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Department of Research Centers



Research Center News

Agricultural Research Center's Contact Info:

Department of Research Centers

Barry Jacobsen, Interim DH
Montana State University
213-A Linfield Hall
PO Box 172860
Bozeman, MT 59717-2860
(406) 994-7289

Central ARC - Moccasin

Dave Wichman
(406) 423-5421

Eastern ARC - Sidney

Joyce Eckhoff
(406) 433-2208

Northern ARC - Havre

Darrin Boss
(406) 265-6115

Northwestern ARC - Kalispell

Bob Stougaard
(406) 755-4303

Southern ARC - Huntley

Ken Kephart
(406) 348-3400

Western ARC - Corvallis

Zach Miller
(406) 961-3025

Western Triangle ARC - Conrad

Gadi V.P. Reddy
(406) 278-7707

Message from Barry

Since my last message in September 2014, we have seen a number of faculty/staff changes. At the Northern Agricultural Research Center (NARC), Superintendent Darrin Boss's appointment changed to include a 25% Extension appointment. This is now the third DRC faculty member with a formal extension appointment and I believe partial Extension appointments will become more common in the future. Also at NARC, Dr. Ligia Prezotto joined the faculty as Assistant Professor of Animal Science (beef cattle reproductive physiology) in January and Dr. Jennifer Thorson started in Dr. Prezotto's Research Associate Position in March. Professor Chengci Chen has moved from the Central Agricultural Research Center (CARC) to become Superintendent at the Eastern Agricultural Research Center (EARC), where he will give leadership to EARC and continue his cropping systems research with focus on pulse crops. Also at CARC, the new position of Farm Manager was filled by Darryl Groves. I believe that this type of position will greatly increase the productivity of our research faculty particularly as "on farm experience" is lacking in many newer faculty. Dr. Chens' position at CARC will be refilled with the exact focus of the position yet to be decided. The Advisory Council has put forth a desire for another cropping systems agronomist to focus on integration and evaluation of new crops or a weed scientist. When the focus become clear, a search will be initiated. At EARC, Dr. Joyce Eckhoff has retired after 28 productive years and her faculty position has been filled by Dr. Chen. I anticipate starting the search for an Assistant Professor of Plant Pathology in the very near future. At the Western Triangle Agricultural Research Center, Dr. Roger Nkoa Ondoua will fill the Agronomy and Soil Nutrient Management position as Assistant Professor of Agronomy on July 1. You can read more about the many staff changes that have occurred at each of the Research Centers inside.

While all of the implications of the 64th of the Montana legislative session are not completely clear, the Legislature and Governor have approved \$2.48 million to address Phase I of our Long Range Building Program. Key items funded are new or improved regulatory and safety compliant pesticide handling, storage and research facilities at each of the Research Centers and investments in irrigation research facilities at NARC and NWARC. The overall base MAES budget is up by approximately \$1.1 million after the Governor's action on House Bill 2. Thank you to the Ag Coalition and our Advisory Committees for so strongly carrying our case to the Legislature and to legislators and Governor who showed faith in us.

This will likely be my last message as Interim Department Head as I plan to retire at the end of July but will stay till a new person is appointed. Vice President Boyer is developing the job announcement for my position and it will be Associate Director of MAES and Head of the Department of Research Centers. I have very much enjoyed serving the faculty and staff of the Department of Research Centers and MAES and have been honored to work with all of you. I have never been more optimistic for MAES or the Department of Research Centers.

Sincerely,



News from Central



Res. Assoc. Dr. Shabeg Briar (l) and Farm Manager Darryl Groves (r)

has recent experience in variety and pest control, product evaluation in pea production and was an Agronomy Instructor at Olds College in Calgary, Alberta where he taught integrated pest management and disease management courses. Shabeg's knowledge of nematodes may provide the opportunity to advance Reddy's efforts of utilizing nematodes as biological control agents.

CARC is excited to announce the recent hires of two new employees; Dr. Shabeg Briar and Darryl Grove.

Dr. Briar is the new Cereal Grain Research Associate. He has a BS degree in Agronomy, a MS degree in Nematology from Punjab Agricultural University in India, and completed his PhD in Plant Pathology from Ohio State University in 2007. He

Darryl Grove has been hired as CARC's new Farm Manager. He has a BS in Ag Ed from the University of Idaho and a BS degree in Mechanized Ag from MSU-Bozeman. In addition, he has 20 years experience in farm related management and farm personnel training. His experience also includes high school instruction in general Ag, welding and metal fabrication, wood technology and small gas engines, as well as FFA leadership and fundraising. As a MSU-Billings COT Construction Trades/Carpentry Instructor, he directed students in the construction of four residential houses, including sub-contracting and budget development, and in OSHA regulations.

