The Connemara countryside in Ireland, by UMD alumna Alexandra deSibour (front cover). Tel Aviv, Israel. Inside cover. An international team of students from UMD's Smith School and Peking University won the China Business Model Competition's $1,000 top prize, courtesy of the Smith School (back cover).
UMD Ph.D. Student Amy Marquardt Wins Big at International Thesis Competition

Amy Marquardt, a Ph.D. candidate in the A. James Clark School of Engineering, was awarded first place in the international competition, Three Minute Thesis (3MT®) competition, which challenged doctoral students to communicate the significance of their years of research to a non-specialist audience in just three minutes.

Building Global Partnerships in Land Use Planning

OIA’s Global Partnerships-Faculty Travel Grants program offered Professor Uri Avin a way to create a durable institutional collaboration involving University of Haifa, Tel Aviv University, and the Hebrew University of Jerusalem.

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Amy Marquardt, Ph.D. candidate in the Clark School of Engineering, swept first place in both the judge’s and people’s categories of Universitas 21’s Three Minute Thesis (3MT®) competition. 3MT challenges doctoral students to communicate the significance of their years of research to a non-specialist audience in just three minutes, and Amy won for her revolutionizing work on the way society preserves cultural artifacts.

“The U21 3MT competition provides an invaluable opportunity for students to learn and practice new communication skills, to convey the substance and enhance the visibility of their important research, and to become active in the international research community,” says Dr. Charles Caramello, dean of the Graduate School. “As a new member of U21, we were enthusiastic about participating and, of course, thrilled that a UMD student won both the Judges’ and People’s Choice Awards.”

The Graduate School initiated and organized a University-wide competition this past summer. A faculty selection committee chose Marquardt as the winner for her dynamic presentation of her research, which seeks to revolutionize the way society preserves cultural artifacts by using a nearly invisible, yet highly-protective coating that enhances the protection of the objects and reduces the damage caused by current methods.

Marquardt, who is advised by Professor Ray Phaneuf in the Department of Materials Science and Engineering, found the competition challenging, yet rewarding.

“Conveying my research in three minutes was much harder than I expected, but also a lot of fun.” says Marquardt. “The 3MT helped me explain my research clearly and concisely to a broad audience. It also taught me how to present in an engaging, non-technical way, an incredibly useful skill when working in an interdisciplinary field.”

Marquardt competed with 16 other finalists from eight countries, who were advanced from the hundreds of students who participated in local competitions. In addition to her UMD prize of $500 and a nomination to the international competition, her U21 first-place prize includes $2,500 to visit a U21 university of her choice to advance her research and ongoing career development. Her People’s Choice prize includes $300 and the opportunity to work with 99Scholars to have her presentation turned into an animated video—an innovative way to share the presentation online and via social media.

By Niambi Wilder Winter,
The Graduate School
UMD Ph.D. Student Amy Marquardt Wins Big at International Thesis Competition

ZUBIN ADRIANVALA, Urban Planning and Development
“The Ethnic Community: Urban Form, Peace, Conflict, and Violence in Urban India”
Adrianvala was named “runner-up” and received $250 in research funds from the Graduate School.

JASON SINCLAIR, Animal and Avian Sciences
“Long-range signaling at the intestinal-neural axis promotes organismal heme homeostatis in C. elegans”

PUI-YU LING, Geographical Sciences
“Forest Carbon Flux and Stock: From the Ecological and the Economical Perspectives”

REBECCA WOLF, Organizational Leadership and Policy Studies
“Who Gets What: A Within-School Equity Analysis of Resource Allocation”

AARON WHITE, Linguistics
“Learning Attitude Verb Meanings”

LAURA BRUNNER, Women’s Studies
“Screening Diversity: Professional Women in Twenty-First Century Film & Television”

ALYSSA BROOKS, Behavioral and Community Health
“Sleep throughout the Alcoholism Recovery Process”

NOTEWORTHY PEERS

Seven talented doctoral students from various departments across the UMD campus joined Marquardt in the internal competition and impressed the judging panel with their presentations:

Photo courtesy of Faye Levine.
Over the past 30 years, conflict between countries has become relatively rare; intrastate conflict—civil wars, territorial disputes, and insurgencies—remains, however, a persistent global phenomenon. Between 2001-2010, the United States has distributed more than $200 billion in development assistance, mostly to conflict-affected states. New research at the University of Maryland leverages major advances in information, technology, and methodology to better understand the relationship between aid and conflict. The UMD project Aiding Resilience? The Impact of Foreign Assistance on the Dynamics of Intrastate Armed Conflict won a $2.5 million grant from the Minerva Initiative of the U.S. Department of Defense (DoD) to study the connections between development aid and the likelihood, escalation, severity, spread, duration, and recurrence of violence, spanning the phases before, during, and after armed conflict.

