

Ioana Andrada Dumitru

Curriculum Vitae

PERSONAL INFORMATION

Name and Title	Dr. Ioana A. Dumitru
Work Address	Discipline of Archaeology School of Humanities, The University of Sydney 708, A18 Brennan MacCallum, Sydney, NSW, 2006, Australia
E-Mail	ioana.dumitru@sydney.edu.au ioana.andrada.dumitru@gmail.com

EDUCATION

2019	Ph.D., Near Eastern Studies, Johns Hopkins University. Dissertation: “A Comparative Approach to the Development of Ancient Copper Supply Networks in Oman and Obsidian Supply Networks in Ethiopia”.
2016	M.A., Near Eastern Studies, Johns Hopkins University.
2011	B.A., Cum Laude with Honors in Majors, Classical and Near Eastern Archaeology, Philosophy (double major), Bryn Mawr College.

EMPLOYMENT HISTORY & PROFESSIONAL EXPERIENCE

2023	Associate Lecturer, Discipline of Archaeology, School of Humanities, The University of Sydney
2021	Postdoc, Centre for Urban Network Evolutions (UrbNet), School of Culture and Society Aarhus University
2019	Official Rapporteur, 2019 UNESCO Meeting on the Management of Public Archaeological Sites (Practical Applications of the Salalah Guidelines), Nizwa, Oman, 16. - 19. September 2019
2019	Senior archaeologist specializing in GIS and Remote Sensing, CSRM Foundation, Baltimore, MD
2016	GIS/ Remote Sensing Specialist, CSRM Foundation, Baltimore, MD

PROFESSIONAL AFFILIATIONS

- 2024 Member, [Sydney Environment Institute](#), the University of Sydney.
2024 Cluster lead, *Climate, Nature, and Culture*, [The Vere Gordon Childe Center \(VGCC\)](#), the University of Sydney.

PUBLICATIONS

Books

- 2025 **Dumitru, I.A.** *Prospects for an Archaeology of Sustainability: A GIScience Perspective from Tropical East Africa*. Cambridge University Press, 2025 (under contract, due December 2024).

Guest Editor for Refereed Journal Issues

- 2022 Comer, D.C., Chapman, B.C., Comer, J.A., **Dumitru, I.A.** – Remote Sensing for Archaeological and Heritage Preservation Special Issue. *Remote Sensing* (ISSN 2072-4292).
https://www.mdpi.com/journal/remotesensing/special_issues/Archaeological_HeritagePreservation

Refereed Journal Articles

- 2024 Paulsen, P., Zaribaf, A., Lehner, J., David-Cuny, H., **Dumitru, I.A.**, Nathan, S., Sivitskis, A., Shannon, J., Wiig, F., Arsenault, B. and Harrower, M. (2024): Architecture, social relations, and trade at mountain settlements in Iron Age Oman. In *Proceedings of the Seminar for Arabian Studies* (Vol. 53, pp. 194-210).
2024 Zaribaf, A., Lehner, J., Paulsen, P., **Dumitru, I.A.**, Sivitskis, A., Arsenault, B., Fisher, B., Buffington, A., Dollarhide, E. and Harrower, M.J. (2024): Socio-political factors influencing early Islamic copper production in Oman. In *Proceedings of the Seminar for Arabian Studies* (Vol. 53, pp. 316-332).
2023 Comer, J.A., Comer, D.C., **Dumitru, I.A.**, Priebe, C.E., Patsolic, J.L. (2023): Sampling methods for archaeological predictive modeling: Spatial autocorrelation and model performance. *Journal of Archaeological Science: Reports* 48, 103824. <https://doi.org/10.1016/j.jasrep.2022.103824>
2023 Harrower, M.J., Mazzariello, J.C., D'Andrea, A.C, Nathan, S., Mekonnen, H., **Dumitru, I.A.**, Priebe C.E., Zerue, K., Park, Y., Gebreegziabher, G. (2023): Aksumite Settlement Patterns: Site Size Hierarchy and Spatial Clustering Analyses. *Journal of Archaeological Research*. <https://doi.org/10.1007/s10814-021-09172-2>
2022 Harrower, M.J., Nathan, S., **Dumitru, I.A.**, Lehner, J.W., Paulsen, P., Dollarhide, E., Wiig, F., Sivitskis, A.J., David-Cuny, H., Swerida, J.L., Mazzariello, J.C., Crassard, R., Buffington, A., Taylor, S.P., Anderson, M.C., Al-Jabri, S. (2021): From the Paleolithic to the Islamic Era in Wilayah Yanqul: The Archaeological Water Histories of Oman (ArWHO) Project Survey 2011-2018. *Journal of Oman Studies* 22: 1 – 21. <https://hal.archives-ouvertes.fr/hal-03523044/>

