## SCOTT H. PIKE

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## **SUMMARY OF QUALIFICATIONS**

Broadly-trained Geologist and Archaeologist with substantial teaching, advising and administration experience. Consistently garner high ratings on student and performance evaluations. Served two years as Acting Director of an archaeological science laboratory in Athens, Greece. Recipient of numerous programmatic, capital and research grants and fellowships totaling over \$1,300,000. Director of archaeology field schools and study abroad programs. Organized international conferences and workshops. Author, editor and reviewer of geoarchaeological and geological manuscripts and articles. Taught sustainability-related coursers in China, Japan and Ireland.

## INDUSTRY BACKGROUND

Environmental engineer and registered professional archaeologist with proven track record of incorporating a solid academic background into an effective professional practice ensuring the protection and improvement of environmental quality. Solid consulting, field and report experience with cultural resource management under Section 106, Section 404, and state and local regulations including report submittals to SHPO offices throughout the southeast. Proven expertise in performing environmental site assessments. Verifiable success in motivating and managing interdisciplinary teams responsible for project planning, scheduling, budget costing and staffing. Local resource to news media on surface and subsurface water issues and earthquakes. Successfully incorporated student research into a multiyear watershed management program with local and regional authorities.

#### **EDUCATION**

UNIVERSITY OF GEORGIA – *Athens, Georgia* Ph.D. in Geology

December 2000

OBERLIN COLLEGE – *Oberlin, Ohio* Bachelor of Arts in Anthropology

May 1989

#### **DOCTORAL THESIS**

Archaeological Geology and Geochemistry of Pentelic Marble, Mount Pentelikon, Attica, Greece

Dissertation Advisors: Dr. Norman Herz and Dr. Ervan Garrison

#### ACADEMIC TEACHING EXPERIENCE

WILLAMETTE UNIVERSITY – Salem, Oregon

Professor, Environmental Sciences and Archaeology

Associate Professor, Environmental and Earth Science

Assistant Professor, Environmental and Earth Science

August 2005 – Present August 2018 - Present August 2009 – February, 2018 August 2005 – July 2009

Appointed to an accelerated tenure-track teaching and research position for a department with a growing major where student participation is integrated into faculty research. Courses

developed and taught include Physical Geology with lab; Environmental Geology with lab, Archaeological Geology with lab, Earth System Science with lab, Principles of Hydrology, Earth Systems Science, Introduction to Global Archaeology, Archaeological Theory and Methods, and introductory environmental science course for majors and non-majors. Designed and taught first-year College Colloquia entitled "Homer's Odyssey as Natural History," "The Unnatural Hazards of Natural Disaster Movies" and "The Columbia River Gorge: A Case Study of the Interaction of Humans and the Environment." Taught a study-abroad course in Galway, Ireland called "Seeing Ireland Through the Lens of Sustainability." Hold appointments in the Department of Classical Studies and Chair Willamette's Environmental Science department and Archaeology program.

- Academic advisor to new majors, transfer and first-year students.
- Oversaw more than 70 senior research theses and independent student research projects in environmental science and archaeology.
- Incorporated significant and applicable research projects into curriculum in upper level courses.
- Participated in a national workshop promoting sustainability across the campus curriculum.
- Coordinate and lead the only non-Scottish undergraduate archaeological field school at the Ness of Brodgar, Orkney Islands, Scotland.
- Facilitated and oversaw Willamette undergraduate students' participation in an Anglo-American landscape archaeology research program in Abruzzo, Italy.
- Mentored and facilitated student paper presentations at national conferences.
- One of three faculty to propose and succeed in developing an archaeology major at Willamette University.
- Recruited to teach summer course for Japanese exchange students at Willamette University's partner institution Tokyo International University America.
- Recruited to instruct students from China, Mongolia, South Africa and the United States on a Willamette-sponsored debate certificate program. Taught students on concepts and theories of environmental and cultural sustainability, summers 2010-2014.
- Taught in Willamette's Luce Foundation-supported Sustainability in Japan in Kawagoe, Japan, summer 2015.
- Selected to direct and teach in Willamette's study-abroad program in Galway, Ireland, Spring 2015.

LYNCHBURG COLLEGE – Lynchburg, Virginia

**July 2001 – June 2005** 

## Assistant Professor, Environmental Science

Selected for a tenure-track teaching and research position with responsibilities to develop and coordinate geologic component of environmental science curriculum for a dynamic environmental science program that encourages experiential learning through fieldwork, research and internships. Courses taught include Physical Geology with lab; Physical Geography; Physical Oceanography with lab; Principles of Hydrology with lab; Environmental Geology with lab; and lecture and laboratory sessions for introductory environmental science courses for majors and non-majors.

- Coordinated and oversaw Junior and Senior level research projects and internships at the College's Claytor Nature Center (Lynchburg, Virginia) and in the Sangro River Valley (Abruzzo, Italy).
- Academic Advisor to forty students.
- Nominated by the College and received state-wide competitive Mednick Fellowship to support travel and related costs for initial summer field season in the Abruzzo, Italy.
- Elected by School of Science faculty to represent their interest on the College's Educational Policies Committee. Selected by committee members to chair the Majors and Minor subcommittee.
- Principle organizer of a 6-week international studies abroad program to Turkey, Greece and Italy, with a focus on the synergistic interaction of modern and ancient societies with the natural environment.
- Selected to serve as campus-wide Blackboard Instructor/Resource for faculty and students.

## **Assistant Director**, Westover Honors Program

**July 2002 - June 2005** 

Recruited to work with the Director of College's scholastic program for academically talented students. Played pivotal role in recruiting top students and encouraging faculty to develop and lead Honors curriculum. Advised all science-major Honors Fellows. Served on all senior science Honor Fellows' theses committees. Disseminated information concerning the Westover Honors Program to prospective students, the media and the campus community.

# OXFORD COLLEGE OF EMORY UNIVERSITY – Oxford, Georgia August 2000 – December 2000 Instructor, Geology

Hired to instruct Physical Geology courses and laboratory sessions. Held full responsibility for course design, laboratory preparation, exercise development and grading. Created multimedia presentations in conjunction with lectures. Led Emory-wide electronic community conferences on recent developments in Geology and Archaeology.

## LaGrange college – LaGrange, Georgia

**August 1999 – July 2000** 

## **Instructor,** Geology

Chosen to instruct Physical Geology, Historical Geology and Environmental Geology courses and laboratory sessions. Conceived and designed curriculum. Prepared and delivered multimedia presentations. Designed, proctored and graded all exams and laboratory exercises. Acquired samples and teaching aides through total management of departmental budget. Oversaw inventory and procurement of laboratory specimen and equipment. Held full responsibility for textbook review and selection. Led field trips. Increased course enrollment by 75% from Fall to Spring.

