

John McDaris

Science Education Resource Center
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PROFESSIONAL PREPARATION

Ph.D., Geophysics, 2018-in progress

University of Minnesota, Minneapolis, MN

Advisor: Joshua Feinberg

M.S., Geophysics, 1997-2000

University of Minnesota, Minneapolis, MN

Investigation of Iron Germanate Spinel as a Mantle Mineral Analogue

Advisor: Shun Karato

B.S. *cum laude*, Physics, 1992-1997; Minor—Mathematics

North Carolina State University, Raleigh, NC

PROFESSIONAL EXPERIENCE

2018—Present:

Graduate Research Assistant

University of Minnesota, Twin Cities

Aug-Dec, 2009:

Adjunct Earth Science Faculty

Rochester Community & Technical College

2003—Present:

Geoscience Education Associate

Science Education Resource Center (SERC), Carleton College

2000—2003:

Officer Manager / Business Manager

YMCA of Metropolitan Minneapolis

1997—2000:

Graduate Teaching Assistant / Graduate Research Assistant

University of Minnesota, Twin Cities

1993—1997:

Undergraduate Laboratory Instructor / Undergraduate Physics Tutor

North Carolina State University

HONORS AND AWARDS

- Banerjee Fellowship – 2019-2020, University of Minnesota
- Gruner Fellowship – 1999-2000, University of Minnesota
- Mooney Fellowship – 1998-1999, University of Minnesota
- Sigma Pi Sigma – National Physics Honor Society
- NCSU Outstanding Undergraduate Physics Tutor/Laboratory Instructor (1997)
- NCSU University Scholars Program Completed (1997)
- NCSU Physics Department Humanities Award (1997)

PROFESSIONAL ACTIVITIES

2018 Reviewer: Journal of Geoscience Education (1 paper)

Member: UMN Department of Earth Sciences Diversity and Equity Committee

Reviewer: NASA Minority University Research and Education Project (MUREP)

Aerospace Academy - MAA. (4 project proposals)

2017 Reviewer: NASA ESTEEM-TCU Program (1 project proposal)

2015 Member of Outreach, Diversity, and Education Committee (OEDC) for the NSF Continental Scientific Drilling Coordination Office (CSDCO) at the University of Minnesota.

Reviewer: NASA Minority University Research and Education Project (MUREP)

Aerospace Academy - MAA. (3 project proposals)

2013 Reviewer: NASA Innovations in Climate Education – Tribal (NICE-T) Program (2

- project proposals)
Introductory Earth Science Text Book Focus Group – W.W. Norton & Company Publishers
- 2012 Co-Convener AGU Sessions
- ED43E. Teaching Structural Geology, Geophysics, and Tectonics I
 - ED53B. Quintessential Field Sites: Model Field Areas and Active Learning (Posters)
- GSA Workshop Co-Convener
- 511B. Teaching about Hazards in the Geoscience Classroom.
- 2011 GSA Workshop Presenter
- 519B. Teaching Climate Science with Active Learning Strategies
- Co-convener: On the Cutting Edge Hazards Webinars Series
<http://serc.carleton.edu/NAGTWorkshops/hazards/webinars/>
- 2009 Reviewer: NASA Global Climate Change Education (GCCE) Program (2 project proposals)
- 2008 Reviewer: NASA Global Climate Change Education (GCCE) Program (5 project proposals)

