

Prof. Dr. FRANK BRADKE

Date of birth: 16 October, 1969
 Gender: Male
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 Position: Senior Research Group Leader at the German Center for Neurodegenerative Diseases (DZNE) and Full Professor at the University of Bonn, Faculty of Mathematics and Natural Sciences
 Children: Three

**CURRICULUM VITAE****University education**

1995 B.Sc. Anatomy and Developmental Biology, University College London (UCL)
 1995 Diploma Biochemistry, Freie Universität (FU), Berlin
 1989 - 1995 Studies of Biochemistry, Anatomy and Developmental Biology in Berlin (FU) and London (UCL)

Scientific degrees

2011 - 2013 Certified Manager, Helmholtz Management Academy, St. Gallen
 2009 Habilitation, Department of Neurobiology, Ludwig-Maximilians-Universität, München, Germany
 1999 Doctoral dissertation in Biology, Mentor: Prof. Carlos Dotti, European Molecular Biology Laboratories (EMBL), Heidelberg, Germany

Professional experience

Since 2013 Topic Coordinator (Molecular Signaling) at the Helmholtz Research Programme of Diseases the Nervous System
 Since 2011 Head of a Senior Research Group at the DZNE and Full Professor (W3) at the Rheinische Friedrich-Wilhelms-Universität, Bonn
 2003 - 2011 Head of an Independent Research Group at Max-Planck Institute of Neurobiology, Martinsried on C3/W2 level
 2000 - 2002 Postdoc at University of California, San Francisco (UCSF) & Stanford University

Academic functions and awards:Panels and coordinating functions:

2018 Organizer of the Cold Spring Harbor Meeting Asia "Assembly of Neuronal Circuits", Japan

- 2017 Organizer of the ASCB Doorstep meeting "Cell Biology of Degeneration and Repair in the Nervous System", USA
- 2017 Organizer of the EMBO Meeting "Cell Biology of the Neuron: Polarity, Plasticity and Regeneration", Crete 2015 Organizer of the "Summer School - Spinal Cord Injury" in Bressanone, Italy
- 2017 - 2020 Member of the Program Committee of the Society for Neuroscience, SfN.
- 2014 Organizer of the meeting "Axon Degeneration" in Berlin, Germany
- 2013 Symposium Chair at the "ASCB Meeting" in New Orleans, USA
- 2011 Symposium Chair at "SfN 2011" in Washington, USA
- 2011 Organizer of the EMBO workshop "Cell Biology of the Neuron: Polarity, Plasticity and Regeneration", Crete, Greece
- 2010 Symposium Chair at the "Cold Spring Harbor Meeting on Axon Guidance, Synapse Plasticity and Regeneration" in Cold Spring Harbor, USA
- 2006 Organizer of the EU research training network meeting "Brain repair"
- 2006 Organizer of the SFB-Symposium "Axon, Dendrites, Calcium channels"

Awards and honours:

- 2016 Gottfried Wilhelm Leibniz-Prize, DFG Bonn
- 2014 Elected Leopoldina member, the German National Academy of Sciences
- 2014 Offered a Full Professorship in Cellular Neurobiology (rejected), at the Swiss Federal Institute of Technology (ETH), Zurich
- 2013 Elected EMBO member
- 2011 IRP-Schellenberg Prize, Switzerland
- 2011 Full Professorship (W3) in Cellular and Molecular Neurobiology, at the University of Bonn
- 2011 Offered a Full Professorship (W3) in Developmental Biology (rejected), at the University of Heidelberg
- 2011 Offered a Full Professorship (W3) in Zoology (rejected), at the University of Ulm
- 2010 Offered a Full Professorship (W3) in Cellular and Molecular Neurobiology (rejected), at the Charité, Berlin
- 2007 Selected Top 100 heads of tomorrow, Initiative of the Government of Germany
- 2003 CDA (Career Development Award), Human Frontier Science Program, Strasbourg
- 2001 HFSP (Human Frontier Science Program), Long-Term Fellowship, Strasbourg
- 2000 EMBO, Long-Term Fellowship, Heidelberg
- 1992 - 1995 Studienstiftung des deutschen Volkes, Bonn

Editorial boards:

- 2016 Editorial Board, Current Biology

A) Publications:

Tedeschi A, Dupraz S, Laskowski CJ, Xue J, Ulas T, Beyer M, Schultze JL, Bradke F. The calcium channel subunit alpha2delta2 suppresses axon regeneration in the adult CNS. **Neuron** 2016;92(2):419-434.