#### PROJECT AND ADMINISTRATION EXPERIENCE

NESS OF BRODGAR ARCHAEOLOGY FIELD SCHOOL

July 2011 – Present

#### Director

Invited to develop and lead the only North American undergraduate student-centered archaeology field school at the Ness of Brodgar, a monumental-scaled Late Neolithic archaeological site in the "Heart of Neolithic Orkney" UNESCO world heritage site. Working with the faculty and staff at Orkney College-University of the Highlands and Islands and the

Orkney Research Centre for Archaeology, the field school focuses on teaching undergraduate students proper excavation techniques including troweling, context recognition, recording, sectioning, profiling as well as post-excavation activities including flotation and macrobotanical sorting. Students also are introduced to geophysical survey and environmental archaeology. Field trips are arranged to visit many of the important Neolithic, Bronze Age, Iron Age and Pictish sites. Returning students complete independent senior capstone research projects related to some aspect of the Ness of Brodgar excavation.

## CENTER FOR SUSTAINABLE COMMUNITIES — WILLAMETTE UNIVERSITY July 2011 — Jan. 2013 Director

Selected to administer one of Willamette University's Centers of Excellence. The Center promotes, develops and administers student, faculty and community efforts to foster resilient, prosperous, and healthy communities that strike a balance between resource use, the needs of the environment and the social, cultural, and economic well-being of their citizens. Responsibilities includes fundraising for the Center's various programs, oversight of the Center's budget including the operations and expenses of Willamette's Zena Forest, organizing and promoting programming including lectures, summits and symposia for the University, the local community and the greater Willamette Valley, and running the Center's scholarship and fellowship programs. Working to integrate and partner with The Innovation Resource Group, an internationally recognize 503C non-profit organization that fosters education and collaboration to meet the resiliency challenges associated with global climate change.

THE SANGRO VALLEY PROJECT – Abruzzo, Italy

# Associate Director, Director of Landscape Studies Staff Geologist

July 2008 – Sept. 2009 January 2004 – June 2008

Recruited to join multinational environmental archaeology project directed jointly by Oberlin College and Oxford University to study the dynamic landscape of the middle valley region of the Sangro River Valley. In 2008 Willamette University was recognized as a third co-directing institution as a result of leadership role in landscape archaeology research oversight and field school curriculum development. Research focused on (1) a stratigraphic analysis of stream channel and terrace deposits to interpret climatic conditions and periods of valley erosion and deposition as they relate to ancient human activities in the landscape, (2) correlating domestic and commercial centers with landslide potential to assess the hypothesis that the placement of ancient villages on precipitous valley rock outcrops was of practical concern and not one of defense against hostile invaders, and (3) a geophysical profile and subsequent stratigraphic analysis of an enclosed seasonal lake to ascertain stability of the landscape throughout the regional archaeological record. These projects were designed to incorporate undergraduate researchers.

International Center for Jefferson Studies – Monticello, Virginia

2002 - 2004

## **Geoarchaeology Consultant**

Chosen to lead a multicomponent chemical and structural analysis of soil horizons as well as alluvium and colluvium deposits as part of a large-scale landscape archaeology project to reconstruct the physical and temporal dynamics of landscape use on the Monticello plantation. Undertook micromorphological studies of soils trapped behind rock walls within stream valleys that drain formally farmed hill slopes in order to relate agricultural practices to changes in the landscape. Coordinated with colleagues from across the country to synthesize data. Served as a

guest lecturer on geological techniques applied to archaeology for the dual sponsored Monticello – University of Virginia Archaeological Field School at Monticello.

THOMAS JEFFERSON'S POPLAR FOREST – Forest, Virginia

2002 - 2004

## **Geoarchaeology Consultant**

Asked to assist with interpreting difficult and subtle soil stratigraphy at various excavation trenches. Worked on soil micromorphological study of soil column from an artificial terrace within the cartilage to investigate the nature in which the material was deposited and determine the fill's provenance. Collaborated with staff to obtain funds to undertake a geophysical survey of the site and other locally important historical sites. Faculty advisor for student interns.

Terracon – Atlanta, Georgia

**April 2001 – August 2001** 

## **Project Manager / Environmental Archaeologist**

Recruited to develop, lead, promote and carryout environmental and archaeological assessment activities for a national environmental and geotechnical consulting firm. First archaeologist hired by company with over 2,300 employees. Oversaw Company's only Cultural Resource Management unit consisting of two historic preservationists, an architectural historian and three archaeologists. Performed Phase I and II archaeological surveys and historical assessments for construction projects, as mandated by Section 106 of the National Historic Preservation Act. Wrote and submitted reports to SHPO offices throughout the southeast. Assessed projects' impact on nationally recognized endangered and threatened species and wrote to U.S. Fish and Wildlife district offices to seek concurrence. Worked with THPO offices to ensure that projects would not impact negatively on ritual or sacred Native American lands. Performed Phase I Environmental Site Assessments of proposed constructions and prepared reports. Held full responsibility for customer management, loyalty and retention. Managed project costing to ensure optimum profit margins and protect company assets. Ensured maintenance of sound practices and compliance with State and Federal laws. Instrumental in preparing company's successful bid to manage CRM for a Georgia DOT road-widening project, the longest single contract ever awarded by GaDOT. Successfully marketed combined archaeological and environmental services to prospective clients and partners resulting in the Atlanta Office's expansion into linear projects. Retained as Consultant after accepting position at Lynchburg College.

# AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS – Athens, Greece Sept.1995 -Sept 1997 Acting Director, Wiener Laboratory

Recruited to oversee day-to-day operations of a field-oriented archaeological science laboratory. Developed and coordinated archaeological geology, physical anthropology, zooarchaeology, archaeobotanical, ceramic and other quantitative archaeological research programs. Supervised the acquisition and curation of biological and non-organic sample reference collections and 2,000 volume specialist library. Co-edited research monographs under Lab moniker. Represented Lab in all levels of ASCSA administration. Submitted annual reports to board members, US and Greek campus Directors. Developed and organized international conferences, lectures, exhibitions and educational outreach programs. Served as resource and support for current and potential graduate students, senior researchers and professors. Developed and wrote research and conference grant proposals, reports, budgets and correspondences.

## HALASMENOS EXCAVATIONS – Crete, Greece

## September 1995 – September 1997

## **Staff Geologist**

Chosen to coordinate scientific component of excavation including collection and impregnation of sediment samples for microstratigraphic analysis, setting up floatation system and developing flotation protocol, and recruiting specialists from archaeological scientific fields (zooarchaeologists, phytolith and faunal experts, etc.) to study excavated materials. Identified local lithic resources. Successfully mapped the geology surrounding excavation site. Collected pottery sherds for organic residue analysis.

U.S. FOREST SERVICE – Athens, Georgia

**August 1992 – April 1993** 

## Computer Programmer, Entomology Department

Hired to design and implement data management program for Federally funded ten-year moth migration study. Held full responsibility for coordinating computer facilities.

University of Georgia – Athens, Georgia

**June 1992 – August 1992** 

Soils Technician, Cooperative Extension Service

Selected to collect and analyze soil samples for an EPA study of experimental pesticide. Responsible for analyzing data using computer statistical packages.

