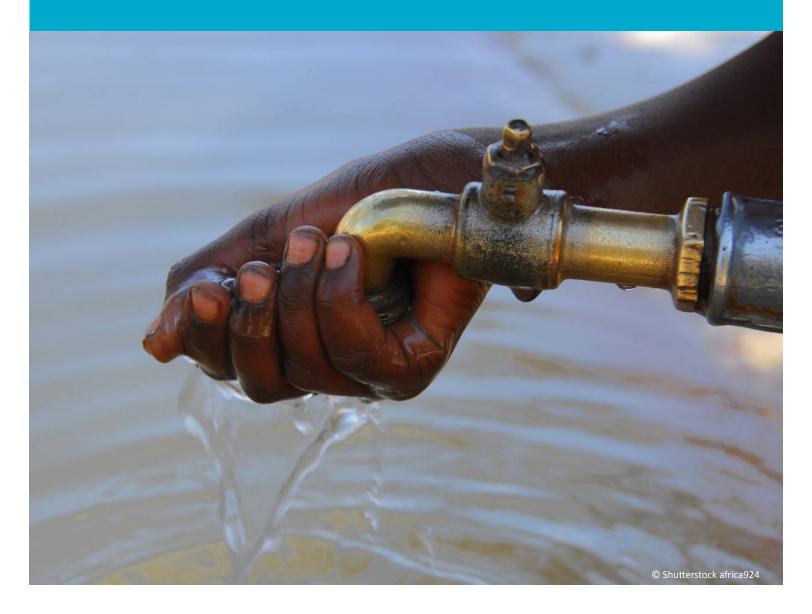
Harvard University August 5-8

# TEACHING MALE AND A SECOND SEC

GLOBAL PERSPECTIVES ON A RESOURCE IN CRISIS

## A Workshop for K-12 Educators



# TEACHING MANUAL TEACHING MANUAL TEACHING GLOBAL PERSPECTIVES ON A RESOURCE IN CRISIS

#### **WELCOME!**

On behalf of the outreach council for international centers and units at Harvard, we are pleased to welcome you to our summer 2013 teachers' workshop. We hope that the next four days will provide you with a number of helpful tools for incorporating global issues into your own classroom, as we work towards the shared goal of helping to develop more globally minded students.

As you are aware, access to clean, safe, potable water is a complex and complicated issue throughout the world, particularly in developing countries. *Teaching Water: Global Perspectives on a Resource in Crisis*, an interdisciplinary four-day workshop for educators, will examine a variety of the most critical issues facing international waterways and the communities who directly and indirectly rely on these bodies of water.

In your program booklet you will find the finalized agenda for the workshop, speaker biographies, a list of workshop participants, information about the sponsoring Harvard groups, and listings for future outreach events. Following the workshop, we welcome your feedback so that we can continue to provide enriching professional development opportunities for teachers across the country.

We also want to thank you for your tremendous efforts in globalizing your curriculum, especially given the challenges that many of you face to bring these topics into your classrooms. Thanks to teachers like you, more students will gain the education they need to become culturally competent and globally aware citizens in our increasingly globalized community.

Sincerely,

**Kathryn Coughlin**, Prince Alwaleed Bin Talal Islamic Studies Program

Jorge Espada, Harvard University Asia Center Erin Goodman, David Rockefeller Center for Latin American Studies

**Rebekah Judson**, Davis Center for Russian and Furasian Studies

**Cris Martin**, Davis Center for Russian and Eurasian Studies

Sarah Meyrick, Center for Middle Eastern Studies
Anna Mudd, Center for Middle Eastern Studies
Elise Noel, Committee on African Studies
Emily Robinson, Harvard Global Health Institute

# TEACHING MANUAL TEACHING GLOBAL PERSPECTIVES ON A RESOURCE IN CRISIS

# **Agenda**

#### DAY 1

#### Water as a Worldwide Resource

8:00am - 4:30pm Monday, August 5, 2013

Barker Center for the Humanities, Thompson Room 12 Quincy Street, Cambridge, MA 02138

Arab Studies, Harvard University

8:00 - 8:30	Registration and Light Breakfast
8:30 - 10:00	Welcome and Introductions Outreach Staff
10:00 - 10:45	Group Discussion Time to discuss preparatory reading, film, and initial thoughts and questions.
10:45 - 11:00	Break
11:00 - 12:30	Developing K-12 Curricula: The Sciences and Humanities  Gretchen Roorback and Scott Chelist  Two local educators share their experience developing curricula for water-focused classes from different disciplinary and grade-level perspectives.
12:30 - 1:30	Lunch
1:30 - 2:45	The Impact of Water on World Health  Glaudine Mtshali, Executive Director, Harvard Global Health Institute
2:45 - 3:00	Break
3:00 - 4:30	Keynote Lecture: Challenges of Water Sustainability in the Arabian Peninsula: Oasis, Coast and Highland Steve Caton, Khalid Bin Abdullah Bin Abdulrahman Al Saud Professor of Contemporary