PROFESSIONAL SOCIETY MEMBERSHIPS

National Association of Geoscience Teachers

American Geophysical Union

Geological Society of America

International Association for Geoscience Diversity

National Organization of Gay and Lesbian Scientists and Technical Professionals

PUBLICATIONS

Journal Articles and Book Chapters

8. Macdonald, R.H., Beane, R.J., Baer, E.M.D., Eddy, P.L., Emerson, N.R., Hodder, J., Iverson, E.R., McDaris, J.R., O'Connell, K., and Ormand, C.J. (2019). Accelerating Change: The Power of Faculty Change Agents to Promote Diversity, Equity, and Inclusive Teaching Practices. *Journal of Geoscience Education*. DOI: 10.1080/10899995.2019.1624679
7. St. John, K., Bitting, K., Cervato, C., Kastens, K.A., Macdonald, R.H., McDaris, J.R., McNeal, K.S., Petcovic, H., Pyle, E., Riggs, E., Ryker, K., Semken, S., and Teasdale, R. (2019), An evolutionary leap in how we teach geosciences. *Eos*, 100, <https://doi.org/10.1029/2019EO127285>. Published on 08 July 2019.
6. McDaris, J.R., Iverson, E.R., Manduca, C.A., Orr, C.H. (2019). Teach the Earth: Making the Connection Between Research and Practice in Broadening Participation. *Journal of Geoscience Education*. DOI: 10.1080/10899995.2019.1616272
5. Orr, C.H. and McDaris, J.R. (2019). Supporting implementation of program-level changes to increase learning about Earth. In Gosselin, D.C., Egger, A., Taber, J. (Eds) *Interdisciplinary Teaching About Earth and the Environment for a Sustainable Future*. Springer, New York, NY.
4. McDaris, J.R., Manduca, C.A., Iverson, E.R., and Orr, C.H. (2017). Looking in the Right Places: Minority-Serving Institutions as Sources of Diverse Earth Science Learners. *Journal of Geoscience Education*, November 2017, Vol. 65, No. 4, pp. 407-415.
3. Banta, L.M., Crespi, E.J., Nehm, R.H., Schwarz, J.A., Singer, S., Manduca, C.A., Bush, E.C., Collins, E., Constance, C.M., Dean, D., Esteban, D., Fox, S., McDaris, J., Paul, C.A., Quinan, G., Raley-Susman, K.M., Smith, M.L., Wallace, C.S., Withers, G.S., Caporale, L., (2012) Integrating Genomics Research throughout the Undergraduate Curriculum: A collection of inquiry-based genomics lab modules. *CBE Life Science*

- Education*, vol. 11, 1–5, Fall 2012.
2. Manduca, C.A., Mogk, D.W., B. Tewksbury, Macdonald, R.H., S.P. Fox, Iverson, E.R., K. Kirk, McDaris, J.R., C. Ormand, and M. Bruckner (2010). SPORE: Science Prize for Online Resources in Education: On the Cutting Edge: Teaching Help For Geoscience Faculty: *Science*, v. 327, no. 5969, pp. 1095-1096.
 1. Williams, M.L., Mogk, D.W., and J. McDaris (2010). Research and Teaching about the Deep Earth. *Eos*, Vol. 91, No. 32, 10 August 2010.

Websites

One major component of my position at SERC is developing web resources for undergraduate faculty. For each of the websites listed below, I have compiled and organized the resources and/or conducted literature research to develop content for the web pages.

- Broadening Access to the Sciences
http://serc.carleton.edu/broadening_access/index.html
- Building Strong Geoscience Departments
<http://serc.carleton.edu/NAGTWorkshops/departments/index.html>
- The Carleton Interdisciplinary Science and Math Initiative (CISMI)
<http://serc.carleton.edu/cismi/index.html>
- Climate Change in an Age of Media (CAM)
http://cleanet.org/cced_media/index.html
- CUREnet
<http://serc.carleton.edu/curenet/index.html>
- EarthLabs: Hurricanes
<http://serc.carleton.edu/earthlabs/hurricanes/>
- Geoscience in Two-Year Colleges
<http://serc.carleton.edu/geo2yc/>
- InTeGrate: Increase the Diversity of Your Graduates
<http://serc.carleton.edu/integrate/programs/diversity.html>
- National Association of Geoscience Teachers
<http://nagt.org>
- North Star STEM Alliance (LSAMP)
<http://serc.carleton.edu/northstarstem/index.html>
- On the Cutting Edge: Teaching About Hazards in Geoscience
<http://serc.carleton.edu/NAGTWorkshops/hazards/>
- On the Cutting Edge: Teaching Geoscience in the Field
<http://serc.carleton.edu/NAGTWorkshops/field/>
- On the Cutting Edge: Teaching Geoscience with Visualizations
<http://serc.carleton.edu/NAGTWorkshops/visualization/>
- Starting Point: Teaching Introductory Geoscience - Cooperative Learning
<http://serc.carleton.edu/introgeo/cooperative/>
- Preparing Teachers to Teach Earth Science
<http://serc.carleton.edu/teacherprep/>
- Supporting and Advancing Geoscience Education at Two-Year Colleges (SAGE 2YC)
<http://serc.carleton.edu/sage2yc/>
- Supporting Two-Year College Faculty Across the Disciplines
<http://serc.carleton.edu/2yc/>
- Teach the Earth: Broaden Participation in the Geosciences
https://serc.carleton.edu/teachearth/broad_partic/index.html
- Teaching in the Field
<http://www.nagt.org/nagt/field/>
- Teaching Quantitative Skills in the Geosciences
<http://serc.carleton.edu/quantskills/>

