

**Leading the Way:
A Closer Look at PitE**



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Director's Letter: A Fond Farewell



Greetings from the Program in the Environment (PitE). We have seen another year of significant growth and change. This year has brought new faculty members, new courses, and a record setting student enrollment. At the end of March 2010, we had 511 students enrolled in the program; this is over 100 more students than we had at this time last year.

There is yet another change on the horizon. I will be stepping down as PitE Director at the end of June and going on retirement leave. It has been a pleasure working closely with the PitE faculty, who offer an impressive wealth of experience and knowledge about environmental issues, and who have always maintained a great sense of humor as we worked our way through the growing pains of a young program. Our faculty members include people from six different Schools and Colleges at UM, so we are probably the most interdisciplinary unit on campus. I have also enjoyed working with the PitE staff, who have worked diligently (often times behind the scenes) to advise students, provide curriculum support, and plan events for a program that was originally expected to reach a maximum of 50 students! And it has been a privilege to teach and a great deal of fun to interact with PitE students. This group of students has a strong desire to understand the natural world in which we live, as well as both the natural laws and socio-political constraints that bind us. They feel it their responsibility that sustainable solutions are continued to be sought.

The announcement of my successor comes on the eve my retirement. PitE's Associate Director Professor Paul Webb was recently named Director of PitE, and will be starting his role this July. Professor Webb holds a faculty appointment in our program, as well as in the School of Natural Resources and Environment and the Department of Ecology and Evolutionary Biology, within the College of Literature, Science and the Arts (LSA). Paul's interdisciplinary background and teaching experience has him well poised to take the lead with this program; I know the program will be in great hands.

The last five years have been a very rewarding experience, and I will truly miss this program. I think that the greatest "problem" that PitE has is the relative youth of our graduates. (And most of our faculty wish they had that problem!) Our oldest graduates are still in their twenties, far from their peak earning years, so we don't yet have an alumni base that is well positioned to contribute to our scholarship funds. Consequently, I am very grateful to our young alums and to those of you who are not alums but who have become friends of the program and have donated generously to meet our various needs. Your generosity has enabled us to maintain PitE as a great undergraduate program.

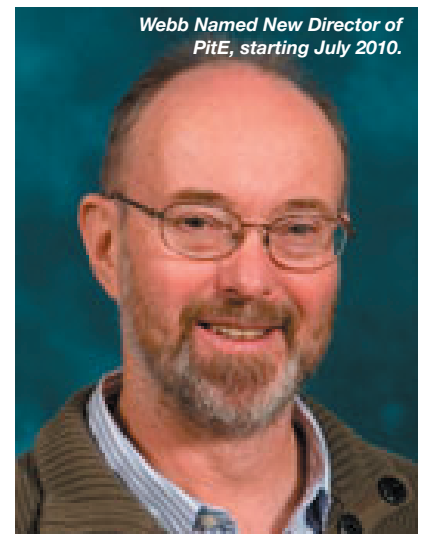
Sincerely,

Robert M. Owen

Bob has striven to expand the interdisciplinarity of the courses within PitE. Here is a look at how the curriculum has grown over the last five years.

Discipline	Course Title
Natural Science	GIS Explorations*
	Chemical Principles of Environmental Pollution
	Introductory Ethnobotany
	Cars, Chemistry and Energy*
	Terrestrial Biomes
Social Sciences	Restoration Ecology
	Environmental Values in Public Policy*
	Environmental Public Opinion Analysis*
	Climate Change and Adaptation
	Urban Sprawl Politics and Policy
	Food: Ecology, Economics and the Ethics of Growing and Eating*
Humanities	Project EyE: Engineering your Environment
	Sustainable Cities*
	Environmental Anthropology
	Nature and Place
	American Environmentalism and the Frontier West*

*Denotes that this course is regular part of the curriculum



Graham Institute Awards Scholarships to PitE Students

If you ask a PitE student why sustainable development is important, you will get a range of answers. But ultimately, they feel a sense of responsibility, to themselves and to future generations. Last summer, the **Graham Environmental Sustainability Institute** provided six scholarships to PitE students so that they could further develop their understanding of the importance of sustainable development.