- 2020 Bausi, A., M.J. Harrower, **I.A. Dumitru** – The Ethiopic inscriptions from Beta Samā‘ti (Beta Samati). *Bibliotheca Orientalis*.
- 2020 Harrower, M.J., S. Nathan, J.C. Mazzariello, K. Zerue, **I.A. Dumitru**, Y. Meresa, J. Bongers, G. Gebreegziabher, B. Zaitchik, M. Anderson (2020): Water, Geography, and Aksumite Civilization: The Southern Red Sea Archaeological Histories (SRSAH) Project Survey (2009 – 2016). *African Archaeological Review*. <https://doi.org/10.1007/s10437-020-09369-8>.
- 2019 Harrower, M.J., **I.A. Dumitru**, C. Perlingieri, S. Nathan, K. Zerue, J.L. Lamont, A. Bausi, J.L. Swerida, J.L. Bongers, H.S. Woldekiros, L.A. Poolman, C.M. Pohl, S.A. Brandt, E.A. Peterson (2019): Beta Samati: discovery and excavation of an Aksumite town. *Antiquity* 93 (372): 1534 – 1552. <https://doi.org/10.15184/aqy.2019.84>.
- 2019 Sivitskis, A.J., J.W. Lehner, M.J. Harrower, **I.A. Dumitru**, P.E. Paulsen, S. Nathan, D.R. Viète, S. Al-Jabri, B. Helwing, F. Wiig, D. Moraetis, B. Pracejus, B. Zaitchick (2019): Detecting and Mapping Slag Heaps at Ancient Copper Production Sites in Oman. *Remote Sensing* 11(24), 3014. <https://doi.org/10.3390/rs11243014>.
- 2019 Comer, D.C., J.A. Comer, **I.A. Dumitru**, W.A. Ayres, M.J. Levin, K. Seikel, D. White, M.J. Harrower (2019): Airborne LiDAR Reveals a Vast Archaeological Landscape at the Nan Madol World Heritage Site. *Remote Sensing* 11(18), 2152. <https://doi.org/10.3390/rs11182152>.
- 2018 Wiig, F., M.J. Harrower, A. Braun, S. Nathan, J.W. Lehner, K.M. Simon, J.O. Strum, J. Trinder, **I.A. Dumitru**, S. Hensley, T. Clark (2018): Mapping a Subsurface Water Channel with X- Band and C-Band Synthetic Aperture Radar at the Iron Age Archaeological Site of ‘Uqdat al- Bakrah(Safah), Oman. *Geosciences* 8(9), 334. <https://doi.org/10.3390/geosciences8090334>.
- 2018 Sivitskis, A.J., M.J. Harrower, H. David-Cuny, **I.A. Dumitru**, S. Nathan, F. Wiig, D.R. Viète, K.W. Lewis, A. Taylor, E.N. Dollarhide, B. Zaitchik, S. Al-Jabri, K.J.T. Livi, A. Braun (2018): Hyperspectral satellite imagery detection of ancient raw material sources: Soft stone vessel production at Aqir al-Shamoos (Oman). *Archaeological Prospection*, 25(4), 363 – 374. <https://doi.org/10.1002/arp.1719>.
- 2016 Harrower, M.J., H. David-Cuny, S. Nathan, **I.A. Dumitru**, S. Al-Jabri (2016): First discovery of ancient soft-stone (chlorite) vessel production in Arabia: Aqir al-Shamoos (Oman). *Arabian Archaeology and Epigraphy*, 27(2), 197-207. <https://doi.org/10.1111/aae.12076>.
- 2014 Harrower, M.J., K. O’Meara, J.J. Basile, J.L. Swerida, **I.A. Dumitru**, C.J. Hickman, J.L. Bongers, C.J. Bailey, E. Fieldhouse (2014): If a picture is worth a thousand words... 3D modeling a Bronze Age Tower in Oman. *World Archaeology*, 46(1), 43-62. <https://doi.org/10.1080/00438243.2014.890909>.

Refereed Book Chapters

- 2023 Lehner, J.W., **Dumitru, I.A.**, Buffington, A., Dollarhide, E., Nathan, S., Paulsen, P., Young, M.L., Sivitskis, A.J., Wiig, F. and Harrower, M.J., 2023. Iron Age Copper Metallurgy in Southeast Arabia: A Comparative Perspective. In “*And in Length of Days Understanding*”(Job 12: 12) *Essays on Archaeology in the Eastern*

- Mediterranean and Beyond in Honor of Thomas E. Levy* (pp. 1391-1417). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-27330-8_59
- 2018 **Dumitru, I.A.**, M.J. Harrower (2018): From Rural Collectables to Global Commodities: Copper from Oman and Obsidian from Ethiopia, in *Globalization in Prehistory: Contact, Exchange and 'People Without History,'* pp. 232 – 262, N. Boivin and M. Frachetti (editors), Cambridge University Press: Cambridge. <https://doi.org/10.1017/9781108573276.011>.
- 2018 **Dumitru, I.A.**, M.J. Harrower (2018): Mapping Ancient Production and Trade of Copper in Oman and Obsidian in Ethiopia, in *Stories of Globalization: The Red Sea and the Persian Gulf from Late Prehistory to Early Modernity*, pp. 74 – 94, A. Manzo, C. Zazzaro, and D.J. De Falco (editors), Brill: Leiden. https://doi.org/10.1163/9789004362321_007.

Other Publications

- 2024 **Dumitru, I.A.** (2024): Archaeology, Satellites, and Simulations: Exploring Historical Adaptations to Climatic and Environmental Extremes in Tropical East Africa. *Sydney Humanities Magazine*, 16 – 19.
- 2017 Harrower, M.J. and **I.A. Dumitru** (2017): Archaeology: Digital maps illuminate ancient trade routes. *Nature* 543: 188 – 189. <https://doi.org/10.1038/543188a>.
- 2016 Harrower, M.J., **I.A. Dumitru**, S. Nathan, F. Wiig, H. David-Cuny, A.J. Sivitskis, A.F. Buffington, S. Al-Jabri (2016): The Archaeological Water Histories of Oman (ArWHO) Project: Recent Research in Al-Dhahirah Governorate of Oman. *Bulletin of the British Foundation for the Study of Arabia* 21: 16 – 18.

