

Curriculum Vitae 2023: Ronald I. Dorn

Business:

School of Geographical Sciences, Arizona State University Tempe AZ 85287-0104
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Education:

A.B.(Geography), University of California, Berkeley, 1980
M.A.(Geography), University of California, Berkeley, 1982
Ph.D.(Geography), University of California, Los Angeles, 1985

Biographical Sketch: Ronald I. Dorn has been a Professor of Geography at Arizona State University, Tempe, Arizona since 1988. He served previously on the faculty at Texas Tech University. He is co-coordinator of the Arizona Geographic Alliance, a K-12 outreach program to promote geographic education in Arizona. He has been President and Secretary/Treasurer of the Geomorphology Specialty Group and as chair of the Nystrom Committee of the Association of American Geographers. He is a Fellow of the Geological Society of America and the Arizona/Nevada Academy of Science, and a member of the Association of American Geographers and the American Rock Art Research Association. He is married and has two children.

Present Research Activities: desert geomorphology, rock art conservation, petroglyph analysis, quantification and geography of mineral weathering, geographic education, tyranny of the majority in science, rock coatings

Positions

Arizona State University, Tempe : Assistant, Associate, and Full Professor of Geography (1988-current); Co-Coordinator, Arizona Geographic Alliance (1996- current)

Texas Tech University, Lubbock: Assistant and Associate Professor of Geography (1985- 1988); Research Associate, International Center Arid and Semi-Arid Land Studies (1985-1988).

Books: *Rock Coatings*. (No. 6 in Developments in Earth Surface Processes Series) Elsevier, 1998. 429 pp.

Geomorphology: Mojave Desert to Death Valley. Guide to Field Excursion A3. International Association of Geomorphologists Third International Geomorphology Conference. Tempe, Arizona: Arizona State University, Department of Geography Publication #4, 137 p., 1993. (with Norman Meek)

Refereed Articles and Book Chapters

187. Jeong A., Seong Y.B., Dorn, R.I. and Yu, B.Y. 2023. [Precipitation as a key control on erosion rate](https://doi.org/10.1080/02723646.2023.2251654) in the tectonically inactive northeastern Sonoran Desert, central Arizona, USA. *Physical Geography*: <https://doi.org/10.1080/02723646.2023.2251654>

186. Dorn, R.I. 2023. [Decay of ignimbrite fairy chimneys of Arizona's Basin and Range Province USA](https://doi.org/10.1002/esp.5632). *Earth Surface Processes and Landforms*: DOI: 10.1002/esp.5632 .

185. Dorn, R.I. and Whitley, D.S. 2023. Threshold of weathering needed for fire to erode rock art: Case study of a Hohokam petroglyph, central Arizona, USA. *Conservation and Management of Archaeological Sites*. doi.org/10.1080/13505033.2022.2133790

184. Allen, C.D., Kennedy, C.D., Groom, K.M., Cerveny, N.V., Dorn, R.I. and Whitley, D.S., 2022. 5. [Rock art stability Index](https://doi.org/10.4324/9780429355349-8). *Global Perspectives for the Conservation and Management of Open-Air Rock Art Sites*. DOI: 10.4324/9780429355349-8. [Link to access](https://doi.org/10.4324/9780429355349-8).

