

MATHEMATICS

RESEARCH EXPERIENCES FOR UNDERGRADUATES



Research, Education and Training in Computational Mathematics and Nonlinear Dynamics of Biological, Bio-inspired and Engineering Systems JUNE 4 - AUG 3, 2012

EARN WHILE YOU LEARN!

Research Areas

- Modeling using deterministic and stochastic differential equations
- Computational biology and biomechanics
- Mathematics of Materials
- Nonlinear dynamics and Micro Air Vehicles
- Mathematics Education



Contact

Dr. P. Seshaiyer and Dr. M. Emelianenko Research Experiences for Undergraduates Department of Mathematical Sciences 4400 University Drive, MS 3F2 George Mason University Fairfax, Virginia 22030 Email: <u>reu@math.gmu.edu</u> Website: http://math.gmu.edu/reu/ Phone: (703) 993-9787, (703) 993-9688

About the Program: The Department of Mathematical Sciences at GMU will host a multidisciplinary undergraduate research program in Research, Education and Training program in Computational Mathematics and Nonlinear Dynamics of Biological, Bio-inspired and Engineering Systems. This program will expose **twelve** mathematics undergraduate students and two **K-12 teachers** to advanced topics in mathematics, problem-solving techniques and multidisciplinary applications, as well as research related to mathematics education. The primary goal of the REU program is to expose twelve highly qualified undergraduate students and two K-12 teachers each year, to advanced topics in mathematics, problem-solving, visualization techniques and applications to bio-inspired and engineering systems. The metro region of Washington, DC is a particularly fertile area for research and work opportunities, including consulting, teaching, and government. Women and minorities are especially encouraged to apply.

Pending funding from the National Science Foundation **REU** (Research Experiences for Undergraduates) Program and the Department of Defense **ASSURE** (Awards to Stimulate and Support Undergraduate Research Experiences) Program.

Program Eligibility

Minimum 3.3 GPA Must be currently in junior/senior year Must be a US Citizen or Permanent Resident

Financial Suppo

Stipend (\$3,375) Travel Allowance (\$550) Housing and dining provided

> Application Deadline March 2, 2012