook.org

4. **Hobert, O** and Loria, PM (2005) "Uses of GFP in *C. elegans*” in "**Green Fluorescent Protein: Properties, Applications and Protocols** (Methods of Biochemical Analysis, Vol 47)” Chalfie and Kain (eds.), 2nd edition, Wiley

5. Benard, C and **Hobert, O** (2009) “Looking beyond development: maintaining nervous system architecture”, ***Curr. Top. Dev. Biol.***87, 175-194

6. **Hobert, O** (2010) "Neurogenesis in the nematode Caenorhabditis elegans", **WormBook**, ed. The C. elegans Research Community, doi/10.1895/wormbook.1.12.2, <http://www.wormbook.org>.

Reprinted in: **Comprehensive Developmental Neuroscience** book series“Patterning and Cell Type Specification in the Developing CNS and PNS”, edited by Pasko Rakic and John Rubenstein, Academic Press, 2013, *First Edition*

Updated and revised: “Neuronal identity specification in the nematode *Caenorhabditis elegans*”, **Comprehensive Developmental Neuroscience** book series “Patterning and Cell Type Specification in the Developing CNS and PNS”, edited by Pasko Rakic and John Rubenstein, Academic Press, 2020 *Second Edition*

7. Cochella, L and **Hobert, O** (2012) “MiRNAs in neuronal development”, ***Curr. Top. Dev. Biol.,*** 99:115-43

8. **Hobert, O** (2013) "The neuronal genome of *C. elegans*", **WormBook**, WormBook, ed. The C. elegans Research Community, doi/10.1895/wormbook.1.161.1, <http://www.wormbook.org>

9. **Hobert, O** (2016) “Terminal selectors of neuronal identity”, ***Curr. Top. Dev. Biol.***116:455-75(50th Anniversary Issue “*Essays on Developmental Biology*”)

10. Vidal, B and **Hobert, O** (2017) “Methods to study nervous system laterality in the nematode *Caenorhabditis elegans*” in “**Lateralized Brain Functions. Methods in Human and Non-Human Species**”(Springer; Eds. Roger, LJ and Vallortigara, G), page 591-608 (invited chapter)

11. Oren, M and **Hobert, O** (2017) “Sexual dimorphisms in the nervous system of the nematode *Caenorhabditis elegans*”, in “**Principles of Gender‑specific Medicine**”, Academic Press (invited chapter)

*Commentaries*

1. **Hobert, O,** Hutter, H and Hynes, RO (2004) " The immunoglobulin superfamily in *Caenorhabditis elegans* and Drosophila melanogaster” ***Development*** 131, 2237-2238 (Commentary)

2. **Hobert, O** (2005) “MicroRNAs: All Gone and Then What?” ***Curr. Biol***, 15(10), R387-389 (Invited Commentary)

3. **Hobert, O** (2007) “MicroRNAs playing a tune” ***Cell***131, 22-24 (Invited Commentary)

4. Bertrand, V and **Hobert, O** (2009) “Wnt asymmetry and the terminal division of neuronal progenitors”, ***Cell Cycle*** 8,1973-1974 (Invited Commentary)

5. **Hobert, O** (2010) “Enhancers stepping out of the shadow” ***Curr. Biol***. 20, R697-699 (Invited Commentary)

6. Hart, MP and **Hobert, O** (2015) “Neurobiology: Dimorphic mystery neurons control sex-specific behavioral plasticity”, ***Curr. Biol.*** 25, pR1170–R1172 (Invited Commentary)

7. Howell, K and **Hobert, O** (2016) “Small Immunoglobulin domain proteins at synapses and the maintenance of neuronal features”, ***Neuron*** 89, 239-241 (Invited Commentary)

8. Vogt, M and **Hobert, O** (2017) “Olfactory Imprinting: A Worm’s Memory of Things Past”, ***Curr. Biol. 27,*** R1108–R1129 (Invited Commentary)

9. Hammarlund, M, **Hobert, O**, Miller 3rd, DM, Sestan, N (2018) “The CeNGEN project: The complete molecular and regulatory map of an entire nervous system” ***Neuron***99, 430-433

10. Kratsios, P and **Hobert, O** (2018) “Nervous system development: Flies and worms converging on neuronal identity control” ***Curr. Biol.*** 28, R1154-R1156 (Invited Commentary)

11. Wang, C and **Hobert, O** (2019) "Sex-specific pheromone responses in *C. elegans*" ***EMBO Rep.*** 20: e47599(Invited Commentary)

***Micropublications:***

1. Bayer, EA and **Hobert, O** (2018) “A novel null allele of *C. elegans* gene *ceh-14”*. ***microPublication Biology***, <https://doi.org/10.17912/G434-3D85>

2. Bhattacharya, A and **Hobert, O** (2019) “A new anterior pharyngeal region specific fluorescent co-transformation marker” ***microPublication Biology*,** <https://doi.org/10.17912/micropub.biology.000084>

3. Rahe, D, Carrera, I, Cosmanescu, F and **Hobert, O** (2019) “An isoform-specific allele of the *sax-7* locus” ***microPublication Biology***, [https://doi.org/10.17912/micropub.biology.000092](https://doi.org/10.17912/MICROPUB.BIOLOGY.000092)

4. Doitsidou, M, & Hobert, O (2019) “New alleles of the *lin-22*/Hairy bHLH transcription factor” ***microPublication Biology***, [https://doi.org/10.17912/micropub.biology.000111](https://doi.org/10.17912/MICROPUB.BIOLOGY.000111)

5. Curtis, L, Witte, H, Sommer, RJ and **Hobert, O** (2019) “An antibody staining protocol variation for nematodes that adds heat-induced antigen retrieval (HIAR)“ ***microPublication Biology***, https://doi.org/[10.17912/micropub.biology.000135](https://doi.org/10.17912/micropub.biology.000135)

6. Minevich, G, Bernstein, A, Mei, K, Poole, RJ, and **Hobert, O** (2019) “Nibbling 405 kb off the X: Viable deletion alleles eliminating 50 protein coding genes, including a chromatin factor involved in neuronal development“ ***microPublication Biology***, https://doi.org/10.17912/micropub.biology.000187

7. Pham, K and **Hobert, O** (2019) “Unlike Drosophila elav, the *C. elegans* elav orthologue *exc-7* is not panneuronally expressed“ ***microPublication Biology***, https://doi.org/10.17912/micropub.biology.000189

