



MONTANA AGRICULTURAL EXPERIMENT STATION SUMMER 2019 INTERNSHIPS

Paid internships are available at each of the seven MAES Research Centers for MSU, MSU-N or MSU-B students. Each intern will serve eight weeks or more during the summer semester. Tuition credits will not be covered but can be discussed with Internship leader. *On-site housing is available at some of the centers. Interns will assist with various research projects, farm and ranch related tasks, data analysis and more. Should internship credits be desired, credit approval through the students' academic department will be led by the student requesting the credits.

This will be a great item for your resumé!

The following opportunities are available:

Central Agricultural Research Center in Moccasin, MT

Contact: Dr. Patrick Carr, email patrick.carr@montana.edu

The internship program is designed to give students a broad experience at an applied agronomic research facility. The focus of the research center is on cropping systems and soil health. That said, student interns will be given hands-on training across the varied research and associated responsibilities that exist at the center. An important component of the internship will involve students and faculty jointly agreeing on their (i.e., the student's) greater involvement in one, and occasionally two, field experiments where the students will have a particularly active role in contributing to the research, from establishment (i.e., planting) through post-harvest processing and analyses (if occurring within the internship period). Potential projects include those focused on conventional or organic cropping systems. Student interns will meet regularly with faculty and professional staff to discuss ongoing research as well as applied agronomic research more generally. Our objective and expected outcome is that student interns will leave CARC with a good understanding of the operation of a research center and the demands and rewards of conducting applied research at CARC and comparable research facilities. While the focus of the internship is research, student interns will occasionally participate in other non-research activities that are common at off-campus research facilities so that they better appreciate the expectations placed on faculty and staff at centers like CARC.

Eastern Agricultural Research Center in Sidney, MT

Contact: Dr. Frankie Crutcher, email frankie.crutcher@montana.edu

The Plant Pathology Program at the Eastern Ag Research Center in Sidney MT is seeking a highly motivated student with an interest in agricultural research and plant disease management to join us for a summer internship focused on diseases of both irrigated and dryland crops. This internship will incorporate both field and laboratory based learning opportunities and an individual research project will be developed based on the student's interests. Field responsibilities will include assisting with field trials, data collection, plot maintenance, rating for disease, and collecting plant samples for disease identification. The student may also receive laboratory training in isolation of plant pathogenic bacteria and fungi from tissue, preparation of growth media, preparation of chemicals and/or inoculum for lab or field use, maintenance of cultures, and using molecular techniques involving DNA. Additionally, there will be several opportunities to interact with local farmers and industry. If needed, funding has been obtained to extend the internship past the advertised 8 weeks and on-site housing may be available.

Eastern Agricultural Research Center in Sidney, MT

Contact: Dr. Chengci Chen, email cchen@montana.edu

MSU-Eastern Agricultural Research Center has Agronomy and Plant Pathology Research Programs. The Agronomy Research Program studies Genotype x Environment x Management interactions for pulse (pea, lentil, and chickpea, Cereal wheat and barley) and Sugar beet. We select varieties for difference environments for high yield and quality. We also use difference techniques, including remote sensing, to screen drought tolerant traits. The Agronomy Research Program is also developing different management strategies, such as sensor-based fertilization and irrigation techniques, for farmers to produce better yield, quality, and resource use efficiency. The summer intern is expected to participate in pulse, sugar beet, or cereal research projects.

Northern Agricultural Research Center in Havre, MT

Contact: Dr. Maryse Bourgault, email maryse.bourgault@montana.edu

The Cropping Systems and Agronomy group is looking for a summer intern. We have experiments looking at nutrition, crop rotations and root development with pulses, canola, and cereals. Hands-on training and mentoring will be provided in crop physiology methodologies such as destructive samplings, monitoring of soil water and root tracing as well as in statistical analysis and writing skills for a producer audience.

Job duties mainly include assisting in data collection and plot field maintenance. Work will be both indoors and outdoors, often conducted as a team. Ability to follow instructions, read plot maps and accurately record data is necessary. For those interested, this experience will give a unique insight into a career in agricultural research. Internship credits are possible and encouraged, but approval needs to be sought by the student. Learning objectives will be determined by discussion between the PI and the student-intern, preferably before the start of the internship.