“Finding sustainable solutions is important to me because it is a way of doing less with more,” says Shannon Qin, a Senior minoring in PitE and concentrating in Urban Planning. **“Sustainability is not just about preserving Earth’s precious ecologies, but is the core of finding cost-effective solutions and providing fair and equitable lives for generations to come.”** Shannon took classes with the Beijing Architecture Studio Enterprise (BASE) in Beijing, China, through the Taubman College of Architecture and Urban Planning. Through the course, Shannon studied the lifestyle and structural differences between a remote rural village and the rapidly expanding Beijing. “My experience taught me that sustainability does not always require large amounts of resources or money, and that creative solutions can be found by recycling what is already within your reach. It was very encouraging for me to see that villagers in the rural areas of Greater Beijing are much more aware of the sky above them, and the dirt underneath their feet, than those who live in the city can ever be. This lifestyle allows them to be much closer to their actual environment, and has given them passion to clean up their community through creative experimentation, from collecting rainwater for cooking to recycling trash.”

Another PitE student who is driven to understand how societies can expand sustainably is Nicole Flores, a PitE Senior double majoring in Economics and the Environment, with a specialization in Sustainable Development. Nicole took classes via the Sustainable Development Program through the School for Field Studies in Atenas, Costa Rica. Nicole selected this program for her field experience based her interests in economics and the environment. “Given the present state of both the environment and the economy, I feel that both areas need to be considered and addressed when planning for the future. My past experiences [in Costa Rica] have brought to the forefront of my mind the undeniable relationship that exists between the environment, health, and race. I believe that pursuing sustainability is the most viable option to preserve the natural beauty of our planet while simultaneously improving living conditions for the human race.”

Already putting her experience to work is Jennifer DeMoss, who graduated with honors in December 2009 with a Bachelor of Arts degree. Her experience studying in Costa

Rica and Nicaragua this past summer also led her to this field. Jennifer took classes through the Institute for Central American Development Studies. Jennifer gained a different understanding from her courses. “While I fell in love with the Costa Rican people and land, some of the areas that we in the States clamor to ‘save,’ such as rainforest habitat, is not as important to the Costa Ricans

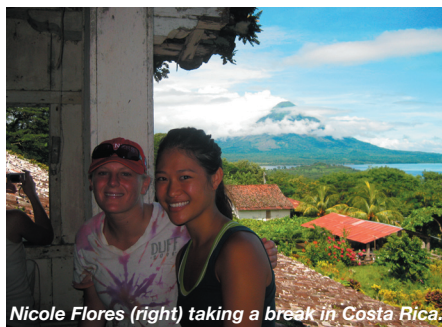
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This table highlights the experiences of the PitE students who received a scholarship from the Graham Environmental Sustainability Institute.

Name	When	Course Completed	Where
Eleanor Bomstein	Summer 2009	Implemented a recycling program to foster sustainable practice within a Ghanaian village through the Global Intercultural Experience for Undergraduates (GIEU) program.	Ghana
Jennifer DeMoss And Nicole Flores	Fall 2009	Institute for Central American Development Studies (ICADS)-- Took field courses in natural resource management and sustainable development. Had total culture immersion; lived with host families and interacted daily with Costa Rican educators and community leaders to gather information in order to better understand effective land use and community development.	Costa Rica
Corinne Land	Winter 2009	EcoQuest – Spent the semester taking field courses on natural resource management, ecology, and best environmental policy practices, in order to better understand sustainable solutions to environmental issues.	Whakatiwai, New Zealand
Jessica Lax	Spring 2009	Journalism Internship with HB Media – Researched behavior, in regards to sustainable practices. Wrote articles to educate magazine readers on ways to incorporate sustainable behaviors in everyday life.	Auckland, New Zealand
Shannon Qin	Spring 2009	Beijing Architecture Studio Enterprise (BASE) – Studied and documented differences in the physical environment and infrastructure between a village and urban area. Goal was to implement construction projects to increase sustainability in village life.	Beijing, China
Katelyn Zemenick	Winter 2009	Agro-Ecosystem Research Project – Studied ecological interactions of agro-ecosystems to better understand sustainability of coffee agro-ecosystems and the practice of organic agriculture.	Chiapas, Mexico



Jen DeMoss: (left center) with Costa Rican family.



Nicole Flores (right) taking a break in Costa Rica.



