

BIOGRAPHICAL SKETCH

Michael J. Pikaart

A. Professional Preparation

B.S. (Chemistry), 1986; Calvin College

PhD (Biological Chemistry), 1992; The University of Michigan

B. Appointments

Associate Professor of Chemistry, Hope College, 2006-present

Visiting Scholar, Department of Molecular Genetics and Molecular Biology, University of New Mexico, 2006-2007

Assistant Professor of Chemistry, Hope College, 1999-2006

Instructor (Chemistry), Foundation for Advanced Education in the Sciences, NIH, Bethesda, MD; 1998-99

Staff Fellow, National Institutes of Health, 1996-99

Intramural Research Training Associate, National Institutes of Health,; 1992-96

Research Assistant, Department of Biological Chemistry and Institute of Gerontology, University of Michigan, Ann Arbor, MI; 1987-92

Human Genetics Training Grant Fellow, Department of Biological Chemistry, University of Michigan, Ann Arbor, MI; 1986-1989.

C. Significant Publications (* denotes undergraduate co-authors; bold-faced denotes REU undergraduate co-authors)

1. AB Fleming, C-F Kao, C Hillyer, M Pikaart, and MA Osley, "H2B ubiquitylation plays a role in nucleosome dynamics during transcription elongation." *Molecular Cell* 31: 57-66 (2008).
2. TR Vonderfect*, DN Schroyer*, BL Schenck*, VM McDonough, and MJ Pikaart, "Substitution of DNA-Contacting Amino Acids with Functional Variants in the Gata-1 Zinc Finger: A Structurally and Phylogenetically Guided Mutagenesis." *Biochemical and Biophysical Research Communication* 369: 1052-1056 (2008).
3. Amy B. Ghering, Lisa M. Miller Jenkins, Brandy L. Schenck*, Sandhya Deo, R. Aeryn Mayer, Michael J. Pikaart, James G. Omichinski, and Hilary A. Godwin. "Spectroscopic determination of the thermodynamics of the interaction of Pb²⁺ with GATA proteins." *Journal of the American Chemical Society* 127: 3751-3759 (2005).
4. **BH Mott, J Bassman**, and MJ Pikaart. "A molecular dissection of the interaction between the transcription factor Gata-1 zinc finger and DNA." *Biochemical and Biophysical Research Communications* 316: 910-917 (2004).
5. F Recillas-Targa, MJ Pikaart, B Burgess-Beusse, AC Bell, MD Litt, AG West, M Gaszner, and G Felsenfeld. "Position-effect protection and enhancer blocking by the chicken beta-globin insulator are separable activities." *Proc Natl Acad Sci U S A.* 99(10):6883-8 (2002).
6. N Saitoh, AC Bell, F Recillas-Targa, AG West, M Simpson, MJ Pikaart, and G Felsenfeld. "Structural and functional conservation at the boundaries of the chicken beta-globin domain." *EMBO Journal* 19(10):2315-22 (2000).

7. PV Pedone, MJ Pikaart, F Cerrato, M Vernucci, P Ungaro, CB Bruni, and A Riccio. "The role of histone acetylation and DNA methylation in the maintenance of the imprinted expression of the H19 and Igf-2 genes." FEBS Letters 458, 45-50 (1999).
8. MJ Pikaart, F Recillas Targa, and G Felsenfeld. "Loss of transcriptional activity of a transgene is accompanied by DNA methylation and histone acetylation, and is prevented by insulators." Genes and Development 12, 2852-2862 (1998).
9. MJ Pikaart and G Felsenfeld. "Expression and codon usage optimization of the erythroid-specific transcription factor cGATA-1 in baculoviral and bacterial systems." Protein Expression and Purification 8, 469-475 (1996).

D. Synergistic Activities

(i) Membership

American Association for the Advancement of Science
American Chemical Society
American Society for Biochemistry and Molecular Biology

(ii) Service

Worked with an American Chemical Society group (NSF- funded workshop) on "Molecular Basis of Life Processes" initiative
Act as faculty liaison at Hope for Undergraduate Affiliate of the American Society for Biochemistry and Molecular Biology
Served as poster presentation judge at national ASBMB meetings
Volunteer Science Olympiad coach
Grand Awards Judge (Molecular and Cellular Biology), Intel Science and Engineering Fair, Albuquerque NM. May 15-16, 2007.

E. Collaborators and other Affiliations:

Felix Recillas-Targa (Universidad Nacional Autonoma de Mexico); Bonnie Burgess-Beusse, Adam C Bell, Michael Litt, Adam West, Miclos Gaszner, and Gary Felsenfeld (NIH); Virginia McDonough (Hope College), Hilary A. Godwin (Northwestern University); Mary Ann Osley (University of New Mexico)

Graduate and Postdoctoral Advisors: Dr. Bryant Villeponteau, University of Michigan (PhD); Dr. Gary Felsenfeld, NIH (Postdoctoral)