HUGO J. BELLEN, D.V.M., PH.D.
PROFESSOR, DEPARTMENTS OF MOLECULAR AND HUMAN GENETICS, AND NEUROSCIENCE
JAN AND DAN DUNCAN NEUROLOGICAL RESEARCH INSTITUTE, TEXAS CHILDREN'S HOSPITAL
BAYLOR COLLEGE OF MEDICINE (BCM)

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EDUCATION

Ph.D. in Genetics, 1986, University of California, Davis, CA
Thesis: "Multiple effects of *dunce* mutations of *Drosophila melanogaster* and their interactions with suppressors", Advisor: Dr. J.A. Kiger
Doctor in Veterinary Medicine, 1983, Magna Cum Laude, Ghent University, Belgium
Preveterinary Medicine, 1980, Magna Cum Laude, University of Antwerp, Belgium
***Business Engineer* (Engineering & M.B.A.)**, 1976, Magna Cum Laude
Solvay Business School, Vrije Universiteit Brussel, Belgium

POSTGRADUATE TRAINING

Postdoctoral Researcher, supported by a N.A.T.O. Fellowship, 1987-1989
University of Basel, Biozentrum, Dept. of Cell Biology, Switzerland, Advisor: Dr. W.J. Gehring

OTHER TRAINING

Research Associate in Econometrics, supported by the National Fund of Scientific Research, 1977-1980
University of Antwerp, Dept. of Economical Sciences, Belgium, Advisor: Dr. C. Van Herbruggen

ACADEMIC APPOINTMENTS

CURRENT APPOINTMENTS AT BAYLOR COLLEGE OF MEDICINE (BCM)

1997-present	***Professor***, Departments of Molecular and Human Genetics, and Neuroscience
2007-present	***Adjunct Member***, The University of Texas MD Anderson Cancer Center
2010-present	***Distinguished Service Professor***, Baylor College of Medicine
2011-present	***Principal Investigator***, Jan and Dan Duncan Neurological Research Institute

PAST APPOINTMENTS AT BAYLOR COLLEGE OF MEDICINE (BCM)

1989-2021	***Investigator***, Howard Hughes Medical Institute
1996-2017	***Director***, Graduate Program in Developmental Biology
1989-1994	***Assistant Professor***, Departments of Molecular and Human Genetics, and Cell Biology; and Program in Cell and Molecular Biology
1990-1994	***Assistant Professor***, Division of Neuroscience

1991-1994 ***Assistant Professor***, Program in Developmental Biology
1994-1997 ***Associate Professor***, Departments of Molecular and Human Genetics, and Cell Biology; Division of Neuroscience; Programs in Cell and Molecular Biology, and Developmental Biology
1997-2009 ***Professor***, Department of Molecular and Cellular Biology

PROFESSIONAL SOCIETIES

Genetics Society of America
American Association for the Advancement of Science
Society for Neuroscience
American Society of Human Genetics

HONORS AND AWARDS

The Gruber Prize in Genetics, January 2024
Emeritus, Howard Hughes Medical Institute, October 2023
Chair in Neurogenetics, Jan and Dan Duncan Neurological Research Institute, April 2020-present
Arthur L. Beaudet Mentoring Award, BCM, October 2022
The Barbara and Corbin J. Robertson, Jr. Presidential Award for Education and Mentoring, May 2021
Elected Associate Member, European Molecular Biology Organization, May 2021
Elected Member, National Academy of Sciences, April 2020
Elected Member, American Academy of Arts and Sciences, April 2020
For many years of service at BCM as leader in numerous programs & committees and advocate for supporting research faculty, Office of Research, BCM, September 2019
Keynote Speaker, Brown University Colloquium on the Biology of Human Aging, May 2019
Keynote Speaker, Chicago Chapter of Society for Neuroscience, April 2019
Opening Lecture, Grande Conference of the Academie des Sciences, Insects: friends, foes and models, Institut de France, Paris, March 2019
The Presidential Award for Excellence in Leadership in Research and Research Mentoring, May 2018
Stanley N. Cohen Lecture, Perelman School of Medicine of the University of Pennsylvania, May 2018
Seymour Benzer Keynote Speaker, Neurobiology of Drosophila Meeting, Cold Spring Harbor, Oct. 2017
Edward J. Masoro Distinguished Lecture, UT Health Science Center, San Antonio, May 2016
Michael E. DeBakey, M.D., Excellence in Research Award, BCM, May 2016
Miegunyah Distinguished Visiting Fellowship at the University of Melbourne, Australia, May 2015
George W. Beadle Award of the Genetics Society of America, March 2014
Linda & Jack Gill Distinguished Neuroscience Investigator Award, Indiana U., Bloomington, Oct. 2012
Distinguished Alumnus Award, University of California, Davis, October 2011
Distinguished Service Professor, BCM, March 2010
March of Dimes Chair in Developmental Biology, BCM, May 2000-present
Charles Darwin Chair in Genetics, Dept. of Molecular and Human Genetics, BCM, Oct. 1999-present
Dean's Faculty Award for Excellence in Graduate Education, BCM, March 1999
Michael E. DeBakey, M.D., Excellence in Research Award, BCM, October 1995
N.A.T.O. Fellowship, July 1986 and July 1987
Distinguished Scholarship, University of California, Davis, September 1985
Fulbright Award, Belgian-American Educational Foundation, July 1983
Upjohn Award, Best Thesis in Veterinary Medicine, Belgium, July 1983

REVIEW PANELS & SERVICE

President, Genetics Society of America, 2021; Vice-President, 2020
Chair, Scientific Advisory Board of the Bloomington *Drosophila* Stock Center, Indiana Univ., 1996-present
Member, Scientific Advisory Board of FlyBase, Harvard University, 2016-present
Member, Scientific Advisory Board of the Alliance of Genome Resources, NHGRI, 2017-present
Member, External Advisory Board of the Gill Center, Indiana University, 2018-present
Chair, Scientific Advisory Board of the INADcure Foundation, 2019-present
Chair, Board of Scientific Counselors, NIH/NICHD, 2019-2024
Member, Scientific Advisory Board of the Institute of Molecular Biology (IMB), Academia Sinica, Taipei, Taiwan, 2011, 2017, 2022 (Chair)
Member, Scientific Advisory Board of the Max Planck Institute for Biophysical Chemistry, Göttingen, Germany, 2008-2017
Member, Scientific Advisory Board of the Flanders Interuniversity Institute for Biotechnology (VIB), University of Leuven, Belgium, 2013
Member, Scientific Advisory Board of the Biology Department, KAIST, Daejeon, Korea, 2010
Member, Advisory Committees of Janelia Farm, HHMI, Ashburn, VA, 2007-2010
Member, Faculty Search Committee of the Flanders Interuniversity Institute for Biotechnology (VIB), Belgium, 2003-2010

Head, Model Organisms Screening Center, Undiagnosed Diseases Network, NIH, 2015-present
Co-Chair, Executive Steering Committee, Undiagnosed Diseases Network, NIH, 2019-2023
Ad hoc grant reviewer, Behavioral and Neuroscience Study Section, NIH, 1993, 1998, and 2001
Member, Special Emphasis Panel Study Section, NIH, 2000-2002
Member, NASA Developmental Review Panel, 2000
Ad hoc grant reviewer, National Science Foundation, 1991-1996
Ad hoc grant reviewer, Department of Agriculture, 1991-1995

Member, Faculty Promotions Committee of the Molecular and Human Genetics Dept., BCM, 2015-present
Genetics Faculty Representative/Senator, Faculty Senate, BCM, 2015-2019
Basic Science Faculty Representative/Senator, Faculty Senate, BCM, 2015-2018
Chair, Basic Science Faculty Input Committee, BCM, 2011-2015
Member, Faculty Appointments and Promotions Committee, BCM, 1998-2018
Chair, Faculty Committee on Awards and Bridge Funding, BCM, 1998-2018

Co-Organizer, TAGC2020, The Allied Genetics Conference, GSA Conference, Washington DC, 2020
Co-Organizer, Notch Meetings, Athens, Greece, 2011, 2012, 2014
Organizer, HHMI Janelia Farm Research Conference "Improving the genetic toolkit for *Drosophila*", 2007
Chair, 47th Annual *Drosophila* Research Conference, Houston, TX, 2006
Organizer, Cold Spring Harbor Laboratory "Neurobiology of *Drosophila*" Meeting, 2001
Member, Organization Committee for the biennial *Drosophila* Crete meetings, 1995-2000

EDITORIAL ACTIVITIES

Member, Editorial Board of *PNAS*, 2020-present
Member, Editorial Board of *eLife*, 2015-present
Member, Editorial Board of *Genetics*, Associate Editor, 2013-present
Member, Editorial Board of *F1000 Research*, 2012-2018
Member, Editorial Board of *PLoS Biology*, 2012-2018
Academic Editor, *PLoS Biology*, 2007-2011
Member, Editorial Board of the *Journal of Cell Biology*, 2001-2016

Member, Editorial Board of *Invertebrate Neuroscience*, 1996-2001
Editor, *Notch Signaling*, Methods in Molecular Biology (Book 1187), Humana Press, 2014
Guest Editor, *Developmental Genetics*: "Focus on Neurogenesis", 1996
Reviewer for: *Cell, Cell Reports, Cell Metabolism, Current Biology, Development, Developmental Biology, Developmental Cell, Disease Models & Mechanisms, eLife, EMBO Journal, EMBO Report, Genes and Development, Genetics, Genome Research, G3, Journal of Cell Biology, Journal of Cell Science, Journal of Neuroscience, Mechanisms of Development, Molecular Cell, Molecular and Cellular Biology, Nature, Nature Cell Biology, Nature Communications, Nature Genetics, Nature Methods, Nature Metabolism, Nature Neuroscience, Nature Structural & Molecular Biology, Neuron, PLoS Biology, PLoS Genetics, PLoS One, PNAS USA*, and *Science*

TEACHING RELATED ACTIVITIES AT BAYLOR COLLEGE OF MEDICINE (BCM)

COURSES TAUGHT AND/OR COORDINATED

Classical Developmental Biology (2016-present)
Neural Development (1997-2003, 2007-present)
Evolutionary Conservation of Developmental Mechanisms (1992-2017)
Seminar in Developmental Biology (1992-2017)
Development (core) (1997-2003, 2008-2014)
Topics in Development (1992-1998, 2008)
Mechanisms of Neural Disease (1999-2001)
Developmental Biology (1992-1997)
Molecular Neuroscience (1992-1996)
Advanced Topics in Genetics (1998-2001)
Genetics A (core) (1997-1998)
Genetics B (core) (1997-1998)
Advanced Eukaryotic Genetics (1997-1998)
Eukaryotic Genetics (1990-1997)

CURRICULUM DEVELOPMENT

Member of the Thesis Advisory Committees of >95 Graduate Students, 1990-present
Member of the Graduate School Executive Council, 1996-2017
Director of the Graduate Program in Developmental Biology, 1996-2017
Co-Director of the Graduate Program in Developmental Biology, 1991-1996
Coordinator of the Seminar Series in the Graduate Program in Developmental Biology, 1993-2017
Coordinator of the Seminar Series in the Department of Molecular and Human Genetics, 1997-2001
Member of the Howard Hughes Medical Institute Liaison Committee, 2004-2011
Committee Member of the Barbara and Corbin J. Robertson, Jr. Presidential Award for Excellence in Education, BCM, 2001-2004
Member of more than 30 Faculty Recruitment Committees, Departments of Molecular and Human Genetics, Molecular and Cellular Biology, and Neuroscience, 1990-present
Head of Search Committees for 4 faculty positions, Dept. of Molecular and Human Genetics, 1995-2010
Head of the Search Committee for a Physiology Chair, 1997-1999
Member of the Graduate School Curriculum Advisory Committee, 1996-2010
Member of the Graduate School Curriculum Committee, 1990-1996
Member of the Operating Committee of the Medical Scientist Training Program, 1992-1997
Member of the Steering Committee of the Graduate Program in Cell and Molecular Biology, 1990-1996
Member of the Graduate Education Committee of the Dept. of Molecular and Human Genetics, 1990-1996
Member of the Examination Committee of the Department of Molecular and Human Genetics, 1990-1994
Member of the Examination Committee of the Department of Cell Biology, 1990-1994

SUPPORT

NIH/OD, PD/PI, R24 OD031447, A comprehensive resource for manipulating the *Drosophila* genome with swappable insertion cassettes (SICs), 07/01/2021 - 03/31/2029

NIH/NIA, PD/PI, R01 AG073260, Impacts of glial droplets on oxidative stress and neurodegeneration in Alzheimer's Disease, 09/01/2021 - 05/31/2027

NIH/NIA, Co-I, U01 AG072439, Functional genomic dissection of Alzheimer's Disease in human and *Drosophila* models, 07/01/2021 - 06/30/2027

NIH/NHGRI, Co-I, R01 HG011795, Genomic medicine and gene function implementation for an under-served population, 07/13/2021- 04/30/2027

NIH/NINDS, PD/PI, U54 NS093793, Center for functional analysis of human UDN gene homologs in *Drosophila* and zebrafish, 09/15/2015 - 03/31/2027

NIH/ORIP Co-I, U54 OD03165, BCM Center for precision medicine models, 09/15/2020 - 08/31/2030

Henri Jackson Foundation, PI, Subcontract, HT9452310375, 05/01/2023 - 12/31/2026

Huffington Fdn, PI, Translational resource for acceleration of Parkinson's Disease, 01/01/2022 - 12/31/2029

Chan Zuckerberg Initiative, PI, Diagnosing and studying pathogenetic mechanisms of rare diseases, 08/01/2023 - 07/30/2027

PUBLICATIONS

ARTICLES PUBLISHED, IN PRESS, SUBMITTED

1. **Bellen, H.J**., van de Weghe, A., Bouquet, Y. and van Zutphen, L.F.M. 1984. Heterogeneity of the Es-1 esterases in the rabbit (*Oryctolagus cuniculus*). ***Biochemical Genetics*** 22:853-870. PMID: 6517851.

2. **Bellen, H.J.** and Kiger, J.A. Jr. 1987. Sexual hyperactivity and reduced longevity of *dunce* females of *Drosophila melanogaster*. ***Genetics*** 115:153-160. PMID: 3030881.

3. **Bellen, H.J.**, Gregory, B.K., Olsson, C.L. and Kiger, J.A. Jr. 1987. Two *Drosophila* learning mutants, *dunce* and *rutabaga*, provide evidence of a maternal role for cAMP on embryogenesis. ***Developmental Biology*** 121:432-444. PMID: 3034702.

4. **Bellen, H.J**. and Kiger, J.A. Jr. 1988. Maternal effects of general and regional specificity on embryos of *Drosophila melanogaster* caused by *dunce* and *rutabaga* mutant combinations. ***Wilhelm Roux's Archives Developmental Biology*** 197:258-268.

5. **Bellen, H.J.**, O'Kane, C.J., Wilson, C., Grossniklaus, U., Pearson, R.K. and Gehring, W.J. 1989. *P*-element-mediated enhancer detection: a versatile method to study development in *Drosophila*. ***Genes and Development*** 3:1288-1300. PMID: 2558050.

6. Wilson, C., Pearson, R.K., **Bellen, H.J.**, O'Kane, C.J., Grossniklaus, U. and Gehring, W.J. 1989. *P*-element-mediated enhancer detection: an efficient method for isolating and characterizing developmentally regulated genes in *Drosophila*. ***Genes and Development*** 3:1301-1313. PMID: 2558051.

7. Grossniklaus, U., **Bellen, H.J.**, Wilson, C. and Gehring, W.J. 1989. *P*-element mediated enhancer detection applied to the study of oogenesis in *Drosophila*. ***Development*** 107:189-200. PMID: 2517254.

8. Weigel, D., **Bellen, H.J.**, Jürgens, G. and Jäckle, H. 1989. Primordium specific requirement of the homeotic gene *fork head* in the developing gut of the *Drosophila* embryo. ***Wilhelm Roux's Archives Developmental Biology*** 198:201-210.

9. **Bellen, H.J.**, Wilson, C., Gibson, G., Grossniklaus, U., Pearson, R.K., O'Kane, C. and Gehring, W.J. 1990. *P*-element-mediated enhancer detection allows rapid identification of developmentally reg-ulated genes and cell specific markers in *Drosophila*. ***Journal of Physiology*** 84:33-41. PMID: 2162957.

10. Wilson, C., **Bellen, H.J.** and Gehring, W.J. 1990. Position effects on eukaryotic gene expression. ***Annual Review of Cell Biology*** 6:679-714. PMID: 2275824.

11. **Bellen, H.J.**, Wilson, C. and Gehring, W.J. 1990. Dissecting the complexity of the nervous system by enhancer detection. ***BioEssays*** 12:199-204. PMID: 2164394.

12. **Bellen, H.J.**, D'Evelyn, D., Harvey, M. and Elledge, S.J. 1992. Isolation of temperature-sensitive diphtheria toxins in yeast and their effects on *Drosophila* cells. ***Development*** 114:787-796. PMID: 1618142.

13. **Bellen, H.J.**, Vaessin, H., Bier, E., Kolodkin, A., D'Evelyn, D., Kooyer, S. and Jan, Y-N. 1992. The *Drosophila couch potato* gene: an essential gene required for normal adult behavior. ***Genetics*** 131: 365-375. PMID: 1644278.

14. Whitehouse-Hills, S., **Bellen, H.J.** and Kiger, J.A. Jr. 1992. Embryonic cAMP and developmental potential in *Drosophila melanogaster*. ***Wilhelm Roux's Archives Developmental Biology*** 201:257-264.

15. **Bellen, H.J.,** Kooyer, S., D'Evelyn, D. and Pearlman, J. 1992. The *Drosophila* Couch potato protein is expressed in nuclei of peripheral neuronal precursors and shows homology to RNA-binding proteins. ***Genes and Development*** 6:2125-2136. PMID: 1427076.

16. Littleton, J.T., **Bellen, H.J.** and Perin, M.S. 1993. Expression of *synaptotagmin* in *Drosophila* embryos reveals transport and localization of synaptic vesicles to the synapse. ***Development*** 118:1077-1088. PMID: 8269841.

17. Littleton, J.T., Stern, M., Schulze, K., Perin, M. and **Bellen, H.J.** 1993. Mutational analysis of *Drosophila synaptotagmin* demonstrates its essential role in Ca^{2+}-activated neurotransmitter release. ***Cell*** 74: 1125-1134. PMID: 8104705.

18. Kania, A., Han, P-L., Kim, Y-T. and **Bellen, H.J.** 1993. *neuromusculin,* a *Drosophila* gene expressed in peripheral neuronal precursors and muscles, encodes a cell adhesion molecule. ***Neuron*** 11:673-687. PMID: 8398154.

19. Eldon, E., Kooyer, S., D'Evelyn, D., Duman, M., Lawinger P., Botas, J. and **Bellen, H.J.** 1994. The *Drosophila 18 wheeler* is required for morphogenesis and has striking similarities to *Toll.* ***Development*** 120:885-899. PMID: 7600965.

20. Salzberg, A., D'Evelyn, D., Schulze, K.L., Lee, J-K., Strumpf, D., Tsai, L. and **Bellen, H.J.** 1994. Mutations affecting the pattern of the PNS in *Drosophila* reveal novel aspects of neuronal development. ***Neuron*** 13:269-287. PMID: 8060613.

21. Littleton, J.T. and **Bellen, H.J.** 1994. Genetic and phenotypic analysis of thirteen essential genes in cytological interval 22F1-2; 23B1-2 reveals novel genes required for neural development in *Drosophila.* ***Genetics*** 138:111-123. PMID: 8001779.

22. Broadie, K., **Bellen, H.J.**, DiAntonio, A., Littleton, J.T. and Schwarz, T.L. 1994. Absence of synaptotagmin disrupts excitation-secretion coupling during synaptic transmission. ***Proceedings of the National Academy of Sciences USA*** 91:10727-10731. PMID: 7938019.

23. Schulze, K.L., Littleton, J.T., Salzberg, A., Halachmi, N., Stern, M., Lev, Z. and **Bellen, H.J.** 1994. rop, a *Drosophila* homolog of yeast Sec1 and vertebrate n-Sec1/Munc-18 proteins, is a negative regulator of neurotransmitter release *in vivo*. ***Neuron*** 13:1099-1108. PMID: 7946348.

24. Littleton, J.T., Stern, M., Perin, M. and **Bellen, H.J.** 1994. Calcium dependence of neurotransmitter release and rate of spontaneous vesicle fusions are altered in *Drosophila synaptotagmin* mutants. ***Proceedings of the National Academy of Sciences USA*** 91:10888-10892. PMID: 7971978.

25. Littleton, J.T. and **Bellen, H.J.** 1995. Presynaptic proteins involved in exocytosis in *Drosophila melanogaster*: a genetic analysis. ***Invertebrate Neuroscience*** 1:3-13. PMID: 9372128.

26. Schulze, K.L., Broadie, K., Perin, M.S. and **Bellen, H.J.** 1995. Genetic and electrophysiological studies of *Drosophila* syntaxin-1A demonstrate its role in nonneuronal secretion and neurotransmission. ***Cell*** 80: 311-320. PMID: 7834751.

27. Littleton, J.T. and **Bellen, H.J.** 1995. Synaptotagmin controls and modulates synaptic-vesicle fusion in a Ca^{2+}-dependent manner. ***Trends in Neuroscience*** 18:177-183. PMID: 7778189.

28. Kania, A. and **Bellen, H.J.** 1995. Mutations in *neuromusculin*, a gene encoding a cell adhesion molecule, cause nervous system defects. ***Wilhelm Roux's Archives Developmental Biology*** 204:259-270.

29. Kania, A., Salzberg, A., Bhat, M., D'Evelyn, D., He, Y., Kiss, I. and **Bellen, H.J.** 1995. *P*-element mutations affecting embryonic peripheral nervous system development in *Drosophila melanogaster*. ***Genetics*** 139:1663-1678. PMID: 7789767.

30. Broadie, K., Prokop, A., **Bellen, H.J.**, O'Kane, C.J., Schulze, K.L. and Sweeney, S.T. 1995. Syntaxin and synaptobrevin function downstream of vesicle docking in *Drosophila*. ***Neuron*** 15:663-673. PMID: 7546745.

31. **Bellen, H.J.** and Smith, R.F. 1995. FlyBase: a virtual *Drosophila* cornucopia. ***Trends in Genetics*** 11: 456-457. PMID: 8578603.

32. Salzberg, A. and **Bellen, H.J.** 1996. Invertebrate versus vertebrate neurogenesis: variations on the same theme? ***Developmental Genetics*** 18:1-10. PMID: 8742829.

33. **Bellen, H.J.** and Salzberg, A. 1996. (Editor Journal Issue) Focus on Neurogenesis. ***Developmental Genetics*** 18 (1), Wiley-Liss, New York, 91p.

34. Rodriguez, A., Zhou, Z., Tang, M. L., Meller, S., Chen, J., **Bellen, H.J.** and Kimbrell, D. A. 1996. Identification of immune system and response genes, and novel mutations causing melanotic tumor formation in *Drosophila melanogaster*. ***Genetics*** 143:929-940. PMID: 8725239.

35. Ben-Arie, N., McCall, A.E., Berkman, S., Eichele, G., **Bellen, H.J.** and Zoghbi, H.Y. 1996. Evolutionary conservation of sequence and expression of the bHLH protein Atonal suggests a conserved role in neurogenesis. ***Human Molecular Genetics*** 5:1207-1216. PMID: 8872459.

36. Salzberg, A., Golden, K., Bodmer, R. and **Bellen, H.J.** 1996. *gutfeeling*, a *Drosophila* gene encoding an antizyme-like protein, is required for late differentiation of neurons and muscles. ***Genetics*** 144: 183-196. PMID: 8878684.

37. Schulze, K.L. and **Bellen, H.J.** 1996. *Drosophila syntaxin* is required for cell viability and may function in membrane formation and stabilization. ***Genetics*** 144:1713-1724. PMID: 8978057.

38. Baumgartner, S., Littleton, J.T., Broadie, K., Bhat, M.A., Harbecke, R., Lengyel, J.A., Chiquet-Ehrismann, R., Prokop, A. and **Bellen, H.J.** 1996. A *Drosophila* neurexin is required for septate junction and blood-nerve barrier formation and function. ***Cell*** 87:1059-1068. PMID: 8978610.

39. Bhat, M.A., Philp, A.V., Glover, D.M. and **Bellen, H.J.** 1996. Chromatid segregation at anaphase requires the *barren* product, a novel chromosome-associated protein that interacts with Topoisomerase II. ***Cell*** 87: 1103-1114. PMID: 8978614.

40. Littleton, J.T., Bhat, M.A. and **Bellen, H.J.** 1997. Deciphering the function of neurexins at cellular junctions. ***Journal of Cell Biology*** 137:793-796. PMID: 9151682.

41. Wu, M.N. and **Bellen, H.J.** 1997. Genetic dissection of synaptic transmission in *Drosophila*. ***Current Opinion in Neurobiology*** 7:624-630. PMID: 9384538.

42. Ben-Arie, N., **Bellen, H.J**., Armstrong, D.L., McCall, A.E., Gordadze, P.R., Guo, Q., Matzuk, M.M. and Zoghbi, H.Y. 1997. *Math1* is essential for genesis of cerebellar granule neurons. ***Nature*** 390:169-172. PMID: 9367153.

43. Cabello, O.A., Baldini, A., Bhat, M., **Bellen, H.J.** and Belmont J.W. 1997. Localization of BRRN1, the human homologue of *Drosophila barr*, to 2q11.2. ***Genomics*** 46:311-313. PMID: 9417923.

44. Salzberg, A., Prokopenko, S.N., He, Y., Tsai, P., Pál, M., Maróy, P., Glover, D.M., Deák, P. and **Bellen, H.J.** 1997. *P*-element insertion alleles of essential genes on the third chromosome of *Drosophila melanogaster:* mutations affecting embryonic PNS development. ***Genetics*** 147:1723-1741. PMID: 9409832.

45. Wu, M.N., Littleton, J.T., Bhat, M.A., Prokop, A. and **Bellen, H.J.** 1998. ROP, the *Drosophila* Sec1 homolog, interacts with syntaxin and regulates neurotransmitter release in a dosage-dependent manner. ***EMBO Journal*** 17:127-139. PMID: 9427747.

46. Dye, C.A., Lee, J-K., Atkinson, R.C., Brewster, R., Han, P-L. and **Bellen, H.J.** 1998. The *Drosophila sanpodo* gene controls sibling cell fate and encodes a tropomodulin homolog, an actin/tropomyosin-associated protein. ***Development*** 125:1845-1856. PMID: 9550717.

47. Adams, R.R., Tavares, A.A.M., Salzberg, A., **Bellen, H.J.** and Glover, D.M. 1998. *pavarotti* encodes a kinesin-like protein required to organize the central spindle and contractile ring for cytokinesis. ***Genes and Development*** 12:1483-1494. PMID: 9585508.

48. **Bellen, H.J.** 1998. The fruit fly: a model organism to study the genetics of alcohol abuse and addiction? ***Cell*** 93:909-912. PMID: 9635419.

49. **Bellen, H.J.**, Lu, Y., Beckstead, R. and Bhat, M.A. 1998. Neurexin IV, caspr and paranodin--novel members of the neurexin family: encounters of axons and glia. ***Trends in Neuroscience*** 21:444-449. PMID: 9786343.

50. Zhang, B., Koh, Y.H., Beckstead, R.B., Budnik, V., Ganetzky, B. and **Bellen, H.J.** 1998. Synaptic vesicle size and number are regulated by a clathrin adaptor protein required for endocytosis. ***Neuron*** 21: 1465-1475. PMID: 9883738.

51. Hassan, B.A., Prokopenko, S.N., Breuer, S., Zhang, B., Paululat, A. and **Bellen, H.J.** 1998. *skittles*, a *Drosophila* phosphatidylinositol 4-phosphate 5-kinase, is required for cell viability, germline development and bristle morphology, but not for neurotransmitter release. ***Genetics*** 150:1527-1537. PMID: 9832529.

52. Bhat, M.A., Izadoost, S., Lu, Y., Cho, K-O., Choi, K-W. and **Bellen, H.J.** 1999. Discs lost, a novel multi-PDZ domain protein, establishes and maintains epithelial polarity. ***Cell*** 96:833-845. Erratum: *Cell* 115: 765-766. PMID: 10102271.

53. Bermingham, N.A., Hassan, B.A., Price, S.D., Vollrath, M.A., Ben-Arie, N., Eatock, R.A., **Bellen, H.J**., Lysakowski, A. and Zoghbi, H.Y. 1999. *Math1*: an essential gene for the generation of inner ear hair cells. ***Science*** 284:1837-1841. PMID: 10364557.

54. Wu, M.N., Fergestad, T., Lloyd, T.E., He, Y., Broadie, K. and **Bellen, H.J.** 1999. Syntaxin 1A interacts with multiple exocytic proteins to regulate neurotransmitter release *in vivo*. ***Neuron*** 23: 593-605. PMID: 10433270.

55. Zhang, B., Ganetzky, B., **Bellen, H.J.** and Murthy, V.M. 1999. Tailoring uniform coats for synaptic vesicles during endocytosis. ***Neuron*** 23:419-422. PMID: 10433253.

56. Prokopenko, S.N., Brumby, A., O'Keefe, L., Prior, L., He, Y., Saint, R. and **Bellen, H.J.** 1999. A putative exchange factor for Rho1 GTPase is required for initiation of cytokinesis in *Drosophila.* ***Genes and Development*** 13:2301-2314. PMID: 10485851.

57. **Bellen, H.J.** 1999. Ten years of enhancer detection: lessons from the fly. ***Plant Cell*** 11:2271-2281. PMID: 10590157.

58. Pennetta, G., Wu, M.N. and **Bellen, H.J.** 1999. (Book Chapter) Dissecting the molecular mechanisms of neurotransmitter release in *Drosophila*. *In* **Neurotransmitter release. Frontiers in Molecular Biology.** Oxford University Press, New York, pp. 304-351.

59. Lloyd, T.E. and **Bellen, H.J.** 1999. (Book Chapter) Genetic analysis of neurotransmitter release in mice and humans. *In* **Neurotransmitter release. Frontiers in Molecular Biology.** Oxford University Press, New York, pp. 352-388.

60. Prokopenko, S.N., Saint, R., and **Bellen, H.J.** 2000. Tissue distribution of PEBBLE RNA and Pebble protein during *Drosophila* embryonic development. ***Mechanisms of Development*** 90:269-273. PMID: 10640710.

61. Mao, Y., Nickitenko, A., Duan, X., Lloyd, T.E., Wu, M.N., **Bellen, H.J.** and Quiocho, F.A. 2000. Crystal structure of the VHS and FYVE tandem domains of Hrs, a protein involved in membrane trafficking and signal transduction. ***Cell*** 100:447-456. PMID: 10693761.

62. Hassan, B.A., Bermingham, N.A., He, Y., Sun, Y., Jan, Y-N., Zoghbi, H.Y. and **Bellen, H.J.** 2000. *atonal* regulates neurite arborization but does not act as a proneural gene in the *Drosophila* brain. ***Neuron*** 25: 549-561. PMID: 10774724.

63. Ben-Arie, N., Hassan, B.A., Bermingham, N.A., Malicki, D.M., Armstrong, D., Matzuk, M., **Bellen, H.J.** and Zoghbi, H.Y. 2000. Functional conservation of *atonal* and *Math1* in the CNS and PNS. ***Development*** 127:1039-1048. PMID: 10662643.

64. Prokopenko, S.N., Saint, R. and **Bellen, H.J.** 2000. Untying the Gordian knot of cytokinesis. Role of small G proteins and their regulators. ***Journal of Cell Biology*** 148:843-848. PMID: 10704435.

