The GSAS Bulletin

HARVARD GRADUATE SCHOOL OF ARTS AND SCIENCES
MARCH 2015 VOLUME XLIV, No. 6

“"The Night is Mother of the Day, The Winter of the Spring””—John Greenleaf Whittier

Your Guide to Commencement

IMPORTANT DEADLINES
Regalia orders (PhD candidates): April 24, 2015
Regalia orders (Master’s candidates): April 9, 2015
Last day to apply for the May 2015 degree: March 27, 2015
Order your tickets: April 1–24, 2015
Pick up your tickets: May 22, 26–28, 2015

EVENTS
The Day Before
Wednesday, May 27, 2015
4:00 p.m. to 6:00 p.m.
Dudley House Masters Reception,
Main Dining Room, Dudley House.

On the Day
Thursday, May 28, 2015
6:45 a.m.
GSAS Breakfast with the Deans,
Gropius Lawns, behind Perkins Hall, 35 Oxford Street, for all degree candidates and their guests.
7:15 a.m.
The GSAS Diploma Awarding Ceremony in
Sanders Theatre begins immediately following the Morning Exercises.
11:30 a.m.–3:00 p.m.
Champagne Reception and Luncheon in Sanders Theatre begins immediately following the Morning Exercises.
11:30 a.m. to 3:00 p.m.
Champagne Reception and Luncheon on the Gropius Lawns, behind Perkins Hall, 35 Oxford Street, for all degree recipients and their guests.
2:05 p.m.
Afternoon Exercises begin in Harvard Yard.
4:00 p.m.
PhD Hooding Ceremony for Harvard School of Engineering and Applied Sciences
5:15 p.m.
Graduate Hooding Ceremony for Division of Medical Sciences

The Rise of Humanity

STUDENT BRIDGET ALEX CONSIDERS OUR EVOLUTION AS HUMANS AND AS SCHOLARS. BY LUSIA ZAITSEVA

Bridget Alex was named one of the 2015 Harvard Horizons Scholars. Read the announcement on page 6.

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MUSIC
Laurie Anderson visits Harvard
Anderson delivers Elson Lecture. p.2

PROFESSIONAL DEVELOPMENT
Harvard Horizons Scholars announced
Scholars will deliver talks at May 6 symposium. p.6

SCHOLARLY LIFE
ABLConnect
How platform advances active learning. p.7

DON’T MISS
March at Dudley
View a sampling of winter activities for grad students. p.5

"The Night is Mother of the Day, The Winter of the Spring”—John Greenleaf Whittier
The Flight: A Performance by Nandipha Mntambo

Thursday, February 26, 2015, 5:00 p.m. to 6:00 p.m. in the Carpenter Center for the Visual Arts, Room B-04, 24 Quincy Street, Cambridge

Nandipha Mntambo, Johannesburg-based interdisciplinary artist, will present an original piece of performance art. Inspired by Spanish bullfights and Miguel Torga’s 2013 book Miura, the work explores concepts of empathy, violence, and spectatorship while challenging the binary between human and animal.

Touched by the Mother: A Lecture by Huey Copeland

Thursday, March 26, 2015, 5:00 p.m. to 6:00 p.m. in the Carpenter Center for the Visual Arts, Room B-04, 24 Quincy Street, Cambridge

Huey Copeland, associate professor of art history at Northwestern University, will discuss how feminist discourses since the 1970s have at once hampered and enabled critical queerings of maleness and masculinity within contemporary African American art. His talk will examine the ways in which the black maternal presence has shaped both artistic and interpretive practices.

Both events are free and open to the public. For more information, visit blackhistoryarthistory.org or e-mail blackhistoryarthistory@gmail.com.

These events are part of the Black History/Art History Lecture and Performance Series, generously sponsored by the Provostial Fund for the Arts and Humanities, Hutchins Center for African & African American Research, Center for African Studies, Harvard Art Museums, Department of History of Art and Architecture, Department of African and African American Studies, and Program in American Studies.
Work to be done

As Alex tells it, when she first came to Harvard she couldn’t imagine making a contribution to such a difficult question. “I thought it was almost too big and exciting for a beginning graduate student like me to tackle,” she admits. However, due to ever-evolving scientific techniques for measuring everything from microscopic plant remains to radiocarbon concentrations, and the relatively primitive scientific tools available to the first waves of scientists who studied the Neanderthal/modern human connection in the nineteenth century, much of the data associated with the Neanderthal fossil record have proven unreliable.

