

Briggantine

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BRIGGS INTERNATIONAL • SCIENCE DAY FOR KIDS • AWARD WINNERS ANNOUNCED



MICHIGAN STATE UNIVERSITY

Lyman Briggs College

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Cover photo of students in Antarctica including
Briggs students Josh Polito (upper left) and
Charlotte Lee (next clockwise).

Photo by Maggie Moore

LYMAN BRIGGS COLLEGE

Lyman Briggs College is an undergraduate, residential college founded in 1967 by dedicated individuals hoping to bridge the widening gap between sciences and humanities. The first of its kind, the college has become known as the institution students go to for an excellent foundation in science and mathematics with additional focus on history, philosophy and sociology of science.

MESSAGE FROM THE DEAN

As you know, Briggs students live and study in the same building in which they attend classes. In addition, Briggs faculty conduct both teaching and research in that same building, including research on new ways to teach. As a result, Briggs students benefit from some of the most innovative education methods in the world.

So it should come as no surprise that when we travel, we do that a little differently too.

From study abroad programs that focus on the life and times of famous scientists and authors, to field study incorporating social science conducted in the far corners of the globe (see the page 4 feature on Briggs International), Briggs is on the move.

To our alumni and friends worldwide, we hope you will share your stories of travel and research, and help us show the larger community at MSU and here in Michigan just how unique we truly are.

Please take a moment to explore this newsletter, and enjoy some of the stories that demonstrate our commitment to doing things a little differently. For more detail, visit our website news page and look for the special sections called 'Briggs International' and 'Briggs on the Move'.

We hope you will share your own stories with us too: we would love to learn what made your Briggs experience so special, or how your Briggs experience has impacted your life. Our current students will also benefit from hearing about the fantastic things accomplished by Briggs alumni and friends.

Looking forward to hearing more about your travels and reflections—and perhaps even seeing you this year at Holmes Hall or abroad!

Sincerely yours,

Elizabeth H. Simmons

Dean, Lyman Briggs College



Elizabeth Simmons came to Lyman Briggs College in 2003 and became dean in 2007. Among other accomplishments, she is credited with leading efforts to increase the student body by 25 percent and renovate the teaching laboratories.

Dr. Simmons is a world-renowned particle theorist, whose research focuses on the origins of mass. She has received numerous prestigious awards in her career, and continues to conduct research in the physics department.

Similar to her dedication to research, Dr. Simmons enjoys teaching physics courses at all levels, and presently teaches a junior level course in mathematical physics.

A central part of her mission as an educator is encouraging more students (especially those from under-represented groups) to consider studies in the physical sciences.

She holds degrees from Harvard and Cambridge, and is well-respected by colleagues and her staff.

BRIGGS INTERNATIONAL

MAKING CONNECTIONS JUST A LITTLE BIT DIFFERENTLY

At Lyman Briggs College, we recognize the necessity of global connectivity. We strive for inclusion and diversity, and we understand that our students benefit the most by also learning from other cultures and in other places.

“Our international programs are quite impactful,” said Assistant Dean Philip Strong, international programs coordinator for the college.

Study Abroad, Alternative Spring Break, Freshman Seminars, and Undergraduate Research are all options for Briggs students studying internationally; they just do them a little bit differently.

“We combine science study and HPS; a constant theme in all of our programs. From biodiversity studies in Panama and Nicaragua, to following the lives of great European scientists like Darwin, Einstein, and Galileo,” said Strong.

International programs at Briggs really do incorporate different perspectives, which is indicative of the Briggs commitment to bridging the two cultures (science and the humanities), he said.

“When you spend any amount of time with our faculty and students, you begin to understand there’s a special culture of learning here,” he said.

This summer, students and faculty at Briggs will have the opportunity to take part in two Study Abroad programs: one that incorporates the sociology of development into the environmentally-sensitive regions of Panama, and one designed around key figures in the history of science including Mary Shelley, the author of the classic novel *Frankenstein*.

Students in each program will travel to either Central America or the United Kingdom to get first-hand exposure into bridging the two cultures.

And this idea applies to more than Study Abroad programs at Briggs.

Charlotte Lee, a Briggs senior studying environmental geoscience, recently participated in a course over winter break where she found herself studying geology in Antarctica.



Students pose by Emerald Lake in Tierra del Fuego, Argentina, as part of the Winter Break Antarctic System Science Program (sponsored by CANR and CNS).

Photo by Josh Polito

INTERNATIONAL PROGRAMS AT BRIGGS

- Touring Europe from the perspectives of some of the founders of science
- Tracking endangered species in Nicaragua
- Hosting faculty and administrators from a partner university in Iraq (see below)
- Sending student researchers to the far corners of the globe (see sidebars)
- Promoting biodiversity study in Central American regions during Spring Break

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VISITING FACULTY FROM UNIVERSITY OF DUHOK, IRAQ

Briggs faculty, staff, and students are happy to welcome seven faculty members from Iraq (including the dean of the faculty of science) to Holmes Hall and MSU this Spring. From the University of Duhok in the Kurdistan Region of Iraq, the group is supported by funding from a State Department grant administered by IREX and came to Briggs to work with faculty and staff on curriculum development in biology, ecology, and genetics. Everyone at Briggs is very excited to be a part of this program, which will help rebuild a nation previously cut off from science.