183. Larson, P.H., Dorn, R.I., Gootee, B., Seong, Y.B. 2022. [Drainage integration in extensional tectonic settings](https://doi.org/10.1016/j.geomorph.2021.108082). *Geomorphology* 399: <https://doi.org/10.1016/j.geomorph.2021.108082>
182. Dorn, R.I., Walker, I.J. 2022. [Dirt cracking as a rock fracture-wedging process in the Mediterranean climate of Victoria, British Columbia](https://doi.org/10.1016/j.catena.2021.105920), Canada. *Catena* 210: 105920 <https://doi.org/10.1016/j.catena.2021.105920>
181. Dorn, R.I., Gordon, S., Jeong, A. 2022. [Nanoscale: mineral weathering boundary](#). In: Pope, G.A. (Ed), *Weathering and Soils Geomorphology: Treatise on Geomorphology*, 2nd Edition, Elsevier, Amsterdam, p. 116-150 (online PDF file)
180. Dorn, R.I. 2022. [Rock Coatings](#). In: Pope, G.A. (Ed), *Weathering and Soils Geomorphology: Treatise on Geomorphology*, 2nd Edition, Elsevier, Amsterdam, p: 1-35 (online PDF file)
179. Shandonay, K.L., Moll, H., Marvin, C.M., López-Castañeda, N., Kelley, M., Hilgendorf, Z., Heintzman, R., Dorn, R.I. 2021. [The fieldwork of shared experiences](#). *The Geographical Bulletin* 62: 82-88.
178. Jeong, A., Dorn, R.I., Seong, Y.B., and Yu, B.Y. 2021. Acceleration of soil erosion by different land uses in arid lands above 10Be natural background rates: Case study in the Sonoran Desert, USA. *Land* 10, 834: <https://doi.org/10.3390/land10080834>
177. González, C., Kelley, M., Marvin, M.C., López Castañeda, N., Dorn, R. and Schmeeckle, M. 2021. [Regional piedmont incision during base-level rise in the northeastern Sonoran Desert](https://doi.org/10.1080/02723646.2021.1934964), Arizona, USA. *Physical Geography*: <https://doi.org/10.1080/02723646.2021.1934964>
176. Dorn, R.I. 2021. [Assessing biological soil crusts as agents of Ca-Mg silicate dissolution and CO2 sequestration](#). *Physical Geography* 42: 529-541
175. Skotnicki, S.J., Seong, Y.B., Dorn, R.I., Larson, P.H., DePonty, J., Jeong, A. 2020. [Drainage integration of the Salt and Verde rivers in a Basin and Range extensional landscape](https://www.sciencedirect.com/science/article/pii/S0169555X20304852), central Arizona, USA. *Geomorphology* 369:<https://www.sciencedirect.com/science/article/pii/S0169555X20304852>
174. Cheung, S.Y., Walker, I., Myint, S.W. Dorn, R.I. 2020. [Assessing land degradation induced by recreational activities in Algodones Dunes, California, using MODIS images](https://www.sciencedirect.com/science/article/pii/S0140196320302330). *Journal of Arid Environments* 185: <https://www.sciencedirect.com/science/article/pii/S0140196320302330>.
173. Larson, P.H., Dorn, R.I. Skotnicki, S., Yeong, S.B., Jeong, A. 2020. [Impact of drainage integration on basin geomorphology and landform evolution: Case study along the Salt and Verde Rivers, Sonoran Desert](https://doi.org/10.1016/j.geomorph.2020.107439), USA. *Geomorphology* 369:<https://doi.org/10.1016/j.geomorph.2020.107439>
172. Dorn, R.I., Skotnicki, S., Wittman, A., Van Soest, M. 2020. [Provenance in drainage integration research: Case studies from the Phoenix metropolitan area, south-central Arizona](https://www.sciencedirect.com/science/article/abs/pii/S0169555X20304037). *Geomorphology* 369: <https://www.sciencedirect.com/science/article/abs/pii/S0169555X20304037> .
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169. Dorn, R.I. and Krinsley, D. 2019. [Nanoscale observations support the importance of chemical processes in rock decay and rock coating development in cold climates](#). *Geosciences*: 9: DOI: 10.3390/geosciences9030121
168. Jeong, A. and Dorn, R.I. 2019. Soil erosion from urbanization processes in the Sonoran Desert, Arizona, USA. *Land Degradation & Development* 30: 226-238

