

A time to shine: Math symposium shares Simpson students' work, invites other colleges to do same

In an effort to showcase the achievements and talents of Simpson's mathematics majors, the math department is planning the Second Annual Midwest Undergraduate Mathematics Symposium (MUMS).

The event, which will be held in early April, is the only symposium of its kind in the state of Iowa and as one of its organizers, Murphy Waggoner, associate professor of mathematics says, its one way to really put Simpson on the map.

The symposium invites math undergrads and faculty from all colleges across Iowa and from bordering states, along with high school seniors, to not only learn what Simpson's math students are doing in terms of research but also to share the research they are doing at their respective colleges.

"It's a chance for people to come and see a day when everybody is celebrating mathematics," says Waggoner.

The idea for MUMS came about three years ago after Waggoner and Rick Spellerberg, professor of mathematics, traveled to the University of South Dakota with a group of Simpson students. They attended the Mathematics on the Northern Plains Symposium during which three of the four total student presentations given were done by Simpson students. Waggoner says she and Spellerberg came away from that experience thinking they could do something like that at Simpson and "not have to drive nine hours."

Thus, MUMS was born. During

its first year in 2004, the symposium was funded with support from the Lilly Foundation. This year, it will be partially funded through an NSF grant.

The daylong event features opening and closing plenary addresses as well as concurrent sessions during which various undergraduates and some faculty from a variety of colleges present findings from undergraduate research. Carleton College professors Deanna Haunsperger, a 1988 Simpson math graduate and her husband Robert Kennedy will give this year's addresses. The opening address is titled "Halving Your Cake: The Mathematics of Fair Division" and the closing address, titled "Election Antics," will focus on how to count votes in an election.

A number of Simpson students who have conducted independent research throughout the academic year have signed up to present their findings during the concurrent sessions throughout the day. Some of the students are choosing to present their findings from the International Mathematics Modeling Contest, which they attended in February. The contest requires students to work in groups of three to answer a particular math question in 96 hours and write a paper on their findings. This year's questions ranged from how to model the land that would be covered by a flood if a dam broke; to how to make toll roads more efficient so there is less waiting time; to a question about managing world resources.

Additionally, Simpson students

who conducted independent research during the semester in specific areas such as Game Theory, a type of mathematics, and other projects will also present their work.

Waggoner says the symposium provides undergraduates not only the opportunity to share their work but to learn from the work of others. It also builds confidence, poise and a comfort level with showcasing their work as well as helping them make connections with graduate programs, a number of which send representatives to observe and interact with the students.

"A high percentage of the students that participate in these types of things are definitely your grad school-type caliber students," says Spellerberg.

In fact one of last year's undergraduate participants from Simpson earned a position in a summer research program at Iowa State University after a representative from ISU saw her presentation during the symposium.

"She got accepted even before our letters of recommendation went because he saw her presentation and he knew what kind of work she could do," shares Waggoner. "It worked out very well for the student. The summer research program was a great experience for her and now she's been accepted to three different graduate programs."

Although Spellerberg and Waggoner both agree the symposium's main

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Science fair considered success

The 19th annual South Central Iowa Science and Engineering Fair (SCISEF), held Saturday, March 19 drew over 100 sixth through 12th grade students to campus along with their teachers and family members.

Jackie Brittingham, assistant professor of biology, who helped organize the fair, says this year's event exceeded expectations.

"We hoped to increase participation from 40 participants last year to maybe 70 this year," says Brittingham. "Having 110 students was remarkable."

All students in grades sixth through 12 interested in science and enrolled in public, private or home schools in Iowa's South-Central region were eligible to enter the fair.

The fair was organized into two categories with two divisions in the categories of biological sciences and physical sciences. Entries were judged within a senior division (grades nine through 12) and a junior division (grades sixth through eighth). Team competition was available at the junior and senior division levels. A seminar paper competition was also held at the senior level.

The fair is affiliated with the Intel International Science and Engineering Fair and is designed to help students explore science, while learning commu-

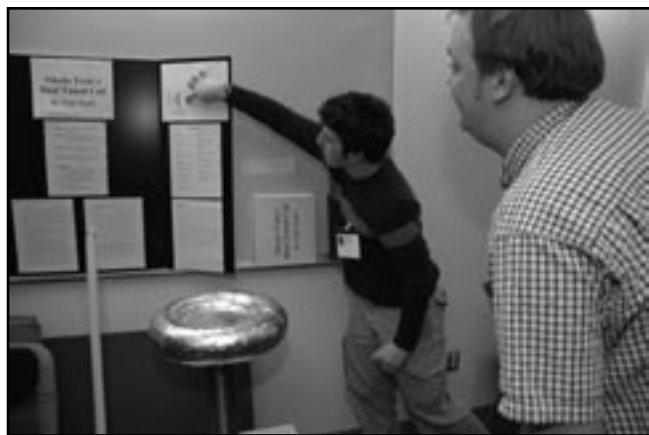
nication and research skills.