65. Lloyd, T.E., Verstreken, P., Ostrin, E.J., Phillipi, A., Lichtarge, O. and **Bellen, H.J.** 2000. A genome-wide search for synaptic vesicle cycle proteins in *Drosophila*. ***Neuron*** 26:45-50. PMID: 10798391.

66. Hassan, B.A. and **Bellen, H.J.** 2000. Doing the MATH: is the mouse a good model for fly development? ***Genes and Development*** 14:1852-1865. PMID: 10921900.

67. Nolo, R., Abbott, L.A. and **Bellen, H.J.** 2000. Senseless, a Zn finger transcription factor, is necessary and sufficient for sensory organ development in *Drosophila*. ***Cell*** 102:349-362. PMID: 10975525.

68. Prokopenko, S.N., He, Y., Lu, Y. and **Bellen, H.J.** 2000. Mutations affecting the development of the peripheral nervous system in *Drosophila*: a molecular screen for novel proteins. ***Genetics*** 156:1691-1715. PMID: 11102367.

69. **Bellen, H.J.** and Budnik, V. 2000. (Book Chapter) The Neuromuscular Junction. *In* ***Drosophila* Protocols, a laboratory manual**. Editors: M. Ashburner, S. Hawley and B. Sullivan. Cold Spring Harbor Laboratory Press, New York.

70. Nolo, R., Abbott, L.A. and **Bellen, H.J.** 2001. *Drosophila Lyra* mutations are gain-of-function mutations of *senseless*. ***Genetics*** 157:307-315. PMID: 11139511.

71. Wu, M.N., Schulze, K.L., Lloyd, T.E. and **Bellen, H.J.** 2001. The ROP-syntaxin interaction inhibits neurotransmitter release. ***European Journal of Cell Biology*** 80:196-199. PMID: 11302525.

72. Steffenson, S., Coelho, P.A., Cobbe, N., Vass, S., Costa, M., Hassan, B., Prokopenko, S.N., **Bellen, H.J.**, Heck, M.M.S. and Sunkel, C.E. 2001. A role for *Drosophila* SMC4 in the resolution of sister chromatids in mitosis. ***Current Biology*** 11:295-307. PMID: 11267866.

73. Beckstead, R., Ortiz, J.A., Sanchez, C., Prokopenko, S.N., Chambon, P., Losson, R. and **Bellen, H.J.** 2001. Bonus, a *Drosophila* homolog of TIF1 proteins, interacts with nuclear receptors and can inhibit βFTZ-F1-dependent transcription. ***Molecular Cell*** 7:753-765. PMID: 11336699.

74. Bhat, M.A., Rios, J.C., Lu, Y., Garcia-Fresco, G.P., Ching, W., St. Martin, M., Li, J., Einheber, S., Chesler, M., Rosenbluth, J., Salzer, J.L. and **Bellen, H.J.** 2001. Axon-glia interactions and the domain organization of myelinated axons require neurexin IV/Caspr/Paranodin. ***Neuron*** 30:369-383. PMID: 11395000.

75. Bermingham, N.A., Hassan, B.A., Wang, V.Y., Fernandez, M., Banfi, S., **Bellen, H.J.**, Fritzsch, B. and Zoghbi, H.Y. 2001. Proprioceptor pathway development is dependent on MATH1. ***Neuron*** 30:411-422. PMID: 11395003.

76. Verstreken, P. and **Bellen, H.J.** 2001. The meaning of a mini. ***Science*** 293:443-444. PMID: 11463902.

77. Lloyd, T.E. and **Bellen, H.J**. 2001. pRIMing synaptic vesicles for fusion. ***Nature Neuroscience*** 4:965-966. PMID: 11574826.

78. Frankfort, B.J., Nolo, R., Zhang, Z., **Bellen, H.J**. and Mardon, G. 2001. *senseless* repression of *rough* is required for R8 photoreceptor differentiation in the developing *Drosophila* eye. ***Neuron*** 32:403-414. PMID: 11709152.

79. Fergestad, T., Wu, M.N., Schulze, K.L., Lloyd, T.E., **Bellen, H.J.** and Broadie, K. 2001. Targeted mutations in the Syntaxin H3 domain specifically disrupt SNARE complex function in synaptic transmission. ***Journal of Neuroscience*** 21:9142-9150. PMID: 11717347.

80. Peter, A., Schöttler, P., Werner, M., Beinert, N., Dowe, G., Burkert, P., Mourkioti, F., Denzer, L., He, Y., Deak, P., Benos, P.V., Gatt, M.K., Murphy, L., Harris, D., Barrell, B., Ferraz, C., Vidal, S., Brun, C., Demaille, J., Cadieu, E., Dreano, S., Gloux, S., Lelaure, V., Mottier, S., Galibert, S., Borkova, D., Miñana, B., Kafatos, F.C., Bolshakov, S., Sidén-Kiamos, I., Papagiannakis, G., Spanos, L., Louis, C., Madueño, E., de Pablos, B., Modolell, J., Bucheton, A., Callister, D., Campbell, L., Henderson, N.S., McMillan, P.J., Salles, C., Tait, E., Valenti, P., Saunders, R.D.C., Billaud, A., Pachter, L., Klapper R, Janning, W., Glover, D.M., Ashburner, M., **Bellen, H.J.**, Jäckle, H. and Schäfer, U. 2002. Mapping and identification of essential gene functions on the X chromosome of *Drosophila*. ***EMBO Reports*** 3:34-38. PMID: 11751581.

81. Chen, S., Zheng, X., Schulze, K.L., Morris, T., **Bellen, H.J.** and Stanley, E.F. 2002. Enhancement of presynaptic calcium current by cysteine string protein. ***Journal of Physiology*** 538:383-389. PMID: 11790807.

82. Lloyd, T.E., Atkinson, R., Wu, M.N., Zhou, Y., Pennetta, G. and **Bellen, H.J.** 2002. Hrs regulates endosome membrane invagination and tyrosine kinase receptor signaling in *Drosophila*. ***Cell*** 108: 261-269. PMID: 11832215.

83. Izaddoost, S., Nam, S.C., Bhat, M.A., **Bellen, H.J.** and Choi, K-W. 2002. *Drosophila* Crumbs is a positional cue in photoreceptor adherens junctions and rhabdomeres. ***Nature*** 416:178-183. PMID: 11850624.

84. Verstreken, P., Kjaerulff, O., Lloyd, T.E., Atkinson, R., Zhou, Y., Meinertzhagen, I.A. and **Bellen, H.J.** 2002. *endophilin* mutations block clathrin-mediated endocytosis but not neurotransmitter release. ***Cell*** 109:101-112. PMID: 11955450.

85. Seto, E., **Bellen, H.J.** and Lloyd, T.E. 2002. When cell biology meets development: endocytic regulation of signaling pathways. ***Genes and Development*** 16:1314-1336. PMID: 12050111.

86. Pennetta, G., Hiesinger, P.R., Fabian-Fine, R., Meinertzhagen, I.A. and **Bellen, H.J.** 2002. *Drosophila* VAP-33A directs bouton formation at neuromuscular junctions in a dosage-dependent manner. ***Neuron*** 35:291-306. PMID: 12160747.

87. Verstreken, P. and **Bellen, H.J.** 2002. Meaningless minis? Mechanisms of neurotransmitter-receptor clustering. ***Trends in Neuroscience*** 25:383-385. PMID: 12127745.

88. Jafar-Nejad, H., Norga, K.K. and **Bellen, H.J.** 2002. Numb: *adapting* Notch for endocytosis. ***Developmental Cell*** 3:155-156. PMID: 12194846.

89. Wang, V.Y., Hassan, B.A., **Bellen, H.J.** and Zoghbi, H.Y. 2002. *Drosophila atonal* fully rescues the phenotype of *Math1* null mice: new functions evolve in new cellular contexts. ***Current Biology*** 12: 1611-1616. PMID: 12372255.

90. Kjaerulff, O., Verstreken, P. and **Bellen, H.J.** 2002. Synaptic vesicle retrieval: still time for a kiss. ***Nature Cell Biology*** 4:E245-E248. PMID: 12415277.

91. Kango-Singh, M., Nolo, R., Tao, C., Verstreken, P., Hiesinger, P.R., **Bellen, H.J.** and Halder, G. 2002. *shar-pei* mediates cell proliferation arrest during imaginal disc growth in *Drosophila.* ***Development*** 129: 5719-5730. PMID: 12421711.

92. Wallis, D., Hamblen, M., Zhou, Y., Venken, K.J.T., Schumacher, A., Grimes, H.L., Zoghbi, H.Y., Orkin, S.H. and **Bellen, H.J.** 2003. The zinc finger transcription factor *Gfi1*, implicated in lymphomagenesis, is required for inner ear hair cell differentiation and survival. ***Development*** 130:221-232. PMID: 12441305.

93. Koh, T-W. and **Bellen, H.J.** 2003. Synaptotagmin I, a Ca^{2+} sensor for neurotransmitter release. ***Trends in Neuroscience*** 26:413-422. PMID: 12900172.

94. Norga, K.K., Gurganus, M.C., Dilda, C.L., Yamamoto, A., Lyman, R.F., Patel. P.H., Rubin, G.M., Hoskins, R.A., Mackay, T.F. and **Bellen, H.J.** 2003. Quantitative analysis of bristle number in *Drosophila* mutants identifies genes involved in neural development. ***Current Biology*** 13:1388-1397. PMID: 12932322.

95. Zhai, R.G., Hiesinger, P.R., Koh, T-W., Verstreken, P., Schulze, K.L., Cao, Y., Jafar-Nejad, H., Norga, K.K., Pan, H., Bayat, V., Greenbaum, M.P. and **Bellen, H.J.** 2003. Mapping *Drosophila* mutations with molecularly defined *P* element insertions. ***Proceedings of the National Academy of Sciences USA*** 100: 10860-10865. PMID: 12960394.

96. Verstreken, P., Koh, T-W., Schulze, K.L., Zhai, R.G., Hiesinger, P.R., Zhou, Y., Mehta, S.Q., Cao, Y., Roos, J. and **Bellen, H.J.** 2003. Synaptojanin is recruited by Endophilin to promote synaptic vesicle uncoating. ***Neuron*** 40:733-748. PMID: 14622578.

97. Fabian-Fine, R., Verstreken, P., Hiesinger, P.R., Horne, J.A., Kostyleva, R., Zhou, Y., **Bellen, H.J.** and Meinertzhagen, I.A. 2003. Endophilin promotes a late step in endocytosis at glial invaginations in *Drosophila* photoreceptor terminals. ***Journal of Neuroscience*** 23:10732-10744. PMID: 14627659.

98. Jafar-Nejad, H., Acar, M., Nolo, R., Hacin, H., Pan, H., Parkhurst, S.M. and **Bellen, H.J.** 2003. Senseless acts as a binary switch during sensory organ precursor selection**.** ***Genes and Development*** 17:2966-2978. PMID: 1466567.

99. Seto, E.S. and **Bellen, H.J.** 2004. The ins and outs of Wingless signaling. ***Trends in Cell Biology*** 14: 45-53. PMID: 14729180.

100. Hiesinger, P.R. and **Bellen, H.J.** 2004. Flying in the face of total disruption. ***Nature Genetics*** 36: 211-212. PMID: 14988715.

101. **Bellen, H.J**. 2004. Hugo J. Bellen. ***Current Biology*** 14:R218. PMID: 15043825.

102. Pesah, Y., Pham, T., Burgess, H., Middlebrooks, B., Verstreken, P., Zhou, Y., Harding, M., **Bellen, H.J.** and Mardon, G. 2004. *Drosophila parkin* mutants have decreased mass and cell size and increased sensitivity to oxygen radical stress. ***Development*** 131:2183-2194. PMID: 15073152.

103. **Bellen, H.J.**, Levis, R.W., Liao, G., He, Y., Carlson, J.W., Tsang, G., Evans-Holm, M., Hiesinger, P.R., Schulze, K.L., Rubin, G.M., Hoskins R.A. and Spradling, A.C. 2004. The BDGP gene disruption project: single transposon insertions associated with 40% of *Drosophila* genes. ***Genetics*** 167:761-781. PMID: 15238527.

104. Koh, T-W., Verstreken, P. and **Bellen, H.J.** 2004. Dap160/intersectin acts as a stabilizing scaffold required for synaptic development and vesicle endocytosis. ***Neuron*** 43:193-205. PMID: 15260956.

105. Zhai, R.G. and **Bellen, H.J.** 2004. The architecture of the active zone in the presynaptic nerve terminal. ***Physiology*** 19:262-270. PMID: 15381754.

106. Zhai, R.G. and **Bellen, H.J.** 2004. Hauling t-SNAREs on the microtubule highway. ***Nature Cell Biology*** 10:918-919. PMID: 15459718.

107. Jafar-Nejad, H. and **Bellen, H.J.** 2004. Gfi/Pag-3/senseless zinc finger proteins: a unifying theme? ***Molecular and Cellular Biology*** 24:8803-8812. PMID: 15456856.

108. Kazanjian, A., Wallis, D., Au, N., Nigam, R., Venken, K.J.T., Cagle, P.T., Dickey, B.F., **Bellen, H.J.**, Gilks, C.B. and Grimes, H.L. 2004. Growth factor independence-1 is expressed in primary human neuroendocrine lung carcinomas and mediates the differentiation of murine pulmonary neuro-endocrine cells. ***Cancer Research*** 64:6874-6882. PMID: 15466176.

109. **Bellen, H.J.** and Schulze, K.L. 2004. (Book Chapter) Invertebrate Glia. *In* **Myelin Biology and Disorders**. Editor: R. Lazzarini. Elsevier Academic Press, London, vol. 1, pp. 199-222.

110. Beckstead R.B., Ner, S.S., Hales, K.G., Grigliatti, T.A., Baker, B.S. and **Bellen, H.J.** 2005. Bonus, a *Drosophila* TIF1 homolog, is a chromatin-associated protein that acts as a modifier of position-effect variegation. ***Genetics*** 169:783-794. PMID: 15545640.

111. Venken, K.J.T. and **Bellen, H.J.** 2005. Emerging technologies for gene manipulation in *Drosophila melanogaster*. ***Nature Review Genetics*** 6:167-178. PMID: 15738961.

112. Escudero, L.M., Caminero, E., Schulze, K.L., **Bellen, H.J.** and Modolell, J. 2005. Charlatan, a Zn-finger transcription factor, establishes a novel level of regulation of the proneural *achaete/scute* genes of *Drosophila*. ***Development*** 132:1211-1222. PMID: 15703278.

113. Mehta, S.Q., Hiesinger, P.R., Beronja, S., Zhai, R.G., Schulze, K.L., Verstreken, P., Cao, Y., Zhou, Y., Tepass, U., Crair, M.C. and **Bellen, H.J.** 2005. Mutations in *Drosophila sec15* reveal a function in neuronal targeting for a subset of exocyst components. ***Neuron*** 46:219-232. PMID: 15848801.

114. Hiesinger, P.R., Fayyazuddin, A., Mehta, S.Q., Rosenmund, T., Schulze, K.L., Zhai, R.G., Verstreken, P., Cao, J., Zhou, Y., Kunz, J. and **Bellen, H.J.** 2005. The v-ATPase V_0 subunit a1 is required for a late step in synaptic vesicle exocytosis in *Drosophila.* ***Cell*** 121:607-620. PMID: 15907473.

115. Dermaut, B., Norga, K.K., Kania, A., Verstreken, P., Pan, H., Zhou, Y., Callaerts, P. and **Bellen, H.J.** 2005. Aberrant lysosomal carbohydrate storage accompanies endocytic defects and neurodegeneration in *Drosophila benchwarmer*. ***Journal of Cell Biology*** 170:127-139. PMID: 15998804.

116. Verstreken, P., Ly, C.V., Venken, K.J.T., Koh, T-W., Zhou, Y. and **Bellen, H.J.** 2005. Synaptic mitochondria are critical for mobilization of reserve pool vesicles at *Drosophila* neuromuscular junctions. ***Neuron*** 47:365-378. PMID: 16055061.

117. Tsuda, H., Jafar-Nejad, H., Patel, A.J., Sun, Y., Chen, H.K., Rose, M.F., Venken, K.J.T., Botas, J., Orr, H.T., **Bellen, H.J.** and Zoghbi, H.Y. 2005. The AXH domain of Ataxin-1 mediates neurodegeneration through its interaction with Gfi-1/Senseless proteins. ***Cell*** 122:633-634. PMID: 16122429.

118. Jafar-Nejad, H., Andrews, H.K., Acar, M., Bayat, V., Wirtz-Peitz, F., Mehta, S.Q., Knoblich, J.A. and **Bellen, H.J.** 2005. Sec15, a component of the exocyst, promotes Notch signaling during the asymmetric division of *Drosophila* sensory organ precursors. ***Developmental Cell*** 9:351-363. PMID: 16137928.

119. Wu, S., Mehta, S.Q., Pichaud, F., **Bellen, H.J.** and Quiocho, F.A. 2005. Sec15 interacts with Rab11 via a novel domain and affects Rab11 localization *in vivo*. ***Nature Structural and Molecular Biology*** 12: 879-885. PMID: 16155582.

120. Shroyer, N.F., Wallis, D., Venken, K.J.T., **Bellen, H.J.** and Zoghbi, H.Y. 2005. Gfi1 functions downstream of *Math1* to control intestinal secretory cell subtype allocation and differentiation. ***Genes and Development*** 19:2412-2417. PMID: 16230531.

121. Giagtzoglou, N. and **Bellen, H.J.** 2006. Fighting anthrax with flies. ***Proceedings of the National Academy of Sciences USA*** 103:3013-3014. PMID: 16492749.

122. Fayyazuddin, A., Zaheer, M.A., Hiesinger, P.R. and **Bellen, H.J.** 2006. The nicotinic acetylcholine receptor Dα7 is required for an escape behavior in *Drosophila*. ***PLoS Biology*** 4:e63. PMID: 16494528.

123. Seto, E.S. and **Bellen, H.J.** 2006. Internalization is required for proper Wingless signaling in *Drosophila melanogaster*. ***Journal of Cell Biology*** 173:95-106. PMID: 16606693.

124. Jafar-Nejad, H., Tien, A.C., Acar, M. and **Bellen, H.J.** 2006. Senseless and Daughterless confer neuronal identity to epithelial cells in the *Drosophila* wing margin. ***Development*** 133:1683-1692. PMID: 16554363.

125. Acar, M., Jafar-Nejad, H., Giagtzoglou, N., Yallampalli, S., David, G., He, Y., Delidakis, C. and **Bellen, H.J.** 2006. Senseless physically interacts with proneural proteins and functions as a transcriptional co-activator. ***Development*** 133:1979-1989. PMID: 16624856.

126. Hiesinger, P.R., Zhai, R.G., Zhou, Y., Koh, T-W., Mehta, S.Q., Schulze, K.L., Cao, Y., Verstreken, P., Clandinin, T.R., Fischbach, K.F., Meinertzhagen, I.A. and **Bellen, H.J.** 2006. Activity-independent prespecification of synaptic partners in the visual map of *Drosophila*. ***Current Biology*** 16:1835-1843. PMID: 16979562; PMCID: PMC3351197.

127. Zhai, R.G., Cao, Y., Hiesinger, P.R., Zhou, Y., Mehta, S.Q., Schulze, K.L., Verstreken, P. and **Bellen, H.J**. 2006. *Drosophila* NMNAT maintains neural integrity independent of its NAD synthesis activity. ***PLoS Biology*** 4:e416. PMID: 17132048; PMCID: PMC1665629.

128. Venken, K.J.T., He, Y., Hoskins, R.A. and **Bellen, H.J.** 2006. P[acman]: a BAC transgenic platform for targeted insertion of large DNA fragments in *D. melanogaster*. ***Science*** 314:1747-1751. PMID: 17138868.

129. Zhang, J., Schulze, K.L., Hiesinger, P.R., Suyama, K., Wang, S., Fish, M., Acar, M., Hoskins, R.A., **Bellen, H.J.** and Scott, M.P. 2007. Thirty-one flavors of *Drosophila* Rab proteins. ***Genetics*** 176:1307-1322. PMID: 17409086; PMCID: PMC1894592.

130. Koh, T-W., Korolchuk, V.I., Wairkar, Y.P., Wei, J., Evergren, E., Pan, H., Zhou, Y., Venken, K.J.T., Shupliakov, O., Robinson, I.M., O'Kane, C.J. and **Bellen, H.J.** 2007. Eps15 and Dap160 control synaptic vesicle membrane retrieval and synapse development. ***Journal of Cell Biology*** 178:309-322. PMID: 17620409; PMCID: PMC2064449.

131. Venken, K.J.T. and Bellen, H.J. 2007. Transgenesis upgrades for *Drosophila melanogaster*. ***Development*** 134:3571-3584. PMID: 17905790.

132. Ohyama, T., Verstreken, P., Ly, C.V., Rosenmund, T., Rajan, A., Tien, A-C., Haueter, C., Schulze, K.L. and **Bellen, H.J.** 2007. Huntingtin-interacting protein 14, a palmitoyl transferase required for exocytosis and targeting of CSP to synaptic vesicles. ***Journal of Cell Biology*** 179:1481-1496. PMID: 18158335; PMCID: PMC2373489.

133. Zhang, W., Wang, D., Volk, E., **Bellen, H.J.**, Hiesinger, P.R. and Quiocho, F.A. 2008. V-ATPase V_0 sector subunit a1 in neurons is a target of calmodulin. ***Journal of Biological Chemistry*** 283:294-300. PMID: 17933871; PMCID: PMC4249936

134. Romero, E., Cha, G-H., Verstreken, P., Ly, C.V., Hughes, R.E., **Bellen, H.J.** and Botas, J. 2008. Suppression of neurodegeneration and increased neurotransmission caused by expanded full-length huntingtin accumulating in the cytoplasm. ***Neuron*** 57:27-40. PMID: 18184562; PMCID: PMC2277511.

135. Acar, M., Jafar-Nejad, H., Takeuchi, H., Rajan, A., Ibrani, D., Rana, N.A., Pan, H., Haltiwanger, R.S. and **Bellen, H.J.** 2008. Rumi is a CAP10 domain glycosyltransferase that modifies Notch and is required for Notch signaling. ***Cell*** 132:247-258. PMID: 18243100; PMCID: PMC2275919.

136. Zhai, R.G., Zhang, F., Hiesinger, P.R., Cao, Y., Haueter, C.M. and **Bellen, H.J.** 2008. NAD synthase NMNAT acts as a chaperone to protect against neurodegeneration. ***Nature*** 452:887-891. PMID: 18344983; PMCID: PMC3150538.

137. Ly, C.V., Yao, C-K., Verstreken, P., Ohyama, T. and **Bellen, H.J.** 2008. *straightjacket* is required for the synaptic stabilization of *cacophony*, a voltage-gated calcium channel α_1 subunit. ***Journal of Cell Biology*** 181:157-170. PMID: 18391075; PMCID: PMC2287295.

138. Tsuda, H., Han, S.M., Yang, Y., Tong, C., Lin, Y.Q., Mohan, K., Haueter, C., Zoghbi, A., Harati, Y., Kwan, J., Miller, M.A. and **Bellen, H.J.** 2008. The Amyotrophic Lateral Sclerosis 8 protein VAPB is cleaved, secreted, and acts as a ligand for Eph receptors. ***Cell*** 133:949-951. PMID: 18555774; PMCID: PMC2494862.

139. Tien, A-C., Rajan, A., Schulze, K.L., Ryoo, H-D., Acar, M., Steller, H. and **Bellen, H.J.** 2008. Ero1L, a thiol oxidase, is required for Notch signaling through cysteine bridge formation of the Lin12-Notch repeats in *Drosophila melanogaster*. ***Journal of Cell Biology*** 182:1113-1125. PMID: 18809725; PMCID: PMC2542473.

140. Verstreken, P., Ohyama, T. and **Bellen, H.J.** 2008. (Book Chapter) FM1-43 labeling of synaptic vesicle pools at the *Drosophila* neuromuscular junction. *In* **Exocytosis and Endocytosis**. ***Methods in Molecular Biology*** 440:349-369. Editors: J.M. Walker and A.I. Ivanov. Humana Press, Totowa, NJ. PMID: 18369958; PMCID: PMC2712823.

141. Tien, A-C., Rajan, A. and **Bellen, H.J.** 2009. A Notch updated. ***Journal of Cell Biology*** 184:621-629. PMID: 19255248; PMCID: PMC2686403.

142. Giagtzoglou, N., Lin, Y.Q., Haueter C. and **Bellen, H.J.** 2009. Importin 13 regulates neurotransmitter release at the *Drosophila* neuromuscular junction. ***Journal of Neuroscience*** 29:5628-5639. PMID: 19403829; PMCID: PMC4011492.

143. Andrews, H.K., Giagtzoglou, N., Yamamoto, S., Schulze, K.L. and **Bellen, H.J.** 2009. Sequoia regulates cell fate decisions in the external sensory organs of adult *Drosophila*. ***EMBO Reports*** 10:636-641. PMID: 19444309; PMCID: PMC2711842.

144. Venken, K.J., Carlson, J.W., Schulze, K.L., Pan, H., He, Y., Spokony, R., Wan, K.H., Koriabine, M., de Jong, P.J., White, K.P., **Bellen, H.J.** and Hoskins, R.A. 2009. Versatile P[acman] BAC libraries for transgenesis studies in *Drosophila melanogaster*. ***Nature Methods*** 6:431-434. PMID: 19465919; PMCID: PMC2784134.

145. Rajan, A., Tien, A-C., Haueter, C.M., Schulze, K.L. and **Bellen, H.J.** 2009. The Arp2/3 complex and WASp are required for apical trafficking of Delta into microvilli during cell fate specification of sensory organ precursors. ***Nature Cell Biology*** 11:815-824. PMID: 19543274; PMCID: PMC3132077.

146. Patel, P.H., Costa-Mattioli, M., Schulze, K.L. and **Bellen, H.J.** 2009. The *Drosophila* deoxyhypusine hydroxylase homologue *nero* and its target eIF5A are required for cell growth and the regulation of autophagy. ***Journal of Cell Biology*** 185:1181-1194. PMID: 19546244; PMCID: PMC2712966.

147. Fotowat, H., Fayyazuddin, A., **Bellen, H.J.** and Gabbiani, F. 2009. A novel neuronal pathway for visually guided escape in *Drosophila melanogaster*. ***Journal of Neurophysiology*** 102:875-885. PMID: 19474177; PMCID: PMC3817277.

148. Giagtzoglou, N., Xue, M., **Bellen, H.J.** 2009. An old dog learns a new trick: Synaptotagmin, a Ca^{2+} sensor for spontaneous release at central synapses. ***Cell Science Reviews*** 6(2). Corpus ID: 15352352.

149. Verstreken, P., Ohyama, T., Haueter, C., Habets, R.L., Lin, Y.Q., Swan, L.E., Ly, C.V., Venken, K.J., De Camilli, P. and **Bellen, H.J.** 2009. Tweek, an evolutionarily conserved protein, is required for synaptic vesicle recycling. ***Neuron*** 63:203-215. PMID: 19640479; PMCID: PMC2759194.

150. Yao, C.K., Lin, Y.Q., Ly, C.V., Ohyama, T., Haueter, C.M., Moiseenkova-Bell, V.Y., Wensel, T.G. and **Bellen H.J.** 2009. A synaptic vesicle-associated Ca^{2+} channel promotes endocytosis and couples exocytosis to endocytosis. ***Cell*** 138:947-960. PMID: 19737521; PMCID: PMC2749961.

151. Giagtzoglou, N., Ly, C.V., Bellen, H.J. 2009. Cell adhesion, the backbone of the synapse: "vertebrate" and "invertebrate" perspectives. ***Cold Spring Harbor Perspectives in Biology*** 1:a003079. PMID: 20066100; PMCID: PMC2773626.

152. Xue, M., Lin, Y.Q., Pan, H., Reim, K., Deng, H., **Bellen, H.J.** and Rosenmund, C. 2009. Tilting the balance between facilitatory and inhibitory functions of mammalian and *Drosophila* Complexins orchestrates synaptic vesicle exocytosis. ***Neuron*** 64:367-380. PMID: 19914185; PMCID: PMC2790209.

153. Giagtzoglou, N., Mahoney, T., Yao, C-K. and **Bellen, H.J.** 2009. Rab3 GTPase lands Bruchpilot. ***Neuron*** 64:595-597. PMID: 20005815; PMCID: PMC5687091.

154. Yamamoto, S., Charng, W.L. and **Bellen, H.J.** 2010. Endocytosis and intracellular trafficking of Notch and its ligands. ***Current Topics in Developmental Biology*** 92:165-200. PMID: 20816395; PMCID: PMC6233319.

155. **Bellen, H.J.**, Tong, C. and Tsuda, H. 2010. 100 years of *Drosophila* research and its impact on vertebrate neuroscience: a history lesson for the future. ***Nature Reviews Neuroscience*** 11:514-522. PMID: 20383202; PMCID: PMC4022039.

156. Neely, G.G., Hess, A., Costigan, M., Keene, A.C., Goulas, S., Langeslag, M., Griffin, R.S., Belfer, I., Dai, F., Smith, S.B., Diatchenko, L., Gupta, V., Xia, C.P., Amann, S., Kreitz, S., Heindl-Erdmann, C., Wolz, S., Ly, C.V., Arora, S., Sarangi, R., Dan, D., Novatchkova, M., Rosenzweig, M., Gibson, D.G., Truong, D., Schramek, D., Zoranovic, T., Cronin, S.J., Angjeli, B., Brune, K., Dietzl, G., Maixner, W., Meixner, A., Thomas, W., Pospisilik, J.A., Alenius, M., Kress, M., Subramaniam, S., Garrity, P.A., **Bellen, H.J.**, Woolf, C.J. and Penninger, J.M. 2010. A genome-wide *Drosophila* screen for heat nociception identifies $\alpha 2\delta 3$ as an evolutionarily conserved pain gene. ***Cell*** 143:628-638. PMID: 21074052; PMCID: PMC3040441.

157. The modENCODE Consortium, *et al*. 2010. Identification of functional elements and regulatory circuits by Drosophila modENCODE. ***Science*** 330: 1787-1797. PMID: 21177974; PMCID: PMC3192495.

158. Venken, K.J., Popodi, E., Holtzman, S.L., Schulze, K.L., Park, S., Carlson, J.W., Hoskins, R.A., **Bellen, H.J.** and Kaufman TC. 2010. A molecularly defined duplication set for the X chromosome of *Drosophila melanogaster*. ***Genetics*** 186:1111-1125. PMID: 20876565; PMCID: PMC2998297.

159. Zheng, L., Michelson, Y., Freger, V., Avraham, Z., Venken, K.J.T., **Bellen, H.J.,** Justice, M.J. and Wides, R. 2011. Drosophila Ten-m and Filamin affect motor neuron growth cone guidance. ***PLoS One*** 6: e22956. PMID: 21857973; PMCID: PMC3152545.

160. Bayat, V., Jaiswal, M. and **Bellen, H.J.** 2011. The BMP signaling pathway at the *Drosophila* neuro-muscular junction and its links to neurodegenerative diseases. ***Current Opinion in Neurobiology*** 21: 182-188. PMID: 20832291; PMCID: PMC3095363.

161. Nègre, N., Brown, C.D., Ma, L., Bristow, C.A., Miller, S.W., Wagner, U., Kheradpour, P., Eaton, M.L., Loriaux, P., Sealfon, R., Li, Z., Ishii, H., Spokony, R.F., Chen, J., Hwang, L., Cheng, C., Auburn, R.P., Davis, M.B., Domanus, M., Shah, P.K., Morrison, C.A., Zieba, J., Suchy, S., Senderowicz, L., Victorsen, A., Bild, N.A., Grundstad, A.J., Hanley, D., MacAlpine, D.M., Mannervik, M., Venken, K., **Bellen, H.**, White, R., Gerstein, M., Russell, S., Grossman, R.L., Ren, B., Posakony, J.W., Kellis, M. and White, K.P. 2011. A cis-regulatory map of the *Drosophila* genome. ***Nature*** 471:527-531. PMID: 21430782; PMCID: PMC3179250.