Manuscripts in Preparation

- (in prep) **Dumitru, I.A.**, Kristiansen, S.M., Lupien R., Olsen, J., Alders, W., Romanowska, I., Sindbæk, S.M., Raja, R. (in prep): Global Climate Event Coincides with Extreme Drought and Migrations in 6th – 7th centuries CE Eastern Africa. (in prep for *Science*)
- (in prep) **Dumitru, I.A.** (in prep): Studying social resilience to climate change through digital methods, in *The Oxford Handbook of Digital Archaeology*. (invited contribution due February 2025).

GRANTS AND FELLOWSHIPS

External and internal grants and fellowships (n = 22; total sum awarded is over 3,400,000 AUD)

- 2023 Provost's Capital Equipment and Contingency fund (CAPEX), The University of Sydney – “The Vere Gordon Childe ExoLab for Field Research and Education” (**I.A. Dumitru** – co-CI; J. Lehner – co-CI; Kirsten McKenzie – co-CI) \$1,043,349.18 AUD.
- 2023 ARUA-U21 Early Career Researcher Collaborative Award – “Dynamic Coasts and Landscapes of Resilience (CALOR): Exploring Historical Adaptations to Climatic

- and Environmental Extremes in Tropical East Africa” (**I.A. Dumitru** – CI) \$15,000 USD (\$23,000 AUD).
- 2023 School of Humanities (SoH) Research Support Scheme, The University of Sydney, Faculty of Arts and Social Sciences – “Modelling Resilience to Extreme Events in East African Coastal Communities” (**I.A. Dumitru** – CI) \$5,000 AUD.
- 2021 – National Geographic Society, Early Career Grant – “Cooperation and Coercion in Ancient Societies: A Study in Applied Archaeologies of Sustainability from Ethiopia,” (**I.A. Dumitru** – CI) \$9,895 USD (\$15,000 AUD).
- 2021 – 2023 United States Ambassadors Fund Large Grant for Cultural Preservation – “Conservation of the Endangered World Heritage Site of Nan Madol: A Ceremonial Center of Eastern Micronesia” (**I.A. Dumitru** – Research collaborator and grant co-writer; D. Comer – CI) \$200,000 USD (\$298,000 AUD).
- 2020 – 2023 National Aeronautics and Space Administration Research Opportunities in Space and Earth Science (NASA ROSES) – “Multisensor Analyses of Pacific Island Migration and Societal Development” (**I.A. Dumitru** – Researcher and grant co-writer; D. Comer – CI) \$917,300 USD (\$1,368,000 AUD).
- 2019 Dean’s Prize Fellowship, Johns Hopkins University, \$6,500 USD (\$9,600 AUD).
- 2019 Lewis and Clark Fund for Exploration and Field Research – “Huaca La Meseta: Exploring a Monumental Stone Complex in a Peruvian Cloud Forest” (**I.A. Dumitru** – Co-CI; J.L. Bongers – Co-CI) - \$4,500 USD (\$6,700 AUD).
- 2018 – 2021 United States Ambassadors Fund Large Grant for Cultural Preservation – “Conservation of the Endangered World Heritage Site of Nan Madol: A Ceremonial Center of Eastern Micronesia” (**I.A. Dumitru** – Research collaborator and grant co-writer; D. Comer – CI) \$375,000 USD (\$559,400 AUD).
- 2016 NASA EPSCoR GEOCORE Grant – “Modelling Fish Spawning Aggregation Sites” (**I.A. Dumitru** – Research collaborator and grant co-writer; D. Comer – CI).
- 2016 Center for Advanced Spatial Technologies (CAST), SPARC Fieldwork Support Grant – “[Mapping the Iron Age Metalworking Site of As-Safah \(Oman\)](#)” (**I.A. Dumitru** – Co-CI; M. Harrower – CI; F. Wiig – Co-CI)
- 2016 National Geographic Society, Committee for Research and Exploration Grant – “Beita Semati and the Empire of Aksum: Political and Religious Change at an African Crossroads” (**I.A. Dumitru** – Co-CI; M. Harrower – CI; C. Perlingieri – Co-CI) \$24,945 USD (\$37,200 AUD).
- 2016 Dean’s Teaching Fellowship, Johns Hopkins University, \$11,500 USD (\$17,000 AUD).
- 2015 Internal Mellon Foundation Summer Research Stipend, \$500 USD (\$745 AUD).
- 2015 Internal Travel Grant, Dept. of Near Eastern Studies, Johns Hopkins University, \$1000 USD (\$1400 AUD).
- 2014 Internal Mellon Foundation Summer Research Stipend, \$500 USD (\$745 AUD).
- 2013 Sigma Xi Grants-in-Aid of Research: Mapping Ancient Red Sea Obsidian Trade Routes Using Satellite Imagery and GIS Applications, \$1,000 USD (\$1400 AUD).
- 2013 Islamic Studies Initiative KSAS, Johns Hopkins University, Language Training Grant, \$1,800 USD (\$2,600 AUD).
- 2013 Internal Mellon Foundation Summer Research Stipend, \$500 USD (\$745 AUD).
- 2013 Internal Research Travel Grant, Dept. of Near Eastern Studies, Johns Hopkins, \$1,000 USD (\$1400 AUD).

- 2012 Internal Mellon Foundation Summer Research Stipend, \$500 USD (\$745 AUD).
 2012 Internal Research Travel Grant, Dept. of Near Eastern Studies, Johns Hopkins University, \$1,000 USD (\$1400 AUD).

AWARDS AND HONORS

- 2024 Faculty of Arts and Social Sciences Teaching Excellence Award (Commendation), University of Sydney, \$500 AUD.
 2014 Cornelia G. Harcum Scholarship, Department of Near Eastern Studies, Johns Hopkins University.

