

## BIOGRAPHICAL SKETCH

### Jeffrey G. Ryan

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### Education and Post-Doctoral Experience:

1978-1983: B.S. (Summa Cum Laude), Geology, Western Carolina University  
1983-1989: M.A., M. Phil., Ph.D., Columbia University. Thesis Title: The Systematics of Lithium, Beryllium and Boron in Young Volcanic Rocks. Advisor: C.H. Langmuir  
1989-1991: Postdoctoral Fellow, Department of Terrestrial Magnetism, Washington, DC.

### Professional History:

2009-Present Chair, Department of Geology, University of South Florida  
2005-2009 Assistant Chair, Department of Geology, University of South Florida  
2003-2005 Program Director, EHR/DUE, National Science Foundation  
2002-Present Professor, Department of Geology, University of South Florida  
2000-2001 Interim Chair, Department of Geology, University of South Florida  
1996--2002 Associate Professor, Department of Geology, University of South Florida  
1991-1996 Assistant Professor, Department of Geology, University of South Florida

### Relevant and/or Significant Publications (students in boldface):

- Peterson, V.L., J.G. Ryan, and **the 1997-1998 REU Site Program Participants** (2008) Geochemistry and petrogenesis of the Buck Creek mafic/ultramafic complex, western North Carolina. *Geological Society of America Bulletin*, v. 121, pp 615-629.
- Agostini, S., Tonarini, S., Ryan, J.G., and Innocenti, F. (2008) Drying and dying of a subducted slab: Li and B isotope variations in Western Anatolia Cenozoic Volcanism. *Earth and Planetary Science Letters*, v. 272; 139-147.
- Savov, I.P.**, Ryan, J.G., D'Antonio, M. and P. Fryer (2007) Petrology and geochemistry of serpentized peridotites from Mariana Forearc, South Chamorro Seamount, ODP Leg 195: Implications for the elemental recycling across and along the Mariana arc-basin system. *Journal of Geophysical Research*, v. 112, doi:10.1029/2006JB004749.
- Savov, I.P.**, Ryan, J.G., Kelley, K. and **Mattie, P.D.** (2005) Geochemistry of serpentinites from the Mariana Forearc- Conical Seamount, ODP Leg 125: describing fluid-mediated slab additions. *Geochemistry, Geophysics, Geosystems*, 6, Q04J15 DOI10.1029/2004GC000777.
- Benton, L., J.G. Ryan, and **I. Savov** (2004) Lithium abundance and isotope systematics of forearc serpentinites, Conical Seamount, Mariana forearc: Insights into the mechanisms of slab/mantle exchange during subduction. *Geochemistry, Geophysics, Geosystems*, v. 5, 10.1029/2004GC000708.
- Ryan, J.G. and Kyle, P.R. (2004) Lithium and lithium isotope variations in intraplate mantle sources: insights from McMurdo Group lavas (Mt. Erebus) and other intraplate volcanic rocks. *Chemical Geology*, v. 212, pp 125-142.
- Peterson, VL, J.G. Ryan, SP Yurkovich, SE Kruse and J. Burr A collaborative field-laboratory summer Research Experiences for Undergraduates (REU) program in geosciences. *CUR Quarterly*, Sept. 2003, p. 5-9.
- Berger, S, Cochrane, D., Simons, K. Savov I., J.G. Ryan**, and V.L Peterson (2001) Insights from rare earth elements into the genesis of the Buck Creek Complex and other Blue Ridge ultramafic bodies. *Southeastern Geology*, 40, p. 201-212.
- Hochstaedter, A.F., Ryan, J.G., Luhr, J.F., and Hasenake, T. (1996) On B/Be systematics of the Mexican Volcanic Belt. *Geochimica et Cosmochimica Acta*. **60**, 613-628.
- Ryan, J.G., Morris J.D., Tera F., Leeman W.P. and Tsvetkov A. (1995) Cross-arc geochemical variations in the Kurile island arc as a function of slab depth. *Science*, **270**, 625-628.