Launched by the Department of Defense (DOD) in 2008, the Minerva Initiative supports university-based social science research. It brings together universities, research organizations, and individual scholars to improve the DoD’s basic understanding of the social, cultural, behavioral, and political forces that shape various regions of the world. Two of the Initiative’s key objectives are to develop foundational knowledge about sources of present and future conflict, and to understand the economic contributors to stability, making UMD’s project of particular interest.

“The overarching goal of our project is to establish when and why aid contributes to reduced violence, and when and why it doesn’t,” says Professor Paul Huth, director of the UMD Center for International Development and Conflict Management (CIDCM) and principal investigator for the study. “Besides the relevance that the findings will have to aid and conflict-related policy decisions, the data resources created through our study will provide information essential to the successful planning and deployment of assistance around the globe.”

Researchers have historically approached this topic at the country level, studying aid in general terms and narrowly examining specific aspects of conflict. By contrast, Huth and the other members of the team are focused on analyzing existing data and collecting new information to develop a far more comprehensive and holistic view of aid’s impact on conflict. “We are combining expansive aid data with diverse sets of other information, including geospatial data, demographics, history, and so on.”

To support this undertaking, Huth is working with a number of researchers at UMD and beyond. “We have intentionally built an interdisciplinary, international team,” says Dr. David Backer, assistant director of CIDCM and co-principal investigator on the Minerva grant. “Collaborators in multiple countries will be collecting and analyzing data and building tools to help visualize our findings.”
Between Aid and Conflict

Partners on the project include the College of William & Mary, the Institute of Development Studies (UK), the Graduate Institute of International and Development Studies (Switzerland), and Development Gateway—each contributing vital, distinctive expertise to the project. The work based at UMD will be concentrated in CIDCM and the Center for International Security Studies at Maryland (CISSM). Dr. Kevin Jones, a research associate at CISSM and also a co-principal investigator on the Minerva grant, highlights the appeal of linking units to work together. “This project capitalizes on two significant research clusters within the university that have world-class expertise on analyzing the underlying dynamics of localized conflict. The combination of the UMD resources with the external partners provides a unique opportunity to move the data-collection and analysis process forward much farther than our respective individual efforts might.”

“These studies are of broad value to conflict and aid researchers, who are limited by the information that is currently available. Beyond its contribution to policy, science and public resources, the grant will support student learning at all levels,” says Backer. “More than 100 undergraduates and graduate students will contribute to this study, from data collection to analysis, to the creation of new tools.”

By Andrew Roberts, College of Behavioral and Social Sciences

The Confucius Institute Celebrates Its 10th Anniversary

The Confucius Institute of Maryland (CIM) opened the celebration of its tenth anniversary on September 26, 2014, with a spectacle of dragon and lion dances by the Wong People, a popular local martial arts group. President Wallace Loh gave an enthusiastic welcome by leading the audience in singing “Happy Birthday!” to CIM and Hanban.

UMD students Nathaniel Goldstein and Olivia Brann emceed the celebration, all in Mandarin. The Xiamen University Performance Troup delighted the audience with traditional dance, singing, and martial arts routines. More than 120 area K-12 students presented colorful cultural performances, and in several tents circling the festival grounds, hundreds of attendees enjoyed calligraphy demonstrations, coloring opera masks, signing a “Great Wall” message scroll, an opportunity to speak with a Chinese doctor, and dressing up in a long dragon-dance costume with poles. A Chinese painting exhibition in nearby Hornbake Library displayed charming scenes of folk and animal life.

The Confucius Institute at Maryland is the oldest continuously operating CI in world, and was honored with a “Pioneer” award from Hanban at the annual CI Directors’ conference in December in Xiamen. CIM Director Dr. Donna Wiseman is grateful for support from the campus and all the students. In a recent forum she reflected, “We really hope that CIM, with its work in K-12, colleges and universities, our wider community, and many organizations here and overseas, might continue to serve as a bridge for understanding between American and Chinese cultures.”

By Rebecca McGinnis, CIM

Figure 3: U.S. Development Aid, by Country Status
UMD Expert Panel Seeks to Alleviate Fears about Ebola

Did you know that virologists and epidemiologists, including researchers at UMD and UM Baltimore, have been studying Ebola for more than forty years, and have a very good idea how the virus works? Or that it is hard to get the virus, which only spreads by direct contact with the bodily fluids of someone who has an active infection? This is why 75 percent of those infected are women: they are the primary caregivers, nurses, and traders within the effected communities. The media frenzy over the current outbreak in Sierra Leone, Liberia, and neighboring West African countries has obscured this basic information beneath a deluge of gruesome images and reporting, stoking unwarranted fears around the world, including in College Park.