162. **Bellen, H.J.**, Levis, R.W., He, Y., Carlson, J.W., Evans-Holm, M., Bae, E., Kim, J., Metaxakis, A., Savakis, C., Schulze, K.L., Hoskins, R.A. and Spradling, A.C. 2011. The *Drosophila* Gene Disruption Project: progress using transposons with distinctive site-specificities. ***Genetics*** 188:731-743. PMID: 21515576; PMCID: PMC3176542.

163. Tong, C., Ohyama, T., Tien, A., Rajan, A., Haueter, C., and **Bellen, H.J.** 2011. *rich* regulates target specificity of photoreceptor cells and N-Cadherin trafficking in the *Drosophila* visual system via Rab6. ***Neuron*** 71:447-459. PMID: 21835342; PMCID: PMC3166630.

164. Venken, K.J.T., Schulze, K.L., Haelterman, N.A., Pan, H., He, Y., Evans-Holm, M., Carlson, J.W., Levis, R.W, Spradling, A.C., Hoskins, R.A. and **Bellen, H.J.** 2011. MiMIC: a highly versatile transposon insertion resource for engineering *Drosophila melanogaster* genes. ***Nature Methods*** 8:737-743. PMID: 21985007; PMCID: PMC3191940.

165. Mitne-Neto, M., Machado-Costa, M., Marchetto, M.C., Bengtson, M.H., Joazeiro, C.A., Tsuda, H., **Bellen, H.J.**, Silva, H.A., Oliveira, A.S., Lazar, M., Muotri, A.R. and Zatz, M. 2011. Downregulation of VAPB expression in motor neurons derived from induced pluripotent stem cells of ALS8 patients. ***Human Molecular Genetics*** 20:3642-3652. PMID: 21685205; PMCID: PMC3159551.

166. Spradling, A.C., **Bellen, H.J.** and Hoskins, R.A. 2011. *Drosophila P* elements preferentially transpose to replication origins. ***Proceedings of the National Academy of Sciences USA*** 108:15948-15953. PMID: 21896744; PMCID: PMC3179094.

167. Venken, K.J.T., Simpson, J. and **Bellen, H.J.** 2011. Genetic manipulation of genes and cells in the nervous system of the fruit fly. ***Neuron*** 72:202-230. PMID: 22017985, PMCID: PMC3232021.

168. Xue, M., Giagtzoglou, N. and **Bellen, H.J.** 2011. Dueling Ca^{2+} sensors in neurotransmitter release. ***Cell*** 147:491-493. PMID: 22036557; PMCID: PMC4061741.

169. Bayat, V., Thiffault, I., Jaiswal, M., Tétreault, M., Donti, T., Sasarman, F., Bernard, G., Demers-Lamarche, J., Dicaire, M.J., Mathieu, J., Vanasse, M., Bouchard, J.P., Rioux, M.F., Lourenco, C.M., Li, Z., Haueter, C., Shoubridge, E.A., Graham, B.H., Brais, B. and **Bellen, H.J**. 2012. Mutations in the mitochondrial methionyl-tRNA synthetase cause a neurodegenerative phenotype in flies and a recessive ataxia (ARSAL) in humans. ***PLoS Biology*** 10:e1001288. PMID: 22448145; PMCID: PMC3308940.

170. Neumüller, R.A., Wirtz-Peitz, F., Lee, S., Kwon, Y., Buckner, M., Hoskins, R.A., Venken, K.J., **Bellen, H.J.**, Mohr, E. and Perrimon, N. 2012. Stringent analysis of gene function and protein–protein interactions using fluorescently tagged genes. ***Genetics*** 190:931-940. PMID: 22174071; PMCID: PMC3296255.

171. Giagtzoglou, N., Yamamoto, S., Zitserman, D., Graves, H.K., Schulze, K.L., Wang, H., Klein, H., Rogiers, F. and **Bellen, H.J.** 2012. dEHBP1 controls exocytosis and recycling of Delta during asymmetric divisions. ***Journal of Cell Biology*** 196:65-83. PMID: 22213802; PMCID: PMC3255984.

172. Han, S.M., Tsuda, H., Yang, Y., Vibbert, J., Cottee, P., Lee, S.J., Winek, J., Haueter, C., **Bellen, H.J.** and Miller, M.A. 2012. Secreted VAPB/ALS8 Major Sperm Protein domains modulate mitochondrial localization and morphology via growth cone guidance receptors. ***Developmental Cell*** 22:348-362. PMID: 22264801; PMCID: PMC3298687.

173. Venken, K.J.T. and **Bellen, H.J**. 2012. Genome-wide manipulations of *Drosophila melanogaster* with transposons, Flp recombinase and phiC31 integrase. ***Methods in Molecular Biology*** 859:203-228. PMID: 22367874.

174. Alves-Silva, J., Sánchez-Soriano, N., Beaven, R., Klein, M., Parkin, J., Millard, T.H., **Bellen, H.J**., Venken, K.J., Ballestrem, C., Kammerer, R.A. and Prokop, A. 2012. Spectraplakins promote microtubule-mediated axonal growth by functioning as structural microtubule-associated proteins and EB1-dependent +TIPs (tip interacting proteins). ***Journal of Neuroscience*** 32:9143-9158. PMID: 22764224; PMCID: PMC3666083.

175. Szabad, J., **Bellen, H.J.** and Venken, K.J.T. 2012. An assay to detect *in vivo* Y chromosome loss in Drosophila wing disc cells. ***G3*** 2:1095-1102. PMID: 22973547; PMCID: PMC3429924.

176. Jaiswal, M., Sandoval, H., Zhang, K., Bayat, V. and **Bellen, H.J.** 2012. Probing mechanisms that underlie human neurodegenerative disease in Drosophila. ***Annual Review of Genetics*** 46:371-396. PMID: 22974305; PMCID: PMC3663445.

177. Chen, Y-C., Lin, Y.Q., Banerjee, S., Venken, K., Li, J., Ismat, A., Chen, K., Duraine, L., **Bellen, H.J.** and Bhat, M.A. 2012. Drosophila Neuroligin 2 is required presynaptically and postsynaptically for proper synaptic differentiation and synaptic transmission. ***Journal of Neuroscience*** 32:16018-16030. PMID: 23136438; PMCID: PMC3508708.

178. Yamamoto, S., Charng, W-L., Rana, N.A., Kakuda, S., Jaiswal, M., Bayat, V., Xiong, B., Zhang, K., Sandoval, H., David, G., Wang, H., Haltiwanger, R.S. and **Bellen, H.J.** 2012. A mutation in EGF repeat 8 of Notch discriminates between Serrate/Jagged and Delta family ligands. ***Science*** 338:1229-1232. PMID: 23197537; PMCID: PMC3663443.

179. Xiong, B., Bayat, V., Jaiswal, M., Zhang, K., Sandoval, H., Charng, W-L., Li, T., David, G., Duraine, L., Lin, Y.Q., Neely, G.G., Yamamoto, S. and **Bellen, H.J.** 2012. Crag is a GEF for Rab11 required for rhodopsin trafficking and maintenance of adult photoreceptor cells. ***PLoS Biology*** 10:e1001438. PMID: 23226104; PMCID: PMC351439.

180. Winther, A.M.E., Jiao, W., Vorontsova, O., Rees, K.A., Koh, T.W., Sopova, E., Schulze, K.L., **Bellen H.J.** and Shupliakov, O. 2013. The dynamin-binding domains of Dap160/Intersectin affect bulk membrane retrieval in synapses. ***Journal of Cell Science*** 126:1021-1031. PMID: 23321638; PMCID: PMC4067270.

181. Zhang, K., Li, Z., Jaiswal, M., Bayat, V., Xiong, B., Sandoval, H., Charng, W-L., David, G., Haueter, C., Yamamoto, S., Graham, B.H. and **Bellen HJ.** 2013. The C8ORF38 homologue Sicily is a cytosolic chaperone for a mitochondrial complex I subunit. ***Journal of Cell Biology*** 200:807-820. PMID: 23509070; PMCID: PMC3601355.

182. Giagtzoglou, N., Li T., Yamamoto, S. and **Bellen HJ**. 2013. Drosophila EHBP1 regulates Scabrous secretion during Notch-mediated lateral inhibition. ***Journal of Cell Science*** 126:3686-3696. PMID: 23788431; PMCID: PMC374402.

183. Yamamoto, S., Bayat, V., Bellen, H. J. and Tan, C. 2013. Protein phosphatase 1β limits ring canal constriction during *Drosophila* germline cyst formation. ***PLoS One*** 8:e70502. PMID: 23936219; PMCID: PMC3723691.

184. Ali, Y.O., Li-Kroeger, D., **Bellen, H.J.,** Zhai, R.G. and Lu, H.C. 2013. NMNATs, evolutionarily conserved neuronal maintenance factors. ***Trends in Neurosciences*** 36:632-640. PMID: 23968695; PMCID: PMC3857727.

185. Xiong, B. and **Bellen, H.J.** 2013. Rhodopsin homeostasis and retinal degeneration: lessons from the fly. ***Trends in Neurosciences*** 36:652-660. PMID: 24012059; PMCID: PMC3955215.

186. Han, S.M., El Oussini, H., Scekic-Zahirovic, J., Vibbert, J., Cottee, P., Prasain, J.K., **Bellen, H.J.**, Dupuis, L. and Miller, M.A. 2013. VAPB/ALS8 MSP ligands regulate striated muscle energy metabolism critical for adult survival in *Caenorhabditis elegans*. ***PLoS Genetics*** 9:e1003738. PMID: 24039594; PMCID: PMC3764199.

187. Cassidy, J.J., Jha, A.R., Posadas, D.M., Giri, R., Venken, K.J.T., Ji, J., Jiang, H., **Bellen, H.J.,** White, K.P. and Carthew, R.W. 2013. miR-9a minimizes the phenotypic impact of genomic diversity by buffering a transcription factor. ***Cell*** 155:1556-67. PMID: 24360277; PMCID: PMC3891883.

188. Moustaqim-Barrette, A., Lin, Y.Q., Pradhan, S., Neely, G.G., **Bellen, H.J.** and Tsuda, H. 2014. The Amyotrophic Lateral Sclerosis 8 protein, VAP, is required for ER protein quality control. ***Human Molecular Genetics*** 23:1975-1989. PMID: 24271015; PMCID: PMC3959812.

189. Charng, W-L., Yamamoto, S., Jaiswal, M., Bayat, V., Xiong, B., Zhang, K., Sandoval, H., David, G., Gibbs, S., Lu, H-C., Chen, K., Giagtzoglou N. and **Bellen, H.J.** 2014. *Drosophila* Tempura, a novel protein prenyltransferase α subunit, regulates Notch signaling via Rab1 and Rab11. ***PLoS Biology*** 12: e1001777. PMID: 24492843; PMCID: PMC3904817.

190. Charng, W-L., Yamamoto, S. and **Bellen, H.J.** 2014. Shared mechanisms between Drosophila peripheral nervous system development and human neurodegenerative diseases. ***Current Opinion in Neurobiology*** 27C:158-164. PMID: 24762652; PMCID: PMC4122633.

191. Wang, S., Tan, K.L., Agosto, M.A., Xiong, B., Yamamoto, S., Sandoval, H., Jaiswal, M., Bayat, V., Zhang, K., Charng, W-L., David, G., Duraine, L., Venkatachalam, K., Wensel, T.G. and **Bellen, H.J.** 2014.

The retromer complex is required for rhodopsin recycling and its loss leads to photoreceptor degeneration. ***PLoS Biology*** 12:e1001847. PMID: 24781186; PMCID: PMC4004542.

192. Venken, K.J.T. and **Bellen, H.J.** 2014. Chemical mutagens, transposons, and transgenes to interrogate gene function in *Drosophila melanogaster*. ***Methods*** 68:15-28. PMID: 24583113; PMCID: PMC4061744.

193. Haelterman, N.A., Yoon, W.H., Sandoval, H., Jaiswal, M., Shulman, J.M. and **Bellen, H.J.** 2014. A mitocentric view of Parkinson's Disease. ***Annual Review of Neuroscience*** 37:137-159. PMID: 24821430; PMCID: PMC4659514.

194. Yamamoto, S., Schulze, K.L. and **Bellen, H.J.** 2014. Introduction to Notch signaling. In "**Notch Signaling - Methods and Protocols**", ***Methods in Molecular Biology*** 1187:1-14, eds. H.J. Bellen and S. Yamamoto. PMID: 25053477.

195. Halstead, J.M., Lin, Y.Q., Duraine, L., Hamilton, R.S., Ball, G., Neely, G.G., **Bellen, H.J.** and Davis, I. 2014. Syncrip/hnRNP Q influences synaptic transmission and regulates BMP signaling at the Drosophila neuromuscular synapse. ***Biology Open*** 3:839-849. PMID: 25171887; PMCID: PMC4163661.

196. Haelterman, N.A., Jiang, L., Li, Y., Bayat, V., Sandoval, H., Ugur, B., Tan, K.L., Zhang, K., Bei, D., Xiong, B., Charng, W.L., Busby, T., Jawaid, A., David, G., Jaiswal, M., Venken, K.J., Yamamoto, S., Chen, R. and **Bellen, H.J.** 2014. Large-scale identification of chemically induced mutations in *Drosophila melanogaster*. ***Genome Research*** 24:1707-1718. PMID: 25258387; PMCID: PMC4199363.

197. Yamamoto, S., Jaiswal, M., Charng, W-L., Gambin, T., Karaca, E., Mirzaa, G., Wiszniewski, W., Sandoval, H., Haelterman, N.A., Xiong, B., Zhang, K., Bayat, V., David, G., Li, T., Chen, K., Gala, U., Harel, T., Pehlivan, D., Penney, S., Vissers, L.E., de Ligt, J., Jhangiani, S.N., Xie, Y., Tsang, S.H., Parman, Y., Sivaci, M., Battaloglu, E., Muzny, D., Wan, Y.W., Liu, Z., Lin-Moore, A.T., Clark, R.D., Curry, C.J., Link, N., Schulze, K.L., Boerwinkle, E., Dobyns, W.B., Allikmets, R., Gibbs, R.A., Chen, R., Lupski, J.R., Wangler, M.F. and **Bellen, H.J.** 2014. A Drosophila genetic resource of mutants to study mechanisms underlying human genetic diseases. ***Cell*** 159:200-214. PMID: 25259927; PMCID: PMC4298142.

198. Sandoval, H., Yao, C.K., Chen, K., Jaiswal, M., Donti, T., Lin, Y.Q., Bayat, V., Xiong, B., Zhang, K., David, G., Charng, W.L., Yamamoto, S., Duraine, L., Graham, B.H. and **Bellen, H.J.** 2014. Mitochondrial fusion but not fission regulates larval growth and synaptic development through steroid hormone production. ***eLife*** 3:e03558. PMID: 25313867; PMCID: PMC4215535.

199. **Bellen, H.J.** 2014. Survival of the fittest tools. ***Genetics*** 198:427-428. PMID: 25316776; PMCID: PMC4196594.

200. Wong, C-O., Chen, K., Lin, Y.Q., Chao, Y., Duraine, L., Lu, Z., Yoon, W.H., Sullivan, J.M., Broadhead, G.T., Sumner, C.J., Lloyd, T.E., Macleod, G.T., **Bellen, H.J.** and Venkatachalam, K. 2014. A TRPV channel in Drosophila motor neurons regulates presynaptic resting Ca^{2+} levels, synapse growth, and synaptic transmission. ***Neuron*** 84:764-777. PMID: 25451193; PMCID: PMC4254599.

201. Liu, L., Zhang, K., Sandoval, H., Yamamoto, S., Jaiswal, M., Sanz, E., Li, Z., Hui, J., Graham, B.H., Quintana, A. and **Bellen, H.J.** 2015. Glial lipid droplets and ROS induced by mitochondrial defects promote neurodegeneration. ***Cell*** 160:177-790. PMID: 25594180; PMCID: PMC4377295.

202. Wangler, M.F., Yamamoto, S. and **Bellen, H.J.** 2015. Fruit flies in biomedical research. ***Genetics*** 199: 639-653. PMID: 25624315; PMCID: PMC4349060.

203. Rui, Y.N., Xu, Z., Patel, B., Chen, Z., Chen, D., Tito, A., David, G., Sun, Y., Stimming, E.F., **Bellen, H.J.**, Cuervo, A.M. and Zhang, S. 2015. Huntingtin functions as a scaffold for selective macroautophagy. ***Nature Cell Biology*** 17:262-275. PMID: 25686248; PMCID: PMC4344873.

204. Tian, X., Gala, U., Zhang, Y., Shang, W., Nagarkar Jaiswal, S., di Ronza, A., Jaiswal, M., Yamamoto, S., Sandoval, H., Duraine, L., Sardiello, M., Sillitoe, R.V., Venkatachalam, K., Fan, H., **Bellen, H.J.** and

Tong, C. 2015. A voltage-gated calcium channel regulates lysosomal fusion with endosomes and autophagosomes and is required for neuronal homeostasis. ***PLoS Biology*** 13:e1002103. PMID: 25811491; PMCID: PMC4374850.

205. Nagarkar Jaiswal, S., Lee, P-T., Campbell, M.E., Chen, K., Anguiano-Zarate, S., Cantu Gutierrez, M., Busby, T., Lin, W-W., He, Y., Schulze, K.L., Booth, B.W., Evans-Holm, M., Venken, K.J.T., Levis, R.W., Spradling, A.C., Hoskins, R.A. and **Bellen, H.J.** 2015. A library of MiMICs allows tagging of genes and reversible spatial and temporal knockdown of proteins in Drosophila. ***eLife*** 4:e05338. PMID: 25824290; PMCID: PMC4379497.

206. Jaiswal, M., Haelterman, N.A., Sandoval, H., Xiong, B., Donti, T., Kalsotra, A., Yamamoto, S., Cooper, T.A., Graham, B.H. and **Bellen, H.J.** 2015. Impaired mitochondrial energy production causes light-induced photoreceptor degeneration independent of oxidative stress. ***PLoS Biology*** 13:e1002197. PMID: 26176594; PMCID: PMC4503542.

207. Wang, S. and Bellen, H.J. 2015. The retromer complex in development and disease. ***Development*** 142: 2392-2396. PMID: 26199408; PMCID: PMC4510866.

208. Nagarkar-Jaiswal, S., DeLuca, S.Z., Lee, P.T., Lin, W-W., Pan, H., Zuo, Z., Lv, J., Spradling, A.C. and **Bellen, H.J.** 2015. A genetic toolkit for tagging intronic MiMIC containing genes. ***eLife*** 4:e08469. PMID: 26102525; PMCID: PMC4499919.

209. Akbari, O.S., **Bellen, H.J.**, Bier, E., Bullock, S.L., Burt, A., Church, G.M., Cook, K.R., Duchek, P., Edwards, O.R., Esvelt, K.M., Gantz, V.M., Golic, K.G., Gratz, S.J., Harrison, M.M., Hayes, K.R., James, A.A., Kaufman, T.C., Knoblich, J., Malik, H.S., Matthews, K.A., O'Connor-Giles, K.M., Parks, A.L., Perrimon, N., Port, F., Russell, S., Ueda, R. and Wildonger, J. 2015. Safeguarding gene drive experiments in the laboratory. ***Science*** 349:927-929. PMID: 26229113; PMCID: PMC4692367.

210. Zanet, J., Benrabah, E., Li, T., Pélissier-Monier, A., Chanut-Delalande, H., Ronsin, B., **Bellen, H.J.**, Payre, F. and Plaza, S. 2015. Pri sORF peptides induce selective proteasome-mediated protein processing. ***Science*** 349:1356-1358. PMID: 26383956.

211. **Bellen, H.J.** and Yamamoto S. 2015. Morgan's legacy: fruit flies and the functional annotation of conserved genes. *Cell* 163:12-14. PMID: 26406362; PMCID: PMC4783153.

212. Wang, F., Jiang, L., Chen, Y., Haelterman, N.A., **Bellen, H.J.** and Chen R. 2015. FlyVar: a database for genetic variation in *Drosophila melanogaster*. ***Database*** 2015: bav079. PMID: 26289428; PMCID: PMC4541374.

213. Wu, S.P., Kao, C.Y., Wang, L., Creighton, C.J., Yang, J., Donti, T.R., Harmancey, R., Vasquez, H.G., Graham, B.H., **Bellen, H.J.**, Taegtmeyer, H., Chang, C.P., Tsai, M.J. and Tsai SY. 2015. Increased COUP-TFII expression in adult hearts induces mitochondrial dysfunction resulting in heart failure. ***Nature Communications*** 6:8245. PMID: 26356605; PMCID: PMC4568566.

214. Carrillo, R.A., Özkan, E., Menon, K.P., Nagarkar-Jaiswal, S., Lee, P.T., Jeon, M., Birnbaum, M.E., **Bellen, H.J.**, Garcia, K.C. and Zinn, K. 2015. Control of synaptic connectivity by a network of Drosophila IgSF cell surface proteins. ***Cell*** 163:1770-1782. PMID: 26687361; PMCID: PMC4720259.

215. Tan, L., Zhang, K.X., Pecot, M.Y., Nagarkar-Jaiswal, S., Lee, P.T., Takemura, S.Y., McEwen, J.M., Nern, A., Xu, S., Tadros, W., Chen, Z., Zinn, K., **Bellen, H.J.**, Morey, M. and Zipursky, S.L. 2015. Ig super-family ligand and receptor pairs expressed in synaptic partners in Drosophila. ***Cell*** 163: 1756-1769. PMID: 26687360; PMCID: PMC4804707.

216. David-Morrison, G., Xu, Z., Rui, Y-N., Charng, W.L., Jaiswal, M., Yamamoto, S., Xiong, B., Zhang, K., Sandoval, H., Duraine, L., Zuo, Z, Zhang, S. and **Bellen, H.J.** 2016. WAC regulates mTOR activity by by acting as an adaptor for the TTT and Pontin/Reptin complexes. ***Developmental Cell*** 36:139-151. PMID: 26812014; PMCID: PMC4730548.

217. Ugur B, Chen K. and **Bellen, H.J.** 2016. At a Glance: Drosophila tools and assays for the study of human diseases. ***Disease Models & Mechanisms*** 9: 235-244. PMID: 26935102; PMCID: PMC4833332.

218. Chao, Y-H., Robak, L.A., Xia, F., Koenig, M.K., Adesina, A., Bacino, C.A., Scaglia, F., **Bellen, H.J.** and Wangler, M.F. 2016. Missense variants in the middle domain of *DNM1L* in cases of infantile encephalopathy alter peroxisomes and mitochondria when assayed in *Drosophila*. ***Human Molecular Genetics*** 25:1846-1856. PMID: 26931468; PMCID: PMC5007591.

219. Li, T., Fan, J., Blanco-Sánchez, B., Giagtzoglou, N., Lin, G., Yamamoto, S., Jaiswal, M., Chen, K., Zhang, J., Wei, W., Lewis, M.T., Groves, A.K., Westerfield, M., Jia, J. and **Bellen, H.J.** 2016. Ubr3, a novel nodulator of Hh signaling affects the degradation of Costal-2 and Kif7 through poly-ubiquitination. ***PLoS Genetics*** 12:e1006054. PMID: 27195754; PMCID: PMC4873228.

220. Ali, Y.O., Allen, H.M., Yu, L., Li-Kroeger, D., Bakhshizadehmahmoudi, D., Hatcher, A., McCabe, C., Xu, J., Bjorklund, N., Taglialatela, G., Bennett, D.A., De Jager, P.L., Shulman, J.M., **Bellen, H.J.** and Lu, H-C. 2016. NMNAT2: HSP90 complex mediates proteostasis in proteinopathies. ***PLoS Biology*** 14:e1002472. PMID: 27254664; PMCID: PMC4890852.

221. Li, T., Giagtzoglou, N., Eberl, D., Nagarkar-Jaiswal, S., Cai, T., Godt, D., Groves, A.K. and **Bellen, H.J.** 2016. The E3 ligase Ubr3 regulates Usher syndrome and MYH9 disorder proteins in the auditory organs of Drosophila and mammals. ***eLife*** 5:e15258. PMID: 27331610; PMCID: MC4978524.

222. Chouhan, A.K., Guo, C., Hsieh, Y.C., Ye, H., Senturk, M., Zuo, Z., Li, Y., Chatterjee, S., Botas, J., Jackson, G.R., **Bellen, H.J.** and Shulman, J.M. 2016. Uncoupling neuronal death and dysfunction in Drosophila models of neurodegenerative disease. ***Acta Neuropathologica Communications*** 4:62. PMID: 27338814; PMCID: PMC4918017.

223. Chen, K., Lin, G., Haelterman, N.A., Ho, T.S., Li, T., Li, Z., Duraine, L., Graham, B.H., Jaiswal, M., Yamamoto, S., Rasband, M.N. and **Bellen, H.J.** 2016. Loss of Frataxin induces iron toxicity, sphingolipid synthesis, and Pdk1/Mef2 activation, leading to neurodegeneration. ***eLife*** 5:e16043. PMID: 27343351; PMCID: PMC4956409.

224. Harel, T., Yoon, W.H., Garone, C., Gu, S., Coban-Akdemir, Z., Eldomery, M.K., Posey, J., Jhangiani, S.N., Rosenfeld, J.A., Cho, M.T., Fox, S., Withers, M., Brooks, S.M., Chiang, T., Duraine, L., Erdin, S., Yuan, B., Shao, Y., Moussallem, E., Lamperti, C., Donati, M.A., Smith, J.D., Pippucci, T., Magini, P., Seri, M., Zeviani, M., Hirano, M., Lewis, R.A., Muzny, D.M., Lotze, T.E., Boerwinkle, E., Baylor-Hopkins Center for Mendelian Genomics, Gibbs, R.A., Hickey, S.E., Graham, B.H., Yang, Y., Buhas, D., Martin, D.M., Potocki, L., Graziano, C., **Bellen, H.J.** and Lupski, J.R. 2016. Recurrent *de novo* and biallelic variation of *ATAD3A*, encoding a mitochondrial membrane protein, results in distinct neurological syndromes. ***American Journal of Human Genetics*** 99:831-845. PMID 27640307; PMCID: PMC5065660.

225. Jakobsdottir, J. *et al.* 2016. Rare functional variant in TM2D3 is associated with late-onset Alzheimer's disease. ***PLoS Genetics*** 12: e1006327. PMID: 27764101; PMCID: PMC5072721.

226. Chen, K., Ho, T.S., Lin, G., Tan, K.L., Rasband, M.N. and **Bellen, H.J.** 2016. Loss of Frataxin activates the iron/sphingolipid/PDK1/ Mef2 pathway in mammals. ***eLife*** 5:e20732. PMID: 27901468; PMCID: PMC5130293.

227. Lin, G., Mao, D. and **Bellen, H.J.** 2017. Amyotrophic Lateral Sclerosis pathogenesis converges on defects in protein homeostasis associated with TDP-43 mislocalization and proteasome-mediated degradation overload. ***Current Topics in Developmental Biology*** 121:111-171. PMID: 28057298.

228. Malmanche, N., Dourlen, P., Gistelinck, M., Demiautte, F., Link, N., Dupont, C., Vanden Broeck, L., Werkmeister, E., Amouyel, P., Bongiovanni, A., Bauderlique, H., Moechars, D., Royou, A., **Bellen, H.J**., Lafont, F., Callaerts, P., Lambert, J.C. and Dermaut, B. 2017. Developmental expression of 4-repeat-Tau

induces neuronal aneuploidy in Drosophila tauopathy models. ***Scientific Reports*** 7:40764. PMID: 28112163; PMCD: PMC5256094.

229. Chao, H.T., Davids, M., Burke, E., Pappas, J.G., Rosenfeld, J.A., McCarty, A.J., Davis, T., Wolfe, L., Toro, C., Tifft, C., Xia, F., Stong, N. Johnson, T.K., Warr, C.G, Undiagosed Diseases Network, Yamamoto, S., Adams, D.R., Markelo, T.C., Gahl, W.A., **Bellen, H.J.,** Wangler, M.F. and Malicdan, M.C.V. 2017. A syndromic neurodevelopmental disorder caused by de novo variants in *EBF3*. ***American Journal of Human Genetics*** 100:128-137. PMID: 28017372; PMCID: PMC5223093.

230. Yoon, W.H., Sandoval, H., Nagarkar-Jaiswal, S., Jaiswal, M., Yamamoto, S., Haelterman, N.A., Putluri, N., Putluri, V., Sreekumar, A., Tos, T., Aksoy, A., Donti, T., Graham, B.H., Ohno, M., Nishi, E., Hunter, J., Muzny, D.M., Carmichael, J., Shen, J., Arboleda, V.A., Nelson, S.F., Wangler, M.F., Karaca, E., Lupski, J.R. and **Bellen, H.J.** 2017. Loss of Nardilysin, a mitochondrial co-chaperone for α-ketoglutarate dehydrogenase, promotes mTORC1 activation and neurodegeneration. ***Neuron*** 93: 115-131. PMID: 28017472; PMCID: PMC5242142.

231. Wangler, M.F., Chao, Y-H., Bayat, V., Giagtzoglou, N., Shinde, A.B., Putluri, N., Coarfa, C., Faust, J., McNew, J., Moser, A., Baes, M., Sardiello, M. and **Bellen, H.J.** 2017. Peroxisomal biogenesis is genetically and biochemically linked to carbohydrate metabolism in Drosophila and mouse. ***PLoS Genetics*** 13:e1006825. PMID: 2864080; PMCID: PMC5480855.

232. Wang, J., Al-Ouran, R., Hu, Y., Kim, S-Y., Wan, Y-W., Wangler, M.F., Yamamoto, S., Chao, H-T., Comjean, A., Mohr, S.E., Undiagnosed Diseases Network (UDN)., Perrimon, N., Liu, Z. and **Bellen, H. J**. 2017. MARRVEL: Integration of human and model organism genetic resources to facilitate functional annotation of the human genome. ***American Journal of Human Genetics*** 100:843-853. PMID: 28502612; PMCID: PMC5670038.

233. Nagarkar-Jaiswal, S., Manivannan, S., Zuo, Z. and **Bellen, H.J.** 2017. Flip-Flop, a cell cycle-independent, conditional gene inactivation strategy that tags wild-type and mutant cells. ***eLife*** 6: e26420. PMID: 28561736; PMCID: PMC5493436.

234. Wong, C.O., Gregory S., Hu H., Chao Y., Sepúlveda V.E., He Y., Li-Kroeger D., Goldman W.E., **Bellen, H.J.** and Venkatachalam, K. 2017. Lysomsomal degradation is required for sustained phagocytosis of bacteria by in macrophages. ***Cell Host Microbe*** 21:719-730. PMID: 28579255; PMCID: PMC5540652.

235. Wangler, M.F. and **Bellen H.J.** 2017. (Book Chapter) *In vivo* animal modeling: Drosophila. *In* **Basic Science Methods for Clinical Researchers**. **Elsevier Science and Technology Books**. Editors: M. Jalali, F.Y.L Saldanha, M. Jalali. Academic Press, pp. 212-236.

236. Chao, H-T, Liu, L. and **Bellen, H.J.** 2017. Building dialogues between clinical and biomedical research through cross-species collaborations. ***Seminars in Cell and Developmental Biology*** 70:49-57. Review. PMID: 28579453; PMCID: PMC5623622.

237. Luo, X., Rosenfeld, J.A., Yamamoto, S., Harel, T., Zuo, Z., Hall, M., Wierenga, K., Pastore, M., Bartholomew, D., Delgado, D., Rotenberg, J., Lewis, R.A., Emrick, L., Bacino, C.A., Eldomery, M.K., Coban-Akdemir, Z., Xia, F., Undiagnosed Diseases Network (UDN), Yang, Y., Lalani, S.R., Lotz, T., Lupski, J.R., Lee, B. **Bellen, H.J.*** and Wangler, M.W.* 2017. Clinically severe CACNA1A alleles affect synaptic function and neurodegeneration differentially. ***PLoS Genetics*** 13:e1006905. PMID: 28742085; PMCID: PMC5557584. *Corresponding authors.

