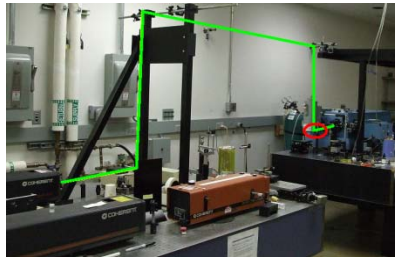
# *PhD studentships in Biochemistry and Molecular Biology*
# *Oregon Health & Science University*



Students with a Master of Science in Chemical Biology or related fields are encouraged to apply for admission to the Biochemistry and Molecular Biology Ph.D. program at OHSU (Portland, Oregon USA), within the Division of Environmental and Biomolecular Systems (www.ogi.edu/ebs/).

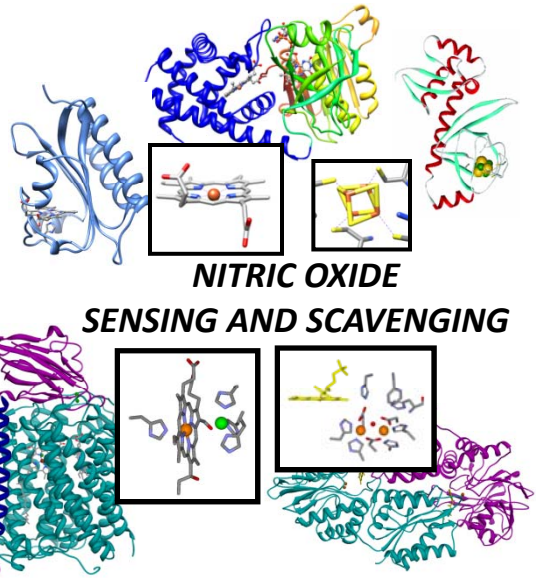
Generous student fellowships funded by the National Institutes of Health and the National Science Foundation are available to investigate reaction mechanisms of enzymes involved in the response to nitric oxide (NO) stress and to iron acquisition in pathogenic bacteria. See recent publications below for details.

This research will be carried out in the laboratory of Dr. Pierre Moënne-Loccoz and will provide students with unlimited access to *state-of-the-art* spectroscopy and fast kinetics facilities.

Experience with protein expression and purification and spectroscopic techniques is not required, but applicants should be highly motivated students drawn to experimental work and with a keen interest in the interplay between structure and function in metalloenzymes.

Along with laboratory work, this 4- to 5-year graduate program offers opportunities for advanced classes, participation in local and international conferences, and collaborative projects with other laboratories across the US and abroad.

***Enrollment is available throughout the year and will remain open until positions are filled.***
***For more details, please write to ploccoz@ebs.ogi.edu***




***Spectroscopic characterization of heme iron-nitrosyl species and their role in NO reductase mechanisms in diiron proteins***. P. Moënne-Loccoz (2007) *Nat. Prod. Rep. 24*, 610-620.
***A distal tyrosine residue is required for ligand discrimination in DevS from Mycobacterium tuberculosis.*** E.T. Yukl et al. (2008) *Biochemistry 47*, 12532-12539.
***Transcription factor NsrR from Bacillus subtilis senses nitric oxide with a 4Fe-4S cluster.*** E.T. Yukl et al. (2008) *Biochemistry 47*, 13084-13092.
***Accommodation of two diatomic molecules in cytochrome bo$_3$: Insights into NO reductase activity in terminal oxidases.*** T. Hayashi et al. (2009) *Biochemistry 48*, 883-890.
***The millisecond intermediate in the reaction of nitric oxide with oxymyoglobin is an iron(III)-nitrato complex, not a peroxynitrite.*** E.T. Yukl et al. (2009) *J. Am. Chem. Soc. 131*, 7234-7235.
***Kinetic and spectroscopic studies of hemin acquisition in the hemophore HasAp from Pseudomonas aeruginosa.*** E.T. Yukl et al. (2010) *Biochemistry 49*, 6646-6654.
***Insights into the nitric oxide reductase mechanism of flavodiiron proteins from a flavin-free enzyme.*** T. Hayashi et al. (2010) *Biochemistry 49*, 7040-7049.