#### **PUBLICATIONS**

## In Print (\*peer-reviewed)

- Pike, S. and Shinsato, L., 2020. Geochemical analysis of the floors from Structure 14 using a portable XRF. In *The Ness of Brodgar: As it Stands*, N. Card, M. Edmonds and A. Mitchell (eds), The Orcadian Press, Kirkwall, 166-173.\*
- Pike, S., 2020. Scientific assessment of the marble fragments of the Raleigh Bacchus. In *The Bacchus Conservation Project*, North Carolina Museum of Art.
- Leidwanger, J., Pike, S. and Donnelly, A., 2018. Revisiting the Origin and Destination of the Late Antique Marzamemi 'Church Wreck' Cargo. In *Interdisciplinary Studies of Ancient Stone, Proceedings of the Eleventh International Conference of ASMOSIA*, Split, Croatia, 291-300.\*
- Powers, J., Abbe, M., Bushey, M. and Pike, S., 2018. New evidence for ancient gilding and historic restorations on a portrain of Antinous in the San Antonia Museum. In *Interdisciplinary Studies of Ancient Stone, Proceedings of the Eleventh International Conference of ASMOSIA*, Split, Croatia, 783-792.\*
- Shillito, L.M., McKenzie, J., Card, N., Pike, S. and Chan, B., 2015. Subsistence, technology and resource use in Neolithic Orkney at the Ness of Brodgar. *Antiquity Project Gallery*, 348.\*
- Bianchi, F., Bruno, M., and Pike, S., 2015. L'apparato architettonico in marmo pentelico del Complesso Severiano a *Leptis Magna* alla luce di recenti indagini archeologiche, epigrafiche e archeometriche. In *L'Africa Romana Momenti di continuità e rottura: bilanio di trent'anni di convegni L'Africa romana*, Carocci editore, Rome, Italy, 215-234.\*
- Bianchi, F., Bruno, M., and Pike, S., 2015. Pentelic marble in the Severan Complex in Leptis Magna (Tripolitania, Libya). In *Interdisciplinary Studies on Ancient Rome:* Proceedings of the Tenth International Conference of ASMOSIA, Rome, Italy, 23-34.\*

- Bernard, S. and Pike, S., 2015. Isotopic analysis of marble from the Stoa of Attalos in the Athenian Agora and the Hellenistic quarries of Mount Pentelikon. In *Interdisciplinary Studies on Ancient Rome: Proceedings of the Tenth International Conference of ASMOSIA*, Rome, Italy, 451-460.\*
- Borromeo, G.E., Hollinshead, M.B. and Pike, S., 2015. A strigilated sarcophagus Providence: ancient, modern or both? In *Interdisciplinary Studies on Ancient Rome: Proceedings of the Tenth International Conference of ASMOSIA*, Rome, Italy, 871-880.\*
- Palagia, O. and Pike, S., 2015. Art historical and scientific perspectives on the nature of the orange-red patina of the Parthenon. In *Interdisciplinary Studies on Ancient Rome:* Proceedings of the Tenth International Conference of ASMOSIA, Rome, Italy, 881-890.\*
- Abbe, B, Borromeo, G. E., and Pike, S, 2012. A Hellenistic Greek marble statue with ancient polychromy reported to be from Knidos. In *Interdisciplinary Studies on Ancient Stones: IX International Conference of the Association of Marbles and Other Stones Used in Antiquity (ASMOSIA)*, Tarragona, Spain, 763-770.\*
- Aylward, W., Carlson, D., Laroche, D., Meretti, J.C. and S. Pike, 2012. The Temple of Apollo at Claros and the Kızılburun shipwreck: preliminary analysis of isotopic data. In *Interdisciplinary Studies on Ancient Stones: IX International Conference of the Association of Marbles and Other Stones Used in Antiquity (ASMOSIA)*, Tarragona, Spain, 540-548.\*
- Romano, I. B., Pike, S. and Gazda, E., 2012. The use of symbolism of Pentelic marble in Domitianic Rome. *Interdisciplinary Studies on Ancient Stones: IX International Conference of the Association of Marbles and Other Stones Used in Antiquity (ASMOSIA)*, Tarragona, Spain, 772-779.\*
- Pike, S., 2009. A stable isotope database for the ancient white marble quarries of Mount Pentelikon, Greece. In BCH Supp, 51, ASMOSIA VII, The French School of Athens, 699-708.\*
- Romano, I., Gazda, E. and Pike, S., 2009. The Hartwig-Kelsey fragments: A Pentelic marble case study. In the Proceedings of the Association for the Study of Marbles and Other Stones Used in Antiquity (ASMOSIA) VIII, *L'Atelier Méditerranéen* Special Volume, Maison Méditerranéenne des Sciences de l'Homme, 273-290.\*
- Palagia, O and Pike, S, 2009. The marble of the Bassai Frieze. In the Proceedings of the Association for the Study of Marbles and Other Stones Used in Antiquity (ASMOSIA) VIII, L'Atelier Méditerranéen Special Volume, Maison Méditerranéenne des Sciences de l'Homme, 255-272.\*
- Sheedy, K. and Pike, S., 2008. The Delos Colossus Project. In *La sculpture des Cyclades à l'Epoque Archaïque: Histoire des Ateliers, Rayonnement des Styles*. Fr. Prost and Y. Kourayios eds., *BCH Suppl*. 48.\*
- Pike, S., 2004. Intra-quarry sourcing of the Parthenon marbles: applications of the Pentelic Marble Stable Isotope Database. In *The Sculptures of the Parthenon*, M. Cosmopoulos ed., Cambridge University Press, Cambridge, UK, pp. 196-206.
- Pike, S., Herrmann, Jr. J., and Herz, N., 2002. A provenance study of calcitic marble from the Archaeological Museum of Thessaloniki. In *ASMOSIA V: Interdisciplinary Studies on*

- Ancient Stone, J. Hermann, Jr., N. Herz and R. Newman eds., Archetype Publications Ltd., London.\*
- Pike, S. and Gitin, S., 2000. *The Practical Impact of Science on Near Eastern and Aegean Archaeology*, Wiener Laboratory Publication Number 3, Archetype Publications Ltd., London.
- Pike, S., 1999. Preliminary results of a systematic characterization study of Mount Pentelikon, Attica, Greece. In Archéomatériaux - Marbres et autres roches: The Proceedings of the Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) IV 1995, M. Schvoerer ed., CRPAA Université Michel de Montaigne, Bordeaux, pp.165-170.\*
- Vaughan, S., Herz, N. and Pike, S., 1997. The application of stable isotope analysis to a ceramic provenance study of Early Cycladic Marble Ware. In *Abstracts of Papers, 213th National Meeting of the American Chemical Society*, Symposium: Geochemistry and Archaeology, San Francisco, Spring 1997.\*
- Pike, S., 1996. A geologic survey on Mount Pentelikon and its implications on sampling. In *Archaeometry 94: The Proceedings of the 29th International Symposium on Archaeometry*, S. Demirci, A.M. Özer and G.D. Summers eds., Tübitak, Ankara, pp. 111-119.\*

## **On-Line (Peer-Reviewed)**

• Shillito, L-M., McKenzie, J., Card, N., Pike, S and Chan, B., 2015. Subsistence, technology and resource use in Neolithic Orkney at the Ness of Brodgar. In *Antiquity Plus Project Gallery*, http://antiquity.ac.uk/projgall/shillito348.

