

REQUEST FOR PROPOSALS
RUSSELL L. RUSTICI RANGELAND AND CATTLE RESEARCH ENDOWMENT
COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES
UNIVERSITY OF CALIFORNIA, DAVIS

CALL FOR PROPOSALS

Annual Research Proposals due Wednesday, November 7, 2018 to rusticiresearch@ucdavis.edu

Extension Activity Proposals accepted year around to rusticiresearch@ucdavis.edu

Time Period

- Research grants: January 1, 2019-December 31, xxxx (not to exceed two years)
- Outreach / extending knowledge activities: request accepted year round (not to exceed two years)

Background and Mission

The Russell L. Rustici Rangeland and Cattle Research Endowment was established within the College of Agricultural and Environmental Sciences, University of California, Davis through a generous gift from the estate of Russell L. Rustici. Earnings from this endowment will be allocated annually via this call for competitive projects. Funding is available to University of California personnel to support problem-solving research to benefit California range cattle producers. The goal of this program is to promote collaboration and strengthen the network among research faculty, cooperative extension specialists, cooperative extension advisors, and range cattle producers – to provide practical answers to critical issues and challenges facing the industry. More information about the Rustici rangeland endowments can be found on the *UC Rangelands* website (<http://rangelands.ucdavis.edu/rustici/>)

Funding Available

It is anticipated that 3 to 4 research proposals will be awarded with a total annual budget typically not exceeding \$60,000/year. Matching funds from other sources that provide leverage will be favorably considered. Funding will also be available to support outreach/extending knowledge activities with budgets not to exceed \$10,000/project.

Eligibility for Submission

All principal investigators must be University of California faculty/cooperative extension (CE) specialists or advisors. Proposals based upon clear collaborations among UC faculty and specialists, CE advisors, CSU faculty, and range cattle producers are highly encouraged.

Restrictions on the Use of Research Funds

- Funds do not support salary of faculty.
- Only in-state fees for graduate students are allowed.
- Travel is restricted to the U.S.
- Equipment is not allowed unless critical to the research and requires prior approval.
- Indirect costs/overhead are not allowed.

Research Priorities for 2019 Call (not in order of priority)

There are long-standing, broad areas of research priority for which research and extension proposals are encouraged relative to improving cattle health and quality, sustainable rangeland management, and ranch profitability. All proposals are expected to 1) build upon existing published research, 2) advance the scientific base, and 3) propose novel solutions to critical problems. Proposals are encouraged which include cross discipline collaboration and direct engagement with cattle producers and range managers.

- **Improving Cattle Health, Genetics, Productivity, and Quality**
Healthy, productive, high quality cattle are a cornerstone for any sustainable ranching operation, and are essential in meeting the demands of both conventional and niche markets. Proposals are encouraged which address the suite of issues associated with cattle welfare; genetics, breeding and reproduction; herd health and disease prevention; nutrition; and antibiotic stewardship.
- **Managing Rangelands for Multiple Ecosystem Services**
California's rangelands provide a suite of benefits to society including clean water, healthy soils, wildlife habitat, nutrient sequestration, forage production, and livelihoods. Proposals are encouraged which address information gaps managers and policymakers face when attempting to simultaneously optimize ecosystem services and agricultural goods provisioned from cattle grazed rangelands.
- **Enhancing the Productivity and Profitability of Rangeland Cattle Operations**
Cattle ranching operations that depend upon rangelands are embedded in an ever changing social-economic-ecological system. These operations must profitably adapt to dynamic environmental, economic, market, and regulatory conditions. Proposals are encouraged which examine opportunities to enhance forage quality and quantity, as well as cattle performance and production; improve resilience to drought, invasive species, predators, and other stressors; improve economic, business management and marketing strategies to sustainably increase profitability.

Research priorities are refined in regular consultation with representatives from the range cattle industry. Specific issues identified in a recent review are listed below. While the overall interest in the broader existing priority areas remains, cross-cutting proposals which target the specific needs below are also encouraged.

