10-1-2000

ARD News October 2000

Follow this and additional works at: http://digitalcommons.unl.edu/ardnews

Part of the Agriculture Commons

http://digitalcommons.unl.edu/ardnews/135

This Article is brought to you for free and open access by the Agricultural Research Division of IANR at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Agricultural Research Division News & Annual Reports by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Comments from the Dean

Dear Colleagues:

IANR continues to be in a state of transition necessitated by the retirement of a number of administrators. Consequently, we have several administrators serving in interim or acting roles. I have been impressed by how well these newly appointed administrators are performing their duties and have confidence that the leadership transitions underway will be smooth and highly successful. We were all pleased to hear that Dr. John Owens, currently the Provost at New Mexico State University, has agreed to become the IANR Vice Chancellor and NU Vice President on Jan. 1, 2001. This is the first step toward completion of the IANR leadership transition.

Given the number of new administrators and recently hired faculty with ARD appointment, we have decided to reprint a number of the ARD policies in this issue and the next issue of ARD News. These policies also will be placed on the ARD web site for more convenient access by faculty and administrative staff. Please keep in mind that these policies are not new but rather have been in place for more than a decade. We ask that units and individual faculty adhere to these policies in carrying out the research mission. Understanding and adhering to the policies prevents a great deal of unnecessary work at the unit level and minimizes the amount of paperwork that is sent back to the unit for revision.

The report “A 2020 Vision: The Future of Research and Graduate Education at UNL” calls for every faculty member to strive for excellence in research and graduate education if we are to increase the national reputation of UNL. Although ARD faculty are doing well in terms of research accomplishments and grant acquisition, collectively we can do better. Over the next few months, there will be an active dialogue on steps that UNL can take to become recognized for excellence in research and graduate education. I encourage each of you to become involved in this dialogue and share your ideas with others.

Darrell W. Nelson
Dean and Director

New Guidelines for Multistate Research Activity

At their national meeting on September 26, 2000, the State Agricultural Experiment Station (SAES) Directors approved a new document, “Guidelines for Multistate Research Activities.” This document was developed jointly with USDA Cooperative State Research, Education and Extension Service (CSREES) and the Experiment Station Committee on Organization Policy (ESCOP) and has also been approved by these partners. The new guidelines are effective as of Oct. 1, 2000. They replace the old “Manual for Cooperative Research,” a USDA document in place since 1992. The new guidelines will be used to administer and operate the multistate research program formerly titled the Regional Research Program.

ARD faculty who participate in multistate research projects and committees will notice a number of changes in the coming years as a result of the new guidelines. Some of these changes won’t be noticed until it is time for a project committee to be revised and renewed, or if a new project is being proposed. Other changes will be noticed annually, since there is a new annual reporting format.

The guidelines encourage more uniformity of projects and committees among the four regions under which the State Agricultural Experiment Stations are organized. However, they do not mandate identical committee identifiers or types among the regions. A peer review is a requirement by law for multistate activities organized under this program. The regions will continue to have flexibility as to how they organize the peer review for projects and committees within their individual region. The guidelines also recommend that there be a standard type of governance for all multistate research activities, with the election of a chair, chair-elect, and a secretary, with officers to serve for at least two-year terms to provide continuity. As with other aspects of the guidelines, however, this is a recommendation rather than a mandate. Some specific components of the new guidelines will be described in...
Recently, the USDA/CSREES made awards from the proposals submitted under the Initiative for Future Agriculture and Food Systems (IFAFS). A special thank you to all faculty and staff for the effort they put into submitting these proposals. A few pertinent facts about the 2000 award process for the IFAFS grants:

- Even though the preparation time was short, almost 1,000 proposals were submitted.
- Total funding requested was $1,445,194,289. Total funding available was $113,408,766 less expenses.
- Proposals were received from 49 states, Puerto Rico, the Virgin Islands and Guam.
- 3,935 scientists and educators were listed as participants in the proposals received.
- 86 projects, involving just over 500 scientists and educators, were selected for funding. The overall success rate was 8.7 percent.
- 43 of the 1862 land-grant universities are set to participate in the programs of IFAFS, along with Guam, Puerto Rico, and the Virgin Islands.

