

Berndt, Carsten

General Information

Name: Berndt, Carsten
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Current position/status: Group leader „Thiol Redox Research in Molecular Neurology“



Academic Education and Qualifications

1995-1999 Studies in Biology, Ruhr-Universität Bochum, Germany
2000 Diploma thesis, Department of Plant Physiology,
Ruhr-Universität Bochum, Germany
2001-2004 PhD thesis, Department of Biochemistry of Plants,
Ruhr-Universität Bochum, Germany

Professional Career

2004-2010 Post-Doc, The Medical Nobel Institute for Biochemistry,
Karolinska Institute, Stockholm, Sweden (since 2006 group leader)
2007-2011 Post-Doc and visiting scientist, Institute for Clinical Cytobiology
and Cytopathology, Philipps-Universität Marburg, Germany
2010-present Post-Doc/group leader, Department of Neurology, Heinrich-Heine
Universität Düsseldorf, Germany

Professional Awards

2004, 2008-2010 Postdoctoral/young investigator fellowships, Karolinska Institute,
Stockholm, Sweden
2005-2007 Postdoctoral Research Fellowships, Deutsche
Forschungsgemeinschaft, Bonn, Germany
2006 Young Investigator award, Society for Free Radical Research-
International
2010 EU grant for a short term scientific mission with the COST program
2017 Editorial board member, *Archives of Biochemistry and Biophysics*

Publications (5 most important out of 49, h-index 27)

1. **Berndt C**, Lillig CH, Wollenberg M, Bill E, Mansilla MC, de Mendoza D, Seidler A, Schwenn JD **(2004)**
Characterisation and Reconstitution of a 4Fe-4S Adenylyl Sulfate/Phosphoadenylyl Sulfate Reductase from *Bacillus subtilis*.
J Biol Chem 279: 7850-7855
2. Lillig CH, **Berndt C**, Vergnolle O, Lönn ME, Hudemann C, Bill E, Holmgren A **(2005)**
Characterization Of Human Glutaredoxin2 As New Iron-Sulfur Protein: A Possible Role As Redox Sensor.
Proc Natl Acad Sci USA 102: 8168-8173
3. Bräutigam L, Schütte LD, Godoy JR, Prozorovski T, Gellert M, Hauptmann G, Holmgren A, Lillig CH, **Berndt C (2011)**
Vertebrate-specific glutaredoxin is essential for brain development.
Proc Natl Acad Sci USA 108: 20532-20537
4. Bräutigam L, Jensen LD, Poschmann G, Nyström S, Bannenberg S, Dreij K, Lepka K, Prozorovski T, Montano SJ, Aktas O, Uhlén P, Stühler K, Cao Y, Holmgren A, **Berndt C (2013)**
Glutaredoxin regulates vascular development by reversible glutathionylation of sirtuin 1.
Proc Natl Acad Sci USA 110: 20057-20062
5. **Berndt C**, Schwenn JD, Lillig CH **(2015)**
The specificity of thioredoxins and glutaredoxins is determined by electrostatic and geometric complementarity.
Chem Sci 6: 7049-7058