Presentations at Professional Conferences

2018

- Bruckner, M.**, Manduca, C.A., McDaris, J.R., Orr, C.H. (2018). Supporting Interdisciplinary Teaching about the Earth for a Sustainable Future through the InTeGrate Project, Earth Educators' Rendezvous (Lawrence, KS).
- Iverson, E.R.**, Macdonald, R.H., Baer, E.M.D., Bragg, D., Eddy, P., Emerson, N.R., Hodder, J., McDaris, J.R., O'Connell, K., Ormand, C.J. (2018). Building a Community of Practice Among Geoscience Two-Year College Faculty: A Framework to Support Individual Learning and Collective Change. Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592.
- Macdonald, R.H.**, Baer, E.M.D, Beane, R.J., Bragg, D., Emerson, N.R., Hodder, J., Iverson, E.R., McDaris, J.R., O'Connell, K., Ormand, C.J. (2018). Promoting Diversity, Equity, and Inclusion: Engaging SAGE 2YC Faculty to Transform Geoscience in Two-Year Colleges. Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592.
- Macdonald, R.H.**, Baer, E.M.D., Bragg, D., Eddy, P., Emerson, N.R., Hodder, J., Iverson, E., McDaris, J.R., O'Connell, K., and Ormand, C.J. (2018). Catalyzing Inclusive Education Practices in Two-Year College Geoscience Programs and Departments: SAGE 2YC and Faculty Change Agents: American Geophysical Union annual fall meeting (Washington, DC).
- McDaris, J.R.**, Manduca, C.A, Iverson, E.R., Orr, C.H. (2018). Teach the Earth: Linking research and practice to attract, support, and prepare diverse students for geoscience careers. Abstract ED11A-10 presented at 2018 Fall Meeting, AGU, Washington, D.C., 10-14 Dec.
- McDaris, J.R.**, Ormand, C., Baer, E.M., Hodder, J., Macdonald, R.H., Emerson, N. (2018). SAGE 2YC: Sustaining Faculty Learning. Poster presented at the 2018 Earth Educator's Rendezvous (Lawrence, KS).
- Ormand, C.J.**, Macdonald, R.H., Maer, E.M.D., Beane, R.J., Hodder, J., McDaris, J.R., O'Connell, K. (2018). Diversity, Equity, and Inclusion: SAGE 2YC Resources for the Geoscience Community. Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592.
- Orr, C.H.**, Dolan, E.L., McDaris, J.R., Haveles, A.W. (2018). CUREnet : Faculty Network for Designing, Teaching, and Evaluating CUREs. Geological Society of America Abstracts with Programs. Vol. 50, No. 6, ISSN 0016-7592.
- Orr, C.H.** and McDaris, J.R. (2018). Working with and across networks to support institutional change. Earth Educators' Rendezvous (Lawrence, KS).

2017

- Baer, E.M.D.**, Blodgett, R.H., Emerson, N.R., Hodder, J., McDaris, J.R., Macdonald, R.H., Ormand, C.J. (2017). Adapting and Extending the On the Cutting Edge Model of Professional Development to Bring Workshops to Two-Year College Faculty. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-307279
- Bruckner, M.Z.**, Manduca, C.A., McConnell, D.A., Hanselman, J., Orr, C.H., McDaris, J.R., Fox, S.P (2017). Using Instructor Stories to Demonstrate the Adaptability of the InTeGrate Interdisciplinary Sustainability Curricula. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-300554
- Egger, A.E.**, Fox, S.P., McDaris, J.R., Gilbert, L.A. (2017). Facilitating Three-Dimensional Learning with Adaptable, Searchable, NGSS-Aligned Curricular Materials from InTeGrate. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-306673
- Iverson, E.R.**, McDaris, J.R., C. Ormand, Macdonald, R.H. (2017). Supporting and Advancing Geoscience Education in Two-Year Colleges (SAGE 2YC): Building a

Foundation for Change through a Network of Regional Communities of Practice. Earth Educators' Rendezvous. Albuquerque, NM.

