Name	***Position Title***
Melanie Börries	Freiburg Institute For Advanced Studies-LIFENET, Postdoc/Project leader

EDUCATION/TRAINING

Institution and Location	Degree	Year(s)	Field of Study
University of Lübeck, Germany	MD	1994-2001	Medicine
University of Basel, Biozentrum, Switzerland	PHD	2001-2005	Cell Biology/Medicine
University of Freiburg, Germany	MDPhD	2005-2009	Cell Biology
University of Freiburg, Germany	Principle Investigator	Since 2009	Systems Biology

Positions and Honours

Employment/Experience

1994-2001	Studies of Medicine, University of Lübeck, Germany
2000- 2004	Doctor thesis (Medicine), Institute of Cardiology, University of Lübeck, Germany and University of Basel, Switzerland
2001-2005	MDPhD-Program in Cell Biology, Maurice E. Müller Institute, University of Basel, Switzerland (Laboratory of Prof. Ueli Aebi)
2001-2005	Residency, Department of Cardiology, Inselspital, University of Bern, Switzerland (3 month/year)
2005-2009	Postdoc /Institute for Pharmacology and Toxicology, University of Freiburg, Germany
2007-2009	Parental leave
2009-present	FRIAS, Postdoc, project leader in the group of Hauke Busch (CCC Group), Institute for Advanced Studies-LIFENET, University of Freiburg, Freiburg, Germany

Grants, Honors, Awards, and Scholarships

2001-2005	Doctoral scholarship of the Maurice E Müller Stiftung
2011-2014	NephAge, BMBF GerontoSys II Project
2013-2016	LungSys II: Systems Biology of Lung Cancer, BMBF MedSys Project

Other Scientific Activities

2004-present	Member of the American Society of Cell Biology
2006-present	Member of the German Society of Cardiology
2006	“Förderpreis für innovative Lehrprojekte”, University of Freiburg

Publications:

Boerries M, Eils R**,** Busch H, Systems Biology, in Encyclopedia of Molecular Cell Biology and Molecular Medicine, 2010, in press.

Heinemann A, He Y, Zimina E, **Boerries M**, Busch H, Chmel N, Kurz T, Bruckner-Tuderman L, Has C., Induction of phenotype modifying cytokines by FERMT1 mutations, Hum Mutat. 2011 Apr;32(4):397-406.

Sprenger A, Küttner V, Biniossek ML, Gretzmeier C, **Boerries, M**, Mack C, Has C, Bruckner-Tuderman L, Dengjel J. Comparative quantitation of proteome alterations induced by aging or immortalization in primary human fibroblasts and keratinocytes for clinical applications. Mol BioSyst, 2010, DOI:10.1039/C003962D

Kraus C, Rohde D, Weidenhammer C, Qiu G, Pleger ST, Voelkers M, **Boerries M**, Remppis A, Katus HA, Most P., S100A1 in cardiovascular health and disease: closing the gap between basic science and clinical therapy. J Mol Cell Cardiol. 2009 Oct;47(4):445-55.

Boerries M, Patrick Most, Jonathan R Gledhill, John E Walker, Hugo A Katus, Walter J Koch, Ueli Aebi and Cora-Ann Schoenenberger. Ca^{2+}-dependent interaction of S100A1 with the F_1-ATPase leads to an increased ATP con- tent in cardiomyoctes. Mol Cell Biol. 2007 Jun;27(12):4365-73.

Schoenenberger CA, Buchmeier S, **Boerries M,** Sütterlin R, Aebi U. Jockusch B.M. Conformation-specific antibodies reveal distinct actin structures in the nucleus and the cytoplasm. J Struct Biol. 2005 Dec;152(3):157-68.

Boerries M, Most P, Eicher C, Schweda C, Volkers M, Wedel T, Sollner S, Katus HA, Remppis A, Aebi U, Koch WJ, Schoenenberger CA. Distinct subcellular location of the Ca2+-binding protein S100A1 differentially modulates Ca2+-cycling in ventricular rat cardiomyocytes. J Cell Sci. 2005 Jan 15;118(Pt 2):421-31.

Most P, Pleger ST, Volkers M, Heidt B, **Boerries M**, Weichenhan D, Loffler E, Janssen PM, Eckhart AD, Martini J, Williams ML, Katus HA, Remppis A, Koch WJ.
Cardiac adenoviral S100A1 gene delivery rescues failing myocardium.
J Clin Invest. 2004 Dec;114(11):1550-63.

Boerries M, Most P, Eicher C, Schweda C, Ehlermann P, Pleger ST, Loeffler E, Koch WJ, Katus HA, Schoenenberger CA, Remppis A (Most and Boerries contributed equally to this work). Extracellular S100A1 protein inhibits apoptosis in ventricular cardiomyocytes via activation of the extracellular signal-regulated protein kinase 1/2 (ERK1/2).
J Biol Chem. 2003 Nov 28;278(48):48404-12.

P. Most, J. Bernotat, P. Ehlermann, ST. Pleger, **M. Börries**, M. Reppel, F. Niroomand, B. Pieske, PM: Janssen, T. Eschenhagen, P. Karczewski, GL. Smith, WJ. Koch, HA. Katus, A. Remppis. S100A1: a regulator of myocardial contractility.
Proceedings of the National Academy of Sciences of the United Staates of America (24): 13889-94. 2001.