Agriculture is a diverse field and students will now have the opportunity to experience Local Food production first-hand through the SDSU Student Farm located at the N.E. Hansen research site here in Brookings. Preparations for the first season at the site are already taking place through the Vegetable Production class. Students have selected crops, ordered seed, designed the site, and started growing transplants to use in a 1/3 acre plot. The produce grown will be marketed through a 15 member CSA (Community Supported Agriculture) program which will provide a family sized share of vegetables from Mid-June through Mid-October. Extra produce will be distributed to organizations serving those in need in our community. Farm based curriculum offers a wide variety of hands-on experiences involving horticultural food crops including planning, planting, irrigation, IPM, fertility management, weed management, harvesting, post-harvest prep and storage, and more. The site will also offer opportunities to work with cover crops, composting, extended season structures such as high-tunnels, wildlife management, appropriate sized technology and equipment, marketing, and more. The site will also offer opportunities to work with cover crops, composting, extended season structures such as high-tunnels, wildlife management, appropriate sized technology and equipment, marketing, and more.

“I am very excited about the opportunities for departmental and cross-campus collaboration a site like this presents,” says Kim James, Instructor of Horticulture and Project Coordinator. “I invite all who may have interest in using some aspect of local food production to enhance programing (or even a particular lesson) in their respective areas to contact me to see how we can work together. Additional opportunities exist for those who may have interest in developing service learning projects or undergraduate or graduate research related to local foods.”

Students in any major can get involved through courses in Local Food Production offered Spring Summer and Fall or through volunteer work at the site. “Local food isn’t a fad”, says James, “it’s about feeding people, supporting our communities, and providing new, diversified opportunities in agriculture. I am very pleased that SDSU has taken this step to support student education and outreach in this increasingly important area of Agriculture.”
New Faculty—Emmanuel Byamukama

Name: Emmanuel Byamukama
Title: Assist. Prof /Extension Plant Pathologist
Office: PS 107

My motivation for work everyday:
That I am generating and reaching out to growers of South Dakota with research-based information to help them make decisions on how best to manage diseases and increase crop production to feed the world.

Education:
B.Sc. Agriculture: Makerere University, Kampala, Uganda. 1995-1999
M.Sc. Crop Science: Makerere University, Kampala, Uganda. 2000-2001
PhD, Plant Pathology: Iowa State University, Ames, Iowa. 2005-2008

Work history
International Institute of Tropical Agriculture, Uganda: 2002-2005
Iowa State University, Iowa: 2006-2009
South Dakota State University, South Dakota: March 2013-

Just for fun:
Favorite TV show: modern family, last season
Favorite movie: 12 angry men , star wars

Places lived/visited: Lived in Uganda, South, UK, USA ( Iowa, Nebraska, and now South Dakota), I have visited Peru, India, Mexico, U.S.A ( ND, MN, NC, ID, OR, HI, CA, KS, TX, GA, IL, MI, OH, RI, and MA)

Hobbies – Traveling to new places (adventure), hiking, playing backyard games.

If you could have three wishes...
Be the best I could be in all my roles (professionally and socially)
Bring out the best in the people I meet and interact with
Visit the wonders of the world

Graduate Student Research Days

MONDAY, April 22, 2013 (NCARL)
2:00 pm—Muhamad S. Misan. (Dr. X. Gu-Advisor). Ecological genetics/genomics of weedy rice
2:45 pm—Mukhtar Agoub. (Dr. G. Jiang-Advisor). Inheritance and Mapping of Soybean Aphid Resistance from Soybean Accession PI603432B
3:30 pm—Jiao-Ping Zhang. (Dr. G. Jiang-Advisor). Association Mapping of Nutrient Traits and Agronomic Characters in Earlier Maturing Soybean (Glycine max) Germplasms

TUESDAY, April 23, 2013
(SNP 103 & SNP Atrium)
2:00 – 3:20 pm—Short oral presentations (Session 1)
Denise Miller. (Dr. T. Schumacher-Advisor ). Calculating Erosion Potential using Ifsar Elevation Models in Two Major Watersheds in South Dakota
Teshal Mamo. (Dr. A. Boe-Advisor). Genetic Variation for Biomass Production in Cup Plant ( Silphium perfoliatum L)
Sarah Adjei-Fremah (Dr. X. Gu-Advisor). Field Evaluation of Variability for Iron Deficiency Chlorosis (IDC) in a Soybean Segregating Population
Rodrigo Dos Santos. (Dr. W. Berzonsky-Advisor). Identifying Unique Combinations of Starch and Protein Genes Optimizing Functional Wheat Flour Tortilla Quality

3:20 – 4:00 pm Break and Poster session
Sidrat Abdullah (Dr. S. Ali-Advisor) Functional Characterization of Rpi chc1 Homologs of Solanum spp
Sajag Adhikari (Dr. S. Subramanian-Advisor) RNAseq Analysis of Soybean Root Nodule Development
Rita I. Velez-Ruiz (Dr. P. Johnson-Advisor). Bee Diversity in Planted Grasslands of South Dakota, US

