Researcher unique identifiers
http://orcid.org/0000-0001-9533-4908
http://www.researcherid.com/rid/D-5221-2012.
https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/54178476/

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Appointments
- ICM: Scientific Director, 01/2019 -
- Inserm: Directeur de Recherche, 10/2016 -
- ICM: Team Leader, 01/2016 -
- Berlin Institute of Health: Einstein Visiting Fellow, 01/2016 -
- HHMI/Janelia Farm Research Campus: Visiting Scientist 10/2010 – 04/2013
- University of Leuven Center for Human Genetics: Professor 10/2002 – 12/2016
- VIB Center for the Biology of Disease: Group Leader, 07/2001 – 12/2015
- HHMI/Baylor College of Medicine: Postdoctoral Fellow, 10/1996 – 07/2001

Education
- Ohio State University Program in Molecular, Cellular, and Developmental Biology, Ph.D., 09/1996
- American University of Beirut Department of Biology, B.S., Biology, 12/1989

Awards and Honors
Group Leader
- Roger De Spoelberch Prize, 2019
- Allen Distinguished Investigator, 2016
- Einstein Fellow, 2016
- EMBO member, 2009
- EMBO Young Investigator, 2003

Postdoctoral Fellow
National Research Service Award Postdoctoral Fellowship, NIH, 1999 - 2001

Undergraduate Student
- The Malcolm Kerr Memorial Scholarship, American University of Beirut, 1987 - 1989
- Faculty of Arts and Sciences Dean's Honor list, The American University of Beirut 1987, 1988, 1989

Research Interests
- Transcriptional regulation of neurogenesis
- Neural circuit development and function
- Drosophila models for neuronal pathology

Teaching Experience
- Sorbonne Université

Graduate course on Cellular Neurobiology and Development 2017, 2018
- Institut Curie
  Course on Developmental Biology 2016, 2017
- EMBO Young Investigator Program
  Ph.D. course, organizer and lecturer, 2005, 2006
- University of Leuven
  Graduate course on "Systems of Genetic Analysis", lecturer, 2008 – 2016
  Graduate course on "Systems of Genetic Analysis", Coordinator and lecturer, 2002 – 2007
  Graduate course on "Cell Biology and Signal Transduction", lecturer, 2002 – 2007
- Baylor College of Medicine:
  Graduate Neural Development course, lecturer, 2000 – 2001
- Ohio State University
  General Biology for non-majors, teaching assistant 1991, 1992
  Introduction to Molecular Genetics, teaching assistant 1991
- The American University of Beirut
  Introductory Ecology, teaching assistant 1990

Lab members

Staff Scientists
- Dr. Xiao-Jiang Quan 01/2002-12/2018 (Staff scientist VIB Center for Brain and Disease Research, Leuven, BE)
- Dr. Carlos Parras 01/2019 -
- Dr. Paulina Ejsmont 05/2016-09/2018 (Operational manager, Center for Research and Interdisciplinarity, Paris, FR)

Postdoctoral Fellows
- Dr. Simon Reeve, 05/2002 – 05/2008 (Science Teacher, UK)
- Dr. Joachim Schultz, 09/2002 – 12/2007 (Chief of Neurology, CHU Saint-Pierre, BE)
- Dr. Stein Aerts, 10/2004 – 10/2009 (Assoc. Prof. & Group Leader, KUL and VIB, BE)
- Dr. Marta Koch, 02/2007 – 02/2014 (Chief Editor, EClinical Medicine)
- Dr. Carlos Oliva, 06/2011 – 05/2014 (Asst. Prof., Univ. Catolica, Santiago, Chile).
- Dr. Radek Ejsmont, 09/2011 – 02/2019 (Junior Group Leader and CRI Fellow, Center for Research and Interdisciplinarity, Paris, FR)
- Dr. Ariane Ramaekers, 10/2009 – 09/2018 (Lecturer, Sorbonne University and Institut Curie, Paris, FR)
- Dr. Ridha Limame, 04/2016 – 09/2018 (Postdoctoral Fellow, ULB, BE)
- Dr. Natalia Mora, 02/2013 –
- Dr. Gerit Linneweber, 03/2014 –
- Dr. Iryna Mohylyak, 03/2016 –
- Dr. Maheva Andriatsilavo, 09/2016 –