UMD faculty and researchers from a variety of units have been working to fight that climate of fear by giving the campus community the fuller story about Ebola and the challenges that it and other diseases do (and do not) pose. A recent forum—Ebola: Beyond the Fear—was one such effort to educate the campus and answer its questions away from the glare of the 24-hour news cycle. Coordinated by the Office of International Affairs in conjunction with the Provost’s Office, the Philip Merrill College of Journalism, the School of Public Health, and the University Health Center, its message was straightforward: keep things in perspective.

Conditions in Sierra Leone and Liberia have been dire, but are also driven by local factors such as limited public health resources. And past experiences such as the AIDS crisis of the 1980s teach us not to stigmatize West Africans as a group because of Ebola, reminding us as well of the ethical responsibilities of media, governments, and the medical community, including the pharmaceutical industry. As a threat to the health and safety of UMD students, the handful of U.S. Ebola cases among a population of more than 300 million pales in comparison to voluntary actions such as binge drinking, according to Dr. David McBride, director of the University Health Center and chair of the Campus Infectious Disease Planning Group. Thoughtful consumption of news and information is particularly important now, when easy access to social media makes the spread of unfiltered, frightening misinformation so easy and common.

Professor Linda Aldoory, director of the Horowitz Center for Health Literacy in the School of Public Health, notes that, “the only time our community cares about influenza is when the media picks up that there is a flu vaccine shortage.” When there is no vaccine shortage and no media coverage, nobody worries about the flu. Yet, as Dr. McBride reminds us: “Influenza kills between 30,000 and 60,000 Americans every year, so the flu is a far greater concern than Ebola.”

Want to hear more about what UMD experts have to say about the implications of the Ebola story? A recording of the campus forum is available online at https://webmeeting.umd.edu/p5uh3ndyzb/.

By Joseph Scholten, OIA
Professor Uri Avin, research professor and director of the Planning and Design Center at UMD’s National Center for Smart Growth Research, has always sought to collaborate with colleagues around the globe. Recently, Avin has focused his attention on Israel, which is “struggling to adapt its urban planning system to a more efficient, less top-down and centrally planned system.” Dr. Avin believes that the State of Maryland, acknowledged as a leader in incentive-based state-level planning, can help.

After winning an Office of International Affairs’ Global Partnerships-Faculty Travel Grant, Avin traveled to Israel in October, where he met with two dozen faculty at the University of Haifa, Tel Aviv University, and the Hebrew University of Jerusalem in fields spanning Engineering, Environmental Studies, Geography, Public Policy, and Urban and Regional Studies. Identifying considerable “mutuality of research interests and synergies” and “several topical clusters which include faculty from all four universities,” ranging from growth management and governance structures to social justice and social mobility, Avin is planning on bringing his colleagues together in College Park for joint research workshops, grant proposals, and a Design Studio to develop sustainable and applicable research projects.

OIA sponsors the Global Partnerships-Faculty Travel Grant Competition twice a year to support faculty travel to one or more existing UMD partner institutions to develop new collaborative projects and programs, or to improve the implementation of existing projects. Further information, including a list of previous recipients, can be found at http://ter.ps/oigrant. The deadline for submissions for Summer/Fall 2015 projects is March 17, 2015.

BY JOSEPH SCHOLTEN, OIA
MBA students from the Smith School joined 33 peers from China and Israel in a business plan competition in Beijing this past year. Participants vied for $2,750 in cash prizes during the China Business Model Competition, organized by Smith’s Dingman Center for Entrepreneurship and host partner, Peking University’s Guanghua School of Management. Other participants came from Zhejiang University in China and the Technion Israeli Institute of Technology.

An international team of students—two from Smith and two from Peking University—won the competition’s $1,000 top prize with a pitch for Wireless ISP, a telecommunications business that would bring better Internet access to rural China.

The competition, now in its ninth year, was the culmination of a business model and study abroad course to China for Smith MBA students. In a twist this year, the course—dubbed the China AdVENTURE Challenge—incorporated opportunities to accrue points by participating in site visits and cultural activities from Hong Kong to Beijing. The challenge, inspired by The Amazing Race reality TV show, allowed Smith students to compete for a $1,000 scholarship separate from the business plan prizes.