## **Agenda Continued**

#### DAY 2

### **Who Controls the Water?: Water Security and Development**

8:00am - 5:00pm Tuesday, August 6, 2013

Barker Center for the Humanities, Thompson Room 12 Quincy Street, Cambridge, MA 02138

8:00 - 8:30	Light Breakfast
8:30 - 9:00	Discussion of Previous Night's Reading
9:00 - 10:15	Framing the Day and Speaking Broadly: Who Controls Water?  Toby Jones, Associate Professor of History, Rutgers University
10:15 - 10:30	Break
10:30 - 11:30	Water Security and the Mekong River Richard Cronin, Senior Associate, Southeast Asia, The Stimson Center
11:30 - 12:30	A Sea of Profit: Piracy, Fishing and Protection in the Western Indian Ocean Jatin Dua, Ph.D. Candidate in Cultural Anthropology, Duke University
12:30 - 1:30	Lunch
1:30 - 2:30	The Nile Basin: A Look at Ethiopia's Grand Dam Plan Paul Block, Assistant Professor, University of Wisconsin
2:30 - 3:30	Water and International Security in Central Asia Fatima Mendikulova, Program Assistant, Human Rights to Water & Sanitation Program, Carr Center, Harvard Kennedy School
3:30 - 3:45	Break
3:45 - 5:00	Indopotamia Simulation Setup and Discussion

## **Agenda Continued**

#### DAY 3

# Access to Water as a Human Right: Who Has Access to Water and What are the Consequences of Access for Some, but Not All?

8:00am - 5:00pm Wednesday, August 7, 2013

Barker Center for the Humanities, Thompson Room 12 Quincy Street, Cambridge, MA 02138

8:00 - 8:30	Light Breakfast
8:30 - 9:00	Discussion of Previous Night's Reading
9:00 - 10:00	Framing the Day and Speaking Broadly: Who Has Access to Water and What are the Consequences? Sharmilla Murthy, Assistant Professor, Suffolk University Law School
10:00 - 11:00	Access to Safe Water in Ghana Mark Williams, Fellow, Human Right to Water and Sanitation Program, Carr Center, Harvard Kennedy School
11:00 - 11:15	Break
11:15 - 12:15	The Right to Water in Haiti Mary Kay Smith Fawzi, Assistant Professor, Harvard Medical School
12:15 - 1:15	Lunch
1:15 - 4:00	Indopotamia Water Negotiation Simulation Carri Hulet, Senior Associate, The Consensus Building Institute
4:00 - 4:15	Break
4:15 - 5:00	Simulation Debrief

## **Agenda Continued**

#### DAY 4

# The Environment, Disasters and Climate Change: Thinking about Water System-wide and Globally

8:00am - 4:00pm Thursday, August 8, 2013

Barker Center for the Humanities, Thompson Room 12 Quincy Street, Cambridge, MA 02138

8:00 - 8:30	Light Breakfast
8:30 - 9:00	Discussion of Previous Night's Reading
9:00 - 10:00	Framing the Day and Speaking Broadly: Climate Change Peter P. Rogers, Gordon McKay Research Professor of Environmental Engineering, Harvard University
10:00 - 11:20	The Aral Sea Disaster Elizabeth Baker Brite, Postdoctoral Fellow, Auburn University
11:20 -11:30	Break
11:30 - 1:00	Water and Climate Change: Looking at Africa and South America  Jeff Griffiths, Director, USAID Innovation Laboratory for Nutrition – Africa  Eunjee Lee, Giorgio Ruffolo Post-doctoral Research Fellow in Sustainability Science,  Harvard University
1:00 - 2:00	Lunch
2:00 - 2:45	Bringing it Home: The American Southwest Pedagogy session exploring connections between the water crisis at home and abroad
2:45 - 3:30	Putting it all Together
3:30 - 4:00	Evaluations