“Radiocarbon dating tools were not yet available and many samples were likely contaminated, so there’s still a lot of work to be done,” Alex says. “Now, we can measure smaller specimens, be better at removing contamination, and are more thoughtful when it comes to choosing meaningful items to test.”

Alex’s current project focuses on a “brief” window of about 5,000 years approximately 39,000 years ago, when modern humans and Neanderthals coexisted in what is today known as the Balkans. “Something happened to decimate their numbers,” Alex says, and “when they repopulated, there were many more modern humans than Neanderthals.” Alex’s recent findings, which document this sudden decrease in the Neanderthal and modern human populations, coincide with a major geologic event: the Campanian Ignimbrite, or CI, eruption, in Southern Italy.

While there are many theories of why modern humans won out over the Neanderthals, so far Alex’s personal bet is on projectile weapons. “Before projectiles came along, they had to fight each other and hunt prey at close range.” From that perspective, modern humans’ innovation would have given them a clear leg-up. “Projectile weapons would have been a huge advantage over Neanderthals: modern humans could outcompete and kill them,” Alex explains. That said, “It’s difficult to demonstrate that particular stone tools could or could not have been used as projectiles. It’s a great idea, but it still needs to be tested more.”

A long and winding road

Alex’s research takes her to places like Serbia, Poland, and Israel in pursuit of evidence from this pivotal juncture in the history of human evolution. But while she may be single minded now, Alex confesses that she wasn’t as certain of her path as an undergraduate. Although in hindsight her winding path to human evolutionary biology has a certain logic to it, taking her through chemistry, earth sciences, anthropology and back again, she insists she had no idea where her interests would eventually take her. “I kept studying what attracted me. It looked like I had a lot of foresight but I didn’t at all,” she says, laughing.

Much like fieldwork, the decisive moment in Alex’s academic career happened outside of the classroom, in an Internet café in Barcelona during her junior semester abroad. As Alex tells it, she was reading a New York Times article that described how scientists used nuclear reactors to determine the composition of ancient pottery and ascertain based on clay composition whether the pottery had been traded or not. This intersection of anthropology and hard sciences excited Alex greatly. “I saw that and said, ‘wow, that’s what I should do!’” With the support of her anthropology advisor at Dartmouth, Professor Deborah Nichols, Alex undertook a senior thesis to analyze the elemental composition of Early Formative pottery from the Yotihuacan Valley in Mexico.

Helping others find their way

The important role that mentorship played for Alex as an undergraduate trying to find her way drove her to find opportunities to mentor younger students. “I like people at the stage when they’re trying to decide what to do with their lives, probably because it was such a hard decision for me,” she says.

“That’s why she jumped at the chance to apply for a resident tutor position in one of Harvard’s undergraduate houses. “As soon as I knew what it was, I knew I would love it.” She credits Stephanie and Rakesh Khurana, Masters of Cabot House, with creating a welcoming and warm environment that she, along with her fellow resident tutors and the undergraduates they advise, is happy to call home. “We have such a good community,” she says. “The Khuranas make it a home, a place the students want to come home to.”

After a hiatus during the 2013–2014 school year when she traveled to Israel as a Fulbright Scholar, Alex is now serving her second year as a resident tutor. The role brings much-needed balance to her life as a graduate student. “I can only do my research for so many hours a day before I need to talk to people,” Alex says with a laugh. It also gives her a different perspective on the undergraduates she teaches. “I’m always impressed by the caliber of discussion that goes on in the dining halls,” she says, while in the classroom it’s sometimes hard to gauge how much they’re learning.

That said, it’s hard for so many modern-day humans to live up to the accomplishments of our forerunners 40,000 years ago. “Through my mentoring I’m often impressed by Harvard undergraduates,” Alex says, “but more often I’m impressed by the accomplishments of humans 40,000 years ago. I doubt many Harvard students could take down a mammoth in Ice Age Europe or make such exquisite cave paintings.”

The Allure of Collecting Arms and Armor

MARCH AT THE PEABODY MUSEUM OF ARCHAEOLOGY & ETHNOLOGY

Thursday, March 26, 2015, at 6:00 p.m.