167. Dorn, R.I. 2018. [Necrogeomorphology and the life expectancy of desert bedrock landforms](http://journals.sagepub.com/doi/10.1177/0309133318795839). Progress in Physical Geography: <http://journals.sagepub.com/doi/10.1177/0309133318795839> 82: 566-587
166. Dorn, R.I. and Jeong, A. 2018. [Rock coating and weathering-rind development at the edge of retreating glaciers: An initial study](#). Association of Pacific Coast Geographers Yearbook 80: 1-31
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157. Cervený, N.V., Dorn, R.I., Allen, C.D., Whitley, D.S. 2016. [Advances in rapid condition assessments of rock art sites: Rock Art Stability Index \(RASI\)](#). Journal of Archaeological Science Reports (in press): <http://dx.doi.org/10.1016/j.jasrep.2016.06.032>.
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147. Krinsley, D.H., Ditto, J., Langworthy, K.A., Dorn, R.I., and Thompson, T.J. 2013. [Varnish microlaminations: New insights from focused ion beam preparation](#). *Physical Geography* 34: 159-173
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145. Dorn, R.I., Gordon, S., Krinsley, D., and Langworthy, K. 2013. [Nanoscale: mineral weathering boundary](#). In: Shroder, J. (Editor in Chief), Pope, G.A. (Eds), *Treatise on Geomorphology*. Academic Press, San Diego, CA, vol 4, *Weathering and Soils Geomorphology*, pp.: 70-97.
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8. 1990. Nobbs, M. and Dorn, R.I. Reply to Further Invited Comments on "Age- determinations for rock varnish formation within petroglyphs: cation-ratio dating of 24 motifs from the Olary region of arid South Australia." Rock Art Research: 7: 51- 52.
7. 1989. Nobbs, M. and Dorn, R.I. Reply to Further Invited Comments on "Age- determinations for rock varnish formation within petroglyphs: cation-ratio dating of 24 motifs from the Olary region of arid South Australia." Rock Art Research 6: 63- 67.
6. [1989. Dorn, R.I. Comment on "A note of the characteristics and possible origins of desert varnishes from SE Morocco" by B.J. Smith and W.B. Whalley. Earth Surface Processes and Landforms. 14: 167-170.](#)
5. 1988. Nobbs, M. and Dorn, R.I. Reply to Invited Comments on "Age-determinations for rock varnish formation within petroglyphs: cation-ratio dating of 24 motifs from the Olary region of arid South Australia." Rock Art Research 5: 143-144.
4. 1988. Dorn, R.I. Reply to letter by A. Gillespie on "Radiocarbon and cation-ratio ages for rock varnish on Tioga and Tahoe morainal boulders of Pine Creek, eastern Sierra Nevada in California, and Paleoclimatic Implications. Quaternary Research 30:104-105.
3. 1987. Dorn, R.I., DeNiro, M.J., and Ajie, H.O. 1987. Reply to comment by Wells and McFadden on "Isotope evidence for climatic influence on alluvial-fan development in Death Valley, California. Geology 15: 1179-1180.
2. 1987. Dorn, R.I. Review of Geomorphology and Soils, ed. K.S. Richard, R.R. Arnett and S. Ellis, Allen & Unwin (1985) in Professional Geographer 39: 124.
1. 1987. Dorn, R.I. Response to Presentation of the Kirk Bryan Award. Geological Society of America Bulletin 99: 155.

Courses Taught

ASU 101
 Introduction to Physical Geography
 Society and Environment
 Freshman Seminar for Learning Community on Sustainability
 Field Methods
 Teacher Training Workshops
 Applied Geomorphology
 Introduction to Landform Processes
 Regional Geomorphology
 Quaternary Environments
 Principles of Remote Sensing
 Digital Image Processing
 Landforms of the Western United States
 Environmental Change
 Weathering Seminar
 Field/Lab Methods in Quaternary Research
 Physical Geography Forum
 ST: Desert Geomorphology
 Introduction to Research Methods
 Honors, Physical Geography

Global Change
 Physical Geography Seminar
 Teaching Geography Standards
 Rock Coatings
 Research on Teaching College Geography
 Field Methods
 Core Courses for Masters of Advanced Study in Geographic Education (Introduction to Geographic Teaching, Physical Geography for Teachers, Human Geography for Teachers, Geographic Techniques for Teachers, World Geography for Teachers, North American Geography for Teachers, Geography Across the Curriculum)

Recent Instructional Accomplishments

Coordinator of GCU 113 and GCU 114 courses ♦ I led the team that developed two courses required of aspiring elementary education majors: U.S. and Arizona Social Studies (GCU/HST 113) and World Social Studies (GCU/HST 114). Now that these courses are in the hands of over 10 different faculty teaching them in geography and cross-listed in history, I coordinated the ongoing development of new materials. I also help maintain and post the online syllabi used by the teaching faculty, help answer the questions of faculty associates, help answer student questions, and help coordinate with the Mary Lou Fulton Teacher ♦s College with respect to the number of desired sections and course type (hybrid, online, in person). I also teach or co-teach these courses with new faculty associates.