# TEACHING MANUAL TEACHING GLOBAL PERSPECTIVES ON A RESOURCE IN CRISIS

## **Participant List**

#### **August 5 - August 8, 2013**

#### **Anita Balliro**

Swampscott High School
Swampscott, MA

#### **Erin Barrett**

Lexington High School Lexington, MA

#### **Meryl Baxter**

Archbishop Williams High School Braintree, MA

#### **Patience Berkman**

Newton Country Day School Newton, MA

#### **Charles Bunting**

Oak Hill Middle School Newton, MA

#### Carol Ann D'Amico

Provincetown Middle School Provincetown, MA

#### **Richard Donnelly**

Bedford High School Bedford, MA

#### **Ed Dube**

William Diamond Middle School Lexington, MA

#### Jalal Ghaemghami

Roxbury Community College Boston, MA

#### **Roger Grande**

Brookline High School Brookline, MA

#### **Pamela Griswold**

Pinkerton Academy Derry, NH

#### **Greg Jackson**

Heath School Brookline, MA

#### Allison Kangas de Bellalta

Winchester High School Winchester, MA

#### Shireen Khuwaja

ITREB USA Sugarland, TX

#### **Sharyn Lamer**

Argenziano School Somerville, MA

#### **Melissa London**

Pierce School Brookline, MA

#### **Kathleen Maher**

F.A. Day Middle School Newton, MA

#### **Marianne Marks**

Oak Hill Middle School Newton, MA

#### **Sara Marx**

F.A. Day Middle School Newton, MA

#### **Bryce Mattie**

Bromfield School Harvard, MA

#### **Owen McElhinney**

Pierce Middle School Milton, MA

### **Participant List Continued**

#### **Ruthie Miller**

Sharon Middle School Sharon, MA

#### **Mary Miller-Charette**

Masconomet Regional High School Topsfield, MA

#### **Feliz Otucu**

Plymouth State University Plymouth, NH

#### **Anna Parker**

Milford High School Milford, NH

#### **Heather Perine**

McCall Middle School Winchester, MA

#### **Ross Phillips**

Winnacunnet High School Hampton, NH

#### **Ryan Quinn**

Masconomet High School Topsfield, MA

#### **Lisa Rioles Collins**

Ursuline Academy Dedham, MA

#### **Jonathan Roy**

Oak Hill Middle School Newton, MA

#### **Saviz Safizadeh**

Pierce Middle School Milton, MA

#### **Nancy St Michel**

Horace Mann School for the Deaf and Hard of Hearing Allston, MA

#### **Dalia Stewart**

Walsh Middle School Framingham, MA

#### **Sally Stone**

Athol Royalston Middle School Athol, MA

#### Elizabeth Baker Brite

Postdoctoral Fellow, Auburn University

Elizabeth Baker Brite is a Postdoctoral Fellow in the Honors College at Auburn University. Currently, she teaches courses in anthropology and sustainability.

Liz earned her B.A. in Asian and Middle Eastern Studies from the University of Pennsylvania in 2002 and a Ph.D. in Anthropology in 2011 from the University of California, Los Angeles. She is an archaeologist who has worked in many parts of the world, including the American Southwest, Peru, India, and Uzbekistan. Her research focuses on human-environment interactions in Central Asia, with particular interests in the ways these societies have adapted to environmental change. Her current research focuses on the Aral Sea region in Uzbekistan, where she examines the connections between water scarcity, agro-pastoral subsistence practices, and ancient social systems. In her research, Liz emphasizes the ways that sustainable adaptations to environmental change are embedded in all aspects of human societies, from our daily life practices to our political and economic institutions. She is also interested in how big changes can arise from ordinary people's responses to environmental challenges, a topic she has most recently explored in her article, *Agricultural Innovation, Environmental Change, and the Spread of Cotton Agriculture in the Old World* (JAA 2013).

Liz is busily working to bring to publication the results of her dissertation and expand on her research endeavors in the Aral Sea region while in residence at Auburn University. She is also enjoying life as a new mom in the beautiful green landscapes of Alabama.

#### **Paul Block**

#### Assistant Professor, University of Wisconsin

Dr. Paul Block was recently appointed to Assistant Professor at the University of Wisconsin, having served as assistant professor in Drexel University's Civil, Architectural, and Environmental Engineering Department, specializing in hydroclimatology and water resources management. He leads the Water Systems and Society research group, creatively addressing critical water resources management challenges in local to international trans-boundary capacities through stakeholder and decision-maker collaborations. His group works at the intersection of engineering and socio-economics to enhance management, adaptation, and sustainability of water resources by leveraging across the sciences. His research themes are centered on a systems-based approach, bridging models and methods across climate science, hydrology, management, the environment, economics, and policy. Dr. Block completed his graduate work at the University of Colorado – Boulder, followed by a 4-year stint (2-year postdoc, 2-year associate research scientist) at the International Research Institute for Climate and Society at Columbia University.

#### **Steve Caton**

Khaled bin Abdullah bin Abdulrahman Al Saud Professor of Contemporary Arab Studies, Harvard University

Since the beginning of his career, Caton has been a specialist of Arabic and the Middle East, with an emphasis on Yemen and the Arabian Peninsula. His earliest work was in anthropological linguistics and poetics which culminated in his first book, *Peaks of Yemen I Summon* (University of California Press, 1990), an ethnography of Arabic, oral poetry and political culture of a Yemeni highland tribe. During the course of fieldwork for that research, a dispute broke out in the village in which he was living—that became the subject of Caton's third book, *Yemen Chronicle* (Hill & Wang, 2005). It explores issues of event, time, and memory in his field research and ethnographic writing, which he now addresses in more theoretical work that engages anthropologists, historians and philosophers. In between these two books on Yemen Caton fell under the spell of Hollywood cinema and wrote *Lawrence of Arabia: a Film's Anthropology* (University of California, 1999), a negative dialectical analysis of a film in the mode of the Frankfurt School.