Geological Lecture hall, 24 Oxford Street

Donald J. LaRocca, Curator, Department of Arms and Armor, the Metropolitan Museum of Art

From dynastic armories and curiosity cabinets to Gothic Revival castles, private collections, and modern museums, armor and weapons have been methodically collected, studied, and preserved for their artistic and historical importance, beginning in the 16th century and continuing to the present day. This lecture will survey that legacy, particularly as it relates to the genesis of the major collections of arms and armor in leading European and American museums today, concluding with the growth and development of the Department of Arms and Armor in the Metropolitan Museum of Art over the past century.

Free and open to the public with free event parking at 52 Oxford Street Garage.

Arts of War: Artistry in Weapons across Cultures, an exhibition at the Peabody Museum of Archaeology & Ethnology, will be open following the lecture until 9:00 p.m.

Armory of Henri II, King of France, France (Paris), ca. 1500-55. Steel, copper alloy, gold, silver, textile.

The Metropolitan Museum of Art, Harris Brisbane Dick Fund, 1939 (39.114-17)

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March Workshops

❖ Attending to Attention: Strategies for Focus and Concentration
Monday, March 2
3:00 p.m. to 4:30 p.m.
Develop strategies to manage difficulties with attention.
Register online at bsc.harvard.edu.

❖ Dissertation Writing Workshop
Wednesday, March 4
2:00 p.m. to 3:30 p.m.
Consider how to orient to the nature and scope of your inquiry, how to write when feeling overwhelmed, lost, daunted, or discouraged, and how to manage time, anxiety, energy, and tasks.
Register online at bsc.harvard.edu.

❖ “Huh?!” Coping with Confusion in Math/Science
Wednesday, March 4
4:00 p.m. to 5:00 p.m.
Confusion is a big part of math/science problem solving, even for the smartest thinkers. What does cognitive science tell us about the experience of confusion (“aarrgh!”) and what specific strategies are there for confusion management (“ahha!”)?
Register online at bsc.harvard.edu.

❖ Speaking Up in Class
Friday, March 27
2:00 p.m. to 3:30 p.m.
Develop strategies to increase self-confidence and manage anxiety about speaking in academic settings.
Register online at bsc.harvard.edu.

Harvard Art Museums
March 2015


❖ Mark Rothko’s Harvard Murals:
Terry Winters in Conversation with Carol Mancusi-Ungaro
Thursday, March 12, 2015, 6:00 p.m. to 7:30 p.m., Harvard Art Museums, Menschel Hall, 32 Quincy Street
Artist Terry Winters and Carol Mancusi-Ungaro, director of the Harvard Art Museums’ Center for the Technical Study of Modern Art, consider the proposition presented in the special exhibition, Mark Rothko’s Harvard Murals. Their discussion will focus on the challenges posed by the use of this non-invasive color restoration tool to our understanding of both conservation and artistic practice. Free admission; seating is first come, first served. Please enter the museums via the Broadway Street entrance.

Meet Noted Science Writer Nicholas Carr

GSAS students are invited to attend a lunch with Nicholas Carr, AM ’84, during his visit to Harvard’s Radcliffe Institute for Advanced Studies. The event takes place on Tuesday, March 3, 2015, at 12:30 p.m. in Room 112 in the Knafel Center at the Radcliffe Institute, located in Radcliffe Yard, 10 Garden Street. The lunch will provide an opportunity for students to have a casual discussion with Carr, a leading public thinker on technology and culture, about his writing and career-life balance. To RSVP, visit hvrd.me/iWeEF.

Carr is on campus to present a lecture about navigation and wayfinding in the digital age. His talk, “The World Is Not the Screen: How Computers Shape Our Sense of Place,” takes place at 5:00 p.m. on March 3, in the Sheer Room of Fay House at the Radcliffe Institute. In the talk, Carr will discuss the automation of navigation and its personal consequences.

Carr’s most recent book, The Glass Cage: Automation and Us, examines the personal and social consequences of our ever-growing dependency on computers. His previous work, The Shallows: What the Internet Is Doing to Our Brains, was a 2011 Pulitzer Prize finalist and a New York Times bestseller. Carr holds a BA from Dartmouth College and an AM in English and American literature and language from Harvard.
Don’t Miss!

OUR DUDLEY HOUSE PICKS OF THE MONTH. FOR MORE EVENTS, OUTINGS, AND GATHERINGS, GO TO WWW.GSAS.HARVARD.EDU/DUDLEYTHISMONTH.