238. Wangler, M.F., Yamamoto, S., Chao H.T., Posey, J.E., Westerfield, M., Postlethwait. J., Undiagnosed Diseases Network (UDN), Hieter, P., Boycott, K.M., Campeau, P.M. and **Bellen, H.J.** 2017. Model organisms facilitate rare disease diagnosis and therapeutic research. ***Genetics*** 207:9-27. PMID: 28874452; PMCID: PMC5586389.

239. Liu, L., MacKenzie K.R., Putluri, N., Maletic-Savatic, M. and **Bellen, H.J**. 2017. The glia-neuron lactate shuttle and elevated ROS promote lipid sythesis in neurons and lipid droplet accumulation in glia via ApoE/D. ***Cell Metabolism*** 26:719-737. PMID: 28965825; PMCID: PMC5677551.

240. Kanca, O., Bellen. H.J., Schnorrer. F. (2017) Gene tagging strategies to assess protein expression, localization, and function in *Drosophila.* ***Genetics*** 207:389-412. PMID: 28978772; PMCID: PMC5629313.

241. Ugur, B., Bao, H., Stawarski, M., Duraine, L.R., Zuo, Z., Lin, Y.Q., Neely, G.G., Macleod, G.T., Chapman, E.R. and **Bellen, H.J.** 2017. The Krebs cycle enzyme Isocitrate Dehydrogenase 3A couples mitochondrial metabolism to synaptic transmission. ***Cell Reports*** 21:3794-3806. PMID: 29281828; PMCID: PMC5747319.

242. Senturk, M. and **Bellen, H.J.** 2018. Genetic strategies to tackle neurological diseases in fruit flies. ***Current Opinion in Neurobiology*** 50:24-32. PMID: 29128849; PMCID: PMC5940587.

243. Landrock, K.K., Sullivan, P., Martini-Stoica, H., Goldstein, D.S., Graham, B.H., Yamamoto, S., **Bellen, H.J.**, Gibbs, R.A., Chen, R., D'Amelio, M. and Stoica, G. 2018. Pleiotropic neuropathological and biochemical alterations associated with Myo5a mutation in a rat model. ***Brain Research*** 1679:155-170. PMID: 2917155.

244. Lee, P-T., Lin, G., Lin, W-W., Diao, F., White, B.H. and **Bellen, H.J.** 2018. A kinase-dependent feedforward loop affects novel CREBB stability and long-term memory formation. ***eLife*** 7:e33007. PMID: 29473541; PMCID: PMC5825208.

245. Oláhová, M., Yoon, W.H., Thompson, K., Jangam, S., Fernandez, L., Davidson, J.M., Kyle, J.E., Grove, M.E., Fisk, D.G., Kohler, J.N., Holmes, M., Dries, A.M., Huang, Y., Zhao, C., Contrepois, K., Zappala, Z., Frésard, L., Waggott, D., Zink, E.M., Kim, Y-M., Heyman, H.M., Stratton, K.G., Webb-Robertson, B-J.M., Undiagnosed Diseases Network (UDN), Snyder, M., Merker, J.D., Montgomery, S.B., Fisher, P.G., Feichtinger, R.G., Mayr, J.A., Hall, J., Barbosa, I.A., Simpson, M.A., Deshpande, C., Waters, K.M., Koeller, D., Metz, T.O., Morris, A.A., Schelley, S., Cowan, T., Friederich, M.W., McFarland, R., Van Hove, J.L.K., Enns, G.M., Yamamoto, S., Ashley, E.A., Wangler, M.F., Taylor, R.W., **Bellen, H.J.**, Bernstein, J.A. and Wheeler, M.T. 2018. Bi-allelic mutations in *ATP5D*, which encodes a subunit of ATP synthase, cause a metabolic disorder. ***American Journal of Human Genetics*** 102:494-504. PMID: 29478781; PMCID: PMC6117612.

246. Wangler, M.F., Assia Batzir N., Robak, L.A., Koenig, M.K., Bacino, C.A., Scaglia, F. and Bellen, H.J. 2018. The expanding neurological phenotype of *DNM1L*-related disorders. ***Brain*** 141: e28. PMID: 29529134.

247. Lee, P-T., Zirin, J., Kanca, O., Lin, W-W., Schulze, K., Li-Kroeger, D., Tao, R., Devereaux, C., Hu Y., Chung, V., Fang, Y., He, Y., Pan, H., Ge, M., Zuo, Z., Housden, B.E., Mohr, S., Yamamoto, S., Levis, R.W., Spradling, A., Perrimon, N. and **Bellen, H.J.** 2018. A gene-specific T2A-GAL4 library for Drosophila. ***eLife*** 7:e35574. PMID: 29565247; PMCID: PMC5898912.

248. Tan, K.L, Haelterman, N., Kwartler, C.S., Regalado, E.S., Lee, P-T., Nagarkar-Jaiswal, S., Guo, D.C., Duraine, L., Wangler, M.F., University of Washington Center for Mendelian Genomics, Bamshad, M.J., Nickerson, D., Lin, G., Milewicz, D.M. and **Bellen, H.J.** 2018. Ari-1 regulates myonuclear organization together with Parkin and is associated with aortic aneurysms**.** ***Developmental Cell*** 45: 226-244. PMID: 29689197; PMID: PMC5920516.

249. Liu, N., Schoch, K., Luo, X., Pena, L.D.M., Bhavana, V.H., Kukolich, M., Stringer, S., Powis, Z., Radtke, K., Mroske, C., Deak, K.L., McDonald, M.T., McConkie-Rosell, A., Markert, M.L., Kranz, P.G., Stong, N., Need, A.C., Bick, D. Amaral, M.D., Worthey, E.A., Levy, S., Undiagnosed Diseases Network (UDN), Wangler, M.F., **Bellen, H.J.,** Shashi, V. and Yamamoto, S. 2018. Functional variants in *TBX2* are associated with a syndromic cardiovascular and skeletal developmental disorder. ***Human Molecular Genetics*** 27:2454-2464. PMID: 29726930; PMCID: PMC6030957.

250. Ansar, M., Chung, H., Waryah, YM., Makrythanasis, P., Falconnet, E, Rao, AR., Guipponi, M., Narsani, A.K., Fingerhut, R., Santoni, F.A., Ranza, E., Waryah, AM., **Bellen, H.J.*** and Antonarakis, S.E.* 2018. Visual impairment and progressive phthisis bulbi caused by recessive pathogenic variant in MARK3. ***Human Molecular Genetics*** 27:2703-2711. PMID: 29771303; PMCID: PMC6048992. *Corresponding authors.

251. Li, T., **Bellen, H.J.** and Groves, A.K. 2018. Using Drosophila to study mechanisms of hereditary hearing loss. ***Disease Models & Mechanisms*** 11:1-16. PMID: 29853544; PMCID: PMC6031363.

252. Lin, G., Lee, P-T., Chen, K., Mao, D., Tan, K.L., Zuo, Z., Lin, W-W., Wang, L. and **Bellen, H.J**. 2018. Loss of phospholipase *PLA2G6*, a Parkinsonism-associated gene, affects Vps26 and Vps35, retromer function, and ceramide levels, similar to α-synuclein gain. ***Cell Metabolism*** 28:605-618. PMID: 29909971.

253. Li-Kroeger, D., Kanca, O., Lee, P.T., Cowan, S., Lee, M., Jaiswal, M., Salazar, J.L., He, Y., and **Bellen, H.J.** 2018. An expanded toolkit for gene tagging based on MiMIC and scarless CRISPR tagging in Drosophila. ***eLife*** 7:e38709. PMID: 30091705; PMCID: PMC6095692.

254. Marcogliese, P.C., Shashi, V., Spillmann, R.C., Stong, N., Rosenfeld, J.A., Koenig, M.K., Martinez-Agosto, J.A., Herzog, M., Chen, A.H., Dickson, P.I., Lin, H.J., Vera, M.U., Salamon, N., Ortiz, D., Infante, E., Steyaert, W., Dermaut, B., Poppe, B., Chung, H.-L., Zuo, Z., Lee, P-T., Kanca, O., Xia, F., Yang, Y., Smith, E.C., Jasien, J., Kansagra, S., Spiridigliozzi, G., El-Dairi, M., Lark, R., Riley, K., Koeberl, D.D., Golden-Grant, K., Program for Undiagnosed Diseases (UD-PrOZA), Undiagnosed Diseases Network (UDN), Yamamoto, S., Wangler, M.F., Mirzaa, G., Hemelsoet, D., Lee, B., Nelson, S.F., Goldstein, D.B., **Bellen, H.J.*** and Pena, L.D.M.* 2018. IRF2BPL is associated with neurological phenotypes. ***American Journal of Human Genetics*** 103:245-260. PMID: 3005703; PMCID: PMC6081494. *Corresponding authors.

255. Willsey, A.J., Morris, M.T., Wang, S., Willsey, H.R., Sun, N., Teerikorpi, N., Baum, T.B., Bender, K.J., Desai, T.A., Srivastava, D., Doudna, J., Chang, E., Sohal, V., Daniel H. Lowenstein, Li, H., Agard, D., Keiser, M.J., Shoichet, B., von Zastrow, M., Mucke, l., Finkbeiner, S., Gan, L., Sestan, N., Ward, M.E., Huttenhain, R., **Bellen, H.J.,** Nowakowski, T., Khokha, M.K., Lifton, R.P., Kampmann, M., Ideker, T., State, M.W., and Krogan, N.J. 2018. The Psychiatric Cell Map Initiative: A convergent systems biological approach to illuminating key molecular pathways in neuropsychiatric disorders. ***Cell*** 174: 505-520. PMID: 30053424; PMCID: PMC6247911.

256. Splinter, K., Adams, D., **Bellen, H.J.**, Bernstein, J., Eng, C., Esteves, C., Gahl, W., Jacob, H., Jarvela, A., Hamid, R., Kikani, B., Koeller, D., Kohane, I., Loscalzo, J., McCray, A., Metz, T., Mulvihill, J., Nelson, S., Palmer, C., Phillips, J., Pick, L., Postlethwait, J., Shashi, V., Sweetser, D., Tifft, C., Walley, N., Wangler, M., Westerfield, M., Wheeler, M., Wise, A., Worthey, E., Yamamoto, S. and Euan, A.A. 2018. Effect of genetic diagnosis on patients with previously undiagnosed disease. ***New England Journal of Medicine*** 379:2131-2139. PMID: 30304647; PMCID: PMC6481166.

257. Ansar, M., Chung, H.L., Taylor, R.L., Nazir, A., Imtiaz, A., Sarwar, M.T., Manousopoulou A, Makry-thanasis, P., Saeed S, Falconnet, E., Guipponi, M., Pournaras, C.J., Ansari, M.A., Ranza, E., Santoni, F.A., Ahmed, J., Shah, I., Gul, K, Black, G., **Bellen, H.J.*** and Antonarakis, S.* 2018. Bi-allelic loss-of-function variants in *DNMBP* cause infantile cataract. ***American Journal of Human Genetics*** 103:568-578. PMID: 30290152; PMCID: PMC6174361. *Corresponding authors.

258. Lin, G., Wang, L., Marcogliese, P.C. and **Bellen, H.J.** 2018. Sphingolipids in the pathogenesis of Parkinson's Disease and Parkinsonism. ***Trends in Endocrinology Metabolism*** 30:106-117. PMID: 30528460.

259. Shah, P.S.#, Link, N.#, Jang, G.M., Sharp, P., Zhu, T., Swaney, D.L., Johnson, J.R., Von Dollen, J., Ramage, H., Satkamp, L., Newton, B., Huttenhain, R., Petit, M.J., Baum, T., Everitt, A., Laufman, O.,

Tassetto, M., Shales, M., Stevenson, E., Iglesias, G., ., Shokat, L, Tripathi, S., Balasubramaniam, V., Webb, L.G., Aguirre, S., Wilsey, A.J., Garcia-Sastre, A., Pollard, K.S., Cherry, S., Gamarnik, A.V., Marazzi, I., Taunton, J., Fernandez- Sesma, A., **Bellen, H.J.*,** Andino, R.* and Krogan, N.J.* 2018. Comparative flavivirus-host protein-protein interaction mapping reveals novel mechanisms of Dengue and Zika virus pathogenesis. ***Cell*** 175:1931-1945. PMID: 30550790; PMCID: PMC6474419. #Equal contribution. *Corresponding authors.

260. Xu, S., Xiao, Q., Cosmanescu, F., Sergeeva, A.P, Yoo, J., Lin, Y., Katsamba, P.S., Ahlsen, G., Kaufman, J., Linaval, N.T., Lee, P-T., **Bellen, H.J.,** Shapiro, L., Honig, B., Tan, L. and Zipursky, S.L. 2018. Interactions between the Ig-superfamily proteins DIP-α and Dpr6/10 regulate assembly of neural circuits. ***Neuron*** 100:1369-1384. PMID: 30467079; PMCID: PMC7501880.

261. Cosmanescu, F., Katsamba, P.S., Sergeeva, A.P., Ahlsen, G., Patel, S.D., Brewer, J.J., Tan, L., Xu, S., Xiao, Q., Nagarkar-Jaiswal, S., Nern, A., **Bellen, H.J.,** Zipursky, S.L., Honig, B. and Shapiro, L. 2018. Quantitative interactome for DIP/Dpr immunoglobulin superfamily cell recognition proteins. ***Neuron*** 100:1385-1400. PMID: 30467080; PMCID: PMC6309224.

262. Mao, D., Lin, G., Tepe, B., Zuo, Z., Senturk, M., Zhang, S., Arenkiel, B.R., Sardiello, M. and **Bellen, H.J.** 2019. VAMP associated proteins are required for autophagic and lysosomal degradation by promoting a PtdIns4P-mediated endosomal pathway. ***Autophagy*** 11:1-20. PMID: 30741620.

263. Senturk, M., Lin, G., Mao, D., Zuo, Z., Watson, E., Mikos, A.G. and **Bellen, H.J.** 2019. Ubiquilins regulate autophagic flux through mTOR signaling and lysosomal acidification. ***Nature Cell Biology*** 21:384-396. PMID: 30804504; PMCID: PMC6534127.

264. Şentürk, M., Mao, D. and **Bellen, H.J.** 2019. Loss of proteins associated with amyotrophic lateral sclerosis affects lysosomal acidification via different routes. ***Autophagy*** 28:1-3. PMID: 30804504; PMCID: PMC6534127.

265. Lin, G., Wang, L., Marcogliese, P.C. and **Bellen, H.J.** 2019. Sphingolipids in the pathogenesis of Parkinson's disease and parkinsonism. ***Trends in Endocrinology & Metabolism*** 30:106-117. PMID: 30528460.

266. Kanca, O., Andrews, J.C., Lee, P-T., Patel, C., Braddock, S.R., Slavotinek, A.M., Cohen, J., Gubbels, C.S., Aldinger, K.A., Williams, J., Indaram, M., Fatemi, A., Yu, T.W., Agrawal, P.B., Vezina, G., Wynn, J., Hernan, R., Mychaliska, G., Undiagnosed Diseases Network (UDN), Chung, W.K., Markello, T.C., Dobyns, W.B., Adams, D.R., Gahl, W.A., Wangler, M.F., Yamamoto, S., **Bellen, H.J.** and Malicdan, M.C.V. 2019. *De novo* variants in *WDR37* are associated with epilepsy, colobomas, dysmorphism, developmental delay, intellectual disability, and cerebellar hypoplasia. ***American Journal of Human Genetics*** 105:413-424. PMID: 31327508; PMCID: PMC6699142.

267. **Bellen, H.J.**, Wangler, M.F. and Yamamoto, S. 2019. The fruit fly at the interface of diagnosis and pathogenic mechanisms of rare and common human diseases. ***Human Molecular Genetics*** 28:R207-214. PMID: 31227826; PMCID: PMC6872428.

268. Ojelade, S.A., Lee, T.V., Giagtzoglou, N., Yu, L., Ugur, B., Li, Y., Durlaine, L., Zuo, Z., Petyuk, V., De Jager, P.L., Bennett, D.S., Arenkiel, B.R., **Bellen, H.J.** and Shulman, J.S. 2019. *cindr*, the *Drosophila* homolog of the *CD2AP* Alzheimer's susceptibility locus, is required for synaptic transmission and proteostasis. ***Cell Reports*** 28:1799-1813. PMID: 31412248; PMCID: PMC6703184.

269. Guo, H., Bettella, E., Marcogliese, P.C., Zhao, R., Andrews, J.C., Nowakowski, T.J., Gillentine, M.A., Hoekzema, K., Wang, T., Wu, H., Jangam, S., Liu, C., Ni, H., Willemsen, M.H., van Bon, B.W., Rinne, T., Stevens, S.J.C., Kleefstra, T., Brunner, H.G., Yntema, H.G., Long, M., Zhao, W., Hu, Z., Colson, C., Nicolas R., Schwartz, C., Romano, C., Castiglia, L., Bottitta, M., Dhar, S.U., Erwin, D.J., Emrick, L., Keren, B., Afenjar, A., Zhu, B., Bai, B., Stankiewicz, P., Herman, K., University of Washington Center

for Mendelian Genomics, Mercimek-Andrews, S., Juusola, J., Wilfert, A.B., Jamra, R.A., Büttner, B., Mefford, H.C., Muir, A.M., Scheffer, I.E., Regan, B.M., Malone, S., Gecz, J., Cobben, J., Weiss, M.M., Waisfisz, Q., Bijlsma, E.K., Hoffer, M.J.V., Ruivenkamp, C.A.L., Sartori, S., Xia, F., Rosenfeld, J.A., Bernier, R.A., Wangler, M.F., Yamamoto, S., Xia, K., Stegmann, A.P.A., **Bellen, H.J.**, Murgia, A. and Eichler, E.E. 2019. Disruptive mutations in *TANC2* define a neurodevelopmental syndrome associated with psychiatric disorders. ***Nature Communications*** 10:4679. PMID: 31616000; PMCID: PM 6794285.

270. Link, N., Chung, H.L., Jolly, A., Withers, M., Tepe, B., Arenkiel, B.R., Shah, P.S., Krogan, N.J., Aydin, H., Geckinli, B.B., Tos, T., Isikay, S., Tuysuz, B., Mochida, G.H., Thomas, A.X., Clark, R.D., Mirzaa, G.M., Lupski, J.R. and **Bellen, H.J.** 2019. Mutations in ANKLE2, a target of Zika virus, disrupt an asymmetric cell division pathway in Drosophila to cause microcephaly. ***Developmental Cell*** 51:713-729. PMID: 31735666; PMCID: PMC6917859.

271. Ansar, M, Chung, H.L., Al-Otaibi, A., Elagabani, M.N., Ravenscroft, T.A., Paracha, S.A., Scholz, R., Magid, T.A., Sarwar, M.T., Shah, S.F., Qaisar, A.A., Makrythanasis, P., Marcogliese, P.C., Kamsteeg, E.J., Falconnet, E., Ranza, E., Santoni, F.A., Aldhalaan, H., Al-Asmari, A., Faqeih, E.A., Ahmed, J., Kornau, H.C., **Bellen, H.J.*** and Antonarakis S.E.* 2019. Biallelic variants in IQSEC1 cause intellectual disability, developmental delay and short stature. ***American Journal of Human Genetics*** 105:907-920. PMID: 31607425; PMCID: PMC6848997. *Corresponding authors.

272. Kanca, O., and **Bellen, H.J.** 2019. La CaSSa da Drosophila: A versatile expansion of the tool box. ***Neuron*** 104:177-179. PMID: 31647888.

273. Kanca, O., Zirin, J., Garcia-Marques, J., Knight, S.M., Yang-Zhou, D., Amador, G., Chung, H.L., Zuo, Z., Ma, M., He, Y., Lin, W-W., Fang, Y., Ge, M., Yamamoto, S., Schulze, K.L., Hu, Y., Spradling, A.C., Mohr, S.E., Perrimon, N. and **Bellen, H.J.** 2019. An efficient CRISPR-based strategy to insert small and large fragments of DNA using short homology arms. ***eLife*** 8:e51539. PMID: 31674908; PMCID: PMC6855806.

274. Wang, J., Rousseau, **J.,** Kim, E., Ehresmann, S., Cheng, Y-T., Duraine, D., Zuo, Z., Park, Y-J., Li-Kroeger, D., Bi, W., Wong, L-J., Rosenfeld, J., Gleeson, J., Faqeih,E, Alkuraya, F.S., Wierenga, K.J., Chen, J., Afenjar, A., Nava, C. , Doummar, D., Keren, B., Juusola, J., Grompe, M., **Bellen, H.J.** * and Campeau P.M.* 2019. Loss of *Oxidation Resistance 1 (OXR1)* is associated with an autosomal recessive neurological disease with cerebellar atrophy and lysosomal dysfunction. ***American Journal of Human Genetics*** 105:1237-1253. PMID: 31785787; PMCID: PMC6904826. *Corresponding authors.

275. Ye, H., Ojelade, S.A., Li-Kroeger, D., Zuo, Z., Wang, L., Li, Y., Gu, JY., Tepass, U., Rodal, A.A., **Bellen, H.J** and Shulman, J.M. 2020. Retromer subunit, VPS29, regulates synaptic transmission and is required for endolysosomal function in the aging brain. ***eLife*** 9:e91577. PMID: 32286230; PMCID: PMC7182434.

276. Bosch, J.A., Knight, S., Kanca, O., Zirin, J., Yang-Zhou, D., Hu, Y., Rodiger, J., Amador, G., **Bellen, H.J.**, Perrimon, N. and Mohr, S.E. 2020. Use of the CRISPR-Cas9 system in Drosophila cultured cells to introduce fluorescent tags into endogenous genes. ***Current Protocols in Molecular Biology*** 130: e112. PMID: 31869524; PMCID: PMC7213786.

277. Chung, H.L., Mao, X., Wang, H., Park, Y., Marcogliese, P.C., Rosenfels, J.A., Burrage, L.C., Liu, P., Murdock, D.R., Yamamoto, S., Wangler, M.F., Undiagnosed Diseases Network (UDN), Chao, H.T., Long, H., Feng, L., Bacino, C.A., **Bellen, H.J.*** and Xiao, B.* 2020. *De novo* variants in *CDK19* are associated with a new syndrome with intellectual disability and epileptic encephalopathy. ***American Journal of Human Genetics*** 106:717-725. PMID: 32330417; PMCID: PMC7212481. *Corresponding authors.

278. Chung, H.L., Wangler, M.F., Marcogliese, P.C., Jo J., Ravenscroft, T.A., Duraine, L., Sadeghzadeh, S., Li-Kroeger, D., Schmidt, R.E., Pestronk, A., Rosenfeld, J.A., Burrage, L., Herndon, M.J., Chen, S., Undiagnosed Diseases Network (UDN), Shillington, A., Vawter-Lee, M., Hopkin, R., Rodriguez-Smith,

J., Henrickson, M., Lee, B., Moser, A.B., Jones, R.O., Watkins, P., Yoo, T., Mar, S., Choi, M., Bucelli, R.C., Yamamoto, S., Lee, H.K., Prada, C.E., Chae, J.H., Vogel, T.P. and **Bellen, H.J.** 2020. Loss or gain of function mutations in *ACOX1* cause axonal loss via different mechanisms. ***Neuron*** 105:589-606. PMID: 32169171; PMCID: PMC7289150.

279. Mao, D., Reuter, C.M., Ruzhnikov, M.R., Beck, A.E., Farrow, E.G., Emrick, L.T., Rosenfeld, J.A., Mackenzie, K.M., Robak, L., Wheeler, M.T., Burrage, L.C., Jain, M., Liu, P., Calame, D., Küry, S. Sillesen, M., Schmitz-Abe, K., Tonduti, D., Spaccini, L., Iascone, M., Genetti, C.A., Graf, M., Tran, A., Alejandro, M., Undiagnosed Diseases Network, Lee, B.H., Thiffault, I., Agrawal, P.B., Bernstein. J.A., **Bellen, H.J.*** and Chao, H.T.* 2020. *De novo EIF2AK1* and *EIF2AK2* variants are associated with developmental delay, leukoencephalopathy, and neurologic decompensation. ***American Journal of Human Genetics*** 106:570-583. PMID: 32197074; PMCID: PMC7118694. *Corresponding authors.

280. Huang, Y., Mao, X., van Jaarsveld, R.H., Shu, L., Terhal, P.A., Jia, Z., Xi, H., Peng, Y., Yan, H., Yuan, S., Li, O., Wang, H. and **Bellen, H.J.** 2020. Variants in *CAPZA2*, a member of a F-actin capping complex, cause intellectual disability and developmental delay. ***Human Molecular Genetics*** *29:1537-1546.* PMID: 32338762; PMCID: PMC7268783.

281. Dutta, D., Briere, L.C., Kanca, O., Marcogliese, P.C., Walker, M.A., High, F.A., Vanderver, A., Krier, J., Carmichael, N., Callahan, C., Taft, R.J., Simons. C,. Helman, G., Undiagnosed Diseases Network (UDN), Wangler, M.F., Yamamoto, S., Sweetser, D.A. and **Bellen, H.J.** 2020. *De novo* mutations in *TOMM70*, a receptor of the mitochondrial import translocase, cause neurological impairment. ***Human Molecular Genetics*** 29:1568-1589. PMID: 32356556; PMCID: PMC7268787.

282. Li ,X., Yang, L., Mao, Z., Pan, X., Zhao, Y., Gu, X., Eckel-mahan, K., Zuom, Z., Tong, Q., Hartig, SM., Cheng, X., Du, G., Moore, DD., **Bellen, H.J.**, Sesaki, H and Sun, K. 2020. Novel role of dynamin-related-protein 1 in dynamics of ER-lipid droplets in adipose tissue. ***The FASEB Journal*** 34:8265-8282. PMID: 32294302; PMCID: PMC7336545.

283. Ding, X., Jo., J., Wang, C.Y., Cristobal, C.D., Zuo, Z., Ye, Q., Wirianto, M., Lindeke-Myers, A., Choi, J.M., Mohila, C.A., Kawabe, H., Jun, S.Y., **Bellen, H.J.**, Yoo, S.H. and Lee, H.K. 2020. The Daam2-VHL-Nedd4 axis 1 governs developmental and regenerative oligodendrocyte differentiation. ***Genes and Development***, doi: 10.1101/gad.338046.120. PMID: 32792353; PMCID: PMC7462057.

284. Kao, .Y., Xu, M., Wang, L., Lin, S.C., Lee, H.J., Duraine, L., **Bellen H.J.**, Goldetein D.S., Tsai, S.Y. and Tsai, M.J. 2020. Elevated COUP-TFII expression in dopaminergic neurons accelerates the progression of Parkinson's disease through mitochondrial dysfunction. ***PloS Genetics*** 16: e1008868. PMID: 32579581; PMCID: PMC7340320.

285. Ravenscroft, T.A., Janssens, J., Lee, P.T., Tepe, B., Marcogliese, P.C., Makhzami, S., Holmes, T., Aerts, S. and **Bellen, H.J.** 2020. *Drosophila* voltage-gated sodium channels are only expressed in active neurons and are localized to distal axonal initial segment-like domains. ***Journal of Neuroscience*** 40: 7999-8024. PMID: 32928889; PMCID: PMC7574647.

286. Link, N. and **Bellen. H.J.** 2020. Using *Drosophila* to drive the diagnosis and understand the mechanisms of rare human diseases. ***Development*** 147:1-7. PMID: 32988995; PMCID: PMC7541339.

287. Martelli, F., Zuo, Z., Wang, J. Wong, C.O., Karagas, N.E., Roessner, U., Rupasinghe, T., Venkatachalam, K., Perry, T., **Bellen, H.J.*** and Batterham, P.* 2020. Low doses of the neonicotinoid insecticide imidacloprid induce ROS triggering neurological and metabolic impairments in Drosophila. ***Proceedings of the National Academy of Sciences USA*** 117:25840-25850. PMID: 32989137; PMCID: PMC7568275. *Corresponding authors.

288. Barish, S., Barakat, T.S., Michel, B.C., Mashtalir, N., Phillips, J., Valencia, A.M., Ugur, B., Wegner, J., Scott, T.M., Bostwick, B., Members of Undiagnosed Diseases Network (UDN)., Murdock, D.R., Dai, H., Perenthaler, E., Nikoncuk, A., Slegtenhorst, M.V., Brooks, A.S., Keren, B., Nava, C., Mignot, C.,

Douglas, J., Rodan, L., Nowak, C., Ellard, S., Stals, K., Lynch, S.A., Faoucher, M., Lesca, G., Edery, P., Engleman, K.L., Zhou, D., Thiffault, I., Herriges, J., Cooley, L., Gass, J., Louie, R., Stolerman, E., Washington, C., Laar, I.V.D., Vetrini, F., Otsubo, A., Pratt, V.M., Conboy, E., Treat, K., Shannon, N., Rosenfeld, J.A., Westerfield. M., Wangler, M., Kadoch, C., Yamamoto, S., Scott, D.A.* and **Bellen, H.J.*** 2020. BICRA, a SWI/SNF complex member, is associated with BAF-disorder related phenotypes in humans and model organisms. ***American Journal of Human Genetics*** 107:1096-1112. PMID: 33232675; PMCID: PMC7820627. *Corresponding authors.

289. Cunningham, K., Zhang, K., Maulding, K., Senturk, M., Grima, J., Sung, H., Zuo, Z., Song, H., Rothstein, J., **Bellen, H.J.** and Lloyd, T. 2020. TFEB/Mitf links impaired nuclear import to autophagolysosomal dysfunction in C9-ALS. ***eLife*** 9:e59419. PMID: 33300868; PMCID: PMC7758070.

290. Luo, X., Schoch, K., Jangam, S.V., Bhavana, V.H., Graves, H.K., Kansagra, S., Jasien, J.M., Stong, N., Keren, B., Mignot, C., Ravelli, C., Undiagnosed Diseases Network (UDN)., **Bellen, H.J.**, Wangler, M.F., Shashi, V., and Yamamoto, S. 2021. Rare deleterious *de novo* missense variants in Rnf2/Ring2 are associated with a neurodevelopmental disorder with unique clinical features. ***Human Molecular Genetics*** 30:1283-1292. PMID: 33864376; PMCID: PMC8255132.

291. Baldridge, D.*, Wangler, M.F.*, Bowman, A.N., Yamamoto, S., Undiagnosed Diseases Network (UDN)., Schedl, T., Pak, S.C., Postlethwait, J.H., Shin, J., Solnica-Krezel, L., **Bellen. H.J.**, and Westerfield, M. 2021. Model organisms contribute to diagnosis and discovery in the Undiagnosed Diseases Network: Current state and a future vision. ***Orphanet Journal of Rare Diseases*** 16:206. PMID: 33962631; PMCID: PMC8103593. *Equal contribution.

292. Ravenscroft, T.A., Phillips, J.B., Fieg, E., Bajikar, S.S., Peirce, J., Wegner, J., Luna, A.A., Fox, E.J., Yan, Y.L., Rosenfeld, J.A., Zirin, J., Kanca, O., Undiagnosed Disease Network (UDN)., Benke, P.J., Cameron, E.S., Strehlow, V., Platzer, K., Jamra, R.A., Klockner, C., Osmond, M., Licata, T., Rojas, S., Dyment, D., Chong, J.S.C., Lincoln, S., Stoler, J.M., Postlethwait, J., Wangler, M.F., Yamamoto, S., Krier, J., Westerfield, M. and **Bellen, H.J.** 2021. Heterozygous loss-of-function variants significantly expand the phenotypes associated with loss of GDF11. ***Genetics in Medicine*** 23:1989-1900. PMID: 34113007; PMCID: PMC8487929.