INVITED TALKS

- 2024 **Dumitru, I.A.** – “Climate, Environment, and Social Dynamics on the Swahili Coast of East Africa (6th – 19th c. CE)” – Near Eastern Archaeology Foundation, the University of Sydney, May 18, 2024.
 2023 **Dumitru, I.A.** – “Climatic Shifts and Societal Reorganizations in First Millennium CE Tropical East Africa,” – Archaeology Seminar Series, School of Humanities, the University of Sydney, April 27, 2023.
 2022 **Dumitru, I.A.** – “Not on the edges: Insights from Aksumite Archaeology on the Limits of Imperial Control in Antiquity,” Near Eastern Seminar Series, The University of Sydney, May 23, 2022.
 2021 **Dumitru, I.A.** – “Power, Cooperation, and Environmental Sustainability: An Explorative Visual Archaeology of Copper Supply Networks in Southeastern Arabia,” Freie Universität Berlin, Fachbereich Geschichts- und Kulturwissenschaften, March 5, 2021.
 2020 **Dumitru, I.A.**, F. Wiig, A.J. Sivitskis, M.J. Harrower, J.W. Lehner – “Remote Sensing and Copper Production: Multisensor Analyses for Archaeological Prospection,” Iron Age Metallurgy in Arabia Work-In-Progress Zoom Meeting, July 27 – 29, 2020.
 2018 **Dumitru, I.A.** and M.J. Harrower – “Mapping and Modeling Obsidian Trade Networks in Northern Ethiopia,” 2018 ASOR Annual Meeting, Denver, Colorado November 14 –17, 2018.
 2015 Harrower, M.J., K.M. O’Meara, **I.A. Dumitru**, C.J. Hickman, J.L. Bongers – “3D Modeling – Breakthrough or Fad? Bronze Age Towers in Oman and Excavations of an Aksumite Town in Ethiopia”, Society for American Archaeology (SAA) Meetings, San Francisco, CA, April 15 – 19, 2015.
 2014 **Dumitru, I.A.** and M.J. Harrower – “GPS in Archaeology,” GIS Science Workshop, University of Bucharest, June 3 – 5, 2014.
 2014 Harrower, M.J. and **I.A. Dumitru** – “Globalization and Entanglement in Ancient Arabia: Reconsidering Core and Periphery in the Archaeology of the Ancient Near East,” Dept. of Near Eastern Languages and Cultures, University of California, Los Angeles, April 21, 2014.
 2013 Harrower, M.J., **I.A. Dumitru**, J.L. Swerida, J.L. Bongers – “The Red Sea and Persian Gulf: Long-Term Conduits of Ancient Interchange, Entanglement, and

Hybridity,” *Ancient Globalization and People without History*, Society for American Archaeology (SAA) Meetings, Honolulu, HI, April 5, 2013.

CONFERENCE ACTIVITY

Sessions Organized

- 2022 **I.A. Dumitru**, Raja, R., Sindbæk, S.M., Riede, F. – *Cross-cultural and Cross-latitudinal Responses to Extreme and Unpredictable Weather and Climate Events in the Ancient World*. Centre for Urban Network Evolutions, Aarhus University, Aarhus, Denmark, June 30, 2022.
- 2022 **I.A. Dumitru** and C. Johnston – *Network Thinking and Methods in Near Eastern Research (Workshop)*. 2022 ASOR Annual Meeting, Boston, Massachusetts, November 16 – 19.
- 2021 **I.A. Dumitru** and C. Johnston – *Network Approaches to Near Eastern Archaeology and History*. 2021 ASOR Annual Meeting, Virtual, December 9-12.
- 2021 **I.A. Dumitru** and C. Johnston – *Network Approaches to Near Eastern Archaeology and History*. 2021 ASOR Annual Meeting, Chicago, IL, November 18 – 21.
- 2018 Earley-Spadoni, T. and **I.A. Dumitru** – *GIS and Remote Sensing in Archaeology*. 2018 ASOR Annual Meeting, Denver, Colorado, November 14 – 17, 2018.

Papers Presented

- 2024 **Dumitru, I.A.** & W. Alders – “Dynamic Coasts and Landscapes of Resilience: Archaeological and Environmental Hotspot Modeling on the Swahili Coast (Sixth – Nineteenth Century CE,” 2024 Society for American Archaeology (SAA) 89th Annual Meeting, New Orleans, April 17 – 21, 2024.
- 2023 Paulsen, P., **I.A. Dumitru**, J. Shannon, H. David-Cuny, B. Arsenault, S. Nathan, M. Harrower – “Social Relations and lived experience at small mountain villages in Iron Age Oman,” 2023 Seminar for Arabian Studies, Aarhus, Denmark, 4 – 6 August.
- 2023 Zaribaf, A., J. Lehner, A. Buffington, B. Fisher, **I.A. Dumitru**, B. Arsenault, A. Sivitskis, E. Dollarhide – “Socio-political factors in the outset of large-scale copper production in Early Islamic Oman,” 2023 Seminar for Arabian Studies, Aarhus, Denmark, 4 – 6 August.
- 2022 **Dumitru, I.A.**, Raja, R., Sindbæk, S.M., Kristiansen, S.M., Olsen, J. – “Climatic Shifts and Societal Reorganizations on the Swahili Coast of East Africa,” *Cross-cultural and Cross-latitudinal Responses to Extreme and Unpredictable Weather and Climate Events in the Ancient World*, Centre for Urban Network Evolutions, Aarhus, Denmark, June 30, 2022.
- 2022 **Dumitru, I.A.** – “Geospatial Big Data and Cross-Disciplinary Research in the Humanities: Climate-Environment-Society Interactions on the Swahili Coast of East Africa,” The Danish National Research Foundation’s Annual Meeting 2022: FAIR Data and the Effects on Research of the Progression in Digitization and Quantitative Data Analysis, Centre for Urban Network Evolutions, Aarhus, Denmark, June 10, 2022.