## In Review

- Pike, S. and Soles, J. A petrographic database of known Bronze Age biocalcarenite (beachrock) quarries in East Crete and the provenance of ashlar blocks from the Palace at Gournia. In *Mochlos Period III: Neopalatial Settlement on the Coast*, J. Soles ed.
- Pike, S. From the Acropolis to Pentelikon: Deconstructing the Parthenon. In *The Parthenon: Color, Materiality and Aesthetics*, M. Abbe and N. Norman, eds., Cambridge University Press, Cambridge, UK.

#### In Preparation.

- Pike, S. A extensive topographic and geologic survey of Mount Pentelikon and the systematic acquisition of a reference sample collection. To be submitted to *Geoarchaeology: An International Journal*.
- Vaughan, S., Pike, S., and Herz, N. Stable isotope analysis as a ceramic provenance technique: applications to Early Cycladic marble-tempered wares. For submission to *Journal of Archaeological Science*.
- Pike, S. and Herz, N. Isotopic testing of Alleged Aphrodites.
- Pike, S. A  $\delta^{13}$ C and  $\delta^{18}$ O database for the ancient white marble quarries on Mount Pentelikon, Attica, Greece: A tool for intra-quarry characterization. For submission to *Geochimica et Cosmochimica Acta*.

#### **PRESENTATIONS**

#### Conferences

- "Palatial Stone Masonry and Transport: A New Geochemical Study of Minoan Ashlar and Quarries in East Crete," Archaeological Institute of America Annual Conference, January 2-5, 2020, Washington, DC (oral paper presented by Jonathan Flood with Jeffrey Soles and Douglas Faulmann).
- "Pentelic marble provenance using X-ray fluorescence spectroscopy and K-means clustering," Geological Society of America Annual Conference, October 22-25, 2019, Phoenix, AZ (poster paper presented by Lara Shinsato\* with Jeff Smith\*).
- "On-site geochemical processing of Late Neolithic floors: what, if anything, can handheld-XRF analysis tell us about the archaeology of the Ness of Brodgar, Orkney, Scotland?", invited paper, Northwest Regional Meeting (NORM), American Chemical Society, Portland, OR, June 16-19, 2019 (oral paper).
- "Sourcing building stones in the ancient Mediterranean: a review of 25 years of provenance research at the Wiener Laboratory," invited paper for symposium *Archaeological Science Meets the Classics: Emerging Knowledge in the Ancient Eastern* Mediterranean, Society for American Archaeology, April 11-15, 2018, Washington, DC (oral paper).
- "Assessing portable XRF data within a Neolithic context: comparing semi-quantitative and quantitative XRF data spectral data analyses of floor samples from Structure 14, Ness of Brodgar, Scotland," Geological Society of America Annual Conference, October 22-25, 2017, Seattle, WA (oral paper with Nick Card and Hugo Anderson-Whymark).
- "Follow the yellow clay floors: a reconstruction of the Neolithic floors at the Ness of Brodgar," Geological Society of America Annual Conference, October 22-25, 2017, Seattle, WA (poster by presented by Lara Shinsato\* with Nick Card).
- "A loch's lithology: a preliminary study of the stone resources from the Loch of Stenness and their relationship to the Ness of Brodgar and other sites within the UNESCO's Heart of Neolithic World Heritage Site," Geological Society of America Annual Conference, October 22-25, 2017, Seattle, WA (poster paper presented by Sarah Crabb\* and with Nick Card, Richard Bates, and Caroline Wickham-Jones).
- "The Parthenon quarry quandary looking inside the Pentelic source," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 11<sup>th</sup> International Congress, May 18-22, 2015, Split, Croatia (oral paper with L Lambrinou).
- "Stable isotope analysis of the white marble sculptures from he Saint Louis Art Museum," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 11<sup>th</sup> International Congress, May 18-22, Split, 2015, Croatia (oral paper presented by L Çakmac and with E. Hamilton).
- "Revisiting the origin and destination of the Late Anitque Marzamemi 'Church Wreck' cargo," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 11<sup>th</sup> International Congress, May 18-22, 2015, Split, Croatia (with J. Leidwanger and A.J. Donnelly).

- "An investigation of gilding, repairs and restorations: the case study of a portrait of Antinous in the San Antonia Museum of Art," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 11<sup>th</sup> International Congress, May 18-22, 2015, Split, Croatia (presented by J. Powers and with M. Abbe and M. Bushey).
- "The sources and shipping of marble used in the Temple of Apollo," Archaeological Institute of America Annual Conference, New Orleans, Louisiana, January 8-11, 2015 (oral paper presented by Deborah Carlson with Donato Attanasio and Philippe Blanc).
- "From the Acropolis to Pentelikon: Deconstructing the Parthenon," Rethinking the Parthenon: Color, Materiality, Aesthetics Conference at the University of Georgia, Athens, Georgia, October 17-18, 2014 (invited oral paper).
- "The use of pXRF on in situ floor deposits to interpret activity areas within monumental-scaled structures at the Ness of Brodgar at UNESCO's Heart of Neolithic Orkney World Heritage Site, Orkney, Scotland," Society of American Archaeology, 78th Meeting, April 3-7, 2013, Honolulu, Hawaii (oral paper with Jordon Loos\*).
- "A fresh investigation of the orange-red patina of the Parthenon," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 10th International Congress, May 21-26, 2012, Rome, Italy (oral paper with Olga Palagia).
- "An isotopic study of pentelic marble from the Athenian Stoa of Attalos and quarry practices at Mount Pentelikon in the 2<sup>nd</sup> century BC," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 10th International Congress, May 21-26, 2012, Rome, Italy (oral paper presented by Seth Bernard).
- "A strigilated sarcophagus in Providence: ancient or modern?" Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 10th International Congress, May 21-26, 2012, Rome, Italy (presented by G. Borromeo and with M. Hollinshead).
- "Pentelic marble in the Sevarian Complex in Leptis Magna," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 10th International Congress, May 21-26, 2012, Rome, Italy (oral paper co-presented with F. Bianchi and with M. Bruno).
- "The accessory mineral content of marbles from Mt. Pentelikon and Proconnesos: an emerging statistical parameter in marble provenance studies," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 10th International Congress, May 21-26, 2012, Rome, Italy (poster paper with L. Babcock\* and S. E. Swanson).
- "pXRF analysis of floor surface deposits in Structure 10 at the Ness of Brodgar, an UNESCO World Heritage Site in the Orkney Islands," Geological Society of America Annual Conference, October 9-12, 2011, Minneapolis, MN (oral paper).
- "The Acropolis marble project: stable isotope analysis of marbles from the Parthenon and Propylaea," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 9th International Congress, June 8-12, 2009, Tarragona, Spain (oral paper).
- "The use and symbolism of Pentelic marble in Domitian's Rome," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 9<sup>th</sup> International Congress, June 8-12, 2009, Tarragona, Spain (oral paper presented by I. Bald Romano, with E. Gazda and R. Paris).