The following proposals involving the University of Nebraska faculty received funding:

<table>
<thead>
<tr>
<th>Grantee:</th>
<th>University of Nebraska</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator(s):</td>
<td>Blair Siegfried, Lance Meinke and Robert Wright</td>
</tr>
<tr>
<td>Amount:</td>
<td>$264,000/3 years</td>
</tr>
<tr>
<td>Title:</td>
<td>Population Genetics and Molecular Mechanisms of Resistant Western Corn Rootworms</td>
</tr>
<tr>
<td>Subcontractor:</td>
<td>Mississippi State University</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grantee:</th>
<th>University of Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator:</td>
<td>Rick Koelsch</td>
</tr>
<tr>
<td>Amount:</td>
<td>$2,509,693/4 years</td>
</tr>
<tr>
<td>Title:</td>
<td>Partnerships for Livestock Environmental Management Assessment Systems</td>
</tr>
<tr>
<td>Subcontractors:</td>
<td>University of Nebraska, University of Georgia, Cornell University, NY, Montana State University</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grantee:</th>
<th>Colorado State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator(s):</td>
<td>Susan Fritz, Julie Albrecht, Nancy Lewis and Deana Namuth</td>
</tr>
<tr>
<td>Amount:</td>
<td>$568,520/3 years</td>
</tr>
<tr>
<td>Title:</td>
<td>Meeting Diverse Educational Needs in Agricultural Biotechnology</td>
</tr>
<tr>
<td>Subcontractor:</td>
<td>University of Nebraska</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grantee:</th>
<th>University of Minnesota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator:</td>
<td>Gerald Duhamel</td>
</tr>
<tr>
<td>Amount:</td>
<td>$997,962/3 years</td>
</tr>
<tr>
<td>Title:</td>
<td>Whole-Genome Sequencing and Analysis of Lawsonia intracellularis</td>
</tr>
<tr>
<td>Subcontractor:</td>
<td>University of Nebraska</td>
</tr>
</tbody>
</table>

The new format for annual reports of multistate research activity (SAES 422) is as an accomplishment report. These reports are intended to be more brief than in previous years, but do a better job of communicating accomplishments and impacts of the activity. This is needed in the longer term in order to document what is being achieved through the multistate research program. The former guidelines specify a specific term for each type of committee or project. Under the new guidelines, there is much more flexibility to approve projects and committees with varying terms, allowing longer and shorter periods depending on the projected time needs to accomplish the objectives.

A summary of the annual meeting minutes and listing of meeting participants is one of the components of the annual SF-422 report. Each committee also is encouraged to have a home page and to maintain minutes of the most recent annual meeting at the home page site.

As committees and projects are being developed and proposed, all participating institutions will be asked to complete a form identifying participants of that institution as well as the proposed CRIS classification of their participating faculty, including research problem area (RPA), Subject (S), Subject of Investigation (SOI) and Field of Science (FOS).

Since Cooperative Extension also is mandated by the 1998 Farm Bill language to enhance multistate activity, the new guidelines should be more adaptable to documenting extension participation in the multistate activities.

The guidelines formally recognize a new rapid response research activity which has been emerging over the past three years. This allows establishment of a rapid response committee (Series 500) if directors from two or more SAES agree that activity is needed and make commitments to cooperate.