- Macdonald, R.H.**, Baer, E.M.D., Bragg, D., Eddy, P., Emerson, N.R., Hao, Y., Hodder, J., Iverson, E., McDaris, J.R., Ormand, C.J. (2017). Student success in Geoscience: A SAGE 2YC Perspective. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-306192
- Macdonald, R.H.**, Manduca, C.A., Beane, R.J., Doser, D.I., Ebanks, S.C, Hodder, J., McDaris, J.R., Ormand, C.J. (2017). Diversifying Geoscience by Preparing Faculty as Workshop Leaders to Promote Inclusive Teaching and Inclusive Geoscience Departments. Abstract ED21C-03 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- McDaris, J.R.**, Baer, E.M.D., Macdonald, R.H., Ormand, C.J., Hodder, J., Emerson, N.R. (2017). The SAGE 2YC Website: Updated Content to Support 2YC Faculty as Agents of Change. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-300600
- McDaris, J.R.**, Bralower, T., Anbar, A., Leinbach, A.A. (2017). Best Practices in Teaching Online: faculty-Sourced Guidance from InTeGrate. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-301314
- McDaris, J.R.**, Bralower, T., Anbar, A., Leinbach, A.A. (2017). Teaching about the Earth Online: Faculty-Sourced Guidance from InTeGrate. Abstract ED53E-0197 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- McDaris, J.R.** and Orr, C.H. (2017). Lessons from the InTeGrate Implementation Teams: Synthesizing Real-World Experience. Earth Educators' Rendezvous. Albuquerque, NM.
- Orr, C.H., **McDaris, J.R.**, Manduca, C.A. (2017). For Higher Ed portal to Resources Supporting Change from Individual to Program Scales. Earth Educators' Rendezvous. Albuquerque, NM.
- Orr, C.H.**, McDaris, J.R., Manduca, C.A. (2017). Lessons from InTeGrate on Program-Scale Change: Synthesizing Real-World Experience. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-301604
- St. John, K.**, Cervato, C., Kastens, K.A., Macdonald, R.H., McDaris, J.R., McNeal, K., Petcovic, H.L., Pule, E.J., Riggs, E.M., Ryker, K., Semken, S., Teasdale, R. (2017). Identifying and Prioritizing Geoscience Education Research Grand Challenges: Draft Plans for a Community Research Agenda. Geological Society of America Abstracts with Programs. Vol. 49, No. 6. doi: 10.1130/abs/2017AM-298851
- St. John, K.**, Semken, S.C., Teasdale, R., Ryker, K., Riggs, E.M., Pyle, E.J., Petcovic, H.L., McNeal, K., McDaris, J.R., Macdonald, R.H., Kastens, K., Cervato, C. (2017). Proposed Grand Challenges in Geoscience Education Research: Articulating a Community Research Agenda. Abstract ED23D-0321 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- 2016**
- Baer, E.**, Emerson, N.R., Hodder, J., Macdonald, R.H., and McDaris, J.R. (2016). SAGE 2YC: Two-Year College Geoscience Faculty as Change Agents. Earth Educators' Rendezvous, Madison, WI.
- Baer, E.**, Emerson, N.R., Hodder, J., MacDonald, H.R., McDaris, J.R., Ormand, C.J. (2016). Community College Geoscience Faculty as Change Agents. Geological Society of America Abstracts with Programs. Vol. 48, No. 7.
- Orr, C.H.**, Manduca, C.A, McDaris, J.R., and Baldassari, C. (2016). Models of program-scale change: Common elements in the implementation of the InTeGrate design philosophy and teaching materials. Earth Educators' Rendezvous, Madison, WI.
- McDaris, J.R.** and Manduca, C.A. (2016). Drawing Diverse Students into your Class. Earth Educators' Rendezvous, Madison, WI.