- There is substantial reliance on antibiotics to prevent costly diseases such as pinkeye and anaplasmosis in cattle on rangelands. Proposals are encouraged which develop and/or assess the efficacies and cost/benefits of integrated prevention strategies which reduce antibiotic dependence in range cattle operations (e.g., integrating strategic antibiotic use, grazing management, vector control, and genetic selection).
- Wildfire is a growing concern on rangelands across the state. There is debate about the role that livestock grazing can play in reducing wildfire risk, and appropriateness of livestock grazing following wildfire. Proposals are encouraged which take an interdisciplinary approach to address questions about the synergies and tradeoffs of grazing management as a tool to directly reduce wildfire risk, and as a tool to restore burned areas to a fire resilient plant community.

PROPOSAL SUBMITTAL REQUIREMENTS

The proposal must be submitted in .pdf format. All items (#1-11) must be included in the single .pdf submission.

The proposal should be scientifically and technically sound and should be written in a manner such that a non-specialist can evaluate. (Note: review committee consists of both industry and research members.) Do not exceed 8 pages including tables and figures, 1" margins, and not smaller than 11-point font in the main text. The literature citations, budget, budget justification and biographical sketch are not included in the **8-page maximum length**.

The research proposal should include:

- 1) Principal investigator name(s), institution, mailing address, phone number and e-mail address.
- 2) Project title.
- 3) List of collaborators and their affiliations.
- 4) Project background, objectives/hypotheses, and scientific significance of the proposed work.
- 5) Approach and methods.
- 6) Project timeline (two year maximum).
- 7) Relevance to the mission of the Russell L. Rustici Rangeland and Cattle Research Endowment. If the PI has previously received research funding from the endowment, provide a detailed description of the research accomplishments (impact) and outreach activities delivered by the previous work. If this is a continuation of endowment-supported research, clearly distinguish how the proposed research differs from the previous research objectives.
- 8) Qualifications of the principal investigator(s).
- 9) Literature citations.
- 10) Budget and budget justification.
- 11) Biographical sketch of the PI.
Include brief vitae, professional and academic information and contact information (telephone and fax, email and mailing address). List up to five refereed publications most closely related to the proposed project and up to five other significant publications, including those *in press*. This document should not exceed two pages and is not counted in the 8-page limit for the proposal.

IMPORTANT BUDGET NOTE:

One UC investigator should be designated as the primary investigator; all funds will be allocated to this individual's department. The budget submitted should reflect this by indicating expenditure by category i.e., supplies, travel, personnel, not by investigator. Any distribution of funds to other investigators will be the responsibility of the recipient department.

Review Process

All proposals will be reviewed and ranked by external reviewers and the Russell L. Rustici Rangeland and Cattle Research Endowment Advisory Committee according to the following principal criteria of quality:

- **Competence** — Technical soundness of the proposed research questions and approach; innovativeness of research; feasibility of successfully completing the research within the designated timeframe, capability and recent research performance of the principal investigator(s), and adequacy of the resources available.
- **Intrinsic Merit** — Likelihood that the research will lead to new discoveries, or important advances, does not duplicate existing research funding of the PIs, and will improve our understanding of issues critical to the sustainability of California's rangeland cattle industry.
- **Relevance** — Likelihood that the research will contribute to the achievement of the priority issues of the Russell L. Rustici Rangeland and Cattle Research Endowment and to the advancement of science contributing to the sustainability of the California rangeland cattle industry.

Final funding approval will be determined by the dean of the College of Agricultural and Environmental Sciences based on recommendations from the Russell L. Rustici Rangeland and Cattle Research Endowment Advisory Committee consisting of the designee of the dean of the College of Agricultural and Environmental Sciences at UC Davis, the president or first vice president of the California Cattlemen's Association, and a designee selected by the Board of Directors of the California Cattlemen's Association.

Reporting Requirements

Researchers receiving funding will submit a report each year.

For one-year projects, the final report will contain research results and a financial accounting of how the funds were expended. **The report will be due no later than three months following the end date of the research project.**

For multi-year projects, a progress report will be due at the end of the project's first year and should cover an update on research activities and a financial accounting of how the funds were expended. Continued funding for multi-year projects will be contingent upon receipt of an annual report demonstrating satisfactory progress toward the goals of the project. When the multi-year project is completed, a final research report and financial accounting will be submitted within three months following the end date of the research.

All research reports will be compiled and published by the dean, College of Agricultural and Environmental Sciences. Grantees must participate in meetings of the Russell L. Rustici Rangeland and Cattle Research Endowment if requested.

Proposals and questions should be submitted to rusticiresearch@ucdavis.edu