Hours are normally 8-4:30 p.m., however there may be some evening and weekend hours necessary. Please include available dates in the application. Must have a Driver's License and be able to lift 50 pounds.

Northwestern Agricultural Research Center in Kalispell, MT

Contact: Dr. Jessica Torrion, email jessica.torrion@montana.edu

At the end of the internship, a highly motivated intern will learn:

1. Crop growth and development of selected legumes and come up with crop phenology characterization as influenced by planting date or irrigation,
2. Daily soil water balance calculation using crop, soil, and weather data.
3. How to schedule irrigation in alfalfa and other crops, and
4. Various research experiences such as plot management, pre-harvest planning to harvest, seed processing, data management, and necessary safety protocols.

Western Triangle Agricultural Research Center in Conrad, MT

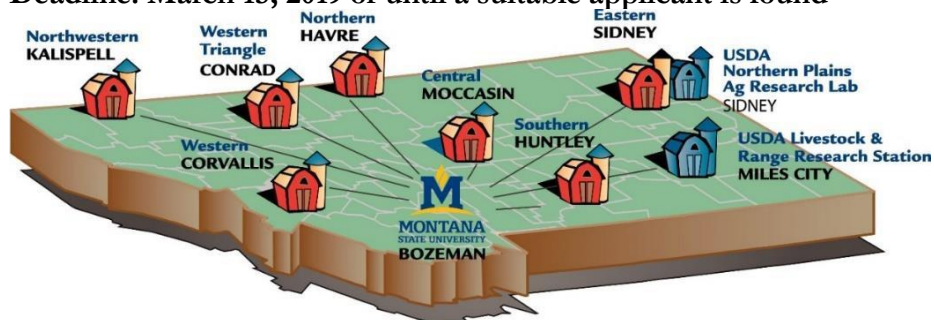
Contact: Dr. Gadi V.P. Reddy, email reddy@montana.edu

Summer interns will have opportunities to work and learn skills on the following areas:

1. Technical ability in know-how on developing Montana agriculture management practices including pest management and varietal evaluation of various crops grown in the Golden Triangle area of Montana.
2. Field trials on evaluation of several integrated pest management practices encompassing biopesticide, pest monitoring and biological control of wheat stem sawfly, wireworms, wheat midge, flea beetles and cabbage seedpod weevils, pea leaf weevil, pea weevil and alfalfa weevil.
3. Direct interaction with Montana Agriculture Producers.
4. Work on the effects of differing systems on crop and variety performance under diverse environments represented across the Western Triangle Agricultural Region of Montana and potential fit of other materials, concepts and techniques with various cropping systems employed for cereal crop production.

TO APPLY: Submit a letter of interest **including** your full name, major, year in school and contact information. Please include a <300 word essay on why you are interested in a **Research Center internship** and which **Research Center internship program** you would like to apply for within your application. You can apply for the specific internship by clicking the email link of your desired internship program and location. You may apply for more than one internship, but you must do so by applying for each program you are interested in. The same application material can be uploaded multiple times by separate emails sent to the specific program leaders.

Deadline: March 15, 2019 or until a suitable applicant is found



For more information regarding the research centers, please go to the Departmental Website <http://agresearch.montana.edu/researchcenters.html>, and click the internship link or contact the Research Center Superintendent:

Research Center	Superintendent	Email	Phone	Housing Details
CARC – Moccasin	Pat Carr	patrick.carr@montana.edu	406.423.5421	*Housing available
EARC – Sidney	Chen Chengci	cchen@montana.edu	406.433.2208	*Housing available
NARC – Havre	Darrin Boss	dboss@montana.edu	406.265.6115	Housing may be available
NWARC – Kalispell	Jessica Torrion	jessica.torrion@montana.edu	406.755.4303	Housing not available
SARC – Huntley	Ken Kephart	kephart@montana.edu	406.348.3400	Housing may be available
WARC – Corvallis	Zach Miller	zachariah.miller@montana.edu	406.961.3025	*Housing available
WTARC – Conrad	Darrin Boss	dboss@montana.edu	406.265.6115	Housing not available