“When you spend any amount of time with our faculty and students, you begin to understand there’s a special culture of learning here.”

- Dr. Philip Strong

“It was an amazing opportunity, and I got to travel to a place that encompasses all my interests and topics of study,” she said.

Lee, along with two other Briggs students and a cohort from other colleges on campus, traveled to the southern tip of the globe over winter break this year.

“I just thrive learning in the field,” she said.

She came to be in Briggs through research into the idea of a residential college, and with encouragement from an aunt who is a Briggs alum. What she found did not disappoint her.

Briggs provided an avenue to a new perspective which ultimately allowed her to get the most out of her educational experiences.

“In Antarctica, I really learned to appreciate the close ties humans have with the Earth,” she said.

Josh Polito, a fellow senior studying plant biology, also took part in the course over winter break.

“I’ve been eyeing the Antarctica program since I was a freshman here at MSU,” he said.

“Other programs were interesting, but this trip was always sort of dream trip.”

Polito currently works in a lab on campus that focuses on cold acclimation in plants, and was excited to compare his work here to what exists in and around the Antarctic Peninsula.

“It was incredible when I realized there was absolutely no soil at any of the places we visited,” he said. “In Michigan, you find soil everywhere, but in Antarctica this just isn’t the case.”

He was surprised by the complete and utter lack of plants (aside from some mosses and lichens), and was fascinated by the limits of plant survival.

Both Lee and Polito were thrilled to have the opportunity to study hands-on outside the classroom. Through international programs such as these, Briggs students learn to apply important concepts from earlier courses to receive upper-level credit in subjects like the history of science.

“And that is what it is ultimately about,” said Strong. “We want students to continue thinking about science and the impact of science through a new lens developed by studying in these important locations and cultures.”

“We are developing global competent citizen-scholars and these international learning opportunities are prominent examples of engaged student learning...with a Briggs slant.”

International programs at Briggs are happening every day throughout the year, and opportunities exist for all community members. For more information, please visit lbc.msu.edu/international.

GEOLOGY AND CULTURE WITH CHARLOTTE LEE

“I can not explain the feelings of a student that has spent the past four years taking classes such as oceanography, glacial geology, structural geology, and plate

tectonics actually getting to observe and interact with these things in the flesh. I easily met and surpassed my goals for learning in the field and becoming a more active citizen of the world.

I would never have been able to take such a trip and gain such knowledge without the professors and peers who made this extraordinary journey with me.

I never anticipated that I would actually go on such an amazing trip, and I hope that as I come back and share experiences I can inspire other students to get out there and experience the world.”



Charlotte Lee is a senior this year, and is studying environmental geoscience. She plans to go to graduate school in geological science.

Josh Polito is a senior studying plant biology, and is planning to go to graduate school.

LOOKING AT COLD ACCLIMATION IN PLANTS WITH JOSH POLITO

“If you are in Briggs, definitely join a study abroad program. The hands-on experience that comes with it is incredibly valuable, and you’ll definitely be more attached to the class topic that you would in a typical course.

I work in a lab in the plant biology department at MSU, which focuses on cold acclimation in plants. While this isn’t necessarily what I’d like to research in the future, it definitely influenced my thoughts on plant survival. Plants near polar regions have particular adaptations for surviving the cold, and it was very interesting to try to find examples of these adaptations at work.

As a senior who doesn’t necessarily want to sit through another lecture, study abroad was the perfect solution.”



NEWS BRIEFS

BRIGGS SPIRIT DAY CELEBRATED AT HOLMES

February 7 marked Briggs Spirit Day at Holmes Hall, and everyone celebrated in spectacular fashion! Faculty, staff, students, alumni and friends all dressed up in Briggs gear to commemorate their time at the college, and photos were taken and posted on Facebook and the Briggs website.

The Dean Team kicked off the event earlier in the week by sporting Briggs gear for a promotional photo that appeared on the website, Facebook, and event page used to build excitement for the day. Everyone else followed suit posting photos and comments throughout the day.

Special shout-outs go to Susan Ohm, Paraj Mandrekar, and two generations of the McGlew clan for posting photos to the event page. We also send a special thank you to everyone who took part and wore their Briggs gear. Hopefully there will be even more participation in the future!



UNDERGRADUATE RESEARCH AWARD WINNERS ANNOUNCED FOR 2013

We are proud to announce the 2013 Undergraduate Research Award winners, selected by committee for the quality of their research proposal and relevance to their proposed career field and/or graduate education.

Students who receive the awards present their projects publicly at an event such as the University Undergraduate Research and Arts Forum held in early April, the Research Symposium to be held at Briggs April 22 and 23, and/or at a regional or national meeting.

