

MARINE ARCHAEOLOGY WORKSHOP: MARINE ARCHAEOLOGY IN ISRAEL & CALIFORNIA AND NEW METHODS & TECHNOLOGIES TUESDAY JUNE 11, 2019 MARTIN JOHNSON HOUSE SCRIPPS INSTITUTION OF OCEANOGRAPHY—UNIVERSITY OF CALIFORNIA SAN DIEGO

PROGRAM

8:30-9:00 am

Coffee & Bagels

9:00-9:10	Opening Remarks	Carol Padden
9:10-9:45	Keynote Address Capacity Development and Maritime Archaeology: Challenges, Approaches and Reflections	Lucy Blue
9:45-10:10	The UC San Diego Scripps Center for Marine Archaeology in Israel: From Field School to Research Expedition	Tom Levy
10:10-10:35	Coastal Morphogenesis at the Late Holocene Multi-Period Site of Dor, Israel: An Interplay between Natural and Anthropogenic Factors	Gilad Shtienberg
10:35-11:00	Coffee Break & Discussion	
11:00-11:25	The 2018 Sediment Coring Expedition in the Kebara Swamplands, Israel: Problems and Potentials	Richard Norris
11:25-11:50	Iapu: Egypt's New Kingdom Harbor in Jaffa, Israel	Aaron Burke
11:50-12:15	Linking Land and Sea in the Roman Levant: Ancient Twin-Settlements and Fluvio-Maritime Harbours in Israel	Carmen Obied
12:15-1:15 pm	Lunch	
1:15-1:40	Time and Water on Pimu Santa Catalina Island: Foundations and Context for a Century of Research	Lynn Swartz Dodd
1:40-2:05	Scarcity versus Abundance on California's Islands: Rethinking Models for Island and Coastal Economies	Mikael Fauvelle
2:05-2:30	Using Sediment Cores to Uncover Environmental Change in Ancient Greece	Katrina Cantu
2:30-2:55	Coffee Break & Discussion	
2:55-3:20	Emerging Underwater Technologies	Eric Terrill
3:20-3:45	Development of 3D Point-Based Visual Analytics Methodologies to Enable Virtual Access to Underwater Cultural Heritage	Dominique Rissolo
3:45-4:30 pm	Discussion & Closing Remarks	Tom Levy



SPEAKERS

Lucy Blue is a Senior Lecturer at the Centre for Maritime Archaeology (CMA), University of Southampton and the Maritime Archaeological Director of the Honor Frost Foundation, UK. Dr. Blue has worked as a maritime archaeologist for over three decades. Her research is focused around the eastern Mediterranean, Red Sea, western Indian Ocean and the Arabian Gulf where she specialises in harbour archaeology, maritime ethnography, and maritime cultural landscapes. Dr. Blue has codirected a range of maritime archaeological research projects in Egypt, India, Montenegro, Cyprus, the UAE and Oman. Over the last ten years she has been engaged in building capacity in maritime archaeology and coastal heritage in the Arab world. She directs the Maritime Archaeological Stewardship Trust (MAST); helped establish the Centre for Maritime Archaeology and Underwater Cultural Heritage (CMAUCH) in Alexandria, Egypt; coordinated the Maritime Archaeological Survey of Oman (MASO) with partners in the Western Australia Museum (WAM) for the Ministry of Heritage and Culture, Oman; and recently secured a grant to document the maritime archaeology of the Middle East and North Africa (MarEAMENA). Further maritime capacity is built through the Honor Frost Foundation, a charity that focuses on promoting maritime archaeological research, protection and promotion in the eastern Mediterranean particularly in Lebanon, Cyprus and Syria.

Aaron A. Burke is Professor of Near Eastern Archaeology and the Kershaw Chair in the Archaeology of the Ancient Eastern Mediterranean in the Department of Near Eastern Languages and Cultures at UCLA. He is also a faculty member of the Cotsen Institute of Archaeology at UCLA, where he serves as editor-in-chief of the Cotsen Press. His interests include the archaeology of Ancient Israel, warfare, and cultural transformations in the Bronze and Iron Ages in the ancient Eastern Mediterranean with particular attention to the archaeology of forced migration and the identification of ensuing cultural changes as documented in archaeological and textual sources. Professor Burke has excavated in Israel, Turkey, and Egypt. From 2011 to 2014, as director of the Jaffa Cultural Heritage Project since 2007, he conducted excavations of a New Kingdom Egyptian fortress in Jaffa (Israel) that were funded by the National Endowment for the Humanities. His work in Jaffa includes Ioppa Maritima, a collaboration with Shelley Wachsmann of the Institute of Nautical Archaeology at Texas A&M University intended to explore Jaffa's early role as a port and to identify the location of its harbor. In 2017, expanding upon his research in Jaffa, he inaugurated, *Turning Points*, an initiative aimed at exploring the broad context of the transition between the Late Bronze Age and early Iron Age, ca. 1200–1000 B.C. in the southern Levant. Email: aaburke@ucla.edu

