

Curriculum vitae

Dr. Oliver Hobert

Columbia University, New York
Department of Biological Sciences
Howard Hughes Medical Institute

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Birth & Nationality

German; born 02.02.1967, Rotenburg an der Fulda, Germany

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, Germany (including 1 year DAAD-financed research program at Sugen, Inc., Redwood City, CA) Advisor: Prof. Axel Ullrich
- 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 (new primary affiliation)
- 2014-present Full Professor at Columbia University Medical Center, Department of Systems Biology
- 2009-present Full Professor at Columbia University Medical Center, Department of Biochemistry and Molecular Biophysics
- 2005-present Investigator, Howard Hughes Medical Institute
- 2005-2009 Associate Professor (with tenure) at Columbia University Medical Center, Department of Biochemistry and Molecular Biophysics
- 1999-2005 Assistant Professor at Columbia University Medical Center, Department of Biochemistry and Molecular Biophysics, Co-Appointment in the Center for Neurobiology and Behavior

Awards and Honors

- 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 (for postdoctoral work)
- 1998 Postdoctoral Fellowship Award from the MGH Fund For Medical Discovery
- 1997 Junior Investigator Award from the German Academy of Science "Leopoldina" (for Ph.D. work)
- 1996 Human Frontiers in Science Postdoctoral Fellowship
- 1994 Awarded a Ph.D. scholarship from the DAAD for 1 year stay at Sugen, Inc.
- 1993 Awarded a Ph.D. scholarship from the "Studienstiftung des deutschen Volkes"
- 1989 Awarded an undergraduate scholarship from "Studienstiftung des deutschen Volkes"

Teaching Activities

At Columbia University:

2017-present	Organizer & Lecturer Advanced Undergraduate course "Neurogenetics", Dept. of Biological 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
2013-2016	Guest Lecturer Graduate course "Advanced eukaryotic molecular genetics", Dept. of Genetics & Development
2012	Guest Lecturer Graduate course "Genetics", Dept. of Biological Sciences
2009-2015	Guest Lecturer Graduate course "Professional Development for Neuroscientists", Dept. of Neuroscience
2007-2011	Organizer & Lecturer of "Stem Cells and Cell Lineage Specification" course
2002-2015	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	Lecturer Graduate course "Biochemistry and Molecular Biology of Eukaryotes", Dept. of Biochem.

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 " <i>C. elegans</i> ", Cold Spring Harbor
2000	Guest lecturer in Cold Spring Harbor Laboratory, Course on "Adv. Genome Seq. Analysis"

Training Activities

Graduate students:

1999-present	23 past Graduate Students (5 currently Faculty Members; see below)
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Postdoctoral fellows:

1999-present	19 past Postdoctoral Fellows (12 currently Faculty Members; see below)
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Other:

2007-2012	Program director NIH T32 Training Grant "Stem Cells and Cell Lineage Specification"
2006-present	Training Mentor <i>Harlem Children Society</i>
2005-present	Training Faculty of the Graduate Program in <i>Biological Sciences</i>
2004-present	Training Faculty of the Graduate Program in <i>Genetics and Development</i>
1999-present	Training Faculty of the Graduate Program in <i>Neurobiology and Behavior</i>

Trainees

a) Past Postdoctoral Fellows:

- 1) 1999-2000 Zeynep Altun-Gultekin (M.D., Ph.D. Cornell U), now Attending Psychiatrist/Faculty, Columbia University 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: Associate Professor 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, Scotland
- 12) 2005-2012 Richard Poole (Ph.D. UC London), now: Group Leader (Wellcome Trust Career Development

- Fellow) at University College, London
- 13) 2006-2011 Nuria Flames (Ph.D. Neuroscience 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: Postdoctoral Fellow, Institut Pasteur de Montevideo, Uruguay
 - 18) 2010-2012 Oded Rechavi (Ph.D. Tel Aviv University, Israel), now: Assistant Professor, Tel Aviv University
 - 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 Nationale Supérieure, Paris, France), ensuing position: Lecturer (Maître de conférences), 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), ensuing position: Simons Fellow (Path to Independence), Associate Research Scientist, University of Pennsylvania School of Medicine, Department of Medicine

