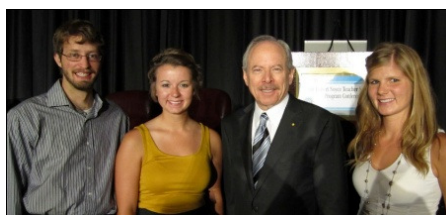




Noyce Scholars Are Class Acts

"The nation that out-teaches us today will out-compete us tomorrow," said President Obama recently, which is why Alan Leshner, Chief Executive Officer of the American Association for the Advancement of Science, revealed in his keynote at the recent Robert Noyce Scholars conference that "President Obama knows about and loves this program." As part of the National Science Foundation, Noyce Scholarships draw talented STEM majors and graduates into K-12 teaching in high need school districts. Iowa's public universities won a five-year grant through IMSEP last year to award Robert Noyce Scholarships; and, so far, 15 scholars have been named. All were invited to the annual conference of Noyce-funded universities earlier this month, and three Iowa State University (ISU) scholars took up the invitation, spending three days in Washington, D.C. "I was pleasantly surprised at how much I learned! I had no idea how widespread...the same ideas of teaching practices are across the nation," observed earth science major Hallie Satre. Her fellow Cyclone, geology major Melanie Marzen, came away networked, "I really enjoyed speaking with previous Noyce scholars about their experiences as new teachers in low income school districts." Talented STEM majors or graduates who may be interested in teaching should inquire of Noyce at <http://www.iowamathscience.org/noyce/>.



Alan Leshner, CEO, American Association for the Advancement of Science, visits with ISU science teaching majors and Robert Noyce Scholars recently at the annual Noyce conference. (L to R) Grant Kellogg, Hallie Satre, Alan Leshner and Melanie Marzen.

Food for Thought - Waterloo Teacher Shops for Ideas



Waterloo science teacher Shalia Moore with Hy-Vee dietitian Stephanie Wharton as they prepare for a day of demonstrations.

As they wheel out the sample cart, Hy-Vee dietitian (and UNI graduate) Stephanie Wharton explains, "It's been great having Shalia as an Extern. She's a professional and is excited to learn all about health and nutrition. And, when I do presentations to children's groups, Shalia teaches ME a few things!" Stephanie is hosting Shalia Moore, a middle-school science teacher in the Waterloo school system who is on a Real World Externship this summer with the Waterloo Crossroads Hy-Vee dietetics department. From helping plan educational seminars, to

prepping for Stephanie's monthly television broadcast about the nutritional value of the foods we buy every day, Shalia feels it has changed the way she thinks about teaching. "I can see teaching my kids about everything from choosing healthy snacks to stretching their family's food dollars – ideas they can take home," said Shalia. "More importantly, I can show them how good customer service skills can help them land their first part-time job." In addition to Shalia, Hy-Vee has partnered with IMSEP to host two more math and science teachers at the corporate office in Grimes, using their backgrounds to track inventory from the warehouse to the store shelf to the kitchen table. To learn more about all IMSEP Externs, go to www.iowamathscience.org/externships/ or log on to Facebook and search for "Real World Externships for Teachers of Math and Science."

IMSEP Related Events

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| August | <p><i>I-Teach Mathematics and Science</i> – Registration for the <i>I-Teach Mathematics and Science</i> teacher recruitment seminar is coming up. Designed for freshman and sophomore mathematics and science majors who might consider teaching as a career option, this tuition-free class gives students an up-close look at what it means to be a math or science teacher in an Iowa classroom. Location: It is a one-credit elective seminar currently offered at UNI, ISU, North Iowa Area Community College (NIACC) and Hawkeye Community College (HCC). Contact: Interested students should log on to http://www.iowamathscience.org/i-teach or e-mail IMSEP@uni.edu for more information.</p> |
| August 3 | <p><i>Iowa Science & Mathematics Teacher Educators Summit</i> – A statewide one-day conference for all math and science teacher educators in Iowa. Keynote address by Dr. Pendred 'Penny' E. Noyce. A reception will be held the evening before the conference. Location: Grinnell College – Grinnell, Iowa. Contact: For more information and to register, go to http://www.iowamathscience.org/summit_2010/ or email IMSEP@uni.edu.</p> |
| October 7-9 | <p><i>Iowa Science Teaching Section Fall Conference</i> – "Changing Iowa Classrooms: One-Room Schools to One-World Education." Keynote Speaker – Galileo Michael Francis of Stars Science Theater. Location: Scheman Conference Building, Iowa State University, Ames, Iowa. Contact: http://ists.pls.uni.edu/</p> |
| October 10 - 24 | <p><i>USA Science and Engineering Festival</i> – A nationwide celebration of all things science and engineering in America, culminating in an exhibition fair on the National Mall. The IMSEP exhibit represents STEM initiatives and hands-on activities for Iowa. Location: National Mall, Washington, D.C. Contact: For more information, go to http://www.usasciencefestival.org/ or email IMSEP@uni.edu.</p> |