News from Eastern

Dr. Chengci Chen, professor of cropping systems from CARC, will become the new Superintendent of EARC in May 2015. Chengci has been with MAES since 2002 and has worked with various crops and projects including peas, lentils, and chickpeas, canola, pulse crops and improving feedstock production, yield and quality. Dr. Chen received his BS in Soil Science and Plant Nutrition from Beijing Ag University in 1984 as well as his MS in Soil Physics in 1987. He went on to receive a second MS degree in Soil Science from Oregon State University in 1995 followed by his PhD in Soil Science in 1998. He has been employed with the Department of Research Centers at the Central Ag Research Center since 2002 and we are happy to see him in this new role as Superintendent at EARC!

As we welcome Dr. Chen to EARC, we say goodbye to Dr. Joyce Eckhoff. Dr. Eckhoff is retiring in May after serving MSU and EARC for over 28 years. Joyce's tenure was celebrated during the DRC Planning Conference in February where she received her MSU blanket from Foundation. EARC also had a retirement celebration for her in early April where members from the community were invited to celebrate her and all she has done for the area. We will surely miss Dr. Eckhoff, her knowledge and expertise, but we are excited for her as she enters this new phase in her life.



Dr. Chengci Chen, new Superintendent at EARC



Dr. Joyce Eckhoff's retirement celebration at the DRC Planning Conference

News from Northern

NARC is close to having a full-house! Dr. Ligia Prezotto, new Assistant Professor of Animal Science, hired Dr. Jennifer Thorson as her Research Associate in April. Jenny received her PhD in the Physiology of Reproduction from Texas A&M in May 2013 and comes to the Center from the USDA-ARS-Roman L Hruska US Meat Animal Research Center in Clay Center, NE. The research team is already hard at work in securing research funds for their projects.

Dustin Clark starts in May as Northern's new Ranch Foreman. Dustin is from Townsend, MT and is currently enrolled in the Ag Operations Technology program at MSU - Northern, where he is also a member of the Collegiate Stockgrower's chapter.

In addition to the new employees, work is currently being done to renovate the lab space at Northern. This project will help Dr. Desta and Dr. Prezotto as they begin their research programs.



Dr. Jennifer Thorson, RA



Dustin Clark, Ranch Foreman



NARC Lab renovation project

News from Northwestern

Dr. Erik Echegaray joined the NWARC as a Postdoc Research Associate in mid-February. Originally from Peru, Dr. Echegaray comes to the Center from Oregon State University. Erik is working with Dr. Stougaard on developing IPM strategies for the Orange Wheat Blossom Midge. His research will emphasize host plant resistance and also include the development of improved modeling and monitoring procedures, and optimization of insecticide inputs.

The Center has been busy planting the fields, which has been very welcome considering the winter they had. One storm in particular brought 24 inches of snow over the course of a day! They then had to battle ice dams following that system...thank goodness for spring!



NWARC was buried in snow January 5th



*Dr. Erik Echegaray,
Postdoc Res Assoc.
at NWARC*

News from Southern

Vipan Kumar graduates this semester with a PhD degree in Plant Sciences under the supervision of Dr. Prashant Jha, Weed Scientist at SARC. He will receive his degree on May 9, 2015 during commencement at MSU-Bozeman. He is the first PhD graduate



Dr. Vipan Kumar

student from the Dept. of Research Centers. Vipan has been working with Dr. Jha’s weed science program since May 2011. His dissertation is titled “Confirmation and Management of Glyphosate-Resistant Kochia in Montana”, and will be available online. During the last four years, he has published more than twenty abstracts/proceedings at various national and regional weed science conferences and seven refereed journal articles as an author/co-author under the guidance

of Dr. Jha. He received 1st place poster and 2nd place paper presentation awards at the Western Society of Weed Science Annual Meeting 2014 and 3rd place paper award at the Western Society of Crop Science Annual Meeting 2014. He also received the Outstanding Graduate Student Award in 2015 from the Western Society of Weed Science. **Congratulations Vipan!!**



News from Western Triangle

Dr. Gadi Reddy was one of 73 volunteers who received the President’s Volunteer Service Award, a national honor given in recognition of volunteer service. The award is given on an annual basis to individuals, groups and families who have met or exceeded requirements for volunteer service and have demonstrated exemplary citizenship through volunteering. Dr. Reddy was honored for contributing over two-weeks of volunteer service on international projects in Nepal where he helped scientists there develop a collaborative project with USAID. This project gives students in Nepal an opportunity to enroll in MSU-Bozeman for master’s and doctoral degree programs. Dr. Reddy received a congratulatory letter from President Barack Obama for his volunteer efforts.