Doctoral Students
- Ching Man Choi, 07/2002-07/2009 (Business Development Manager, Bone Therapeutics, Leuven, BE)
- Maarten Leyssen M.D., 09/2002-09/2006 (Clinical Leader, J&J)
- Derya Ayaz, 09/2003-05/2009 (Senior Project Manager, Modis, Leuven, BE)
- Wouter Bossuyt, 12/2003-4/2008 (Operational Manager, Genomics Core, Leuven University Hospital, Leuven BE)
- Hu Shu, 11/2004-11/2009 (Associate Professor, Henan University, China)
- Sven Vilian, 01/2004-06/2009 (Staff Scientist, VIB, BE)
- Marion Langen, 09/2006 – 07/2012 (Postdoctoral Fellow, UCSF, USA)
- Marlen Schlieder, 10/2007 – 07/2012 (Postdoctoral Fellow, TU Dresden, DE)
- Laura Nicolaï, 10/2007 – 04/2012 (Managing Director, Boomkwekerij Johan Nicolaï, Sint Truiden, BE)
- Alessia Soldano, 01/2008 – 12/2012 (Postdoctoral Fellow, University of Trento, IT)

- Maya Nicolas, 10/2010 – 10/2015 (Assistant Professor, American University of Cairo)
- Zeynep Okray, 02/2009 – 10/2016 (Postdoctoral Fellow, University of Oxford, UK)
- Liqun Yuan, 10/2010 – 06/2016 (Postdoctoral Fellow, Harvard University, USA)
- Luis Franco, 09/2012 – 10/2016 (Postdoctoral Fellow, UCSB, USA)
- Simon Weinberger, 06/2012 – 01/2017 (Software Engineer, Raiffeisen)
- Guangda Lui, 09/2012 – 10/2018 (Biostatistical Analyst, SGS Life Sciences, Mechelen, BE)
- Tingting Zhang, 09/2015 –
- Tengyuan Liu, 10/2015 –
- Suchetana Bias Dutta, 07/2016 –
- Irini Kessissoglou, 10/2016 –
- Dania Shaabani, 2/2017 –

Patents

Title: Compositions and methods for the therapeutic use of an atonal-associated sequence for deafness, osteoarthritis, and abnormal cell proliferation
Patent number: CA 2375106 C
Inventors: Bassem Hassan, Nessan Bermingham, Nissim Ben-Arie, Hugo Bellen and Huda Zoghbi

Publications

On BioRxiv while under revision

-A neurodevelopmental origin of behavioral individuality. Gerit Linneweber, Maheva Andriatsilavo, Suchetana Dutta, Liz Hellbruegge, Guangda Liu, Radoslaw Ejsmont, Lisa Fenk, Andrew Straw, Mathias Wernet, Peter Robin Hiesinger, Bassem A Hassan. doi: https://doi.org/10.1101/540880

Key career papers

1. Ramaekers, A, Claeys A, Kapun M, Mouchel-Viehl E, Potier D, Weinberger S, Grillenzoni N, Cuménal D, Yan J, Wolf R, Flatt T, Buchner E, Hassan BA. Altering the temporal regulation of one transcription factor drives sensory trade-offs. Dev Cell. 2019. Sep 23: In Press.
2. Mora N, Oliva C, Fiers M, Ejsmont R, Soldano A, et al. A Temporal Transcriptional Switch Governs Stem Cell Division, Neuronal Numbers, and Maintenance of Differentiation. Dev Cell. 2018. 45(1):53-66.e5.
3. Franco LM, Okray Z, Linneweber GA, Hassan BA, Yaksi E. Reduced Lateral Inhibition Impairs Olfactory Computations and Behaviors in a Drosophila Model of Fragile X Syndrome. Curr Biol. 2017. 27(8):1111-1123.
4. Weinberger S, Topping MP, Yan J, Claeys A, Geest N, et al. Evolutionary changes in transcription factor coding sequence quantitatively alter sensory organ development and function. Elife. 2017. 6. pii: e26402.
5. Quan XJ, Yuan L, Tiberi L, Claeys A, De Geest N, et al. Post-translational Control of the Temporal Dynamics of Transcription Factor Activity Regulates Neurogenesis. Cell. 2016. 164(3):460-75.
6. Hassan BA, Hiesinger PR. Beyond Molecular Codes: Simple Rules to Wire Complex Brains. Cell. 2015. 163(2):285-91.
7. Soldano A, Okray Z, Janovska P, Tmejová K, Reynaud E, et al. The Drosophila homologue of the amyloid precursor protein is a conserved modulator of Wnt PCP signaling. PLoS Biol. 2013. 11(5):e1001562.
8. Langen M, Koch M, Yan J, De Geest N, Erfurth ML, et al. Mutual inhibition among postmitotic neurons regulates robustness of brain wiring in Drosophila. Elife. 2013. 2:e00337.
9. Choi CM, Vilain S, Langen M, Van Kelst S, De Geest N, et al. Conditional mutagenesis in Drosophila. Science. 2009. 324(5923):54.
10. Quan XJ, Denayer T, Yan J, Jafar-Nejad H, Philippi A, et al. Evolution of neural precursor selection: functional divergence of proneural proteins. Development. 2004. 131(8):1679-89.
11. Morales J, Hiesinger PR, Schroeder AJ, Kume K, Verstreken P, et al. Drosophila fragile X protein, DFXR, regulates neuronal morphology and function in the brain. Neuron. 2002. 34(6):961-72.
12. Wang VY, Hassan BA, Bellen HJ, Zoghbi HY. Drosophila atonal fully rescues the phenotype of Math1 null mice: new functions evolve in new cellular contexts. Curr Biol. 2002. 12(18):1611-6.