When Caton returned to Yemen in 2001 for the first time in twenty years after his fieldwork on oral poetry, he was shocked to see how dire the water situation had become and wondered what he, a social anthropologist, could do about it. This represented a significant departure from his earlier interests and has required a good deal of re-education in the fields of environmentalism, political ecology, hydrology and science studies. In 2005-2006, with a grant from the Wenner Gren Foundation, Harvard University's Center for the Environment, and the American Institute for Yemeni Studies, Caton and a Yemeni colleague, Abdou Ali Othman, trained four Yemeni researches in anthropological field methods to join them in ethnographic research on water problems in the Sana'a Basin. Some of the results of that research are being edited for publication. Caton's ethnographic contribution had to do with international experts and their agencies, as these affect the circulation of knowledge about water use and policies stemming from them in countries like Yemen. He is currently collaborating with a colleague, anthropologist Ben Orlov (University of California, Davis), on an article reviewing anthropological work on problems of water use and sustainability and is beginning new fieldwork in the Gulf with another colleague, architect Nader Ardalan, on burgeoning cities and their impacts on the environment (including water sustainability).

#### **Scott Chelist**

#### **Humanities Teacher**

Scott Chelist has been teaching middle school for 18 years, both in St. Louis and in the greater Boston area. Since 2006, he has been teaching a 6th grade Humanities course called "The World and Water" at The Rivers School in Weston, MA. His course focuses on the various conflicts, opportunities and power water provides/creates.

#### **Richard Cronin**

#### Senior Associate, Southeast Asia, The Stimson Center

Dr. Richard P. Cronin is the director of the Southeast Asia program at Stimson. He works on transboundary and nontraditional security issues in Southeast Asia and the South China Sea, from a political economy perspective. Cronin joined Stimson in 2005 after a long career with the Congressional Research Service (CRS).

Cronin is the author of *Hydropower Dams on the Mekong: Old Dreams, New Dangers*, Asia Policy, July 2013 and is the lead co-author of *Mekong Turning Point: Shared River for a Shared Future* (Stimson, 2012), which focuses on the environmental, food security and regional stability impacts of mainstream dams being constructed on the Upper Mekong in China, and planned for the Lower Mekong by Cambodia, Laos, and Thailand.

Cronin has also taught comparative political economy of Asia at Johns Hopkins University and at Chuo University in Tokyo as a visiting professor, and has given short courses on the comparative economic development of East Asia for government officials and other professionals in Vietnam and Laos.

Cronin earned a B.S. in economics and history, and an M.A. in European history from the University of Houston. He holds a Ph.D. in modern South Asian history from Syracuse University. He served in Vietnam as a brigade-level intelligence officer with the US Army's 1st Infantry Division in 1965-66.

#### **Jatin Dua**

#### PhD Candidate in Cultural Anthropology, Duke University

Jatin Dua is a Ph.D. candidate in the Department of Cultural Anthropology at Duke University. His dissertation focuses on maritime piracy and attempts to regulate the western Indian Ocean by private actors, nation-states, and international bodies in a moment of post-Cold War, post-9/11 reconfiguration. He has conducted over eighteen months of ethnographic fieldwork with pirates, fishermen, merchants, seafarers, judges, lawyers, and others implicated in the world of piracy and counter-piracy in Kenya, Somalia, Djibouti, and the United Kingdom. His research has been supported by the ACLS/Mellon Dissertation Completion Fellowship, SSRC International Dissertation Research Fellowship, the Wenner-Gren Foundation, the Foreign Language and Area Studies (FLAS) Fellowships Program of the US Department of Education, and Duke University. He also holds an M.A. in International Law from the American University in Cairo.

#### **Mary Kay Smith Fawzi**

#### Assistant Professor, Harvard Medical School

Mary C. Smith Fawzi, Sc.D., is an Assistant Professor at Harvard Medical School in the Program in Infectious Disease and Social Change in the Department of Global Health and Social Medicine. Dr. Smith Fawzi is an epidemiologist trained at the Harvard School of Public Health with direct experience running NIH-funded research and training projects. She has international experience in study design and/or implementation in Tanzania, Iraq, Thailand, Peru, Haiti, and Kazakhstan. She has trained healthcare professionals in study design, statistical analysis, and proposal development at technical workshops funded by the Tropical Disease Research branch of the World Health Organization.