8. Aghayeva, U, Bhattacharya, A and **Hobert, O** (2020) “A panel of fluorophore-tagged *daf-16* alleles“ ***microPublication Biology***,https://doi.org/10.17912/micropub.biology.000210

9. Hart, MP and **Hobert, O** (2020) “A missense mutation separates distinct functions of the Zic-family transcription factor REF-2 “ ***microPublication Biology***,https://doi.org/10.17912/micropub.biology.000232

10. Reilly, M and **Hobert, O** (2020) “*ceh-34*, an unusual homeobox gene“ ***microPublication Biology***,https://doi.org/10.17912/micropub.biology.000340

11. Cook, S, Vidal, B and **Hobert, O** (2021) “The bHLH-PAS gene hlh-34 is expressed in the AVH, not AVJ interneurons “ ***microPublication Biology***, https://doi.org/10.17912/micropub.biology.000467

12. Toker, I and **Hobert O** (2022) “The Cbr‑DPY‑10(Arg92Cys) modification is a reliable co-conversion marker for CRISPR/Cas9 genome editing in *Caenorhabditis briggsae”*, ***microPublication Biology***, https://doi.org/10.17912/micropub.biology.000554

***Research papers:***

Undergraduate & Graduate Student:

1. Mancinelli, AL, **Hobert, O**, Nikas, G (1992) "*In vivo* Phytochrome-mediated perception of reflected light signals"***Photochem. Photobiol****.* 5, 585-592.

2. Zeidler, R, **Hobert, O**, Johannes, L, Faulhammer, H, Krauss,G (1993) "Characterisation of two novel ssDNA-specific ARS-binding proteins from *S.cerevisiae*" ***J. Biol. Chem****.* 268, 20191-20197

3. **Hobert, O**, Jallal, B, Schlessinger, J, Ullrich, A (1994) "Novel signaling pathway suggested by SH3 domain-mediated p95Vav/hnRNP-K interaction" ***J. Biol. Chem****.* 269, 20225-20228

4. **Hobert, O**, Schilling, J, Beckerle, M, Ullrich, A, Jallal B (1996) "SH3-dependent interaction of the Vav-proto-oncogene product with the focal adhesion protein Zyxin” ***Oncogene*** 12, 1577-1581.

5. **Hobert, O**, Jallal, B, Ullrich, A (1996) "Interaction of Vav with ENX-1, a putative transcriptional regulator of homeobox gene expression” ***Mol. Cell. Biol****.*16, 3066-3073

6. **Hobert, O**, Sures, I, Ciossek, T, Fuchs, M, Ullrich, A (1996) "Isolation and developmental expression analysis of Enx-1, a novel mouse Polycomb-group gene" ***Mech. Dev****.* 55, 171-184

7. Su, I-H, Basavaraj, A, Krutchinsky, AN, **Hobert, O**, Ullrich, A., Chait, BT, Tarakhovsky, A (2003) "Ezh2 controls B cell development through histone H3 methylation and Igh rearrangement” ***Nat. Immunol****.* 4, 124-131 (recommended by Faculty of 1000)

Postdoctoral Fellow:

1. **Hobert, O**, Mori, I, Yamashita, Y, Honda, H, Ohshima, Y, Liu, Y. and Ruvkun, G (1997) "Regulation of interneuron function in the *C. elegans* thermoregulatory pathway by the *ttx-3* LIM homeobox gene” ***Neuron*** 19, 345-357.

2. **Hobert, O**, D’Alberti, T, Liu, Y and Ruvkun, G (1998). "Control of neural development and function in a thermoregulatory network by the LIM homeobox gene *lin-11*” ***J. Neuroscience*** 18, 2084-2096.

3. Ruvkun, G and **Hobert, O** (1998) "The taxonomy ofdevelopmental control in *Caenorhabditis elegans*” ***Science*** 282, 2033-2041

4. **Hobert, O**, Moerman, DG, Clark, KA, Beckerle, MC and Ruvkun, G (1999) "A conserved LIM proteinthat affects muscular adherens junction integrity and mechanosensory function in *C. elegans*” ***J. Cell Biol****.* 144, 45-57

5. **Hobert, O**, Tessmar, K and Ruvkun, G (1999) "The *C. elegans lim-6* LIM homeobox gene regulates neurite outgrowth and function of particular GABAergic neurons “ ***Development*** 126, 1547-1562

6. Hall, DH, Winfrey, VP, Blaeuer, G, Hoffman, LH, Furuta, T, Rose, KL, **Hobert, O** and Greenstein, D (1999) “Ultrastructural features of the adult hermaphrodite gonad of *C. elegans*: Relations between the germ line and soma” ***Dev.Biol****.* 212, 101-123

7. Sagasti, A, **Hobert, O**, Troemel, ER, Ruvkun, G. and Bargmann, C. (1999) “Alternative olfactory neuron fates are specified by the LIM homeobox gene *lim-4*” ***Genes Dev****.*13, 1794-1806

Prinicipal Investigator:

2001:

1. Altun-Gultekin, Z, Andachi, Y, Tsalik, E, Pilgrim, D, Kohara, Y and **Hobert, O** (2001) "A regulatory cascade of three homeobox genes, *ceh-10, ttx-3* and *ceh-23* controls cell fate specification of a defined interneuron class in *C. elegans*” ***Development***128, 1951-1969

2. Sarafi-Reinach, TR, Melkman, T, **Hobert, O** and Sengupta, P (2001) "The *lin-11* LIM homeobox gene specifies olfactory and chemosensory neuron fates in *C. elegans*” ***Development***128, 3269-3281

2002:

3. Aurelio, O, Hall, DH and **Hobert, O** (2002) "Immunoglobulin-domain proteins required for maintenance of ventral nerve cord organization”***Science*** 295, 686-690 (featured in *J.Cell.Biol.*156, 588, *Science* 295, 599 and in Faculty of 1000)

4. **Hobert, O** (2002) “A rapid PCR fusion-based approach to create reporter gene constructs for expression analysis in transgenic *C. elegans*” *BioTechniques* 32, 298-300

5. Bülow, HE, Berry, KL, Topper, L, Peles, E and **Hobert, O** (2002) “Heparan sulfate proteoglycan dependent induction of axon branching and axon misrouting by the Kallmann syndrome gene *kal-1*” ***Proc.Natl.Acad.Sci USA*** 99, 6346-6351 (featured in *Neuron* 34, 675)

