Rajul E. Pandya

rajul.pandya@asu.edu 303-999-7112

Employment

Jan 2023-present Fulton Presidential Professor of Practice, Mary Lou Fulton Teachers College

Executive Director, Global Futures Education Lab

Arizona State University

Advances sustainability and resilience education and community-engaged

education and research.

May 2022-Dec 2023 Vice President, Community Science

American Geophysical Union

Developed and implemented integrated, comprehensive strategy for advancing community-engaged science. Co-developed new journal, formed and led advisory committees, led professional curriculum development, introduced justice-centered approaches, created AGU's first Indigenous

Action Group

June 2013-May 2022: Director/Program Director, Thriving Earth Exchange

American Geophysical Union (AGU)

Founding director. Thriving Earth has worked with 250 communities in 11 countries, engaged and educated over 1000 volunteers, and brought \$2.5M

in external support on issues related to environmental justice,

sustainability, and resilience.

July 2011-June 2013: Director of Education and Outreach

University Corporation for Atmospheric Research

Responsible for overall program leadership including strategy, funding, leadership, management, and alignment with community needs. Led the development of the Education Strategic Plan and contributed to the overall

Strategic Plan for UCAR.

April 2010-June 2011: Deputy Director of Education and Outreach

University Corporation for Atmospheric Research (UCAR)

2007-June 2013: Director, Community Building Program and Africa Initiative

University Corporation for Atmospheric Research (UCAR)

Created a program to catalyze participatory research and education projects in partnership with historically underserved communities. Successful, externally funded projects include global change research with

tribal colleges and health-weather research with African partners.

2004-June 2011: Director, SOARS Program

(http://www.soars.ucar.edu)

Led a 24-student, \$1.4M yr⁻¹ program that has helped over 100 students from historically under-represented groups enter and succeed in graduate

school in the atmospheric and related sciences.

2002-2004: Outreach and Community Relations Liaison, DLESE Program Center, UCAR

Office of Programs

Led efforts to align digital libraries to meet needs of K-16 teachers and

learners; part of management team.

1999-2002: Assistant Professor of Meteorology, West Chester State University, West

Chester, PA

Developed and taught science courses to future and in-service K-12 teachers; built an interactive weather laboratory; developed and tested learner-centered visualization environments; led undergraduate research

1998 and 2008: Visiting Professor, Colorado College, Colorado Springs, CO

Developed and taught courses on the philosophy and practice of science,

climate change, and atmospheric science.

1996-1998: ASP Postdoctoral Fellowship, NCAR

Developed and used atmospheric models to understand evolution of thunderstorms; Developed hands-on science education activities for and

with students and teachers in rural Colorado.

1991-1996: Graduate Research and Teaching Assistant, University of Washington, Seattle

Developed and used atmospheric models to understand evolution of thunderstorms, Teaching Assistant for undergraduates courses in weather

and climate

1991: Substitute Math and Science High School Teacher, Illinois School District #205

Publications

- 1 Pandya, R., Boyd, A., Feliú-Mójer, M. and Yanovitzky, I., 2024: Transformative Community Engaged Science: Strengthening Relationships between Science and Society. Submitted to the *Proceedings of the National Academies of Sciences*.
- Williams B., Hanson R., and Pandya R., 2024: Geoscience—society interface: How to improve dialog and build actions for the benefit of human communities. Chapter in *Geoethics for the Future: Facing Global Challenges*, Peppoloni, S and Di Capua, G, Eds. Elsevier, London.
- Pandya, R. et al, 2023: Advancing Entrepreneurism in the Geosciences: A report to the National Science Foundation. *ESS Open Archive*, December 10, 2023. DOI: 10.22541/essoar.170224534.41445163/v1
- Pandya, R. et al, 2023. Recommendations for an NSF Convergence Accelerator Track on Community Science A Community Science Report of an NSF-funded Convergence Accelerator Workshop Facilitated by the American Geophysical Union. ESS Open Archive. March 01, 2023. DOI: 10.22541/essoar.167768122.22544063/v1
- 3 Hanson, R. B. et al, 2022: Defining Research and Teaching Priorities that Could be Advanced Through a Near-Surface Geophysics Center. ESS Open Archive . August 03, 2022. DOI: 10.1002/essoar.10512087.1
- 4 Hanson, R. B. et al, 2022: AGU Report to NSF on Accelerating Research and Impacts in GeoHealth. *ESS Open Archive*, April 21, 2022. DOI: 10.1002/essoar.10511162.1

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- 5 Hanson, R. B. et al, 2022: Report to NSF on AGU community recommendations and ideas regarding implementing Climate Change Solutions.