Katrina Cantu is a graduate student at Scripps Institution of Oceanography, University of California San Diego. Her research focuses on reconstructing paleoclimate and the paleo-environment by analyzing microfossils, lithology, and geochemistry of sediment cores. Although she started her research on a 7.5 million-year record from deep sea cores, during the last two years she has been working with archaeologists from UC San Diego and the University of Haifa, Israel to investigate more recent contexts. These partnerships have led to field work in Israel in summer of 2018, where Ms. Cantu participated in an underwater excavation via SCUBA of a harbor in Tel Dor on the Carmel Coast in Northern Israel. In early 2019 she returned to the Carmel Coast to collect over 200 meters of sediment cores from the beach at Tel Dor and the nearby Kebara Marsh, which yielded an environmental record representing the entire Holocene. This summer she will be travelling to Puerto Rico where she will collect cores from a coastal wetland to obtain a record of the island's environmental changes from prehistory through European contact to the present day.

Lynn Swartz Dodd is an Associate Professor in Religion at the University of Southern California and directs the Archaeology Research Center. Her archaeological projects are located in the Middle East and in California. Professor Dodd researches the politics of the past in the present and changing technologies in past societies. She is co-founder of the Israeli-Palestinian Archaeology Working Group and the Institute for Shared Heritage and has received grants from the National Endowment of the Humanities and the Andrew W. Mellon Foundation. Locally, she collaborates with the Pimu Catalina Island Archaeology Project, an indigenous archaeology project focused on understanding the human and environmental past and present on and around that island.

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Mikael Fauvelle is a doctoral candidate in the Anthropology Department at the University of California San Diego. His research is focused on understanding the role of long-distance trade and regional interactions in the development and maintenance of social inequality. He addresses these issues through work on hunter-gatherer exchange systems on California's Channel Islands, as well as on archaic state interactions in coastal Mexico. Both projects are aimed at understanding human adaptations to the environment, with an emphasis on examining how societies were able to maintain and modify trade networks in response to changing social and ecological landscapes. He has published articles on paleobotanical, ceramic, and lithic studies in both California and Mesoamerica.

Thomas E. Levy is Distinguished Professor of Anthropology and Director of the Center for Cyber-Archaeology and Sustainability (CCAS) in the Qualcomm Institute at the University of California San Diego. He holds the Norma Kershaw Chair in the Archaeology of Ancient Israel and Neighboring Lands and is a member of the Jewish Studies Program. Elected to the American Academy of Arts and Sciences, Professor Levy is a Levantine field archaeologist with interests in the role of technology, especially early mining and metallurgy, on social evolution. Professor Levy has been the principal investigator for many interdisciplinary archaeological field projects in Israel and Jordan that have been funded by the National Geographic Society, National Endowment for the Humanities, National Science Foundation, and other organizations. He also conducts ethnoarchaeological research in India. Professor Levy directs the University of California San Diego Levantine and Cyber-Archaeology Laboratory, and he was recently elected Chair of the Committee on Archaeological Policy (CAP) of the American Schools of Oriental Research (ASOR) and a member of the European Academy of Sciences and Arts. He was the Principal Investigator for the \$1 million University of California Office of the President's Research Catalyst grant for At-Risk Cultural Heritage and the Digital Humanities. Professor Levy is Co-Director of the Scripps Center for Marine Archaeology. Email: tlevy@ucsd.edu

Richard Norris is Professor of Paleobiology at Scripps Institution of Oceanography, University of California San Diego. Professor Norris' research focuses on the evolution of life in the oceans, with particular emphasis on the mechanisms of extinction and speciation of plankton and the processes of assembly of marine ecosystems. He also works on the recent fossil record of reefs and coastal environments to evaluate the impact of human activities on marine and terrestrial ecosystems. In recent years, Professor Norris has been working on the paleoenvironmental record of the Mediterranean to the rise of civilizations around the basin and on African environmental history during the rise of humanity. Email: rnorris@ucsd.edu