2003:

6. Aurelio, O, Boulin, T and **Hobert, O** (2003) " Identification of spatial and temporal cues that regulate postembryonic expression of axon maintenance factors in the *C. elegans* ventral nerve cord”***Development*** 130, 599-610

7. Raich, WB, Moorman, C, Lacefield, CO, Lehrer, J, Bartsch, D. Plasterk, RHA, Kandel, EK and **Hobert, O** (2003) “Characterization of *Caenorhabditis elegans* homologs of the Down Syndrome candidate gene DYRK1A” ***Genetics*** 163(2), 571-580

8. Tsalik, EL and **Hobert, O** (2003) "Functional mapping of neurons that control locomotory behavior in *Caenorhabditis elegans*” ***J. Neurobiol****.* 56, 178-197

9. Loria, PM, Duke, A, Rand, JB and **Hobert, O** (2003) "Two neuronal, nuclear-localized RNA-binding proteins involved in synaptic transmission” ***Curr.Biol****.* 13, 1317-1323 (featured in *Nat.Rev.Neurosci.*4, 781)

10. Chang, S, Johnston, RJ and **Hobert, O** (2003)" A transcriptional regulatory cascade that controls left/right asymmetry in chemosensory neurons of *C. elegans”* ***Genes Dev.*** 17, 2123-2137

11. Tsalik, EL, Niacaris, T, Wenick, AS, Pau, K, Avery L and **Hobert, O** (2003) "LIM homeobox gene-dependent expression of biogenic amine receptors in restricted regions of the *C. elegans* nervous system” ***Dev. Biol****.*263, 81-102

12. Berry, KL, Bülow, HE, Hall, DH and **Hobert, O** (2003) " A *C. elegans* CLIC-like protein required for intracellular tube formation and maintenance “ ***Science***302, 2134-2137(featured in *Science* 302,2077-2078 and Faculty of 1000)

13. Johnston, RJ and Hobert, O (2003) “A microRNA controlling left/right neuronal asymmetry in *Caenorhabditis elegans*” *Nature* 426, 845-849 (featured in Mini-review in *Nature Neurosci.* 7, 100-102*; Nat.Rev.Neurosci.* 5, 79; Faculty of 1000)

2004:

14. Bülow, HE and **Hobert, O** (2004) “Differential sulfations and epimerization define heparan sulfate specificity in nervous system development” ***Neuron*** 41(5), 723-736 (Mini-reviewed in *Neuron* 46, 169-72)

15. Loria, PM, Hodgkin J and **Hobert, O** (2004) “A conserved postsynaptic transmembrane protein affecting neuromuscular signaling in *C. elegans*” ***J. Neurosci.*** 24(9), 2191-2201 (recommended by Faculty of 1000)

16. Mehta, N, Loria, PM and **Hobert, O** (2004) "A genetic screen for neurite outgrowth mutants in *C. elegans* reveals a new function for the F-box ubiquitin ligase component LIN-23” ***Genetics***166(3),1253-1267

17. Bülow, HE, Boulin, T and **Hobert, O** (2004) “Differential functions of the *C. elegans* FGF receptor in axon outgrowth and maintenance of axon position” ***Neuron*** 42, 367-374

18. Bigelow, H, Wenick, AS, Wong, A and Hobert, O (2004) “CisOrtho: A program pipeline for genome-wide identification of transcription factor target genes using phylogenetic footprinting” *BMC Bioinformatics* 5, 27

19. Wenick, AS and Hobert, O (2004) “Genomic *cis-*regulatory architecture and *trans-*acting regulators of a single interneuron-specific gene battery in *C. elegans*” *Dev. Cell* 6, 757-770 (featured in Mol.Cell 14, 693-4)

20. Deng, X, Hofmann, ER, Villanueva, A, **Hobert, O**, Capodieci,P, Veach, DR, Yin, X, Campodonico, L, Glekas, A, Cordon-Cardo, C, Clarkson, B, Bornmann, WG, Fuks, Z, Hengartner, MOand Kolesnick, R(2004)"*Caenorhabditis elegans* ABL-1 antagonizes p53-mediated germline apoptosis after ionizing radiation" ***Nat. Genet.*** 36, 906-912

21. Chang, S, Johnston, RJ, Frøkjær-Jensen, C, Lockery, S and Hobert, O (2004) “MicroRNAs act sequentially and asymetrically to control chemosensory laterality in the nematode” *Nature* 430, 785-789 (recommended by Faculty of 1000)

2005:

22. Remy, JJ and Hobert, O (2005) “An interneuronal chemoreceptor required for olfactory imprinting in *C. elegans*” *Science* 309, 787-790 (highlighted in *Nature* 436, 60*7* and Faculty of 1000)

23. Johnston, RJ, Chang, S, Etchberger, JF, Ortiz, CO and Hobert, O (2005) “MicroRNAs acting in a double-negative feedback loop to control a neuronal cell fate decision” *Proc. Natl. Acad. Sci. USA,* 102, 12449-12454 (Featured in “*This Week in PNAS*”)

24. Johnston, RJ and Hobert, O (2005) “A novel *C. elegans* zinc finger transcription factor, *lsy-2*, required for the cell-type specific expression of the *lsy-6* microRNA” *Development* 132, 5451-5460

2006:

25. Ortiz, CO, Etchberger, JF, Posy, SL, Frøkjær-Jensen, C, Lockery, S, Honig B, and Hobert, O (2006) “Searching for neuronal left/right asymmetry: Genomewide analysis of nematode receptor-type guanylyl cyclases”, *Genetics* 173, 131-149

26. Faumont, S, Boulin, T, Hobert, O, and Lockery, S (2006) “Developmental regulation of whole-cell capacitance and membrane current in identified interneurons in *C. elegans*”, *J. Neurophys.* 95, 3665-3673

27. Berry, KL and Hobert, O (2006) “Mapping functional domains of chloride intracelllular channel (CLIC) proteins *in vivo*”, *J. Mol. Biol.* 359, 1316-1333

28. Benard, CY, Boyanov, A, Hall, DH and Hobert, O (2006) “DIG-1, a novel giant protein non-autonomously mediates maintenance of nervous system architecture”, *Development* 133, 3329-3340