The SAES Directors have reaffirmed the principles for conducting the multistate research activity. For activities to be organized and approved, they must be:

1. Multistate (results benefiting two or more states)
2. Multidisciplinary/cooperative
3. Peer reviewed
4. Oriented towards accomplishment of a specific outcomes and impacts
5. Clearly focused objectives
6. Based on priorities developed from stakeholder input
7. Responsive to CSREES goals

The SAES Directors believe that the multistate research program is an outstanding example of what can be established through cooperative activity among states with resources from federal, state, and other sources. The intent of the new guidelines is to continue a strong multistate research program with a minimal amount of bureaucracy and roadblocks while communicating well on the program outcomes and impacts.
Grantee: University of Nebraska
Investigator(s): John C. Allen and Steve Taylor
Amount: $2,500,000/3 years
Title: North Central Initiative for Small Farm Profitability
Subcontractors: Iowa State University
University of Wisconsin-Madison
Center for Rural Affairs
Practical Farmers of Iowa
Michael Fields Agricultural Institute, Inc.
University of Missouri

Further information regarding IFAFS may be found at the following WEB Location: http://www.reeeusda.gov/

Grants and Contracts Received
August and September 2000

Agricultural Economics
Cordes, S. M. — USDA/CSREES 10,000
Perrin, R. K. — USDA/ARS 26,975

Agricultural Research Development Center
Duncan, D. — Barta Brothers vis UN Foundation 20,000

Agronomy/Horticulture
Baenziger, P. S., Nettleton, D. S., Eskridge, K. M., Gill, K. S. — USDA/CSREES 250,000
Caldwell, R. M. — USDA/ARS 110,000
Specht, J. E. — USDA/ARS 42,000
Miscellaneous grants under $10,000 each 62,100

Animal Science
Jones, S. J., Calkins, C. R., Burson, D. E. — National Cattlemen’s Beef Association 49,000
Jones, S. J. — National Pork Producers 10,000
Klopfenstein, T. J. — Biota! 39,120
Klopfenstein, T. J., Brandle, J. R., and Francis, C. A. USDA/CSREES 55,194
Miner, J. L. — National Pork Producers 10,000
Scheidel, S. — Frank and Inez Mussehl via UN Foundation 15,000
Scheidel, S. — Frank and Inez Mussehl via UN Foundation 13,350
Miscellaneous grants under $10,000 each 42,023

Biochemistry
Allison, L. A. — USDA/CSREES 210,000
Banerjee, R. — NIH 208,910
Ragsdale, S. — NSF 100,000

Biological Systems Engineering
Brand, R. — American Diabetes Association 97,693

Entomology
Higley, L. — Montana State University 50,621
Siegfried, B. D. — Wichita State University 51,474
Siegfried, B. D. — Monsanto 28,000
Miscellaneous grants under $10,000 each 34,000

Food Science and Technology
Benson, A. — Kansas State University 9,450
Benson, A. — American Meat Institute Foundation 92,960
Benson, A. — Beacon Venture Mgmt. Corporation 287,010

Hefle, S. — USDA/CSREES 140,325
Meagher, M. — US Army 695,197
Meagher, M. — Anonymous 97,013
Taylor, S. — USDA/CSREES 395,716
Taylor, S. — USDA/CSREES 39,291
Miscellaneous grants under $10,000 each 44,420

Industrial Agricultural Products Center
Hanna, M. A. — USDA/CSREES 59,872
Hanna, M. A. — USDA/CSREES 100,000

Northeast Research and Extension Center
Mader, T. — Farmland Industries 19,000
Miscellaneous grants under $10,000 each 25,852

Panhandle Research and Extension Center
Bailey, D. — Kansas State University 10,000
Monticello, C. — Sampson Range and Management via UN Foundation 10,000
Wilson, R. G. — CropScience 11,600
Miscellaneous grants under $10,000 each 54,550

Plant Pathology
Dickman, M. — USDA/BARD 145,000
Powers, T. — NSF 54,451
Van Etten, J. — NIH 243,263
Miscellaneous grants under $10,000 each 6,700

School of Natural Resource and Sciences
Brandle, J. — USDA/FS 52,798
Brandle, J. — USDA/FS 73,719
Hoogland, K. — Nebraska Game and Parks 93,084
Hubbard, K. — USDA/CSREES 15,154
Peters, E. — Nebraska Game and Parks 701,000
Peters, E. — Nebraska Game and Parks 110,000
Spalding, R. — Central Platte NRD 78,460
Verma, S. B. — USDAOE 280,000
Watts, D. — USDA/ARS 100,000