Stephanie Hansen (Dr. S. Clay-Advisor). Drought vs Weed Stress: Comparison of Corn (Zea mays) Gene Expression at Midseason
Kyle Gustafson (Dr. G. Carlson-Advisor). Verifying a Variable Rate
Recommendation Using Yield Monitor Data and On-Farm Research

4:00-5:00 pm Short oral presentations (Session 2)
Laura Winkler (Dr. P. Johnson-Advisor). Using Ants (Hymenoptera:Formicidae) as Indicators of Restoration Success in Temperate Grasslands
Aditi Kondhia (Dr. J. Gonzalez-Advisor). Studying the Mechanism of Resistance to Orange Wheat Blossom Midge
Rosa Guerrero-Chavez (Dr. K. Glover-Advisor). Mapping a Novel Source of Resistance to Emerging Stem Rust Races in Wheat
# 2013 Sigma Xi Oral Presentation Schedule - April 19th

## SNP 183

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Advisor</th>
<th>Department</th>
<th>Title</th>
<th>Time</th>
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<tbody>
<tr>
<td><strong>M.S. Proposal</strong></td>
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<tr>
<td>Sagar Gautam</td>
<td>Sandeep Kumar</td>
<td>Plant Science</td>
<td>Simulating runoff and water quality from watersheds managed with long-term no-till and grazed pasture management.</td>
<td>9:00-9:15 am</td>
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<tr>
<td>Diane Narem</td>
<td>Lan Xu/Gary Larson</td>
<td>Nat. Resource Mgmt.</td>
<td>Mapping and classifying native grassland habitats and characterizing Dakota skipper (Hesperia dactoe) habitat on South Dakota’s prairie coteau.</td>
<td>9:40-9:55 am</td>
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<td><strong>M.S. Paper</strong></td>
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<tr>
<td>Manali Shirke</td>
<td>Jai Rohila</td>
<td>Bio/Micro</td>
<td>In Vitro manipulations of wheat for genotype-independent genetic engineering via Agrobacterium tumefaciens.</td>
<td>10:00-10:15 am</td>
</tr>
<tr>
<td>Megan Smith</td>
<td>Kenneth Kalscheur</td>
<td>Dairy Science</td>
<td>Rumensin in dairy cow diets with high and low levels of linoleic acid and high and low levels of physically effective neutral detergent fiber.</td>
<td>10:20-10:35 am</td>
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<tr>
<td><strong>Ph.D. Proposal</strong></td>
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<tr>
<td>Ishwary Acharya</td>
<td>David Casper</td>
<td>Dairy Science</td>
<td>Maximizing use of high quality forages in rations of high producing dairy cows.</td>
<td>11:00-11:15 am</td>
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<tr>
<td>Parisa Fallahi</td>
<td>Kasiviswanathan Muthukumarappan</td>
<td>Ag. &amp; Biosystems</td>
<td>Understanding the role of a novel plant-based protein source and extrusion processing parameters on the functional and nutritional properties of the complete plant-based aquafeed. Towards sustainable aquaculture industry.</td>
<td>11.20-11.35 am</td>
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<tr>
<td><strong>Ph.D. Paper</strong></td>
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<tr>
<td>Raj Bhandari</td>
<td>Brian Logue</td>
<td>Chem/Biochem</td>
<td>Simultaneous determination of cyanide and thiocyanate in plasma by chemical ionization gas chromatography mass-spectrometry (CI-GC-MS).</td>
<td>1.00-1.15 pm</td>
</tr>
<tr>
<td>Kaushalkumar Dave</td>
<td>Omathunu Perumal</td>
<td>Pharmaceutical Sciences</td>
<td>Topical transmammary drug delivery: Invitro and in vivo studies.</td>
<td>1.20-1.35 pm</td>
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</table>
FYI

I would like to thank all of the members of the Plant Science Department for the beautiful plant that was given in memory of my father and the very nice plaque in memory of my mother who passed away thirteen days after my father’s funeral. Everyone was so supportive and communicated such warm and thoughtful messages. Also I would like to express a special thanks to those who during my absence helped cover classes and met with my advisees during the registration period for fall classes. Sincerely, Martin Maca

Interesting Links

Vegetable Growers Should Consider High Tunnels
SDSU Extension Gardening 101 Workshops Begin April 26
Early Spring Climate Forecast
Grain Stocks Bearish; Soybean and Sunflower Planting Intentions Down
Don’t Knock ice from Tree Branches & Other tips
This Weeks Storms Amount to 2 to 3 inches in Moisture

More Kudos!

"Karly Henry, entomology grad student advised by Dr. Ada Szczepaniec, has received a grant from the Center for Excellence on Drought Tolerance Research to study the effects of drought and neonicotinoid insecticides on population dynamics of spider mites on soybeans. Congratulations, Karly!"