 DOI: 10.1002/essoar.10507256.2
- 6 Moss, R. H., et al, 2019: Evaluating Knowledge to Support Climate Action: A Framework for Sustained Assessment. Wea. Climate Soc., 11, 465–48.
 DOI: 10.1175/WCAS-D-18-0134.1
- 7 Pandya, R, 2019: Community Science Education: A Personal Journey. In the Trenches, 9,
- 8 National Academies of Sciences, Engineering, and Medicine, 2018. *Learning Through Citizen Science: Enhancing Opportunities by Design*. The National Academies Press, Washington, DC. DOI: 10.17226/25183.
- 9 Guile, Bruce R., and Rajul E. Pandya, 2018: Adapting to Global Warming: Four National Priorities. *Issues in Science and Technology* 34, no. 4 (Summer 2018).
- 10 Vano, J. A., D. Behar, P. W. Mote, D. B. Ferguson, and R. Pandya, 2017: Partnerships drive science to action across the AGU community, *Eos*, **98**, Published on 07 December 2017. DOI: 10.1029/2017E0088041.
- 11 Soleri D, Long JW, Ramirez-Andreotta MD, Eitemiller R, Pandya R. 2016. Finding Pathways to More Equitable and Productive Public-Scientist Partnerships. *Citizen Science: Theory and Practice*, **1(1):9**, 1–11. DOI: 10.5334/cstp.46.
- 12 Pandya, Rajul, et al., 2014: Using the Thriving Earth Exchange to advance community science. *The Leading Edge* **33**, *12*, 1330-1334. Using the Thriving Earth Exchange to advance community science," *The Leading Edge* 33: 1330–1332, 1334. DOI: 10.1190/tle33121330.1
- 13 Pandya, R., A. Hodgson, M. H. Hayden, P. Akweongo, T. Hopson, A. A. Forgor, T. Yoksas, M. A. Dalaba, V.a Dukic, R. Mera, A. Dumont, K. McCormack, D. Anaseba, T. Awine, J. Boehnert, G. Nyaaba, A. Laing, and F. Semazzi, 2014: Using Weather Forecasts to Help Manage Meningitis in the Sahel, *Bulletin of the American Meteorological Society*, 96, 103–115. DOI: 10.1175/BAMS-D-13-00121.1
- 14 García-Pando, Carlos Pérez, M. C. Thomson, M. C. Stanton, P. J. Diggle, T. Hopson, R. Pandya, R. L. Miller, and Stéphane Hugonnet, 2014:Meningitis and climate: from science to practice. *Earth Perspectives* **1**, 1-15. DOI: 10.1186/2194-6434-1-14
- 15 Charlevoix, D., R. Pandya, A. Bridger, T. Gill, E. Hampton, R. Herman, J. Knox, W.W. Lee, Diane Stanitski, 2014: New Directions for the Education Symposium, *Bulletin of the American Meteorological Society*, **95**, 1465–1467. DOI: 10.1175/BAMS-D-13-00273.1)
- 16 Pandya, R. E., 2014: Community-Driven Research in the Anthropocene. *Future Earth-Advancing Civic Understanding of the Anthropocene,* Diana Dalbotten, Ed., American Geophysical Union, 53-66. DOI: doi.org/10.1002/9781118854280.ch6
- 17 Akweongo, P., Dalaba, M. A., Hayden, M. H., Awine, T., Nyaaba, G. N., Anaseba, D., ... & Pandya, R. (2013). The Economic Burden of Meningitis to Households in Kassena-Nankana District of Northern Ghana. *PLOS ONE*, **8**(11), DOI: doi.org/10.1371/journal.pone.0079880
- 18 Hayden, M.H., M. Dalaba, T. Awine, P. Akweongo, G. Nyaaba, D. Anaseba, J. Pelzman, A. Hodgson, and R. Pandya, 2013: Knowledge, Attitudes and Practices Related to Meningitis in Northern Ghana, *Amer. J. Trop. Med. and Hyg..*, **89**, 265-270. DOI::10.4269/ajtmh
- 19 Porticella, N., Bonfield, S., DeFalco, T., Fumarolo, A., Garibay, C., Jolly, E., Huerta Migus, L., Pandya, R., Purcell, K., Rowden, J., Stevenson, F., and Switzer, A., 2013: *Promising Practices for Community Partnerships: A Call to Support More Inclusive Approaches to Public Participation in Scientific Research.* A Report Commissioned by the Association of Science-Technology Centers, Washington, DC. (Available at http://www.birds.cornell.edu/citscitoolkit/promisingpractices)
- 20 Maldonado, J. K., Colombi, B., & Pandya, R. (2016). *Climate change and Indigenous peoples in the United States*, **93**. New York: Springer. DOI: 10.1007/978-3-319-05266-3
- 21 Pandya, R. E., 2012: A framework for engaging diverse communities in citizen science in the US. *Frontiers in Ecology and the Environment* **10**: 314–317. DOI: 10.1890/120007
- Pandya, Rajul, Donna Charlevoix, Eugene Cordero, David Smith, Sepi Yalda, 2012: Trends in the AMS education symposium and highlights from 2012. *Bull. Amer. Meteor. Soc.*, 93, 1917– 1920