THE WHITE HOUSE
WASHINGTON

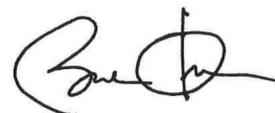
Congratulations on receiving the President’s Volunteer Service Award, and thank you for helping to address the most pressing needs in your community and our country.

In my Inaugural Address, I stated that we need a new era of responsibility—a recognition on the part of every American that we have duties to ourselves, our Nation, and the world. These are duties that we do not grudgingly accept, but rather seize gladly, firm in the knowledge that there is nothing so satisfying to the spirit than giving our all to a difficult task. Your volunteer service demonstrates the kind of commitment to your community that moves America a step closer to its great promise.

Our Nation faces the most challenging economic crisis in a lifetime. We will only renew America if we all work together. Individuals, the private sector, and government must combine efforts to make real and lasting change so that each person has the opportunity to fulfill his or her potential.

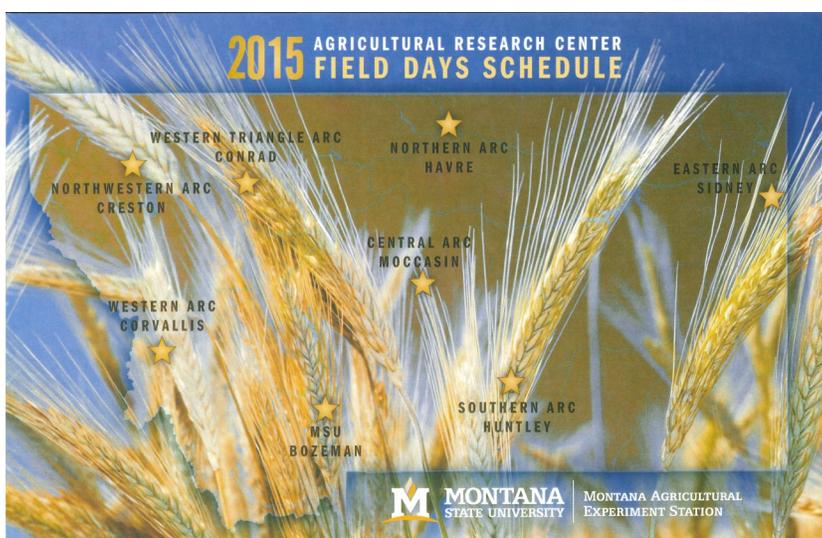
While government can open more opportunities for us to serve our communities, it is up to each of us to seize those opportunities. Thank you for your devotion to service and for doing all you can to shape a better tomorrow for our great Nation.

*Congratulatory letter from
President Obama to Dr. Reddy*



MAES Field Days

MAES Field Days planning are well under way! The NWARC has been selected as this year’s Field Day stop for the President’s Bus Tour and the NARC is planning a big gala at their Field Day to celebrate their 100th Anniversary. The DRC Summer Conference will be held after NARC’s Field Day on July 2nd; stay tuned for additional details about Summer Conference from Shana in the next few weeks. Please check-out the entire MAES Field Days schedule below. If you have any questions regarding Field Days, feel free to email them to Shana Wold at shana.wold@montana.edu or contact her at (406) 994-7289.



Mark your Calendar!

NWARC - Creston	June 24: Noon - 3pm
NARC - Havre	July 1: 1pm - 7pm
EARC - Sidney	July 14: 8:30am - Noon
CARC - Moccasin	July 16: 9am - Noon
WTARC - Conrad	July 17: 8:30am - Noon
Post Farm - Bozeman	July 21: 8:30 - Noon
WARC - Corvallis	July 23: 4pm - 7pm

PCR Technique Used at EARC

Eastern Ag Research Center now has the ability to test durum for the low-cadmium uptake character. Polymerase chain reaction (PCR) is a molecular biology technique used to amplify DNA across several orders of magnitude, generating thousands to millions of copies of a particular DNA sequence. Sherry Turner operates the PCR in the EARC lab to determine low-cadmium from high-cadmium uptake varieties. The durum lines are germinated in growth pouches. Leaf material is collected from the first leaf of each seedling, and the DNA is purified from the leaf material. The DNA is then amplified with PCR and run on a gel. The low-cadmium uptake varieties produce different band sizes from the high uptake varieties. Lines with the high-cadmium trait, including lines heterozygous for this trait, can be identified and discarded. The protocol was received from Dr. Devon See and has been used to identify low and high uptake varieties at EARC.



