

## BIOGRAPHICAL SKETCH

Steven Buechler

### Professional Preparation

Eastern Illinois University; 1975, B.A. (Mathematics), B.S. (Physics)  
University of Maryland; 1981, Ph.D. (Mathematics)

### Appointments

2010 – present Professor, Department of Applied and Computational Mathematics and Statistics  
2010 – present Chair, Department of Applied and Computational Mathematics and Statistics  
2006 – 2010 Associate Dean for Undergraduate Studies, College of Science, University of Notre Dame  
2004 – 2005 Visiting Professor, Mathematical Biosciences Institute, The Ohio State University  
2000 – 2004 Department Chair, Department of Mathematics, University of Notre Dame  
1996 – 2000 Associate Dean for Research, College of Science, University of Notre Dame  
1995 – 1996 Associate Provost, University of Notre Dame  
1992 – 2010 Professor, Department of Mathematics, University of Notre Dame  
1988 – 1992 Associate Professor, Department of Mathematics, University of Notre Dame  
1987 – 1988 Associate Professor, Department of Mathematics, University of Wisconsin – Milwaukee  
1985 – 1987 NSF Postdoctoral Research Fellow, Department of Mathematics, University of California – Berkeley  
1983 – 1987 Assistant Professor, Department of Mathematics, University of Wisconsin – Milwaukee  
1981 – 1983 Gibbs Instructor, Department of Mathematics, Yale University

### Recent Publications – Closely Related

1. M. Carrasco, S. Buechler, R. Arnold, T. Sformo, B. Barnes, J. Duman, Investigating the deep supercooling ability of an Alaskan beetle, *Cucujus clavipes puniceus*, via high throughput proteomics, *Journal of Proteomics* (2011), in press
2. M. Carrasco, S. Buechler, R. Arnold, T. Sformo, B. Barnes, J. Duman, Elucidating the biochemical overwintering adaptations of larval *Cucujus clavipes puniceus*, a non-model organism, via high throughput proteomics, *Journal of Proteome Research* (2011), in press
3. K.M. Bauer, A.B. Hummon, S. Buechler, Right-side and left-side colon cancer follow different pathways to relapse, *Molecular Carcinogenesis* (2011), doi: 10.1002/mc.20804 (Epub ahead of print)
4. S. Buechler, Low expression of a few genes indicates good prognosis in estrogen receptor positive breast cancer, *BMC Cancer*, vol. 9, No. 243 (2009) 1-18
5. H. Guillen-Ahlers, S. Buechler, M. Suckow, F.J. Castellino, V. Ploplis, Regulation of collagen expression in tumors of Apc<sup>Min/+</sup> mice after sulindac treatment, *Carcinogenesis*, vol. 29, No. 7, (2008) 1421-7

### **Other Publications**

1. S. Buechler, Vaught's conjecture for superstable theories of finite rank, *Annals of Pure and Applied Logic*, vol. 155 (2008) 135-172
2. A. Berenstein, S. Buechler, Simple stable homogeneous expansions of Hilbert spaces, *Annals of Pure and Applied Logic*, vol. 128 (2004) 75-101
3. S. Buechler, O. Lessmann, Simple Homogenous models, *Journal of the American Math. Soc.*, Vol. 16, No. 1, (2003) 91-121
4. S. Buechler, A. Pillay, F. Wagner, Supersimple theories, *Journal of the American Math. Soc.*, Vol. 14, No. 1, (2001) 109-124
5. S. Buechler, **Essential Stability Theory**, *Perspective in Mathematical Logic*, Springer-Verlag, Heidelberg/Berlin/New York (1996) (330 pages)

### **Synergistic Activities**

1. Developed a course module in statistical methods for the ESTEEM masters program, 2009.
2. Developed a course module in applied statistics/bioinformatics for graduate students in the Department of Biological Sciences, 2007.
3. Member, Design and Biostatistics Committee, Indiana Clinical and Translational Sciences Institute, 2009.
4. Patent pending, Accelerated Progression Relapse Test, US Patent 12/695,723; International Application Number PCT/US10/22403.

### **Collaborators and Other Affiliations (last 48 months)**

F. Castellino, H. Guillen-Ahlers, A. Hummon, V. Ploplis, M. Suckow, J. Duman, A. Hummon (University of Notre Dame)  
Sunil Badve (IU School of Medicine)

### **Graduate Students (last 5 years)**

Jacob Heidenreich, Ph.D., 2006  
Prerna Juhlin, Ph.D., 2010  
Donald Brower, current  
Jun Dan, current

### **Thesis and Postdoctoral Advisors**

David Kueker, University of Maryland  
Angus Macintyre, Yale University  
Leo Harrington, University of California at Berkeley