293. Park, Y.J., Kim, S., Shim, H.P., Park, J.H., Lee, G., Kim, T.Y., Jo, M.C., Kwon, A.Y., Lee, M., Chung, H.L., **Bellen, H.J.**, Kwon, S.H. and Jeon, S.H. 2021. Phosphatidylserine synthase plays an essential role in glia and affects development, as well as the maintenance of neuronal function. ***iScience*** 24: 102899. PMID: 34401677; PMCID: PMC8358705.

294. Goodman, L.D., Cope, H., Nil, Z., Ravenscroft, T.A., Charng, W.L., Lu, S., Kanca, O., Tien, A.C., Moulton, M.J., Dutta, D., Pfundt, R., Koolen, D.A., Haaxma, C.A., Veenstra-Knol, H.E., Wassink-Ruiter, J.S.K., Wevers, M.R., Jones, M., Walsh, L.E., Klee, V.H., Theunis, M., Legius, E., Steel, D., Barwick, K.E.S., Kurian, M.A., Mohammad, S.S., Dale, R.C., Terhal, P.A., Kirmse, B., Robinette, B., Cogne, B., Isidor, B., Grebe, T.A., Kulch, P., Hainline, B.E., Sapp, K., Morava. E., Klee, E.W., Macke, E.L., Trapane, P., Spencer, C., Undiagnosed Diseases Network (UDN), Wangler, M.F., Yamamoto, S., **Bellen, H.J.*** and Tan, Q.K.G.* 2021. *De novo TNPO2* variants are associated with developmental delays, dysmorphic features and neurological phenotypes in humans and alter TNPO2 activity in *Drosophila*. ***American Journal of Human Genetics*** 108:1669-1691. PMID: 34314705; PMCID: PMC8456166. *Corresponding authors.

295. Goodman, L.D. and **Bellen, H.J.** 2021. Recent insights into the role of glia and oxidative stress in Alzheimer's disease gained from *Drosophila*. ***Current Opinion in Neurobiology*** 72:32-38. PMID: 34418791; PMCID: PMC8854453.

296. **Bellen, H.J.***, Hubbard, E.J.A., Lehmann, R., Madhani, H.D., Solnica-Krezel, L. and Sothard-Smith, E.M. 2021. Model organism databases are in jeopardy. ***Development*** 148:dev200193. PMID: 35231122; PMCID: PMC10656462. *Corresponding author.

297. Manivannan, S.N., Roovers, J., Smal, N., Myers, C.T., Turkdogan, D., Roelens, F., Kanca, O., Chung, H.L., Scholz, T., Hermann, K., Bierhals, T., Caglayan, H.S., Stamberger, H., MAE working group of EuroEPINOMICS RES Consortium., Mefford, H., de Jonghe, P., Yamamoto, S., Weckhuysen, S. and **Bellen, H.J.** 2021. *De novo FZR1* loss-of-function variants cause developmental and epileptic encephalopathy. ***Brain*** 145:1684-1697. PMID: 34788397; PMCID: PMC9166542.

298. Moulton, M.J., Barish, S., Ralhan, I., Chang, J., Goodman, L.D., Harland, J., Marcogliese, P.C., Johansson, J.O., Ioannou, M. and **Bellen, H.J.** 2021. Neuronal ROS-induced glial lipid droplet formation is altered by loss of Alzheimer's disease-associated genes. ***Proceedings of the National Academy of Sciences USA*** 118::e2112095118. PMID: 34949639; PMCID: PMC8719885.

299. Marcogliese, P.C.#*, Dutta, D.#, Sinha-Ray, S., Dang, N.D.P., Zuo, Z., Wang, Y., Lu, D., Fazal, F., Ravenscroft, T.A., Chung, H.L., Kanca, O., Wan, J., Douine, E.D., Pena, L.D.M., Yamamoto, S., Nelson, S.F., Might M., Meyer, K.C., Yeo, N.C. and **Bellen, H.J.*** 2022. Loss of IRF2BPL impairs neuronal maintenance through excess Wnt signaling. ***Science Advances*** 8:eabl5613. PMID: 35044823; PMCID: PMC8769555. #Co-first authors. *Corresponding authors.

300. Martelli, F., Hernandes, N.H., Zuo, Z., Wang, J., Wong, C.O., Karagas, N.E., Roessner, U., Rupasinhe, T., Robin, C., Venkatachalam, K., Perry, T., Batterham, P. and **Bellen, H.J.*** 2022. Low doses of the organic insecticide spinosad trigger lysosomal defects, ROS driven lipid dysregulation and neuro-degeneration in flies. ***eLife*** 11:e73812. PMID: 35191376; PMCID: PMC8863376. *Corresponding author.

301. Harnish, J.M., Li, L., Rogic, S., Poirier-Morency, G., Kim, S.Y., Undiagnosed Diseases Network (UDN)., Boycott, K.M., Wangler, M.F., **Bellen, H.J.**, Hieter, P., Pavlidis, P., Liu, Z. and Yamamoto, S. 2022. ModelMatcher: A scientist-centric online platform to facilitate collaborations between stakeholders of rare and undiagnosed disease research. ***Human Mutation*** 43:743-759. *Special Issue:* Matchmaker Exchange: Seven years of discovery and collaboration. PMID: 35224820; PMCID: PMC9133126.

302. **Bellen, H.J.** 2022. Lord of the fruit flies: an interview with Hugo Bellen. ***Disease Models & Mechanisms*** 15:dmm.049500. PMID: 35302163; PMCID: PMC8938401.

303. Cristobal, C.D., Wang, C.Y., Zuo, Z., Smith, J.A., Lindeke-Myers, A., **Bellen, H.J**. and Lee, H.K. 2022. Daam2 regulates myelin structure and the oligodendrocyte actin cytoskeleton through Rac1 and Gelsolin. ***Journal of Neuroscience*** 42:1679-1691. PMID: 35101966; PMCID: PMC8896627.

304. Chung, H.L., Rump, P., Lu, D., Glassford, M.R., Mok, J.W., Fatih, J., Basal, A., Marcogliese, P.C., Kanca, O., Rapp, M., Fock, J.M., Kamsteeg, E.J., Lupski, J.R., Larson, A., Haninbal, M.C., **Bellen, H.J.*** and Harel, T.* 2022. *De novo* variants in EMC1 lead to neurodevelopmental delay and cerebellar degeneration and affect glial function in *Drosophila*. ***Human Molecular Genetics*** 31:3231-3244. PMID: 35234901; PMCID: PMC9523557. *Corresponding authors.

305. Accogli, A., Lu, S., Musante, I., Scudieri, P., Rosenfeld, J.A., Severino, M., Baldassari, S., Iacomino, M., Riva, A., Balagura, A., Piccolo, G., Minetti, C., Roberto, D., Xia, F., Razak, R., Lawrence, E., Hussein, M., Chang, E.Y., Holick, M., Cali, E., Aliberto, E., Gambardella, A., Undiagnosed Diseases Network (UDN), SYNaPS Study Group, Emrick, L., McCaffery, P.J.A., Clagett-Dame, M., Marcogliese, P.C., **Bellen, H.J.**, Lalani, S.R., Zara, F., Striano, P. and Salpietro, V. 2022. Loss of neuron navigator 2 impairs brain and cerebellar development. ***The Cerebellum*** 22:206-222. PMID: 35218524; PMCID: PMC9985553.

306. Lu, S., Hernan, R., Marcogliese, P.C., Huang, Y., Gertler, T.S., Akcaboy, M., Liu, S., Chung, H.L., Pan, X., Sun, X., Oguz, M., Oztoprak, U., de Baaij, J.H.F., Ivanisevic, J., McGinnis, E., Guillen Sacoto, M.J., Chung, W.K.* and **Bellen, H.J.*** 2022. Loss of function variants in TIAM1 are associated with developmental delay, intellectual disability and seizures. ***American Journal of Human Genetics*** 109: 571-586. PMID: 35240055; PMCID: PMC9069076. *Corresponding authors.

307. Huang, Y., Ma, M., Mao, X., Pehlivan, D., Kanca, O., Un-Candan, F., Shu, L., Akay, G., Mitani, T., Lu, S., Candan, S., Wang, H., Xiao, B., Lupski, J.R. and **Bellen, H.J.** 2022. Novel dominant and recessive

variants in human ROBO1 cause distinct neurodevelopmental defects through different mechanisms. ***Human Molecular Genetics*** 31:2751-2765. PMID: 35348658; PMCID: PMC9402236.

308. Ma, M.*, Moulton, M.J.*, Lu, S. and **Bellen, H.J.** 2022. 'Fly-ing' from rare to common neuro-degenerative disease mechanisms**.** ***Trends in Genetics*** 38:972-984. PMID: 35484057; PMCID: PMC9378361. *Equal contribution.

309. Wang, Y., Lobb-Rabe, M., Ashley, J., Chatterjee, P., Anand, V., **Bellen, H.J.**, Kanca, O. and Carrillo, R. 2022. Systematic expression profiling of dprs and DIPs reveals cell surface codes in *Drosophila* larval motor and sensory neurons. ***Development*** 149(10):dev200355. PMID: 35502740; PMCID: PMC9188756.

310. Manivannan, S.N., Roovers J., Smal N., Myers, C.T., Turkdogan, D., Roelens, F., Kanca, O., Chung, H..L, Scholz, T., Hermann, K., Bierhals, T., Caglayan, H.S., Stamberger, H., MAE Working Group of EuroEPINOMICS RES Consortium, Mefford, H., de Jonghe, P., Yamamoto, S., Weckhuysen, S. and **Bellen H.J**. 2022. *De novo FZR1* loss-of-function variants cause developmental and epileptic encephalopathy. ***Brain*** 145:1684-1697. PMID: 34788397; PMCID: PMC9166542.

311. Kanca, O., Zirin, J., Hu, Y., Tepe, B., Dutta, D., Lin, W-W., Ma, L., Ge, M., Zuo, Z., Liu, L.P., Levis, R.W., Perrimon , N. and **Bellen, H.J.** 2022. An expanded toolkit for *Drosophila* gene tagging using synthesized homology donor constructs for CRISPR mediated homologous recombination. ***eLife*** 11: e76077. PMID: 35723254; PMCID: PMC9239680.

312. Deshpande, S.A., Rohrbach, E.W., Asuncion, J.D., Harrigan, J., Eamani, A., Schlingmann, E., Suto, D.J., Lee, P.T., Schweizer, F.E., **Bellen, H.J.** and Krantz, D.E. 2022. Regulation of *Drosophila* oviduct muscle contractility by octopamine. ***iScience*** 25(8):104697. PMID: 35880044; PMCID: PMC9307614.

313. Wang, L., Lin, G., Zuo, Z., Li, Y., Byeon, S.K., Pandey, A. and **Bellen, H.J.** 2022. Neuronal activity induces glucosylceramide that is secreted via exosomes for lysosomal degradation in glia. ***Science Advances*** 8:eabn3326. PMID: 35857503; PMCID: PMC9278864.

314. Thomas, A.X., Link, N., Robak, L.A., Demmler-Harrison, G., Pao, E.C., Squire, A.E., Michels, S., Cohen, J.S., Comi, A., Prontera, P., Verrotti di Pianella, A., Cara, G.D., Garavelli, L., Caraffi, S.G., Fusco, C., Zuntini, R., Parks, K.C., Sherr, E.H., Hashem, M.O., Maddirevula, S., Alkuraya, F.S., Contractar, I.A.F., Neil, J.E., Walsh, C.A., **Bellen, H.J.**, Chao, H.T., Clark, R.D. and Mirzaa, G.M. 2022. *ANKLE2*-related microcephaly: a variable disorder resembling Zika infection. ***Annals of Clinical and Translational Neurology*** 9:1276-1288. PMID: 35871307; PMCID: PMC9380164.

315. Barish, S., Senturk, M., Schoch, K., Minogue, A.L., Lopergolo, D., Fallerini, C., Harland, J., Seemann, J.H., Stong, N., Kranz, P.G., Kansagra, S., Mikati, M.A., Jasien, J., El-Dairi, M., Galluzzi, P., Undiagnosed Diseases Network (UDN), Ariani, F., Renieri, A., Mari, F., Wangler, M.F., Arur, S., Jiang, Y.H., Yamamoto, S., Shashi, V. and **Bellen, H.J**. 2022. The microRNA processor DROSHA is a candidate gene for a severe progressive neurological disorder. ***Human Molecular Genetics*** 31:2934-2950. PMID: 35405010; PMCID: PMC9433733.

316. Cheng, K.C., Burdine, R.D., Dickinson, M.E., Ekker, S.C., Lin, A.Y., Kent., Lloyd, K.C., Lutz, C.M., MacRae, C.A., Morrison, J.H., O'Connor, D., Postlethwait, J.H., Rogers, C.D., Sanchez, .S, Simpson, J.H., Talbot, W.S., Wallace, D.C., Weimer, J.M. and **Bellen, H.J.** 2022. Promoting validation and cross-phylogenetic integration in model organism research. ***Disease Models & Mechanisms*** 15: dmm.049600. PMID: 36125045; PMCID: PMC9531892.

317. Lu, S., Ma, M., Mao, X., Bacino, C.A., Jankovic, J., Sutton, V.R., Bartley, J.A., Wang, X., Rosenfeld, J.A., Beleza-Meireles, A., Chauhan, J., Pan, X., Li, M., Liu, P., Prescott, K., Amin, S., Davies, G., Wangler, M.F., Dai, Y. and **Bellen, H.J**. 2022. *De novo* variants in *FRMD5* are associated with developmental delay, intellectual disability, ataxia and abnormalities of eye movement. ***American Journal of Human Genetics*** 109:1932-1943. PMID: 36206744; PMCID: PMC9606480.

318. Karagas, N., Gupta, R., Rastegari, E., Tan, K.L., Leung, H.H., **Bellen, H.J.**, Venkatachalam, K. and Wong, C.O. 2022. Loss of activity-induced mitochondrial ATP production underlies the synaptic defects in a *Drosophila* model of ALS. ***Journal of Neuroscience*** 42:8019-8037. PMID: 36261266; PMCID: PMC9617612.

319. Huang, Y., Lemire, G., Briere, L.C., Liu, F., Wessels, M.W., Wang, X., Osmond, M., Kanca, O., Lu, S., High, F.A., Walker, M.A., Rodan, LH, Undiagnosed Diseases Network (UDN), Care4Rare Canada Consortium, Kernohan, K.D., Sweetser, D.A., Boycott, K.M. and **Bellen, H.J**. 2022. The recurrent *de novo* c.2011C>T missense variant in MTSS2 causes syndromic intellectual disability. ***American Journal of Human Genetics*** 109:1923-1931. PMID: 36067766; PMCID: PMC9606386.

320. Ma, M.#, Zhang, X.#, Zheng, Y., Lu, S., Pan, X., Mao, X., Pan, H., Chung, H.L., Wang, H., Hong, G.* and **Bellen, H.J.*** 2022. The fly homolog of SUPT16H, a gene associated with neurodevelopmental disorders, is required in a cell-autonomous fashion for cell survival. ***Human Molecular Genetics*** 32: 984-997. PMID: 36255738; PMCID: PMC9991001. #Equal contribution. *Corresponding authors.

321. Bosch, J.A., Ugur, B., Pichardo-Casas I., Rabasco, J,. Escobedo, F., Zuo, Z., Brown, B., Celniker, S., Sinclair, D.A., **Bellen, H.J.** and Perrimon, N. 2022. Two neuronal peptides encoded from a single transcript regulate mitochondrial complex III in *Drosophila*. ***eLife*** 11:e82709. PMID: 36346220; PMCID: PMC9681215**.**

322. Ray, .S.S., Dutta, D., Dennys, C., Powers, S., Roussel, F., Lisowski, P., Glazar, P., Zhang, X., Biswas, P., Caporale, J.R., Rajewsky, N., Bickle, M., Wein, N., **Bellen, H.J.**, Likhite, S., Marcogliese, P.C. and Meyer, K.C. 2022. Mechanisms of IRF2BPL-related disorders and identification of a potential therapeutic strategy. ***Cell Reports*** 41:111751. PMID: 36476864.

323. Mele, S., Martelli, F., Lin, J., Kanca, O., Christodoulou, J., **Bellen, H.J.**, Piper, M. and Johnson, T. 2023. *Drosophila* as a diet discovery tool for treating amino acid disorders. ***Trends in Endocrinology and Metabolism*** 34:85-105. PMID: 36567227.

324. Lin, G., Tepe, B., McGrane, G., Tipon, R.C., Croft, G., Panwala, L., Hope, A., Liang, A.JH., Zuo, Z., Wang, L. and **Bellen, H.J.** 2023. Exploring therapeutic strategies for Infantile Neuronal Axonal Dystrophy (INAD/PARK14). ***eLife*** 12:e82555. PMID: 36645408; PMCID: PMC98889087.

325. Srivastava, S., Shaked, H.M., Gable, K., Gupta, S.D., Pan, X., Somashekarappa, N., Han, G., Mohassel, P., Gotkin, M., Doney, E., Goldenberg, P., Tan, Q.K.G., Gong, Y., Kleinstiver, B., Wishart, B., Cope, H., Pires, C.B., Stutzman, H., Spillmann, R.C., Undiagnosed Diseases Network (UDN), Sadjadi, R., Elpeleg, O., Lee, C.H., **Bellen, H.J.**, Edvardon, S., Eichler, F. and Dunn, T.M. 2023. *SPTSSA* variants alter sphingolipid synthesis and cause a complex hereditary spastic paraplegia. ***Brain*** 146:1420-1435. PMID: 36718090; PMCID: PMC10319774.

326. Pan, X., Dutta, D., Lu, S. and **Bellen, H.J.** 2023. Sphingolipids in neurodegenerative diseases. ***Frontiers in Neuroscience*** 17:1137893. PMID: 36875645; PMCID: PMC9978793.

327. Chung, H.L., Ye, Q., Park, Y.-J., Zuo, Z., Kanca, O., Mok, J.-W., Tattikota, S.G., Lu, S., Perrimon, N., Lee, H-K. and **Bellen, H.J.** 2023. Very long-chain fatty acids induce glial-derived Sphingosine-1-Phosphate synthesis, secretion, and neuroinflammation. ***Cell Metabolism*** 35:855-874. PMID: 37084732; PMCID: PMC10160010.

328. Ralhan, I., Chang, J., Moulton, M.J., Goodman, L.D., Lee, N.Y.J., Plummer, G., Pasolli, H.A., Matthies, D., **Bellen, H.J.** and Ioannou, M.S. 2023. Autolysosomal exocytosis of lipids protect neurons from ferroptosis. ***Journal of Cell Biology*** 222:e202207130. PMID 37036445; PMCID: PMC10098143.

329. Andrews, J.C., Mok, J.W., Kanca, O., Jangam, S., Tifft, C., Macnamara, E.F., Russell, B., Wang, L.K., Undiagnosed Diseases Network (UDN), Nelson, S.F., **Bellen, H.J.,** Yamamoto S., Malicdan, M. and Wangler, M.F. 2023. *De Novo* variants in MRTFB have gain of function activity in Drosophila and are

associated with a novel neurodevelopmental phenotype with dysmorphic features. ***Genetics in Medicine*** 25:100833. PMID: 37013900; PMICD: PMC115333975.

330. Tepe, B., Macke, E.L., Niceta, M., Hubsham, M.W., Kanca, O., Schultz-Rogers, L., Zarate, Y.A., Schaefer, B., Granadillo De Luque, J.L., Wegner, D.J., Cogne, B., Gilbert-Dussardier, B., Guillou, X.L., Wagner, E.J., Pais, L.S., Neil, J.E., Mochida, G.H., Walsh, C.A., Magal, N., Drasinover, V., Shohat, M., Schwab, T., Schmitz, C., Clark, K., Fine, A., Lanpher, B., Gavrilova, R., Blanc, P., Burglen, L., Afenjar, A., Steel, D., Kurian, M.A., Prabhakar, P.. Gößwein, S., Donato, N.D., Bertini, E.S,. Undiagnosed Diseases Network (UDN), Wangler, M.F., Yamamoto, S., Tartaglia, M., Klee, E.W. and **Bellen H.J.** 2023. Biallelic variants in INTS11 are associated with a novel complex neurological disorder. ***American Journal of Human Genetics*** 110:774-789. PMID: 37054711; PMCID: PMC10183469.

331. Wang, C.Y., Zuo, Z., Jo, J., Kim, K.I., Madamba, C., Ye, Q., Jung, S.Y., **Bellen, H.J.** and Lee, H.K. 2023. Daam2 phosphorylation by CK2α negatively regulates Wnt activity during white matter development and injury. ***Proceedings of the National Academy of Sciences USA*** 120:e2304112120. PMID: 37607236; PMCID: PMC10469030.

332. Accogli, A. Lu S, Musante I, Scudieri P, Rosenfeld JA, Severino M, Baldassari S, Iacomino M, Riva A, Balagura G, Piccolo G, Minetti C, Roberto D, Xia F, Razak R, Lawrence E, Hussein M, Chang EY, Holick M, Calì E, Aliberto E, De-Sarro R, Gambardella A, Network UD, Group SS, Emrick L, McCaffery PJA, Clagett-Dame M, Marcogliese PC, **Bellen HJ**, Lalani SR, Zara F, Striano P, Salpietro V. 2023. Loss of neuron navigator 2 impairs brain and cerebellar development. ***Cerebellum*** 22:206-222. PMID: 35218524; PMCID: PMC9985553.

333. Lu, T.C., Brbic, M., Park, Y-J., Jackson, T., Chen, J., Kolluru, S.S., Qi, Y., Katheder, N.S., Cai, X.T., Lee, S., Chen, Y.C., Auld, N., Liang, C.Y., Ding, S.H., Welsch, D., D'Souza, S., Pisco, A.O.., Jones, RC., Leskovec, J., Lai, E.C., **Bellen, H.J**., Luo, L., Jasper, H., Quakem S.R. and Li, H. 2023. Aging fly cell atlas identifies exhaustive aging features at cellular resolution. ***Science*** 380(6650):eadg0934. PMID: 37319212; PMCID: PMC10829769.

334. Scott, H., Novikov, B., Ugur, B., Allen, B., Mertsalov, I., Monagas-Valentin, P., Koff, M., Baas Robinson, S., Aoki, K., Veizaj, R., Lefeber, D.J., Tiemeyer, M., **Bellen, H.J**. and Panin, V. 2023. Glia-neuron coupling via a bipartite sialylation pathway promotes neural transmission and stress tolerance in Drosophila ***eLife*** 12:e78280. PMID: 36946697; PMCID: PMC10110239.

335. Ravenscroft, T.A., Jacobs, A., Gu, M., Eberl, D.F. and **Bellen, HJ.** 2023. The Voltage-gated sodium channel in Drosophila, Para, localizes to dendrites as well as axons in mechanosensitive chordotonal neurons. ***eNeuro*** 10(6):ENEURO.0105-23. PMID: 37328295; PMCID: PMC10316460.

336. Guichard, A., Lu, S., Kanca, O., Bressan, D., Huang, Y., Ma, M., Sanz Juste, S., Andrews, J.C., Jay, K., Sneider, M., Schwartz, R., Huang, M.C., Bei, D., Pan, H., Ma, L., Lin, W-W., Auradkar, A., Bhagwat, P., Park, S., Wan, K.H., Ohsako, T., Takano-Shimizu, T., Celniker, S.E., Wangler, M.F., Yamamoto, S*, **Bellen, H.J.*** and Bier, E.*. 2023. A comprehensive Drosophila resource to identify key functional interactions between SARS-CoV-2 factors and host proteins. ***Cell Reports*** 42:112842. PMID: 37480566; PMCID: PMC10952759. *Corresponding authors.

337. Nil, Z., Deshwar, A.R., Huang, Y., Barish, S., Zhang ,X., Choufani, S., Le Quesne Stabej, P., Hayes, I., Yap, P., Haldeman-Englert, C., Wilson, C., Prescott, T., Tveten, K., Vøllo, A., Hayne,s D., Wheeler, P.G., Zon, J., Cytrynbaum, C., Jobling, R, Blyth, M., Banka, S., Afenjar, A., Mignot, C., Robin-Renaldo, F., Keren, B., Kanca, O., Mao, X.., Wegner, D.J., Sisco, K., Shinawi, M., Undiagnosed Diseases Network (UDN), Wangler, M.F., Weksberg, R., Yamamoto, S.., Costain, G. and **Bellen, H.J.** 2023. Rare *de novo* gain-of-function missense variants in *DOT1L* are associated with developmental delay and congenital anomalies. ***American Journal of Human Genetics*** 10:1919-1937. PMID: 37827158; PMCID: PMC1064550.

338. Dutta, D., Kanca, O., Byeon, S.K., Marcogliese, P.C., Zuo, Z., Shridharan, R.V., Park, J.H., Undiagnosed Diseases Network (UDN), Lin, G., Ge, M., Heimer, G., Kohler, J.N., Wheeler, M.T., Kaipparettu, B.A., Pandey, A. and **Bellen H.J.** 2023. Loss of Mitochondrial Enoyl CoA Reductase causes elevated ceramide levels and impairs iron metabolism. ***Nature Metabolism*** 5:1595-1614. PMID: 37653044; PMCID: PMC11151872.

339. Pan, X., Alvarez, A.N., Ma, M., Lu, S., Crawford, M.W., Briere, L.C., Kanca, O., Yamamoto, S., Sweetser, D.A., Wilson, J.L., Napier, R.J., Pruneda, J.N. and **Bellen, H.J.** 2023. Allelic strengths of encephalopathy-associated UBA5 variants correlate between *in vivo* and *in vitro* assays. ***eLife*** 12:RP89891. PMID: 38079206; PMCID: PMC10712953.

340. Vuocolo, B., German, R.J., Lalani, S.R., Murali, C.N., Bacino, C.A., Baskin, S., Littlejohn, R., Odom, J.D., McLean, S,. Schmid, C., Nutter, M., Stuebben, M., Magness, E., Juarez, O., El Achi, D., Mitchell, B., Glinton, K.E., Robak ,L., Nagamani, S.C.S, Saba, L., Ritenour, A., Zhang, L., Streff H, Chan K, Kemere, K.J., Carter, K., Texome Project, Owen, N., Vossaert, L., Liu, P., **Bellen, H.J.** and Wangler, M.F. 2024. Improving access to exome sequencing in a medically underserved population through the Texome Project. ***Genetics in Medicine*** 26:101102. PMID: 38431799; PMCID: PMC11161315.

341. Wilson, K.A., Bar, S., Dammer, E.B., Carrera, E.M., Hodge, B.A., Hilsabeck ,T., Bons, J., Brownridge, G.W., Beck, J.N., Rose, J., Granath-Panelo, M., Nelson, C.S., Qi, G., Gerencser, A.A., Lan, J., Afenjar, A., Chawla, G., Brem, R.B., Campeau, P.M., **Bellen, H.J.**, Schilling, B., Seyfried, N.T., Ellerby, L.M. and Kapahi, P. 2024. OXR1 maintains the retromer to delay brain aging under dietary restriction. ***Nature Communications*** 15:467-478. PMID: 38212606; PMCID: PMC10784588.

342. Yamamoto, S.#, Kanca, O.#, Wangler, M.F.* and **Bellen, H.J.*** 2024. Integrating non-mammalian model organism in the diagnosis of rare genetic diseases in humans. ***Nature Review Genetics*** 25:46-60. PMID: 37491400. #Equal contribution. *Corresponding authors.

343. Goodman, L.D, Ralhan, I., Li, X., Lu, S., Moulton, M.J., Park, Y.J., Zhao, P., Kanca, O., Ghaderpour-Taleghani, Z.S., Jacquemyn, J., Shulman, J.M., Ando, K., Sun, K., Ioannou, M.S. and **Bellen, H.J.** 2024. Tau is required for glial lipid droplet formation and resistance to neuronal oxidative stress. ***Nature Neuroscience*** 27:1918-1933. PMID: 39187706; PMCID: PMC11809452.

344. Goodman, L., Moulton, M. and **Bellen, H.J.** 2024. Glial lipid droplets resolve ROS during sleep. ***Nature Neuroscience*** 27:610-612. PMID: 38360945; PMCID: PMC11929967.

345. Dutta, D,. Kanca, O., Shridharan, R.V., Marcogliese, P.C., Steger, B., Morimoto, M., Frost, F.G., Macnamara, .E, Undiagnosed Diseases Network (UDN), Wangler, M.F., Yamamoto, S., Jenny, A., Adams, D., Malicdan, M.C. and **Bellen, H.J.** 2024. Loss of the endoplasmic reticulum protein Tmem208 affects cell polarity, development, and viability. ***Proceedings of the National Academy of Sciences USA*** 121:e2322582121. PMID: 38381787; PMCID: PMC10907268.

346. Martelli, F., Lin, J., Mele, S., Imlach, W., Kanca, O., Barlow, C.K., Paril, J., Schittenhelm, R.B., Christodoulou, J., **Bellen, H.J.**, Piper, M.D.W. and Johnson, T.K. 2024. Identifying potential dietary treatments for inherited metabolic disorders using Drosophila nutrigenomics. ***Cell Reports*** *43:*113861. PMID: 38416643; PMCID: PMC11037929.

347. Pan, X., Tao, A.M., Lu, S., Ma, M., Slaugh, R., Williams, S.R., O'Grady, L., Kanca, O., Person, R., Carter, M.T., Platzer, K., Schnabel, F., Jamra, R.A., Roberts, A.E., Newburger, J.W., Anya Revah-Politi, A., Granadillo, J.L., Stegmann, A.P.A., Accogli, A., Salpietro, V., Capra, V., Ghaloul-Gonzalez, L., Brueckner, M., Simon, M.E.H., Sweetser, D.A., Glinton, K.E., Kirk, S.E., Baylor College of Medicine Center for Precision Medicine Models, Wangler, M.F., Yamamoto, S., Chung, W.K.* and **Bellen, H.J.***. 2024. *De novo* variants in *FRYL* are associated with developmental delay, intellectual disability, and dysmorphic features. ***American Journal of Human Genetics*** 111:742-760. PMID: 38479391; PMCID: PMC11023917. *Corresponding authors.

348. Ma, M., Ganapathi, M., Zheng, Y., Tan, K.-L., Kanca, O., Bove, K.E., Quintanilla, N., Sag, S.O., Temel, S.G., LeDuc, C.A., McPartland, A.J., Pereira, E.M., Shen, Y., Hagen, J., Thomas, C.P., Galván, N.T.N., Pan, X., Lu, S., Rosenfeld, J.A., Calame, D.G., Wangler, M.F., Lupski, J.R., Pehlivan, D., Hertel, P.M., Chung, W.K.* and **Bellen, H.J.*** 2024. Homozygous missense variants in *YKT6* result in loss of function and are associated with developmental delay, with or without severe infantile liver disease and risk for hepatocellular carcinoma. ***Genetics in Medicine*** 26:101125. PMID: 38522068; PMCID: PMC11335040. *Corresponding authors.

349. Liao, J.Z., Chung, H.L., Shih, C., Wong, K.K.L., Dutta, D., Nil, Z., Burns, C..G, Kanca, O., Park, Y.J., Zuo, Z., Marcogliese, P.C., Sew, K. and **Bellen, H.J.*** and Verheyen, E.M.* 2024. Cdk8/CDK19 promotes mitochondrial fission through Drp1 phosphorylation and can phenotypically suppress pink1 deficiency in Drosophila. ***Nature Communications*** 15:3326. PMID: 38637532; PMCID: PMC11026413. *Corresponding authors.

350. Goodman, L.D., Moulton. M.J., Lin, G. and **Bellen, H.J.** 2024. Does glial lipid dysregulation alter sleep in Alzheimer's and Parkinson's disease? ***Trends in Molecular Medicine*** 30:913-923. PMID: 38755043; PMCID: PMC11466711.