McDaris, J.R. and Manduca, C.A. (2016). Showcasing Approaches to Inclusivity and Broadening Participation in Geoscience and STEM. Geological Society of America Abstracts with Programs. Vol. 48, No. 7.

St. John, K., Kastens, K.A., MacDonald, R.H., McDaris, J.R., McNeal K.S. (2016). Emerging Priorities and New Online Resources to Support Geoscience Education Researchers. Geological Society of America Abstracts with Programs. Vol. 48, No. 7.

2015

Kirk, K.B., Kulick, K.M., Defur, S.H., McLaughlin, V., McDaris, J.R., Baer, E.M.D., and Macdonald, R.H. (2015). Teaching the Students You Have: Insights and Strategies for Inclusive Instruction. Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.107.

Macdonald, R.H., Layou, K.M., McDaris, J.R., Baer, E.M.D., Blodgett, R.H., Hodder, J. (2015). Resources for Supporting the Transfer of Community College Students to Four-Year Colleges and Universities. Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.478.

Manduca, C.A., Macdonald, R.H., McDaris, J.R., and Weissmann, G. (2015). Supporting Success for All Students. Abstract ED21E-08 presented at 2015 Fall meeting, AGU, San Francisco, Calif., 14-19 Dec.

McDaris, J.R. and Manduca, C.A. (2015). Characterizing the Prevalence and Practices of Geoscience Programs at Minority Serving Institutions. Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.46.

McDaris, J.R., Manduca, C.A., and Macdonald, R.H. (2015). Broadening Access to STEM and Geoscience through Support for the Whole Student. Earth Educators' Rendezvous, Boulder, CO.

McDaris, J.R., Manduca, C.A., Macdonald, R.H., and Iverson, E.R. (2015). Addressing Issues of Broadening Participation Highlighted in the Report on the Future of Undergraduate Geoscience Education. Abstract ED14B-06 presented at 2015 Fall Meeting, AGU, San Francisco, Calif., 14-19 Dec.

Orr, C.H., Manduca, C.A., Blockstein, D, Davis, F., McDaris, J.R. (2015). Teaching Coastal Hazard, Risk, and Environmental Justice. Abstract ED33E-03 presented at 2015 Fall Meeting, AGU, San Francisco, Calif., 14-19 Dec.

St. John, K., Macdonald, R.H., Feig, A.D., Ladue, N., Lukes, L.A., McNeal, K.S., Riggs, E.M., McDaris, J.R. (2015). Shaping the Future of Geoscience Education Research: A Community Effort. Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.255.

2014

Bruckner, M.Z., O'Connell, K., McDaris, J.R., Kirk, K.B., Larsen, K., Kent, M., Manduca, C.A., Egger, A., Blockstein, D., Mogk, D.W., and Taber, J. (2014). Infusing Sustainability Across Disciplines to Build Student Engagement. Abstract ED13B-3452 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 14-19 Dec.

Hickson, T.A., Gastaldo, R.A., Gran, K., Macdonald, R.H., McDaris, J.R., Theissen, K.M. (2014). Getting Together: Reporting on an Interdisciplinary Workshop for Sedimentary Geologists, Paleontologists, and Geomorphologists. Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.437

Macdonald, R.H., Baer, E.M.D., Blodgett, R.H., Hodder, J., McDaris, J.R. (2014). Transforming a Community: Supporting and Advancing Geoscience Education in Two-year Colleges. Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.599

Macdonald, R.H., McDaris, J.R., Kulick, K.M., Baer, E.M.D., Blodgett, R.H., Hodder, J. (2014). Supporting Student Success in Geoscience at Two-year Colleges. Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.244

McDaris, J.R., Hodder, J., Macdonald, R.H., Baer, E.M.D., Blodgett, R.H. (2014). Undergraduate Research in Geoscience with Students from Two-year Colleges: SAGE

2YC Resources. Abstract ED21D-3477 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 14-19 Dec.