29. Johnston, RJ, Copeland, JW, Fasnacht M, Etchberger, JF, Liu J, Honig B and Hobert, O (2006) “An unusual Zn finger/FH2 domain protein controls a left/right asymmetric neuronal fate decision in *C. elegans*”, *Development* 133, 3317-3328

30. Didiano, D and Hobert, O (2006) “Perfect seed pairing is not a generally reliable predictor for miRNA-target interactions”, *Nature Struct. Mol. Biol.* 13(9), 849-851 (featured in “News and Views” and in Research Highlight in *Nature* 442, p.960 and in Faculty of 1000)

31. Boulin, T, Pocock R and Hobert, O (2006) “ A novel Ephrin receptor-interacting Ig/FnIII domain protein provides *C. elegans* motoneurons with midline guidepost function”, *Curr. Biol.* 16, 1871-1883 (featured in *Dispatches* in *Curr.Biol.* 16, r954-955)

32. Poole, R and **Hobert, O** (2006) “ Early embryonic programming of neuronal left/right asymmetry in *C. elegans*”,***Curr. Biol.*** 16, 2279-92 (featured in Dispatches Mini-Review in Curr.Biol. 16, r1039-1041, in Nat. Genetics 39, 15 and in Faculty of 1000)

2007:

33. Etchberger, JF, Lorch, A, Sleumer, MC, Zapf, R, Jones, SJ, Marra, MA, Holt, RA, Moerman DG and **Hobert, O** (2007) “The molecular signature and cis-regulatory architecture of a *C. elegans* gustatory neuron’ ***Genes Dev***21, 1653-1674

34. Sarin, S, O'Meara, MM, Flowers, EB, Antonio, C, Poole, R, Didiano, D, Johnston, RJ, Chang, S, Narula, S

and **Hobert, O** (2007) “Genetic screens for *C. elegans* mutants defective in left/right asymmetric neuronal fate specification” ***Genetics***176, 2109-2130

2008:

35. Pocock, R, Benard, CY, Shapiro L and Hobert, O (2008) “Functional dissection of the *C. elegans* cell adhesion molecule SAX-7, a homologue of human L1”, *Mol. Cell. Neurosci.* 37, 56-68

36. Etchberger, JF and Hobert, O (2008) “Vector-free DNA constructs improve transgene expression in *C. elegans*”, *Nature Methods* 5, 3

37. Didiano, D and Hobert, O (2008) “Molecular architecture of a miRNA-regulated 3’UTR”, *RNA* 14, 1297-1317

38. Pocock, R and Hobert, O (2008) “Oxygen levels affect axon guidance and neuronal migration in *Caenorhabditis elegans*”, *Nature Neurosci.* 11, 894-900 (featured in *News and Views* p.859-861)

39. Sarin, S, Prabhu, S, O'Meara, MM, Pe'er, I \*, and Hobert, O \*(2008) "*Caenorhabditis elegans* mutant allele identification by whole-genome sequencing", *Nature Methods* 5 (10), 865-867 (featured in *News and Views* p. 863-p.864 and in Faculty of 1000)(\* joint corresponding authors)

40. Shen, Y, Sarin, S, Liu, Y, **Hobert, O \***, Pe'er I \* (2008) "Comparing platforms for *C. elegans* mutant identification using high-throughput whole-genome sequencing", ***PLoS ONE***3(12):e4012(\* joint corresponding authors)

41. Doitsidou, M, Flames, N, Lee, AC, Boyanov A and Hobert, O (2008) "Automated screening for mutants affecting dopaminergic neuron specification in *C. elegans*", *Nature Methods* 5 (10), 869-872 (featured in *News and Views* p.863-864 and in Faculty of 1000)

42. Bülow, H, Tjoe, N, Townley, RA, Didiano, D, van Kuppevelt, TH and **Hobert, O** (2008) " Extracellular sugar modifications provide instructive and cell-specific information for axon guidance choices", ***Curr. Biol.***18(24):1978-1985 (recommended by Faculty of 1000)

2009:

43. Etchberger, JF, Flowers, EB, Poole, RJ, Bashllari, E and **Hobert, O** (2009) “*Cis*-regulatory mechanisms of left/right asymmetric neuron-subtype specification in *C. elegans”* ***Development*** 136:147-160 (recommended by Faculty of 1000)

44. Tung JJ, **Hobert, O**, Berryman M, Kitajewski J (2009) " Chloride intracellular channel 4 is involved in endothelial proliferation and morphogenesis in vitro." ***Angiogenesis*** 12(3):209-20.

45. O'Meara, MM, Bigelow,H, Flibotte, S, Etchberger, JF, Moerman, DG and **Hobert, O** (2009)“ Cis-regulatory mutations in the *C. elegans* homeobox genelocus *cog-1* affect neuronal development” ***Genetics*** 181: 1679–1686

46. Tursun, B, Cochella, L, Carrera, I and **Hobert, O** (2009) "A toolkit and robust pipeline for the generation of fosmid-based reporter genes in *C. elegans*", ***PLoS ONE***4(3), e4625

47. Bertrand, V and **Hobert, O** (2009) "Linking asymmetric cell division to the terminal differentiation program of postmitotic neurons in *C. elegans*" ***Dev. Cell***16, 563-575 (recommended by Faculty of 1000)

48. Flames, N and **Hobert, O** (2009) "Gene regulatory logic of dopaminergic neuron differentiation" ***Nature***458, 885-889 (featured in *News and Views* p.843-844, in *Genome Biology* 10, 229 and in Faculty of 1000)

49. Ortiz, CO, Faumont, S, Takayama, J, Ahmed, HK, Goldsmith, AD, Pocock, R, McCormick KE, Kunimoto, H, Iino, Y, Lockery, S and **Hobert, O** (2009) “Lateralized gustatory behavior of *C. elegans* is controlled by specific receptor-type guanylyl cyclases”, ***Curr. Biol.*** 19, 996-1004 (recommended by Faculty of 1000)

50. Bigelow, H, Doitsidou, M, Sarin, S and **Hobert, O** (2009) “MAQGene: software to facilitate *C. elegans* mutant genome sequence analysis” ***Nature Methods***, 6(8):549

51. Sarin, S, Antonio, C, Tursun, B and Hobert, O (2009) “The *C. elegans* Tailless/TLX transcription factor nhr-67 controls neuronal identity and left/right asymmetric fate diversification” *Development,* 136(17):2933-44

