



COUNCIL ON UNDERGRADUATE RESEARCH

## **2023-2024 Elections Geosciences Division: Councilor Slate**

**Position Purpose:** The CUR Council is a multidisciplinary body providing advisory input to the Board, so they have a broader perspective when making resource investment decisions. The Council serves in a communication capacity, surfacing key items arising from the Divisions, bridging the insight of the Division to the work of CUR as a whole, and serving as one means of information and resource dissemination from the central organization to the Divisions and members. The CUR Council is a newly developed body of volunteer leaders for this election cycle.

### **Needed Qualifications:**

- Strong communication skills
- Previously served as a Division Councilor is a plus, but not required
- Membership with CUR
- Can not be serving concurrently as a Division Representative

*There is 1 individual running.*

*You may vote for the candidate presented to be elected as a councilor for this division.*

*This division will also be accepting write-In candidates for this election cycle.*

Candidate information is presented on the following pages. Click on the candidate name below to be taken to their Information In the document.

- [Jeffrey Ryan](#)

# Jeffrey Ryan, University of South Florida

## *Geosciences Division Nominee*

### **NOMINEE STATEMENTS**

#### **Describe your leadership experience both within CUR and extramural.**

I've been Division Chair in the Geosciences Division (and thus the Geosciences Executive Board member), and a General Representative to the Executive Board. I was Vice Chair of the NCUR Oversight Committee through the year that it all went sideways with COVID, and I continue to serve on that committee as the Geosciences member. I served as a Councilor-at-Large with the National Association of Geoscience Teachers between 2007-2013, as a member and then Chair of the UNAVCO Education and Community Engagement Advisory Committee (2011-2017). As noted in my CV, I was Chair of my Department for six years, the last two leading them through a department merger to become a new (and much larger) School, and I served as the Geosciences Program Director in the Division of Undergraduate Education at NSF, where one acts in a quasi-leadership capacity with respect to the PI community that the Division served.

#### **How will your skills help the Council successfully uphold its charge?**

I've been a CUR Member since 1996, and a Divisional Councilor (now Representative) since 2000. During this period I've served on the E-Board a couple times, I've worked at NSF as a Program Director in the Division of Undergraduate Education, I've played leadership roles in the National Association of Geoscience Teachers (NAGT), and I've helped lead a number of national-level, NSF-funded efforts to review and re-vision geoscience education - all while mentoring some 90+ undergraduate researchers either individually or through REU Site projects. This all mean that a) I am probably reasonably well known in the geosciences community, both within CUR and more broadly, and b) I have seen CUR's growth and evolution, for good and for ill (and it's been both...) over a rather long period of time. Per the described tasks of the new Councilor role, my experiences as an academic, researcher and undergraduate research mentor make me able to both provide cogent advice to the Board, and to facilitate communication between the Geoscience Division (both its Divisional Representatives and its members) and CUR leadership. Thanks to foundational experiences I got early on as a Divisional Councilor, I am also able to liaise effectively between CUR and key disciplinary organizations in the geosciences that hold education is a priority interest (NAGT, the American Geosciences Institute (AGI), Geological Society of America (GSA), and American Geophysical Union (AGU)), important given the status of CUR, through its Geoscience Division, as a Member Association in AGI and an Associated Society in GSA. These relationships provide CUR with invites to disciplinary meetings access to new members, and are central to how CUR-Geosciences has been able to be an effective Division.

### **NOMINEE ABBREVIATED CV**

An abbreviated CV highlighting the candidate's accomplishments with respect to undergraduate research is available on the next page.

---

## BIOGRAPHICAL SKETCH

---

### Jeffrey G. Ryan

Department of Geology, University of South Florida  
4202 East Fowler Ave. Tampa, Florida 33620

**Phone:** (813) 974-1598/6492

**FAX:** (813) 974-2654

**Email:** ryan @ mail.usf.edu

### Education and Post-Doctoral Experience:

1983: B.S. (Summa Cum Laude), Geology, Western Carolina University

1985;1987;1989: M.A.; M. Phil.; Ph.D., Columbia University

1989-1991: Postdoctoral Fellow, Department of Terrestrial Magnetism, Washington, DC.

### Professional History:

2002-Present Professor, Department of Geology, University of South Florida

2013-2015 Founding Director, USF School of Geosciences

2009-2013 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

2000-2001 Interim Chair, Department of Geology, University of South Florida

1991-2002 Assistant (to 1996), Associate Professor, Dept. Geology, Univ. South Florida

### Relevant Publications and Products (Students in Bold; Undergraduates in Italics):

**Cook, M.L., Ricchezza, V.J.,** Ryan, J.G., Vacher H.L. and Sheffield, S.L., 2024, Changing habits of mind: a phenomenological view of how a Computational Geology course affected students' geological numeracy. *Journal of Geoscience Education*, 02 Jan 2024, DOI: 10.1080/10899995.2023.2293614

Mosher, S., Ryan, J.G., and Keane, C., 2023, *Vision and Change in the Geosciences: shaping the future of graduate geoscience education*. 116 p. AGI publishing, Washington, DC.  
<https://graduate.americangeosciences.org/>.