- "The marble technique, polychromy, and sculptural style of the 'Karg-Bebenburg youth,'" Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 9<sup>th</sup> International Congress, June 8-12, 2009, Tarragona, Spain (oral paper presented by Mark Abbe, with G. E. Borromeo).
- "The temple of Apollo at Claros and the shipwreck at Crimson Cape: preliminary analysis of isotopic data," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 9th International Congress, June 8-12, 2009, Tarragona, Spain (poster paper with W. Aylward, D. Carlson, D. Laroche, and J.C. Moretti).
- "The nature of the orange-red patina of the Parthenon," Archaeological Institute of America Annual Conference, January 6-9, 2009, Philadelphia, PA (oral paper with Olga Palagia).
- "Slope failure and the archaeological record of the middle Sangro River Valley, Abruzzo, Italy: working towards an understanding of archaeological site formation, preservation and interpretation of high-relief Mediterranean valley systems," Geological Society of America Annual Conference, October 5-9, 2008, Houston, TX (oral paper).
- "Recent stable isotope studies of the Mount Pentelikon and Parian white marble quarries: a call for rigorous geology field work in marble provenance studies," Geological Society of America Annual Conference, October 27-31, 2007, Denver, CO (oral paper).
- "Ancient terroir: correlating modern grape growing suitability to historic production on the slopes of Monte Pallano, Abruzzo, Italy," Geological Society of America Annual Conference, October 27-31, 2007, Denver, CO (poster paper with Andy Myer\*).
- "An Investigation into the Role of Slope Stability on Archaeological Site Distribution and Preservation: Middle Sangro Valley, Abruzzo, Italy," Geological Society of America Annual Conference, October 22-25, 2006, Philadelphia, PA (poster paper with Cari Schruth\*).
- "Isotopic testing of alleged Hellenistic Aphrodites," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 8<sup>th</sup> International Congress, June 12-18, 2006, Aix-en-Provence, France (oral paper with Norman Herz).
- "The Hartwig-Kelsey Fragments: a Pentelic Marble case study," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 8<sup>th</sup> International Congress, June 12-18, 2006, Aix-en-Provence, France (oral paper presented by Irene Romano, with Elaine Gazda).
- "The marble of the Bassai Frieze," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 8<sup>th</sup> International Congress, June 12-18, 2006, Aix-en-Provence, France (oral paper presented by Olga Palagia).
- "Isotopic signatures and marble consanguinity: Hellenistic Aphrodites and Philadelphia Franklins," Archaeological Institute of America Annual Meeting, January 6-9, 2005, Boston, Massachusetts (co-presenter of poster paper with N. Herz).
- "A geoarchaeological investigation at Thomas Jefferson's Monticello: Correlating Land Use Strategies with the Landscape Dynamics on the North Slope of Monticello Mountain,"

- Geological Society of America Annual Meeting, November 2-5, 2003, Seattle, Washington (oral paper with N. Fraser, S. Bon-Harper, J. Stein, J. Jones, and D. Maki).
- "A Petrographic Database of Known Bronze Age Biocalcarenite (Beachrock) Quarries in East Crete and the Provenance of Ashlar Blocks from the Palace at Gournia," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 7th International Congress, September 16-21, 2003, Thasos, Greece (oral paper with Jeffrey Soles).
- "Intra-quarry sourcing of the Parthenon Marbles: applications of the Pentelic marble stable isotope database," The Parthenon and Its Sculptures in the 21st Century: The Current State and Future Directions of Research, April 26-28, 2002, St. Louis, Missouri (invited oral paper).
- "A systematic intra-quarry characterization study of Pentelic marble, Attica, Greece: an illustration of the importance of fieldwork for marble provenance studies," Geological Society of America Annual Meeting, Nov. 9-18, 2000, Reno, Nevada (oral paper).
- "A database for Pentelic marble," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 6th International Congress, June 15-18, 2000, Venice, Italy (oral paper).
- "Ceramic provenance and the Aegean marble stable isotope database: a study of Early Bronze Age 'Marble Ware' from the Aegean islands of Amorgos, Keros and Naxos," Geological Society of America, Southeastern Section 48th Annual Meeting, Mar. 26-28, 1999, Athens, Georgia (oral paper with S. Vaughan and N. Herz).
- "A characterization study of statuary marble from the archaeological museum of Thessaloniki and its implication on our understanding of marble use and procurement in northern Greece," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 5th International Congress, June 7-10, 1998, Boston (oral paper with J. Herrmann and N. Herz).
- "Petrographic characterization study of Bronze Age beachrock quarries in east Crete and its application to Minoan archaeology," Archaeological Institute of America 99th Annual Meeting, Dec. 27-29, 1997, Chicago (poster paper with J. Soles awarded best of show).
- "The use of Parian marble in Attic sculpture," Paria Lithos, Oct. 2-5, 1997, Paros, Greece (invited oral paper with O. Palagia).
- "A standardized scheme for describing archaeological marble," Archaeological Institute of America 98th Annual Meeting, Dec. 27-30, 1996, New York (poster paper).
- "Preliminary stable isotopic results of a systematic characterization study of the Mount Pentelikon marble quarries," Third Archaeometry Symposium of the Greek Archaeometry Society, Nov. 6-10, 1996, Athens, Greece (poster paper).
- "An investigation of marble heterogeneity as a tool for characterizing ancient marble quarries on Mount Pentelikon, Attica, Greece," Geologic Society of America Annual Meeting, Nov. 6-9, 1995, New Orleans, LA (poster paper).
- "Characterizing a mountain: preliminary results of a systematic characterization study of Mount Pentelikon, Attica, Greece," Association for the Study of Marbles and Other Stones

- in Antiquity (ASMOSIA), 4th International Congress, Oct. 9-13, 1995, Bordeaux, France (poster paper).
- "Marble from Amorgos and sources of Cycladic Early Bronze Age marble temper," Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 4th International Congress, Oct. 9-13, 1995, Bordeaux, France (oral paper presented by S. Vaughan, with Norman Herz).
- "Survey of stone-working and craftsmanship," Trade and Production in Premonitory Greece V: The Craftsman and His/Her Place in Society, 6-7 May 1995, Athens, Greece (invited oral paper).
- "Results of a field survey on the south slope of Mount Pentelikon and its implications for sampling," Archaeological Institute of America 96th Annual Meeting, Dec. 27-30, 1994, Atlanta, GA (poster paper).
- "An overview of archaeological geology in the Aegean," The Practical Impact of Science and Field Archaeology: Maintaining Long-Term Options A Workshop on Crete, July 30, 1994, Iraklion, Greece (invited oral paper).
- "A geologic perspective on determining the provenance of Pentelic marbles," Materials Research Society, Material Issues in Art and Archaeology IV, May 16-20, 1994, Cancun, Mexico (oral paper).
- "A geologic survey on Mount Pentelikon and its implications on sampling," 29th International Symposium on Archaeometry, May 9-14, 1994, Ankara, Turkey (oral paper).
  - \* indicates student co-presenter

#### **Invited Lectures**

- "The Vélez Blanco Patio at the Met: New Evidence and New Directions," Department of European Sculpture and Decorative Arts at the Metropolitan Museum of Art, New York, October 7, 2019 (with Federico Caro).
- "Brief Introduction to Water," William University Law School, January 19, 2018.
- "The Past, Present and Future Geology of Oregon," Straub Environmental Learning Center Naturalist Series, September 13, 2017.
- "The Geology of Oregon," Salem Environmental Education, Salem, Oregon, September 13, 2016.
- "The Archaeology of the Parthenon Marbles: Using Stable Isotopes to Decipher the Building History of the Parthenon," Orkney Archaeological Society, Kirkwall, July 26, 2016.
- "Sediment Studies at the Ness of Brodgar: A Key to Understanding Activity Areas within a Late Neolithic 'Temple' Complex," National University of Ireland Galway, February 4, 2016.
- "A History of the Parthenon Marbles: An Earth Science Perspective," Taking the Long View: Art and Cultural Heritage in the Age of Terror, Hallie Ford Museum of Art Lecture Series, Willamette University, October 1, 2015.