52. Benard, C, Tjoe, N, Boulin, T, Recio, J and Hobert, O (2009) "The Small, Secreted Immunoglobulin Protein ZIG-3 Maintains Axon Position in *Caenorhabditis elegans*" *Genetics* 183, 917-927

2010:

53. Didiano, D, Cochella, L, Tursun, B and **Hobert, O** (2010) "Neuron-type specific regulations of a 3'UTR through redundant and combinatorially acting *cis-*regulatory elements", ***RNA***16, 349–363

54. Pocock, R and **Hobert, O** (2010) "Hypoxia activates a latent circuit for processing gustatory information in *C. elegans"* ***Nature Neurosci.*** 13(5), 610-614

55. Flowers, E, Poole, R, Tursun, B, Bashllari, E, Pe'er, I and **Hobert, O** (2010) "UNC-37/Groucho interacts with a short Groucho-like protein, LSY-22, to control developmental decisions", ***Development***137, 1799-1805

56. Sarin, S, Bertrand, V, Bigelow, H, Boyanov, A, Doitsidou, M, Poole, R, Narula, S and **Hobert, O** (2010) "Analysis of multiple ethyl methanesulfate-mutagenized *Caenorhabditis elegans* strains by whole-genome-sequencing", ***Genetics***185, 417-430

57. O'Meara, MM, Zhang, F and **Hobert, O** (2010) "Maintenance of neuronal laterality in *C. elegans* through MYST histone acetyltransferase complex components LSY-12, LSY-13 and LIN-49", ***Genetics***186, 1497–1502

58. Doitsidou, M, Poole, RJ, Sarin, S, Bigelow, H and **Hobert, O** (2010) "*C. elegans* mutant identification with a one-step Whole-Genome-Sequencing and SNP mapping strategy", ***PLoS ONE***5(11), e15435 (recommended by Faculty of 1000; acc. to PloS ONE, among the 10% of most cited papers in PloS One, as of June 2017)

59. Goldsmith, AD, Sarin, S, Lockery, S and **Hobert, O** (2010) "Developmental control of lateralized neuron size in the nematode *Caenorhabditis elegans"* ***Neural Dev***5, 33

2011:

60. Haklai-Topper, L, Soutschek, J., Sabanay, H, Scheel, J, **Hobert, O\*** and Peles, E\* (2011) "The Neurexin Superfamily of *Caenorhabditis elegans*", ***Gene Expr Patterns*** 11 (2011) 144–150 (\* joint corresponding authors)

61. Tursun, B, Patel, T, Kratsios, P and **Hobert, O** (2011) “Direct conversion of *C. elegans* germ cells into specific neuron types”, ***Science*** 331, 304-308 (Research Article; featured in Perspective in *Science,* *Curr.Biol., Nature Struct. Mol. Biol., Nature Methods, Nature Reviews Neuroscience* and in Faculty of 1000).

62. Poole, RJ, Bashllari, E, Cochella, L, Flower, EB and **Hobert, O** (2011) "A genome-wide RNAi screen for factors involved in neuronal specification in *Caenorhabditis elegans*", ***PLoS Genetics*** 7 (6), e1002109

63. Zhang, F, O'Meara, MM and **Hobert, O** (2011) "A left/right asymmetric neuronal differentiation program is controlled by the *C. elegans* LSY-27 Zn finger transcription factor", ***Genetics*** 188, 753–759

64. Bertrand, V, Bisso, P, Poole RJ and **Hobert, O** (2011) "Notch-dependent induction of left/right asymmetry in *C. elegans* interneurons and motoneurons", ***Curr. Biol****.* 21, 1225-1231

65. Zheng, G, Cochella, L, Lui, J, **Hobert, O** and Li, WH (2011) "Temporal and spatial regulation of microRNA activity with photo-activatable cantimirs", ***ACS Chem. Biol.*** 6(12):1332-8

66. Rechavi, O, Minevich, G and **Hobert, O** (2011) "Transgenerational inheritance of an acquired small RNA-based antiviral response in *C. elegans* ", ***Cell***147, 1248-1256(recommended by Faculty of 1000)

2012:

67. Kratsios, P, Stolfi, A, Levine, M and **Hobert, O** (2012) "Coordinated regulation of cholinergic motor neuron traits through a conserved terminal selector gene", ***Nature Neurosci.*** 15, 205-214(recommended by Faculty of 1000)

68. Bénard, C, Blanchette, C, Recio,J and **Hobert, O** (2012) ”The secreted Ig domain proteins ZIG-5 and ZIG-8 cooperate with L1CAM/SAX-7 to maintain nervous system integrity in *C. elegans* “, ***PLoS Genetics***8(7): e1002819

69. Patel, T, Tursun, B, Rahe, D and **Hobert, O** (2012) "Removal of Polycomb Repressive Complex 2 makes *C. elegans* germ cells susceptible to direct conversion into specific somatic cell types", ***Cell Reports***2, 1178–1186

70. Minevich, G, Park, DS, Blankenberg, D, Nekrutenko, A, Poole, RJ and **Hobert, O** (2012) *“*CloudMap: A Cloud-based Pipeline for Analysis of Mutant Genome Sequences”, ***Genetics*** 192, 1249–1269

71. Cochella, L and **Hobert, O** (2012) *“*Embryonic priming of a miRNA locus predetermines postmitotic neuronal left-right asymmetry in *C. elegans*”, ***Cell***151, 1229–1242 (highlighted in *Nature Neuroscience*; recommended by Faculty of 1000)

2013:

72. Weinberg, P, Flames, N, Sawa, H, Garriga, G and **Hobert, O** (2013) “The SWI/SNF chromatin remodeling complexselectively affects multiple aspects of serotonergic neuron differentiation”, ***Genetics*** 192, 1249-69

73. Smith, HK, Luo, L, O'Halloran, D, Guo, D, Huang, X-Y, Samuel, ADF and **Hobert, O** (2013) "Defining specificity determinants of cyclic GMP-mediated gustatory sensory transduction in *Caenorhabditis elegans",* ***Genetics***94, 885-901

74. Doitsidou, M, Flames, F, Topalidou, I, Abe, N, Felton, T, Remesal, L, Popovitchenko, T, Mann, RS, Chalfie, M and **Hobert, O** (2013) ”A combinatorial regulatory signature controls terminal differentiation of the dopaminergic nervous system in *C. elegans",* ***Genes Dev****.* 27, 1391-1405