- 2022 **Dumitru, I.A.** – “Confronting Uncertainty in the Archaeological Record: A Network Analysis Perspective,” 2022 ASOR Meeting, Boston, Massachusetts, November 16 – 19.
- 2021 **Dumitru, I.A.**, Martindale Johnson, L., Brandt, S.A., Peterson, E., Harrower, M.J. – “Power and Cooperation in Decentralized Regional Economies: A Diachronic Perspective on the Development of Obsidian Supply Networks in Northern Ethiopia (ca. 800 B.C.E. - 825 C.E.),” 2021 ASOR Meeting, Chicago, IL, November 17 – 20, 2021.
- 2021 Glenn, A. and **I.A. Dumitru**, - “Let Him Play the Lyre, the Drum, and the ...? Using SNA to Simulate Musical Ensembles in Mesopotamian Texts,” 2021 ASOR Meeting, Chicago, IL, November 17 – 20, 2021. 2019 Harrower, M.J., Nathan, S., **Dumitru, I.A.**, Lehner, J., Wiig, F., Sivitskis, A., Crassard, R. – “From the Paleolithic to the Islamic Era: The Archaeological Water Histories of Oman (ArWHO) Project Survey (2011 – 2019),” 2019 American Schools of Oriental Research (ASOR) Meeting, San Diego, CA, November 20 – 23, 2019.
- 2019 Lehner, J., Harrower, M., **Dumitru, I.A.**, Nathan, S., Dollarhide, E., Sivitskis, A., Paulsen, P., Helwing, B. – “Periodic Production, Paleoenvironment, and Provenance: Archaeometallurgical Survey and Excavations in Wadi Raki, Oman,” 2019 American Schools of Oriental Research (ASOR) Meeting, San Diego, CA, November 20 – 23, 2019.
- 2019 **Dumitru, I.A.** – “Introduction to Key Issues and Thematic Areas to discuss in round tables,” The International Workshop of the Practical Application of the Salalah Guidelines for the Management of Public Archaeological Sites (UNESCO Workshop), Nizwa, Oman, September 16 – 19, 2019.
- 2019 Harrower, M.J. and **I.A. Dumitru** – “Community Participation at Beta Semati, Ethiopia,” The International Workshop of the Practical Application of the Salalah Guidelines for the Management of Public Archaeological Sites (UNESCO Workshop), Nizwa, Oman, September 16 – 19, 2019.
- 2018 **Dumitru, I.A.** and M.J. Harrower – “Modelling Networks of Obsidian Production in Northern Ethiopia and of Copper Production in Northern Oman: A Comparative Study,” The Connected Past 2018, Oxford, UK, December 6 – 7, 2018.
- 2018 **Dumitru, I.A.**, J.W. Lehner, and M.J. Harrower – “Modelling the Connectivity of Socioeconomic Networks of Copper Production in Ancient Oman,” 2018 Society for American Archaeology (SAA) 83rd Annual Meeting, Washington, DC., April 11 – 15, 2018.
- 2018 Harrower, M.J., **I.A. Dumitru**, C. Perlingieri, J.L. Lamont – “An Ancient Basilica: Monumental Architecture at Beita Semati, Ethiopia,” 2018 Society of Africanist Archaeologists (SAfA) 24th Biennial Meeting, Toronto, Canada, June 18 – 21, 2018.
- 2016 Harrower, M.J., C. Perlingieri, **I.A. Dumitru**, S. Nathan, J.C. Mazzariello – “The rise and decline of Aksum beyond the capital: The Southern Red Sea Archaeological Histories (SRSAH) Project (2009 – 2015),” 2016 Society of Africanist Archaeologists (SAfA) 23rd Biennial Meeting, Toulouse, France, June 26 – July 2, 2016.
- 2016 **Dumitru, I.A.**, M.J. Harrower, C. Perlingieri – “Discovery and excavations of an Aksumite town, Bieta Semati (Ethiopia),” 2016 Society of Africanist

- Archaeologists (SAfA) 23rd Biennial Meeting, Toulouse, France, June 26 – July 2, 2016.
- 2016 Harrower, M.J., **I.A. Dumitru**, S. Nathan, A. Buffington, H. David-Cuny, A. Sivitskis – “The Archaeological Water Histories of Oman (ArWHO) Project: Results of Archaeological Survey and Satellite Imagery Analysis,” 2016 American Schools of Oriental Research (ASOR) Meeting, San Antonio, TX, November 2016.
- 2016 **Dumitru, I.A.** and M.J. Harrower – “Mapping Economic Networks of Production and Trade: Copper in Oman and Obsidian in Ethiopia,” Raw Materials Exploitation in Prehistory: Sourcing, Processing, and Distribution, Faro, Portugal, March 10 – 12, 2016.
- 2015 Sivitskis, A.J., M.J. Harrower, and **I.A. Dumitru** – “Satellite Imagery Detection of Archaeological Deposits: Experiments with Field Measured Spectral Signatures of Agricultural Sediments and Ancient Copper Mining in Oman (poster),” 2015 Geological Society of America Annual Meeting in Baltimore, MD, November 1 – 4, 2015.
- 2015 **Dumitru, I.A.** and M.J. Harrower – “Mapping Ancient Production and Trade of Copper from Oman and Obsidian from Ethiopia,” Red Sea Conference VII, Procida, Italy, May 27, 2015.
- 2014 **Dumitru, I.A.**, and M.J. Harrower – “Mapping Ancient Copper in Oman: Application of Hyperspectral EO-1 Hyperion Satellite Imagery,” Early Arabian Metallurgy Workshop, Seminar for Arabian Studies, British Museum, London, UK, July 26, 2014.
- 2013 Harrower, M.J., **I.A. Dumitru**, J. Swerida, S. Nathan, J. Bongers – “The Red Sea and the Persian Gulf: Long-Term Conduits of Ancient Interchange, Entanglement, and Hybridity,” American Schools of Oriental Research (ASOR) Meetings, Baltimore, MD, Nov. 20 – 23, 2013.