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- 23 Dukic, V., M. H. Hayden, A. Adams Forgor, T. Hopson, P. Akweongo, A. Hodgson, A. Monaghan, C. Wiedinmyer, T. Yoksas, M. C. Thomson, S. Trzaska, and R. Pandya, 2012: The role of weather in meningitis outbreaks in Navrongo, Ghana: A Generalized Additive Modeling Approach. *J. Ag. Bio. Env. Stat.*, **17**(3), 442-460.
- 24 Pandya, R. E., D. R. Smith, S. A. Ackerman, P. P. Brahma, D. J. Charlevoix, S. Q. Foster, V. K. Gaertner, T. F. Lee, M. J. Hayes, A. Mostek, S. T. Murillo, K. A. Murphy, L. Olsen, D. M. Stanitski, T. Whittaker, 2010: A Summary of the 18th AMS Education Symposium, *Bulletin of the American Meteorological Society*, 92(1), 61-64
- 25 National Research Council, 2010: *NOAA's Education Program: Review and Critique*.

 Committee for the Review of the NOAA Education Program, John W. Farrington and Michael A. Feder, Editors. Board on Science Education, Division of Behavioral and Social Sciences and Education, The National Academies Press, 169 pp.
- Pandya, R. E., S. Q. Foster, D. R. Smith, D. J. Charlevoix, R. Hart, M. J. Hayes, M. McGuirk, S. T. Murillo, K. A. Murphy, D. M. Stanitski, T. M. Whittaker, 2009: A Summary of the 17Th AMS Education Symposium, *Bulletin of the American Meteorological Society*, 90(10), 1545-1548
- 27 Lamptey, B. L, R. E. Pandya, T. T. Warner, R. Boger, R. T. Bruintjes, P. A. Kucera, A. Laing, M. W. Moncrieff, M. K. Ramamurthy, T. C. Spangler, and M. Weingroff; 2008: The UCAR Africa Initiative. *Bulletin of the American Meteorological Society*, 90(3), 299-303.
- 28 Pandya, R. E., D. R. Smith, D. J. Charlevoix, W. C. Hartung (Hart), M. J. Hayes, S. T. Murillo, K. A. Murphy, D. M. Stanitski, T. M. Whittaker, 2008: A Summary of the 16th AMS Education Symposium. *Bulletin of the American Meteorological Society*, **90(6)**, 861-865.
- 29 Murillo, S. T, and R. E. Pandya, R. Y. Chu, J. A. Winkler, R. Czujko, and E. M.C. Cutrim; 2008: The 2005 Membership Survey: An overview and longitudinal analysis of the demographics of the American Meteorological Society. *Bulletin of the American Meteorological Society*, **89**, 727–733.
- 30 Pandya, R. E., Henderson, S. Henderson, R. A. Anthes, and R. M. Johnson, 2007: BEST Practices for Broadening Participation in the Geosciences: Strategies from the UCAR Significant Opportunities in Atmospheric Research and Science (SOARS) Program, *Journal of Geoscience Education*, *55*(6), 500-506.
- 31 Pandya, R. E., D. R. Smith, D.J. Charlevoix, G.M. Fisher, S. T. Murillo, K. A. Murphy, D. M. Stanitski, T. M Whittaker, 2007: 15th AMS Education Symposium, *Bulletin of the American Meteorological Society*, **88**, 83-85.
- 32 Pandya, R. E., D. R. Smith, M. K. Ramamurthy, P. J. Croft, M. J. Hayes, K. A. Murphy, J. D. Mcdonnell, R. M. Johnson, H. A. Friedman, 2004: 11th AMS Education Symposium, *Bulletin of the American Meteorological Society*, **85**, 425-430.
- 33 Smith, D. R., M.C. Hayes, M. K. Ramamurthy, J. W. Zeitler, K. A. Murphy, P. J. Croft, J. M. Nese, H. A. Friedman, H. W. Robinson, C. D. Thornmeyer, P. A. Ruscher, and R. E. Pandya, 2001: Meeting Summary of the 10th Symposium on Education. *Bulletin of the American Meteorological Society*, 82, 2817-2824.
- 34 Pandya, R. E., D. R. Durran and M. L. Weisman, 2000: The influence of convective thermal forcing on the three-dimensional circulation around squall lines. *Journal of the Atmospheric Sciences*, **57**, 29-45.
- 35 Pandya, R. E., and M. J. Alexander, 1999: Linear gravity waves in the stratosphere above deep convective thermal forcing. *Journal of the Atmospheric Sciences*, **56**, 2434-2446.
- Pandya, R. E., and D. R. Durran 1996: The influence of convectively generated thermal forcing on the mesoscale circulation around squall lines. *Journal of the Atmospheric Sciences*, **53**, 2924-2951.
- Pandya, R., D. Durran and C. Bretherton, 1992: Comments on "Thermally forced gravity waves in an atmosphere at rest." *Journal of the Atmospheric Sciences*, **31**, 1481-1489.