South Central Research and Extension Center
Miscellaneous grants under $10,000 each 42,000

South Central Research and Extension Center
Miscellaneous grants under $10,000 each 42,000

Veterinary and Biomedical Sciences
Duhamel, G. E. and Cirillo, J. D. — USDA/CSREES 240,000
Jones, C. J. and Doster, A. R. — USDA/CSREES 292,000
Srikumaran, S. and Kelling, C. L. — USDA/CSREES 200,000
Wills, R. W. — National Pork Producers 25,000
Miscellaneous grants under $10,000 each 10,490

West Central Research and Extension Center
Miscellaneous grants under $10,000 each 5,100

GRAND TOTAL 6,955,935

Proposals Submitted for Federal Grants

The following is a listing of proposals that were submitted after August 2000 by faculty for federal grant programs. While not all grants will be funded, we appreciate faculty members’ outstanding effort in submitting proposals to the various agencies.

Michael Graves and James VanEtten — NSF — Virus Subversion of a Lower Eukaryote’s Transcriptional Machinery — $328,884
Ruma Banerjee — NIH — Regulation of Methionine Metabolism: A Computational and Experimental Study — $120,480
Qi Steven Hu — NSF — CAREER: Climate Variability in the Central United States — $494,066
James E. Partridge — USDA/ARS — Sorghum Ergot Epidemiology in the Great Plains — $35,000
The following station projects were approved recently by the USDA Current Research Information System:

**NEB-11-120 (Biological Systems Engineering)** Development and Testing of Field Techniques for Estimating the Effectiveness of Vegetative Filter Strips  
**Investigator(s):** D. Eisenhauer, M. Dosskey, T. Franti, K. Hoagland and D. Marx  
**Status:** New State project effective July 1, 2000

**NEB-15-094 (Biochemistry)** Inhibition of Methane Synthesis in Ruminants  
**Investigator(s):** S. W. Ragsdale, J. Takacs and J. Miner  
**Status:** New State project effective July 1, 2000

**NEB-17-074 (Entomology)** Characterization of Protein Changes in Plants Challenged by Sap-Feeding Insects  
**Investigator(s):** F. P. Baxendale, T. M. Heng-Moss, R. V. Klucas, T. P. Riordan and G. Sarath  
**Status:** New State project effective Jan. 1, 2000

**NEB-19-009 (Food Processing Center) Midwest Advanced Food Manufacturing Alliance**  
**Investigator:** S. L. Taylor  
**Status:** New Special Grant effective July 1, 2000

**NEB-21-022 (Plant Pathology)** Biocontrol of Soil- and Residue-Borne Plant Pathogens  
**Investigator:** Gary Yuen  
**Status:** Revised project that contributes to regional research project NC-125 effective Oct. 1, 1999

**NEB-33-002 (Center for Grassland Studies)** Improved Grazing Systems for Beef Cattle Production  
**Investigator(s):** R. T. Clark and T. J. Klopfenstein  
**Status:** New project that contributes to regional research project NC-225 effective Oct. 1, 1999

---

**Technology Transfer Website**

Part of my responsibilities as an intern in the Agricultural Research Division is to carry out a project that would be a good learning experience and would be of value to IANR. This project is considered part of the activities that discussed at the ESCOP training meeting that was held in September and will be reported upon as a poster next June.

I selected the technology transfer process because of my experience in working with this area as part of the activities required in developing new turfgrasses. It has been my experience that it is necessary to develop protection of the technology, either Plant Variety Protection (PVP) or a plant patent; and then work with companies in the commercialization of the new turfgrass cultivar. In the new area of biotechnology it is also necessary to obtain licenses from companies for proprietary technology such as the gene gun and the genes you are going to use.