75. Serrano-Saiz, E, Poole, RJ, Felton, T, Zhang, F, De La Cruz, E and **Hobert, O** (2013)“Modular control of glutamatergic neuronal identity in *C. elegans* by distinct homeodomain proteins", ***Cell***155, 659–673

2014:

76. Zhang, F, Bhattacharya, A, Nelson, JC, Abe, N, Gordon, P, Lloret-Fernandez, C, Maicas, M, Flames, N, Mann, RS, Colón-Ramos, DAand **Hobert, O** (2014) “The LIM and POU homeobox genes *ttx-3* and *unc-86* act as terminal selectors in distinct cholinergic and serotonergic neuron types”, ***Development***141, 422-435

77. Cochella, L, Tursun, B, Hsieh, YW, Galindo, S, Johnston, RJ, Chuang, CF\* and **Hobert, O\*** (2014) **“**Two distinct types of neuronal asymmetries are controlled by the *Caenorhabditis elegans* zinc finger transcription factor *die-1*”**, *Genes Dev****.* 28, 34–43 (\* joint corresponding authors)(Mini-reviewed in *Curr. Biol. 24, R201–R204*; recommended by Faculty of 1000)

78. Nagarajan, A, Ning, Y, Reisner, K, Larsen, JP, **Hobert, O**\*, Doitsidou M\*(2014) **“**Progressive degeneration of dopaminergic neurons through TRP channel-induced cell death” ***J. Neurosci.***34, 5738-5746 (\* joint corresponding authors)

79. Glenwinkel, L, Wu, D, Minevich G, **Hobert, O** (2014) “TargetOrtho: a phylogenetic footprinting tool to identify transcription factor targets”, ***Genetics***197, 61-76

80. Rechavi, O, Houri-Ze'evi, L, Anava, S Goh WSG, Kerk, SY, Hannon, GJ, **Hobert, O** (2014) “Starvation-induced transgenerational inheritance of small RNAs in *C. elegans*”, ***Cell*** 158, 277–287 (featured in Preview in sameissue; recommended by Faculty of 1000)

81. Woods, DP, Ream, TS, Minevich, G, **Hobert, O** and Amasino, RM (2014) “PHYTOCHROME C is an essential light receptor for photoperiodic flowering in the temperate grass, Brachypodium distachyon”, ***Genetics*** 198:397-408

2015:

82. Kratsios, P, Pinan-Lucarré, B, Kerk, SY, Bessereau, JL and **Hobert, O** (2015) “Transcriptional coordination of synaptogenesis and neurotransmitter signaling”, ***Curr. Biol.*** 25, 1282–1295 (recommended by Faculty of 1000)

83. Murgan, S, Kari, W, Rothbächer, U, Iché-Torres, M, Mélénec, P, Couillault, C, **Hobert, O**\* and Bertrand, V\* (2015) “Atypical transcriptional activation by TCF via a Zic transcription factor in *C. elegans* neuronal precursors”, ***Dev Cell*** 33, 737-745 (\* joint corresponding authors)

84. Vidal, B, Santella, A, Bao, Z, Chuang, CF and **Hobert, O** (2015) “*C. elegans* SoxB genes are dispensable for embryonic neurogenesis but required for terminal differentiation of specific neuron types”, ***Development***142, 2464-2477

85. Alqadah, A, Hsieh, YH, Vidal, B, Chang, C, **Hobert, O\***, Chuang, CF\* (2015) “Postmitotic diversification of olfactory neuron types is mediated by differential activities of the HMG-box transcription factor SOX-2”, ***EMBO J.***, 34, 2574-2589 (\*joint corresponding authors)

86. Gordon, PM and **Hobert, O** (2015) “A competition mechanism for a homeotic neuron identity transformation in *C. elegans*”, ***Dev. Cell*** 34, 206–219

87. Howell, K, White, JG and **Hobert, O** (2015) “Spatiotemporal control of a novel synaptic organizer molecule”, ***Nature*** 523, 83-87(covered in *News & Views,* p.44-45)

88. Stefanakis, N, Carrera, I, and **Hobert, O** (2015) “Regulatory logic of pan-neuronal gene expression in *C. elegans*” ***Neuron****,* 87, 733–750

89. Pereira, L, Kratsios, P, Serrano-Saiz, E, Sheftel, H, Mayo, A, Hall, DH, White, JG, LeBoeuf, B, Garcia, LR, Alon, U and **Hobert, O** (2015) “A cellular and regulatory map of the cholinergic nervous system of *C. elegans*”, ***eLife*** 2015;4:e12432

2016:

90. Oren-Suissa, M, Bayer, EA and **Hobert, O** (2016) “Sexually dimorphic synaptic connectivity established by sex-specific synapse pruning in *C. elegans*”, ***Nature,*** 533:206-211 (Research Article; featured in *News & Views*; recommended by Faculty of 1000; covered in Washington Post, May 18, 2006)

91. Gendrel, M, Atlas, EG and **Hobert, O** (2016) “A cellular and regulatory map of the GABAergic nervous system of *C. elegans*”, ***eLife*** 5:e17686

92. **Hobert, O**, Glenwinkel, L, White, JG (2016) “Revisiting Neuronal Cell Type Classification in *Caenorhabditis elegans*”, ***Curr. Biol****.*26, R1197–R1203 (recommended by Faculty of 1000)

2017:

93. Kerk, SY, Kratsios, P, Hart, M, Mourao, R and **Hobert, O** (2017) “Diversification of *C. elegans* motor neuron identity via selective effector gene repression” ***Neuron*** 93, 80–98

94. Serrano-Saiz, E, Oren-Suissa, M, Bayer, EA, and **Hobert, O** (2017) “Sexually dimorphic differentiation of a *C. elegans* hub neuron is cell-autonomously controlled by a conserved transcription factor” ***Curr. Biol.*** 27,199–209 (recommended by Faculty of 1000)

95. Patel, T and **Hobert, O** (2017) “Coordinated control of terminal differentiation and restriction of cellular plasticity”, ***eLife***6:e24100 (recommended by Faculty of 1000)