McDaris, J.R., Layou, K.M., Macdonald, R.H., Baer, E.M.D., Hodder, J., Blodgett, R.H. (2014). Preparing, Supporting, and Advising 2YC/4YC Transfer Students. Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.111

McDaris, J.R., Macdonald, R.H., Manduca, C.A. (2014). Supporting Diverse STEM Students using the Whole Student Framework. Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.191

McDaris, J.R., Manduca, C.A., Larsen, K. (2014). Understanding the Prevalence of Geo-Like Degree Programs at Minority Serving Institutions. Abstract ED43B-3464 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 14-19 Dec.

Mogk, D.W., Wyession, M.E., Beaugard, A., Reinen, L., Surpless, K., O'Connell, K., McDaris, J.R. (2014). Undergraduate Research in Earth Science Classes: Engaging Students in the First Two Years. Abstract ED21D-3479 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 14-19 Dec.

2013

Baer, E.M.D., Blodgett, R.H., Hodder, J., Macdonald, R.H., McDaris, J.R. (2013). Faculty Professional Development as a Strategy to Sustain Geoscience Programs in Two-Year Colleges. Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.207

McDaris, J.R., Kirk, K.B., Layou, K., Macdonald, R.H., Baer, E.M.D., Blodgett, R.H., Hodder, J. (2013). Supporting Geoscience Students at Two-year Colleges: Career Preparation and Academic Success. Abstract ED11F-02 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

McDaris, J.R., Nelson, T., Egger, A., Manduca, C.A., and Williams, W. (2013). Showcasing Successful Strategies for Supporting Minority Students in the Geosciences. Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.379.

2012

McDaris, J.R. (2012). Online Resources for Teaching Geoscience in the Field. Abstract ED53B-0927 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

McDaris, J.R., Larsen, K., Baer, E.M.D., Blodgett, R.H., Hodder, J., Macdonald, R.H., van der Hoeven Kraft, K.J., and Maier, M. (2012). Online Resources for Geoscience Instructors at Two-Year Colleges, Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p. 174

McDaris, J.R., Tewksbury, B.J., and Wyession, M.E. (2012). Using Grand Challenges For Innovative Teaching in Structural Geology, Geophysics, and Tectonics. Abstract ED43E-01 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

Mogk, D.W., Wiese, K., Castendyk, D., McDaris, J.R. (2012). Teaching Environmental Geology in the 21st Century: A Workshop Report. Abstract ED51E-04 Presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

2011

Baer, E.M.D., Macdonald, R.H., McDaris, J.R., Granshaw, F.D., Wenner, J.M, Hodder, J., van der Hoeven Kraft, K.J., Filson, R.H., Guertin, L., Wiese, K. (2011). Professional Development Opportunities for Two-Year College Geoscience Faculty: Issues, Opportunities, and Successes. Abstract ED42A-05 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

Fox, S.P., Iverson, E.R., Manduca, C.A., Kirk, K.B., McDaris, J.R., Ormand, C.J., Bruckner, M.Z. (2011). Supporting Faculty Learning About Teaching: The On the Cutting Edge Website. Abstract ED23A-0612 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

van der Hoeven Kraft, K., Guertin, L., Filson, R.H., Macdonald, R.H., McDaris, J.R. (2011). Issues, Challenges, and Opportunities in Geoscience Education and Broadening

Participation in the Geosciences at Two-year Colleges (Invited). Abstract ED11E-07 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

McConnell, D., Iverson, E.R., Budd, D., Henry, D., van der Hoeven Kraft, K.J., McDaris, J.R., Macdonald, R.H., Manduca, C.A., Srogi, L., and Viskupic, K. (2011). A Preliminary Snapshot of Geoscience Teaching at US Colleges and Universities, Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 136.

McDaris, J.R., Macdonald, R.H., Blodgett, R.H., Manduca, C.A., and Maier, M. (2011). Website Resources and Support for Two-Year College Geoscience Educators, Abstract ED11E-08 Presentation at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

McDaris, J.R. and Manduca, C.A. (2011). On the Cutting Edge: Faculty Professional Development in the Geosciences. Poster presented at AACC's Broadening Impact: NSF-Funded Projects at Two-Year Colleges Conference. June 16-17, 2011.

McDaris, J.R. (2011). Teaching about Hazards in the Geoscience Classroom. Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 137.

