



Ryan Philip Bender, PhD, FACMG

Associate Director, Molecular Genetics



EDUCATION

2007 Ph.D. Vanderbilt University

2002 B.S. Niagara University

POSTDOCTORAL TRAINING

2008-2009 Fellow in Medical Oncology
The Dana Farber Cancer Institute

2007-2009 Fellow in Clinical Molecular Genetics
*The Partners Center for Personalized Genetic Medicine,
Harvard University Medical School*

CERTIFICATION

American Board of Medical Genetics

ACADEMIC APPOINTMENTS

2004-2006 Tutor, Biochemistry
Vanderbilt University

2002 Teaching Assistant, Biology
Niagara University



SELECT PUBLICATIONS

R.P. Bender and N. Osheroff. "DNA Topoisomerases as Targets for the Chemotherapeutic Treatment of Cancer." In: Checkpoint Responses in Cancer Therapy (W. Dai ed.). Totowa, NJ: Humana Press, 2008; 57-92.

R.P. Bender and V.A. Joshi. *Predicting Response to Gefitinib with Germline EGFR variants*. Personalized Medicine. 2008;5:327-328.

R.P. Bender, M.J. Jablonsky, M. Shadid, I. Romaine, N. Dunlap, C. Anklin, D.E. Graves, and N. Osheroff. *Substituents on Etoposide that Interact with Human Topoisomerase IIa in the Binary Enzyme-Drug Complex: Contributions to Etoposide Binding and Activity*. Biochemistry. 2008;47:4501-9.

A.M. Wilstermann, **R.P. Bender**, M. Godfrey, S. Choi, C. Anklin, D.B. Berkowitz, N. Osheroff, and D.E. Graves. *Topoisomerase II-Drug Interaction Domains: Identification of Substituents on Etoposide that Interact with the Enzyme*. Biochemistry, 2007;46:8217-8225

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R.P. Bender, A.J. Ham and N. Osheroff. *Quinone-induced Enhancement of DNA Cleavage by Human Topoisomerase IIa: Adduction of Cysteine Residues 392 and 405*. Biochemistry, 2007;46:2856-2864.

R.P. Bender, H.J. Lehmler, L.W. Robertson, G. Ludewig, and N. Osheroff. *Polychlorinated Biphenyl Quinone Metabolites Poison Human Topoisomerase IIa: Altering Enzyme Function by Blocking the N-Terminal Protein Gate*. Biochemistry, 2006;45:10140-10152.

R.H. Lindsey, **R.P. Bender**, and N. Osheroff. *Stimulation Of Topoisomerase II-Mediated DNA Cleavage by Benzene Metabolites*. Chemico-Biological Interactions, 2005;153-154:197-205.

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R.P. Bender, R.H. Lindsey, D.A. Burden, and N. Osheroff. *NAPQI, the Toxic Metabolite of Acetaminophen, is a Topoisomerase II Poison*. Biochemistry, 2004;43:3731-3739.

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