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### **Integrative Activities:**

**NSF-MARGINS Program:** (Member of MARGINS Education Advisory Committee, 2005-Present; Member, NSF MARGINS Steering Committee, 2005-2008; Co-Associate Editor, "Izu-Bonin-Mariana Subduction System: A Comprehensive Overview", Theme in *GCubed*)

**NSF-EHR Projects and Funding:** Two active projects supported by the NSF Course, Curriculum and Laboratory Improvement (CCLI) Program ("Preparing Undergraduates for Research: Examining the use of Remote Instrumentation in Earth and Planetary Science Classrooms", "Collaborative Research: Using MARGINS Research Data Resources in the Classroom: Developing and Testing Multidisciplinary Mini-Lessons"; PI of an NSF-Research Experiences for Undergraduates Site program, 1997-2002 ("Collaborative Research: REU: An integrated field-laboratory experience for undergraduates: constraints on the evolution of Southern Blue Ridge mafic-ultramafic massifs"); REU Supplement funds obtained to train 11 students on three past NSF grant awards.

**National Association of Geoscience Teachers,** (Councilor-at-Large and Executive Committee member, 2007-present; NAGT Liaison to the AGU Committee on Education and Human Resources; Coordinator and Facilitator of annual NAGT-CUR Short Course "Starting out in Undergraduate Research and Education" at the GSA Annual Meetings)

**Council on Undergraduate Research** (Geoscience Councilor, 2001-present; Chair, CUR-Geosciences Division and Executive Board member, 2006-2008; Member, CUR Government and External Affairs Committee; Facilitator for the CUR Institutes "Beginning a Research Program in the Natural Sciences at a Predominantly Undergraduate Institution", and "Institutionalizing Undergraduate Research")

**Review Panelist** for seven different NSF-supported Funding programs (Course, Curriculum and Laboratory Improvement; Advanced Technological Education; National STEM Digital Libraries; STEM Talent Expansion Program; Research Experiences for Undergraduates; NSF-MARGINS; NSF-NATO Postdoctoral Fellowships)

### **List of Collaborators over Past Five Years:**

Dr. Geoff Abers, L-DEO

Dr. Zachary Atlas, USF

Dr. Toshi Hasenaka, Kunamoto Univ.

Dr. Bill McDonough, Univ. Maryland

Dr. Virginia Peterson, Grand Valley State U.

Dr. Don Reed, SJSU

Dr. Ivan Savov, Leeds Univ.

Dr. Sonia Tornarini, CNR-Pisa

Dr. Steven Yurkovich, WCU

Dr. Samuele Agostini, CNR-Pisa

Dr. Susan Eriksson, UNAVCO

Dr. Cathy Manduca, Carleton College

Dr. Masaya Miyoshi, Kunamoto Univ.

Dr. Allan Feldman, USF

Dr. Roberta Rudnick, Univ. Maryland

Dr. Steve Shirey, DTM

Dr. Jim Walker, Northern Illinois Univ.

Dr. Gladis Kersaint, USF

**GCubed Theme Co-Editors:** Dr. Shiuchi Kodaira (JAMSTEC); Dr. Sara Pozgay (ANU)

### **Academic Advisors:**

Dr. Charles Langmuir, Columbia University

Dr. Julie Morris, Washington Univ. (Postdoctoral)

### **Recent Advisees: (9 MS; 1 Ph.D.; 48 REU Site Participants)**

Dr. Eric Tenthorey (MS: Australian National Univ.)

Dr. Livio Tornabene (MS: Univ. Arizona)

Dr. Ivan Savov (Ph.D.: Leeds Univ.)

Dr. Kyla Simons (REU Site participant - Univ. Miami)

Dr. Jeff Rahl (REU Site Participant: Washington and Lee Univ.)

Dr. William Sullivan (REU Site Participant: Colby College)

Dr. Julie O'Leary (REU Site Participant: DTM)

Dr. Meagen Pollock (REU Site Participant: College of Wooster)

Allan Feldman, PhD  
Department of Secondary Education, College of Education  
University of South Florida, Tampa, FL  
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### Professional Preparation

Stanford University	Curriculum and Teacher Education	Doctor of Philosophy
Columbia University	Teachers College	Master of Arts
New York University	Mathematics	Bachelors of Arts

### Appointments

2009- Professor, Science Education, Department of Secondary Education, College of Education, University of South Florida, Tampa, FL  
Research Areas: Science Education, Teacher Education and Action Research, Program Evaluation.

1993-2009 Professor, Science and Teacher Education, TECS Department, School of Education, University of Massachusetts, Amherst.

2007 (Fall semester)-*Visiting Professor*, Department of Science Teaching, Weizmann Institute of Science, Rehovot, Israel and *Visiting Professor*, Faculty of Education, University of Haifa, Haifa, Israel

2006 (January 1- May 31) *Interim Chair*, Department of Teacher Education and Curriculum Studies, University of Massachusetts Amherst

1984-89 Science Department Chair, Germantown Friends School, Philadelphia, PA.