Senior Common Room Dinner
Monday, March 2: Reception 5:30 p.m., Dinner 6:00 p.m., in the Dudley House Common Room. Join us for dinner and a conversation with an expert on South Korea’s democracy movement, Paul Y. Chang, assistant professor of sociology.
◆ For more information, e-mail Kevin Kang at hyeokbweonkang@g.harvard.edu.

Dudley Spring Swing
Saturday, March 7, 8:30 p.m., Dudley House Main Dining Room. Enjoy a classy evening of live jazz music, socializing, and dancing at Dudley House’s second formal of the year, the Spring Swing. Join us for the free swing lesson at 8:30 p.m., and then at 9:30 p.m., cut up the dance floor or mingle with friends to the sounds of the Dudley House Jazz Band. Tickets on sale for $10 at the Dudley House Office or $15 at the door (if any remain). Ticket price includes hors d’oeuvres, dessert, and drinks. Open to Dudley House members and their guests. Proper ID required for alcohol.
◆ E-mail dudley.social@gmail.com for more information.

Fireside Chat
Wednesday, March 11, 5:30 p.m. to 6:30 p.m., in the Dudley House Fireside Room. A conversation with Sara M. Watson, a fellow at the Berkman Center for Internet and Society.
◆ For more information, e-mail Justin D. Stern at justindstern@gmail.com.

Dudley Jazz Jam Sessions, Spring 2015 Series
Wednesdays, February 25, March 25, and April 29, 8:00 p.m. to 10:00 p.m., in the Dudley House Common Room. Are you a graduate student at Harvard? Do you play an instrument? Do you like jazz? Do you improvise? Do you want to play and perform with friends and colleagues? Come enjoy the jam and get to know the vibrant Dudley Jazz Program! We’ll provide the refreshments and the house band, you bring your instruments and your friends, and come hang out! All levels, singers, and instruments welcome.
◆ For more information, visit dudley.harvard.edu/dudley-jazz-band.

Blood Drive
Tuesday, March 31, 10:00 a.m. to 2:00 p.m., in the Dudley House Graduate Student Lounge. You are somebody’s type! Sign up for a blood donation and save up to three lives at Mount Auburn Hospital in Cambridge. We will provide plenty of juice and snacks to reward your generosity!
◆ Please note that you need to pre-register before March 28 by e-mailing dudleypublicservice@gmail.com.

Dudley House Your Graduate Student Center since 1991
Lehman Hall, Harvard Yard ➤ www.dudley.harvard.edu ➤ 617-495-2255
House Masters James M. Hogle and Doreen M. Hogle ➤ House Administrator Susan Zawalich
Eight students named as 2015 Horizons Scholars, selected to present their research at the third-annual Harvard Horizons Symposium in May

GSAS is pleased to announce the 2015 Horizons Scholars, eight PhD students whose ideas, innovations, and insights have the potential to reshape their disciplines. These students have been selected by the Harvard Horizons Initiative as representatives of the high aspirations and the extraordinary achievements of Harvard University’s PhD programs. They form the third class of the Society of Horizons Scholars, a fellowship cohort that will offer opportunities for long-lasting community, mentorship, and professional and academic growth. Over the next month, these scholars will receive in-depth mentoring on the art of effective presentation, preparing them for a campus-wide symposium on May 6, 2015 from 4:15 p.m. to 6:00 p.m. in Sanders Theatre (reception to follow).

HARVARD HORIZONS

› Shane Campbell-Staton, G6, Organismic and Evolutionary Biology
Cold-blooded insights into climate change adaptation

› Widusha Illeperuma, G6, Materials Science and Mechanical Engineering, SEAS
Engineering with soft materials: Non-traditional applications

› Elisabeth Newton, G5, Astronomy
Shedding light on cool dwarf stars: Fundamental observations of our nearest stellar neighbors

› Prachi Sanghavi, G6, Health Policy
Is doing more, doing better? Basic versus advanced life support ambulances for medical emergencies

Job Talk

PERIODIC UPDATES FROM THE OFFICE OF CAREER SERVICES ON CAREERS, PROFESSIONAL DEVELOPMENT, AND LIFE AFTER GRADUATE SCHOOL

› Making the Most of Your Postdoc
Monday, March 9, 3:00 p.m. to 4:30 p.m., Longwood Campus, Building C, Cannon Room
Postdocs are faced with many obstacles in their pursuit of being an independent investigator, none more frustrating than getting the most out of their training. This seminar lays out strategies for choosing the right research environment to thrive as a postdoc as well as planning, and executing, a successful postdoc tenure. Designed for current and future postdocs, the session will cover what you need know, and do, to efficiently advance in your early research career. GSAS students, please register through Crimson Careers.