Sherry Turner operates the PCR in the EARC lab

Faculty Corner



*Dr. Ligia Prezotto,
Asst. Professor of Animal
Science*

Dr. Ligia Prezotto started her position as Assistant Professor of Animal Science at NARC on January 1, 2015. Dr. Prezotto has experience in animal reproduction, gestation and nutrition. She was born and raised in Brazil where her family has a farm, and they have been raising beef and some dairy cattle, for years. She obtained her BS in Animal Science at Univ. of Sao Paulo in 2007, her MS in the Physiology of Reproduction from Texas A&M in 2012 and her PhD in the Physiology of Nutrition in Ruminants from North Dakota State University in 2014.

Dr. Roger (Nkoa) Ondoua has accepted the position of Assistant Professor of Agronomy/Soil & Nutrient Management at WTARC. Dr. Ondoua comes to the Department from the Univ. of Guelph in Ontario, Canada where he has been working on sustainable cropping systems since 2012. He earned his MS in Soil Science in 2000 and his PhD in Plant Biology in 2004, both from Laval University in Quebec, Canada. His anticipated start date is July 1, 2015.

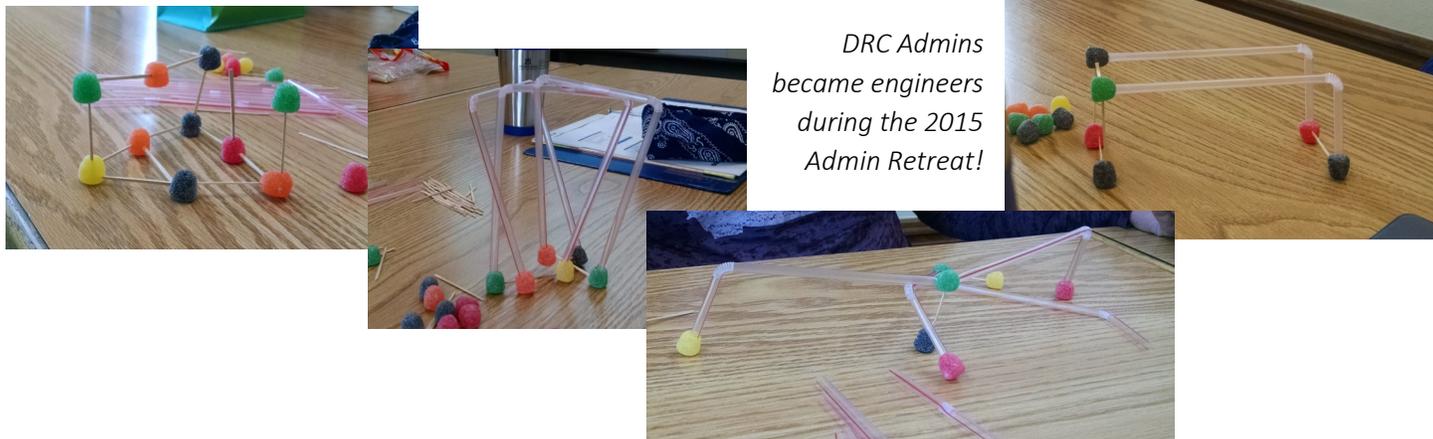


*Dr. Roger (Nkoa)
Ondoua, Asst. Professor
of Agronomy/ Soil &
Nutrient Management*

Staff Corner

The 2015 Admin Retreat was held in Bozeman April 7th & 8th. Research Center administrative associates participated in professional development sessions from Betsy Webb, Professional Development Manager at MSU. Sessions included Effective Communications, Working with Different Conflict Styles and Stress Management. They also had the opportunity to visit with key campus liaisons from the Office of Sponsored Programs, Foundation, University Business Services, and the COA. The ladies even partook in a fun team-building exercise where teams of two had to construct an object that would hold a cellphone for 5 seconds and allow the phone to pass beneath it using only bendy straws, toothpicks and gumdrops. Each structure passed the test with flying colors!

Betsy Webb, MSU's Professional Development Manger, is happy to extend her trainings to the Research Centers. Contact Shana Wold at shana.wold@montana.edu for more information.



*DRC Admins
became engineers
during the 2015
Admin Retreat!*