

outbursts

● a monthly publication of outreach and international affairs

spotlight on international faculty development program

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Faculty gain insights from Southeast Asia

Program helps develop international partnerships to enrich teaching, research

By Andrea Brunais

In a huge, multilevel fresh-foods market in Kota Bharu, Malaysia, two Virginia Tech faculty members marveled at the din, the stalls, and the vendors — a marked preponderance of women. The professors tasted mangosteen and rambutans, fruits exotic to them. But the pungent nectar wasn't the profound part of the day for Akshay Sharma of the College of Architecture and Urban Studies.

"Just look around you," says Sharma, who teaches industrial design, waving his arm at the colorful tableau of fruits and vegetables. "There is so much going on, so much at stake, but everybody is



The large fresh-foods market in Kota Bharu, Malaysia, offers fruits and vegetables in great quantities. Visitors from Virginia Tech were surprised by how many of the market's vendors were women.

About the International Faculty Development Program

The 2013 group of eight faculty members met in Singapore, then fanned out to their countries of interest.

Faculty members are selected based on their research interests and the quality of their projects.

Ecuador and the Galapagos Islands are the springboards for the 2014 trip.

The program, launched in 2005, is funded by Outreach and International Affairs and the Provost's Office.

INSIDE:
Faculty share observations from the trip

content. There is no yelling, screaming, or cutthroat competition to sell their stuff. Everything is organized. Everybody is just chilling out and waiting for the customers to show up."



Akshay Sharma

He grins, winding up to his conclusion: "If the world were run by women, I think it would be a much better place."

Sharma's insight reflects what happens when faculty members are empowered to see through a global lens, a goal of Virginia Tech's annual International Faculty Development Program. The perspectives they gain on the two-week trip strengthen their teaching and inform their research, says Guru Ghosh, vice president for Outreach and International Affairs.

Each faculty member lines up high-



Kathy Hosig

level researchers and professionals to meet with, which "broadens the scope of their work beyond the geographic boundaries of one nation."

Along with Sharma, Kathy Hosig of the Virginia-Maryland College of Veterinary Medicine spent five days in Malaysia. She learned much from her counterparts, who work with chronic disease sufferers "very similar to the marginalized populations I work with in the U.S.," Hosig says.

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Fighting breast cancer worldwide

By *Carla Finkelstein*
College of Science

As breast cancer incidence is projected to increase in the near future, there is a need for effective preventive strategies.

The global impact of industrialized society on breast cancer is large and growing and results from altered gene-environment interactions such as disruption of circadian gene function.

My laboratory aims to uncover functionally relevant environmentally controlled pathways in breast tissue that will define new nodes for therapeutic approaches.

To help in this search, I flew to Singapore to meet leaders in the breast cancer field in Asia. I had the opportunity to explore the spectrum of research from basic science to patient care, while stopping in the middle to see advances in nanotherapeutics.

The experience was energizing. I was able to present our work and see firsthand the work of outstanding investigators who once were my competitors in the field and with whom I collaborate today. I learned of multilevel exchange programs for training our students in the emerging areas of nanoscience that we are currently incorporating into our curricula.

Overall, it was a professional and personal experience worth the 20-plus hours of flight and for which I am grateful.



Carla Finkelstein



Alan Abrahams (right), an assistant professor in the Department of Business Information Technology in the Pamplin College of Business, talks with Yang Zhang, an assistant professor of urban affairs and planning.

Thailand gets a peek inside Pamplin's social media toolbox

By *Alan Abrahams*
Pamplin College of Business

My trip to Singapore and Thailand allowed me to connect with potential collaborators, solicit feedback, and brainstorm ideas for future studies.

At Thammasat Business School in Bangkok, I introduced colleagues to Pamplin's Text Analytics Toolbox (PamTAT), an easy-to-use Microsoft Excel workbench for acquiring, transforming, and analyzing textual data from the Web and social media. Participants responded enthusiastically, and future projects may range from examining internet software

adoption failures to exploring Thailand's destination image for foreign tourists.

On the teaching side, I also visited Singapore Management University and Nanyang Technological University, both in Singapore. I learned about best practices, particularly the management of student system-development projects.

Practices I hope to adopt include introducing online learning tracking and increasing opportunities for mobile app project development. I left Southeast Asia thrilled by the vibrancy of their teaching and research efforts and the hospitality and collegiate spirit of my hosts.

Achieving resilience after disaster

By *Yang Zhang*
College of Architecture and Urban Studies

My research addresses one of the most urgent challenges of the 21st century — the increasing vulnerability and, consequently, the accelerating and unsustainable rate of disaster losses due to both natural and man-made causes. I study the dynamic interaction between natural systems and human activities in the context of community resilience.

An upcoming collaborative research project involves the University of Hong Kong and uses social media as a data source for examining risk perception

of disasters and adaptive behavior by individuals.

Also, the Peking University Shenzhen Graduate School was receptive to the idea of a joint summer program involving Virginia Tech students and agreed to provide resources (monetary, space and personnel).

Another potential collaboration centers on the fact that Shenzhen, situated across the river from Hong Kong, is the face of China's economic reform. The city seeks to internationalize higher education, and from my discussions, it was obvious that they are eager to explore opportunities.

Understanding immigration in Asia

By Deborah Milly
College of Liberal Arts and Human Sciences

My research addresses the question of how members of society and their governments use policy to include those who are socially excluded due to inadequate income, lack of access to social supports and education, and linguistic and cultural differences. The trip to Southeast Asia allowed me to expand my network of researchers who study migration and immigration in Asia and to find possibilities for interdisciplinary collaboration at Virginia Tech.