Dr. Fawzi has served as the Co-PI of a Fogarty International Center-funded training grant in rural Haiti entitled "Scale-up of Community-based HIV Prevention and Care," a research training program linked with the expansion of HIV services through support from the Global Fund to Fight AIDS, Tuberculosis, and Malaria. She has also served as the Co-PI of an NIH-funded research study entitled "Psychosocial intervention in HIV-affected children in Haiti" and has co-authored a number of program and policy-related manuscripts for the Joint Learning Initiative on Children and HIV/AIDS. Most recently, she has served as the primary instructor for a new course entitled "Epidemiologic Methods for Global Health" offered at Harvard School of Public Health and Harvard Medical School as part of the Global Health Effectiveness program.

#### **Jeff Griffths**

#### Director of USAID Innovation Laboratory for Nutrition – Africa

Jeffrey K. Griffiths, MD, MPH&TM, Director of USAID's Innovation Laboratory for Nutrition - Africa, has worked at the intersection of water, health and nutrition for 30 years. He is the immediate past Chair of the Drinking Water Committee of the US EPA's Science Advisory Board, and was a founding member of the interdisciplinary Water: Systems, Science and Society (WSSS) program at Tufts University. Current projects are based in Uganda, Ghana, Ethiopia, and Malawi. He has also worked in Haïti, Bangladesh, and Ecuador. He is a Professor of Public Health and of Medicine at Tufts University School of Medicine, and holds adjunct appointments at the Friedman School of Nutrition Science and Policy, in Civil and Environmental Engineering at the School of Engineering, and in Infectious Diseases and Global Health at the Cummings School of Veterinary Medicine.

By training he is a pediatrician, internist, and infectious diseases physician with expertise in infectious diseases and the influence of the environment on health. For many years he has been involved in US water policy and has thrice testified before the US Senate. Dr. Griffiths was educated at Harvard College, Albert Einstein College of Medicine, Tulane University School of Public Health and Tropical Medicine, Yale-New Haven Hospital, the Harvard School of Public Health, and Tufts Medical Center.

#### Carri Hulet

#### Senior Associate, The Consensus Building Institute

Carri Hulet is a mediator/facilitator and Senior Associate at The Consensus Building Institute. Carri has worked with various communities on complex public resource issues for nearly a decade. She has a Masters in City Planning from MIT and a BA from Tufts University. While at MIT, Carri worked on an ongoing research project to study the impact of role play simulations on coastal communities' climate adaptation efforts.

#### **Toby Jones**

#### Associate Professor of History, Rutgers University

Toby Jones is a historian of the modern Middle East. His interests are varied. Jones's scholarship focuses primarily on the political intersections between science, technology, the environment, knowledge production, and the state formation, war, and Islamism. Before joining the history department at Rutgers University, Jones taught at Swarthmore College. During the 2008-2009, he was a fellow at Princeton University's Oil, Energy and the Middle East project. From 2004 to early 2006, he worked as the political analyst of the Persian Gulf for the International Crisis Group where he wrote about political reform and sectarianism.

Jones is author of *Desert Kingdom: How Oil and Water Forged Modern Saudi Arabia*, (Harvard University Press, 2010). He is currently working on a new book project *America's Oil Wars*, also to be published by Harvard University Press. Jones has published articles in *The International Journal of Middle East Studies, Middle East Report, Foreign Affairs, Foreign Policy's* online magazine, the *Arab Reform Bulletin, Strategic Insights*, and the CTC Sentinel.

At Rutgers, Jones teaches courses on the Arab-Israeli Conflict, the modern Middle East, oil, the environment in the Middle East, and war and revolution in Iran and Iraq.

#### **Eunjee Lee**

#### Giorgio Ruffolo Postdoctoral Research Fellow in Sustainability Science, Harvard University

Eunjee Lee is a Giorgio Ruffolo Postdoctoral Research Fellow in the Sustainability Science Program at Harvard Kennedy School and is based at Harvard's Department of Organismic and Evolutionary Biology. She is exploring the sustainability of the hydrologic cycle in the Amazon and surrounding regions under changes in land-use and climate. Prior to joining Harvard, Eunjee received her Sc.D. in Atmospheric Sciences from the Massachusetts Institute of Technology (MIT) in 2011 and worked as a postdoctoral research associate at the MIT Center for Global Change Science. She also holds a Master's degree in Chemistry from Ohio State University, and a Bachelor's degree in Chemical Engineering from Seoul National University.

#### Fatima Mendikulova

#### Program Assistant, Carr Center for Human Rights Policy, Harvard Kennedy School

Fatima Mendikulova has a portfolio of extensive experiences in various fields, including but not limited to education, state service, diplomacy and social development. Currently, she is a Program Assistant at the Carr Center for Human Rights Policy, Harvard Kennedy School, researching water conflicts in the Ferghana Valley of Central Asia. Prior to moving to the United States, Fatima lived in New Delhi, India for five years, where she organized cultural and educational exchange programs between Kyrgyzstan and India. While in Kyrgyzstan, she founded and managed the Business Center at Osh State University of Kyrgyzstan. Besides her works in education, Fatima also worked closely with local communities in the Ferghana Valley as the chief specialist of Osh province government in Kyrgyzstan. She is the founder of two NGO's, "Center for Support of Women's Initiatives" and "Initiatives for Development," to help local communities increase their capacity and support for unemployed people. In 2007, she fundraised and organized Kyrgyzstan's first national convention to celebrate World

Water Day, promoting awareness on water scarcity and resource management. This event was widely covered in all media channels throughout Kyrgyzstan, and the tradition remained until today.

