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Department of Research Centers



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Department of Research Centers

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Message from Barry

My congratulations to the DRC faculty for their grant and contract activity in FY16. Research expenditures for the Department were \$874,076 in FY14, \$1,126,184 in FY15 and \$1,899,640 in FY 16! On a per FTE basis grant activity was \$146,126 in FY16. This compares favorably with both LRES and Plant Sciences and Plant Pathology faculty and much higher than faculty in Animal and Range Sciences and Agricultural Economics. Based on activity year

to date I expect that DRC will set another record for grant and contract based research expenditures.



DRC Family - Summer Conference at the SARC

Grant and contract expenditures for MSU –Bozeman were \$94,155,130 in FY16 and the College of Agriculture/MAES were \$16,704,715 or 17.4% of the MSU total. The College and Departments are now beginning to once again receive a share of IDCs (indirect cost recovery) from grants. These funds, which have not been available for several years, are an important source for research start up packages and Department cost sharing for certain grant opportunities. I am proud to say that this expanded DRC research activity fits well with our mission stated in our Role and Scope document.

Implementation of the Fair Labor Standards Act (FSLA) will have impact on all employees making less than \$47,476 annually. Training materials have been sent to all Superintendents and I am arranging a video conference with Ms. Brandi Clark, our HR Personnel Officer, time to be announced soon.

We have finished interviews for the NARC Assistant Professor of Cropping Systems, Assistant position and have a verbal acceptance. Interviews are nearly finished for the CARC Agronomist/ Soil Microbiologist position and we are just starting interviews for the WARC Horticulturalist/ Tree & Small Fruit position. Hopefully all three positions will be filled in the next few weeks and for the first time in my tenure, as Head, all faculty positions will be filled.

The long range building program (LRBP) for the 2019 biennium has been approved by the Board of Regents and transmitted to the Governor. MAES phase I greenhouse/head house and research labs are on the list for SARC, WTRAC, CARC and NARC and for research lab only at NWARC (total \$4.52 million). WARC is also on the list for a \$1 million Research and Education building. These projects are all in the top seven projects requested by the whole Montana University System. Romney Hall on campus remains the #1 priority for the University System. If

these MAES projects are funded by the legislature and governor in the upcoming session, I believe we will at last have first class, safe research facilities at all Research Centers that will help us attract and retain top researchers and produce the research data needed by Montana producers.

Hany Jacohn

Save the date!

Departmental
Winter Meeting in
Great Falls, November 28th

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Completed LRBP Projects

This year many of the research centers, and the Post Farm in Bozeman, have been the recipients of new Pesticide/ Chemical Storage and Handling Facilities and Shops. It has been exciting to see construction progress and we are grateful for the Legislative support in the creation of these much needed facilities.



NWARC Pesticide Storage & Shop buildings



NARC Pesticide Storage Facility



WARC Pesticide Storage Facility



CARC Farm Shop Building

News from Northwestern

WTARC Pesticide Storage Facility

Our staff has increased this year with the addition of three graduate students and a Research Associate. Jessica Torrion's graduate student, Anish Sapkota, presented a poster at the North American Alfalfa Improvement Conference in Madison, WI in July. He was one of 10 recipients of a graduate student travel grant award. Congratulations Anish!

A second graduate student also joined Dr. Torrion's team. Breno Almeida just started a Master's degree program of Crop Science at the Department of Plant Science and Plant Pathology. Drs. Torrion and Talbert are his co-advisers. We are thankful for both of these students' funding from the Montana Fertilizer Tax Fund.

Justin Vetch also just started a Master's degree program at the Plant Science and Plant Pathology Department. Justin finished his undergraduate studies at MSU and worked as a research assistant at NWARC this past summer. Drs. Stougaard and Giroux are his co-advisers.



Anish Sapkota receiving award

Last but certainly not least, Sherry Turner joined NWARC on September 1st, moving here from EARC in Sidney. She is a Research Associate working with Bob Stougaard. Sherry is excited to be back in the valley where she began her college education at Flathead Valley Community College. Welcome Sherry!

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News from Northern

Dr. Ligia Prezotto and Dr. Jennifer Thorson have recently started a study investigating the impacts of protein supplementation offered to beef cows during gestation on the development of the nutritional and reproductive neuronal circuitry and the formation of the blood-brain barrier in the hypothalamus of calves. The main object is to better understand how maternal nutrition throughout gestation affects offspring reproductive performance and feed efficiency during postnatal life. The study is being carried at a recently renovated barn where 24 gates of the Calan feeding system have been installed with the support of an equipment grant awarded by MAES/COA to Dr. Prezotto, Dr. Boss, and Dr. Thompson during the fall of 2015. This study is being supported by Dr. Prezotto's Hatch funding.









Montana Stockgrower's Leadership Experience By Julia Dafoe - NARC

This year Heather Fryer (CARC) and I have had the opportunity to participate in the Montana Stockgrowers Association's inaugural Leadership Series class. The class includes 14 producers from across the state. We have the opportunity to participate in 6 meetings throughout the year as well as 6 webinars. The objective of the class is to develop strong leaders, not only for Stockgrower's but for affiliate organizations as well. Most of the skills we have learned so far revolve around strong communication. We discussed how to run effective meetings as well as how to recognize different communication styles and how to approach each style. We spent one meeting discussing the importance of media training, and I quickly realized I'm glad I'm not in media relations!



We also discussed the importance of keeping in touch with our neighbors. There are a lot of very interesting things going on in our state. We have a classmate that went to Costa Rica to promote Montana seed stock producers. Another classmate is taking the step to vertically integrate her business and opening a storefront to market her specialty meats. We have a classmate running for office who is excited about all the changes that are happening in agriculture right now.