- "The Ness of Brodgar: A Key to Understanding the Neolithic of the British Isles," Willamette University Institute for Continued Learning, February 20, 2014.
- "The Ness of Brodgar, Orkney's Ancient Temple Complex: Using Geochemistry to Unravel its Mysteries." Eugene Natural History Society, University of Oregon, September 20, 2013.
- "Twenty Years of Archaeological Geology Research at the Wiener Laboratory A Review from a 19 Year Veteran," Symposium to honor Malcolm H. Wiener and his support of the Wiener Laboratory, Athens, Greece, June 2, 2013.
- "Zapping the Neolithic: What X-Rays Can Tell Us about Orkney's Ness of Brodgar Temple Complex," Archaeological Society of Central Oregon, Bend, OR, March 21.
- "Gleaming White Marble: Archaeometric Source Analysis of Marble from Ancient Greek Monuments," American Research Center in Sofia, March 13, 2013.
- Guided tour of the Pentelic marble quarries on Mount Pentelikon, American School of Classical Studies, Athens, Greece, March 5, 2013.
- "The Archaeology of the Marbles of the Athenian Acropolis: What Can Science Tell Us?" Oregon Archaeological Society, Portland, OR, December 6, 2011.
- "Locating and Interpreting the Archaeological Record in Dynamic Landscapes: A Case Study in the Sangro River Valley, Abruzzo, Italy," Anthropology Department, Portland State University, February 3, 2011.
- "The Acropolis Marble Project: Stable Isotope Analysis of Marbles from the Parthenon and Propylaea," Parent and Family Weekend Mini-University, Willamette University, Fall 2010.
- "The Geology of the Columbia Gorge," Straub Environmental Learning Center, Salem, Oregon, April 16, 2009 followed by an all-day fieldtrip to the Columbia Gorge on April 18, 2009.
- "The Changing Face of Mediterranean Archaeology: From Site to Landscape," American Hellenic Institute, Portland, OR, January 15, 2009.
- "The Athenian acropolis from the ground up: sourcing the marbles used for the Parthenon and Propylaea," Portland Society of the Archaeological Institute of America, November 21, 2008.
- "Science in Archaeology: The Art of Finding Lost Marbles," Willamette University Institute of Continued Learning, Salem, OR, September 25, 2008.
- "Dynamic landscapes: the role of slope failure on archaeological site location, selection and interpretation in the Sangro River Valley, Abruzzo, Italy," Fitch-Wiener Labs Seminar Series, British School at Athens, Greece, May 7, 2008.
- "Properties of Paint," Symposium participant with Pacific Northwest artist James Lavadour, Hallie Ford Museum of Art, Willamette University, March 13, 2008.
- "Dynamic landscapes and the archaeology of the Sangro Valley, Abruzzo, Italy: geomorphological perspectives," Oregon State University, February 27, 2008.

- "Deconstructing Temples: marble provenance of the Parthenon and how it all fits together," Reed College, Portland, Oregon, November 19, 2007.
- "The Geology of the Columbia Gorge," Straub Environmental Learning Center, Salem, Oregon, May 17, 2007 followed by an all-day fieldtrip to the Columbia Gorge on May 19, 2007.
- "From where does the Parthenon come? Characterizing the ancient Pentelic marble quarries and the role of marble studies in Classical archaeology," Classics Symposium, Hollins University, March 4, 2004.
- "The current state of marble provenance: identifying the source quarries of the Parthenon," annual David Anthony Sr. Memorial Lecture and Spring Archaeological Institute of America talk, Randolph-Macon Woman's College, February 26, 2003, Lynchburg, Virginia (oral paper).
- "A geologic perspective on archaeological stone: introduction to stone provenance studies in the Aegean," invited alumnus lecture, April 2000, Oberlin College (alumnus lecture).

#### REVIEWER

### **Manuscripts**

- Anonymous reviewer for article submitted to *Geoarchaeology*, February, 2018
- Anonymous reviewer for article submitted to *Journal of Archaeological Science*, January, 2017
- Anonymous reviewer for article submitted to *Journal of Cultural Heritage*, December, 2016
- Anonymous reviewer for article submitted to *Archaeological and Anthropological Sciences*, December, 2015
- Anonymous reviewer for article submitted to the *Journal of Archaeological Science:* Reports, July 2015
- Anonymous reviewer for article submitted to *Science & Technology of Archaeological Research*, Dec. 2014
- Anonymous reviewer for articles submitted to *Journal of Cultural Heritage*, June and December, 2014
- Anonymous reviewer for article submitted to Archaeometry, January 2014
- Anonymous reviewer for article submitted to *Journal of Archaeological Science*, March 2013
- Anonymous reviewer for three manuscripts submitted to Proceedings of the Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) IX, Institut Català d'Arqueologia Clàssica, Terragona, 2012
- Anonymous reviewer for article submitted to Geoarchaeology, December 2012
- Anonymous reviewer for article submitted to *Journal of Cultural Heritage*, November 2010

- Anonymous reviewer for article submitted to the *American Journal of Archaeology*, August 2010
- Reviewer for two chapters of a new environmental science course textbook being developed by W.H. Freeman & Co. March 2010
- Anonymous reviewer for article submitted to the *American Journal of Archaeology*, January 2010
- Anonymous reviewer for article submitted to the *Journal of Archaeological Science*, October 2009
- Anonymous reviewer for article submitted to Archaeometry, October 2008
- Anonymous reviewer for article submitted to *Archaeometry*, March 2008
- Reviewer for three chapters of a new environmental science textbook covering the history of life on Earth, the role of energy in the Earth system and biosphere and climate and Earth system change, February 2008
- Anonymous reviewer for three manuscripts submitted to Proceedings of the Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) VIII, L'Atelier Méditerranéen Special Volume, Maison Méditerranéenne des Sciences de l'Homme, January 2008
- Anonymous reviewer of chapter on human population for a new introductory science text, W.H. Freeman & Co., December 2007
- Anonymous reviewer of two manuscripts submitted to BCH Supp, The Proceedings of the Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) VII, The French School of Athens, Spring 2005
- Anonymous reviewer for article submitted to *Geoarchaeology: An International Journal*, February 2005
- Anonymous reviewer for article submitted to *Geoarchaeology: An International Journal*, December 2003