The day began with the participants (representing 11 different Iowa schools) gathering in Carver Science to set up their exhibits from 7:30 a.m. to 8:45 a.m. A greeting from Brittingham was followed by a presentation on lasers by Dave Olsgaard, associate professor of physics and Murphy Waggoner, associate professor of mathematics' talk on "Math Magic" in Lekberg Hall. During these presentations, judges, which included various professionals from Drake University, Grand View College, Des Moines University, Pioneer HyBrid and local physicians, viewed the exhibits in Carver.

Interview sessions between the judges and each exhibitor followed. There were also seminar paper presentations held from 9:30 a.m. to noon. Lunch in Pfeiffer dining hall was followed by the exhibits being open to the public in the afternoon and the day closed with an awards ceremony. Throughout the day, there were three rotating tours of the campus delivered by Simpson student ambassadors.

Exhibits ranged from testing different brands of pop corn and paperplates to investigating the proper aseptic techniques necessary for successful plant tissue culture. Students demonstrated their ability to build better bridges, solar panels, pin-hole cameras, wind turbine blades and

toothpaste. They tested patterns found in prime numbers and even asked "can dogs do math?" They looked at energy sources such as wood products, soybeans, corn and oats. They studied tsunami waves and erosion principles,



Participant Tyler Pauly demonstrates his homemade Nikola Tesla generator for a judge.

investigated the fat content of ground beef and poultry and investigated microbial contaminants from the vegetables we eat and the exercise equipment we use. They also looked at substances that affected the growth of plants including light and tobacco tea.

Each participant received a SCISEF 2005 T-shirt to commemorate their experience as well as a participation award. In addition, the two senior high division winners and a teacher-sponsor received a trip to the 2005 International Science and Engineering Fair in Phoenix, AZ, May 8-14, and \$500 college scholarships to the college of their choice upon enrollment.

Second and third place winners in the senior division received trophies, and \$200 and \$100 college scholarships, respectively. The top five winners in each category of both the senior and junior divisions received medals and a certificate. There were also many other specialty awards and prizes for both junior and senior divisions.



Students listen to presentations by Simpson faculty members Murphy Waggoner and David Olsgaard in Lekberg Hall.

Math symposium

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purpose isn't to simply showoff the high caliber math students attending Simpson, but rather to allow those students and others from various colleges a comfortable and welcoming environment in which to learn more about math through their peers' research; it still provides an excellent opportunity to get the word out about Simpson's math program.

"Basically we were bursting at the seams," says Waggoner. "We didn't have enough opportunities for our students to present [their research] to us, so we had to branch out to share it with other people. The math department has a lot on the ball and it's always been because our students really want authentic learning experiences and this is one of the authentic learning experiences that we've offered them and they've embraced it."

Last year's event drew 60 people, representing eight different educational institutions. Waggoner is hopeful that this year's will welcome between 75 and 100. Spellerberg says the event has true potential for growth.

"I see the potential that this thing is going to grow in participants and I think there is a very good possibility that it will be considered a very prestigious event in terms of promoting undergraduate research in mathematics," shares Spellerberg.

For additional information on MUMS go to simpson.edu/math/beyond/mums2005.html

Campus book club continues

The Simpson College Book Club celebrated its first anniversary in January and is still going strong.

The club, which meets the first Wednesday of every other month, is headed up by Laura Johnson, Jennifer Clark and Pat Hicks. Johnson originated the club in an effort to meet others who are passionate about reading.

"I love to read and I also do a lot of writing," shares Johnson. "I actually wanted to start a writing group but didn't know how that would go over. I figured since most people like to read, a book club would be a nice way to meet other people who enjoy reading."

Each meeting, which is held in Dirlam Lounge over the lunch hour, involves small talk and discussion on the book. Some titles the club has read include "The Lovely Bones" by Alice Seibold, "The Red Tent" by Anita Diamant, "The Da Vinci Code" by Dan Brown and their current book "The Time Traveler's Wife" by Audrey Niffenegger, which will be discussed at

the next meeting on Wednesday, May 4.