CLAS Sustainability Learning Community - Partnering with Prof. Peter Goggin, Librarian Katherine O'Clair, English TAs April Brannon and Steven Accardi, and Geography TAs Gabe Judkins and Elyssa Gutbrod, I served as the lead faculty in this Fall Semester learning community. Although there was supposed to be a course-load reduction, my course load actually increased from two to three courses in order to meet programmatic needs. The community lasted for two fall semesters in 2006 and 2007, with a break in the Fall of 2008 because of Professor Goggin ♦s sabbatical. Resumption in the Fall of 2009 was not possible. Please feel free to examine some of the photos taken during field trips (for example, [Salt River Trip Photos](#) and [Landside Trip Photos](#)).

Development of GPH 211 as Online Lab Science Class ♦ At the behest of the Provost, CLAS was tasked with the development of completely online lab science courses. The stated goal was to help graduation rates for students whose life paths had forced them to move away from ASU, but who were just missing a few courses needed for graduation. Another stated goal was to allow online degrees. In turn, CLAS approached my academic unit to develop an online version of Introduction to Physical Geography (GPH 111). In its stead, I coordinated an effort to turn our Introduction to Landform Processes (GPH 211) course into an online lab format that meets the Natural Science Quantitative (SQ) general studies criteria. A pilot version of this course was taught in the Fall of 2008 and a 140-enrollment version is being taught currently in the Fall of 2009. This effort absorbed (and continues to take) a tremendous amount of time rethinking every aspect of instruction, essentially turning the traditional SQ model upside down in order to maximize active learning of SQ criteria.

Development of an entirely Online Masters Degree in CLAS for Teachers ♦ My outreach service to the K-12 teachers of Arizona, as a co-coordinator of the Arizona Geographic Alliance (<http://alliance.la.asu.edu/azga/>), led me to the realization that a Masters degree would benefit Arizona ♦s geography teachers. Surveys revealed a strong preference for an online format, whereby professor-developed courses in geography content could be graded and mentored in coordination with retired master teachers. This is a program now run during Summer and Winter Sessions in order to best match the schedules of practicing teachers.

This model, approved by ABOR, is to create a cycle of professional development. Stage 1 is pre-service teachers learning about how to teach geography. This first stage is implemented through a new course model for the training of future geography teachers described below. Stage 2 is where new teachers join the Arizona Geographic Alliance and gain more experience. Stage 3 is where teachers obtain their Master of Advanced Study in Geographic Education (MASGE), CLAS degree with 2 courses taught by collaborators in ASUs Colleges of Education. Stage 4 is where alumni of this program go on to be Faculty Associates who grade assignments in the courses and mentor new teachers through this professional growth. As the program ♦s

director, I continue to refine content and aid Faculty Associates. I coordinated the development of this program with many colleagues. A paper, written with the first associate director of the MASGE that describes the degree in greater detail, can be viewed at this web address: http://alliance.la.asu.edu/dorn/MASGE_CalifGeog_08.pdf.

Learning Outcomes Assessment Coordinator I volunteer as the go to individual in the writing and implementation of the learning outcome plans in my school. These assessment plans are required by ASUs Office of University Evaluation.

Development of New Course Model for Training Pre-service Instruction in the Teaching of Geography I developed and continue to improve GCU 414 (Teaching Geography Standards) as an online course to assist in the preparation of K-12 pre-service teachers. This Geography Methods course is unique in its online format, its use of an extensive collection of best practices videos of master teachers explaining how they teach, and its connecting the realities of classroom instruction with pedagogical theory learned in classes in ASUs colleges of education. The course was designed in way that it could be turned over to Faculty Associates (practicing or retired teachers), who have been the formal instructors of record starting in the Fall of 2006. The course continues in this fiscal climate, because instruction now occurs during summer sessions.