University of Iowa instructor and Extern mentor Ted Neal does a site visit at Abbe Hills Farm near Mount Vernon

Ted Neal, an instructor in science education at the University of Iowa, joined the IMSEP team this summer, along with ISU's Comfort Akwaji-Anderson, to mentor teachers enrolled in *Real World Externships*. Ted and Comfort, together with project supervisor and UNI instructor Jason Lang, are monitoring 33 teachers at work across the state. Helping manage a multi-dimensional program that unites schools, universities, retail businesses, Fortune 500 companies and organic farm settings is

a tall order. "It takes the right teacher to say, 'Today's lesson isn't going to be reciting Page 37.' What teachers are learning [as Externs] on the ground will translate to hands on lessons kids can get excited about," Ted observes. Prior to joining the U of I as a clinical instructor for the Science Education Program, Ted taught for nine years—seven years in the states and two years in Portugal—bringing a background that lends itself to working with diverse people and situations. "I'd like teachers to know that businesses are great resources for the classroom and to know they [businesses] want to be involved," he enthused. "We have great communities, great businesses and a great education system in Iowa. We need to continue to bring all these elements to the table for our kids.

Alternative Energy to be Focus for Science Festival

The Iowa Mathematics and Science Education Partnership (IMSEP) will represent Iowa at the culminating exhibit on the National Mall at the conclusion of the *USA Science and Engineering Festival* in Washington, D.C. An innovative group of leaders from Iowa State University, the University of Northern Iowa, the University of Iowa and the Corridor STEM Initiative will be on hand to inspire Mall visitors with the wonders of science and technology critical to Iowa's economic future. Our state ranks first in the nation in the production of ethanol, second in the production of biodiesel and second overall in wind generation output, so it only makes sense that we highlight our leadership in sustainable science for a national audience. The event is scheduled for Saturday, October 23, and Sunday, October 24. For more information about the event, go to <http://www.usasciencefestival.org/>.



Another Summit's Eve



Pendred 'Penny' Noyce, M.D. is keynote speaker for the 2010 Iowa Science and Mathematics Teacher Educators Summit

The arrival of this newsletter coincides with the eve of the **Iowa Science and Mathematics Teacher Educators Summit** beginning with a campus tour and reception on August 2 and a day-long conference on August 3. Well over 100 professionals are registered to explore the possibilities in improving the way we produce future science and mathematics teachers for Iowa. Breakout sessions will include facilitated conversations around such diverse topics as nontraditional licensure, equitable teaching and next-generation teacher preparation. Keynote speaker Dr. Pendred 'Penny' Noyce of the, Noyce Foundation will speak on the grand challenges in math and science

education. For more information, go to http://www.iowamathscience.org/summit_2010/.

Moms' Night Out for STEM, an evening extravaganza supporting moms (and dads) in their critical role in inspiring children toward careers in the STEM fields, is being planned as a "Satellite Event" of the USA Science and Engineering Festival on October 10 through 24, 2010. Schools, colleges, universities, museums and industries will be sites across Iowa where Moms' Night Out for STEM events will be occurring simultaneously on October 18 (tentatively). Interested in hosting, helping coordinate or attending one of these events? Let us know at IMSEP@uni.edu. More information is available at <http://www.usasciencefestival.org/satellite-event-directory>.

Reaching for the Stars. Dr. Siobahn Morgan recently led 20 teachers from around the state through the path of the stars at this year's "Astronomy Workshop for Teachers" held on UNI's campus. The week-long workshop included networking with other science teachers and learning new curriculum and astronomy content as well as the night sky. Teachers finished the workshop with armloads of new lesson ideas and materials to bring alive the night sky for students.

Statewide STEM Activities. Curious about STEM education programming taking place across Iowa? A searchable database (by name, institution, theme and funder) of 259 such programs is available at <http://www.iowamathscience.org/inventory.shtml>. Participants may modify, add, or delete programs at <http://kparathi2.cba.uni.edu/MSInventory/>.

For more information or to suggest story ideas, contact us at:

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