She holds masters degrees in Economics and Law, including a one-year intensive program in Free Market Economy at London School of Economics. She also studied Management at Central European University in Budapest, Hungary and Jagiel-Ionian University in Krakow, Poland.

#### **Glaudine Mtshali**

#### Executive Director, Harvard Global Health Institute

Dr. Mtshali is a physician and diplomat with degrees in medicine, law, and business administration and has nearly four decades of experience in multidisciplinary settings where she had demonstrated a consistent commitment to the equality of human rights among individuals. Her focus has included access to health care improvement in resource-poor countries, national health program and policy development, international health partnership building, and promoting health and human rights at international levels. Dr. Mtshali practiced medicine for ten years in Soweto, Johannesburg, where she was also a Deputy Superintendent at Baragwanath Hospital. At the abolition of apartheid, she was appointed South Africa's Chief Director for National Health Programs in the National Department of Health, and led the transition of a wide range of health policies and programs from an apartheid-based to a multi-racial, holistic, primary health care-oriented focus. She has served as South Africa's Ambassador to the United Nations Office and International Organizations in Geneva, South Africa's Health Envoy to the governments of the USA, Canada, and Brazil, as a Consul-General based in Los Angeles, and as Director of Clinical Risk Management at the Harvard Community Health Plan in Boston. She was a Visiting Researcher in 1987-1988 at the Harvard Law School focusing on human rights. Dr. Mtshali received a medical degree (MBBCh 1975) and a law degree (LLB 1982) from the University of the Witwatersrand in Johannesburg, and an MBA (1986) from the University of Massachusetts at Amherst.

#### **Sharmila Murthy**

#### Assistant Professor, Suffolk University Law School

Sharmila L. Murthy recently joined the faculty of Suffolk University Law School as an Assistant Professor, where she will be teaching property and international environmental law. Her research focuses on questions at the intersection of human rights, poverty, and the environment. She is particularly interested in examining legal and policy barriers to equitable water access and sustainable water management. She has written on the meaning of the human right to water and sanitation under international law and the controversy over privatization; on the relationship between land security and water access in the slums of Mumbai, India; on the use of carbon markets to fund clean water projects; on the right to water in the Negev in Israel; on Iraq's constitutional mandate to ensure the just distribution of water; and more broadly on questions of water governance.

Professor Murthy was previously at the Harvard Kennedy School of Government, where she co-led the Human Rights to Water and Sanitation Program as a Fellow with the Carr Center for Human Rights Policy. As a Fellow with the Sustainability Science Program at the Mossavar-Rahmani Center for Business and Government, she also served as the Lead Investigator for the Water Sector in an interdisciplinary, cross-sectoral research project on "Innovation and Access to Technologies for Sustainable Development." Professor Murthy has also taught at Harvard executive education programs and at the Water Diplomacy Workshop organized by MIT and Tufts.

Professor Murthy received her JD from Harvard Law School, her MPA from Harvard Kennedy School, and BS in Natural Resources from Cornell University. She currently serves as the Co-Chair of the Steering Committee of the American Constitution Society Boston Lawyer Chapter.

#### Peter P. Rogers

#### Gordon McKay Research Professor of Environmental Engineering, Harvard University

Peter Rogers served as Gordon McKay Professor of Environmental Engineering at Harvard University, since 1974 and became emeritus in 2012. He was a member of the Center for Population Studies, Harvard University, from 1966 to 1996; and member of the Harvard University Center for the Environment (HUCE), since 2000. He is currently a Gordon McKay Research Professor at Harvard School of Engineering and Applied Sciences. Professor Rogers has a wide range of research interests, including the consequences of population on natural resources development; improved methods for managing natural resources and the environment; the development of robust indices of environmental quality and sustainable development; conflict resolution in international river basins; the impacts of global change on water resources; and transportation and environment with an emphasis on Asian cities. He has carried out extensive field and model studies on population, water and energy resources, and environmental problems in Costa Rica, Pakistan, India, China, the Philippines, Bangladesh, and to a lesser extent, in 25 other countries. He is co-author with Susan Leal of a book entitled *Running Out of Water*, published by Palgrave/Macmillan, 2010.

Professor Rogers is Senior Advisor to the Global Water Partnership; recipient of Guggenheim, Twentieth Century, Wenner-Gren, and Maass-White Fellowships, and the Warren A. Hall Medal of the Universities Council on Water Resources (UCOWR); and member of the American Society of Civil Engineers (ASCE). He received the 2010 Julian Hinds Award from the Environmental Water Resources Institute (EWRI) of the American Society of Civil Engineers.