Shannon Qin

A Fresh Perspective

An Interview with Michaela Zint

With Professor Paul Webb on leave from PitE this term, Professor Michaela Zint stepped in to fill the role of Acting Associate Director of the Program in the Environment. Professor Zint was also recently jointly appointed as a faculty member for PitE. Professor Zint's home department is within the School of Natural Resources and Environment. This term, Professor Zint is teaching "Social Sciences and Environmental Problems," in which students are introduced to the current environmental problems and their solutions through the lenses of the different social science disciplines. Here is some insight about PitE from the perspective of our Acting Associate Director.



Michaela Zint (center) speaks with PitE Junior Jillian Drow (left) and PitE Concentration Advisor Jaime Langdon (right).

Q1. What have you enjoyed most about filling the associate director role with PitE this term?

Zint: I have greatly enjoyed getting to know PitE faculty and staff better. Their enthusiasm and support for the Program are tremendous. In addition, I have learned that there is great interest in the program across the university. For example, PitE is the program that others look to for innovative and leading undergraduate courses on the environment and sustainability. I personally have also been grateful for the opportunity to gain greater insight into program administration, both in terms of its challenges as well as its rewards. My most rewarding experience so far was nominating two exceptional PitE GSI's for a Rackham Outstanding Graduate Student Instructor Award, of which one, Jason Duvall (Doctoral Candidate, SNRE), was subsequently selected. This university-wide award is extremely competitive and therefore it was particularly satisfying to be able to play a role in recognizing a GSI who has made both extensive and significant contributions to the Program.

Q2. What do you enjoy the most about teaching PitE students?

Zint: I teach two PitE courses, one that seeks to introduce students to the social sciences and what they offer for understanding and addressing environmental and sustainability challenges (Environ 211) as well as one that prepares student to teach others about these challenges (Environ 382). Based on these experiences, I have found PitE students to have excellent academic abilities and to be motivated to learn about how they make be able to make a

difference. PitE students are also not afraid of challenges, they welcome them enthusiastically. For example, as part of Environ 211, students have helped, university and other local organizations better meet their environmental and sustainability goals by drawing on social science research insights. And as part of Environ 382, PitE students have developed and implemented local environmental education lessons that have helped to inform Pre-K to adult audiences about the environment, and when developmentally appropriate, motivated audiences to act to help address environmental and sustainability challenges. I have no doubt that by successfully completing these assignments, PitE students have helped to reduce our university's and community's environmental footprint. I also always especially please to hear from our alumni who have shared stories about how that they learned from my courses has helped them succeed in their careers as environmental and sustainability professionals.

Q3. Is there anything you wish to share about Bob Owen's leadership with our readers (alumni, donors, parents of current students)?

Zint: While I have only had the opportunity to work for Bob for three months, it is clear to me that he is very committed to the program, both to its growth and excellence. Bob's main interest is to meet students' needs and ensure their success. Simultaneously, Bob is also very supportive of faculty and staff, encouraging them to give their best in making this one of the leading undergraduate environment programs in the country. I am grateful to have had the chance to get to know him and serve PitE under his leadership.

Program in the Environment Minors by Home Department
as of February 2010

COLLEGE/SCHOOL	DEPARTMENT	NUMBER OF STUDENTS
LS&A	American Culture	1
	Anthropology	6
	Biology	2
	Biochemistry	2
	Brain, Behavior and Cognitive Science	1
	Chemistry	1
	Classical Civilization	2
	Communication	5
	Computer Science	1
	Creative Writing - Literature	1
	Earth Sciences	2
	Ecology and Evolutionary Biology	3
	Economics	21
	English	9
	Environmental Geosciences	1
	Evolutionary Anthropology	1
	French	1
	Geological Sciences	2
	German	1
	History	2
	Individualized Concentration Program (ICP)	3
	Mathematics	1
	Oceanography	1
	Political Science	24
	Psychology	10
	Russian & East European Studies	1
Social Anthropology	1	
Sociology	9	
Spanish	10	
Art and Design		6
Architecture and Urban Planning		3
Business		18
Education		1
Engineering	Civil	7
	Electrical	1
	Mechanical	3
	Naval Architecture & Marine Engineering	1
	Nuclear Engineering & Radiological Science	1
Kinesiology		1
Music, Theatre and Dance		1
Public Policy		7
Dual Degree Candidates	LSA/Engineering	1
	LSA/Business	1