351. Moulton, M.J., Atala, K., Zheng, Y., Dutta, D., Grange, D.K., Lin, W-W., Wegner, D.J., Wambach, J.A., Duker, A.L., Bober, M.B., Kratz, L., Wise, C.A., Oxendine, I., Khanshour, A., Undiagnosed Diseases Network, Wangler, M.F., Yamamoto, S., Cole, F.S., Rios, J., and **Bellen, H.J.** 2024. Dominant missense variants in SREBF2 are associated with complex dermatological, neurological, and skeletal abnormalities. ***Genetics in Medicine*** 26:101174. PMID: 38847193; PMCID: PMC12358889.

352. Mao, D., Liu C., Wang, L., AI-Ouran, R., Deisseroth, C., Pasupuleti, S., Kim, S.Y., Li, L., Rosenfeld, J.A., Meng, L., Burrage, L.C., Wangler, M.F., Yamamoto, S., Undiagnosed Diseases Network (UDN), Santana, M., Perez, V., Shukla, P., Lee, B., Yuan, B., Xia, F.., **Bellen H.J.***, Liu, P.* and Liu, Z.*. 2024. AI-MARRVEL - A knowledge-driven AI system for diagnosing mendelian disorders. ***New England Journal of Medicine AI*** 1(5):10.1056/aioa2300009. PMID: 38962029; PMCID: PMC11221788. *Corresponding authors.

353. Huang, Y., Jay, K.L., Huang, A.Y-W., Wan, J., Jangam, S.V., Chorin, O., Rothschild, A., Barel, O., Mariani, M., Iascone, M., Xue, H., Undiagnosed Diseases Network (UDN), Huang, J., Mignot, C., Keren, B., Saillour, V., Mah-Som, A.Y., Sacharow, S., Rajabi, F., Costin, C., Yamamoto, S., Kanca, O.**, Bellen, H.J.**, Rosenfeld, J.A., Palmer, C.G.S., Nelson, S.F., Wangler, M.F. and Martinez-Agosto, J,A. 2024. Loss-of-function in RBBP5 results in a syndromic neurodevelopmental disorder associated with microcephaly. ***Genetics in Medicine*** 26:101218. PMID: 39036895; PMCID: PMC11648989.

354. Goodman, L.D., Ralhan, I., Li, X., Lu, S., Moulton, M.J., Park, Y.J., Zhao, P., Kanca, O., Ghaderpour-Taleghani, Z.S., Jacquemyn. J., Shulman, J., Ando, K., Sun, K., Ioannou, M. and **Bellen, H.J.** 2024. Tau is required for glial lipid droplet formation and resistance to neuronal oxidative stress. ***Nature Neuroscience*** 10:1918-1933. PMID: 39187706; PMCID: PMC11809452.

355. Booth, K.T.A., Jangam, S.V., Chui,, M.M.C., Treat K, Graziani, L, Soldano, A, Ruan, Y, Hui, J.W.-H., White, K., Christensen, C.K., Lynnes, T., Yamamoto, S., Kanca, O., Tsang, M.H.Y., Lynch, S.A., Mullegama, S.V., Batista, J., Iancu, D., Joss, S.K., Wong, S.Y.Y., Mak, C.C.Y., Kwong, A.K.Y., **Bellen, H.J.**, Conboy, E., Sanges, R., Leung, A.Y., Wangler, M.F., Chung, B.H.Y. and Vetrini, F. 2025. *De novo* and inherited variants in DDX39B cause a novel neurodevelopmental syndrome. ***Brain*** 148:2658-2670. PMID: 39918047; PMCID: PMC12316012.

356. Bereshneh, A.H., Andrews, J.C., Eberl, D.F., Bademci, G., Borja, N.A., Bivona, S., Undiagnosed Diseases Network (UDN), Baylor College of Medicine Center for Precision Medicine Models, Chung, W.K., Yamamoto, S., Wangler, M.F., McKee, S., Tekin, M., **Bellen, H.J.*** and Kanca, O.* 2025. *De novo* variants in CDKL1 and CDKL2 are associated with neurodevelopmental symptoms. ***American Journal of Human Genetics*** 112:846-862. PMID: 40088891; PMCID: PMC12081231. *Corresponding authors.

357. Dubey, S.K. and **Bellen, H.J.** 2025. A neuroprotective role of polyunsaturated fatty acids in C9orf72-ALS/FTD. ***Nature Neuroscience*** 28:710-712. PMID: 40140608.

358. Mok, J.W., Mackay, L.., Blazo, M, Mizerik, E., Gecz, J., Carroll, R., Nizon, M., Rondeau, S., Joubert, M., Cuinat, S., Deb, W., Sirias, F.V., Weisz-Hubshman, M., Ketkar, S., Polak, U., Tran, A.A., Kearney, D., Hanchard, N.A., Kanca, O., Wangler, M.F., **Bellen, H.J.**, Lee, B.H., Baylor College of Medicine Center for Precision Medicine Models,Yamamoto, S. and Machol, K. 2025. C-terminal frameshift variants in GPKOW are associated with a multisystemic X-linked disorder. ***Genetics in Medicine*** 27:101429. PMID: 40221893; PMCID: PMC12435177.

359. Huang, Y., Xiang, Z., Xiang, Y., Pan, H., He, M., Guo, Z., Kanca, O., Liu, C., Zhang, Z., Zhan, H., Wang, Y., Bai, Q.R., **Bellen, H.J.,** Wang, H., Bian, S. and Mao, X. 2025. Biallelic MED16 variants disrupt neural development and lead to an intellectual disability syndrome**.** ***Journal of Genetics and Genomics*** 52: 1189-1198. PMID: 40254158.

360. Zhao, X., Li, Y., Zhang, S., Sudwarts, A., Zhang, H., Kozlova, A., Moulton, M.J.., Goodman, LD., Pang, Z.P., Sanders, A.R., **Bellen, H.J.**, Thinakaran, G. and Duan, J. 2025. Alzheimer's disease protective allele of *Clusterin* modulates neuronal excitability through lipid-droplet-mediated neuron-glia communication. ***Molecular Neurodegeneration*** 20:51. PMID: 39185522; PMCID: PMC11343251.

361. Park, Y.J., Lu, T.C., Jackson, T., Goodman, L.D., Ran, L., Chen, J., Liang, C.Y., Harrison, E., Ko, C., Chen, X., Wang, B., Hsu, A.L., Ochoa, E., Bieniek, K.F., Yamamoto, S., Zhu, Y., Zheng, H., Qi, Y., **Bellen, H.J.*** and L**i,** H.* 2025. Distinct systemic impacts of Aβ42 and Tau revealed by whole-organism snRNA-seq. ***Neuron*** 113:2065-2082. PMID: 40381615; PMCID: PMC12245608. *Corresponding authors.

362. Ma, M., Zheng, Y., Deng, M., Lu, S., Pan, X., Luo, X., Etoundi, M., Li-Kroeger, D., Worley, K.C., Burrage, L.C., Blieden, L.S., Allworth, A., Chen, W-L., Merla, G., Mandriani, B., Otten, C.E., Blanc, P., Rosenfeld, J.A., Dutta, D., Yamamoto, S., Wangler, M.F., Glass, I.A., Chen, J., Blue, E., Prontera, P., Rosain, J., Marlin, S., Lalani, S.R. and **Bellen, H.J.,** Undiagnosed Diseases Network (UDN). 2025. Heterozygous variants in *PLCG1* affect hearing, vision, cardiac, and immune function. ***eLife*** 13:RP95887. PMID: 40862571; PMCID: PMC12387771.

363. Kozlova, A, Zhang, S., Sudwarts, A., Zhang, H., Smirnou, S., Byeon SK, Thapa C, Sun, X., Stephenson, K., Zhao, X., Jamison, B., Ponnusamy, M., He, X., Schneider JA, Pandey A, Bennett DA, Pan, Z.P. Sanders, A.R., **Bellen, H.J.,** Thinakaran, G. and Duan, J. 2025. PICALM Alzheimer's disease risk allele causes aberrant lipid droplets in microglia. ***Nature*** 646:1178-1186. PMID: 40903578; PMCID: PMC12571902.

364. Kim, J.D., Chaudhary, S., Chen, W., Astin, J., Crosier, P.S., Yu, P., Cooke, J.P., Pownall, H.J., **Bellen, H.J.**, Le, N.T., Kiss, D.L., Wang, G., Rockson, S.G., Chen, H. and Fang, L. 2025. APOA1 binding protein promotes lymphatic cell fate and lymphangiogenesis by relieving caveolae-mediated inhibition of VEGFR3 signaling. ***Nature Communications*** 16:9286. PMID: 41120256; PMCID: PMC12540785.

365. Deger, J.M., Hannan, S.B., Gu, M., Strohlein, C.E., Goodman, L.D., Pasupuleti, S, Shaik, Z., Ma, L., Li, Y., Li, J., Stephens, M, Liu, Z., Al-Ramahi, I., Botas, J., Shaw, C., Kanca, O., **Bellen, H.J.*** and Shulman J.M.* 2025. Revealing the nervous system requirements of Alzheimer's disease risk genes in Drosophila. ***American Journal of Human Genetics*** 112:2870-2887. PMID: 40766358; PMCID: PMC12324250. *Corresponding authors.

366. Jay, K.L., Gogate, N., Hall, P.I., Ezell, K.M., Andrews, J.C., Jangam, S.V., Pan, H., Pham, K., German, R., Gomez, V., Jellinek-Russo, E., Storch, E.A.; Brain Gene Registry Consortium; Undiagnosed Diseases Network; Yamamoto, S., Kanca, O., **Bellen, H.J.,** Dierick, H.A., Cogan, J.D., Phillips, J.A., Hamid, R., Cassini, T., Rives, L., Pruthi, S., Chen, H-C., Posey, J.E. and Wangler, M.F. 2026. Resolving SLC6A1 variable expressivity with deep clinical phenotyping and Drosophila models. ***Human Genetics and Genomics Advances*** 7:100541. PMID: 41174879; PMCID: PMC12681531.

367. Dubey, SK., Chaubey, D., Ikenaga, C., Lin, W-W., **Bellen, H.J.** and Lloyd, T.E. 2026. Aberrant nuclear pore complex degradation contributes to neurodegeneration in VCP disease. ***Neuron*** 114:850-867.e8. PMID: 41475349; PMCID: PMC13123404.

368. Farmer, S.M., Xu, S., Yu, Y., Ye, X., Yang, H., Cai, J., Rios, B., Lin, W-W., Covarrubias, D., Chuong, V., Ye, L., Zylberberg, G., Wang, C., Furr-Stimming, E., Tong, Q., Kanca, O., **Bellen, H.J**., Moore, T.I. and Zhang, S. 2026. Rab4 spatially and functionally converges with Rab7 in the degradative endo-lysosomal network. ***Molecular Biology of the Cell*** 37:ar18. PMID: 41537736; PMCID: PMC12911854.

369. Bereshneh, A.H., Wilson, K.A., Pan X., Hannan, S., Cooper, M.A. , Diaz, L.E., Moses, T.M., Azamian, M.S., Scott, D.A., Billie, P.Y., Appendino, J.P., Scheffer, I.E., Kaspi, A., Bahlo, M., Hildebrand, M.S., Morgan, A.T., Ekure, E., Baylor College of Medicine Center for Precision Medicine Models, Shulman, J.M., Hildebrandt, F., Posey, J.E., Kruszka, P., Vilain, E., Yamamoto, S., Kanca, O., Berger, S.* and **Bellen, H.J.*** 2026. Rare heterozygous *de novo* variants in RAPGEF2 are associated with a neuro-developmental disorder. ***Genetics in Medicine*** 28:101685. PMID: 41556274; PMCID: PMC13060567. *Corresponding authors.

370. Gu, M., Zhao, J., Deng, M., Lin, G., Pan, X., Lin, W., Ma, M., Kim, J., Byeon, S. K., Pandey, A., Lange, L.M., Shaw, C. A., Kim, J., Trinh, J., Klein, C., Kanca, O., Shulman J.M.* and **Bellen, H.J.*** 2026. Two lysosomal genes ATP13A2 and GBA1 interact to drive neurodegeneration. ***Molecular Neurodegeneration*** 21:18. PMID: 41618367; PMCID: PMC13001375.

371. Huang, H-W., Tyrlik, M., Huang, P-W., Yeo, A.I., Kim, A-R., Perrimon, N., Tseng, C-Y., **Bellen, H.J**. and Ryoo, H.D. 2026. NECAP antagonizes light-induced Thodopsin-1 internalization to promote photo- receptor homeostasis. ***BioRxiv*** [Preprint] Jun 2 2026.06.01.729193. doi: 10.64898/2026.06.01.729193. PMID: 42282815; PMCID: PMC13252013.

372. Aceves-Ewing, N.M., Lanza, D.G., Marcogliese, P.C., Lu D., Hsu C-W., Hashimoto H., Gonzalez M., Christiansen, AE, Rasmussen, T.L., Ho, A.J., Gaspero, A., Sha, C., Dickinson, M.E., Yuan, B., Shayota, B.J., Pachter, S., Hu, X., Day-Salvatore, D.L., Mackay, L., Kanca, O., Wangler, M.F., Potocki, L., Rosenfeld, J.A., Lewis, R.A., Chao, H-T., Lee, B., Blieden, L., Wasserman, B.N., Bax, D.A., Ragge, N.K., Lee, S.; Undiagnosed Diseases Network; Baylor College of Medicine Center for Precision Medicine Models; Yamamoto, S., **Bellen, H.J.**, Burrage, L.C. and Heaney, J.D. 2026. Uncovering phenotupic expansion in AXIN2-related disorders through precision animal modeling. ***Genetics in Medicine*** 28: 102648. PMID: 42429102; PMCID: PMC13678866.

373. Lu, S., Ma, M., Hannan, S.B., Deng, M., Chen, H., Yu, Z., Goodman, L.D., Kim, H., Zhao, Y., Dubey, S.K., Lin, W-W., Pan, X., Dutta, D., Cuddapah, V.A., Rosenfeld, J.A., Luo, X., Liu, Z., Shulman, J.M. and **Bellen, H.J.** 2026**.** Epilepsy-associated digenic variants affecting an actin-mitochondria-glutamate pathway promote seizure susceptibility. ***Journal of Clinical Investigation*** 137:e198696. PMID: 42461707; PMCID: PMC13528942.

374. Deng, M., Ma, M., Gomez, V.A., Zhao, J., Lu, S., Hannan, S.B., Baskin, S., Khan, A., Latner, D.R., Hiatt, S.M., Cooper G.M., Parker, M.J., Carroll, T., Wortmann, S.B., Mayr, J.A., Boczek, N.J., Rasmussen, K., Kahn, E., Lanpher, B., Nava, C., Courtin, T., Gu, M., Ma, L, Zhao, Y., Hashimoto, H., Yamamoto, S., Liu, Z, Shulman, J.M.; Community Texome; Wangler, M.F., **Bellen, H.J.** 2026. Monoallelic variants in BRSK1 are associated with a neurodevelopmental disorder with or without epilepsy. ***American Journal of Human Genetics*** 2026 Sep 28:S0002-9297(26)00346-0. doi: 10.1016/j.ajhg.2026.09.005. Epub ahead of print. PMID: 42805187.

375. Mok, J-W., Welch, C.L., Dostalik, H.A., Tan, Z., Brautbar, A., DesCartes, M., Gray, E.T., Iglesias, A., McLean, S.D., Nutter, M., Daugherty, O., Begtrup, A., Wentzensen, I.M., Shen, Y., Young, D.M., Matzuk, M.M.; Baylor College of Medicine Center for Precision Medicine Models; Kanca, O., Wangler, M.F., **Bellen, H.J.**, Chung, W.K., Yamamoto, S. 2026. A rare recurring gain-of-function variant in

BMPR2 causes neurodevelopmental phenotypes in humans and flies. *American Journal of Human Genetics* 113: 2178-2194. PMID: 42767215; PMID: PMC13662929.

376. Ma, M., Lei, X., Li, J., Zheng, Y., Yuan, Y, Nitta, Y, Mao, X., Guo, Z., Lu, S., Deng, M., Pan, X., Kanca, O., Liu, S., Wang, H., Xiao, B., Schot, R., Demirdas, S., van Bever, Y., van Siegtenhorst, M., Barakat, T.S., Bian, S., **Bellen, H.J.**, Long, L. 2026. Bi-allelic variants in the secretory pathway gene SEC16A are associated with a neurodevelopmental disorder. ***Journal of Clinical Investigation*** 2026 Oct 13: e199882. Online ahead of print. PMID: 42867917.

BOOKS, BOOK REVIEWS, COURSES

1. **Bellen, H.J.** 1979. (Published Thesis) *Het sociaal welzijn in België (Social Welfare in Belgium).* Editor: National Fund of Scientific Research: University of Antwerp (RUCA), Antwerp, Belgium, 221p.
2. **Bellen, H.J.** 1980. (Course) *Cursus Genetica met Woordenlijst (Genetics: A textbook).* Editors: H.J. Bellen and J. Leroy: Student Publication Service of the University of Antwerp (RUCA), Antwerp, Belgium, 208p.
3. **Bellen, H.J.** 1999. (Editor Book) Neurotransmitter release. *In* Frontiers in Molecular Biology. Oxford University Press, New York, 437p. Reviewed in *Cell* (2000) 101:21-23.
4. **Bellen, H.J.** 2000. (Book Review) The fruitfly neuromuscular junction flexes its muscle. *Cell* 101:141-143.
5. **Bellen, H. J.** 2008. The development of the peripheral nervous system in the fruitfly *Drosophila*. *In* The Legacy of *Drosophila* Genetics: From 'defining the gene' to 'analyzing genome function'. Editor: E. Bier. The Biomedical & Life Sciences Collection, Henry Stewart Talks Ltd, London (online at http://www.hstalks.com/?t=BL0341680-Bellen).
6. **Bellen, H.J.** and Yamamoto, S. 2014. (Editor Book). Notch signaling: Methods and Protocols. Methods in Molecular Biology. Humana Press, New York, vol. 1187,351p.
7. **Kanca, O.** and Bellen, H.J. 2026. *Drosophila* as a Model Organism to stufy Mendelian Diseases. *In* Human Genetics, Problems and Approaches; Vogel, Motulsky, and Antonarakis. Editors: S.E. Antonarakis, C.C. Morton, and M.R. Speicher.

INVITED SEMINARS/SYMPOSIA SINCE 2000

"Genetic dissection of neurotransmitter release", Department of Molecular Pharmacology and Biological Chemistry, Northwestern University Medical School, Chicago, IL, January 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Cell Biology, Emory University School of Medicine, Atlanta, GA, April 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Anatomy, Morehouse School of Medicine, Atlanta, GA, April 2000

"Senseless is necessary and sufficient for PNS development in fruit flies", HHMI Scientific Meeting, Chevy Chase, MD, May 2000

"Genetic dissection of neurotransmitter release in fruit flies", Symposium of the Juan March Foundation, Madrid, Spain, May 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Human Genetics, University of Alabama at Birmingham, AL, June 2000

"Senseless is necessary and sufficient for peripheral nervous system organ development in *Drosophila*", EMBO 12th International Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2000

"Genetic dissection of neurotransmitter release", Joint Meeting of the American and Scandinavian Physiological Societies, Stockholm, Sweden, August 2000

"The genetic basis of hearing, balance, and the sixth sense", National Network in Neuroscience, Uppsala, Sweden, August 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Neurosciences, Case Western Reserve University, Cleveland, OH, October 2000

"The genetic basis of hearing, balance, and the sixth sense", Division of Neuroscience, The Children's Hospital, Harvard Medical School, Boston, MA, October 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Biology, Brandeis University, Waltham, MA, November 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Molecular Genetics, Albert Einstein College of Medicine, Bronx, NY, November 2000

"The genetic basis of hearing, balance, and the sixth sense", Department of Cell Biology, Duke University Medical Center, Durham, NC, April 2001

"Does vesicle trafficking affect pattern formation and development?" Center for Human Genetics, Flanders Interuniversity Institute for Biotechnology (VIB), University of Leuven, Belgium, May 2001

"The genetic basis of hearing, balance, and the sixth sense", HHMI Scientific Meeting, Chevy Chase, MD, September 2001

"The genetic basis of hearing, balance, and the sixth sense", Department of Molecular and Human Biology, Baylor College of Medicine, Houston, TX, September 2001

"The genetic basis of hearing, balance, and the sixth sense", Keynote Speaker, Southwest Regional Meeting for the Society for Developmental Biology, New Orleans, LA, September 2001

"The genetic basis of hearing, balance, and the sixth sense", Neurobiology of *Drosophila* Meeting, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, October 2001

"Genetic dissection of vesicle trafficking", Institute of Neurological Sciences, University of Pennsylvania, Philadelphia, PA, October 2001

"The genetic basis of hearing, balance, and the sixth sense", Centre National de Recherche Scientifique, University of Louis Pasteur, Strasbourg, France, November 2001

"Genetic dissection of vesicle trafficking", Max-Planck-Institute of Molecular Cell Biology and Genetics, Dresden, Germany, November 2001

"The role of endocytosis in synaptic vesicle formation and signaling", Neuroscience Discussion Group, Department of Zoology, University of British Columbia, Vancouver, Canada, May 2002

"The role of endocytosis in synaptic vesicle formation and developmental signaling pathways", Department of Molecular Genetics, Flanders Interuniversity Institute for Biotechnology (VIB), University of Antwerp, Belgium, June 2002

"The role of endocytosis in synaptic vesicle formation and developmental signaling pathways", Center for Human Genetics, Flanders Interuniversity Institute for Biotechnology (VIB), University of Leuven, Belgium, June 2002

"The role of Senseless in peripheral nervous system development", EMBO 13th International Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2002

"Defining the molecular path of neuronal precursor selection in flies and mice", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, September 2002

"Defining the molecular path of neuronal precursor selection in flies and mice", Department of Human Genetics, University of Utah, Salt Lake City, UT, October 2002

"Defining the molecular path of neuronal precursor selection in flies and mice", Blaffler Lecture, MD Anderson Cancer Research Center, Houston, TX, November 2002

"The role of endocytosis in synaptic vesicle formation and developmental signaling pathways", Department of Life Science, National Taiwan University, Taipei, Taiwan, November 2002

"Defining the molecular path of neuronal precursor selection in flies and mice", Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan, November 2002

"Defining the molecular path of neuronal precursor selection in flies and mice", Department of Physiology & Biophysics, University of Arkansas, Little Rock, AK, February 2003

"The role of endocytosis in synaptic vesicle formation and developmental signaling pathways", Department of Biochemistry, University of Iowa, Iowa City, IA, March 2003

"Endocytosis: vesicle formation and developmental signaling", Department of Biological Sciences, University of Illinois, Chicago, IL, April 2003

"Endocytosis: vesicle formation and developmental signaling", Department of Genetics, Cell Biology, and Development, University of Minnesota, Minneapolis, MN, May 2003

"Endophilin recruits Synaptojanin to uncoat vesicles", Genetics Society of Canada, Halifax, Canada, June 2003

"Senseless functions as a binary switch", Canadian *Drosophila* Meeting, Halifax, Canada, June 2003

"Wingless signaling at endosomes", European Meeting on Endocytosis, Maratea, Italy, September 2003

"Molecular mechanisms of neurotransmitter release in fruit flies", Boerhringer Ingelheim Fonds International Titisee Conferences, Göttingen, Germany, October 2003

"Wingless signaling at endosomes", Department of Cell Biology, Johns Hopkins University, Baltimore, MD, December 2003

"Defining the function of proteins required for neurotransmitter release", Department of Physiology, University of California, San Francisco, CA, December 2003

"The genome disruption project", Ernest Orlando Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, January 2004

"Defining the function of proteins required for neurotransmitter release", Picower Center for Learning and Memory, Massachusetts Institute of Technology, Cambridge, MA, February 2004

"Vesicle trafficking in *Drosophila*: from neurotransmission to development", HHMI Scientific Meeting, Chevy Chase, MD, March 2004

"Wingless signaling at endosomes", Department of Biochemistry and Cell Biology, and Vanzant Lecture Series, Rice University, Houston, TX, April 2004

"Defining the function of proteins required for neurotransmitter release", Program in Developmental Neurobiology and Plasticity, Kennedy Center for Research on Human Development, Vanderbilt University, Nashville, TN, May 2004

"Defining the function of proteins required for neurotransmitter release", Department of Molecular and Cellular Physiology, Stanford University School of Medicine, Stanford, CA, May 2004

"The role of Senseless in peripheral nervous system development", EMBO 14th International Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2004

"The role of dap160/intersectin in endocytosis", Gordon Conference on Lysosomes and Endocytosis, Andover, NH, June 2004

"Genetic and molecular mechanisms of synaptic transmission", Department of Cell and Molecular Physiology and the Neuroscience Center of UNC, University of North Carolina, Chapel Hill, NC, September 2004

"The GPS (Gfi1, Pag-3, Senseless) transcription factor family in nervous system development, lung cancer, cell survival, and ....", Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, September 2004

"The role of the Vo100kD V-ATPase subunit in synaptic vesicle secretion", Max Planck Institute, Gottingen, Germany, October 2004

"The role(s) of the exocyst in neurons: Lessons from sec15 in neural specification and synaptic specificity", Department of Biochemistry, University of Washington, Seattle, WA, November 2004

"Specifying neuronal precursors: Senseless and the bHLH proneural protein", Department of Biochemistry & Molecular Biophysics, Columbia University Medical Center, New York, NY, December 2004

"The GPS (Gfi1, Pag-3, senseless) transcription factors: roles in nervous system development and cancer", National Cancer Institute-Frederick, National Institutes of Health, Frederick, MD, December 2004

"Endocytosis: proteins required for kiss and run versus clathrin mediated processes", National Institutes of Environmental Health Science, National Institutes of Health, Research Triangle Park, NC, December 2004

"The role of the v-ATPase V_0 complex in neurotransmission", Department of Neurobiology, Harvard Medical School, Boston, MA, January 2005

"The GPS (Gfi1, Pag-3, senseless) transcription factors: roles in nervous system development and cancer", Department of Genetics, Case Western Reserve University, Cleveland, OH, February 2005

"The v-ATPase V_0 subunit a1 is required for a late step in synaptic vesicle exocytosis", Committee on Neuroscience, University of Arizona, Tucson, AZ, March 2005

"The Senseless and Gfi1 transcription factors in fly nervous system development and human ataxia: from proneural proteins to cell survival", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, September 2005

"The GPS (Gfi1, Pag-3, senseless) transcription factors: roles in nervous system development and cancer", Department of Neuroscience, Institut de Recherches Cliniques de Montréal, Montréal, Canada, September 2005

"The GPS (Gfi1, Pag-3, senseless) transcription factors: roles in nervous system development and cancer", Institut du cancer de Montréal, Canada, September 2005

"The Senseless and Gfi1 transcription factors in fly and mouse nervous system development, oncogenesis, and ataxia", Academia Sinica, Taipei, Taiwan, November 2005

"The role of the v-ATPase V_0 complex in neurotransmission", National Yang Ming University, Taipei, Taiwan, November 2005

"Atonal and Math1 in hearing and proprioception", Temasek Life Sciences Laboratory, The National University of Singapore, Temasek Life Sciences Laboratory, Singapore, November 2005

"The Senseless and Gfi1 transcription factors in fly and mouse nervous system development, oncogenesis, and ataxia", Temasek Life Sciences Laboratory, The National Univ. of Singapore, November 2005

"Atonal and Math1 in hearing and proprioception", National Centre for Biological Sciences, Bangalore, India, November 2005

"The role of the v-ATPase V_0 complex in neurotransmission", National Centre for Biological Sciences, Bangalore, India, November 2005

"The Senseless and Gfi1 transcription factors in fly and mouse nervous system development, oncogenesis, and ataxia", The National Centre for Biological Sciences, Tata Institute of Technology, Bangalore, India, November 2005

"The Senseless and Gfi1 transcription factors in fly and mouse nervous system development, oncogenesis, and ataxia", Department of Biological Sciences and Engineering, Indian Institute of Technology, Kanpur, India, November 2005

"Atonal and Math1 in hearing and proprioception", Department of Biological Sciences and Engineering, Indian Institute of Technology, Kanpur, India, November 2005

"The role of the v-ATPase V_0 complex in neurotransmission", Department of Biochemistry, University of Lausanne, Switzerland, November 2005

"Molecular mechanisms of exo- and endocytosis at synapses", Department of Physiology, Columbia University, New York, NY, December 2005

"Molecular mechanisms of exo- and endocytosis at synapses", Department of Cell Biology, Yale University, New Haven, CT, January 2006

"Flies to study mechanisms of neuronal degeneration and protection", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, February 2006

"Flies to study neuronal degeneration and protection", IBT Information Exchange Seminar Series, Institute of Biosciences and Technology, Houston, TX, April 2006

"Flies to study mechanisms of neuronal degeneration and protection", Plenary talk, Flanders Biotechnology Meeting, Ghent, Belgium, June 2006

"Recombineering, phiC31, Minos, and RMCE in a genome wide approach", EMBO 15th Internat'l Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2006

"Molecular mechanisms of exo and endocytosis at synapses", Gordon Research Conference, Colby Sawyer College, NH, July 2006

"Flies to study neuronal degeneration and protection", Department of Neurology Grand Rounds, Baylor College of Medicine, Houston, TX, August 2006

"Novel players in Notch signaling pathway", Department of Molecular Biology and Pharmacology, Washington University School of Medicine, St. Louis, MO, October 2006

"Novel players in Notch signaling pathway", Department of Cell Biology, The University of Alabama at Birmingham, AL, October 2006

"Mechanisms of neuronal degeneration and protection", National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, MD, November 2006

"Flies to study mechanisms of neural development", The Francis Schmitt Lecture in the Life Sciences, Department of Biology, Massachusetts Institute of Technology, Boston, MA, November 2006

"Genome-wide approaches to manipulate flies", and "Novel players in Notch signaling", Division of Biological Sciences, University of California, San Diego, CA, December 2006

"Three novel players in Notch signaling", Developmental Genetics Program, Skirball Institute of Biomolecular Medicine, New York University School of Medicine, NY, January 2007

"Flies to study neuronal degeneration and protection", HHMI Janelia Farm Research Center, Ashburn, VA, May 2007

"Rumi, a novel O-glucosyl transferase modifies EGF repeats of Notch", HHMI Janelia Farm Research Center, Ashburn, VA, May 2007

"Tweek and Hip 14 in synaptic transmission", Gordon Conference on Excitatory Synapses and Brain Function, Colby-Sawyer College, New London, NH, June 2007

"Novel players in Notch signaling", First Pan American Congress in Developmental Biology Meeting, Cancun, Mexico, June 2007

"Genome-wide approaches to manipulate flies", University of Minnesota 5th Annual International Conference on Transposition and Animal Biotechnology, Minneapolis, MN, June 2007

"Tweek and Hip 14 in synaptic transmission", Plenary Speaker, Vesicle Recycling Meeting, Brisbane, Australia, July 2007

"Genome-wide approaches to manipulate flies", University of Melbourne, Australia, July 2007

"Novel players in Notch signaling", Australian National University, Canberra, Australia, July 2007

"Rumi: O-glucosyltransferase required for Notch signaling", The Notch Meeting, Athens, Greece, Sept. 2007

"A genome-wide approach to manipulate flies", Improving the Genetic Toolkit for *Drosophila* Conference, HHMI Janelia Farm Research Center, Ashburn, VA, October 2007

"Novel proteins required for synaptic transmission", Keynote Speaker, Department of Physiology Retreat, University of Texas Health Science Center at San Antonio, TX, October 2007

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features: a possible mechanism for the pathogenesis of ALS", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, October 2007

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features: a possible mechanism for the pathogenesis of ALS", Institute for Molecular Medicine, Houston, TX, December 2007

"Genome-wide approaches to manipulate flies", Genetics Society of America Meeting, San Diego, CA, January 2008

"Genome-wide approaches to manipulate flies", Department of Pharmacology, University of California, Los Angeles, CA, January 2008