Although this is not a process that we are trained to handle, there is encouragement from administration for us to transfer our technology. There is a great deal of information at the University to assist us with the entire process and there are tech transfer attorneys and managers available to answer our questions. To assist in the overall process I am in the early stages of developing a web site that will explain the technology transfer process, explain disclosure procedures, provide links to UNL patent policy, give examples of contracts for licensing technology from others and to others, and even what is required to develop an incubator company (I want to learn how to do this!). I also hope to have some examples of current UNL patents and links to the inventors of the technology. Finally, I will include links...
to the offices and individuals at UNL that are there to help us with the entire process.

If you have any suggestions or ideas, please e-mail me at triordan@unl.edu. I plan to report on my progress again in the spring and hope to have an active Web site by the end of this internship.

Terry Riordan
Administrative Intern

### ARD Administered Grant and Awards Programs

The Agricultural Research Division administers several grant and recognition programs using ARD funds, NU Foundation funds and funds from other sources. Some of these are awarded annually on a regular schedule and some on an ad hoc basis as funds permit. The following summary explains some of these programs and how they are currently being administered.

#### NU Foundation Endowments

**Anna H. Elliott Fund Grants**
Awarded every two years as endowment income permits. Income is about $60,000 annually and program is oriented to plant science research directed to western Nebraska. RFP issued about Dec. 15, awarded in odd-numbered years.

**Sampson Range and Pasture Management Endowment**
Awarded every two years as endowment income permits. Three research, extension or teaching projects are funded every two years. The program is directed at pasture and rangeland management and the study of native grasses. RFP issued about Jan. 15, awarded in odd-numbered years.

**Mussen Poultry Research Endowment**
Awarded every two years as endowment income permits. Income is about $25,000 per year. Research in poultry management, health, nutrition, physiology, waste management and utilization, and poultry product research is supported by the endowment. RFP is issued about June 1, awarded in even-numbered years.

**Widaman Trust Graduate Fellowship**
Awarded annually. $2,000 added to stipend of outstanding graduate students. Nominations are due about May 10.

**Harkin Distinguished Graduate Fellowship in Plant Stress Physiology**
Awarded annually. $2,000 added to stipend of selected student plus $1,000 to the department to assist student’s research. One fellowship awarded annually. Nominations are due about May 10.

**Mary and Charles C. Cooper/Emma L. Sharpless Fellowships**
Jointly awarded on an annual basis by ARD and CASNR. $1,000 or $2,000 added to stipend of selected graduate students for assistance in recruitment. Applications are accepted throughout the year.

**Junior Faculty Excellence in Research Recognition (Ruth E. Branham Endowment)**
Up to two junior faculty recognized per year. Recognition consists of certificate, plaque, and $3,000 for use in research or professional development. Call for nominations is issued on June 1.

**Burlington Northern Water Science Endowment**
Awarded on a bi-annual basis for water science research. Approximately $60,000 is available every two years. RFP issued about Jan. 15, awarded in even-numbered years.

**Helen Porter Van Spronssen Charitable Trust**
The annual income from the Trust is to partially support ($10,000) one GRA in the range and livestock research program. This will be a named assistantship assigned to an approved ARD project in range and livestock research at the Gudmundsen Sandhills Laboratory. Awarded every two years. RFP issued about Feb. 1, awarded in odd-numbered years.

**Ralph H. Bainbridge Memorial Fund**
The annual income of approximately $5,000 will be used to partially support research in beef production and grassland management. Grants will be awarded on a competitive basis to interdisciplinary teams. Matching funds will be required. Awarded every two years. RFP issued about Feb. 1, awarded in odd-numbered years.

**Agricultural and Water Research Fund**
Interest income will be used in conjunction with the current Burlington-Northern Water Science Endowment to enhance biannual awards in water science and irrigation management research. This is awarded every two years in concurrence with the Burlington Northern Water Science Endowment. RFP issued about Jan. 15.

**Jorgensen Fund**
The interest income will be used to partially support a GRA for a graduate student conducting research at the Gudmundsen Sandhills Laboratory on beef-range systems. Awarded every two years. RFP issued about Feb. 1, awarded in odd-numbered years.

