**Required Qualifications:**  (As evidenced by an attached resume)
Doctoral degree or the equivalent degree from a University. High level of familiarity with the following: fungal pathogenesis, antimicrobial susceptibility testing, studying fungal virulence factors, studying drug mechanism of action, expertise in murine model of fungal infections, especially with Cryptococcus neoformans, Candida albicans and particularly Aspergillus fumigatus. Required expertise in Mass spectrometry analysis (i.e. LC-MS, GC-MS, HPLC) particularly, but not exclusively, in lipid research (e.g. phospholipids, sphingolipids, fatty acids, cholesterol); protein-protein interaction; the effect of lipids on membrane proteins; lipidomics and proteomic approaches.

**Preferred Qualifications:**
Experience in fungal pathogenesis, antimicrobial susceptibility testing, studying fungal virulence factors, studying drug mechanism of action, constructing fungal strains deficient in the sphingolipid synthesis genes, expertise in murine model of fungal infections, especially with Aspergillus fumigatus. Experience with lipid research (metabolism, analysis). Experience with molecular biology and biochemistry (proteins and lipids), and role of lipids in the biology of fungal cells. Experience with lipid research (metabolism, analysis). Familiarity with molecular biology and biochemistry (proteins and lipids), protein-protein interaction, lipid-protein interaction, membrane structures, lipid function and role of lipids in biology of mammalian and/or microbial cells. Experience with mass spectrometry analysis, such as triple-quadrupole mass spectrometer or similar.

**Brief Description of Duties:**
The Postdoctoral Associate will assist the Principal Investigator in the department of Molecular Genetics & Microbiology. The incumbent will conduct research and ensure that all experiments are appropriately conducted following the policies and procedures of Stony Brook University. This position involves many collaborations, thus the individual must work well together with other investigators as a team. Drug susceptibility testing in vitro (microbial cultures) and in vivo (animals). Structure-activity relationships of new antifungal drugs. Drug toxicity studies in mammalian cell lines and in animals. Mass spectrometry experiments by LC-MS and GC-MS to understand the mechanisms of action of the antifungal drugs. LC-MS and GC-MS in the specialized fields of lipid research (e.g. phospholipids, sphingolipids, fatty acids, cholesterol); protein-protein interactions, effect of lipids on membrane proteins, lipidomics and proteomic approaches. Analyze and interpret the results the experiments. Overcome pitfalls and provide alternative solutions. Write reports and manuscripts on the results obtained. Present the results in a logical way and set up the next round of critical experimentations or questions.

**Special Notes:**
The Research Foundation of SUNY is a private educational corporation. Employment is subject to the Research Foundation policies and procedures, sponsor guidelines and the availability of funding. FLSA Exempt position, not eligible for the overtime provisions of the FLSA. Minimum salary threshold must be met to maintain FLSA exemption. FLSA Exempt position, not eligible for the overtime provisions of the FLSA. Minimum salary threshold must be met to maintain FLSA exemption.

Stony Brook University is 100% tobacco-free as of January 1, 2016. See our policy and learn more at [stonybrook.edu/tobaccofree](http://stonybrook.edu/tobaccofree), stonybrook.edu/tobaccofree
About Stony Brook:

Long Island's premier academic medical center, Stony Brook Medicine represents Stony Brook University's entire medical enterprise and integrates all of Stony Brook's health-related initiatives: education, research and patient care. It encompasses Stony Brook University Hospital, Stony Brook Children's Hospital, the six Health Sciences schools — Dental Medicine, Health Technology and Management, Pharmaceutical Sciences, Medicine, Nursing and Social Welfare — as well as the major centers and institutes, programs and more than 50 community-based healthcare settings throughout Suffolk County. With 603 beds, Stony Brook University Hospital serves as Suffolk County's only tertiary care center and Regional Trauma Center. Stony Brook Children's, with more than 180 pediatric specialists in 30 specialties, offers the most advanced pediatric specialty care in the region.

Equal Opportunity Employer, females, minorities, disabled, veterans.

If you need a disability related accommodation, please call the University Human Resource Services Department at (631) 632-6161 or the University Hospital Human Resources Department at (631) 444-4700. In accordance with the Title II Crime Awareness and Security Act, a copy of our crime statistics is available upon request by calling (631) 632-6350. It can also be viewed on line at the University Police website at http://www.stonybrook.edu/police. http://www.stonybrook.edu/police

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