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features: a possible mechanism for the pathogenesis of ALS", Department of Pharmacology, University of California, Los Angeles, CA, January 2008

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features", Carnegie Mellon University, Pittsburgh, PA, February 2008

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features", HHMI Development meeting, Bethesda, MD, March 2008

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features", Program in Neuro- biology, University of Southern California, Los Angeles, CA, April 2008

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features", A.L. Chapman keynote lecturer, 29th Annual KUMC Student Research Forum, University of Kansas Medical Center, Kansas City, MO, April 2008

"Genome-wide approaches to manipulate flies", EMBO 16th International Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2008

"Lou Gehrig, ALS, flies, *C. elegans* and ephrin receptors share common features", XXth International Genetics Meeting, Berlin, Germany, July 2008

"Probing the function of genes that cause Amyotrophic Lateral Sclerosis", Institute of Genetics and Biophysics "Adriano Buzzati-Traverso", Consiglio Nazionale delle Ricerche, Naples, Italy, Oct. 2008

"Probing the function of genes that cause Amyotrophic Lateral Sclerosis", Department of Immunology, University of Ghent, Belgium, October 2008

"Novel players in the Notch pathway", Dept. of Immunology, University of Ghent, Belgium, October 2008

"Probing the mechanisms that cause Amyotrophic Lateral Sclerosis", Flanders Interuniversity Institute for Biotechnology (V.I.B.), University of Leuven, Department of Molecular and Developmental Genetics, Center for Human Genetics Laboratory of Neuronal Communication, Leuven, Belgium, October 2008

"New pathways and growth cone guidance receptors in the pathogenesis of ALS/Lou Gehrig's disease", Dept. of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, October 2008

"Probing the mechanisms that cause Amyotrophic Lateral Sclerosis", Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, December 2008

"Probing the mechanisms that cause Amyotrophic Lateral Sclerosis", Weizman Institute, Rehovot, Israel, December 2008

"Probing the mechanisms that cause Amyotrophic Lateral Sclerosis", Hebrew University, Jerusalem, Israel, December 2008

"Probing the mechanisms that cause Amyotrophic Lateral Sclerosis", Rappaport Institute, Technion, Haifa, Israel, December 2008

"Molecular pathology of Lou Gehrig's disease (ALS), a fly's view", Neuroscience Seminar Series, University of California, San Diego, CA, January 2009

"Growth cone guidance receptors and the pathogenesis of ALS/Lou Gehrig's Disease", Stowers Institute for Medical Research, Kansas City, MO, February 2009

"Novel Genome-wide Approaches to Manipulate Flies", Stowers Institute for Medical Research, Kansas City, MO, February 2009

"Expanding the coverage and versatility of the Gene Disruption Project collection", 50th Annual *Drosophila* Research Conference, Chicago, IL, March 2009

"Novel proteins that affect synaptic transmission", Freiburg Institute for Advanced Studies, Germany, March 2009

"Probing the mechanisms that cause Amyotrophic Lateral Sclerosis: an invertebrate viewpoint", Freiburg Institute for Advanced Studies, Germany, March 2009

"Pathogenesis of Lou Gehrig's disease/ALS: a Vap viewpoint", Walter Gehring's Symposium, University of Basel, Switzerland, March 2009

"The mitochondrial methionyl-tRNA synthetase's role in neurodegeneration", Keystone Symposia X6 on Mitochondrial Dynamics and Physiology, Whistler, British Columbia, Canada, March 2009

"Genome-wide manipulations of fruit flies: novel technologies" and "Probing the mechanisms that cause Amyotrophic Lateral Sclerosis", Biological Sciences Seminar Series, University of Missouri, Columbia, MO, April 2009

"Novel players in synaptic transmission", Biological Sciences, Rutgers University, NJ, September 2009

"Novel players in the Notch pathway", Notch Meeting, Athens, Greece, September 2009

"Tools for genome wide manipulations", Fly Tool Kit Meeting, HHMI Janelia Farm Center, Ashburn, VA, October 2009

"Pathogenesis of Lou Gehrig's disease/ALS: a Vap viewpoint", Developmental Biology Section, Institut Pasteur, Paris, France, November 2009

"Tools for genome wide manipulations", European *Drosophila* Research Conference, Nice, France, Nov. 2009

"Pathogenesis of Lou Gehrig's disease/ALS: a Vap viewpoint", Developmental Biology Section, University of the Bosphorus, Istanbul, Turkey, November 2009

"Molecular mechanisms of endocytosis at synapses", Department of Physiology, University of Texas Southwestern Medical Center, Dallas, TX, January 2010

"A forward genetic approach to study neurodegeneration", Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, March 2010

"Novel Players in the Notch Pathway", President's Research Seminar Series, Memorial Sloan-Kettering Cancer Center, New York, NY, March 2010

"Novel proteins that affect synaptic transmission", Keynote Lecture, Protein Trafficking Symposium, Hamburg, Germany, May 2010

"Tools for genome wide manipulations of flies", Korean Advanced Institute for Science and Technology, Dajun, Korea, June 2010

"Molecular mechanisms of endocytosis at synapses", Korean Advanced Institute for Science and Technology, Dajun, Korea, June 2010

"Tools for genome wide manipulations of flies", EMBO 17th International Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2010

"Mitochondria and neurodegeneration", Texas Children's Hospital Grand Rounds, Baylor College of Medicine, Houston, TX, August 2010

"Mitochondria and neurodegeneration: the X-flies", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, September 2010

"Mitochondria and neurodegeneration: the X-flies", Department of Biology, University of Dayton, Dayton, OH, September 2010

"Novel players in the Notch signaling pathway", Notch meeting, Athens, Greece, October 2010

"Players that affect endocytosis at synapses", Dept. of Biology, University of Houston, TX, October 2010

"Tools for genome wide manipulations of flies", Department of Biological Chemistry, John Hopkins University, Baltimore, MI, November 2010

"Mitochondria and neurodegeneration: the X-flies", Department of Biological Chemistry, Johns Hopkins University, Baltimore, MI, November 2010

"ALS, mitochondria and neurodegeneration", Academia Sinica, Taipei, Taiwan, January 2011

"ALS, mitochondria and neurodegeneration", National Taiwan University, Taipei, Taiwan, January 2011

"ALS, mitochondria and neurodegeneration", National Health Research Institutes (NHRS), Taipei, Taiwan, January 2011

"ALS, mitochondria and neurodegeneration", The 2nd Batsheva Seminar on Integrative Perspectives on the Development of the Musculoskeletal System, Ein Gedi, Israel, February 2011

"ALS, mitochondria and neurodegeneration", Department of Biology, California Institute of Technology, March 2011

"ALS, mitochondria and neurodegeneration", University of Texas Southwestern Medical Center, Dallas, TX, April 2011

"ALS, mitochondria and neurodegeneration", Instituto de Neurociencias CSIC-UMH, Alicante, Spain, May 2011

"ALS, mitochondria and neurodegeneration", Development and Growth Control Laboratory, ICREA and IRB, Barcelona, Spain, May 2011

"Tools for genome wide manipulations of flies", Development and Growth Control Laboratory, ICREA and IRB, Barcelona, Spain, May 2011

"Novel players in the Notch signaling pathway", EMBO Workshop Frontiers in Sensory Development, Barcelona, Spain, May 2011

"ALS, mitochondria and neurodegeneration", President's Lecture Series, Sanford Burnham Medical Research Institute, San Diego, CA, September 2011

"ALS, mitochondria and neurodegeneration", Pediatric Neurology Seminar, Baylor College of Medicine, September 2011

"Novel players in Notch signaling", The Notch Meeting, Athens, Greece, October 2011

"ALS, mitochondria and neurodegeneration", Distinguished Alumnus Lecture, University of California, Davis, October 2011

"Amyotrophic Lateral Sclerosis: Molecular pathogenesis", Beach Distinguished Lectures, Department of Biochemistry, Purdue University, West Lafayette, IN, October 2011

"Mitochondria and neurodegeneration", Beach Distinguished Lectures, Department of Biochemistry, Purdue University, West Lafayette, IN, October 2011

"ALS, mitochondria and neurodegeneration", Texas A&M Univ., College Station, TX, November 2011

"ALS, mitochondria and neurodegeneration", Division of Biological Sciences, University of California, San Diego, December 2011

"ALS, mitochondria and neurodegeneration", Pediatric Neurology Grand Rounds, Texas Children's Hospital, Houston, TX, January 2012

"Engineering flies", Department of Molecular and Human Genetics Annual Retreat, Baylor College of Medicine, Houston, TX, January 2012

"ALS, mitochondria and neurodegeneration", Department of Neuroscience, Farber Institute of Neuroscience, Thomas Jefferson University, Philadelphia, PA, March 2012

"Engineering flies", Plenary Speaker, 53rd Annual *Drosophila* Research Conference, Chicago, IL, March 2012

"ALS, mitochondria and neurodegeneration", HHMI Janelia Farm Res. Campus, Ashburn, VA, March 2012

"Mitochondria and neurodegeneration", Howard Hughes Medical Institute, Chevy Chase, MD, March 2012

"Mitochondria and neurodegeneration", The Rockefeller University, New York, NY, March 2012

"ALS, mitochondria and neurodegeneration", Department of Molecular Biosciences, Northwestern University, Evanston, IL, April 2012

"ALS, mitochondria and neurodegeneration", Institut de Recherche d'Immunologie et du Cancer (IRIC), Montreal, Canada, April 2012

"The X-flies and neurodegeneration", Montreal Neurological Research Institute, Canada, May 2012

"Mitochondria and neurodegeneration", Department of Ophthalmology, John Hopkins University School of Medicine, Baltimore, MD, May 2012

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", Society for Muscle Biology Meeting on Development, Function and Repair of the Muscle Cell, New York, NY, June 2012

"Tools for genome wide manipulations of flies", EMBO 18th International Workshop on the Molecular and Developmental Biology of *Drosophila*, Kolymbari, Crete, Greece, June 2012

"Notch EGFR-8 is required for Serrate/Jagged binding and Rab mediated trafficking of Delta and Scabrous", Gordon Research Conference on Notch Signaling in Development, Regeneration & Disease, Lewiston, ME, August 2012

"ALS, mitochondria and neurodegeneration", The Gill Award Lecture at Indiana University, Bloomington, IN, October 2012

"Engineering flies", Department of Biology, Indiana University, Bloomington, IN, October 2012

"ALS, mitochondria and neurodegeneration", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, October 2012

"Photoreceptor degeneration and novel trafficking pathways", Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, October 2012

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", Institute of Neuroscience, Shanghai, China, October 2012

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", Zhejiang University, Hangzhou, China, October 2012

"The X-flies and neurodegeneration", Zhejiang University, Hangzhou, China, October 2012

"ALS, mitochondria and neurodegeneration", Chinese Academy of Science, Beijing, China, November 2012

"ALS, mitochondria and neurodegeneration", Tsinghua University, Beijing, China, November 2012

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", Peking University, Beijing, China, November 2012

"MiMIC technology", HHMI Janelia Farm Research Campus, Ashburn, VA, March 2013

"Engineering Flies", Flanders Interuniversity Institute for Biotechnology (V.I.B.), University of Leuven, Department of Molecular and Developmental Genetics, Center for Human Genetics Laboratory of Neuronal Communication, Leuven, Belgium, April 2013

"Mitochondria and neurodegeneration", Department of Life Science, National Taiwan University, Taipei, Taiwan, May 2013

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", Institute of Biochemistry, Academia Sinica, Taipei, Taiwan, May 2013

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", National Health Research Institutes, Department of Life Sciences, Taiwan, May 2013

"Engineering flies", Asian Pacific *Drosophila* Research Conference, Seoul, Korea, May 2013

"ALS, mitochondria and neurodegeneration", Genetics Society of Australia, Sydney, Australia, July 2013

"Mitochondria and neurodegeneration", Garvan Institute, Sydney, Australia, July 2013

"Engineering flies", Australian Insect Research Conference, Sydney, Australia, July 2013

"Mitochondria and neurodegeneration", Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, September 2013

"Mitochondria and neurodegeneration", Flanders Interuniversity Institute for Biotechnology (V.I.B.), University of Leuven, Department of Molecular and Developmental Genetics, Center for Human Genetics Laboratory of Neuronal Communication, Leuven, Belgium, October 2013

"Novel players in the Notch signaling pathway", The Notch Meeting, Athens, Greece, October 2013

"Mitochondria and neurodegeneration", Biochemistry Seminar Series, University of California, San Francisco, CA, November 2013

"Engineering Flies", University of California, San Francisco, CA, November 2013

"Mitochondria and neurodegeneration", National Institutes of Health, Bethesda, MD, December 2013

"Mitochondria and neurodegeneration", Columbia University, New York, NY, December 2013

"Growth cone guidance receptors regulate mitochondrial dynamics in muscles via VapB: implications for ALS", Columbia University, New York, NY, December 2013

"Mitochondria and neurodegeneration", Cell Press LabLinks: Human Genetics, Methodist Research Institute, Houston, TX, January 2014

"The X-Flies: Unraveling disease mechanisms through forward genetics", Genomic Disorders 2014: The Genomics of Rare Diseases, Cambridge, UK, March 2014

"Engineering Flies", University of Cambridge, UK, March 2014

"VapB, ALS and ER stress", Target ALS Meeting, Columbia University, New York, NY, April 2014

"Mitochondria and neurodegeneration", Veterinary Sciences, Texas A&M Univ,, College Station, April 2014

"Mitochondria and neurodegeneration", Department of Molecular Biology and Genetics, Cornell University, Ithaca, NY, May 2014

"Engineering Flies", Dept. of Molecular Biology and Genetics, Cornell University, Ithaca, NY, May 2014

"Mitochondria and neurodegeneration", Colorado *Drosophila* Club, Univ. of Colorado at Boulder, June 2014

"The Demise of Neurons", Howard Hughes Medical Institute, Chevy Chase, MD, July 2014

"The Demise of Neurons", HHMI Farm Research Campus, Ashburn VA, September 2014

"The Demise of Neurons", The Notch Meeting VIII, Athens, Greece, September 2014

"The Demise of Neurons", Protein Trafficking Symposium, Eppendorf, Germany, September 2014

"Engineering Flies", FliAct, Leuven, Belgium, November 2014

"The Demise of Neurons", Flanders Interuniversity Institute for Biotechnology (VIB), University of Leuven, Belgium, November 2014

"The Demise of Neurons", Neuroscience Seminar Series, University of Massachusetts, Worchester, MA, December 2014

"Engineering Flies", University of Massachusetts, Worchester, MA, December 2014

"CRISPRING MIMICs", 56th Annual *Drosophila* Research Conference, Chicago, IL, March 2015

"Mitochondria and neurodegeneration", Genetics Section, Univ. of Florida, Gainesville, FL, March 2015

"Mitochondria and neurodegeneration", Zikha Neurogenetic Institute, University of Southern California, Los Angeles, CA, April 2015

"Proteins that cause ER stress and ALS in *Drosophila*", Target ALS Meeting, Columbia Univ., NY, April 2015

"Mitochondria and neurodegeneration", Keynote Lecture, University-wide 2015 Health Sciences Research Week, University of Iowa Carver College of Medicine, Iowa City, IO, April 2015

"Mitochondria and neurodegeneration", Department of Genetics, Yale School of Medicine, New Haven, CT, April 2015

"Engineering Flies", Bio21 Molecular Science & Biotechnology Institute, University of Melbourne, Australia, May 2015

"What flies tell us about human neurodegenerative diseases", Miegunyah Fellowship Lecture, University of Melbourne, Australia, May 2015

"Mitochondria and neurodegeneration", LaTrobe University, Melbourne, Australia, May 2015

"Mechanisms underlying the demise of neurons in ALS", Florey Institute of Neuroscience (Parkville), Melbourne, Australia, May 2015

"Mitochondria and neurodegeneration", Florey Institute of Neuroscience (Austin), Melbourne, Australia, May 2015

"Mechanisms underlying the demise of neurons and the role on WAC in mTOR signaling", Peter Maccallum Institute, Melbourne, Australia, June 2015

"Mechanisms underlying the demise of neurons in Friedreich's Ataxia", Monash University, Melbourne, Australia, June 2015

"Mechanisms underlying the demise of neurons", Developmental Genetics and Stem Cell Biology Programs, Skirball Institute, New York University School of Medicine, NY, October 2015

"Funding resources and technology needs for the *Drosophila* community", Workshop, HHMI Janelia Farm Research Campus, Ashburn, VA, February, 2016

"Mechanisms underlying the demise of neurons", HUGO Human Genome Meeting, Houston, TX, Feb. 2016

"Mechanisms underlying the demise of neurons", Neuroscience Institute, University of Tennessee Health Science Center, Memphis, TN, March 2016

"Mechanisms underlying the demise of neurons", Department of Developmental and Regenerative Biology, Icahn School of Medicine, Mount Sinai, NY, April 2016

"Mechanisms underlying the demise of neurons", Department of Entomology, University of Maryland, College Park, MD, April 2016

"Mechanisms underlying the demise of neurons", HHMI Scientific Meeting, Maryland, MD, April 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Institute of Neuroscience, University of Oregon, Eugene, OR, May 2016

"Mitochondria and the demise of neurons", The Vollum Seminar Series, Vollum Institute, Oregon Health & Science University, Portland, OR, May 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Clinical and Translational Science Institute (CTSI), David Geffen School of Medicine, Univ. of California, Los Angeles, CA, May 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", The Edward J. Masoro Distinguished Lecture, Department of Physiology Research Symposium, University of Texas Health Science Center, San Antonio, TX, May 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Plenary talk, FASEB Science Research Conf., "Lipid Droplets: Dynamic Organelles in Metabolism and Beyond", Snowmass, CO, July 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Plenary talk, Gordon Research Conference on Visual System Development, Mount Snow, West Dover, VT, August 2016

"The fly eye as a discovery tool for human neurodegenerative disease", Gill Symposium on Glia, Linda and Jack Gill Center for Biomolecular Science, Indiana University, Bloomington, IN, September 2016

"The role of mitochondria, glia, and lipid droplets n the demise of neurons", Keynote Lecture, Gill Symposium on Glia, Linda and Jack Gill Center for Biomolecular Science, Indiana University, Bloomington, IN, September 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Developmental Genomics Section, Translational and Functional Genomics Branch, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD, September 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Department of Cell Biology, University of Texas Southwestern Medical Center, Dallas, TX, October 2016

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Graduate Seminar Talk, Department of Biology and Biotechnology, Worcester Polytechnic Institute, Worcester, MA, October 2016

"The fly to study disease associated variants", UDN Meeting, Washington, DC, November 2016

"The fly to study disease associated variants", International UDN Meeting, Tokyo, Japan, November 2016

"Flies as a discovery tool for human diseases", John Lawrence Seminar Series in Biosciences, Biological System & Engineering Division of Lawrence Berkeley National Laboratory, CA, December 2016

"Flies to study disease associate variants and pathogenic mechanisms", Program in Developmental Biology, Baylor College of Medicine, Annual Retreat, Galveston, TX, February 2017

"The Undiagnosed Diseases Network and the discovery of new human genes", Alliance for Genome Resources (AGR), National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, MD, March 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Regulatory Networks in Health and Disease Seminar Series, Duke University, Durham, NC, March 2017

"Mechanisms underlying the demise of neurons", Vollum Institute, Oregon Health & Science University, Portland, OR, March 2017

"Re-engineering flies", 58th Annual *Drosophila* Research Conference, San Diego, CA, April 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Cell and Developmental Biology Seminar Series, University of Michigan, Ann Arbor, MI, April 2017

"Flies as a diagnostic tool for human disease in the Undiagnosed Diseases Network and for deciphering pathogenesis", Genetics Training Program and CMB Short Course Seminar, University of Michigan, Ann Arbor, MI, April 2017

"Re-engineering flies", Vollum Institute, Oregon Health & Science University, Portland, OR, May 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Keynote Speaker, 2017 Triangle Fly Symposium (NCSU, Duke, NCU), McKimmon Center, North Carolina State University, Raleigh, NC, May 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", European School of Molecular Medicine (SEMM), Institute of Molecular Oncology (IFOM), Milan, Italy, June 2017

"Flies to study disease associated variants and pathogenic mechanisms", Protein Trafficking in Health and Disease, 4th International (GRK1459) Symposium, Hamburg, Germany, June 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Distinguished Lecture, Biomedicine Discovery Institute, Monash University, Melbourne, Australia, June 2017

"The Undiagnosed Diseases Network and the discovery of new human genes", Symposium on Model Organisms in Human Health, Balgownie Estate, Yarra Valley, Victoria, Australia, June 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Annual Conference of the Genetics Society of AustralAsia (with the NZ Society for Biochemistry & Molecular Biology), University of Otago, Dunedin, New Zealand, July 2017

"The Model Organism Screening Center in the Undiagnosed Diseases Network", National Institutes of Health Steering Committee Meeting of the UDN, Washington DC, July 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Plenary Lecture at the National Veterinary Scholars Symposium of the Association of American Veterinary Medical Colleges, National Institutes of Health, Washington DC, August 2017

"Mitochondrial dysfunction in neurons: lipid synthesis in neurons versus lipid droplets in glia", Seymour Benzer Keynote Speaker, Neurobiology of *Drosophila* Meeting, Cold Spring Harbor Laboratory, Cold

Spring Harbor, NY, October 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Keynote Lecture, The Inaugural Asia-Pacific Drosophila Neurobiology Conference, Wuhan, China, October 2017

"Flies to identify undiagnosed disease: identifying genes that cause disease and their pathogenic mechanisms", Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, October 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Keynote Speaker, Neuroscience and Behavioural Disorders Programme and Retreat, Duke-NUS Medical School, Swiss Club, Singapore, October 2017

"Tackling rare disease in flies: A case for Parkinson Disease", Temasek Life Sciences Laboratory (TLL), National University of Singapore, October 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration", Institute of Molecular Biology (IMB) Symposium, Academia Sinica, Taipei, Taiwan, November 2017

"Mitochondria, lactate, and lipid droplets in neurodegeneration: Implications for Alzheimer Disease", John H. Blaffer Leture Series, MD Anderson Cancer Center, Houston, TX, November 2017

"Drosophila to identify and unravel pathogenic mechanisms of neurologic diseases", Division of Biology Seminar Series and Genetics Seminar Series, University of California, San Diego, December 2017

" Drosophila to identify and unravel pathogenic mechanisms of neurologic diseases", Department of Molecular Medicine Seminar Series, The Scripps Research Institute, La Jolla, CA, January 2018

"Drosophila to unravel pathogenic mechanisms of neurologic diseases: a Zika target and ApoE4 in Alzheimer's Disease", Frontiers in Biology Seminar Series, Department of Biochemistry, Stanford, CA, February 2018

"What flies can tell us about Zika induced microcephaly and the pathogenesis of Alzheimer Disease", Neuroscience Seminar Series, Program in Neuroscience, University of Arizona, Tucson, AZ, March 2018

"Flies tell us something about Zika induced microcephaly and the pathogenesis of Alzheimer Disease", Stanley N. Cohen Lecture, Perelman School of Medicine of the University of Pennsylvania, Philadelphia, PA, May 2018

"Axes of evil: Lipid droplets/ ApoE in AD and retromer/ ceramide in PD", Max Planck Institute, Annual Retreat Schloss Ringberg, Bavaria, Germany, May 2018

"Molecular pathogenesis of neurodegenerative disease modeled in Drosophila", 83rd Cold Spring Harbor Laboratory Symposium on Quantitative Biology addressing Brains & Behavior: Order & Disorder in the Nervous System, Cold Spring Harbor, NY, May/June 2018

"Lipid droplets and pathogenesis of Alzheimer Disease", 'Lipid Droplets and Integrative Physiology' Session, FASEB Lipid Droplet on the Move from Health to Disease Conference, Steamboat Springs, CO, June 2018

"Ceramides in Parkinson's disease", HHMI Scientific Meeting, Janelia Farm Research Campus, Ashburn, VA, September 2018

"Lipid dysfunction in neurodegenerative disease", Institute for Brain and Spinal Cord, Institut du Cerveau et de la Moelle Epiniere (ICM), Paris, France, September 2018

"Lipid dysfunction in neurodegenerative disease", Student Committee on Development, Regeneration, and Stem Cell Biology, University of Chicago, IL, October 2018

"Diagnosing diseases with flies", Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, November 2018

"Gene discovery mediated by the Drosophila Model Organism Screening Center", Functional Genomics Symposium, Sidra Medicine's flagship Annual Conference, Doha, Qatar, December 2018

"Current state of the art: Functional data, analysis and interpretation", National Human Genome Research Institute, Strategic Planning Workshop: From Genome to Phenotype: Genomic Variation Identifica-tion, Association, and Function in Human Health and Disease, Bethesda, MD, January 2019

" Probing the role of glial endocytic genes and ROS on AB42-induced neurotoxicity", Texas Alzheimer's Research and Care Consortium (TARCC), Austin, TX, January 2019

"Identification and pathogenic mechanisms of human disease using Drosophila", Harvard Medical School, Department of Genetics and Division of Genetics and Genomics, Boston Children's Hospital, Feb. 2019

"How flies contribute to the discovery of human disease and their pathogenic mechanism", Opening Lecture at the Grand Conference of the Academie des Sciences, Insects: friends, foes and models, Institut de France, Paris, March 2019

"Lipids and the demise of neurons", Keynote Speaker at the Chicago Chapter of Society for Neuroscience, Chicago, IL April 2019

"Peroxidated lipids and ceramides in neurodegenerative disease", NINDS Neuroscience Seminar Series, Bethesda, MD, May 2019

"Lipids in neurodegenerative diseases", Keynote Speaker, Colloquium on the Biology of Human Aging, Brown University, Providence, RI, May 2019

"Lipids and the demise of neurons", Department of Molecular and Cellular Biology Seminar Series, Baylor College of Medicine, Houston, TX, October 2019

"Lipids and the demise of neurons", Brains and Behavior Distinguished Lecture Series, Georgia State University, Atlanta, GA, October 2019

"Lipids and the demise of neurons", Formal Research Seminar Series, Buck Institute, Novato, CA, Nov. 2019

"Fruit flies and the diagnoses of rare diseases", BioMarin & Buck Institute, Novato, CA, November 2019

"A Zika virus protein inhibits a novel microcephaly-associated pathway", National Mosquito-Borne Diseases Control Research Center, Nat'l Health Research Institutes (NHRI), Zhunan Campus, Taiwan, Nov. 2019

"Defects in lipid metabolism in Alzheimer and Parkinson disease models", Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan, November 2019

"Engineering flies", Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan, November 2019

"The fruit fly at the interface of diagnosis and pathogenic mechanisms of rare and common human disease", National Taiwan University, Taipei, Taiwan, November 2019

"Flies facilitate rare disease diagnosis and therapeutic avenues ", Department of Molecular and Human Genetics, Baylor College of Medicine, Annual Retreat, Galveston, TX, January 2020

"ACOX1 Disorder - mechanism of disease and treatment", Undiagnosed Diseases Network, External Collaborators Meeting, Harvard Medical School, Boston, MA, January 2020

"The fruit fly at the interface of diagnosis and pathogenic mechanisms of rare and common human disease", Department of Physiology and Neurobiology Research Seminar Series, University of Connecticut, Storrs-Mansfield, CT, January 2020

"Flies facilitate rare disease diagnosis and therapeutic avenues", TAGC 2020, The Allied Genetics Conference, GSA, Virtual Meeting, April 2020

"ROS, peroxidated lipids and the neuroprotective role of lipid droplets in glial cells", FASEB Science Research Conference, The Lipid Droplets Conference, Virtual Meeting, July 2020

"The study of rare neurological diseases drives discoveries for common diseases", Keynote Speaker, UCL Institute of Health Ageing Symposium: 'Neurodegeneration in Flies', University College London, UK, Virtual Meeting, September 2020

"Lipids and the demise of neurons; from rare to common diseases", 'From Cell to Organism: Cell Biology, Developmental Genetics, and Stem Cell Biology' Seminar Series, Developmental Genetics Program, Skirball Institute of NYU School of Medicine, NY, Virtual Seminar, October 2020

"Lipids and the demise of neurons; from rare to common diseases", Department of Cellular Biology, University of Georgia, Athens, GA, Virtual Seminar, November 2020

"Lipids and the demise of neurons; from rare to common diseases", Deutsches Zentrum für Neuro-degenerative Erkrankungen (DZNE), Center for Neurodegenerative Diseases, Bonn and other DZNE research sites, Germany, Virtual Seminar, November 2020

"Lipids and the demise of neurons; from rare to common diseases", Instituto de Neurociencias CSIC-UMH, Univ. Miguel Hernandez-Campus de San Juan, Alicante, Spain, Virtual Seminar, November 2020

"The Model Organisms Screening Center for the Undiagnosed Diseases Network: Mitchell's disease a model for Multiple Sclerosis?", Australian Functional Genomics Conference, Melbourne, Australia, Virtual Meeting, November 2020

"Engineering Flies", Drosophila Methods Workshop, The Company of Biologists, London, UK, Virtual Meeting, January 2021

"ROS, peroxidated lipids and the neuroprotective role of lipid droplets in glial cells", 18th European Neurobiology of Drosophila Conference, Toledo, Spain, Virtual Meeting, May 2021

"Engineering Flies", The Boston Area Drosophila Meeting, Boston, MA, Virtual Meeting, June 2021

"Tackling human gene function in model organisms", Genetics Society of America, Virtual Seminar Series, June 2021

"Exploring gene function across humans and model organisms", Quantitative & Computational Biosciences Graduate Program, Baylor College of Medicine, Houston, TX, Virtual Seminar, August 2021

"Lipids and the demise of neurons; from rare to common diseases", Brain and Mind Research Institute | Weill Cornell Medicine, Neuroscience PhD Program | Weill Cornell Graduate School of Medical Sciences, NY, Virtual Seminar, September 2021

"GlucosylCeramide in the pathogenesis of rare Lysosomal Storage Disease and Parkinson's Disease", 2021 Welch Conference on 'Frontiers of Brain Science and Medicine', Houston, TX, Virtual Meeting, October 2021

"Engineering Flies", Indian Drosophila Research Conference (InDRC), Virtual Meeting, December 2021

"Tackling human gene function in model organisms", Department of Genetics, Washington University, St Louis, MO, Virtual Seminar, February 2022

"Neuronal ROS-induced glial lipid droplet formation is altered by loss of Alzheimer's disease–associated genes that effect lipid transfer and endocytosis", International Symposium on the Development and Aging of Synapses, Capital University of Medical Sciences, Beijing, China, Virtual Meeting, February 2022

"The Texome Project: Genomic Medicine for Underserved Communities", National Human Genome Research Institute (NHGRI), Virtual Seminar, February 2022

"Glucosylceramides are generated by neuronal activity and transported to glia via exosomes for degradation upon release of a glial TGFbeta/BMP signal", 'Glycoinformatics: At the interface of data and disease, NIH Common Fund Symposium, Virtual Meeting, April 2022

"Fruit flies to study rare and common diseases", Cure Epilepsy, September 2022

"ROS-induced lipid droplet formation: Implications forAlzheimer Diseasse", NIH Alzheimer's Disease Sequencing Project Consortia (ADSP), October 2022

"Development of resources and technologies for enhancing rigor, reproducibility and translatability of animal models in biomedical research", NIH Geroscience Meeting, October 2022

"Fly neurobiology: Accomplishments and highlights of talented mentees", Baylor College of Medicine, Jan and Dan Duncan Neurological Research Institute, Houston, TX, October 2022

"Shingolipids and the demise of neurons: from rare to common diseases", Sanofi Meeting, Amsterdam, The Netherlands, April 2023

"Methods to facilitate CRIMIC based genome editing and its impact on the Undiagnosed Diseases Network", The NIH BRAIN Initiative Multi-Council Group Meegting, Virtual Meeting, May 2023

"Lipid Droplets and Alzheimer Disease", 16th Canadian Neuroscience Meeting, Montreal, May 2023