## **Grants and Fellowships**

• Faculty reviewer of National Fish and Wildlife Foundation grant, December 2007

## **GRANTS**

- 2018 Samuel H. Kress Research Grant, *The Colossus of the Naxians at Delos: Towards an understanding of the relationship between the kouros, its source, and the use of Naxian marble*, \$9, 300
- 2018 Green Fund Grant, *Multispectral aerial imaging at Zena Forest and Beyond*, Willamette University, \$7,633
- 2017 Atkinson Research Grant, *The Delos Colossus Project*, Willamette University, \$2,260
- 2016 Atkinson Research Grant, *The Delos Colossus Project*, Willamette University, \$2,500 (declined)

- 2016 Mellon Foundation, Learning by Creating Curricular Development Award, Willamette University, \$2,480
- 2014 Malcolm H. Wiener Foundation Grant to support Willamette's archaeological science program, \$46,000
- 2013 Henry Luce Foundation's Initiative on Asian Studies and the Environment, Sustainability and the Pacific Rim, team member, \$400,000
- 2011 Malcolm H. Wiener Foundation Grant to support Willamette's archaeological science program, \$109,000
- 2011 Center for Ancient Studies and Archaeology Faculty Fellowship, \$3,920
- 2011 Hewlett Foundation Grant to build capacity for teaching and research in land management and sustainable forestry at Zena Forest, Oregon, co-PI with Joe Bowersox, Karen Arabas and Bob Reinhardt, \$6000
- 2010 Hewlett Foundation Grant to develop an Oregon-Centered Physical Geology lab manual, \$2,500
- 2009 Lilly Project grant to support Visiting Scholar Nick Card, \$3000.
- 2009 Center for Sustainable Communities, Willamette University, Curricular Improvement Grant, \$3,000
- 2009 Samuel H. Kress Conference Grant to support North American scholar participation at the 9th ASMOSIA conference in Tarragona, Spain, June 2009, \$7,500
- 2008 Center for Ancient Studies and Archaeology, Willamette University, Faculty Fellowship, \$4,000
- 2008 Hewlett Foundation Grant to build curricular program for new Archaeology program at Willamette University, co-PI with David McCreery and Ann Nicgorski, \$3000
- 2008 Atkinson Faculty Development Grant, Willamette University
- 2007 Samuel H. Kress Research Grant, \$6,300
- 2007 Institute for Water and Watersheds and the US Geological Survey State Water Resources Research Institute grant, co-PI with Joe Bowersox, Tamara Smith and Khela Singer-Adams, \$26,200
- 2007 Willamette University Professional Development Grant, \$1,500
- 2007 Willamette University Professional Travel Grant,\$1,610
- 2006 Samuel H. Kress Conference Grant to support North American scholar participation at the 8<sup>th</sup> ASMOSIA conference in Aix-en-Provance, France, June 2006, \$20,000
- 2006 Atkinson Faculty Development Grant, Willamette University
- 2005 Willamette University Sustainability Council Grant
- 2005 Willamette University Professional Development Grant
- 2005 Willamette University Professional Travel Grant (declined)
- 2004 Mednick Fellowship, Virginia Foundation for Independent Colleges, \$1,600
- 2003 Samuel H. Kress Travel Grant
- 2003 Lynchburg College Summer Faculty Research Grant
- 2003 Lynchburg College Faculty Development Grant
- 2002 Lynchburg College Faculty Development Grant
- 2001 Lynchburg College Faculty Development Grant
- 2000 Samuel H. Kress Travel Grant

- 1999 Samuel H. Kress Research Grant
- 1998 Miriam Watts Harold Wheeler Research Scholarship, Department of Geology, University of Georgia
- 1997 University-wide Non-Teaching Assistantship, University of Georgia
- 1997 Miriam Watts Harold Wheeler Research Scholarship, Department of Geology, University of Georgia
- 1997 Archaeological Institute of America Travel Grant
- 1996 University-wide Non-Teaching Assistantship, University of Georgia (declined)
- 1996 Samuel H. Kress Conference Grant
- 1995 University-wide Non-Teaching Assistantship, University of Georgia (declined)
- 1995 Geological Society of America Research Grant
- 1995 Sigma Xi Research-in-Aid award
- 1994 University-wide Non-Teaching Assistantship, University of Georgia
- 1993 Sigma Xi Research-in-Aid award
- 1992 University-wide Non-Teaching Assistantship, University of Georgia

#### **FELLOWSHIPS**

- 2020 Spain-Greece Multi-country Fulbright Fellowship alternate (program cancelled due to COVID-19 pandemic)
- 1994 Wiener Laboratory Summer Research Fellowship
- 1993 Wiener Laboratory Summer Research Fellowship
- 1993 Fulbright Fellowship to Greece
- 1993 Samuel H. Kress Art Conservation Fellowship (declined)

## AWARDS

- 2020 Volunteer Service Award, City of Salem Mayor and City Council for work on Jason Lee Mission House Archaeological Project
- 2020 Historic Landmark Commission Chairperson Award for Public Archaeology, City of Salem Historic Preservation Commission, for work on Jason Lee Mission House Archaeological Project
- 2019 Virginia Green Award, Salem Historic Landmarks Commission for work on the Salem Police Station Archaeology Project

#### **CURRENT PROJECTS**

- Stable isotope provenance analysis of marble samples from different architectural elements of the Parthenon and Propylaea on the Athenian acropolis.
- On-site geochemical analysis of soils, sediments and painted artifacts, Ness of Brodgar, Orkney, Scotland.
- Multispectral imaging and archaeological survey, Ness of Brodgar, Orkney, Scotland.
- Multispectral and RGB photogrammetry to monitor forest health, tree inventory, and carbon sequestration at Zena Forest, Oregon.

- Applying and maintaining the stable isotope database used in determining the provenance of white marble used in the ancient Mediterranean.
- Systematic characterization study of the Mount Pentelikon marble quarries incorporating fieldwork, petrographic, stable isotopic and geochemical analyses.
- Identification of marble fragments from the Early Byzantine Marzamemi shipwreck off the southern coast of Sicily.
- Characterization and sourcing the marble fragments of the Colossus of the Naxians at Delos, Greece.

#### CONFERENCES AND MEETINGS ORGANIZED

- Scientific Committee, 11<sup>th</sup> International Congress of the Association for the Study of Marbles and Other Stones Used in Antiquity, May 18-22, Split, Croatia, 2015.
- Scientific Committee, 10<sup>th</sup> International Congress of the Association for the Study of Marbles and Other Stones Used in Antiquity, Rome, Italy, May 21-26, 2012.
- Scientific Committee, 9<sup>th</sup> International Congress of the Association for the Study of Marbles and Other Stones Used in Antiquity, June 8-13, Terragona, Spain, 2009.
- Member of Organizing Committee three-day international conference "Cultural Heritage Issues: The Legacy of Conquest, Colonization and Commerce," held at Willamette University, October 12-14, 2006.
- Co-organizer of a week-long series of workshops titled "The Practical Impact of Science on Field Archaeology," held in Tel Aviv and Jerusalem, Israel, October 1996 (with the Albright Institute, Seymore Gitin, Director), sponsored by the Samuel H. Kress Foundation and endorsed by the Society for Archaeological Science.
- Co-organizer of a four-part Wiener Laboratory Fitch Laboratory Demokritos Archaeometry Laboratory round-table discussion series on theoretical topics related to science and archaeology covering issues related to Bias, Statistics, Scale and Chronology, March April, 1996.
- Principal organizer of an international colloquium titled "Excavation Techniques and Treatment of Finds: Balancing the Constraints of Excavation with Conservation and Analytical Potential," American School of Classical Studies at Athens, Greece, March 29, 1997.