Coordinator of GPH 111 Labs Introduction to Physical Geography (GPH 111) is one of the largest enrollment courses in my academic unit, because it fulfills the SQ Natural Laboratory Science requirement. I volunteer, without the normal course load reduction applied in many academic units, as the individual who works with the teaching assistants to monitor and improve the laboratory experiences of our students.

Notable Student Mentoring My greatest satisfaction comes from mentoring students. This mentoring occurs in three contexts.

First, I love helping undergraduates grow as scholars through the research process, taking them from freshmen to published authors. I particularly enjoy working with brilliant students who, for one reason or another, fell through the cracks in high school and question their own ability for academic success. Space restrictions prevent a full listing of all undergraduates mentored. The latest published honors students paper, first authored by Honors alumni Richard Stumpf II, can be seen here: <http://alliance.la.asu.edu/dorn/StumpfLearningVirtually2008.pdf>.

Second, I mentor graduate students in geography, most commonly Ph.D. students who are seeking employment as a college teacher. It is a point of great pride for me that every single Ph.D. student has obtained academic employment at their preferred level. These graduates and their first positions are listed below

Third, I am currently mentor over 30 teachers seeking a graduate degree in geographic education in the program described above. Rather than requiring a thesis, the capstone project requires that teachers embrace the scholarly literature in geography and link that literature to scholarly pedagogy. As I write, I am working with the second and third cohorts Master of Advanced Study in Geographic Education students on their applied projects.

Theses and Dissertations Supervised or Co-Supervised

Student	Title	Year, Degree	First Appointment After Degree
Peter Goodwin	Geomorphic interpretation of digital SPOT imagery; Hanaupah Canyon alluvial fan, Death Valley, California	1988, M.A. Thesis Texas Tech University	Chevron Overseas Remote Sensing Unit, San Francisco
Steve Stadelman	Pedogenesis and geomorphology of	1989, M.A Thesis Texas	Ph.D. Student, Texas Tech

	Hanaupah Canyon alluvial fan, Death Valley, California	Tech University	University
Gregory Pope	Quartz decrystallization in glacial tills, eastern Sierra Nevada, California	1990, M.A. Thesis, Arizona State University	Ph.D. Student at Arizona State University
Thad Wasklewicz	Importance of environment on basalt weathering, Hawaii	1992, M.A. Thesis Arizona State University	Ph.D. Student at Arizona State University
Thomas R. Paradise	Weathering-constrained erosion of sandstone at the Roman Theater, Petra Jordan	1993, Ph.D. Dissertation, Arizona State University	Assistant Professor at University of Hawaii at Hilo
Gregory Pope	A weathering boundary layer model to interpret spatial variation in quartz weathering	1994, Ph.D. Dissertation, Arizona State University	Assistant Professor Montclair State University
Tanzhuo Liu	Visual microlaminations in rock varnish: a new paleoenvironmental and geomorphic tool in drylands	1994, Ph.D. Dissertation, Arizona State University	Postdoctoral Fellow at Lamont-Doherty Earth Observatory, Columbia University
Molly Pohl	Radiocarbon dating in drylands	1995, M.A. Thesis, Arizona State University	NSF Graduate Fellow, Ph.D. Student at Arizona State University
Steve Gordon	Assessing the effects of temperature on plagioclase weathering, Iztaccihuatl, Mexico	1996, M.A. Thesis, Arizona State University	Ph.D. Student at Arizona State University
Donald Friend	Evolution of desert colluvial boulder fields, eastern California	1997, Ph.D. Dissertation, Arizona State University	Assistant Professor, Mankato State University (Now Minnesota State University)