Although the meetings generally draw fewer than 10 people, Johnson considers the book club a success.

"My hope is that people are getting something out of the books we read as well as out of hearing other people's points of view," shares Johnson. "We all have varied backgrounds and everybody brings something different to the book and to the discussions."

She adds that it's important for people to understand that they don't have to like the book or even finish reading it in order to come to the meeting. "A number of people couldn't finish "The Lovely Bones" [do to its subject matter] so they just didn't come to the meeting. It would have been interesting to hear their take on the book."

Johnson sees the club continuing as long as there is interest.

Contact Johnson, Clark or Hicks for more information on the book club. Students, faculty and staff are welcome

LIFE AFTER FIVE



Pascasio

A look at life with Trish Pascasio

Title: administrative assistant to human resources

Been at Simpson: since August 2004

Family: husband Jim; daughter Jessica, 17; daughter Sarah, 14 and son Andrew, 12

Likes most about job: "The people. There is always such a variety of personalities and characters. I like the variety."

Outside of work: her children keep her busy with musical activities. All three children are in band and choir. She and her husband play in their church's praise band. She also enjoys baking, cooking, gardening and canning.

Upcoming vacation: planning trip to Pittsburgh, PA., with husband and children this summer to visit husband's family.

Favorite movie: *Tuesdays with Morrie*. "I agree with the mindset life is for the living, do it now, don't wait."

FACULTY NOTES

During the week of Jan.16 through 22, approximately 30 members of the Theatre Simpson company attended the 37th Annual Region V Kennedy Center American College Theatre Festival in St. Louis, where they had a chance to interact with students and faculty from approximately 80 other institutions of all sizes from the Upper Midwest region, and with theatre professionals from across the country. Simpson students participated in acting and directing scholarship auditions, production and design competitions, workshops chosen from over 100 offerings and saw invited festival productions from other schools. Several students also auditioned and interviewed for summer professional internships with organizations ranging from Highland Summer Theatre in Minnesota to the Santa Fe Opera Company in New Mexico.

John Benoit, associate professor of music, judged trombones and small brass ensembles at the 2005 Perry Band

THE CORNERSTONE

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Olympics held at Perry High School on Feb. 19.

Bruce Brown, instructor of music, was a featured panelist Feb. 21 at Urbandale High School during their week of "Career Day at Urbandale." The panel discussed professional careers in the performing arts with the high school students. On March 1, he conducted a session in audition techniques for Drake University vocal students sponsored by the Student National Association of Teachers of Singing Drake University Chapter.

Angela Gafford, chaplain and director of religious life council, and **Chris Waddle**, chaplain and director of church relations, attended the National Association of College and University Chaplains yearly conference in San Antonio, TX. This year's theme was "Gender and Sexuality."

Associate professor of religion **Gary Kinkel's** essay called "Orthodoxy and Pietism as the Necessary Dialectic of Christian Existence" is being published in a Finnish journal called *Perusta*, which means "Foundations."

Eduardo Magalhaes III, associate professor of political science, was recently elected program chair for the North Central Council of Latin Americanists and will be organizing this year's Annual Conference to be held at Marian College in Fond du Lac, WI, in October.

Tim McMillin, instructor of music, was honored recently to be the guest conductor and clinician for two day-long

choral events in the state of Iowa. The first was a conference choral festival in South Central Iowa. The second was the Southwest Iowa Choral Directors' Association Honor Choir held at Iowa Western Community College in Council Bluffs. Both were events for high school choral singers.

Justin Nostrala, assistant professor of art, had a charcoal drawing, "Charcoal on Paper, 42x58", titled "Prayer," in an exhibit at Austin Peay State University in Clarksville, TN. The title of the exhibition is "Border to Border: A National Drawing Competition." The show dates were Feb. 21 through March 24.

John Sirianni, director of athletics, attended the Iowa High School Baseball Coaches Association spring clinic in Cedar Rapids on Feb. 5. He was selected College Coach of the Year.

Rick Spellerberg, professor of mathematics, gave a talk titled, "Using Game Theory as a Mathematics Pump," at the Iowa Council of teachers of Mathematics Annual Conference in Ankeny on Feb. 18.

Jule Thorsen, adjunct faculty member has been appointed by Mayor Frank Cownie as a member of the Des Moines Library board of trustees. This is a five-member board charged with the governance of the public library system.

Melvin Wilk, professor of English, conducted poetry writing workshops in Des Moines for junior high students on Feb. 11.