A highlight was a behind-the-scenes visit to KBL Group International, the Hong Kong garment factory of Steven Begleiter ’92. Dean Alexander Triantis accompanied the delegation of 17 Smith students throughout the trip, which also included an alumni event.

BY CARRIE HANDWERKER, ROBERT H. SMITH SCHOOL OF BUSINESS
One of only 32 students chosen from across the nation, UMD Senior Fang Cao is the first Rhodes Scholar from UMD since 1974. The Rhodes Scholarship is widely considered to be the most esteemed academic award available to college graduates. Born in China, Cao emigrated to London at age five, and to the U.S. at age seven. Majoring in biological sciences, with a specialization in physiology and neurobiology, Cao plans to use the scholarship to pursue a master’s degree in medical anthropology at the University of Oxford in England. His long-term plans include a career in medicine and public health policy.

“My desire to become a physician and advocate, dedicated to improving healthcare opportunities for underserved communities across America, fueled my interest in the Rhodes Scholarship,” says Cao. “I’m thankful to all of the wonderful mentors, teachers, and advisers I’ve met since I stepped onto the University of Maryland campus who helped me earn this prestigious award.”

As a sophomore at UMD, Cao founded a program at a local high school to tutor disadvantaged minority students in college-level biology. With his help, the school’s average AP biology exam score improved. Inspired by these results, Cao founded an additional tutoring program at the school to help students obtain their high school diploma and consider attending community and four-year colleges. The program now boasts two dozen UMD students serving as mentors.

“The Rhodes Scholarship shows Fang’s exemplary academic and research achievements as well as his inspiring community service,” says UMD President Wallace D. Loh. “He brings distinction to the University of Maryland, and I’m sure he’ll continue to do so as an alumnus in the years to come.”

Cao has extensive leadership and community service accomplishments, and is the recipient of numerous honors and awards. He was the first UMD student to be awarded both a Goldwater scholarship and a Truman scholarship. In addition, he has received a Howard Hughes Medical Institute undergraduate research fellowship, a National Institutes of Health (NIH) intramural training research award, and an NIH exceptional summer intern award. He has conducted molecular and computational neuroscience research in the laboratories of Jeffrey Smith at NIH and Daniel Butts in UMD’s Department of Biology. He was also selected to serve as one of four UMD representatives to present at the 2013 Meeting of the Minds regional conference.

The Rhodes Scholarships were created in 1902 by the Will of Cecil Rhodes, British philanthropist and African colonial pioneer, and are provided in partnership with the Second Century Founder, John McCall MacBain and other generous benefactors. The scholarships provide all expenses for two or three years of study at the University of Oxford, and may allow funding in some instances for four years. The total value of the scholarship averages $50,000 per year. The 32 Rhodes Scholars chosen from the United States will join an international group of scholars chosen from 14 jurisdictions around the world.

By Abby Robinson, College of Computer, Mathematical & Natural Sciences
Maryland Students in High-Level Policymaking

As part of the High-Level Consultation on People-to-People Exchange (CPE), UMD students Esther “Lou” Robinson (‘14) and Jessica Liu (’16) were two of three Americans selected to participate in a two-day policy negotiation simulation in cooperation with Peking University, the Brookings Institution, the American Mandarin Society, and the Dialogue Group. The CPE, which aims to enhance ties between citizens of the U.S. and China, was held inside the Great Hall of the People, China’s parliamentary building, to recognize 35 years of U.S.-China relations.

U.S. Secretary of State John Kerry and Chinese Vice-Premier Liu Yandong led the session. “Their speeches made me feel that even though the previous day’s dialogue only seemed like a mini Model U.N. demonstration at the time, it was also a small part of building positive U.S.-China relations,” says Robinson, a Government & Politics, and Chinese double major. Robinson represented China’s Minister of Commerce in the policy simulation, and Liu represented the CEO of the New Partnership for Africa’s Development, as the U.S., China, and African Union teams negotiated the terms for a joint development fund for Africa.

“I cherished the opportunity to collaborate with both American and Chinese students, including my Chinese partner, and learn about each other’s perspectives and backgrounds,” says Liu, a Government & Politics and Economics double major who hopes to pursue a career in public policy. “This experience gave me wonderful insight into the complexities of policy negotiation: although agreements may not be reached on all issues, communicating one’s priorities and being open to compromise is...
Exercise in Beijing

vital to a fruitful negotiation.”

The students were split into teams and given background readings prior to the trip. Upon arrival in Beijing, they spent a day mentored by well-known scholars on both the substance and form of the negotiation. Scholars included Cheng Li, director of the Brookings Institution’s China Center; Richard Bush, director of the Center for East Asia Policy Studies at the Brookings Institution; Professor Li Anshan, director of the Center for Africa Studies at Peking University; and Professor Jia Qingguo, dean of the School of International Studies and Peking University.