My goal was to learn about Indonesian

perspectives and research on migration to Japan, and I developed new ties with Indonesian researchers.

In Yogyakarta, I met with researchers from Gadjah Mada University's Center for Population and Policy Studies who have conducted research on the experience of Indonesian migrants in Japan and after their return.

In Jakarta, I met with a senior scholar at the Indonesian Institute of Science whose ethnographic work on Indonesians in Japan deals with how community-level discussion leads to acceptance of outsiders with different religious beliefs.



Kathy Hosig (left), who directs the Center for Public Health Practice and Research, approaches the Firefly plane, an internal Malaysian airline, for the flight from Kuala Lumpur to Kota Bharu.

Promoting healthy living in the U.S. and Malaysia

By Kathy Hosig
Virginia-Maryland College of Veterinary Medicine

My research focuses on promotion of healthful eating and physical-activity habits through public health programs, with emphasis on partnership with related community agencies and organizations.

The public health system in Malaysia is designed to provide clinical services to the entire population at a nominal cost. Infrastructure and opportunities for community-based prevention and management of chronic disease do not appear to be as well developed or extensive as those in

the U.S. Collaboration with public health researchers and professionals in Malaysia may help.

The high point of my experience was seeing how truly universal the opportunities and challenges related to community-based prevention of lifestyle-related chronic disease are. I felt immediate and deep connections with the researchers, health professionals, and community members of Malaysia.

I had no idea when embarking on this journey how much I would want to establish lasting relationships there and go back!

Preparing for tsunamis

By Robert Weiss
College of Science

I study the impact of tsunamis on coastal areas. More recently, I have focused on how sea-level rise influences the impact of tsunamis.

A better understanding of past events, especially their frequency (How often has a tsunami hit a certain area?) and magnitude (How large were the waves?) will help reduce uncertainties that accompany predictions.

While my work is theoretical, field data are important, and Southeast Asia is the place to get that. For research on the influence of sea-level rise on storm and tsunami impact, we hope to change policies that regulate what happens after an event to a more proactive system.

A proactive policy framework would increase awareness and preparedness, which saves more lives, costs less and contributes to economic stability.

Working toward better vaccines

By Biswarup Mukhopadhyay
Virginia Bioinformatics Institute

I spent four days at Institut Teknologi Bandung, the premier science and engineering university in Indonesia, meeting with the rector and many other officials. The goal was to get an agreement in principle that will foster the development of formal collaboration between Virginia Tech and Institut Teknologi Bandung. It was decided that the two institutions will pursue both graduate and undergraduate study abroad programs and collaboration in research.

I also met with an Indonesian vaccine company producing vaccines that are used worldwide. The outcome was a plan for collaborative research for the development of bacterial strains that will provide more effective tuberculosis and whooping cough vaccines with consistent quality and at reduced costs.



A Malaysian fisherman throws a cast net along the northwestern coast near Langkawi Island.

Southeast Asia *continued*

Her journey took her from the capital, Kuala Lumpur, to coastal areas including Langkawi Island. The sights and sounds included a squid fisherman throwing a cast net into shallow waters, the sizzle of fish on a restaurant’s outdoor grill, and a brigade of motorcycles pulling up to an outdoor café.

These were unexpected bonuses for someone who “had never actually considered doing international work before this,” she says.

As an academician, the payoffs were many. She returned to Blacksburg with ideas for collaboration, capitalizing on the fact that populations in both the U.S. and Malaysia suffer from similar rates of chronic disease.

Hear and see more from three professors on the trip:

- <http://tinyurl.com/Kathyhealth>
- <http://tinyurl.com/Akshaymicrogame>
- <http://tinyurl.com/Carlasingapore>

For his part, Sharma gained an opportunity to share a microfinance board game that he and his students developed as an anti-poverty tool. A University of Malaya researcher is eager to incorporate the game into a study of sex workers in Kuala Lumpur. For the sex workers, it might lead to alternative ways of earning income.

“That is one of the beauties of the program,” Ghosh says. “It creates many benefits, and many of them could not have been predicted.”

Collaboration, and microfinance, in Malaysia

By Akshay Sharma
College of Architecture and Urban Studies

My research on Design for the Bottom of the Pyramid inspired me to learn about similar projects in Malaysia. The financial literacy education system developed with my students called the laXmi project — a board game that can be used by people who are not fully literate — was presented to a researcher in rural Malaysia and received a positive response.

I also learned more about my Virginia Tech colleagues and their research. In fact, I collaborated with Alan Abrahams over the summer, and we received support from the Institute for Creativity, Arts, and Technology to develop a course that enables design, business, and engineering students to work together on a project.

The news media coverage I received as a result of the trip has resulted in implementation of the laXmi project in Uganda and Bangladesh and with another organization that leads microfinance initiatives in sub-Saharan Africa. I hope to continue working on projects related to social impact and integrate more such projects in my teaching activities.

www.outreach.vt.edu

For information on the International Faculty Development Project, contact the Office of the Vice President for Outreach and International Affairs at 540-231-9868, hcarroll@vt.edu, or 319 Burruss Hall (0265), Virginia Tech, Blacksburg, VA 24061.

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Akshay Sharma (left) talks with Li Jin Chan, a guide who accompanied the professors on the Kota Bharu leg of their Malaysia trip.