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Service

| 2024-Present | Member, Climate Crossroads Committee, National Academies of Sciences, |
|--------------|--|
| 2024-Present | Engineering, and Medicine Member, Climate Community Network Steering Committee, National Academy of |
| 2024-Present | Medicine |
| 2023-Present | Member, Standing Committee on Science Communication, National Academy of |
| | Sciences |
| 2023-Present | Member, Committee to assess NASA Science Activation 2.0, National Academy of |
| | Sciences |
| 2023-Present | Member, Resilience Roundtable, National Academy of Sciences |
| 2023-Present | Member, Committee for "Integrating the Human Sciences to Scale Societal |
| | Responses to Environmental Change: A Workshop", National Academy of Sciences |
| 2023-Present | Vice-chair of the Disaster and Preparedness Subcommittee of the Scientific Advisory |
| | Board, American Red Cross |
| 2023-Present | Board Member, Aspen Global Change Institute |
| 2020-Present | Board Member, Institute for Science and Society in Transition |
| 2020-Present | Board Member, Community and Colleges Partnership program |
| 2019-Present | Advisory Board Member, Cornell Lab of Ornithology |
| 2018-Present | Board Member, Anthropocene Alliance |
| 2017-2018 | Chair, National Academies Committee on Science Learning from Citizen Science |
| 2018-2019 | Member, Advisory Committee on Sustained Climate Assessment |
| 2018-2023 | Board Member, Renewable Natural Resources Foundation |
| 2017-2023 | Board Member, Public Lab |
| 2015-2017 | Founding Board Member, Citizen Science Association |
| 2016 | Advisor, Emerging Leaders in Science and Society |
| 2014-2017 | Commissioner for Education and Human Resources for the American Meteorological |
| | Society (AMS) |
| 2013 | Faculty Mentor for "Preparing for an Academic Career in the Geosciences" |
| 2011-2013 | Chair of the MS Board on Women and Minorities |
| 2010 | Co-chair of the 91st Annual Meeting of the American Meteorological Society, with the |
| | theme of Communicating Weather and Science |
| 2009-2011 | Mentor for participants in UCAR Leadership Academy |
| 2009-2010 | Committee member for the National Academy of Sciences Review of NOAA's |
| | Education and Outreach Program |
| 2005-2008 | Member of the Editorial Board, focusing on Education, for the <i>Bulletin of the</i> |
| | American Meteorological Society |
| 2001-2007 | Board Member for the AMS Board on Outreach and Pre-college Education |
| 1991-2011 | Co-Chair for AMS Education Symposium |
| Awards | |
| 2021 | Power of A <u>Summit Award</u> from the American Society of Association Executives |
| | (ASAE). ASAE's highest honor, awarded to AGU for the Thriving Earth Exchange Program |
| 2008 | Boulder County Action Program Multicultural Award for Outstanding Contribution |

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UCAR Award for Education and Outreach for outstanding contributions to Education

to Science

and Outreach

1998

Education

1996: PhD, Atmospheric Sciences, University of Washington

Developed and used numerical models to understand how large thunderstorms

persist and influence the lower and upper atmosphere.

1991: BS, Physics, University of Illinois

Magna Cum Laude and Bronze Tablet, the top honor for university graduates.

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