A Minor Detail



Here we take a closer look at the current composition of the students who are working towards a minor in PitE. These minors make up one-third of the 511 students in our program. The interdisciplinary nature of the program draws students from across all corners of the campus. Within the College of Literature, Science and the Arts (LSA), PitE is home for students whose interests lie in the natural and social sciences alike; the two most common concentrations, or majors, for PitE minors are through the Departments of Ecology and Evolutionary Biology (EEB) and Political Science, respectively. PitE students are also focused on other disciplines throughout the university. Outside of LSA, the next largest home units for PitE minors are in the Ross School of Business and the Taubman College of Architecture and Urban Planning, respectively.

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as area to graze cattle or develop mines or poach wildlife. I learned that in some cases people feel as though they have no other choice when they sacrifice biodiversity in order to feed themselves or their families. Without sustainable ways to produce food and energy for people, these decisions will continue to endanger the future of all the planet's denizens."

While each student returned to campus with a different understanding, they were all eager to thank the Graham Institute for helping to fund their experiences. "My time in Costa Rica and Nicaragua unveiled the global nature of environmental issues and convinced me to dedicate my time and energy to improving the lives of people who are affected by my everyday actions," says Jennifer. "I felt a real sense of culpability and sometimes a deep despair due to the events that unfolded before me. *I'd like to think that my experiences had an immense impact on my life, and it was certainly a semester I will never forget. I really can't thank you enough for helping me get there.*" Shannon Qin echoes Jennifer's sentiments. "I am so thankful for the scholarship that the Graham Institute provided me. Without their support, I would not have been able to see such an exciting community in the most unexpected of all places."

"Funding from the Graham Institute made my trip so much more enjoyable by providing much needed financial aid and overall has allowed me to grow as a student, a researcher, and a citizen. I understand that the world is growing rapidly both through population and technology and in the future, pressures on the environment will only increase. *I hope that through my studies and subsequently through my career, I can contribute to this call for a sustainable developing economy.*" –Nicole Flores.

Nicole can be contacted at nicolelf@umich.edu.

Jennifer can be contacted at jdemoss@umich.edu.

For more information about the Graham Environmental Sustainability Institute, please visit www.graham.umich.edu. ■

Meet the PitE Staff

by: Shante Galloway

In our last edition of *Crossroads for the 2009-10 academic year*, we feature our staff, which was recently awarded the LSA Staff Spotlight Award. Here we provide you with a behind the scenes look at what each staff member does to keep this program moving.



Pictured from left to right: Beth Hill, Shante Galloway, Amanda Ciacelli, Kimberly Smith, Ellen McDonald, Jaime Langdon, Angela Tapley.

Beth Hill: Serves as Department Administrator for Program in the Environment. Beth has been with PitE since its inception, and knows everything there is to know about PitE. Beth handles general oversight of our department, fiscal management, human resources, and management of our GSI's.

Shante Galloway: Serves as the Director's Assistant. Shante handles the calendars for both the Director and Assistant Director, financial transactions, payroll, Faculty Associates for the department, and employment paperwork for GSI/Students.

Amanda Ciacelli: Serves as the Curriculum Specialist. If students have registration issues or waitlist questions, Amanda is the staff member that provides assistance. Amanda issues class permissions, advises students of our waitlist policy, creates the PitE course schedule for the academic year, and is our office "go to" staff member for questions.

Kimberly Smith: Serves as the Program Coordinator. If students need assistance with finding an internship, Kimberly will be the friendly face to provide students with choices. She also handles marketing, field experience and internship advising, alumni relations and development, planning PitE events, and serving as the liaison for the PitE Club, the new student advisory committee.

Ellen McDonald: Serves as the Secretary. She is the first helpful face you will see upon entering our office. Ellen handles our telephone lines, fields questions from students and visitors, accommodates transportation or supply needs of our faculty, and plays a critical role in planning events for students and faculty.

Jaime Langdon: Serves as the Concentration Advisor. Any student who wishes to graduate with a PitE Major/Minor meets with Jaime. If every student meets with Jaime once a year, she will have no fewer than 465 appointments during the year. She handles our student advising, fields study abroad and curriculum equivalency questions, supports the PitE Honors Program, and oversees information sessions for our department.