1972-1989 Physics, mathematics, and middle school science teacher in public and private schools in NY, NJ, and PA.

### Five Publications Related to the Project

Feldman, A., Divoll, K. and Rogan-Klyve, A. (2009). Research Education of New Scientists: Implications for Science Teacher Education. *Journal of Research on Science Teaching*.

Davidson, T., Feldman, A., Rogan-Klyve, A. and Divoll, K. (2006). Science teacher learning through legitimate participation in scientific research. Proceedings of the Annual Meeting of the Association for Science Teacher Education, January 12-15, 2006, Portland, OR.

Feldman, A. & Davidson, T. (2005). Talking about doing science: Scientists' and engineers' conceptions of the nature of science. Proceedings of the Annual Meeting of the National Association for Research in Science Teaching, April 2005, Dallas, TX.

Weiss, T., Feldman, A., Pedevillano, D. E. and Capobianco, B. (2003). The implications of culture and identity: a professor's engagement with a reform collaborative. International Journal of Science and Mathematics Education, 1(3), 333-356.

Feldman, A. (2002). Multiple perspectives for the study of teaching: Knowledge, reason, social context and being. Journal of research in science teaching, 39(10), 1032-1055

### Five Other Publications

Feldman, A. and Capobianco, B. (2008). Teacher Learning of Technology Enhanced Formative Assessment. *Journal of Science Education and Technology*, 17(1), 82-99.

Feldman, A. (2000). Decision making in the practical domain: A model of practical conceptual change. Science education, 84(5), 606-623.

- Feldman, A. and Minstrell, J. (2000). Action research as a research methodology for the study of the teaching and learning of science. In R. Lesh and E. Kelly (Eds.), Designing research for reform in mathematics & science education.
- Feldman, A. and Kropf, A. (1999). Teachers as curriculum decision-makers: The selection of topics for high school physics. Journal of Curriculum and Supervision, 14(3), 241-259.
- Feldman, A. (1997). Varieties of wisdom in the practice of teachers. Teaching and teacher education, 13(7), 757-773.

### Synergistic Activities

- STEM RAYS. Co-PI of the NSF-funded out of school time project in which grades 4-8 teachers and students engage in authentic science research in collaboration with scientists.
- Pioneer Valley PreK-16 STEM Pipeline Network: Direct this collaboration of school districts, institutions of higher education, and businesses that provides professional development for teachers and after-school activities for students.
- Evaluation projects. Have served as the outside evaluator for 10 projects, including four funded by the NSF. Developed a variety of instruments including interview protocols, surveys, and the "card sort."
- Participation of underrepresented groups. Worked closely with Holyoke and Springfield Public Schools to improve the quality of bilingual science teaching. Developed and implemented a degree bearing teacher enhancement program in Springfield, MA.

### Collaboration

- Dr. David Ahlfeld, University of Massachusetts
- Dr. Marsha Alibrandi, Fairfield University
- Dr. Brenda Capobianco, Purdue University
- Dr. Charlene D'Avanzo, Hampshire College
- Dr. Kathleen Davis, University of Massachusetts
- Dr. Sarina Ergas, University of South Florida
- Dr. William Gerace, University of North Carolina Greensboro
- Mr. Aaron Kropf, Amherst High School
- Dr. Jim Minstrell
- Dr. Klaus Nusslein, University of Massachusetts
- Dr. Mary Rearick, Eastern Michigan University
- Dr. Morton Sternheim, University of Massachusetts
- Dr. Susan Thrasher, Five College Partnership
- Dr. Tarin Weiss, Westfield State College
- Dr. Richard Yuretich, University of Massachusetts
- Dr. Ximena Zuniga, University of Massachusetts

### Graduate Advisors

- Dr. J. Myron Atkin, Stanford University
- Dr. Lee Shulman, Stanford University
- Dr. Mary Budd Rowe (deceased), Stanford University

### Advisees

- Postdoctoral Advisee: Dr. Eric Klopfer, Massachusetts Institute of Technology
- Thesis Advisees: Dr. Marsha Alibrandi, Dr. Chrispen Matsika, Dr. Elizabeth Flores, Dr. Amy Gelinas, Dr. Brenda Capobianco, Dr. Tarin Weiss, Dr. Elizabeth Pedevillano, Dr. Curtis Turner, Dr. Karen St. Cyr