

## ANNE STRAUBE, PHD



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### EDUCATION

1999 | **Diploma (MSc) in Biochemistry** (University of Hamburg)  
2003 | **PhD in Cell Biology** (Phillips University Marburg)

### POSITIONS

2009- | **Assistant Professor in Mechanochemical Cell Biology**, Warwick Medical School, Coventry, UK  
2007-2009 | **Leader**, Cytoskeletal Organization Laboratory, MCRI, Oxted, UK  
2006-2007 | **Research Associate**, Wellcome Trust Centre for Cell Biology, Edinburgh, UK  
2004-2006 | **Emmy Noether Fellow**, Wellcome Trust Centre for Cell Biology, Edinburgh, UK  
2003-2004 | **Research Associate**, Max Planck Institute, Marburg, Germany  
2000-2002 | **PhD student**, Max Planck Institute, Marburg, Germany  
1999-2000 | **PhD student**, Ludwig-Maximilians-University, Munich, Germany

### HONOURS

2004 | **Emmy Noether Fellowship** from the German Research Foundation (DFG)  
2005 | **Poster Prize**, ELSO conference, Dresden

### RESEARCH SUPPORT

2009-2012 | **Programme Grant Marie Curie Cancer Care** £630,000  
*My recent move to Warwick is linked to the creation of a new centre, the **Centre for Mechanochemical Cell Biology**, of which I am a co-founder. We are constructing a purpose-designed new building to house the centre on the Gibbett Hill campus of Warwick university (UoW). UoW is contributing £3.4M, AWM (the regional development agency) is contributing £2M and the Wolfson Trust is contributing £1M. Construction is scheduled to begin in July 2010 and will take one year. UoW is also providing £1.5M towards microscopy and other equipment for the centre.*

2007-2009 | **Marie Curie Cancer Care Core Funding for Cytoskeletal Organization Laboratory**

2004-2006 | **DFG Emmy Noether Fellowship, Rearrangements and stabilization of the microtubule cytoskeleton during muscle cell differentiation**

## PROFESSIONAL ASSOCIATIONS

Member of the American Society for Cell Biology (ASCB); European Life Science Organization (ELSO), German Society for Cell Biology (DGZ); British Society of Cell Biology (BSCB)

## INTERNATIONAL CONFERENCES / SESSIONS ORGANISED

- 2009 **The dynamic cell**, Edinburgh, session chair, *Microtubule Dynamics*
- 2008 **ELSO**, Nice, special subgroup meeting, *Microtubule - cell cortex interactions*
- 2008 **MCRI Spring Workshop**, main organizer, *Microtubule Dynamics*

## SCIENTIFIC INTERESTS & CURRENT RESEARCH

I have a strong track record in cell biological aspects of microtubule organization and molecular motor functions, both in yeast and mammalian cells. Currently, my lab aims to understand the mechanochemical processes underlying directional cell migration and differentiation. We focus on the mechanisms that generate specific microtubule arrays and study the dynamic interactions of microtubules with the cell cortex during cell shape changes. We are using live-cell imaging and biochemical approaches paired with RNA interference and target protein mutagenesis to analyse structure-function relationships of motor proteins, structural MAPs and the +tip complex.

## 5 KEY PUBLICATIONS      \*corresponding author

- 2007 Straube, A.\* and Merdes A. (2007).  
**EB3 regulates microtubule dynamics at the cell cortex and is required for myoblast elongation and fusion.**  
Current Biol 17 (15), 1318-1325.
- 2006 Straube, A., Hause, G., Fink, G. and Steinberg, G. (2006).  
**Conventional kinesin mediates microtubule-microtubule interactions *in vivo*.**  
Mol Biol Cell 17, 907-916
- 2005 Straube, A., Weber, I. and Steinberg, G. (2005).  
**A novel mechanism of nuclear envelope breakdown in a fungus: nuclear migration strips off the envelope.**  
EMBO J 24 (9), 1674-1685.
- 2003 Straube, A., Brill, M., Oakley, B.R., Horio, T. and Steinberg, G. (2003).  
**Microtubule organization requires cell cycle dependent nucleation at dispersed cytoplasmic sites, polar and perinuclear MTOCs in the plant pathogen *Ustilago maydis*.**  
Mol Biol Cell 14, 642-657.
- 2001 Straube, A., Enard, W., Berner, A., Wedlich-Söldner, R., Kahmann, R. and Steinberg, G. (2001).  
**A split motor domain in a cytoplasmic dynein.**  
EMBO J 20 (18), 5091-5100.