Teasdale, R., Budd, D., Cervato, C., Iverson, E.R., van der Hoeven Kraft, K.J., Manduca, C.A., McConnell, D.A., McDaris, J.R., Murray, D.P., and Slattery, W. (2011). Enhancing Student-Centered Teaching Practices: Approaches Developed On the New Cutting Edge Geosciences RTOP Website, Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 255.

Wysession, M.E., McDaris, J.R., Mogk, D.W. (2011), Tools and Methods for Visualizing and Representing Seismic Waves in College Classrooms, Abstract ED51B-0744 Poster presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2010

McDaris, J.R. and Macdonald, R.H. (2010). Teaching About Hazards Using Current Events. Geological Society of America *Abstracts with Programs*, Vol. 42, No. 5, p. 24

McDaris, J.R., Kirk, K.B., Mogk, D.W., and Bruckner, M.Z. (2010), Virtual Workshop Experiences for Faculty: Lessons Learned from On the Cutting Edge, Abstract ED31B-0641 Poster presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

Williams, M.L., Mogk, D.W., McDaris, J.R. (2010). Understanding the Deep Earth: Slabs, Drips, Plumes and More - An On the Cutting Edge Workshop. Abstract ED44A-01 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

2009

Iverson, E., Manduca, C.A., **McDaris, J.R.**, and Lee, S. (2009). Refining MARGINS Mini-Lessons Using Classroom Observations. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract ED13D-0616.

Kirk, K.B., Manduca, C.A., Ormand, C.J., and McDaris, J.R. (2009). Resources for Designing, Selecting and Teaching with Visualizations in the Geoscience Classroom. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract ED53E-01.

2008

McDaris, J.R., Dahlman, L., and Barstow, D. (2008). EarthLabs: A National Model for Earth Science Lab Courses, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract ED21B-0624.

2007

McDaris, J.R., Dahlman, L., and Barstow, D. (2007). EarthLabs- Investigating Hurricanes: Earth's Meteorological Monsters, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED42A-07.

2006

Manduca, C.A., Rissler, H., Anderson, J., Bezanson, C., Moosavi, S.C., and McDaris, J.R. (2006). Preparing Teachers to Teach Earth Science. Geological Society of America Abstracts with Programs, 38(7), 398.

McDaris, J.R. and Manduca, C.A. (2006). Teaching in the Field: Gathering the Collective Expertise. Geological Society of America Abstracts with Programs, 38(7), 524.

McDaris, J.R., Manduca, C.A., and Macdonald, R.H. (2006). Geohazards Visualizations and Teaching Materials Just-In-Time. *Geological Society of America Abstracts with Programs*, 38(7), 153.

2005

McDaris, J.R., Macdonald, R.H., and Manduca, C.A. (2005). "The 2004 Indian Ocean Tsunami: Using a Disaster as a Teachable Moment." *Geological Society of America Abstracts with Programs*, 37(5), 98.

2004

McDaris, J.R., Fox, S., and Manduca, C.A. (2004). Supporting Reusability. Tucson, AZ, 2004 Joint Conference on Digital Libraries, June 2004.

McDaris, J.R. and Manduca, C.A. (2004). "Developing Effective Online Learning Resources in the Geosciences." *EOS Trans. AGU, Fall Meeting Supplement*, Abstract ED41A-0246 85(47).

Wenner, J.M., Manduca, C.A., Macdonald, R.H., Patterson, S., and McDaris, J.R. (2004). "Teaching Quantitative Skills in the Geosciences: Resources for Faculty." *EOS Trans. AGU, Fall Meeting Supplement*, Abstract ED41A-0245 85(47).

Workshop Support

One major component of my position at SERC is supporting professional development workshops for faculty. For each of the workshops listed below, I provided leadership, and/or organizational and technical support.

