

A Message from Dr. Bajwa

Dear COA/MAES Family,

This holiday season, I thank you for everything you have done to achieve your goals, support others, and be an important member of your college and departmental teams. I am proud of everything you have accomplished to make this year a success in spite of the great challenges you faced. What a blessing to have you in our team.

May this holiday season fill your homes and hearts with peace, positivity and joy. I hope you will have time to rest and recover, and enjoy holiday cheer with loved ones.

With warmest wishes for a happy holiday season and a wonderful (and safer) new year,
Sreekala Bajwa

Notes

Faculty interested in the **Incentive Program for Researchers** for spring 2021 must contact Jody Barney no later than Wednesday, **Jan 6**. More information can be found at https://www.montana.edu/research/osp/ipr_description.html

MSU Farrier School will start a new session in February 2021 with new program director Diego Almeida. While students are in session, clients can bring horses to the school for discounted shoeing services. If you have questions or are interested or would like more information, contact Diego at diego.almeida@montana.edu or 708-297-7620.

An update from the **Dan Scott Ranch Management Program**:

The DSRMP welcomes the Class of 2023 to the Ranching Systems major. For the next 2 years, this cohort of 4 students will take courses in animal science, rangeland ecology and business while completing 2 summer internships on working ranches to sharpen their leadership and management skills. Visit our [website](#) to learn more about the career plans of Arena Plenty, Cayden Rose, Georgie Wortman and Julia Hudson.

“I found everything I was looking for in the Ranching Systems Major. I believe with the wide range of education I will receive while in the program, as well as getting the opportunity to gain hands-on experience with the summer internship, I can build a strong foundation to take with me as I continue to pursue my goals of becoming a successful rancher in today's world. “ –
Arena Plenty, Class of 2023 DSRMP

Upcoming Events

MSU Extension will begin offering **MontGuide Mondays** discussions beginning **January 4**. The sessions will run 10 to 11 a.m. Mondays in January and February via WebEx. Sessions will be hosted by Marsha Goetting and will run like a book club, where participants will read a MontGuide and take part in a virtual discussion. Registration can be found at montana.edu/familyeconomics/montguidemondays.

MSU Extension will offer its **Tuesday Tips** online seminar series on estate and legacy planning beginning **January 5**. The series will run from 10 to 10:45 am each Tuesday in January and February followed by a 15-minute Q&A session. MSU Extension educators Marsha Goetting and Emily Standley will host. Registration can be found at <https://www.montana.edu/estateplanning/tuesdaytips>

MBI's **Seth Walk** will give a virtual lecture on **January 12** as part of the annual Provost's Distinguished Lecture Series. The lecture will feature a virtual tour of MSU's COVID-19 testing lab and will be streamed on [MSU's website](#).

The annual USDA **MonDak Ag Research Summit** will take place virtually via webinar series beginning **January 14**. The event is a partnership between MSU's EARC, the USDA Northern Plains Ag Research Lab in Sidney and NDSU's Williston Research Extension Center. More information can be found at <https://www.ars.usda.gov/plains-area/sidney-mt/northern-plains-agricultural-research-laboratory/nparl-docs/mondak-ag-research-summit/>

Peer review grant panels have been scheduled for **February 25** and **March 31** from 9 a.m. to noon. If you are interested please email mburrows@montana.edu with your preferred time. A week prior to the meeting, participants will need to deposit the relevant RFA, an executive summary, and a list of objectives with a brief summary of methodology and expected outcomes to the Box upload homepage for their respective date. Those wishing for a full proposal review can make a connection at the training or ask Mary Burrows to facilitate a review. At the peer review meeting, primary, secondary, and tertiary reviewers will be assigned to your proposal. If you have any questions contact Mary Burrows, mburrows@montana.edu, 406-994-7766. Box upload and Webex information for [February 25 meeting can be found here](#), and [for the March 31 meeting here](#).

New Grants

Congratulations to the 12 recipients of the COA's minigrant program! Funded proposals include:

- **Clain Jones, Jessica Torrion, Justin Vetch, Dave Gettel, Scott Powell, Perry Miller:** Evaluating the extent of low pH soils at the MSU Post Farm, Western Triangle Agricultural Research Center, and Northwestern Agricultural Research Center
- **Michelle Flenniken, Nina Zidack, Brian Ross:** Investigating the role of callose deposition as a mechanism of resistance to Potato virus Y in potato plants

- **Jared Beaver, Jeff Mosley, Lance McNew:** Bringing Wildlife-Livestock Conflict Mitigation into the 21st Century: Exploring Emerging Technologies to Reduce Wildlife Conflicts on Montana Ranches
- **Jovanka Voyich, Phil Stewart:** Mechanisms of Neutrophil Evasion during *Staphylococcus aureus* Biofilm Formation
- **Eric Boyd, Rachel Spietz:** Subsurface geohydrological monitoring following a fuel spill in Yellowstone National Park
- **Mike Giroux, Peggy Lamb:** Enhancing Durum Adaptation and Yield by Optimizing Tillering and Plant Height
- **Agnieszka Rynda-Apple, Diane Bimczok, Mark Jutila:** Evaluation of VLP-based platform for vaccine against *Mycoplasma ovipneumoniae*
- **Diane Bimczok, Agnieszka Rynda-Apple, Mark Jutila:** Understanding immune evasion strategies of *Mycoplasma ovipneumoniae* in sheep
- **Rodrigo Marques, Sarah McCoski, Amanda Bradbery:** Effects of supplementing calcium salts of omega-3 fatty acids to late-gestating first-calf beef heifer on performance and physiological response of the offspring.
- **Doug Kominsky, Mark Jutila:** Inhibition of CD73 as a novel therapy for Salmonella-induced calf scours
- **Amanda Bradbery, Sarah McCoski:** The effects of maternal overnutrition on testicular development in foals
- **Uta McKelvy:** Comparing active and passive spore samplers for their efficacy in capturing airborne spores of important wheat fungal pathogens in the Montana environment