One of the main points I've taken away this year is the importance of telling our story. People will be discussing our research or agriculture in general; we need to part of the conversation. With that in mind I've been making an organized effort to put more posts on our Facebook page. I have also realized the importance of not only highlighting our current work but also some of the classic studies that are still available. Our stake holders are curious about what we are doing and this class has taught me the importance of letting them know what we're doing.

I'm looking forward to the remainder of the Leadership Series meetings and would highly recommend this great opportunity to others.

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News from Western Triangle

A new CABI Book on "Integrated Management of Insect Pests on Canola and Other Brassica Oilseed Crops" edited by Gadi V.P. Reddy (please see the attached two page brochure following the newsletter) will be published by The Centre for Agriculture and Bioscience International (CABI), UK in March 2017. This is a first book and has 25 chapters on Brassica oilseeds, which will be very useful to the scientists, growers and stakeholder.

In addition, the WTARC has 3 new staff members to introduce; Dr.'s Etone Epie Kenedy and Maral Etesami have joined Dr. Ondoua's program and Ramadevi Gadi is working on projects for Dr. Reddy. Their profiles can be found at agresearch.montana.edu/wtarc/people. The center also purchased and installed a new modular office to accommodate additional staff and laboratory space.

Dr. Reddy had the opportunity to visit with Mr. Nathan Kroeger of Rad Source Technologies at a conference this year about the X-ray Irradiator the 4 pi-X-ray (Patent # 7346147), which he hopes to obtain for the WTARC. This equipment will help in the sterilization of the wheat stem sawfly and all other insects as part of an insect Sterile Technique.



WTARC Lab/Office Modular



Discussing the 4 pi-X-ray

Southern Ag Receives Award

The Southern Ag Research Center was the recipient of the NOAA's National Weather Service 100-year Honored Institution Award, which is presented for outstanding service in the Cooperative Weather Observing Program for more than 100 years. Here is what was mentioned of the SARC:

The station at Huntley Branch Station, as it was known at the time, just outside of Huntley, Montana, began officially recording daily weather observations on January 1, 1910. In the entire 100 plus years the staff has taken more than 38,000 daily observations. Additionally daily observation's are never missed unless there was total equipment failure.

The Cooperative station at the Huntley is one of oldest stations in Montana. In the entire state of Montana there are fewer than 50 stations that have a record as long as the station at Huntley. Another thing that sets it apart is that the equipment has set at almost the same location since they began taking daily readings. The Cooperative Observing station at Huntley is one of a few select few stations in the region that are part of the Historical Climate Network.

They have experienced a variety of weather in his 100 plus year history. This area experiences extreme temperatures ranging from -53° low in February of 1936, 109° high in July of 2002. Annual average precipitation since 1948 is almost 14", a very dry region. Precipitation: Daily Max Snowfall of 13" in January 1975. Daily Max Rainfall of 2.81" in September of 1941.

The Cooperative Weather Observer Program has given scientists and researchers continuous observational data since its inception more than a century ago. Today, over 10,000 volunteer observers participate in the nationwide program to provide daily reports on temperature, precipitation and other weather factors such as snow depth, river levels and soil temperature, which provide an accurate picture of a locale's normal weather, and give climatologists and others a basis for predicting future trends. These data are invaluable for scientists studying floods, droughts and heat and cold waves.

Left to right: John C. Pulasky (COOP Observer), Dr. Grant Cooper (Western Region Director), Ken Kephart (SARC), Keith Meir (NWS Meteorologist), Tom Fischer (COOP Observer)

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Faculty Corner

Dr. Frankie Crutcher joined the DRC on June 20th as the new Plant Pathologist at the EARC in Sidney. Frankie, a Montana native, came to the department from the USDA ARS in College Station, TX and has been busy growing her research program having made connections with area growers, collaborating with MSU faculty over the summer and early fall and attending the annual APS conference. She has recently hired Amber Ferda to as her Research Associate.

Superintendents and staff at the NARC, the CARC and the WARC have been busy preparing for and accommodating candidates for faculty positions at their centers. The NARC brought in three candidates for their Asst. Professor of Cropping Systems position, Dr. Harmandeep Khurana, Dr. Sukhbir Singh and Dr. Maryse Bourgault and are currently in the negotiation process with one of the candidates. The CARC committee is in the middle of their search having identified four candidates for their Asst. Professor of Agronomy/Soil Microbiology position, Dr. Shabeg Briar, Dr. Soledad Benitez Ponce, Dr. Jed Eberly and Dr. Kristine Buckland. The WARC is also bringing in four candidates for their new Asst. Professor of Horticulture/Tree & Small Fruits position, Dr. Rachel Leisso, Ms. Ashley Thompson, Dr. Laura Ingwell and Dr. Lori Hoagland. The search committees involved have been very impressed and pleased with the applicant pool they had for these positions. We hope to have three new faculty members join us in the early spring!

Staff Corner

Research Center administrative associates attended the annual Admin Retreat this September in Bozeman. This year admins attended sessions from MSU's Financial Development series in efforts to complete all of the required sessions next year to earn their Financial Development Certificate.

The 2nd Annual Milestone's in Service Ceremony was held on Tuesday, October 27th. The Department and MAES are very fortunate to have many hard-working, dedicated staff members on our team. Below is a listing of the Dept. of Research Center employees who were recognized for their service to the University. Congrats to all!



Name	Center	Years of Service
Brooke Bohannon	NWARC	5 Years
Cherie Gatzke	EARC	5 Years
Deb Harrison	WARC	10 Years
Calla Kowatch-Carlson	EARC	5 Years

The University has additional programs to recognize faculty and staff for their outstanding service. If you would like to recognize someone for a job well done, we encourage you to utilize one or more of the following programs:





Excellence in Service

So

MSU Employees

of the Year