- 2018: CURE Institute - Hampton University
 - North Star STEM Alliance Transfer Stakeholder Group Meeting
 - 2018 Network of STEM Education Centers Working Meeting: Strengthening Our Networks Through Improving Communication
 - SAGE2YC Faculty as Change Agents Cohort 1 Workshop (Year 3)
 - SAGE2YC Faculty as Change Agents Cohort 2 Virtual Workshop (Year 1)
- 2017: Teaching about Earth Online
 - SAGE2YC Faculty as Change Agents Cohort 1 Workshop (Year 2)
 - Geoscience Education Research Grand Challenges and Strategies Workshop (Earth Educators' Rendezvous 2017)
 - Building Pathways for Success: Supporting Student Transfer from Two-Year Colleges to Four-Year Colleges and Universities (Earth Educators' Rendezvous 2017)
 - Putting Sustainability into Action: New Strategies for Courses and Programs
 - CUREnet Planning Workshop
- 2016: SAGE2YC Faculty as Change Agents Cohort 1 Workshop (Year 1)
 - Geoscience Education Research Community Planning (Earth Educators' Rendezvous 2016)
 - NSEC STEM Centers Toolkit Workshop
 - InTeGrate Implementation Programs Synthesis of Lessons Learned
- 2015: 2015 Summit on the Implementation of the NGSS at the State Level
 - Coastal Hazards, Risk, and Environmental Justice
 - Synthesizing Geoscience Education Research: Where are we? What is the path forward? (Earth Educators' Rendezvous 2015)
 - Improving the Odds of Student Success: Academic supports and more (Earth Educators' Rendezvous 2015)
 - Colorado's Changing Energy Portfolio: Essential Teaching Strategies and Resources
- 2014: Broadening Access to the Earth and Environmental Sciences
 - Innovative Approaches to Teaching Sedimentary Geology, Geomorphology, and

Paleontology

- Undergraduate Research in Earth Science Classes: Engaging Students in the First Two Years
2014 Supporting and Advancing Geoscience Education in Two-year Colleges (SAGE 2YC) Webinar Series
AGU Workshop: Broadening Access to the Earth and Environmental Sciences
- 2013: Supporting Student Success in Geoscience at Two-year Colleges
Teaching Hydrogeology, Soils, and Low-T Geochemistry in the 21st Century
Interpreting and Teaching with Tomograms
2013 Economics in Two-Year Colleges Webinar Series
Creating a National Network of STEM Education Centers Workshop
- 2012: GSA Workshop: Teaching about Hazards in the Geoscience Classroom.
Preparing Students in Two-year Colleges for Geoscience Degrees and Careers
Teaching Structural Geology, Geophysics, and Tectonics in the 21st Century
Teaching Environmental Geology
On the Cutting Edge Hazards Webinar Series
2012 Economics in Two-Year Colleges Webinar Series
Designing Effective and Innovative Courses in Mineralogy, Petrology, and Geochemistry
- 2011: Teaching Economics at Community Colleges
Designing GIS and Remote Sensing Courses
Visualizing Seismic Waves for Teaching and Research
- 2010: Teaching Geoscience in the Field in the 21st Century
Using GIS and Remote Sensing to Teach Geoscience in the 21st Century
Using on-line volcano monitoring data in college and university courses: The Volcano Exploration Project: Pu`u`O`o (VEPP)
Integrating Sustainability into the Undergraduate Curriculum
Designing Effective and Innovative Courses in the Geosciences
Understanding the Deep Earth
- 2009: Teaching Paleontology in the 21st Century
Teaching with MARGINS Data and GeoMapApp Webinar
Broadening Access to STEM
Using MARGINS Data in Your Classroom
- 2008: Teaching Geomorphology in the 21st Century
Urban Students, Urban Issues: Opportunities and Challenges for Teaching Geoscience Courses
- 2007: Teaching Geophysics in the 21st Century
Designing Effective and Innovative Courses in the Geosciences
Geoscience Courses that Prepare Future Teachers
- 2006: Infusing Quantitative Literacy into Introductory Geoscience Courses
Designing Effective and Innovative Courses in the Geosciences
Discoveries from Mars: Using a Planetary Perspective to Enhance Undergraduate Geoscience Courses
Improving the Quantitative Training of Earth Science Graduate Students
- 2005: Teaching Hydrogeology in the 21st Century
Developing Quantitative Activities for Upper Division Geoscience Students
- 2004: Teaching Geoscience with Visualizations
Teaching Quantitative Skills in the Geosciences