CAMPUS TALKS

- 2022 **Dumitru, I.A.** – “Urban-Environment Interaction in East Africa: Using Multi-criteria Metrics of Coastal Productivity for Reef-to-Ridge-to-Hinterland Mapping on the Swahili Coast,” Centre for Urban Network Evolutions (UrbNet), Aarhus University, Aarhus, Denmark, October 11, 2022.
- 2022 **Dumitru, I.A.** – “Work in Progress Talk: Were the Swahili Created by Climate Change?” Centre for Urban Network Evolutions (UrbNet), Aarhus University, April 7, 2022.
- 2022 **Dumitru, I.A.** – “Work in Progress Talk: Climatic Shifts and Societal Reorganizations on the Swahili Coast of East Africa,” Centre for Urban Network Evolutions (UrbNet) Aarhus University, February 22, 2022.
- 2013 **Dumitru, I.A.** – “Using GIS Applications and Remote Sensing Technologies in Archaeology,” Johns Hopkins Archaeological Museum, April 20, 2013.
- 2012 **Dumitru, I.A.** – “Create your own Cuneiform Tablet,” Johns Hopkins Archaeological Museum.

TEACHING EXPERIENCE

- 2024 Instructor of record, “Social Archaeology: Everyday Worlds,” Discipline of Archaeology, The University of Sydney.
- 2023 – Instructor of record, “Humans and the Living World,” Discipline of Archaeology, The University of Sydney.
- 2023 – Instructor of record, “Mapping the Past,” Discipline of Archaeology, The University of Sydney.
- 2022 Instructor of record, “Cross-cultural and Cross-latitudinal Responses to Extreme and Unpredictable Weather and Climate Events in the Ancient World,” Ph.D. Master Course (1 July 2022), Centre for Urban Network Evolutions, Aarhus University.
- 2019 Instructor of record, “Freshman Seminar: The Development of Useful Things: A Comparative Approach to the Study of Technology and Economy in the Ancient World,” Department of Near Eastern Studies, Johns Hopkins University.
- 2017 Teaching Assistant, “Geographic Information Systems in Archaeology,” Department of Near Eastern Studies, Johns Hopkins University.
- 2017 Instructor of record, “The Development of Useful Things: Technology and Economy in the Ancient World,” Department of Near Eastern Studies, Johns Hopkins University.
- 2015 Teaching Assistant, “World Prehistory,” Department of Near Eastern Studies, Johns Hopkins University.
- 2013 Teaching Assistant, “Introduction to Archaeology,” Department of Near Eastern Studies, Johns Hopkins University.

RESEARCH AND ARCHAEOLOGICAL FIELD EXPERIENCE

- 2021 – 2023 *GIS/Remote Sensing Analyst*, Ambassadors Fund Large Grant for Cultural Preservation (Phase 2) – “Conservation of the Endangered World Heritage Site of Nan Madol: A Ceremonial Center of Eastern Micronesia,” CSRM Foundation.
- 2020 – 2023 *Research Associate*, National Aeronautics and Space Administration Research Opportunities in Space and Earth Science (NASA ROSES) – “Multisensor Analyses of Pacific Island Migration and Societal Development.”
- 2020 – *NASA ICESat-2 Applied User Co-Investigator*, Applied Research Topic: Archaeological Applications of ICESat-2 Data.
- 2020 – *Research Associate*, Spatial Observation Lab for Archaeological Research (SOLAR), Johns Hopkins University.
- 2019 – *Director*, Africa Social Networks Project (AfroNet) (Co-Director, Kifle Zerue, Chair of Archaeology Department, Aksum University).
- 2019 – *Co-Director*, Archaeological Water Histories of Oman (ArWHO) Project.
- 2019 – 2021 *Archaeological illustrator*, Umm el-Marra Project (JHU).
- 2018 – 2021 *GIS/Remote Sensing Analyst*, Ambassadors Fund Large Grant for Cultural Preservation (Phase 1) – “Conservation of the Endangered World Heritage Site of Nan Madol: A Ceremonial Center of Eastern Micronesia,” CSRM Foundation.
- 2018 – 2021 Australian Research Council – Discovery Early Career Research Award – “Strategic resources and human cooperation in the rise of social complexity in