#### SERVICE

#### Institutional Service

- Chair, Environmental Science Department, Willamette University, 2018-present
- Chair, Archaeology Program, Willamette University, 2014-2021
- Chair, International Education Committee, Willamette University, 2016-2020
- Chair, Academic Council, Willamette University, 2013-2015
- Search Committee, Professor of Climate Change and Human Health, Willamette University, 2014
- Search Committee, Professor of Climate Science, Willamette University, 2013
- Co-Chair, Archaeology Program, Willamette University, 2013

- Director, Center for Sustainable Communities, Willamette University, 2011-2012
- Chair, General Education Working Group, Willamette University, 2010-2013
- Dean Search Committee, Willamette University, 2009
- Academic Council, Willamette University, 2009-2011
- Chair, Environmental and Earth Sciences Department, Willamette University, 2008-2012
- Core Faculty Member, Center for Ancient Studies and Archaeology, Willamette University, 2007-Current
- Core Faculty Member, Center for Sustainable Communities, Willamette University, 2007-2013
- Search Committee, joint Classics and History position, Willamette University, 2007-2008
- International Education Committee, Willamette University, 2006-2008
- Search Committee, Professor of Latin American Cultural Geography, Willamette University, 2006-2007
- Campus Representative to Science Advisory Board, Mill Creek Watershed Council, 2006-2007
- Chair, Barry M. Goldwater Scholarship Selection Committee, Lynchburg College, 2004-2005
- Search Committee, Professor of Chemist, Lynchburg College, 2004
- School of Science faculty representative, Education Policy Committee, Lynchburg College, 2003-2005
- Chair, Majors and Minors Subcommittee of the Education Policy Committee, Lynchburg College, 2003-2004
- Search Committee, Professor of Botany, Lynchburg College, 2002-2003
- Undergraduate Research Committee, LaGrange College, 1999-2000

## Organizational Service

- Committee on the Wiener Laboratory, American School of Classical Studies at Athens, elected member 2008 to 2013, appointed member 2014 to 2018
- Scientific Committee, Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) 11<sup>th</sup> International meeting, 2014-2015
- Search Committee, Director of the Wiener Laboratory, American School of Classical Studies, 2013 to 2014
- Scientific Committee, Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) 10<sup>th</sup> International Congress, 2011 to 2012
- Elected Counselor, Executive Committee, Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 2009 to 2015
- Chair, Committee on the Wiener Laboratory, American School of Classical Studies at Athens, 2011 to 2013
- Chair, Archaeological Science Advisory Committee, American Research Center in Sofia, 2012 to 2013
- President, Archaeological Institute of America, Salem Society, 2008 to present

- Program Coordinator, Archaeological Institute of America, Salem Society, 2008 to 2011
- Newsletter and Web Editor, Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) 9<sup>th</sup> International Congress, 2003 to present
- Co-Program Coordinator, Archaeological Institute of America, Salem Society, 2007-2008
- Managing Committee, American School of Classical Studies in Athens, 2007 to present
- Council of Member Institutions (formally the Managing Committee), American Research Center in Sofia, Bulgaria, 2007 to present
- Classical Studies Executive Committee, Willamette University, 2006 to present
- Treasurer, Archaeological Institute of America, Salem Society, 2006-2007
- Scientific Committee, Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA) 8<sup>th</sup> International Congress, 2005 2006
- Executive Committee, Association for the Study of Marbles and Other Stones in Antiquity (ASMOSIA), 2003 to present
- Chair, Awards Committee, Archaeological Geology Division, Geological Society of America, 2004 2006, member 2003 2004
- Treasurer, Archaeological Institute of America, Lynchburg Chapter, 2002 2005
- Joint Technical Program Committee, Geological Society of America, 2001 & 2002
- Pardee Symposium Review Panel, Geological Society of America, 2001
- Chair, Education Committee, Archaeological Geology Division, Geological Society of America, 1999 2002
- Membership Committee, Geoarchaeology Interest Group, Society for American Archaeology 1996 1999
- Member *ex officio*, INSTAP Study Center for East Crete Managing Committee, 1995 1997
- Member *ex officio*, Managing Committee, American School of Classical Studies at Athens, 1995 1997
- Chair, The Wiener Laboratory Managing Committee, 1995-1997
- Chair, The Wiener Laboratory Science Advisory Committee, 1995-1997
- Student Representative, Geology Department Faculty, University of Georgia, 1992-1993

#### PROFESSIONAL MEMBERSHIPS AND CERTIFICATIONS

- FAA Part 107 Unmanned Aerial Vehicle license
- Geological Society of America, Geoarchaeology, Quaternary Geology & Geomorphology and Geoscience Education Divisions
- American Geophysical Union
- National Association of Geoscience Teachers
- Society for American Archaeology, Geoarchaeology Interest Group
- Archaeological Institute of America
- Society for Archaeological Sciences
- Register of Professional Archaeologists

#### **CLIPPINGS**

- *The Statesman Journal*, November 6, 2017, "Open house for archaeology project is Nov. 8 at Pioneer Cemetery."
- *The Statesman Journal*, September 30, 2017, "Chinese shrine rediscovered, again, at Salem's Pioneer Cemetery."
- *The Oregonian*, October 7, 2017, "Chinese shrine rediscovered at Salem's Pioneer Cemetery."
- PBS Newshour, August 20, 2015, "Keeping up with the Jones, Neolithic Scotland Edition."
- *The Statesman Journal*, August 31, 2014, "Willamette archaeology students pictured in National Geographic."
- National Geographic, August 2014, "The First Stonehenge: Scotland's Master Builders."
- The Orcadian, August 30, 2012, p. 9, "Eminent Visitors to the Ness."
- The Scene, Spring 2012, History Unearthed: Archaeology at the Ness of Brodgar.
- The Chemistry of Everything, K. Waldron, Pearson Prentice Hall, 2007, featured research.
- Research Reporter, Summer 2001, Vol. 30, No.2, pp. 33-34, "Rocks of Ages."
- Geotimes, January 2001, Vol. 46, No.1, p. 9, "Cracking Ancient Quarry Codes."
- National Geographic Online, 17 November 2000, "Scientist Pinpoints Elgin Marbles Quarry."
- Science News Online, 14 November 2000, "Study of Greek Quarries May Make It Possible to Locate Area where Famed Elgin Marbles Originated."
- Science News, 2000, Vol. 158, No. 2, p. 324, "New Database Describes All the Marbles."

#### **PHOTOGRAPHY CREDITS**

Arial photographs have appeared in online and print publications including *The BBC*, *The Orcadian, The Scotsman, The Statesman Journal, Current Archaeology*, and *The Belfast Telegraph*.

Updated March 2, 2021