13. Hassan BA, Bermingham NA, He Y, Sun Y, Jan YN, et al. atonal regulates neurite arborization but does not act as a proneural gene in the Drosophila brain. Neuron. 2000. 25(3):549-61.
14. Bermingham NA, Hassan BA, Price SD, Vollrath MA, Ben-Arie N, et al. Math1: an essential gene for the generation of inner ear hair cells. Science. 1999. 284(5421):1837-41.

As senior and corresponding author

1. Ramaekers, A, Claeys A, Kapun M, Mouchel-Viehl E, Potier D, Weinberger S, Grillenzoni N, Cuménal D, Yan J, Wolf R, Flatt T, Buchner E, Hassan BA. Altering the temporal regulation of one transcription factor drives sensory trade-offs. Dev Cell. 2019. (In Press).
2. Liu G, Nath T, Linneweber GA, Claeys A, Guo Z, et al. A simple computer vision pipeline reveals the effects of isolation on social interaction dynamics in Drosophila. PLoS Comput Biol. 2018. 14(8):e1006410.
3. Hiesinger PR, Hassan BA. The Evolution of Variability and Robustness in Neural Development. Trends Neurosci. 2018. pii: S0166-2236(18)30154-1.
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5. Koch M, Nicolas M, Zschaetzsch M, de Geest N, Claeys A, et al. A Fat-Facets-Dscam1-JNK Pathway Enhances Axonal Growth in Development and after Injury. Front Cell Neurosci. 2017. 11:416.
6. Lou WP, Mateos A, Koch M, Klussman S, Yang C, et al. Regulation of Adult CNS Axonal Regeneration by the Post-transcriptional Regulator Cpeb1. Front Mol Neurosci. 2017. 10:445.
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11. Oliva C, Soldano A, Mora N, De Geest N, Claeys A, et al. Regulation of Drosophila Brain Wiring by Neuropil Interactions via a Slit-Robo-RPTP Signaling Complex. Dev Cell. 2016. 39(2):267-278.
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14. The I in Scientist. Cell. 2016. 11;166(4):790-793.
15. All You Need Is Mentorship. Cell. 2016. 164(6):1092-1093.
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31. Quan XJ, Ramaekers A, Hassan BA. Transcriptional control of cell fate specification: lessons from the fly retina. Curr Top Dev Biol. 2012. 98:259-76.
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As first author

53. Wang VY, Hassan BA, Bellen HJ, Zoghbi HY. Drosophila atonal fully rescues the phenotype of Math1 null mice: new functions evolve in new cellular contexts. Curr Biol. 2002. 12(18):1611-6.
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56. Hassan BA, Bermingham NA, He Y, Sun Y, Jan YN, et al. atonal regulates neurite arborization but does not act as a proneural gene in the Drosophila brain. Neuron. 2000. 25(3):549-61.
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As contributing author