#### Gretchen W. Roorbach

#### Science Teacher, Concord Academy

Gretchen Roorbach teaches biology and advanced environment science at Concord Academy, a secondary school in Concord, Massachusetts. She designed the course, "Water: Conflicts at Home and Abroad," as an elective for juniors and seniors. Prior to joining the faculty at Concord, she taught science at other schools, worked for eight years as a water resources planner at the Massachusetts Water Resources Authority, where she principally focused on protecting off-line water supplies, worked for 11 years as an environmental consultant, and served as a lobbyist. She has an M.S. degree from Tufts University in Urban and Environmental Planning and Civil Engineering and Public Health and a B.E.D. in Environmental Design and a B.A. in Environmental Conservation from the University of Colorado. As a Fulbright Scholar, she studied how the European Union's environmental policies affected Denmark's water resources protection.

#### **Mark Williams**

#### Fellow, Human Right to Water and Sanitation Program, Harvard Kennedy School

Mark Williams joined the Carr Center for Human Rights as a Fellow in 2011. He received his J.D. from the University of California at Hastings in 1990, and has lived and practiced law internationally and in the United States for over 20 years.

Mark's research and travel focuses on the challenges of improving global access to clean drinking water and sanitation. He has traveled extensively, including extended trips to Ecuador to study the "rights of nature" and "right to water" constitutional amendments, to Haiti to learn about small-scale water projects and to Israel to research the water issues involving the Bedouins living in the Negev. Last summer, he was an informal delegate at the United Nations Global Development forum in Rio de Janerio ("Rio + 20") for the UN Special Rapporteur on the Human Right to Water and Sanitation. Last winter, he spent three months in Northern Ghana working on and studying small-scale household water treatment systems. He has co-authored several articles on water related issues.

# **About the Sponsors**

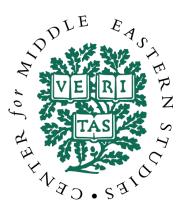


HARVARD UNIVERSITY Established on July 1, 1997, the Harvard University Asia Center was founded as a university-wide inter-faculty initiative with an underlying mission to engage people across disciplines and regions. The Center sponsors a number of seminars, conferences, lectures, and programs during the academic year including the annual Tsai Lecture, the Modern Asia, Southeast Asia, and Islam in Asia seminar series, the Ezra F. Vogel Distinguished Visitors Program, and Asia Vision 21 conference. In addition to

its award-winning Publications Program, the Center issues a weekly bulletin featuring Asia-related events at Harvard and in the greater Boston area as well as an online newsletter. The Asia Center funds student research and study in Asia as well as the activities of Asia-focused student organizations. In addition, the Asia Center is designated a Title VI National Resource Center for East Asia by the U.S. Department of Education.

The Outreach Center at the Center for Middle Eastern Studies draws on the Harvard community to promote a critical understanding of the diversity of the Middle East region for educators and the general public through professional development programs, online resources, and public events.

The Outreach Center fulfills the Center for Middle Eastern Studies' mandate as a U.S. Department of Education National Resource Center to serve as a conduit for scholarship to local and regional primary and secondary school instructors and to the general public. The Outreach Center accomplishes this mission by offering webinars, workshops, public events, access to our resource lending library, and talks to schools and teachers in the Boston region and throughout New England.





The Committee on African Studies at Harvard, a National Resource Center for African Studies, fosters the creation and dissemination of knowledge about Africa and African perspectives across the University and beyond into the community. The Committee offers a wide range of outreach activities and resources for educators at all levels to help them consider how they can infuse African Studies into teaching and learning objectives. Visit our website to see online lesson planning tools, recommended resource lists, events geared towards area educators (both in person and recorded event archives), and to learn how to let us know about which African Studies topics you'd like to see us develop resources for in the future!



Founded in 1994, Harvard's David Rockefeller Center for Latin American Studies (DRCLAS) works to increase knowledge of the cultures, economies, histories, environment, and contemporary affairs of past and present Latin America. DRCLAS also has offices in Santiago, Chile; São Paulo, Brazil; and Mexico City.

# **About the Sponsors**

The Davis Center for Russian and Eurasian Studies is Harvard University's center for interdisciplinary research and study of Russia and its neighbors. We have more than 300 affiliates working in disciplines ranging from anthropology to sociology, and whose regional interests span virtually all of Russia, Eastern Europe, and Central Asia. Our goal is to foster these scholars' development and to stimulate interdisciplinary thinking by creating opportunities for them to meet, exchange views, and collaborate.