The 2013 winning projects and students are:

- Jared Elenbaas, a junior studying biochemistry and molecular biology, for a project titled 'Effects of Retinoblastoma Protein Mutations in Developing Tissues'.
- Caitlin Kirby, a senior studying environmental biology and microbiology, for a project titled 'Phytophthora Zoospore Transport in Media-packed Columns'.
- Dana Koeppel, a junior studying astrophysics, for a project performing electron-capture rates calculations on scandium-45 and titanium-46.
- Kayle Noble, a senior studying physiology for a project titled 'Noninvasive Investigation of Microvascular Function in Aging'.
- Monica Pomaville, a senior studying physiology, for a project titled 'Implications of Novel Lung Cancer Associated Mutations in Human Retinoblastoma Family Protein p130'.
- Rebecca Tauscher, a sophomore studying chemistry, for a project titled 'Comparing the Longitudinal Impacts of Three Formats of MSU General Chemistry Courses'.

Up to seven \$1,000 awards are funded each Fall and Spring semester, and up to four \$3,000 scholarships for Summer, for students conducting undergraduate research in partnership with an MSU researcher.

For more information about undergraduate research at Briggs, please visit our website.

TWO BRIGGS FACULTY AND DEAN SIMMONS RECOGNIZED WITH PRESTIGIOUS MSU AWARDS

Congratulations are in order for two outstanding faculty members and our excellent dean at Briggs. At three separate award ceremonies this Spring, each was awarded a prestigious MSU award.

Dr. Aklilu Zeleke, associate professor of mathematics at Briggs, was awarded one of two Quality in Undergraduate Teaching awards by the MSU Alumni Club of Mid-Michigan. Dr. Zeleke was recognized for his 'deep enthusiasm for mathematics' and his 'determination to give as many

students as possible access to the joys of mathematical discovery'.

Dr. Cori Fata-Hartley, an assistant professor in Briggs biology, received an Excellence in Diversity Award for an individual with 'sustained effort toward excellence

in diversity'. Among many other efforts, Dr. Fata-Hartley is one of the founding members of LBC Inc., a faculty committee dedicated to raising awareness of diversity issues and inclusion at Briggs.

And Dr. Elizabeth Simmons, dean of Lyman Briggs College, received the 2013 Robert F. Banks Award for Institutional Leadership. This award is given each year to a member of the faculty or staff in recognition of extraordinary and sustained institutional leadership that advances the university's commitment to connectivity, quality, and inclusion.

All of us at Briggs are so proud of Drs. Zeleke, Fata-Hartley, and Simmons, and we hope you will join us in congratulating them the next time you see them around campus.



BRIGGS STUDENT GROUP HOSTS SCIENCE DAY FOR ELEMENTARY SCHOOL STUDENTS

Last week, the Briggs Multicultural Alliance (BMA) hosted a science day for a class from Potter Elementary School in Flint.

This marks nearly a decade of partnership for the event held by BMA, a student organization that stands for the Briggs core values of diversity and inclusion.

Vanessa Salmo, president of the group and a junior at Lyman Briggs College, said "Science Day is so important, and exactly what we stand for."

"Many of the children come from under-privileged school districts that can barely afford to teach any type of science; students at Lyman Briggs College are very excited about science, so we (BMA) are excited to meet students from all over and encourage them to pursue higher education," she said.

Approximately 20 volunteers showed up to support the group and teach mini-sessions in various scientific fields. Among instructors were Briggs' Dean Elizabeth Simmons, who taught students about elementary particles with plastic tubs and ping pong balls, and Hanni Nichols,



a Briggs mathematics instructor (and alum), who helped out with an insect demonstration.

The event began as a partnership with Shelbi Redmond, a teacher who picks a group of fifth and sixth grade students to bring to MSU each year.

"This is such a great program," said Redmond. "The kids just love coming here, and we're happy to have the opportunity for them to learn more about science."

And the program is on the move. With plans to expand, and the potential to include

other schools, BMA will be making an even larger impact in the diverse communities surrounding the Lansing area.

"Our Science Day was a definite success," Salmo said. "We were able to teach students about chemistry, physics, biology, and other things they would not normally get to see until college, and I feel like they really had fun learning from other students and volunteers in a setting outside the typical classroom."

For more photos of BMA's science day event, please visit the Briggs Facebook page.



NEW WEB PAGES FOR ALUMNI AND FRIENDS

As part of the recent website redesign, which included the creation of a news and events page and a donation guide, Briggs is proud to announce new web pages for alumni and friends. Now you can stay connected

and choose preferences that will allow the staff at Briggs to help you take advantage of opportunities to connect with students, attend events, etc.

Visit lbc.msu.edu/alumni, and see how you can get involved.



FIRST ANNUAL SCIENCE FESTIVAL AT MSU

Lifelong learners of all ages, get ready to BE WOWED! On the campus of Michigan State University, April 12-21 marks the first-ever MSU Science Festival.

Faculty, staff, students, and friends will all take part in a collection of events ranging from hands-on activities to discussions and panels that will peak the interest of everyone regardless of age or education-level.

Watch for Briggs faculty and staff, including Dr. Robert Pennock, who will be taking part in the opening ceremonies.

Visit the website for program details and updates, or like us on Facebook. We hope we will see you there!

For more information, visit
sciencefestival.msu.edu