61. Vicente C, Stirparo R, Demeyer S, de Bock CE, Gielen O, et al. The CCR4-NOT complex is a tumor suppressor in Drosophila melanogaster eye cancer models. J Hematol Oncol. 2018 (1):108.
62. Marie C, Clavairoly A, Frah M, Hmidan H, Yan J, et al. Oligodendrocyte precursor survival and differentiation requires chromatin remodeling by Chd7 and Chd8. Proc Natl Acad Sci U S A. 2018.
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Competitive external funding (2010 – Present)

Title	Source	Amount	Period	Role
Molecular mechanisms of tumor suppression by the atonal transcription factor.	FWO	212.000 EUR	01.01.2010-31.12.2015	PI
Identification and characterization of novel factors to induce axonal regeneration after injury.	FWO	275.364 EUR	01.01.2010-31.12.2015	PI
In vivo structure-function analysis of the atonal transcription factor	FWO	317.764 EUR	01.01.2010-31.12.2015	PI
Point mutations as a novel genetic mechanism for fragile X syndrome	FWO	93.280 EUR	01.01.2010-31.12.2015	PI
TRP channels as endotoxin sensors in Drosophila.	KU Leuven	325.000 EUR	01.01.2010-31.12.2015	Co-PI
ITN Network on Systems neuroscience of Drosophila: genes, circuits, behavior	European Commission	227.540 EUR	01.01.2012-31.12.2015	Partner

Mechanistic analysis of the ATOH1 colorectal cancer tumor suppressor gene	Stichting tegen Kanker	320.000 EUR	01.01.2013-31.12.2016	PI
The evolutionary basis of sensory organ diversity.	FWO	423.599 EUR	01.01.2012-31.12.2017	PI
Mechanisms of brain wiring in normal and pathological conditions.	Belspo	325.000 EUR	01.10.2012-30.09.2017	Partner
Deconstructing the role of APP as a Wnt signaling receptor and its relevance to Alzheimer's disease	FWO	280.000 EUR	01.01.2015-31.12.2018	PI
Einstein Fellow grant	Einstein Stiftung	750.000 EUR	01.01.2016-31.12.2020	PI
Allen Distinguished Investigator award	Paul G. Allen Frontiers Group	1.500.000 USD	01.01.2016-31.12.2018	PI
A quantitative approach towards the characterization of mitochondrial dysfunction in Parkinson's disease	European Commission (IMI2 call)	93K	01.01.2019-31.12.2021	Partner
Quantitative analysis of the Social influence on Individuality	ANR	297K	01.01.2020-31.12.2022	PI

Selected recent conference talks and invited seminars

- University of Geneva, Geneva, Switzerland (May 2019)
- Plenary talk at 60th Annual Drosophila Research Conference (March 2019)
- Yale University, New Haven, USA (May 2018)
- Harvard Medical School, Boston, USA (May 2018)
- King's College London, London, UK (Mar 2018)
- EMBO Neural Development Conference, Taipei, Taiwan (Feb 2018)
- The Crick Institute, London, UK (Oct 2017)
- Axon 2017 conference, Vienna, Austria (Sep 2017)
- Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany (June 2017)
- King's College London, London, UK (Feb 2017)
- BioMedX, Heidelberg, Germany (Jan 2017)
- NYU Medical School, New York, USA (Oct 2016)
- University of California Berkeley, Berkeley, USA (Oct 2016)
- Allen Institute of Brain Science, Seattle, USA (Oct 2016)
- University of California San Francisco, San Francisco, USA (Oct 2016)
- Gladstone Institute, San Francisco, USA (Oct 2016)
- Brain Mosaic Meeting, Leuven, Belgium (Sept 2016)
- Champalimaud Center for the Unknown, Lisbon, Portugal (Aug 2016)
- Keynote address at Portuguese Drosophila meeting, Tomar, Portugal (Aug 2016)
- Charité, Berlin, Germany (June 2016)
- University of California San Francisco, San Francisco, CA, USA (Nov 2015)
- 29th annual French Drosophila meeting, Montpelier, France (Oct 2015)
- University of Vienna, Vienna, Austria (July 2015)
- ESPCI, Paris, France (March 2015)

