

D'Antonio, Edward L.

Assistant Professor of Biochemistry and Structural Biology

Education

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Indiana University of Pennsylvania (Indiana, PA)		1999-2001	Chemistry
Millersville University (Millersville, PA)	B.S.	2001-2003	Chemistry
North Carolina State University (Raleigh, NC)	Ph.D.	2004-2010	Chemistry
University of Pennsylvania (Philadelphia, PA)	Postdoctoral	2010-2013	Structural Biology

Positions and Honors

Positions

2004-2004	Analytical Chemist, TEVA Pharmaceuticals USA, Sellersville, PA
2004-2010	Graduate Student in Chemistry, North Carolina State University, Raleigh, NC
2010-2013	Postdoctoral Fellow, Structural Biology, University of Pennsylvania, Philadelphia, PA
2013-2013	Adjunct Professor, Chemistry, Gloucester County College, Sewell, NJ
2013-	Assistant Professor, Biochemistry, University of South Carolina Beaufort, Bluffton, SC

Honors

2008	The American Institutes of Chemists Foundation Award
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Selected Peer-reviewed publications

1. **D'Antonio, E. L.** and Christianson, D. W. (2011) Crystal structures of complexes with cobalt-reconstituted human arginase I. *Biochemistry*, *50*, 8018-8027.
2. **D'Antonio, E. L.**, D'Antonio, J., de Serrano, V., Gracz, H., Thompson, M. K., Ghiladi, R. A., Bowden, E. F., and Franzen, S. (2011) Functional consequences of the creation of an Asp-His-Fe triad in a 3/3 globin. *Biochemistry*, *50*, 9664-9680.
3. **D'Antonio, E. L.**, Bowden, E. F., and Franzen, S. (2012) Thin-layer spectroelectrochemistry of the Fe(III)/Fe(II) redox reaction of dehaloperoxidase-hemoglobin. *J. Electroanal. Chem.*, *668*, 37-43.
4. **D'Antonio, E. L.** and Christianson, D. W. (2012) Binding of the unreactive substrate analog L-2-amino-3-guanidinopropionic acid (dinor-L-arginine) to human arginase I. *Acta Crystallogr.*, *F68*, 889-893.
5. **D'Antonio, E. L.**, Hai, Y., and Christianson, D. W. (2012) Structure and function of non-native metal clusters in human arginase I. *Biochemistry*, *51*, 8399-8409.
6. **D'Antonio, E. L.**, Chen, T. K., Turner, A. H., Santiago-Capeles, L., and Bowden, E. F. (2013) Voltammetry of dehaloperoxidase on self-assembled monolayers: reversible adsorptive immobilization of a globin. *Electrochem. Commun.*, *26*, 67-70.
7. **D'Antonio, E. L.**, Ullman, B., Roberts, S. C., Gaur Dixit, U., Wilson, M. E., Hai, Y., and Christianson, D. W. (2013) Crystal structure of arginase from *Leishmania mexicana* and implications for the inhibition of polyamine biosynthesis in parasitic infections. *Arch. Biochem. Biophys.*, *535*, 163-176.
8. **D'Antonio, E. L.** and D'Antonio, J. (2014) Therapeutic monosaccharide-based inhibitors of hexokinase and glucokinase for parasitic diseases, along with methods of their formation and use. *U.S. Provisional Patent Application No. 62/082,861*.