96. Howell, K and **Hobert, O** (2017) “Morphological diversity of *C. elegans* sensory cilia instructed by the differential expression of an immunoglobulin domain protein”, ***Curr. Biol.*** 27, 1782–1790 (featured in *Dispatch* in *Curr.Biol.* *27, R642–R666*)

97. Serrano-Saiz, E, Pereira, L, Gendrel, M, Aghayeva, U, Bhattacharya, A, Howell, K, Garcia, LR and **Hobert, O** (2017) “A neurotransmitter atlas of the *C. elegans* male nervous system reveals sexually dimorphic neurotransmitter usage”, ***Genetics*** 206: 1251–1269

98. Kratsios, P, Kerk, SY, Catela, C, Liang, J, Vidal, B, Bayer, EA, Feng, F, De La Cruz, ED, Croci, L, Consalez, GG, Mizumoto, K and **Hobert, O** (2017) “An intersectional gene regulatory strategy defines subclass diversity of *C. elegans* motor neurons”, ***eLife*** 6:e2575

99. Leyva-Diaz, E Stefanakis, N, Carrera, I, Lori Glenwinkel, L, Wang, G, Driscoll, M and **Hobert, O** (2017) “*pals-22*, a member of an expanded *C. elegans* gene family, controls silencing of repetitive DNA”, ***Genetics***207: 529-545

2018:

100. Doitsidou, M, Kroll, J, Minevich, G, Soete, G, Gowtham, S, Korswagen, HC, van Zon, JS and **Hobert, O** (2018) “A *C. elegans* Zn finger transcription factor, *ztf-6*, required for the specification of a dopamine neuron producing lineage”, ***G3: Genes, Genomes, Genetics*** 8(1), 17-26

101. Vidal, B, Aghayeva, U, Sun, H, Wang, C, Glenwinkel, L, Bayer, E and **Hobert, O** (2018) “An atlas of *Caenorhabditis elegans* chemoreceptor expression”, ***PLoS Biology***16(1): e2004218

102. Hart, M and **Hobert, O** (2018) “Neurexin controls functional and morphological plasticity of a mature sexually dimorphic neuron”, ***Nature*** 553, 165-170(Research Article)(featured in News & Views *Nature 553, 159-160;* recommended by Faculty of 1000)

103. Weinberg, P, Berkseth, M, Zarkower, D and **Hobert, O** (2018) “Sexually dimorphic *unc-6*/Netrin expression controls sex-specific maintenance of synaptic connectivity”, ***Curr Biol.*** 28, 623–629 (featured in *Dispatch* in *Curr. Biol.* *28: R254-R256*; recommended by Faculty of 1000)

104. Masoudi, N, Tavazoie, S, Glenwinkel, L, Ryu, L, Kim, K and **Hobert, O** (2018) “Unconventional function of an Achaete-Scute homolog as a terminal selector of nociceptive neuron identity”, ***PLoS Biology*** 16(4): e2004979

105. Serrano-Saiz, E, Leyva-Díaz, E, De La Cruz, E and **Hobert, O** (2018) “BRN3-type POU homeobox genes maintain the identity of mature postmitotic neurons in nematodes and mice”, ***Curr Biol.*** 28, 2813–2823

106. Bayer, EA and **Hobert, O** (2018) “Sexually dimorphic neuronal wiring is shaped by past experience through monoaminergic signaling”, ***Nature***561, 117–121

2019:

107. Pereira, P, Aeschimann, F, Wang, C, Lawson, H, Serrano-Saiz, E, Portman, DS, Großhans, H and **Hobert, O** (2019) “Timing mechanism of sexually dimorphic nervous system differentiation”, ***eLife*** 8*:* e42078(featured in Insight by Perry & Desplan *eLife* 8:e41523)

108. Bhattacharya, A, Aghayeva, U, Berghoff, E and **Hobert, O** (2019) “Plasticity of the electrical connectome of *C. elegans*”, ***Cell*** *176, 1174–1189* (featured in *Dispatch* in *Curr. Biol.* *29, R372-R375*)

109. Cook, SJ, Jarrell, TA, Brittin, CA, Wang, Y, Bloniarz, AE, Yakovlev, MA, Nguyen, KCQ, Tang, LTH, Bayer, EA, Duerr, JS, Bülow, HS, **Hobert, O**, Hall, DH and Emmons SW (2019) “Whole-animal connectomes of both *Caenorhabditis elegans* sexes”, ***Nature*** 571, 63-71(featured in *Nature* News & Views; New York Times; Washington Post)

110. Rahe, D and **Hobert, O** (2019) “Restriction of cellular plasticity of differentiated cells mediated by chromatin modifiers, transcription factors and protein kinases”, ***G3: Genes, Genomes, Genetics*** 9: 2287-2302

111. Leyva-Diaz, E and **Hobert, O** (2019) “Transcription factor autoregulation required for acquisition and maintenance of neuronal identity”**, *Development***146 (13)*,* dev177378 (highlighted article)(recommended by Faculty of 1000)

112. Hong, RL, Riebesell, M. Bumbarger, DJ, Cook, SJ, Carstensen, HR, Sarpolaki, T, Cochella, L, Castrejon, J, Moreno, E, Sieriebriennikov, B, **Hobert, O** and Sommer, RJ (2019) “Evolution of neuronal anatomy and circuitry in two highly divergent nematode species”, ***eLife*** 8:e47155

2020:

113. Serrano-Saiz, E, Vogt, MC, Levy, S, Kaczmarczyk, KK, Mei, X, Singson, A and **Hobert, O** (2020) “SLC17A6/7/8 vesicular glutamate transporter homologs in nematodes”, ***Genetics*** 214, 163–178

114. Yu, CC, Barry, NC, Wassie, AT, Sinha, A, Bhattacharya, A, Asano, S, Zhang, C, Chen, F, **Hobert, O**, Goodman, MB, Haspel, G, Boyden, ES (2020) “Expansion microscopy of *C. elegans”,* ***eLife*** 9:e46249 DOI: 10.7554/eLife.46249

115. Serrano-Saiz, E, Gulez, B, Pereira, L, Gendrel, M, Kerk, SY, Vidal, B, Feng, W, Wang, C, Kratsios, P, Rand, JB and **Hobert, O** (2020) “Modular organization of cis-regulatory control information of neurotransmitter pathway genes in *Caenorhabditis elegans*”, ***Genetics****,* 215, 665**–**681 (highlighted article)