Steve Gordon	An analysis of volcanic glass weathering, El Malpais National Monument, New Mexico, USA	1999, Ph.D. Dissertation, Arizona State University	Assistant Professor, United States Air Force Academy, Colorado Springs
Niccole Cerveny	Relationships between internal fractures and surface microtopography of quartz grains	2000, M.A. Thesis, Arizona State University	Instructor, Scottsdale Community College
Brandon Vogt	Weathering of a tombstone sphere, Tempe, Arizona	2000, M.A. Thesis, Arizona State University	Ph.D. Student Arizona State University
Michael Henze	Sediment yield on Spook Hill Pediment, Arizona	2000, M.A. Thesis, Arizona State University	Consultant, J.E. Fuller
Lorenzo Vazquez Selem	Glacial Chronology of Iztaccihuatl Volcano, Central Mexico. A Record of Environmental Change on the Border of the Tropics	2000, Ph.D. Dissertation, Arizona State University	Research Professor, UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO, Mexico City
Mike Applegarth	Interpretation of pediment form using geographic information technology and field data	2001. Ph.D. Dissertation, Arizona State University	Assistant Professor, Shippensburg State University
Evan Palmer	Feasibility and implications of a rock coating catena: Analysis of a desert hillslope	2002, M.A. Thesis, Arizona State University	United States Air Force
Kathryn Anne Gross	Analysis of lateral channel stability for a portion of New River, Arizona, Between 1964-2000	2002, M.A. Thesis, Arizona State University	Hydrologist, Maricopa County Flood Control District

Daniel A. Gilewitch	Military Geography: The Interaction of Desert Geomorphology and Military Operations	2003, Ph.D. Dissertation, Arizona State University	Assistant Professor, United States Army Military Academy, West Point
Kevin A. Green	Debris slope/pediment adjustment to hydraulic processes through analyses of particle size-slope relations in different lithologies	2003, M.A. Thesis, Arizona State University	Ph.D. Student, University of Oregon
Rebecca S. Beard	Stream channel change in response to cattle exclosures in semi-arid riparian ecosystems	2003, M.A. Thesis, Arizona State University	Research Assistant, Ecuadorian Andes Land Use Change Project, University of Texas, Austin
Kathleen M. Bergmann	Urban impacts on Rillito Creek	2004, M.A. Thesis, Arizona State University	Army Corp of Engineers
John C. Douglass	Criterion approach to transverse drainages	2005, Ph.D. Dissertation, Arizona State University	Full-time instructor, Paradise Valley Community College, Paradise Valley, Arizona
Susan Johnson	Combining geography instruction with reading: Exploring the interplay in 3rd and 5th grade classrooms	2005, M.A. Thesis, Arizona State University	Elementary School Teacher, Virginia
Niccole Villa Cerveny	A weathering-based perspective on rock art conservation	2005, Ph.D. Dissertation, Arizona State University	Full-time Instructor, Mesa Community College
Wendy Bigler	Historical biocomplexity in irrigation agriculture: The Akimel O'Odham (Pima) and the	2007, Ph.D. Dissertation, Arizona State University	Assistant Professor, Southern Illinois University

	Gila River, Arizona		
Douglas Frink	Explorations into a dynamic process-oriented soil science	2007, Ph.D. Dissertation, Arizona State University	Visiting Professor, Valdosta State University
Casey Allen	Using rock art as an alternative science pedagogy	2008, Ph.D. Dissertation, Arizona State University	Assistant Professor, University of Colorado-Denver
Elyssa Gutbrod	Implementing Rapid Assessment of the Trail Environments of Arid Regions: Indicator Development and Implementation Scenarios	2013, Ph.D. Dissertation, Arizona State University	GIS Professional Employment (Titan Mapping Solutions), Calgary, Canada
Emma Harrison	Introducing a terrestrial carbon pool in desert mountains	2013, M.A. Thesis, Arizona State University	Visiting Instructor, University of Wyoming
Phil Larson	Conceptual field-based models to elucidate the distribution and nature of desert fluvial terraces: Case studies within the Sonoran Desert, Basin and Range, Arizona.	2013, Ph.D. Dissertation, Arizona State University	Assistant Professor, Minnesota State at Mankato
R. Evan Palmer	Analysis of the Spatial Thinking of College Students in Traditional and Web-facilitated Introductory Geography Courses using Aerial Photography and Geo-visualization Technology	2014, Ph.D. Dissertation, Arizona State University	Assistant Professor, Air Force Academy, Colorado Springs
Ara Jeong	Anthropocene in the Geomorphology of the Sonoran Desert	2019, Ph.D. Dissertation, Arizona State University	Assistant Professor, Korea Military Academy

