ARD News August 1994

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COMMENTS FROM THE DEAN

August 1994

Dear Colleagues:

This summer, I have taken advantage of opportunities to discuss the future of U.S. higher education with administrators from other institutions. Several of these universities are facing serious funding problems because of declining support from legislators and clientele. Significant changes such as massive early retirements and major reorganizations are occurring at other campuses. The driving forces for change are decreased state funding and the imperative to demonstrate responsiveness to societal needs.

Some of the comments from other research administrators include: “Many scientists are providing answers to questions that no one has asked”; “Less than 10 percent of research findings are ever used”; and “Most scientists feel that funding from taxpayers is an entitlement.”

Of even more concern are the points made by critics of research universities. These points are summarized in a recent article in Change magazine that stated, “Faculty bashing is becoming a growth industry. We hear that budgets are bloated by administrative excess, that our faculty salaries are high and teaching loads almost non-existent. We hear ourselves described, too, as conspirators in this grand game — as eager participants in a system that steals student dollars to line professorial pockets.”

Dr. Albert Yates, President of Colorado State, asks, “How did this happen? How did we arrive at the point where professors are regarded as the ‘imposters in the temple’ or ‘the cat guarding the cream’ — as two of the most recent books criticizing higher education have labeled us. How has a once universally respected profession become the target of so much cynicism, so much mistrust?”

Hopefully, these comments and statements do not apply to faculty members with ARD appointments because our research is focused on relevant questions of importance to society and we attempt to make efficient use of our resources. As Land Grant University faculty members we have a service orientation and expect to be held accountable. However, the criticism heaped on higher education and the changes occurring at other universities should give us cause to examine our actions and programs to ensure that we are living up to the philosophy and traditions of Land Grant University scientists.

Darrell W. Nelson  
Dean and Director

WIDAMAN TRUST DISTINGUISHED GRADUATE ASSISTANT AWARD

The Widaman Trust was established in 1975 through a generous gift provided to the University of Nebraska Foundation by Ms. Blanch Widaman. Ms. Widaman asked that the income from the trust be used by UNL for basic research in agriculture and the funds support people rather than purchase supplies and/or equipment. She suggested that the money be used for scholarships or fellowships for graduate students conducting basic research in agriculture. The criteria established for the Widaman Trust Distinguished Graduate Assistant Award specifies that only 5 percent of the graduate students in a department can receive the recognition and that the awardees must demonstrate outstanding scholarship and excellence in research. We congratulate the following graduate students for receiving the Widaman Trust Distinguished Graduate Student Award for 1994-1995:

Name: Samarendra Mohanty
Thesis area: International Ag Trade
Department: Agricultural Economics
Advisor: Wesley F. Peterson

Name: Ananda Weliwita
Thesis area: Industrial Organization
Department: Agricultural Economics
Advisor: Azzeddine Azzam

Name: Andrew Suyker
Thesis area: Micrometeorology
Department: Agricultural Meteorology
Advisor: Shashi Verma

Name: Daniel Anderson
Thesis area: Weed Sciences
Department: Agronomy
Advisor: Alex Martin and Fred Roeth

Name: Nandkishor Boedhram
Thesis area: Crop Physiology
Department: Agronomy
Advisor: Tim Arkebauer

It is the policy of the University of Nebraska-Lincoln Institute of Agriculture and Natural Resources not to discriminate on the basis of sex, age, handicap, race, color, religion, marital status, veteran’s status, national or ethnic origin or sexual orientation.
Name: Lakhwinder Hundal  
Thesis area: Soil and Water Science  
Department: Agronomy  
Advisor: William Powers and Pat Shea

Name: Zhengming Li  
Thesis area: Soil and Water Science  
Department: Agronomy  
Advisor: Steve Comfort and Pat Shea

Name: John L. Lindquist  
Thesis area: Crop/Weed Ecology  
Department: Agronomy  
Advisor: Dave Mortensen

Name: Abdoulaye Traore  
Thesis area: Crop Physiology  
Department: Agronomy  
Advisor: Jerry Maranville

Name: Kristin L. Barkhouse  
Thesis area: Breeding and Genetics  
Department: Animal Science  
Advisor: Dale Van Viek

Name: Ellen G.M. Bergfeld  
Thesis area: Reproductive Physiology  
Department: Animal Science  
Advisor: James Kinder

Name: Brian P. Demos  
Thesis area: Meat Science  
Department: Animal Science  
Advisor: Roger Mandigo

Name: Wesley N. Osburn  
Thesis area: Meat Science  
Department: Animal Science  
Advisor: Roger Mandigo

Name: Xiaoli Bi  
Thesis area: Plant Environmental Engineering  
Department: Biological Systems Engineering  
Advisor: George Meyer

Name: Howard Clyma  
Thesis area: Agricultural and Biological Systems Engineering  
Department: Biological Systems Engineering  
Advisor: Derrell Martin

Name: David B. Parker  
Thesis area: Animal Waste Management  
Department: Biological Systems Engineering  
Advisor: Dean Eisenhauer

Name: Midori Ono  
Thesis area: Toxicology  
Department: Entomology  
Advisor: Blair Siegfried

Name: Douglas Christensen  
Thesis area: Food Microbiology  
Department: Food Science and Technology  
Advisor: Robert Hutkins and Tyrrell Conway

