

Name: Prof. Dr. Frank Bradke

Position: Senior group leader and University Professor (W3)

Date of Birth: 16.10.1969

Gender: Male

Nationality: German

German Center for Neurodegenerative Diseases (DZNE) Bonn

Axon Growth and Regeneration

Ludwig-Erhard-Allee 2, D-53175 Bonn/Germany

Phone: +49-228 43302 590; Fax: +49-228 43302 689

E-mail: Frank.Bradke@dzne.de

Familial Status: Married, three children

**Education/Degrees:**

1995 B.Sc., Anatomy and Developmental Biology, University College London

1995 Degree, Biochemistry, FU Berlin

1999 Dr. rer. nat., Biology, Ruprecht-Karls-Universität Heidelberg

2009 Habilitation, Neurobiology, Ludwig-Maximilians-Universität München

Academic Career:

1995 – 1999 PhD student, Cell Biology Program, EMBL, Heidelberg with Dr. C. Dotti

2000 – 2002 Postdoctoral research associate, University of California, San Francisco & Stanford University (both HHMI) with Prof. Dr. M. Tessier-Lavigne (HFSP & EMBO Fellow)

2003 – 2011 Independent junior research group leader on associate Professor level (C3), Max-Planck Institute for Neurobiology, Martinsried

April 2011 – Senior research group leader on Full Professor level (W3), German Center for Neurodegenerative Diseases (DZNE), Bonn

Awards and Honors:

2000 Long-Term Fellowship, EMBO, Heidelberg

2001 Long-Term Fellowship, Human Frontier Science Program, Strasbourg

2003 Career Development Award, Human Frontier Science Program, Strasbourg

2007 Selected Top 100 heads of tomorrow, Initiative of the Government of Germany

2011 Schellenberg-Prize, IRP, Switzerland

2011 Full Professorship (W3) in Cellular and Molecular Neurobiology, University of Bonn

Memberships, academic and professional duties (selection):

Organizer of EMBO workshop “Cell Biology of the Neuron”, Crete 2011

Chair of the Cold Spring Harbor Meeting on Axon Guidance, Synapse Plasticity & Regeneration, 2010

Organizer of the SFB-Symposium “Axon, Dendrites, Calcium channels” in 2006

Organizer of the EU research training network meeting “Brain repair” in 2006

List of 5 most important publications

Flynn KC, Hellal F, Neukirchen D, Jacobs S, Tahirovic S, Dupraz S, Stern S, Garvalov BK, Gurniak C, Shaw A, Meyn L, Wedlich-Söldner R, Bamberg JR, Small JV, Witke W, **Bradke F** (2012). ADF/cofilin-mediated Actin Retrograde Flow Directs Neurite Formation in the Developing Brain. *Neuron* 2012, 76:1091-107.

Ertürk A, Mauch CP, Hellal F, Förstner F, Keck T, Becker K, Jähring N, Steffens H, Richter M, Hübener M, Kramer E, Kirchhoff F, Dodt HU, **Bradke F** (2011). 3D imaging of the unsectioned adult spinal cord to assess axon regeneration and glial responses after injury. *Nature Medicine* 18: 166-171.

Hellal F, Hurtado A, Ruschel J, Flynn KC, Laskowski CJ, Umlauf M, Kapitein LC, Strikis D, Lemmon V, Bixby J, Hoogenraad CC, **Bradke F** (2011). Microtubule Stabilization Reduces Scarring and Causes Axon Regeneration After Spinal Cord Injury. *Science* 331: 928-31.

Enes J, Langwieser N, Ruschel J, Carballosa-Gonzalez MM, Klug A, Traut MH, Ylera B, Tahirovic S, Hofmann F, Stein V, Moosmang S, Hentall ID, **Bradke F** (2010). Electrical activity suppresses axon growth through Cav1.2 channels in adult primary sensory neurons. *Current Biology* 20: 1154-64.

Stiess M, Maghelli M, Kapitein L, Gomis-Rüth S, Wilsch-Bräuninger M, Hoogenraad CC, Tolić-Nørrelykke IM, **Bradke F** (2010). Axon extension occurs independently of centrosomal microtubule nucleation. *Science* 327: 704-707.

Ylera B, Ertürk A, Hellal F, Nadrigny F, Hurtado A, Tahirovic S, Oudega M, Kirchhoff F, **Bradke F** (2009). Chronically injured adult sensory axons in the CNS acquire axon regenerative competence following a lesion of their peripheral process. *Current Biology* 19: 930-936.