Manuscript Reviewer

American Chemical Society, Symposium Volume (Archaeological Chemistry)
American Indian Rock Art
Annals of the Association of American Geographers
Earth Surface Processes and Landforms
Geoarchaeology: An International Journal
Geological Society of America Bulletin
Geological Society of America Centennial Volume on Geomorphology
Geology
Geomicrobiology Journal
Geomorphology
Israel Journal of Earth Science
Journal of Archaeological Science
Journal of Geology
Landscape Ecology
Mountain Research and Development
National Geographic Research
Nature (London)
Palaeogeography, Palaeoclimatology, Palaeoecology
Physical Geography
Plains Anthropologist
Professional Geographer
Quaternary Research
Radiocarbon
Rock Art Research
Royal Geological Society London
Science
Wiley, Physical Geography texts
Zeitschrift für Geomorphologie
Scanning Microscopy International

Proposal Reviewer

American Institute of Biological Sciences
 American Chemical Society
 Cotrell Science Advancement Program
 International Science Foundation
 Lawrence Livermore Laboratory-University of California Program
 Los Alamos-Institute of Geophysics and Planetary Physics Program
 NASA
 National Geographic Society
 National Oceanic and Atmospheric Administration
 National Park Service
 National Center Preservation Technology and Training Program
 National Sciences and Engineering Research Council of Canada
 National Science Foundation Programs: Anthropology Archaeology Climate Dynamics
 Ecological Studies Geography Geology Instrumentation Polar Programs EPSCoRm Small Business Innovation
 Research
 NOAA
 U.S. Geological Survey

Membership in Professional Organizations

American Quaternary Association
 American Rock Art Research Association
 Arizona-Nevada Academy of Sciences
 Association of American Geographers
 Association of Pacific Coast Geographers
 Geological Society of America
 National Council for Geographic Education

Awards

2012 [*President's Medal of Social Embeddedness for the Teaching Foundations Project*](#) [led by Laura B. Turchi, shared with many others]
 2010 *Geography Excellence in Media Award from the National Council for Geographic Education*. [Hinde, E.R., Jimenez-Silva, M., Ekiss, G.O., Dorn, R.I., Osborn Popp, S.E., Managing Editors, (2009, Version 5.4).
[*GeoLiteracy ELL Adaptations: Integrating Geography, Reading and Writing*](#). Tempe, AZ: Arizona Geographic Alliance.]
Distinguished Mentor Award from the National Council for Geographic Education, 2009.
College of Liberal Arts and Science's Innovation in Teaching Award, Arizona State University, 2009.
Enhancement of Geographic Literacy Cram Award, 2005 for GeoMath, National Council for Social Studies (with G.B. Ekiss and E. Hinde)
 Professor of the Year Special Recognition, 2005, Arizona State University Parents Association
Enhancement of Geographic Literacy Cram Award, 2003 for GeoLiteracy, National Council for Social Studies (with G.B. Ekiss and E. Hinde)
Guggenheim Fellowship, 1996-1997
Wiley Award, Presented for Excellence in Geomorphological Research, British Geomorphological Research Group, 1993 (with Roger LeB. Hooke)
Castleton Award, Presented for Excellence in Rock Art Research, American Rock Art Research Association, 1992
G.K. Gilbert Award, Presented for Excellence in Geomorphological Research, Geomorphology Specialty Group of the Assoc. American Geographers, 1988
New Professor Excellence in Teaching Award, Texas Tech University, 1988
Presidential Young Investigator Award of the National Science Foundation, 1987
New Faculty Award, Texas Tech University, 1987
Kirk Bryan Award of the Geological Society of America (with T.M. Oberlander), For Excellence in Geomorphological Research, 1986

Honors

Fellow of the Arizona-Nevada Academy of Sciences, 1996
Fellow of the Geological Society of America, 1992
Sigma Xi, 1986
National Science Foundation Graduate Fellowship, 1980-1984
Phi Beta Kappa, 1979