DANIEL MAXIN
Associate Professor of Mathematics

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Citizenship: Romanian and U.S.		
Birth date: 03/12/1975		

EDUCATION

Ph.D.	Mathematics	Purdue University	August 2007
M.S.	Mathematics	Purdue University	May 2005
B.S.	Mathematics and Computer Science	Dunarea de Jos University, Galati, Romania	June 1997

PROFESSIONAL EXPERIENCE

- *Associate Professor of Mathematics*, Department of Mathematics and Computer Science, Valparaiso University, from August 2014

- *Assistant Professor of Mathematics*, Department of Mathematics and Computer Science, Valparaiso University, August 2008-August 2014

- *Visiting Assistant Professor,* Department of Mathematics, University of Nebraska-Lincoln, June-July 2011

- *Visiting Assistant Professor,* Department of Mathematics and Computer Science, Valparaiso University August 2007-August 2008

- *Graduate Teaching Assistant,* Department of Mathematics, Purdue University, August 2001-August 2007

- *Computer Science Teacher,* "V. Alecsandri" College, Galati, Romania, September 1997-May 2001

- *Mathematics Instructor,* Romanian Business School-Galati, Romania, September 1998-May 1999

FELLOWSHIPS AND HONORS

•	IMMERSE fellowship	University of Nebraska-Lincoln	Summer 2011
•	Project NExT fellowship	Mathematical Association of America	2008-2009
•	VIGRE fellowship	Department of Mathematics, Purdue University	Summer 2007
•	Graduate Student Award for Outstanding Teaching	Purdue University	2007
•	Excellence in Teaching Award	Department of Mathematics, Purdue University	2006-2007
•	Science Scholarship	Department of Mathematics, Purdue University	Fall 2001

RESEARCH INTERESTS:

- Mathematical Biology and Epidemiology
- Population Dynamics
- Applied Mathematics

PUBLICATIONS   (*) *undergraduate co-author*

- *Is more better? Higher sterilization of infected hosts need not result in reduced pest population*, June 2014, J. Math. Biol., DOI : 10.1007/s00285-014-0800-0

- *Why have parasites promoting mating success been observed so rarely?,* (with L. Berec), J. Theor. Biol., (342)(2014), 47-61
- *A generalized two-sex logistic model,* (with L. Sega), J. Biol. Dynamics, 7(1)(2013), 302-318

- *Fatal or harmless: extreme bistability induced by sterilizing, sexually transmitted pathogens* (with L. Berec), Bull. Math. Biol., 75(2)(2013), 258-273

- *The impact of sexually abstaining groups on persistence of sexually transmitted infections in populations with ephemeral pair bonds* (with L. Berec, M. Covello*, J. Jessee* and M. Zimmer*), J. Theor. Biol., 292(2012), 1-10

- *Double impact of sterilizing pathogens: added value of increased life expectancy on pest control effectiveness* (with L. Berec), J. Math. Biol., 64(7)(2012), 1281-1311

- *Vertical transmission in epidemic models of sexually transmitted diseases with isolation from reproduction* (with T. Olson* and A. Shull*), Involve, 4-1 (2011), 13-26

- *A two-sex demographic model with single-dependent divorce rate* (with L. Berec), J. Theor. Biol., 265(4) (2010), 647-656

- *Proving that three lines are concurrent,* College Mathematics Journal, (March 2009)

- *The Influence of Sexually Active Non-Reproductive groups on persistent sexually transmitted diseases*, J. Biol. Dynamics, 3(5)(2009) 532-550

- *The role of sexually abstained groups in two-sex demographic and epidemic logistic models with non-linear mortality* (with F.A. Milner), J. Theor. Biol. 258(3) (2009), 389-402

- *Effects of Non-Reproductive Groups on persistent sexually transmitted diseases* (with F.A. Milner), Math. Biosc. Engin. 4(2007) 505-522

SUPERVISED UNDERGRADUATE RESEARCH

- Jared Erickson, *A new couple removal estimation in gender structured demographic models,* undergraduate research project presented at The 20th Annual Undergraduate Research Conference, Butler University, April 18, 2008

- Thomas Patrick, Tim Olson and Adam Shull, *Vertical transmission in epidemic models of STD's with isolation from reproduction,* undergraduate research project presented at The 26th Rose-Hulman Undergraduate Mathematics Conference, March 27-28, 2009