› Job Search Check-In
Friday, March 13, 10:00 a.m. to 11:30 a.m., OCS Conference Room
If you are job searching, then you know it continues to be a tough job market and that staying motivated and proactive can be challenging. This group can help you stay focused, connected, and goal-oriented. Joining this monthly meeting enables you to get together with other GSAS students searching for nonacademic jobs to share tips and advice wherever you are in your search. Even as fall recruiting has ended for this academic year, many organizations fill positions on a “just in time basis,” especially during spring semester. To register, e-mail Heather Law at hwlaw@fas.harvard.edu with your name, G-level, and department.

› Beyond the Bench: Career Options for Biomedical PhDs
Thursday, March 26, 3:00 p.m. to 5:00 p.m., Longwood Campus, Armenise Building, D Amphitheater
Do you love science, but wish to contribute to the scientific enterprise outside of the lab? Learn from several science PhDs about their career paths beyond the bench. Please register through Crimson Careers.

› SAVE THE DATE!
Take Control of Your Career—
for Scientists and Engineers
Thursday, April 2, 3:00 p.m. to 5:00 p.m., check the OCS website for location information
Take Control of Your Career—
for Humanists and Social Scientists
Tuesday, April 14, 6:00 p.m. to 8:00 p.m., Lamont Library, Forum Room
Leveraging Your PhD in the Work Place
Friday, April 24, 4:00 p.m. to 7:30 p.m., Dudley House Common Room
Those Who Can Do, Teach

HOW ABLCONNECT PROVIDES RESOURCES TO ENGAGE STUDENTS IN ACTIVITY-BASED LEARNING BY LUSIA ZAITSEVA

WHEN DUSCIF TINGLEY TAUGHT THE DEPARTMENT OF Government class “International Conflict and Cooperation,” his students learned firsthand the role that partisan politics play in shaping the American response to international crises.

For one lesson, he briefed the students on a natural disaster in Bangladesh and broke them up into groups of representatives for all of the branches of government and agencies that come together to coordinate humanitarian action abroad. “It was pretty funny,” Tingley, the Paul Sack Associate Professor of Political Economy, says. “The Democrats and Republicans played their roles to a tee, refusing to talk to one another.” Eventually, though, they did what Democrats and Republicans often can’t manage to do: “They came together and reached a consensus.”

Tingley came to active learning as a high-school math teacher at the Darrow School in Upstate New York. “I realized pretty early that I could increase motivation and engagement by having an active learning component for something that for some people is otherwise a somewhat boring subject,” he remembers.

As Tingley contemplates, there’s nothing that makes high-school math especially boring. anything can be boring if students are not given a chance to find their personal stake in the material. And on the flip-side, anything can be interesting if they are. “I had students play rock, paper, scissors against each other, and then we learned how to use basic algebra to analyze that game,” he says. “When you can use math to analyze a game, it becomes much more engaging.”

Soon after Tingley came to Harvard in 2010, he focused his efforts on finding a method that would enable teachers to bring active learning into their classrooms more easily and share their creative approaches to a wide range of subjects. “Everyone has great teaching ideas, but we’re all busy and spread across different departments,” he explains. “The idea was to collect all of these ideas together in one place so that people who want to use these techniques don’t always have to reinvent the wheel.”

At the inception of what would later become ABLConnect, a website that aims to help university-level instructors apply active learning techniques in the classroom, Tingley spoke to faculty and graduate students to learn more about their innovative teaching tactics. “I asked myself, why and the only one hearing these great ideas?” With the support of the Institute for Quantitative Social Science, and later the Harvard Initiative on Teaching and Learning and the Derek Bok Center for Teaching and Learning, he launched ABLConnect

Together with Leslie Finger, a graduate student in the Department of Government, Tingley expanded ABLConnect to a platform that today includes contributions from institutions like MIT, Yale, MassBay Community College, and Cornell and is home to over three hundred lesson plan ideas. “As this broad range of disciplines demonstrates, Tingley and Finger are working to make ABLConnect maximally useful to the Harvard community and beyond. “We hope to make ABLConnect as crosscutting as possible,” Finger says.