"The Model Organisms Screening Center for the Undiagnosed Diseases Network", NIH Brain Consortium, Bethesda, MD, June 2023

"Using Drosophila to help in the diagnosis of undiagnosed diseases", XXIII International Congress of Genetics, Melbourne, Australia, July 2023

"Sphingolipids and the demise of neurons: from rare to common neurological diseases", Asia Pacific Drosphila Research Conference, Cairns, Australia, July 2023

"The Model Organisms Screening Center for the Undiagnosed Diseases Network", Mouse KOMP Conference, Houston, TX, November 2023

"The study of rare pediatric neurological diseases drives discoveries in common diseases", Department of Pediatrics, Univeristy of Pittsburg, PA, December 2023

"Lipid metabolism defects in AD and PD models", Department of Integrative Biology and Pharmacology, The Univeristy of Texas Health Science Center, Houston, TX, January 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases, TAGC24, The Allied Genetics Conference, Keynote and Gruber Prize Presentation, Oxon Hill, MD, March 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", Jackson Laboratory, 65th McKusick Course, Bar Harbor, MA, July 2024

"Lipid metabolism defects in Alzheimer's and Parkinson's disease models", Kern lipid conference, Snowmass, CO, August 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", Developmental Biology Symposium in honor of Michael O'Connor, University of Minnesota, Minneapolis, MN, October 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", Chan Zuckerberg Initiative Science in Society Meeting, San Jose, CA, October 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", Department of Biochemistry, Virginia Commonwealth University, Richmond, VA, November 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", Office of Research Infrastructure Programs (ORIP), National Institutes of Health, Bethesda, MD, November 2024

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", Oklahoma Medical Research Foudation (OMRF), Oklahoma City, OK, November 2024

"Fruit flies to study rare and common disease, Genomics Discovery Translational Series", Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Virtual Meeting, January 2025

"Glial Lipid Droplets in Alzheimer 's disease and Sphingolipids in Parkinson's disease", Inaugural Symposium on lipids and neurological disease, Department of Cell Biology, University of Texas Southwestern Medical Center, Dallas, TX, May 2025

"Glial Lipid Droplets in Alzheimer 's disease and Sphingolipids in Parkinson's disease", Jackson Laboratory, 66th McKusick Course, Bar Harbor, MA, July 2025

"The role of lipids in neurodegenerative diseases", Department of Biochemistry and Biophysics, Department of Biomedical Engineering, Texas A&M University, College Station, TX, September 2025

"The study of rare pediatric neurological diseases drives discoveries in common diseases", Plenary Talk, Spotiight Symposium Series, University of Buffalo College of Arts and Sciences, SUNY, Buffalo, NY, April 2026

"The study of rare pediatric neurologic diseases in flies drives discoveries in common diseases", The University of British Columbia, Life Sciences Institute, Vancouver Campus, BC, Canada, May 2026

"Glial Lipid Droplets in Alzheimer 's disease", Plenary Talk, Federation of American Societies for Experimental Biology (FASEB), Lipid Droplets/ Phospholipids Conf., Scottsdale, AZ, July 2026

"The study of rare pediatric neurological diseases drives discoveries in common diseases", National Institutes of Health Comparative Medikcine Resource Directors Meeting, Bethesda, MD, August 2026

"The study of rare pediatric neurological diseases drives discoveries in common diseases", Keynote Talk, Taiwan Society for Neuroscience Meeting, Taiwan Neuroscience Alliance, Taipei, Taiwan, August 2026

"The study of rare pediatric neurological diseases drives discoveries in common diseases", Academica Sinica, Institute of Biological Chemistry,Taipei, Taiwan, August 2026

"The study of rare pediatric neurological diseases drives discoveries in common diseases", Rachford Lecture, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, October 2026

"TBA", HHMI Janelia Conference "Cell Communication across time scales", Janelia Research Campus, Ashburn, Virginia, November 2027

"TBA", Northwestern University, Feinberg Neuroscience Institute, Dinstinguished Lecture Series, Chicago, IL, April 2027

POSTDOCTORAL TRAINEES/ RESEARCH ASSOCIATES - TIME IN THE BELLEN LAB - CURRENT POSITIONS

Elizabeth D. Eldon, Ph.D., 1990-1992, Emerita & Former Faculty, California State Univ., Long Beach, CA
Pyung-Lim Han, Ph.D., 1992-1993, Professor, Ewha Womans University, Seoul, Korea
Adi Salzberg, D.Sc., 1992-1995, Professor and Vice President for Diversity and Inclusion, Technion-Israel Institute of Technology, Haifa, Israel
Ja-Kyeong Lee, Ph.D., 1993-1995, Professor, Inha University Medical School, Incheon, Korea
J. Troy Littleton, Ph.D., 1994-1996, Professor, Massachusetts Institute of Technology, Cambridge, MA
Manzoor A. Bhat, Ph.D., 1994-1999, Professor and Vice Dean of Research, University of Texas Health Science Center, San Antonio, TX
Bing Zhang, Ph.D., 1997-1999, Professor, University of Missouri, Columbia, MO
Ming-Li Zhao, Ph.D., 1997-2000, DBA Team Lead, Accenture, Houston, TX
Bassem A. Hassan, Ph.D., 1996-2001, Team Leader, Brain and Spine Institute, Institut du Cerveau et de la Moelle Epiniere (ICM), Paris, France
Riitta Nolo, Ph.D., 1996-2002, (Retired) Research Scientist, University of Texas, MD Anderson Cancer Center, Houston, TX
Ole Kjaerulff, M.D./Ph.D., 2001-2002, Associate Professor, University of Copenhagen, Denmark
Cornelius Boerkoel, M.D./Ph.D., 2001-2002, Clinical Professor, Medical Genetics, University of British Columbia, Vancouver, Canada
Deeann Wallis Schultz, Ph.D., 2000-2003, Associate Professor, University of Alabama, Birmingham, AL
Giuseppa Pennetta, Ph.D., 1997-2004, Senior Lecturer, University of Edinburgh, United Kingdom
Koenraad K. Norga, M.D./Ph.D., 2000-2004, Professor, Head of Clinic, Pediatric Oncology, Antwerp University Hospital (UZA), Belgium
Bart Dermaut, M.D./Ph.D., 2003-2004, Professor and Clinical Geneticist, Ghent University, Belgium
Peter Robin Hiesinger, Ph.D., 2000-2006, Professor, Free University Berlin and NeuroCure Cluster of Excellence, Charité University Hospital, Berlin, Germany
Hamed Jafar-Nejad, M.D., 2000-2006, Professor, Molecular & Human Genetics, Baylor College of Medicine, Houston, TX
Rong Grace Zhai, Ph.D., 2001-2006, Vice Chair for Research and Professor, Neurology, University of Chicago, IL
Patrik Verstreken, Ph.D., 2003-2006, Scientific Director and Group Leader, Center for Brain & Disease Research, Flanders Interuniversity Institute for Biotechnology (V.I.B.), University of Leuven, Belgium
Tanja Rosenmund, Ph.D., 2004-2006, Director, Spark Berlin Institute of Health, Charité, Berlin, Germany
Hiroshi Tsuda, M.D./Ph.D., 2005-2007, Visiting Professor, Tohoku and Toho Univeristy and Visiting Lecturer in Neurology, Juntendo University, Tokyo, Japan
Amir Fayyazuddin, Ph.D., 2000-2008, Medical Geneticist, Astellas Pharma, San Diego, CA
Prajal Patel, Ph.D., 2007-2009, Research Support Specialist, Wolfner Lab, Cornell University, Ithaca, NY
Chao Tong, Ph.D., 2006-2011, Professor, Zhejiang University, Hangzhou, China
Chi-Kuang Yao, Ph.D., 2006-2011, Associate Professor, Academia Sinica, Taipei, Taiwan
Yong-Qi Lin, Ph.D., 2007-2011, Sr Research Fellow (retired), Charles Perkins Centre, University of Sydney, Australia
Timothy R. Mahoney, Ph.D., 2008-2011, Medical Science Liaison, Tempus Labs, Inc., Chicago, IL
Michael F. Wangler, M.D., 2009-2011, Associate Professor, Molecular & Human Genetics, Baylor College of Medicine and Jan and Dan Duncan Neurological Research Institute, Houston, TX
Nikolaos Giagtzoglou, Ph.D., 2004-2013, Senior Director of CNS Program Research, Envisagenics, New York, NY
Shinya Yamamoto, D.V.M., Ph.D., 2011-2013, Associate Professor, Molecular & Human Genetics, Baylor College of Medicine and Jan and Dan Duncan Neurological Research Institute, Houston, TX
Elaine S. Seto, M.D., PhD., 2011-2013, Assistant Professor, Baylor College of Medicine and Pediatric Neurologist and Medical Director, EEG, Texas Children's Hospital, Houston, TX

Koen J.T. Venken, Ph.D., 2007-2013, Independent Consultant, Genetic Platform Architect, Translatonal Tool and Assay Leader, Houston, TX
Manish Jaiswal, Ph.D., 2007-2016, Prinicipal Investigator, TIFR Centre for Interdisciplinary Sciences, Hyderabad, India
Hector Sandoval, Ph.D., 2009-2016, Lead Medical Science Liaison, Bayer Pharmaceuticals, Houston, TX
Wan Hee Yoon, Ph.D., 2011-2017, Associate Professor, Oklahoma Medical Research Foundation, Oklahoma City, OK
Sonal Nagarkar Jaiswal, Ph.D., 2012-2017, Senior Scientist, Centre for Cellular and Molecular Biology, Hyderabad, Telangana, India
Ning Liu, Ph.D., 2015-2017, Assistant Professor, Baylor College of Medicine and Associate Director of Biochemical Genetics, Baylor Genetics, Houston, TX
Sathiyanarayanan Manivannan, Ph.D., 2015-2017, Senior Scientific Consulatant, Qiagen, Columbus, OH
Xi Luo, Ph.D., 2015-2017, Assistant Professor, Baylor College of Medicine and Associate Clinical Director, Baylor Genetics, Houston, TX
Pei-Tseng Lee, Ph.D., 2013-2018, Gene Editing Scientist, WellGenetics, Taipei, Taiwan
Megan Campbell, Ph.D., 2014-2018, Associate Director and Medical Writing, Vertex Pharmaceuticals, Boston, MA
Hsiao-Tuan Chao, M.D., Ph.D., 2016-2019, Associate Professor, Pediatrics, Baylor College of Medicine and Jan and Dan Duncan Neurological Research Institute, Houston, TX
David Li-Kroeger, Ph.D., 2012-2019, Assistant Professor, Neurology, Baylor College of Medicine
Nichole Link, Ph.D., 2013-2020, Assistant Professor, Univ. of Utah School of Medicine, Salt Lake City, UT
Scott Barish, Ph.D., 2018-2020, Epigenetic Reprogramming Scientist, e184, Portland, OR
Guang Lin, Ph.D., 2011-2020, Assistant Professor, Genetics, Baylor College of Medicine
Oguz Kanca, Ph.D., 2015-2021, Assistant Professor, Genetics, Baylor College of Medicine
Paul Marcogliese, Ph.D., 2016-2022, Assistant Professor, University of Manitoba, Winnipeg, Canada
Yiming Zheng, PhD, 2020-2022, Assistant Professor, Xiamen University, Xiamen, China
Hyunglok Chung, Ph.D., 2016-2023, Assistant Professor, Weil Cornell Medicine, Methodist Hospital Research Institute, Houston, TX
Dongxue Mao, Ph.D., 2018-2023, Data Scientist, MD Anderson Cancer Center, Houston, TX
Yan Huang, Ph.D., 2019-2023, Associate Investigator, Huan Children's Hospital, Hunan, China
Zelha Nil, Ph.D., 2019-2023, Research Professional 6, University of Minnesota, Twin Cities, MI
Matthew Moulton, Ph.D., 2017-2024, Assistant Professor, Texas A&M, College Station, TX
Debdeep Dutta, Ph.D., 2019-2024, Assisstant Professor, Indian Institute of Technology, Kanpur, India
Xueyang Pan, Ph.D., 2020-2024, Fellow, Clinical Biochemical Genetics, Baylor College of Medicine
Ali Bereshneh, Ph.D., 2022-2026, Fellow, Clinical Laboratory Genetics and Genomics, U Penn, Chidren's Hospital of Philadelphia, PA
Mengqi Ma, Ph.D., 2019-present
Burak Tepe, Ph.D., 2019-present
Lindsey Goodman, Ph.D., 2019-present
Shenzhao Lu, Ph.D., 2020-present
Mingxue Gu, Ph.D., 2021-present
Prajakta Deshpande, Ph.D, 2023-present
Bhagyashree Kaduskar, Ph.D., 2024-present
Mingxi Deng, Ph.D., 2024-present
Yohei Nitta, Ph.D., 2024-present
Ameya Walimbe , M.D., Ph.D., 2024-present
Yuqing Zhu, Ph.D., 2025-present
Yun Zhao, Ph.D., 2025-present

GRADUATE STUDENTS

AS MAJOR ADVISOR - CURRENT POSITIONS - BCM DEGREES AND AWARDS

J. Troy Littleton, Professor, Massachusetts Institute of Technology, Cambridge, MA
Ph.D. in Neuroscience, 1994; M.D., 1997
BCM Dean's Award for Excellence, 1992-1994; NIH NRSA Predoctoral Fellowship; Arnold Beckman Academic Achievement Award, 1994; Minora Suzuki Award for Excellence in Neuroscience, 1994; Finalist, 10th Larry Sandler Memorial Lecture, 36th Annual *Drosophila* Research Conference, 1995; Sigma Xi Dissertation Excellence Award in Biology, Rice University-Texas Medical Center, 1995; Elkins Memorial Lecture, Best *Drosophila* Neurobiology Thesis (1994-1995), Cold Spring Harbor Neurobiology of *Drosophila*, NY

Artur Kania, Director, Neural Circuit Development Research Unit, and Professor, Montreal Clinical Research Institute (IRCM), and University of Montréal, Canada
Ph.D. in Genetics, 1996

Karen L. Schulze
Ph.D. in Neuroscience, 1996
Platform Presenter representing the Division of Neuroscience, BCM Annual Graduate Student Symposium, 1995; Young Investigator Award, Texas Neurological Society, 1996; Finalist, 12th Larry Sandler Memorial Lecture Award, 38th Annual *Drosophila* Research Conference, 1997

Catherine A. Dye, Scientific Communication and Medical Affairs, REGENBIO Inc, Greater Seattle area
Ph.D. in Molecular and Cellular Biology, 1999
Poster Awards, BCM Annual Graduate Student Symposium, 1997 and 1998; First Place Poster Award, BCM Cell Biology Symposium, 1998

Mark N. Wu, Professor, Johns Hopkins University School of Medicine, Baltimore, MD
Ph.D. in Molecular and Cellular Biology, 1999; M.D., 2001
BCM Presidential Scholar, 1993; John J. Trentin Award for Scholastic Excellence, 1994; NIH NRSA Predoctoral Fellowship; BCM Dean's Award for Excellence, 1995-1999; First Place Poster Award, BCM Annual Graduate Student Symposium, 1996; Outstanding Graduate Student Award, Department of Molecular and Cellular Biology, 2000; Best Overall BCM Medical Student in Basic Sciences and Clinical Clerkships, 2000; Sigma Xi Dissertation Excellence Award in Biology, Rice University-Texas Medical Center, 2000

Sergei N. Prokopenko, Internat'l Baccalaureate Teacher of Chemistry, St. Joseph's Institution, Singapore
Ph.D. in Developmental Biology, 2000
Platform Presenter representing the Program in Developmental Biology, BCM Annual Graduate Student Symposium, 2000

Robert B. Beckstead, Director of US R&D BIO, CEVA Sante Animale, Lenexa, Kansas
Ph.D. in Molecular and Cellular Biology, 2001

Thomas E. Lloyd, Professor and Chair of Neurology, Baylor College of Medicine, Houston, TX
Ph.D. in Molecular and Cellular Biology, 2002; M.D., 2003
NIH NRSA Predoctoral Fellowship; BCM Medical Scientist Training Program Publication Award, 2000; First Place Poster Award, BCM Annual Graduate Student Symposium, 2001; Deborah K. Martin Award in Biomedical Sciences, 2001; Harold M. Weintraub Graduate Student Award, 2002; Outstanding Physician Scientist Award, R. R. Dickason Jr. M.D./Ph.D. Scholar Endowment, 2002

Patrik Verstreken, Scientific Director and Group Leader, Center for Brain & Disease Research, Flanders Interuniversity Institute for Biotechnology (VIB), University of Leuven, Belgium
Ph.D. in Developmental Biology, 2003
Platform Presenter representing the Program in Developmental Biology, and Beckman Coulter Award for the Best Platform Presentation, BCM Annual Graduate Student Symposium, 2002;

Hoover Foundation Fellow and Belgian American Educational Foundation (BAEF) Postdoctoral Fellowship, 2003; Finalist, 17th Larry Sandler Memorial Lecture Award, 45th Annual *Drosophila* Research Conference, 2004; Sigma Xi Dissertation Excellence Award in Biology, Rice University-Texas Medical Center, 2004; First Place Best Paper Student Category, BCM, Department of Molecular and Human Genetics Annual Retreat, 2005

Koenraad K. Norga, M.D./Ph.D., 2000-2004, Professor, Head of Clinic, Pediatric Oncology, Antwerp University Hospital (UZA), Belgium

Elaine S. Seto, M.D., PhD., 2011-2013, Assistant Professor, Baylor College of Medicine and Pediatric Neurologist and Medical Director, EEG, Texas Children's Hospital, Houston, TX
Ph.D. in Developmental Biology, 2006; M.D., 2007
NIH NRSA Predoctoral Fellowship; John J. Trentin Award for Scholastic Excellence, 2001; Best Poster Award, BCM MSTP Annual Retreat, 2003; First Place Poster Award, BCM Annual Graduate Student Symposium, 2003; Best Presentation at MSTP meeting, 2004; Beckman Coulter Award for the Best Platform Presentation, BCM Annual Graduate Student Symposium, 2005

Tong-Wey Koh, Case Manager, Early Psychosis Intervention Prgramme, Institute of Mental Health, Singapore
Ph.D. in Developmental Biology, 2006
Platform Presenter representing the Program in Developmental Biology, BCM Annual Graduate Student Symposium, 2004; First Place Best Paper Student Category, BCM, Department of Molecular and Human Genetics Annual Retreat, 2005

Melih Acar, Associate Director, Precision Medicine, AbbVie, South San Francisco, CA
Ph.D. in Developmental Biology, 2006

Prajal Patel, Research Support Specialist, Wolfner Lab, Cornell University, Ithaca, NY
Ph.D. in Developmental Biology, 2007

Koen J.T. Venken, Assistant Professor, Biochemisty, Baylor College of Medicine, Houston, TX
Ph.D. in Developmental Biology, 2007
Best Paper of the year of the Graduate Students, BCM, Department of Molecular and Human Genetics Annual Retreat, 2007

Hillary Andrews Graves, Artist, Idlewind Ceramics, Houston, TX
Ph.D. in Developmental Biology, 2008
First Place Poster, Annual *Drosophila* Research Conference, 2006

Cindy V. Ly, Assistant Professor in Neurology, Washington University School of Medicine, St. Louis, MO
M.D., Ph.D. in Neuroscience, 2008; M.D., 2009

Akhila Rajan, Associate Professor, Fred Hutchinson Cancer Research Center, Seattle, WA
Ph.D. in Genetics, 2009
Third Place Platform Speaker Annual Genetics Retreat, 2006; Platform Presenter representing the Department of Molecular and Human Genetics and winner of the John R. Kelsey Student Speaker Award, BCM Annual Graduate School Symposium, 2006

An-Chi Tien, Assistant Professor, Ivy Brain Tumor Center, Barrow Neurological Inst., Phoenix, AZ
Ph.D. in Developmental Biology, 2009

Tomoko Ohyama, Associate Professor, McGill University, Montréal, Canada
Ph.D. in Genetics, 2009

Shinya Yamamoto, Associate Professor, Baylor College of Medicine and Jan and Dan Duncan Neurological Research Institute, Houston, TX
(D.V.M.), Ph.D. in Developmental Biology, 2011
Fellow of the Nakajima Foundation, 2006-2010; Platform Presenter representing the Program in Developmental Biology at BCM Annual Graduate Student Symposium, 2010; First Place Graduate Student Poster Award, BCM Annual Graduate Student Symposium, 2011

Vafa Bayat, Program Head, R&D, Bitscopic, Redwood City, CA
Ph.D. in Developmental Biology, 2011; M.D. 2012
Recipient of Medical Scientist Training Program tuition funding and stipend award, 2004; Invited

speaker, Southwest Regional Society of Developmental Biology meeting, Austin, TX, 2010; Second Place Graduate Student Poster Award, 51st Annual *Drosophila* Research Conference, 2010; First Place Graduate School and Beckman Coulter Poster Awards, BCM Annual Graduate School Symposium, 2010; Platform Presenter representing the Program in Developmental Biology, and Beckman Coulter Award for the Best Platform Presentation, BCM Annual Graduate Student Symposium, 2011

Bo Xiong, Professor, Tongji Medical College, Huazhong Univ. of Science and Technology, Wuhan, China
Ph.D. in Developmental Biology, 2013
Recipient, Burroughs-Wellcome Foundation Grant "Houston Laboratory and Population Sciences Training Program in Gene-Environment Interaction", 2010-2012; Award from the Chinese government for outstanding Scholar

Ke Zhang, Jr Prinicipal Investigator, ShenZhen Bay Laboratory, Shenzhen, China
Ph.D. in Structural and Computational Biology and Molecular Biophysics, 2013

Wu-Lin Charng, Staff Scientist, Washington University, St. Louis (Christina Gurnett)
Ph.D. in Developmental Biology, 2013
Supported by the Taiwan Merit Scholarships Program sponsored by the National Science Council of Taiwan

Shiuan (Kevin) Wang, Medical Lead, Taiwan and Hong Kong, Sanofi
Ph.D. in Developmental Biology, 2014
Recipient, Burroughs-Wellcome Foundation Grant "Houston Laboratory and Population Sciences Training Program in Gene-Environment Interaction", 2012-2014; Second Place Graduate Student Poster Award, BCM Annual Graduate Student Symposium, 2012

Upasana Gala, CEO, Evolve Brain Training, Dubai, United Arab Emirates
Ph.D. in Developmental Biology, 2016

Gabriela David-Morrison, Field Application Scientist, Complete Genomics Inc., San Diego, CA
Ph.D. in Developmental Biology, 2016
John J. Trentin Award for Scholastic Excellence, 2009

Nele A. Haelterman, Assistant Professor, Baylor College of Medicine, Houston, TX
Ph.D. in Developmental Biology, 2016
John J. Trentin Award for Scholastic Excellence, 2011; Second place poster award, BCM Annual Graduate Student Symposium, 2015; Best Poster award at the Gordon Conference: Myogenesis, Lucca, Italy, 2017; Best Paper Award, BCM, Department of Molecular and Human Genetics Annual Retreat, 2019

Kuchuan Chen, Postdoctoral Fellow, Harvard Medical School, Boston, MA (Clifford Woolf)
Ph.D. in Developmental Biology, 2016
John J. Trentin Award for Scholastic Excellence, 2010; First place poster award, BCM Annual Graduate Student Symposium, 2015

Tongchao Li, Assistant Professor, Zhejiang University, Hangzhou, China
Ph.D. in Developmental Biology, 2016
Award from the Chinese Government for Outstanding Scholar

Lu (Lucy) Liu, Principal, Longwood Fund, Boston, MA
Ph.D. in Neuroscience, 2017
Best Talk, 25th Annual Rush and Helen Record Forum, Department of Neuroscience, 2015; Platform Presenter representing the Department of Neuroscience, and recipient of a Speaker Award, BCM Annual Graduate Student Symposium, 2015; Rush Record Best Neuroscience Student Award, 2016; Harold Weintraub Graduate Student Award, 2017; Larry Sandler Memorial Lecture Awardee, 2018.

Kai Li Tan, Associate Director, DP, Sequel Pharma, Washington DC-Baltimore area
Ph.D. in Developmental Biology, 2018
John J. Trentin Award for Scholastic Excellence, 2011; Second place poster award, BCM Annual Graduate Student Symposium, 2015; Best Talk award, Gordon Research Seminar: Elastin, Elastic fibers and Microfibrils, University of New England, ME, 2017; Best Paper Award, BCM, Department

of Molecular and Human Genetics Annual Retreat, 2019

Berrak Ugur, Postdoctoral Fellow & Associate Research Scientist, Yale University School of Medicine, New Haven, CT (Pietro De Camilli)
Ph.D. in Developmental Biology, 2018
First place poster award, BCM Annual Graduate Student Symposium, 2015

Dongxue Mao, Data Scientist, MD Anderson Cancer Center, Houston, TX
Ph.D. in Developmental Biology, 2018

Mumine Senturk, Clinical Genomic Scientist, Baylor Genetics, Houston, TX
Ph.D. in Developmental Biology, 2018

Burak Tepe, Postdoctoral Fellow, Baylor College of Medicine (Hugo Bellen)
Ph.D. in Developmental Biology, 2018, co-mentored by Dr. Arenkiel

Julia Wang, Hematopathologist, Moffitt Cancer Center, Tampa, Florida
Ph.D. in Developmental Biology, 2019; M.D., 2021
McNair Award (supported for her entire PhD); John J. Trentin Award for Scholastic Excellence, 2017; NIH NRSA Predoctoral Fellowship

Thomas Ravenscroft, Postdoctoral Fellow, HHMI Janelia, 2021 (Gerry Rubin)
Ph.D. in Molecular and Human Genetics, 2021
Betz-Harlan Endowed Scholarship, BCM, 2016-2017; The Cullen Foundation Molecular and Human Genetics Predoctoral Fellowship, 2017-2019; Second Place Poster Award, BCM Annual Graduate Student Symposium, 2010; Best Oral Presentation, BCM Molecular and Human Genetics Retreat, 2020

Jose Luis Salazar, Field Applications Scientist, Oxford Nanopore Technologies, Houston, TX
Ph.D. in Molecular and Human Genetics, 2021, co-mentored by Dr. Yamamoto

Liping Wang, Project Manager, National Vaccine and Serum Institute, Beijing, China
Ph.D. in Developmental Biology, 2022

Jennifer Deger, Medical Student, Baylor College of Medicine
Ph.D. in Neuroscience, co-mentored by Josh Shulman**,** 2026
BRASS Scholar

Ye Jin Park, Ph.D. Candidate in Developmental Biology, co-mentored by Hongjie Li, 2022-present

Michal Tyrlik, MSTP and Ph.D. Candidate in Genetics & Genomics, 2024-present
BRASS Scholar, John J. Trentin Award for Scholastic Excellence

Tyler Jackson, Ph.D. Candidate, 2026-present

AS THESIS COMMITTEE MEMBER

Pyung-Lim Han, Ph.D., 1992
Tricia Miller, Ph.D., 1992
Yuhong Qiu, Ph.D., 1992
Alan Nighorn, Ph.D., 1993
Bahram Varjavand, M.D./Ph.D., 1993
Wanda Lemma, Ph.D., 1993
Don Chen, Ph.D., 1993
Chi Chan, Ph.D., 1994
Patrick Lawinger, Ph.D., 1996
Rob Britton, Ph.D., 1996
Kent Anderson, M.D./Ph.D., 1996
Kwok Han, Ph.D., 1996
Jill Crittenden, Ph.D., 1998
Laura Warner, Ph.D., 1999
Cheng-Hsin Lu, Ph.D., 1999
Rui Chen, Ph.D., 1999
Hong Su, Ph.D., 1999

Shayan Izaddoost, M.D./Ph.D., 2000
Binhai Zheng, Ph.D., 2000
William Decker, Ph.D., 2001
Jose Barral, M.D./Ph.D., 2001
Patrick Cox, M.D./Ph.D., 2001
Heping Liu, Ph.D., 2002
You-Tzung Chen, Ph.D., 2002
Carsten Stuckenholz, Ph.D., 2003
Benjamin Frankfort, M.D./Ph.D., 2003
Yakov Sandler, M.D./Ph.D., 2004
Kartik Pappu, Ph.D., 2004
Sunil Mehta, M.D./Ph.D., 2005
Ed Oestrin, M.D./Ph.D., 2005
Kevin MacMillan, M.S., 2005
Lihua Zheng, Ph.D., 2006
Kathryn Pepple, M.D./Ph.D., 2006
Jennifer Childress, Ph.D., 2007
Kavita Oommen, Ph.D., 2007
Jayeeta Basu, Ph.D., 2007
Ryan Udan, Ph.D., 2007
Feyza Engin, Ph.D., 2007
Xiaomeng Yu, Ph.D., 2007
Ya-Chieh Hsu, Ph.D., 2007
Melis Inan, Ph.D., 2008
Matt Rose, Ph.D., 2008
Paolo Mangahas, Ph.D., 2008
Clayton Morrison, Ph.D., 2008
Mingshan Xue, Ph.D., 2009
Aimee Anderson, Ph.D., 2009
Eric Hyun M.D./Ph.D., 2010
Mardelle Atkins, Ph.D., 2010
Bibhash Mukhopadhyay, Ph.D., 2010
Jae Man Lee, Ph.D., 2011
Onkar Dhande, Ph.D., 2011
Ciao-Lin Chen, Ph.D., 2011
Joanna Asprer, Ph.D., 2011
Lu Nan, Ph.D., 2011
Carlos Ballester Rosado, Ph.D., 2011
Mahalakshmi Prabhakaran, Ph.D., 2011
Jessica Leonardi, Ph.D., 2012
Molly Schroeder, Ph.D., 2012
Jacob Berry, Ph.D., 2012
Chiat-Koo (Leon) Lim, Ph.D., 2012
Sarah Woodfield, Ph.D., 2012
KyongMi Um, Ph.D., 2012
Marife Arancillo, Ph.D., 2012
Barbara Jusiak, Ph.D., 2013
Edward Miranda, Ph.D., 2013
Tammy Chan, Ph.D., 2013
Renee Edlund, Ph.D., 2014
Qian Shen, Ph.D., 2014

Shaun Davis, Ph.D., 2016
Hsiang-Chih Lu, Ph.D., 2016
Juyeon Jo, Ph.D., 2016
Antonio Tito, Ph.D., 2016
Chun-An Chen, Ph.D., 2017
Zenghui Xu, Ph.D., 2017
Jenny Sun, Ph.D., 2017
Antonia De Maio, Ph.D., 2018
Sungwoo Choi, Ph.D., 2018
Sena Ozseker, Ph.D., 2018
Chang-Ru Tsai, Ph.D., 2018
Lakshya Bajaj, Ph.D., 2018
Marissa A. Scavuzzo, Ph.D., 2018
Sandra Riad, M.S., 2018
Yi-Chen Hsieh, Ph.D., 2019
Gabriel Vazquez Velez, M.D./Ph.D., 2019
Seung-Yeop Han, Ph.D., 2020
Young Won (Jamie) Kim, Ph.D., 2020
Joshua Ortiz, Ph.D., 2021
Zachary Kadow, Ph.D., 2021
Jolly Angad, M.D./Ph.D., 2021
Jonathon Duffy, Ph.D., 2022
Marzia Savini, Ph.D., 2022
Colleen Brady, M.D./Ph.D., 2022
Shihong Max Gao, Ph.D., 2023
Yue Ye (UT MD Anderson), Ph.D., 2024
Chaohao Gu, Ph.D., 2026
Stephen Farmer Jr (UT Health), Ph.D., 2026
Takese McKenzie (UT MD Anderson), Ph.D., 2026
Jinghan Zhao (Neuroscience), 2022-present
Gwendolynn Hummel (Bioinformatics, Genomics, Systems Biology), 2022-present
Nicole Auld (Cancer and Cell Biology), 2023-present
Ashwaraya Rajurkar (Biomedical Sciences), 2023-present