One of the cornerstones of our mission is to develop and deliver high quality resources and programming that will educate the general public (and specifically K-12 teachers and students) about the history, culture, and current events of Russia and Eurasia. We do



this by developing and executing high-quality events and programming (including workshops for teachers, in-classroom lectures, cultural events and webinars) as well as developing, disseminating and helping teachers make use of curricular, digital and material resources. Please be in touch with us if we can help you bring this rich and vibrant region into your classroom teaching.



The Harvard Global Health Institute (HGHI) is a cross-university Institute, which aims to build and strengthen an emerging field of global health. HGHI works to develop an educational platform

that reframes world health issues within a broader context and establishes a conceptual foundation to guide the design of new curricula. Our educational efforts extend beyond new courses in global health to initiatives that support the integration of a global health perspective into learning opportunities across the university and beyond. HGHI facilitates interdisciplinary collaboration to fill high-priority knowledge gaps, pilot new models for experiential learning, incentivize innovative pedagogy, and produce 'public goods' for global health teaching and learning. We leverage the intellectual capacity and convening power of Harvard University to form collaborative frameworks and principled partnerships that tackle the most intractable challenges through informed action -- whether it be agenda-setting, decision-making, or formulation of policy. HGHI incubates innovative ideas for social change, incentivizes attention on the most relevant global health challenges through support of junior faculty and doctoral students, and invests in emerging leaders - who can serve as change agents - through cross-cutting initiatives that engage scholars and leaders from all parts of the world. Our aspiration is to equip future generations - inclusive of all professions - with the knowledge, skills and values necessary for serving as agents of change, recognizing that real progress will require a transformation in education across disciplines, and integrated global action.



The Prince Alwaleed Bin Talal Islamic Studies Program At Harvard University

The Alwaleed Islamic Studies Program at Harvard University is dedicated to furthering the scholarly study of Islam and the Muslim world in a broadly interdisciplinary context and offers incomparable resources in its world-class faculty, extensive and multiple libraries, on-line resources, museums, area studies centers and research initiatives.

Through its College, graduate, and professional Schools, Harvard offers undergraduate and graduate coursework in arts and literature, art and architecture, anthropology and sociology, comparative literature, economics, environmental and developmental issues, geography, government and political science, history and the history of science, international relations, law, medieval studies, music, philosophy and the study of religion, and women, gender and sexuality studies. Area studies' centers and programs provide outstanding programming and resources on Muslim cultures and societies from Europe and the West to sub-Saharan Africa and South Asia.

Central to its academic and scholarly objectives, the Alwaleed Program seeks to bridge gaps in understanding between the Muslim and non-Muslim worlds and to ensure that Harvard's capacity in Islamic Studies fully represents the depth of Islam's rich historical and geographically diverse cultures.

# **About the Sponsors**

The Edwin O. Reischauer Institute of Japanese Studies at Harvard University supports research on Japan and provides a forum for related academic activities and the exchange of ideas. It seeks to stimulate scholarly and public interest in Japan and Japanese studies at Harvard and around the world.



REISCHAUER INSTITUTE
OF JAPANESE STUDIES

HARVARD UNIVERSITY

First established in 1973 as the Japan Institute, the Reischauer Institute has a university-wide mandate to develop and coordinate activities concerning Japan among the various faculties at Harvard through the advancement of instruction and research in the social sciences and humanities. Moreover, the Reischauer Institute seeks to expand and coordinate Japan-related connections with other Harvard departments, centers and research institutes, and to respond to scholarly and public interest in Japan from outside Harvard through outreach activities such as lectures, conferences, symposia, exhibitions and films.

### **Upcoming Programming for K-12 Educators**



A partnership of international study centers on Harvard's campus, the Global Literature Online Book Group for K-12 educators will explore literature from different global regions including: Africa, Asia, Latin America, Russia/Eurasia, the Middle East, and the Muslim world. Webinar participants will have the opportunity to discuss works of global literature with scholars and authors through online conversations throughout the 2013-14 school year. To view recordings from last year's webinars and this year's book lineup, visit

http://cmes.hmdc.harvard.edu/node/3194.

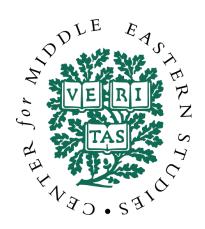
<sup>\*</sup>Special thanks to Soa Andrian, Deirdre Buckley and Oscar Xia, Harvard Global Health Institute Program Development interns and Krystina Friedlander of the Alwaleed Islamic Studies Program, for their help in the preparation and logistics for this workshop.

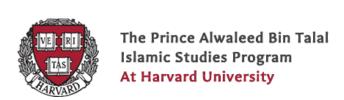
# Notes

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The collaborative is co-sponsored by the Asia Center, the Center for Middle Eastern Studies, the Committee on African Studies, the David Rockefeller Center for Latin American Studies, the Davis Center for Russian and Eurasian Studies, the Harvard Global Health Institute, the Prince Alwaleed Bin Talal Islamic Studies Program, the Reischauer Institute of Japanese Studies, all of Harvard University.