**Channing B. and Katherine W. Baker Fund**
Interest from the endowment is used to support one GRA in the areas of (i) soil conservation and management or (ii) breeding and genetics of food and feed grains. Preference in awarding the GRA will be given to Ph.D. students. Awarded every two years. RFP issued about Feb. 1, awarded in odd-numbered years.

#### ARD Discretionary Funds

**Interdisciplinary Research Grants**
Awarded annually depending on availability of funds. Two or three grants awarded for up to two years duration and for up to $20,000 annually. RFP issued about Feb. 1.

**Innovative and High Risk Research Program**
Awarded annually depending on availability of funds. The purpose is to provide initial funding for innovative research that will lead to extramural grant proposals. $15,000 will be provided for these one year projects. Applications accepted anytime during the year although call for proposals will be issued about June 1. Relatively few proposals have been received for this program. Faculty redirecting research thrusts are encouraged to prepare proposals. Evaluations of proposals will occur about Oct. 15, Jan. 15, April 15, and July 15 each year.
Travel to Multi-State Research Committee Meetings

Agricultural Research Division faculty currently participate in a large number of multi-state research projects and multi-state research coordinating committees. The ARD considers multi-state research projects and committees to be valuable opportunities to improve the productivity of research programs by enhancing coordination and reducing duplication with other institutions. The multi-state committees normally meet annually and the ARD maintains a portion of the USDA-CSREES multi-state research fund allocation in a travel fund to pay travel costs for official representatives to these annual meetings.

As a general rule, there is only one designated official representative to these committees from each experiment station, but additional committee and project participants also may attend the annual meetings. The ARD travel trust is used to fund only the travel of the official representative for one meeting per year. Other attendees must use departmental or other funds for travel support. This policy was reconfirmed by the ARD Advisory Council in 1993.

Official representatives are expected to place importance on the annual meetings and make every effort to attend. However, if the designated official UNL representative is unable to attend, a substitute may be approved if the substitute also is working on the project or works in a closely associated area in the case of coordinating committees. The decisions on whether to pay travel for a substitute are made by ARD administration and must be preceded by a request from the official representative at, or before, the time when the annual meeting is authorized and it is determined that the official representative is unable to attend.

Since our multi-state research allocations tend to be fairly level in recent years, we want to be able to allocate as much of the funds as possible to departments for carrying out their multi-state research activities. Accordingly, we attempt to keep the expenditures for travel as low as possible and must consider, in each case, whether it is justifiable to spend the funds for the attendance by a substitute.

Through careful management, we hope to be able to maintain significant ARD involvement in these multi-state activities for the foreseeable future.

ARD Out-of-State Travel Policy — Professional Society Meetings

The current policy within the Agricultural Research Division is to not allow the use of state-appropriated funds (2162XX0001) for travel support to attend professional society meetings. This policy also applies to the use of revolving account funds, which in the eyes of the state financial offices are the same as state-appropriated funds.

This policy was adopted several years ago by ARD as a result of attempts by state government accountants to identify areas within the University budget that could be easily reduced or deleted without significant impact on the program. While we believe it is very important for faculty members to attend professional society meetings, it has been difficult to communicate the importance of this to state government. In order to reduce this vulnerability, it was decided that travel to such meetings would have to be on other funding, primarily grant funds, IANR professional development funds and IANR research travel grant funds. The ARD administration also feels that it is desirable to use appropriated funds to the greatest extent possible to support research programs, rather than for travel support. This policy recently was reviewed and reconfirmed as standard operating policy for ARD.

Exceptions to this policy have been made on a case-by-case basis. There are instances with new faculty and other situations whereby alternative sources of travel funds may not be available, but it is still highly desirable to have the faculty member attend the meeting with travel costs paid. Unit administrators wishing to use state appropriated funds to support a faculty member’s attendance at a professional society meeting should seek ARD approval before travel is initiated.

Diane says

A thousand probabilities do not make one truth.