- Krista Schaefer and Adam Shull, *When does quarantine make things worse?* undergraduate research project presented at The 27th Rose-Hulman Undergraduate Mathematics Conference, March 26-27, 2010

- Michael Covello, Jill Jessee, Matthew Zimmer, *The impact of non-reproductive groups in two-sex demographic and logistic models without pair-formation,* NSF-REU project, Valparaiso University, Summer 2010

- Adrienna Bingham, Denali Molitor, Julie Pattyson, *Controlling pest populations with sterilizing pathogens and vertical transmission*, NSF-REU project, Valparaiso University, Summer 2012

- Chase Ludington and Amanda Riley, *The effect of risk taking behavior induced by treatment efficiency in epidemic models*, the 30th , Rose-Hulman Undergraduate Mathematics Conference, April 19-20, 2013

INVITED TALKS

- Valparaiso Experience for Research by Undergraduates in Mathematics, July 2007, Valparaiso University

- MAA Session on Using Computer Algebra Systems in the Calculus Sequence, Joint AMS-MAA meeting, San Francisco, January 14th, 2010

- Department of Mathematics, Computer Science and Statistics, Purdue University-Calumet, February 11th, 2010

- Department of Mathematics and Computer Science, Wabash College, October 5th, 2010

- Department of Mathematics, University of Nebraska-Lincoln, July 22nd , 2011

- School of Mathematical & Statistical Science, Arizona State University, October 14th , 2011

- Department of Mathematics, Augusta State University, October 19th , 2012

- Joint International Meeting of the AMS and Romanian Mathematical Society, Alba Iulia, Romania, June 30th , 2013

CONFERENCE TALKS

- Fall 2009 Indiana MAA Section Meeting, Purdue University-Calumet, October 2009
- AMS Session on Biology, II, Joint AMS-MAA meeting , Washington D.C., January 6th 2009
- Spring 2008 Indiana MAA Section meeting, St. Mary's College, March 28-29, 2008
- AMS Session on Applications of Mathematics, I, Joint AMS-MAA meeting, San Diego, January 7th 2008
- 2nd Conference on Computational and Mathematical Population Dynamics, July 16-20, 2007, Campinas, Brazil
- Spring 2007 Indiana MAA Section meeting, University of Indianapolis, March 24th 2007
- 2007 Workshop for Young Researchers in Mathematical Biology, Mathematical Biosciences Institute, Columbus, OH, March 12-15, 2007
- AMS Session on Applications of Mathematics, IV, Joint AMS-MAA meeting , New Orleans, January 8th , 2007
- Joint SIAM-SMB Conference on the Life Sciences, July 31-August 4, 2006, Raleigh, North Carolina,
- European Conference for Mathematical and Theoretical Biology, July 18-22, 2005, Dresden, Germany

TEACHING EXPERIENCE

- In U.S.A. at Valparaiso University:
  Abstract Algebra I and II, Analytic Geometry and Calculus I, II, III, Differential Equations and Linear Algebra, Pre-calculus, Fourier Series and Boundary Value Problems, Mathematical Modeling of Infectious Diseases, Dynamical Systems, Real Analysis.

- In U.S.A. at Purdue University:
  Introduction to Analysis 1 and 2, Algebra and Trigonometry 1 and 2, Pre-calculus, Calculus and Analytic Geometry 1, Plane Analytic Geometry and Calculus 2, Ordinary Differential Equations, Linear Algebra, Real Analysis (problem session).

- In U.S.A. at University of Nebraska-Lincoln:
  Designed and taught an intensive course in Real Analysis and Dynamical Systems for beginning graduate students.

- In Romania:
  High School Teacher of Computer Science at "V.Alecsandri College", Galati, Sept. 1997-June 2000
  Mathematics Lecturer at Business Romanian School, Galati, Sept. 1998-June 1999

GRANTS

- Wheat Ridge Ministries-O.P. Kretzmann Grant, 2014-2015
- Wheat Ridge Ministries-O.P Kretzmann Grant, 2012-2013
- Short-term visitor support to NIMBioS (National Institute for Mathematical and Biological Synthesis), University of Tennessee-Knoxville, April 2011
- CELT travel grant, Valparaiso University, 2009
- Expense grant to develop an online course in Mathematical Biology, Valparaiso University, 2008
- Travel grant from Society of Mathematical Biology and Purdue University, 2007
- Travel grant from Society of Mathematical Biology, 2006