Angela Tapley: Assists with concentration advising, and answering a large portion of general student inquiries. Angela was the Concentration Advisor from 2006-2009.

PitE Student Named Udall Scholar

PitE would like to recognize Robin Czerwinski, who was recently named a Udall Scholar. Robin was selected out of a candidate pool of 537 students from across the nation. 80 of these scholarships are awarded to students nationwide by the Morris K. Udall and Stewart L. Udall Foundation, which strives to educate students on the importance of preserving and protecting our natural environment. Sophomore and junior college students who have demonstrated a commitment to a career in the environment, tribal public policy, or Native American health care are eligible for this prestigious scholarship. Robin, a sophomore concentrator in the Program in the Environment was nominated based on her past volunteer and leadership experience, in addition to her commitment to working in the environment.

"PitE helps me see the big picture," says Robin. "Working for the environment isn't just about developing cleaner technology or pushing for greener public policy. The natural environment is inherently a component in all aspects of life, and the interdisciplinary courses that I have taken through PitE have really helped me to see the connections between them."

As a Udall Scholar, Robin will receive a \$5,000 scholarship from the Udall Foundation, and will attend a 5-day orientation in Tucson, AZ where she will have the opportunity to meet current and former Udall scholars, as well as other environmental and tribal leaders and elected officials.



Take 5: Robin takes a break from her internship as the Junior Ranger Ambassador in Sleeping Bear Dunes National Lakeshore. Robin was trained at the National Conservation Training Center in West Virginia by lead interpreters in the National Park Service before starting her main internship responsibilities of updating the Junior Ranger Program.

Cream of the Crop: PitE's Honors Students

This year six accomplished PitE concentrators will be graduating with honors. To earn this distinction, students must complete nine credit hours of work, which includes submitting a written thesis and presenting it at the PitE Honors Symposium in April. PitE would like to congratulate the following students, and welcomes you to get to know them.



Alex Bajcz

"While shaded coffee agroecosystems are billed as (potential) sanctuaries for tropical diversity, full understanding of their biological complexity is still out of our reach. Specifically, this project attempts to delineate and, hopefully, finalize the roles of predators in these systems. This research is important because predators may keep pest levels down naturally and are often the first taxa extirpated by agricultural intensification."



Amy Fingerle

"The benthic amphipod *Diporeia* spp. has historically been abundant in the Great Lakes and is a critical member of the fisheries food web. However, *Diporeia* populations have recently been in decline potentially due to environmental stressors or resource competition from invasive species. I am researching how their population structure is changing spatially within the Great Lakes ecosystem."



Hannah Bent

"My thesis explores the impact that schools, markets, and police stations have on road development in rural Nepal, and how this change in infrastructure development affects the local environment."



Dana Schweitzer

"The main question my project seeks to answer is what are oil companies (specifically BP, ExxonMobil, and Royal Dutch Shell) saying about sustainability issues and what are they doing in terms of sustainable business decisions? By tracking trends over time, this paper also seeks to examine how organizations learn."



Christine Doman

"I investigated the relative uptake of calcium and strontium in tree foliage using a whole watershed calcium addition experiment at the Hubbard Brook Experimental Forest, NH. I evaluate the efficacy and potential of the Ca/Sr ratio and subsequent species based discrimination factors to trace calcium sources in terrestrial ecosystems."



Bhavya Sridhar

"I am working to understand the response of seedling growth to climate change. In my thesis, I work with *Acer rubrum* and *Quercus rubra* species and use Bayesian statistics to model predictions of their response to climate variables."

Enclosed is my gift of:
 \$50 \$100 \$250 \$500 \$1,000 Other

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- Barry G. Rabe Endowment Fund* (570939)
- Prog. in the Environ. Field/Internat'l Study Exp. Fund (308449)
- Program in the Environment Strategic Fund (308524)
- Environmental Experience Scholarship Fund* (571743)
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1120 Undergraduate Science Building
204 Washtenaw Ave.
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734-763-5065
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Front Cover image: PitE Junior Mike Canetta (top left) and classmates collecting data for class at Camp Davis Rocky Mountain Field Station in 2008.

Back Cover image: (from: Graham Scholarship Feature article) Jessica Lax, a PitE Senior Concentrator, takes in the glow of a New Zealand sunset.