- southeastern Arabia” (**I.A. Dumitru** – Research collaborator; J. Lehner – PI) \$384,983 AUD.
- 2017 – 2019 *Design lead and technical consultant*, Meroe Visitor Center, UNESCO World Heritage Site of the Island of Meroe, Sudan, CSRM Foundation.
- 2016 *Co-Director*, Southern Red Sea Archaeological Histories Project (SRSAH).
- 2016 *GIS/Remote Sensing Analyst*, Fort Irwin: Direct Detection Modelling Project (NASA Legacy funded), CSRM Foundation.
- 2016 *GIS/Remote Sensing Analyst*, Fort Benning: Direct Detection Modelling Project (NASA Legacy funded), CSRM Foundation.
- 2016 *GIS/Remote Sensing Analyst*, Nasca Lines Project, CSRM Foundation.
- 2015 *Field Director for Geospatial Analysis*, Archaeological Water Histories of Oman (ArWHO) Project (2015, 2017).
- 2014 *Field Archaeologist*, Tayinat Lower Town Project (TLTP), Turkey.
- 2014 *Geospatial Technician*, Mochena Borago Archaeological Project, Ethiopia.
- 2013 – 2017 National Aeronautics and Space Administration Research Opportunities in Space and Earth Science (NASA ROSES) – “Satellite Remote Sensing of Ancient Water Availability and Irrigation: A Comparative Study of Complex Societies in Oman and Ethiopia” (**I.A. Dumitru** – Research collaborator; M. Harrower – CI) \$288,441 USD (\$430,400 AUD).
- 2012 – 2015 *Field Director*, Southern Red Sea Archaeological Histories (SRSAH) Project (2012, 2014, 2015).
- 2012 – *Field Photographer*, for Excavation and Small Finds, Southern Red Sea Archaeological Histories (SRSAH) Project (2012, 2014 – 2016).
- 2012 – *Field Photographer*, Archaeological Water Histories of Oman (ArWHO) Project (2012 – 2013, 2015, 2017).
- 2012 – *Remote Sensing Analyst*, Archaeological Water Histories of Oman (ArWHO) Project (2012 – 2013, 2015, 2017).
- 2011 – 2019 *Graduate Student Researcher*, Spatial Observation Lab for Archaeological Research (SOLAR), Johns Hopkins University.

RESEARCH REPORTS

- 2020 Lehner, J.W., M. Harrower, **I.A. Dumitru**, et al. Archaeological Water Histories of Oman (ArWHO) Project. 2020 Field Report, August 3, 2020.
- 2020 Comer, D., **I.A. Dumitru**, J. Comer. Nan Madol Sustainable Conservation Plan Quarterly Report 8 (1 April – 30 June 2020).
- 2020 Comer, D., J. Comer, **I.A. Dumitru**. Nan Madol Sustainable Conservation Plan Quarterly Report 7 (1 January – 31 March 2020).
- 2019 Lehner, J.W., M. Harrower, S. Nathan, P. Paulsen, S. Al-Jabri, S. Al-Alawi, B. Helwig, A. Sivitskis, E. Dollarhide, L. Renaux, **I.A. Dumitru**, Archaeological Water Histories of Oman (ArWHO) Project. 2019 Field Report, February 8, 2019.
- 2019 Comer, D., J. Comer, **I.A. Dumitru**. Nan Madol Sustainable Conservation Plan Quarterly Report 6 (1 October – 31 December 2019).
- 2019 Comer, D., J. Comer, **I.A. Dumitru**. Nan Madol Sustainable Conservation Plan Quarterly Report 5 (1 July – 30 September 2019).

- 2019 Comer, D., J. Comer, **I.A. Dumitru**. Nan Madol Sustainable Conservation Plan Quarterly Report 4 (1 April – 30 June 2019).
- 2019 Comer, D., J. Comer, **I.A. Dumitru**. Nan Madol Sustainable Conservation Plan Quarterly Report 3 (1 January – 31 March 2019).
- 2018 Comer, D., J. Comer, **I.A. Dumitru**. Nan Madol Sustainable Conservation Plan Quarterly Report 2 (1 October – 31 December 2018).
- 2018 Harrower, M., C. Perlingieri, **I.A. Dumitru**, et al. Southern Red Sea Archaeological Histories (SRSAH) Project. 2016 Field Report, May 17, 2018.
- 2017 Harrower, M., **I.A. Dumitru**, et al. Archaeological Water Histories of Oman (ArWHO) Project. Report 2017, Sept. 4, 2017.
- 2015 Harrower, M., **I.A. Dumitru**, et al. Archaeological Water Histories of Oman (ArWHO) Project. Report 2015, Jan. 25, 2015.
- 2015 Harrower, M., C. Perlingieri, **I.A. Dumitru**, et al. Southern Red Seas Archaeological Histories (SRSAH) Project. Report 2015, June 22, 2015.
- 2014 Harrower, M., C. Perlingieri **I.A. Dumitru**, et al. Southern Red Seas Archaeological Histories (SRSAH) Project. Report 2014, Oct. 10, 2014.
- 2013 Harrower, M., C. Perlingieri, **I.A. Dumitru**, et al. Southern Red Seas Archaeological Histories (SRSAH) Project. July 21, 2013.
- 2013 Harrower, M., K. O'Meara, J. Swerida, **I. A. Dumitru**, et al. Archaeological Water Histories of Oman (ARWHO) Project, Report 2013, Mar 22, 2013.
- 2012 Harrower, M., J. Swerida, J. Bongers, **I. A. Dumitru**, et al. Southern Red Sea Archaeological Histories Project: Baita Semati and Aksumite Societies of Yeha Region. Report Jul 10, 2012.
- 2012 Harrower, M., J. Swerida, **I. A. Dumitru**, J. Bongers. Archaeological Water Histories of Oman (ARWHO) Project Report Jan 22, 2012.

SERVICE TO PROFESSION

- 2024 *Manuscript reviewer*, Journal of African Archaeology.
- 2024 *Manuscript reviewer*, Edited volume, *Tools of the Trade: Australasian Perspectives on Digital Archaeology* (Sydney University Press)
- 2023 *Manuscript reviewer*, Claroscuro Special Thematic Issue, "Community Resilience in Ancient Egypt" (coordinated by Dr. Anna-Latifa Mourad)
- 2021 *Manuscript reviewer*, Remote Sensing.
- 2022 *Manuscript reviewer*, The Journal of the Polynesian Society.
- 2019 *Rapporteur*, 2019 Symposium: The Economic and Social Benefits of World Heritage Listing in the United States, Washington, D.C., USA, November 8 – 9, 2019.

