

Jason A. Rosenzweig, Ph.D.

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A. Professional Preparation

Degree	Year	University	Major
Ph.D.	2006	University Of Miami	Microbiology and Immunology
B.S.	1998	Florida Atlantic University	Microbiology and Immunology

B. Appointments

2008-present	Assistant Professor of Biology, Texas Southern University
2007-2008	Assistant Professor Biology, Nova Southeastern University
2006-2007	Visiting Professor Biology, Nova Southeastern University

C. Selected Peer Reviewed Publications

1. Rosenzweig JA and Schesser K. Polynucleotide phosphorylase and the T3SS. (2007) *Adv Exp Med Biol.* 2007; 603: 217-24.
2. Wiley DJ, Nordfeldth R, Rosenzweig J, Dafonseca CJ, Gustin R, Wolf-Watz H, Schesser K. (2006) The Ser/Thr kinase activity of the Yersinia protein kinase A (YpkA) is necessary for full virulence in the mouse, mollifying phagocytes, and disrupting the eukaryotic cytoskeleton. *Microbial Pathogenesis*, 40(5): 234-43.
3. Rosenzweig JA, Weltman G, Plano GV, Schesser K. (2005) Modulation of Yersinia's type three secretion system by the S1 domain of polynucleotide phosphorylase. *J Biol Chem.* 280(1):156-63.
4. Edgeworth RL, San JH, Rosenzweig JA, Nguyen NL, Boyer JD, Ugen KE. (2002) Vaccine development against HIV-1: current perspectives and future directions. *Immunol Res.* 25(1): 53-74.
5. Patarca R, Rosenzweig JA, Zuniga AA, Fletcher MA. (2000) Benzalkonium salts: effects on G protein-mediated processes and surface membranes. *Crit Rev Oncog*, 11(3-4): 255-305.
6. Rosenzweig JA, Chromy B, Echeverry A, Yang J, Adkins B, Plano GV, McCutchen-Maloney S and Schesser K. (2007) Polynucleotide phosphorylase independently controls virulence factor expression levels and export in the yersiniae. *FEMS Microbiol Lett.* 270(2): 255-64.

D. Synergistic Activities

Further Characterization of a novel C8 surfactant based hand foam (antimicrobial) compound. Initial characterization in collaboration with Dr. Nwadiuto Esiobu (Florida Atlantic University) has revealed that the compound is highly effective against a wide range of both Gram negative and positive bacteria (including the mycobacteria). Further formulation and testing will evaluate sporocidal activity of the compound. This project can be readily expanded to evaluate antimicrobial capability in antigravity environments.

I plan on continuing to develop a poignant undergraduate and Masters level research program (begun at Nova Southeastern University's Farquhar College of Arts and Sciences this year), that focuses on bacterial stress responses at both physiological and molecular levels. The three major stress responses that I am presently studying include: 1.) host cell induced stress responses of bacterial pathogens, 2.) cold growth stress responses, and 3.) antimicrobial stress responses.