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 Assistant 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

Institutional Committees

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|-----------|---|
| 2015-2018 | Member of Search Committee Junior Faculty Recruitment for Dept. 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 |

Editorial Activities

Present:

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| 2018 | Guest Co-Editor special issue <i>Current Opinions in Neurobiology</i> "Neuronal Identity" |
| 2012-present | Reviewing Editor, <i>eLife</i> |
| 2012-present | Associate Editor, <i>Wiley Interdisciplinary Reviews (WIREs): Developmental Biology</i> |

2009-present Editorial board of *Current Biology*
 2008-present Associate Editor; then Senior Editor & Reviews Editor, *Genetics* (Official journal of the Genetics Society of America)
 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) & its sister journal *Gene Expression Patterns*
 2003-present Editorial board of *Development*
 2001-present F1000Prime Faculty member

Past:

2012-2013 Associate Editor, *Neural Development*
 2009-2017 Editor, *WormMethods*
 2009-2015 Editorial board of *Developmental Dynamics* (Journal of the American Association of Anatomists)
 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"*

Boards

2011-present Scientific Advisory Board WormBase
 2015-present Scientific and Clinical Steering Committee New York Genome Center
 2016-present WormBoard member
 2017 External Advisory Board "Developmental Genetics" graduate program, NYU
 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.; 2 terms)

Professional Society Memberships

American Association 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 other) 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 (3.renewed funding period), now entitled "*Sexually dimorphic regulation of neuronal identity in C.elegans*" and awarded a P37 Merit Award in 2015
 2005-present Howard Hughes Medical Institute (next renewal 2021)
 2017-2020 NSF NeuroNex "Live Imaging of the *C.elegans* Connectome" (NSF #1707401)
 2017-2022 National Institutes of Health R01NS100547 "*Discovery and analysis of the C. elegans neuronal*

2018-2020 *gene expression network (CENGEN)*” (CoPI)
National Institutes of Health R21NS106909 “*A molecular map of the electrical connectome of C. elegans*”
2018-2020 National Institutes of Health R21NS106843 “*A nervous system-wide analysis of C. elegans homeobox gene function*”

Past:

2016-2018 National Institutes of Health R21 NS096343
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 comm.
- 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

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. LMU University Munich, Gene Center, 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 (Gene Center) at the LMU, Munich, 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 Maximilian University Munich, 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, 06/2011, **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. Society for Neuroscience Annual Meeting, San Diego, **Special Lecture**, 11/2018

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

288. EMBO Workshop "Building, repairing and maintaining a functional nervous system", Lyon, France, 05/2019

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

290. Cell Symposium "Transcription in Evolution, Development, and Disease", Chicago, 10/2019

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) "New insights 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, p.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. Oren-Suissa, M, Wang C and **Hobert, O** (2019) "Sexually dimorphic circuits in *C.elegans*" *Curr. Opin. Neurobiol* in preparation (Invited Review)
24. **Hobert, O** (2019) "Neuronal identity control by terminal selectors in worms, flies and mice" *Curr. Opin. Neurobiol* in preparation (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, edited by Pasko Rakic and John Rubenstein, Academic Press, 2013, First 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)
12. **Hobert, O** (2019) "Neurogenesis in the nematode *Caenorhabditis elegans*", **Comprehensive Developmental Neuroscience** book series, edited by Pasko Rakic and John Rubenstein, Academic Press, Second Edition

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**, *in press*

Primary research publications:

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 p95^{Vav}/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, Ciosek, 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 of developmental control in *Caenorhabditis elegans*" **Science** 282, 2033-2041

4. **Hobert, O**, Moerman, DG, Clark, KA, Beckerle, MC and Ruvkun, G (1999) "A conserved LIM protein that 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

Principal 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:

4. 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**, Capodici, P, Veach, DR, Yin, X, Campodonico, L, Glekas, A, Cordon-Cardo, C, Clarkson, B, Bornmann, WG, Fuks, Z, Hengartner, MO and 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

asymmetrically 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, 607 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, *Isy-2*, required for the cell-type specific expression of the *Isy-6* microRNA" **Development** 132, 5451-5460

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