Recent Publications

The [Center for American Indian and Rural Health Equity \(CAIRHE\)](#), the [Montana Institute on Ecosystems \(IoE\)](#), and [Montana Health Professionals for a Healthy Climate \(HPHC\)](#) are pleased to announce the release of the new report “[Climate Change and Human Health in Montana.](#)” This publication is a special report that highlights the current and anticipated impacts of climate change on the health of all Montanans. It provides recommendations for individuals, healthcare professionals, clinics, public health officials, community leaders and elected officials at all levels of government for addressing, minimizing and preparing for climate change impacts. You can access the full report at montanaclimate.org. Special kudos to faculty Bruce Maxwell, Cathy Whitlock and Mari Eggers who played a critical role in the creation of this report as lead authors!

Nick Fox wrote an article for the [Conservation Job Board](#) regarding GIS careers that may be a useful reference for students who would like to understand where GIS can take them.

R. Leisso, K. Mendrey, T. Novak, C. Anderson, S. Perrin, A. Kapus, A. Darling, and Z. Miller (Research Centers and Extension): Montana codling moth trap-based biofix compared to

two fixed biofix models, 2018-2020. Dryad: dataset, <https://doi.org/10.5061/dryad.h18931zjc>

R. Leisso, C. Anderson, T. Novak, K. Mendrey, and Z. Miller (Research Centers): Montana surveys of codling moth damage to apple fruit 2019-2020, Dryad: dataset, <https://doi.org/10.5061/dryad.pnvx0k6k7>

Funding Opportunities

NSF [Ethical and Responsible Research \(ER2\)](#): LOI due **January 4**, Application due **February 22**.

NOAA [Climate Program Office Extreme Heat Risk Initiative Competition](#): LOI due **January 8**, Application due **February 15**.

Western SARE has announced a new grant program – adding a **Sabbatical Research and Education** program to its portfolio of sustainable agriculture funding. The grants provide an opportunity for invited faculty from around the world to partner with farmers, ranchers, professionals and researchers in the Western U.S. to conduct research, education, and Extension activities. Projects focused on unexplored topics in underserved communities and understudied geographic locations are of special interest. These grants fund up to \$75,000 and are one year in scope. Proposals are due by **January 11** at noon. Full directions can be found on the Western SARE [website](#).

Also from WSARE, the Graduate Student Call for Proposals is open until **February 9**. Full-time graduate students who are conducting research in sustainable agriculture in the Western region are eligible. This program funds up to \$30,000 to conduct research and outreach on sustainable agriculture during one or two years. A webinar addressing the nuts and bolts of Western SARE grant writing and submission will take place on **January 12** at 4:00 MST.

EPA [Deployment of Innovative Water Technologies for Very Small Drinking Water Systems, Areas Served by Private Wells and Source Waters](#): Application due **January 12**.

NSF [Molecular Foundations for Biotechnology](#): LOI due **January 14**, Application due **March 16**.

USDA [Forest Service Wildfire Risk Reduction/Wildfire Response](#): Application due **January 15**.

International COVID-19 Data Alliance and Bill & Melinda Gates Foundation [Grand Challenges ICODA COVID-19 Data Science](#): Application Due **January 19**.

DOE [Systems Biology of Bioenergy-Relevant Microbes to Enable Production of Next-Generation Biofuels and Bioproducts](#): Pre-application due **January 19**, Application due **April 6**.

NIH [Analytical Validation of a Candidate Biomarker for Neurological or Neuromuscular Disorders](#): LOI due **January 22**, Application due **February 22**.

NIH [Outstanding New Environmental Scientist Award](#): LOI due **January 26**, application due **February 26**.

USDA [Specialty Crop Research Initiative](#): Pre-application due **January 26**.

Awards and Successes

John Priscu was selected by NASA to be on a “Tiger Team” to outline science and operational objectives for ice coring on Mars. Congratulations, Dr. Priscu!

The **Montana Med Lab Science Program** is proud to announce the fall 2020 recipients of the Sonja Wegner Scholarship. The recipients are Ticha Padgett-Stewart and David McCoy. This scholarship goes to MMLS interns who have demonstrated outstanding academic achievement over the summer and into the fall sessions of their internship. Applicants must also demonstrate the potential to become a leader in the med lab science profession. Ms. Padgett-Stewart is completing her internship with Benefis Hospital in Great Falls, MT, and Mr. McCoy is with Community Hospital in Missoula, MT.

News

[Montana middle and high school students compete in semiannual stock market game](#)

[Lead scientist in MSU’s COVID-19 testing lab to give provost’s lecture Jan. 12](#)

[Hydrogen-supported life beneath glaciers the subject of MSU team’s recent publication](#)

[MSU economist’s research on occupational licensing published in Journal of Political Economy](#)

[MSU soil scientist recognized with multiple awards](#)

[MSU published information on potential pest targeting ash trees](#)