At the end of the program Robinson and Liu were invited to the CPE plenary session in the Great Hall of the People. The program was arranged and led by newly arrived Director of China Affairs Nat Ahrens. Ahrens stressed the importance of taking learning beyond the ivory tower: “Events like this take Maryland students out of the classroom and provide them with the kind of hands-on experience that really prepares them to be policy practitioners. Emerging generations of leaders on both sides of the Pacific need to develop more collaborative approaches to negotiation, communication, and problem solving, especially as so many of the world’s most vexing problems are no longer bound by national borders.”

<< Left to right: Nat Ahrens, Jessica Liu, and Esther “Lou” Robinson. Photos courtesy of Dr. Xiangning Wu of Peking University.
UMD and UCC Doctoral Students Collaborate on Frederick Douglass

What do Talbot County, Maryland, and County Cork, Ireland have in common? Frederick Douglass, the distinguished nineteenth-century writer, orator, and major figure in abolition and emancipation in the United States and abroad. Born into slavery on Maryland’s Eastern Shore, Douglass travelled and spoke widely on emancipation in the United States and home rule in Ireland.

The Graduate School at the University of Maryland (UMD) and the College of Arts and Sciences at University College Cork (UCC) have joined together to sponsor a year-long graduate student project on this great historical figure. Not only was this project transatlantic, it also was interdisciplinary, bringing together archaeology students from UMD and literature students from UCC.

Concurrent seminars on Douglass were conducted at the two universities with the two groups of students often meeting together over Skype. The Maryland students visited Ireland as well for a planning conference, and the UCC students visited UMD for a symposium, in which the two student groups presented their research findings.

The symposium was followed by a program and reception for the students at Wye House, where Douglass had been enslaved. Hosted by Mr. and Mrs. Richard Tilghman, whose family has owned the property since the seventeenth century, the event included several representatives of the Frederick Douglass Honor Society and the Honorable John McDonough, Secretary of State for Maryland.

Dr. Mark Leone, professor of anthropology and associate dean in the Graduate School at UMD, and Dr. Lee Jenkins, senior lecturer in the School of English at UCC, led the collaboration. Leone is the director of archaeology in Annapolis and has been excavating the slave quarters at Wye House with UMD doctoral students.

By Niambi Wilder Winter, The Graduate School

“Where justice is denied, where poverty is enforced, where ignorance prevails, and where any one class is made to feel that society is an organized conspiracy to oppress, rob and degrade them, neither persons nor property will be safe.”

—Frederick Douglass
UMD’s First-Ever iGEM Team Wins Gold at International Competition

The University of Maryland team earned a gold medal in the International Genetically Engineered Machine (iGEM) competition. The UMD team participated in the environmental division, developing a biosensor to detect the presence of the oyster pathogen *Perkinsus marinus*, which is commonly found in Maryland’s own Chesapeake Bay. They developed the project, performed lab research over the summer, raised $26,000 for lab supplies and travel costs, conducted an extensive study of human practices related to the project, developed a Wiki page, and presented a poster and presentation at the competition. While they weren’t the only gold medal winners, it was an impressive feat for their first year in the competition.

Taking place from October 30 to November 3, the competition engaged student-led teams from universities across the globe to present novel synthetic biology projects that address real-world problems. This year iGEM celebrated its tenth anniversary with one massive event, the Giant Jamboree, with a gathering of more than 2,300 participants in Boston, MA. UMD competed against 295 teams worldwide, including 245 teams that attended the convention. The undergraduate student team members included biochemistry majors Pavel Vlasov and Iowis Zhu; biological sciences majors (specializing in physiology and neurobiology) Adip Bhargav and Janine Taira; and bioengineering majors Nathan Barber, Aditya Biswas, and Andrew Zhao. The team’s advisors were Ed Eisenstein, associate professor, bioengineering; Tanya Gordonov, graduate student, bioengineering; Jason Kahn, associate professor, chemistry and biochemistry; and Boots Quimby, associate director, Integrated Life Sciences honors program.

“The scope of this year’s competition was astounding, teams from every corner of the world were collaborating for the sake of synthetic biology. This competition provides a great model for future globalization of scientific work. We felt privileged to be a part of it and were happy to have done so well in the competition,” said UMD senior Barber.

The team is currently recruiting team members for the 2015 iGEM competition.
To submit story ideas and photos, please contact the editor, Vivian Hayward, at vhayward@umd.edu or 301-405-4312.