

Swati DebRoy

CONTACT INFORMATION	358 Little Hall Department of Mathematics University of Florida	Mobile: 352-870-4044 Email: debroy.swati@gmail.com Website: www.math.ufl.edu/~swati
RESEARCH INTERESTS	Treatment and related toxicities of within-host Hepatitis C infection. Infectious Diseases, Immunology, Epidemiology, Population Dynamics	
EDUCATION	University of Florida , Gainesville, Florida, USA <i>PhD in Mathematics</i> <ul style="list-style-type: none">• Expected graduation date: Aug 2011• Advisors: Dr. Maia Martcheva• Co-advisor: Dr. Ben Bolker University of Florida , Gainesville, Florida, USA <i>MS in Mathematics</i> University of Burdwan , West Bengal, India <i>MSc in Pure Mathematics</i> University of Calcutta , Kolkata, India <i>BSc with Hons. in Mathematics</i>	Jan 2008 – present Aug 2005 – Dec 2007 Jul 2003 – Jul 2005 Jun 2000 – Jun 2003
AWARDS	College of Liberal Arts and Sciences (UF) Graduate Travel Award , Summer 2010 Center for Applied Mathematics (UF) Travel Award , Summer 2010. Graduate Students Council (UF) Travel Award , Summer 2010. SIAM Life Sciences Conference 2010, Student Travel Award . CMPD3 Conference 2010, Student Travel Award . Certificate for most outstanding contribution to SIAM student chapter at UF , 2008-2009 and 2006-2007 Third Prize for SIAM 'Math Matters, Apply it' Flyer Contest . Jan 2007.	
PUBLICATIONS	Swati DebRoy , Benjamin M. Bolker and Maia Martcheva. Bistability and long-term cure in a within-host model of hepatitis C. <i>Submitted</i> . Swati DebRoy , Christopher Kribs-Zaleta, Anuj Mubayi, Gloriell M. Cardona-Melendez, Liana Medina-Rios, MinJun Kang and Edgar Diaz. Evaluating Treatment of Hepatitis C for Hemolytic Anemia Management. <i>Mathematical Biosciences</i> 225 (2010) 141-155. doi:10.1016/j.mbs.2010.02.005 Swati DebRoy and Maia Martcheva. Immuno-Epidemiology and HIV/AIDS: A Modeling Perspective. <i>Mathematical Biology Research Trends</i> , Nova Publishers (2008) ISBN: 978-1-60456-141-8	
PROFESSIONAL EXPERIENCE	University of Florida , Gainesville, Florida, USA <i>Teaching Assistant</i> 14 semesters Calculus III - Summer 2011 (Lecturer), Fall 2010 Calculus II - Fall 2009 Calculus I - Summer 2010 (Lecturer), Fall 2008 Survey of Calculus I- Fall 2007, Spring 2008 Pre-calculus Algebra & Trigonometry-Summer-B 2006, 2007, Fall 2006 Pre-calculus Algebra - Fall 2005, Spring 2006 Mathematics for Liberal Arts Majors II - Spring 2009 (Lecturer) Mathematics for Liberal Arts Majors- Spring 2007 Carmel High School , Kolkata, India <i>Part-time Position</i> Taught Statistics to High School Seniors.	Aug 2005 – present Summer 2000

GRANT WRITING EXPERIENCE	<p>NSF Grant for The Second SIAM Gators Student Conference, March 2009. PI: Dr. Sergii Pilyugin. (Grant writing committee: Swati DebRoy, Minah Oh, Souvik Bhattacharya). Status- Awarded.</p> <p>NAKFI Complex Systems- Futures Grant, 2009. PI: Dr. Maia Martcheva, Co-PI: Swati DebRoy, Dr. Regino Gonzalez-Peralta. Status- Declined</p>	
TECHNICAL REPORTS	<p>Threshold Behavior in Immunological Models of Hepatitis C. Advised by Dr. Carlos Castillo-Chavez and Dr. Maia Martcheva</p> <p>Drug Action of Interferon and Ribavirin in Treatment for Hepatitis C and Resulting Hemolytic Anemia. Supervised by Dr. Ben Bolker</p> <p>Underreporting of Visceral Leishmaniasis Deaths in Bihar, India (with Olivia Prosper, Nick Ruktanonchai). Supervised by Dr. Ben Bolker</p>	
CONFERENCE TALKS	<p>Invited talk, Workshop in Mathematical Ecology, 2010 at IISER, Kolkata, India.</p> <p>Invited talk, Special session in the SIAM Annual Conference, 2010 at Pittsburgh, USA.</p> <p>Invited talk, Special session in CMPD3 conference, 2010 at Bordeaux, France.</p> <p>Talk, The Second SIAM Gators Student Conference, 2009 at Gainesville, USA.</p>	
WORKSHOPS ATTENDED	<p>Optimal Control and Optimization for Biologists at NIMBioS, University of Tennessee, Knoxville. Dec 2009.</p> <p>Mathematical and Theoretical Biology Institute (MTBI) Research Training, Arizona State University, Summer 2008 and 2009</p>	
SELECTED COURSES	<p>Ecological Models and Data, Integrative Principles in Biology, Ecology and Evolution of Infectious Diseases in the Dept. of Biology at UF.</p> <p>Modeling in Mathematical Biology, Biomathematics Seminars, Numerical Analysis in the Dept. of Mathematics at UF.</p>	
COMPUTER SKILLS	<p>Programming languages such as R, Matlab, Fortran.</p> <p>Software Tools like Mathematica, Latex, Maple and MSOffice.</p>	
SYNERGISTIC ACTIVITIES	<p>Poster presented at SACNAS National Conference, 2009</p> <p>Poster presented at NSF Research Day, UF, 2009.</p> <p>Elected officer for SIAM Gator Student chapter as President (2008-2009), Vice President (2007-2008) and Treasurer (2006-2007).</p> <p>Attended conferences including SIAM Annual meeting 2008-2010, H1N1 Flu Conference at Arizona State University, 2009.</p>	
EVENTS ORGANIZED	<p>President of the organizing committee of The Second SIAM Gators Student Conference, UF, 2009.</p> <p>Weekly SIAM Seminar for Fall 2006 - Spring 2009.</p> <p>Weekly Mathematical Biology Seminar, Dept. of Mathematics, UF, 2008-2009.</p>	
REFERENCES	<p>Dr. Maia Martcheva Associate Professor Dept. of Mathematics University of Florida Gainesville, Florida, USA Email: maia@ufl.edu</p>	<p>Dr Ben Bolker Professor Dept. of Mathematics and Statistics and Dept. of Biology McMaster University Hamilton, Ontario, Canada Email: bolker@ufl.edu</p>
	<p>Dr Christopher Kribs-Zaleta Associate Professor Dept. of Mathematics and Dept. of Curriculum and Instruction University of Texas at Arlington Arlington, Texas, USA Email: kribs@uta.edu</p>	<p>Dr. Rick Smith Associate Professor/Associate Chair Dept. of Mathematics University of Florida Gainesville, Florida, USA Email: rs@ufl.edu</p>