116. Cook, SJ, Crouse, CM, Hall, DH, Emmons, SW and **Hobert, O** (2020) “The connectome of the *Caenorhabditis elegans* pharynx”, ***J. Comp. Neurol.***528:2767**–**2784

117. Bayer, EA, Sun, H, Rafi, I and **Hobert, O** (2020) “Differential temporal, spatial, sexual and environmental regulation of the master regulator of sexual identity in *C. elegans*”, ***Curr. Biol.*** 30, 3604–3616 (featured in *Dispatch* in *Curr. Biol.* 30, R1036–R1061)

118. Reilly, MB, Cros, C, Varol, E, Yemini, E, and **Hobert, O** (2020) “Unique homeobox codes delineate all C. elegans neuron classes”, ***Nature***584, 595–601

119. Bayer, EA, Stecky, R, Neal, L, Kasamba, PS, Ahlsen, G, Balaji, V, Hoppe, T, Shapiro, L, Oren-Suissa, M and **Hobert, O** (2020) “Ubiquitin-dependent regulation of a conserved DMRT protein controls sexually dimorphic synaptic connectivity and behavior”, ***eLife***9:e59614

2021:

120. Pham, K, Masoud, N, Leyva-Diaz, E and **Hobert, O** (2021) “A nervous system-specific subnuclear organelle in *C. elegans*”, ***Genetics*** *217(1), 1–17,*<https://doi.org/10.1093/genetics/iyaa016>

121. Yemini, E, Lin, A, Nejatbakhsh, A, Varol, E, Sun, R, Mena, GE, Samuel, ADT, Paninski, L, Venkatachalam, V and **Hobert, O** (2021) “NeuroPAL: A Multicolor Atlas for Whole-Brain Neuronal Identification in *C. elegans*”, ***Cell***184, 272–288

122. Aghayeva, U, Bhattacharya, B, Sural, S, Jaeger, E, Churgin, M, Fang-Yen, C and **Hobert, O** (2021) “DAF-16/FoxO and DAF-12/VDR control cellular plasticity both cell-autonomously and via interorgan signaling”, ***PLoS Biology****, 19(4): e3001204*

123. Masoudi, N, Yemini, E, Schnabel, R and **Hobert, O** (2021) “Piecemeal regulation of convergent neuronal lineages by bHLH transcription factors in *C. elegans*”, ***Development*** 148, dev199224. doi:10.1242/dev.199224

124. Glenwinkel, L, Taylor, SR, Langebeck-Jensen, K, Pereira, L, Reilly. MB, Basavaraju, M, Rafi, I, Yemini, E, Pocock, R, Sestan, N, Hammarlund, M, Miller, DM, and **Hobert, O** (2021) “In silico analysis of the transcriptional regulatory logic of neuronal identity specification throughout the C. elegans nervous system”, ***eLife*** 10:e64906 doi: 10.7554/eLife.64906.

125. Berghoff, E, Glenwinkel, L, Bhattacharya, A, Sun, H, Varol, E, Mohammadi, N, Antone, A, Feng, Y, Nguyen, K, Cook, SJ, Wood, JF, Masoudi, N, Cros, C, Ferkey, DM, Hall, DH and **Hobert, O** (2021) “The Prop1-like homeobox gene unc-42 specifies the identity of synaptically connected neurons”, ***eLife***, 10:e64903 doi: 10.7554/eLife.64903

126. Taylor, SR, Santpere, G, Weinreb, A, Barrett, A, Reilly, M, Xu, C, Verdol, E, Oikonomou, P, Glenwinkel, L, McWhirter, R, Poff, A, Basavaraju, M, Rafi, I, Yemini, E, Cook, SJ, Abrams, A, Vidal, B., Cros, C, Tavazoie, S, Sestan, N \*, Hammarlund, M \*, **Hobert, O \*** and Miller, D \* (2021) “Molecular topography of an entire nervous system”, ***Cell***, 184, 4329–4347 (\* joint corresponding authors)

127. Tekieli, T, Yemini, E, Nejatbakhsh, A, Varol, E, Fernandez, RW, Masoudi, N, Paninski, L and **Hobert, O** (2021) “Visualizing the organization and differentiation of the male-specific nervous system of *C. elegans*”, ***Development*** 148, dev199687. doi:10.1242/dev.199687

128. Sural, S and **Hobert, O** (2021) “Nematode nuclear receptors as integrators of sensory physiology”, ***Curr Biol.*** 31, 4361–4366

129. Sun, H and **Hobert, O** (2021) “Temporal transitions in post-mitotic neurons throughout the *C. elegans* nervous system” ***Nature*** 600, 93–99

2022:

130. Vidal, B, Gulez, B, Cao, WX, Leyva-Diaz, E, Reilly, MB, Tekieli, T and **Hobert, O** (2022) “The enteric nervous system of *C. elegans* is specified by the Sine Oculis-like homeobox gene *ceh-34*”, ***eLife*** 11:e76003. doi: 10.7554/eLife.76003

131. Leyva-Diaz, E and **Hobert, O** (2022) “Robust regulatory architecture of pan-neuronal gene expression”, ***Curr Biol*** 32, 1715–1727

132. Cros, C and **Hobert, O** (2022) “*C. elegans* Sine oculis/SIX-type homeobox genes act as homeotic switches to define neuronal subtype identities”, ***Proc. Natl. Acad. Sci.* USA** 119 (37) e2206817119

133. Yu, J, Vogt, MC, Fox, BW, Wrobel, CJJ, Palomino, DF, Curtis, BJ, Zhang, B, Le, HH, Tauffenberger, A, **Hobert, O,\*** and Schroeder, FC\* (2022), “Parallel pathways for serotonin biosynthesis and metabolism in *C. elegans*”, ***Nature Chem Biol.****,* https://doi.org/10.1038/s41589-022-01148-7(\* joint corresponding authors)

134. Reilly, MB, Tekieli, T, Cros, C, Aguilar, R, Lao, J, Toker, IA, Vidal, B, Leyva-Diaz, E, Bhattacharya, A, Smith, J, Gulez, B, Fernandez, R, Bradford, EF, Ramadan, YH, Kovacevic, I, Kratsios, P, Bao, Z and **Hobert, O** (2022) “Widespread employment of conserved *C. elegans* homeobox genes in neuronal identity specification”, ***PLoS Genetics,*** 18(9): e1010372