Carmen Obied is a Maritime Archaeologist and Photogrammetrist. Dr. Obied's doctoral thesis at the University of Southampton UK, *Rethinking Roman Perceptions of Coastal Landscapes: A Case-Study of the Levant*, focused on understanding ancient maritime space, sea routes and ancient geographers/mariners in the eastern Mediterranean using a multidisciplinary approach that combined archaeological evidence, ancient sources and Geographical Information Systems (GIS/QGIS). She has over a decade of experience conducting international maritime and terrestrial archaeological excavations, geoarchaeological and geophysical surveys, and managing photogrammetry, GIS, and outreach projects (notably in the eastern Mediterranean, India, UK, USA, and the Balkans). Dr. Obied has collaborated with research institutions, governmental agencies, outreach organizations, and museums (Natural History Museum of L.A. County, British Museum, Mary Rose Museum, Western Australian Museum). Currently, she leads a project developing 3D photogrammetric models and training workshops for the Natural History Museum of L.A. County, works on scientific-commercial archaeological fieldwork, and acts as Expert Archaeologist & Presenter for Past Preservers media agency for scientifically-informed documentaries for educational outreach.

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Carol Padden is the Sanford I. Berman Endowed Professor of Communication and Dean of Social Sciences at the University of California San Diego. She has published on language emergence, culture and genes, comparative sign language structure, and reading in deaf children. With Tom Humphries, Professor Padden is the co-author of four books on culture and community of deaf people in the United States. In recent years, she and her research team have been studying new sign languages in Israel and Turkey and documenting the spontaneous emergence of language in small communities. Her work has been supported by the U.S. Department of Education, the Spencer Foundation, the National Science Foundation and the National Institutes of Health. In 1992 she was awarded a John D. Simon Guggenheim Fellowship and, in 2010, a John D. and Catherine T. MacArthur Foundation Fellowship. She was elected Fellow of the Linguistic Society of America and the American Association for the Advancement of Science.



Dominique Rissolo is an Assistant Research Scientist at the Qualcomm Institute at the University of California San Diego and co-leads the Cultural Heritage Engineering Initiative (CHEI). Dr. Rissolo has worked closely with multiple agencies and universities to plan and execute oceanographic and marine archaeological survey and research projects using autonomous, remotely operated, and human occupied vehicles as well as vessels for scuba operations. As an archaeologist, his interdisciplinary research focuses on paleocoastal human ecology and the development of ancient maritime trade networks in the Caribbean and the Gulf of Mexico as well as ancient Maya and Paleoamerican cave and cenote use. Dr. Rissolo also serves on the NOAA Ocean Exploration Advisory Board. Email: drissolo@ucsd.edu

Gilad Shtienberg is the Israel Institute/Murray Galinson San Diego Israel Initiative Post-Doctoral Fellow in the Department of Anthropology at the University of California San Diego. Dr. Shtienberg received his Ph.D. in Coastal Geomorphology with an emphasis on anthropogenic influences at the University of Haifa, Israel. He studies long-term climate change in Israel and neighboring lands as a model for more general issues of global environmental change. Dr. Shtienberg specializes in understanding theoretical and practical aspects of the landscape changes that occur in the dynamic environments of the coastal zone. His post-doctoral research investigates the evolution of the coastal area of Dor (Carmel Coast, Israel) and human impacts on the natural vegetation during the past 10,000 years. Email: gshtienberg@ucsd.edu

Eric Terrill is Director of the Coastal Observing Research and Development Center (CORDC). CORDC, founded in 2003, resides within the Marine Physical Laboratory at Scripps Institution of Oceanography, one of the four original Navy-University Applied Research Laboratories (ARLs) established during World War II. CORDC focuses on the development of new technologies, their application for basic and applied sciences, and the exploitation and fusion of data for improved decision-making. Dr. Terrill has 26 years' experience in conducting at-sea research as an oceanographer with an engineering background and leads basic and applied research programs in a variety of marine and environmental disciplines. Email: eterrill@ucsd.edu

Acknowledgements

SCMA is grateful to the Israel Institute, Washington, DC and the Murray Galinson San Diego-Israel Initiative for their support of this workshop.

