Stephanie C. Weber

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Education

Ph.D. Biochemistry, Stanford University — 2006-2011

B.S. Biology, B.S. Chemistry, *summa cum laude*, Duke University — 2002-2006

Research Experience

Postdoctoral fellow with Cliff Brangwynne, Princeton University — 2011-present
Mechanisms controlling nucleolar, cell and body size in the nematode Caenorhabditis elegans

Graduate student with Julie Theriot, Stanford University — 2007-2011
Macromolecular motion in vivo: *anomalous diffusion through an "active" viscoelastic medium*

Undergraduate student with Arno Greenleaf, Duke University — 2005-2006
FF Domains and the Binding of PCAPs to the Carboxy Terminal Domain of RNA polymerase II

Summer student with Kerry O'Banion, University of Rochester — 2004
The Use of RNA Interference to Elucidate the Role of mPGES-1 in PGE2 Biosynthesis

Undergraduate student with Steve Haase, Duke University — 2003-2005
The Effect of Clb6 on Population Doubling Time in Saccharomyces cerevisiae

Honors, Awards and Fellowships

Damon Runyon Postdoctoral Fellowship — 2012 - present

Jane Coffin Childs Memorial Fund Postdoctoral Fellowship (declined) — 2012

Life Sciences Research Foundation Postdoctoral Fellowship (declined) — 2012

Bioengineering Outstanding Teaching Assistant Award — 2011

Harold M. Weintraub Graduate Student Award — 2011
National award recognizing outstanding achievement in graduate studies in the biological sciences

NSF Graduate Research Fellowship 2008-2011

Graduation with Distinction in Biology, Chemistry 2006

Faculty Scholar Award 2005
Highest honor bestowed upon a Duke undergraduate recognizing intellectual leadership and scholarly accomplishment

Phi Beta Kappa 2005

Deans' Summer Research Fellowship 2005

GEBS/NSF REU Summer Scholars Program 2004

Howard Hughes Research Fellows Program 2003

Publications

Weber, S. C., and Brangwynne, C. P. (2012) Getting RNA and Protein in Phase, *Cell*, 149, 1188.

Weber, S. C., Thompson, M. A., Moerner, W. E., Spakowitz, A. J. and Theriot, J. A. (2012) Analytical tools to distinguish the effects of localization error, confinement and medium elasticity on the velocity autocorrelation function, *Biophysical Journal*, 102, 2443.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2012) Nonthermal ATP-dependent fluctuations contribute to the *in vivo* motion of chromosomal loci, *Proceedings of the National Academy of Sciences*, 109, 7338.

Weber, S. C., Theriot, J. A. and Spakowitz, A. J. (2010) Subdiffusive motion of a polymer composed of subdiffusive monomers, *Physical Review E* 82, 011913.

Weber, S. C. and Theriot, J. A. (2010) Mu Gets in the Loop, *Molecular Cell* 39, 1.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2010) Bacterial chromosomal loci move subdiffusively through a viscoelastic cytoplasm, *Physical Review Letters* 104, 238102.

Presentations

Weber, S. C. and Brangwynne, C. P. (2013) Organelle size control: Nucleolar assembly and growth in the early *C. elegans* embryo, Poster, *American Society for Cell Biology*, Annual Meeting.

Weber, S. C. and Brangwynne, C. P. (2013) Mechanisms controlling organelle, cell and body size in the nematode *Caenorhabditis elegans*, Poster, *Biophysical Society*, Annual Meeting.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2011) ATP-dependent fluctuations drive macromolecular motion *in vivo*, Poster, *Gordon Research Conferences*, Motile and Contractile Systems.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2010) ATP-dependent fluctuations drive macromolecular motion *in vivo*, Talk, *American Society for Cell Biology*, Annual Meeting.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2010) Bacterial chromosomal loci move subdiffusively through a viscoelastic cytoplasm, Poster, *Biophysical Society*, Annual Meeting.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2009) Bacterial chromosomal loci move subdiffusively through a viscoelastic cytoplasm, Poster, *American Society for Cell Biology*, Annual Meeting.

Weber, S. C., Spakowitz, A. J. and Theriot, J. A. (2008) Fine-scale dynamic analysis of chromosomal loci, Poster, *American Society for Cell Biology*, Annual Meeting.

Teaching/Mentoring Experience

Guest Lecturer, CBE433/533 Mechanics and Dynamics of Soft Living Matter,
Princeton University — Aut 2012

Mentoring high school, undergraduate, senior thesis and graduate students,
Princeton University — 2011-present

Teaching Assistant, BIOE41 Physical Biology of Macromolecules,
Stanford University — Aut 2010

Teaching Assistant, Physiology Course, Marine Biological Laboratory,
Woods Hole, MA — Sum 2008

Teaching Assistant, BIO109 The Human Genome and Disease,
Stanford University — Win, Spr 2008