ABLConnect is just one example of the efforts to encourage active and activity-based learning at Harvard that date back several decades. According to Terry Aladjem, director of special initiatives at the Bok Center, “The Bok Center has actively supported these kinds of initiatives across the university community for years.”

Virginia Mauzer, associate director at the Bok Center, says that while the common perception among faculty and teaching fellows is that active learning is good because it wakes students up and gets them excited, in reality there’s more to it than that. “There’s often a very sound pedagogical reason for doing what you’re doing—it’s not just that it’s fun.”

As Aladjem sees it, ABLConnect is part of a changing tide in a university-wide attitude toward innovative teaching methods, a change of which Tingley was at the forefront and that received a substantial boost from Dean Michael D. Smith of the Faculty of Arts and Sciences in 2011.

Today, word of mouth is one of the strongest forces promoting an interest in active learning. “When I first started teaching, it would never have occurred to me to do something else besides lecturing,” Aladjem recalls. “What’s happening now is that students are demanding to do something different—people want to try new teaching methods because their peers are trying them, too.”

Inspections of Power: Spaces, Institutions, and Crisis

This conference uncovers the complex ways in which space has been imagined as well as actualized by the design disciplines, institutional histories, the people who encounter such spaces are destined. An interdisciplinary group of urbanists, organizational scholars, architects, anthropologists and historians will speak to the communicative potential, organizational translation, and real-world impact of buildings, landscapes, and urban environments.

Cambridge Talks is the annual spring conference organized by the Bok Center for Teaching and Learning, the Derek Bok Center for Social Science, and the Urban Planning Program at Harvard University, dedicated to the exploration of interdisciplinary themes that engage issues of space. In addition to convening a group of senior scholars both interdisciplinary and international in orientation, the conference gives PhD students a chance to present and discuss their work in a formal context. The two-day event is free and open to the public. For more information, visit cambridgetalks2015.wordpress.com.
Get Out
EXPLORATIONS AND ADVENTURES ON AND OFF CAMPUS

And the bunny goes to...
Embrace the bizarre at the Boston Underground Film Festival, an annual cinematic screening and competition celebrating the goriest of the gory, weirdest of the weird, and creepiest of the creepy in short and feature-length film. Winners are awarded with the Bacchus, a demonic bunny trophy with red eyes and fangs that vibrates when held. This year’s event runs March 25 to 29 at the Brattle Theatre. Get a preview at bostonunderground.org.

Lead the Way
NOMINATE A GSAS/SEAS STUDENT TO BE A 2015 COMMENCEMENT MARSHAL
Eight outstanding graduate students from GSAS/SEAS will lead their class into Harvard Yard for Commencement. Do you know a student who deserves to be one of the eight?

Make a nomination at www.gsc.fas.harvard.edu!
Degree recipients from November, March, and May are all eligible for selection. Nominations may be submitted by faculty, department administrators, and students. You can even nominate yourself!
Nomination deadline: March 18, 2015.
Marshals will be announced in mid-April.

Tales of Science in Policy and Politics: From Sharks to Rats
MONDAY, MARCH 30, 2015, AT 6:00 P.M. IN THE GEOLOGICAL LECTURE HALL, 24 OXFORD STREET.
Drawing on her recent four years in Washington, DC, at the helm of the National Oceanic and Atmospheric Administration (NOAA), The Honorable Jane Lubchenco will share tales about and reflect on her experiences as a public servant, with special emphasis on weather, climate, and oceans as well as the science that underpins the services and stewardship NOAA provides. Dr. Lubchenco is a US Science Envoy and University Distinguished Professor and Advisor in Marine Studies at Oregon State University. Free and open to the public, with free event parking available in the 52 Oxford Street Garage.

TUESDAY, MARCH 31, 2015, AT 4:00 P.M. IN THE BOLABS LECTURE HALL
Science is more relevant and urgently needed than ever before and opportunities for scientists to deliver useful knowledge have never been greater. But unleashing the full power of science will require engaging with society in new and different ways.
Dr. Lubchenco will discuss new scientific advances that are transforming attitudes, behavior, management, and policies that affect ocean health and therefore the future of humanity.