Ryan, J.G., 2022, Virtualizing course-based undergraduate research in the geosciences: freely available geospatial data resources, and strategies for their use. In *Undergraduate Research in Online, Virtual, and Hybrid Courses* (Coleman J., Hensel, N., Campbell, W. eds.) Sterling, VA, AACU/Stylus Publishing, pp 216-229.

**Scholpp, J., Ryan, J.G.,** Shervais, J. Stremtan, C., Rittner, M. **Luna, A., Hill, S., Mack, B.,** and Atlas, Z., 2022, Petrologic evolution of boninite lavas from the IBM fore-arc, IODP Expedition 352: evidence for magma mixing during early subduction zone magmatism. *American Mineralogist*, **107**, 572-586, <https://doi.org/10.2138/am-2021-7733>.

Mosher, S., Harrison, W., Huntoon, J., Keane, C., McConnell, D., Miller, K., **Ryan, J.G.,** Summa, L., and White, L., 2021, (Mosher, S. and Keane, C. eds) *Vision and Change in the Geosciences: The Future of Undergraduate Geoscience Education*. American Geosciences Institute, 176 p.  
<https://www.americangeosciences.org/change/print-edition/>.

**Willis, S. Stern, R.J. Ryan, J.G., Bebeau, C.,** 2021, Exploring Best Practices in Geoscience: Adapting an Animation on Continental Rifting for Upper-Division Students to a Lower Division Audience. *Geosciences*, 11, 140, <https://doi.org/10.3390/geosciences11030140>.

Ryan, J.G., 2013, Embedding research practice activities into earth and planetary science courses through the use of remotely operable analytical instrumentation: interventions, and impacts on student perceptions and activities. In Tong, V. (ed). *Geoscience Research and Education: Teaching at Universities*. New York, Springer Verlag., p. 149-162.

Ryan, J.G., 2013, Chapter 8: Integration of Research into the Classroom and Curriculum, in Schuh, M, (ed.) *Starting out in Undergraduate Research*, Council on Undergraduate Research, Washington, DC, pp. 44-49.

Mogk, D., **Ryan, J.G.,** and Manley, P., 2011, *Undergraduate Research as a Teaching Practice*.  
[http://serc.carleton.edu/NAGTWorkshops/undergraduate\\_research/overview.html](http://serc.carleton.edu/NAGTWorkshops/undergraduate_research/overview.html). On the Cutting

---

## BIOGRAPHICAL SKETCH

- Edge/Council on Undergraduate Research online resource collection. [Primary author on “Preparing for Research”, “Obtaining Grant Support”, and “Geo-cyberinfrastructure” pages]
- Ryan, J.G. and S.E. Ericksson, 2011, *Planning the Future of Geocybereducation: Report from a Workshop*, Arlington, VA, January 6-8, 2010.
- 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.
- Peterson, V.L., J.G. Ryan, S.P. Yurkovich, S.E. Kruse and J. Burr, 2003, A collaborative field-laboratory summer Research Experiences for Undergraduates (REU) program in geosciences. *CUR Quarterly*, Sept. 2003, p. 5-9.
- Berger, S., Cochran, 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.

### Synergistic Activities:

1. **Council on Undergraduate Research:** Geoscience Councilor/Division Representative - since 2000.  
My current Divisional activities include serving on the National Conference for Undergraduate Research Oversight Committee (since 2012), facilitating during CUR faculty development workshops at AGU Fall Meetings, and convening Undergraduate Research Poster sessions at GSA Sectional meetings.
  - CUR Executive Board General Representative 2018-2019; Division Chair/Representative 2006-2008
  - Served on the Nominations Vetting Committee 2014-2017; on the Advocacy Committee 2005-2012; on the Nominations Committee 2004-2006
  - CUR-sponsored External Reviewer: Earth and Environmental Sciences Department, Furman University (2010); Geosciences Department, Middle Tennessee State University (2016); Geology and Geography, Mount Holyoke College (2017); Environmental Sciences/Studies, Stockton University (2019); Earth Science and Science Education, Buffalo State University (2021)
  - Facilitator in CUR Institutes: “Institutionalizing Undergraduate Research”, “Proposal Writing Institute”, “Beginning a Research Program in the Natural Sciences at a Predominantly Undergraduate Institution”
  - Convened many, many workshops and interactive sessions at CUR Biannual Conferences...
2. Goldwater Scholarships Review Committee, 2019-present: Annual review of 50-60 scholarship applications/year
3. Member, JOIDES Resolution Geochemistry/Microbiology Laboratory Working Group, 2018-present. (2-3 meetings/year, providing advice on operations and development of the JR Geochemistry/Microbiology shipboard facilities)
4. Summit on Improving Geoscience Graduate Preparation for the Workforce (2018-2023): Co-Chair, Co-PI, and co-convenor of national Summit and five employer/faculty workshop events, and coauthor of the graduate education chapter in the "Vision and Change " report on geoscience education, and on the national report (see above).
5. Summit on the Future of Undergraduate Geoscience Education, 2014-2021: Member of the Planning Committee, facilitator in Summit and workshop events; co-author on the “Vision and Change” report on undergraduate geoscience education (see above).
- 6: Past NSF panelist/reviewer for 14 different funding programs in the Education and Geosciences Directorates (>50 panels since 2005)