- Ruschel J, Hellal F, Flynn KC, Dupraz S, Elliott DA, Tedeschi A, Bates M, Sliwinski C, Brook G, Dobrindt K, Peitz M, Brustle O, Norenberg MD, Blesch A, Weidner N, Bunge MB, Bixby JL, Bradke F. Axonal regeneration. Systemic administration of epothilone B promotes axon regeneration after spinal cord injury. **Science** 2015;348(6232):347-352.
- Flynn KC, Hellal F, Neukirchen D, Jacob S, Tahirovic S, Dupraz S, Stern S, Garvalov BK, Gurniak C, Shaw AE, Meyn L, Wedlich-Soldner R, Bamburg JR, Small JV, Witke W, Bradke F. ADF/cofilin-mediated actin retrograde flow directs neurite formation in the developing brain. **Neuron** 2012;76(6):1091-1107.
- Hellal F, Hurtado A, Ruschel J, Flynn KC, Laskowski CJ, Umlauf M, Kapitein LC, Strikis D, Lemmon V, Bixby J, Hoogenraad CC, Bradke F. Microtubule stabilization reduces scarring and causes axon regeneration after spinal cord injury. **Science** 2011;331(6019):928-931.
- Erturk A, Mauch CP, Hellal F, Forstner F, Keck T, Becker K, Jahrling N, Steffens H, Richter M, Hubener M, Kramer E, Kirchhoff F, Dodt HU, Bradke F. Three-dimensional imaging of the unsectioned adult spinal cord to assess axon regeneration and glial responses after injury. **Nature Medicine** 2011;18(1):166-171.
- Stiess M, Maghelli N, Kapitein LC, Gomis-Ruth S, Wilsch-Brauninger M, Hoogenraad CC, Tolic-Norrelykke IM, Bradke F. Axon extension occurs independently of centrosomal microtubule nucleation. **Science** 2010;327(5966):704-707.
- Ylera B, Erturk A, Hellal F, Nadrigny F, Hurtado A, Tahirovic S, Oudega M, Kirchhoff F, Bradke F. Chronically CNS-injured adult sensory neurons gain regenerative competence upon a lesion of their peripheral axon. **Current Biology** 2009;19(11):930-936.
- Witte H, Neukirchen D, Bradke F. Microtubule stabilization specifies initial neuronal polarization. **The Journal of Cell Biology** 2008;180(3):619-632.
- Garvalov BK, Flynn KC, Neukirchen D, Meyn L, Teusch N, Wu X, Brakebusch C, Bamburg JR, Bradke F. Cdc42 regulates cofilin during the establishment of neuronal polarity. **The Journal of Neuroscience** 2007;27(48):13117-13129.
- Erturk A, Hellal F, Enes J, Bradke F. Disorganized microtubules underlie the formation of retraction bulbs and the failure of axonal regeneration. **The Journal of Neuroscience** 2007;27(34):9169-9180.

B) Patents: -

Scientific collaborations beyond the planned Collaborative Research Centre

John Bixby, The Miami Project to Cure Spinal Cord Injury, Florida, USA

James Bamburg, University of Colorado, Fort Collins, USA

Cord Brakebusch, BRIC, University of Copenhagen, Denmark

James Fawcett, Cambridge, UK

Vic Small, IMBA, Vienna, Austria

Casper Hoogenraad, Utrecht, Netherlands

Hans-Ulrich Dodt, Vienna, Austria

Michael Sixt, Vienna, Austria

Walter Witke, Bonn, Germany

Joachim Schulze, Bonn, Germany

Theresia Stradal, HZI, Braunschweig, Germany

Tobias Bonhoeffer, MPI of Neurobiology, Martinsried, Germany

Achim Klug, Ludwig-Maximilians-University, Munich, Germany

Volker Haucke, FU Berlin, Germany

Roland Wedlich-Söldner, MPI of Biochemistry, Martinsried, Germany

Sven Moosmang, TU Munich, Germany

Frank Kirchhoff, Saarbrücken, Germany