- Helsinki University, Helsinki, Finland (Jan 2015)
- Columbia University, New York, NY, USA (Dec 2014)
- Scripps Institute, Jupiter, FL, USA (Dec 2014)
- Miami University Medical School, Miami, FL, USA (Dec 2014)
- EMBO Meeting on decoding the structure and function of neural circuits, Istanbul, Turkey (September 2014)
- Institut de la Vision, Paris, France (May 2014)
- UT Southwestern, Dallas, USA (April 2014).
- Cold Spring Harbor Laboratory, Long Island, NY, USA (September 2013)
- Keynote address at the EMBO Young Scientists Forum, Lisbon, Portugal (July 2013)
- European Society for Human Genetics Meeting, Paris, France (June 2013)
- Peking University, Beijing, China (May 2013)
- Tsinghua University, Beijing, China (May 2013)
- Scripps Institute, San Diego, CA, USA (March 2013)
- Columbia University, New York, NY, USA (March 2013)

Scientific Networks and Societies

2012 – 2017 Member, EU ITN Research Network "*FliAct*"
2012 – 2017 Member, BELSPO Research Network "*WiBrain*"
2011 – Member, Society for Neuroscience
2016 – Member, French Society for Neuroscience
2016 – Member, French Society for Stem Cell Research
2016 – Member, French Society for Developmental Biology

Commissions of trust

Expertise Panels

- 2019 – FEBS/EMBO Women in Science Award Committee
- 2018 European Research Council (ERC), Neuroscience and Neural Disorders Consolidator Grant panel
- 2017 Medical Research Council (MRC) UK Dementia Research Institute (DRI) evaluation panel
- 2016 European Research Council (ERC), Neuroscience and Neural Disorders Consolidator Grant panel
- 2015 Paul G. Allen Family Foundation Scientific Charette panel
- 2013 Scientific advisory board: TEFOR infrastructure project, Paris, France
- 2011 Neuroscience Commission: French National Research Agency, Paris, France
- 2010 Scientific program review panel: Science Foundation Ireland.
- 2009 Scientific review board of CNRS UMR 7637 department, Paris, France
- 2009 – 2014 Scientific advisory board, Molecular Biology and Genetics, Bogazici University, Istanbul, Turkey

Journal Editorial Boards

- 2013 – Present Editorial Board member of PL*o*S Biology
- 2012 – 2017 Editorial Board member of EMBO Reports
- 2012 – Present Editorial Board member of Frontiers in Neural Circuits

Journal refereeing: Cell, Science, Neuron, Developmental Cell, PL*o*S Biology, Journal of Neuroscience, Molecular Psychiatry, Nature Communications, Nature Genetics, Current Biology, EMBO Journal, Journal of Cell Biology, European Journal of Neuroscience...

Grant reviewing: EMBO fellowship program, EMBO Young Investigator Program, US National Science Foundation (NSF), French National Research Agency (ANR), The Wellcome Trust, UK Medical Research Council (MRC) and Royal Dutch Science Foundation (NWO).

Academic community service

ICM

- 2017 – Sorbonne University Doctoral School in Neuroscience (ED3C) selection committee

- 2017 – ICM committee on gender parity
- 2016 – IHU-A-ICM Education program committee

VIB

- 2010 – Chair, VIB Search Committee for NERF Group Leaders
- 2010 – Chair, VIB Search Committee for new Group Leaders
- 2005 – 2009 Director, Doctoral program in Molecular and Developmental Genetics
- 2003 – 2005 Vice-Chair, VIB Group Leader Committee
- 2003 Chair, VIB Search Committee for new Group Leaders

Baylor College of Medicine

- 1997 – 1999 Executive Committee, Baylor College of Medicine Postdoctoral Association
- 1997 – 1999 Chair, Baylor College of Medicine Postdoctoral Association Seminar Committee

The Ohio State University

- 1995 – 1996 Search Committee for a new Dean for the College of Biological Sciences, The Ohio State University
- 1993 –1994 President, Molecular, Cellular and Developmental Biology Graduate Student Organization, The Ohio State University,
- 1993 –1994 Graduate Student Representative, Molecular, Cellular and Developmental Biology Graduate Studies Committee, The Ohio State University,
- 1993 –1994 Molecular, Cellular and Developmental Biology Seminar Committee Graduate Student Representative, The Ohio State University, Fall 1993- Fall 1994
- 1991 – 1993 Council of Graduate Students, The Ohio State University