Michael Guy Poirier

Laboratoire de Dynamique des Fluides Complexes
3, rue de l'Université
67084 Strasbourg, France
Tel : 011 33 (0)3 90 24 07 25; Fax : 011 33 (0)3 90 24 07 45
E-mail: mpoirier@ldfc.u-strasbg.fr
Citizenship: United States

EDUCATION

University of Illinois at Chicago, Chicago, IL, 1997-2001: PhD in Physics.
Thesis: Micromechanical-Biochemical Studies of Mitotic Chromosome Structure.
Advisor: Prof. John F. Marko
University of Illinois at Chicago, Chicago, IL, 1995-1997: MS in Physics.
Truman State University, Kirksville, MO, 1991-1995: BS in Physics (formerly Northeast Missouri State University).

HONORS and AWARDS

Northeast Missouri State University President's Honorary and Combined Scholarship, 1991-1995
Dr. Robert Peavler Memorial Endowed Physics Scholarship, 1994-1995

EMPLOYMENT

Postdoctorial Researcher, 2002-Current, Laboratoire de Dynamique des Fluides Complexes, Universite Louis Pasteur
Research Assistant, 1997-2001, University of Illinois at Chicago, Department of Physics
Teaching Assistant, 1995-1997, University of Illinois at Chicago, Department of Physics
Research Intern; Summer 1994, The College of William and Mary, Applied Science Department, Advisor: Prof. Dennis Manos,

SOCIETY MEMBERSHIPS

American Physical Society student member, March 2000-2002.
American Society of Cell Biology student member, September 2000-2002.

PRESENTATIONS

Poster Presentation: Study of Mitotic Chromosomes Using Micromechanical and Microdigestion Experiments, American Society for Cell Biology Annual Meeting, Dec. 8-12, 2001.
Poster Presentation: Biophysical Characterization of Structure and Elasticity of Mitotic Chromosomes, American Society for Cell Biology Annual Meeting, Dec. 13-17, 2000.
Poster Presentation: Elasticity Measurements Reveal Differences Between In Vivo and In Vitro Assembled Chromosomes, FASEB summer research conference 2000, Yeast Chromosome Strucure, Aug. 19-24, 2000.
Oral Presentation: Microelastiticity of Single Mitotic Chromosomes, American Physical Society March Meeting, March 20-24, 2000.
Poster Presentation: Elasticity of Metaphase Chromosomes, Biophysical Society Annual Meeting, Feb. 13-17, 1999.

PAPERS

Poirier, M.G. and Marko, J.F. Micromechanical properties of mitotic chromosomes (review). (2003) J. Musc. Res. Cell. Mot., In Press.
Poirier, M.G. and Marko, J.F. Mitotic chromosomes are chromatin networks without an internal protein scaffold. (2002) Proc. Natl. Acad. Sci USA 99, 15393-15397.
Sarkar, A., Eroglu, S., Poirier, M.G., Nemani, A., Gupta, P. and Marko, J.F. Dynamics of Chromosome Compaction During Mitosis, Exp Cell Res. (2002) Jul 1;277(1):48-56.
Poirier, M.G. and Marko, J.F. Effect of Internal Friction on Biofilament Dynamics (2002) PRL 88(22):228103.
Poirier, M.G., Eroglu, S. and Marko, J.F. The Bending Rigidity of Mitotic Chromosomes (2002) Mol. Biol. Cell. 13:2170-2179.
Poirier, M.G., Monhait, T. and Marko, J.F. Reversible hypercondensation and decondensation of mitotic chromosomes studied using combined chemical-micromechanical techniques. (2002) J. Cell. Biochem. 85:422-424.
Poirier, M.G., Nemani, A., Gupta, P., Eroglu, S. and Marko, J.F. Probing chromosome structure with dynamic force relaxation (2001) PRL 86, 360-363.
Poirier, M. Eroglu, S., Chatenay, D. and Marko, J.F. Reversible and irreversible unfolding of mitotic newt chromosomes by applied force (2000) Mol. Biol. Cell 11, 269-276.