UNIVERSITY AND DEPARTMENTAL SERVICE

- 2023 – Postgraduate Research Coordinator, Discipline of Archaeology, The University of Sydney.
- 2023 – School of Humanities Research Coordinator for the Discipline of Archaeology, The University of Sydney.

- 2018 *Co-Organizer*, 2018 ANŠHE Lecture, Emily Hammer (University of Pennsylvania, Near Eastern Languages and Civilizations Department) – “Digital Approaches to Historical Landscapes of the Ancient Near East,” Johns Hopkins University, May 1, 2018.
- 2015 *Co-Organizer*, 2015 ANŠHE Lecture, Heather Baker (University of Toronto, Near and Middle Eastern Civilizations Department) – “The Babylonian City in Long-Term Perspective: Investigating Urban Processes Using Texts and Archaeology,” Johns Hopkins University, April 20, 2015.
- 2014 *Co-Organizer*, 2014 ANŠHE Lecture, Rita Wright (New York University, Anthropology Department) – “A Comparative Perspective on Gender in Specialized Economies: Craft Specialization, Kinship, and Technology,” Johns Hopkins University, April 21, 2014.

MEDIA & SOCIAL MEDIA COVERAGE

- 2019 Hunt, K. (2020): Archaeologists unearth lost town from little-known ancient East African empire. *CNN Inside Africa* (published only December 11th, 2019); <https://edition.cnn.com/2019/12/11/africa/ethiopia-buried-town-discovery-beta-samati-scn/index.html>.
- 2019 Metcalfe, T. (2019): Buried Christian (and Pagan) Basilica Discovered in Ethiopia’s ‘Lost Kingdom’ of Aksum. *Live Science* (published only December 10th, 2019); <https://www.livescience.com/buried-christian-church-lost-kingdom-ethiopia.html>
- 2019 Marshall, M. (2019): Lost Ethiopian town comes from an ancient empire that rivalled Rome; <https://www.newscientist.com/article/2226803-lost-ethiopian-town-comes-from-an-ancient-empire-that-rivalled-rome/>.
- 2019 Georgiou, A. (2019): 2,700-Year-Old Town from One of Ancient World’s Major Powers Revealed by Archaeologists; <https://www.newscientist.com/article/2226803-lost-ethiopian-town-comes-from-an-ancient-empire-that-rivalled-rome/>.
- 2019 Lawler, A. (2019): Church Unearthed in Ethiopia Rewrites the History of Christianity in Africa; <https://www.smithsonianmag.com/history/church-unearthed-ethiopia-rewrites-history-christianity-africa-180973740/>.
- 2018 Buchanan, M. (2018): Protecting the legacy of Nan Madol, a lost city in the Pacific. *Share America* (published online September 4th, 2018); <https://share.america.gov/protecting-nan-madol-lost-city-in-pacific/?fbclid=IwAR1Vet9HmpVPd-3pbRHMlxR9qsWqW7wEr6htLoyhvw1rzMDhpyR9rD1aep4>)
- 2017 Iron Age soft-stone vessels discovered in Sultanate. *Times of Oman* (published online January 18, 2017; <https://timesofoman.com/article/100894/Oman/Heritage/Iron-Age-soft-stone-vessels-discovered-in-Sultanate>)
- 2017 Oman TV – First Discovery of Soft-Stone (Chlorite) Vessel Production in Arabia (published online January 16, 2017; <https://youtu.be/Flg-IezdMsY>)

RELATED PROFESSIONAL SKILLS

Drone License	Australian Remote Pilot Licence (RePL) – Initial, Civil Aviation Safety Authority (CASA), Australian Government
Drone License	Australian Remote Pilot Licence (RePL) Sub 25kg Multi-Rotor upgrade, Civil Aviation Safety Authority (CASA), Australian Government
AROC	Aeronautical Radio Operator Certificate, Civil Aviation Safety Authority (CASA)
GIScience	<u>GIS</u> (ESRI ArcMap, ArcGIS Pro, QGIS), <u>Remote Sensing</u> (Hexagon Geospatial ERDAS IMAGINE 2018, Harris Geospatial ENVI 5.3, CloudCompare, Global Mapper LiDAR Module)
3D-modelling/ photogrammetry	ArcGIS Pro, Agisoft Metashape Professional
Network Analysis	UCINET 6, Gephi, visone
Chemical Analysis	Brucker Tracer III-V XRF Analyzer, Thermo Niton XL3t GOLDD+
Statistics	R 3.5.1, JMP Pro 14
Mapping	Trimble GeoXH, Trimble Geo7x, Trimble R4 base station, Leica GS16
Photography	Digital Photograph, Adobe Photoshop CC 2021
Illustration	Adobe Illustrator CC 2021, Adobe InDesign 2021

LANGUAGES

Modern

Romanian	Native	German	Classroom study
English	Native	Portuguese	Can read with dictionary
Spanish	Advanced	Arabic	Beginner
French	Intermediate	Danish	Module 1 (A2B)
Italian	Classroom study		

Ancient

Ancient Greek	Can read with dictionary
Akkadian	Can read with dictionary
Sumerian	Can read with dictionary

PROFESSIONAL MEMBERSHIPS/ AFFILIATIONS

Society of Africanist Archaeologists (SAfA)
American Schools of Oriental Research (ASOR)
International Council on Monuments and Sites (US/ ICOMOS)
University Consortium for Geographic Information Science (UCGIS)