Name: Shyi Liang Yu  
Thesis area: Fish Ecology  
Department: Forestry, Fisheries and Wildlife  
Advisor: Ed Peters and Kyle Hoagland

Name: Martha J. Desmond  
Thesis area: Conservation Biology  
Department: Forestry, Fisheries and Wildlife  
Advisor: Julie Savidge and Ron Case

Name: Zhanyuan Zhang  
Thesis area: Plant Molecular Biology and Tissue Culture  
Department: Horticulture  
Advisor: Dermot Coyne and Amit Mitra

Name: Jeffrey S. Hampi  
Thesis area: Community Nutrition  
Department: Nutritional Science and Dietetics  
Advisor: Nancy Betts

Name: Loren J. Giesler  
Thesis area: Biological Control  
Department: Plant Pathology  
Advisor: Gary Yuen

Name: Robert O. Elder  
Thesis area: Infectious Diseases  
Department: Veterinary and Biomedical Sciences  
Advisor: Gerald Duhamel

Name: Luis M. Schang  
Thesis area: Virology  
Department: Veterinary and Biomedical Sciences  
Advisor: Clint Jones and Fernando Osorio

HARDIN DISTINGUISHED GRADUATE FELLOWSHIP FOR 1994-1995

The recipient of the Hardin Distinguished Graduate Fellowship for 1994-1995 is Robert K. D. Peterson from the Entomology Department. This is the third year that Robert Peterson has received the award. The fellowship is made possible by an endowment established at the University of Nebraska Foundation by former University of Nebraska Chancellor Clifford Hardin to support outstanding graduate students doing research in plant physiology.

Robert Peterson is completing his Ph.D. in plant stress physiology associated with biotic stressors. His research project focuses specifically on physiological responses of plants to leaf injury by arthropods, with particular emphasis on photosynthetic responses. Dr. Leon Higley in the Department of Entomology is his advisor.

Diane Says  
To everything there is a reason.
CALL FOR PROPOSALS — SARE

The North Central Region Sustainable Agriculture Research and Education Program has released the 1995 Call for Preproposals. This will be a joint call for the Sustainable Agriculture Research and Education (SARE) grants program (approximately $1,000,00 available) and the Agriculture in Concert with the Environment (ACE) research and education grants program (approximately $300,000 available). Preproposals are due Sept. 16, 1994.

This year the priority areas for SARE are: 1) value-added regional food systems; 2) sustainable livestock systems; 3) integration of food, environment and agricultural policy; 4) alternative weed management systems; 5) farmer-based/initiated networks; and 6) systems approaches to manure management for plants, animals and the environment.

The ACE priority issues are: 1) environmentally sensitive areas including riparian protection/enhancement; wetlands protection/enhancement; surface and groundwater protection and terrestrial avian or aquatic habitat, and 2) environmentally sound management practices including alternative uses of CRP lands, non-chemical pest management, pesticide use reduction; on-farm composting; manure management; and nutrient management.

A Special Call for Proposals will be made later this fall for projects addressing quality of life and the structure of agriculture.

PROPOSALS SUBMITTED FOR FEDERAL GRANTS

The following is a listing of proposals that were submitted after June 1, 1994 by faculty for federal grant programs. While not all grants will be funded, we applaud the faculty member’s effort in submitting proposals to the various agencies.


Stephen Ernst, Scott Nissen and Sandra Smith — National Science Foundation — Auxin-Mediated Cell Differentiation: Perception and Transduction of the Inductive Signal — $388,157

James S. Schepers — USDA/Special Research Grants Program — Characterizing Potential Mineralizable Nitrogen by Remote Sensing — Kansas State University is the lead institution — $122,736


Norman Klocke and Richard Clark — USDA/Special Research Grants Program — Irrigation Management to Reduce Leaching Potential and Sustain Economic Returns — $200,245

James R. Brandle — U.S. Forest Service — Assessment of Microenvironment Conditions Related to Use of Landscape Fabric Mulch for Protecting Newly Planted Trees in Semi-Arid Environments — $24,000

Raymond J. Supalla, John C. Allen and Darrell G. Watts — USDA/Special Research Grants Program — Strategies to facilitate the Adoption of Improved On-Farm Management Practices to Reduce Nitrate Pollution — $181,739


Bahman Eghball and James F. Power — USDA/Special Research Grants Program — In-situ Field and Laboratory N and P Mineralization from Fresh and Composted Manure — $103,569

H. Edward Grotjan and Mark Morrison — National Science Foundation — Ovine Luteinizing Hormone Bioactivity: Role of Oligosaccharides — $382,270

H. Edward Grotjan and Mark Morrison — National Institutes of Health — Luteinizing Hormone Structure-Function Relationships — $657,867

David W. Stanley-Samuelson — National Institutes of Health — Eicosanoids Mediate Insect Immunity — $344,040

Paul Staswick — National Science Foundation — Jasmonate Signaling in Plants — $263,331


Stephen Ragsdale — Department of Energy — Enzymology of Acetoclastic Methanogenesis — $554,043

NEW OR REVISED PROJECTS

The following station projects were approved recently by the USDA Cooperative State Research Service:

NEB-10-125 (Agricultural Economics) Impacts of Policies Related to Water, Commodity Programs, and Energy-Based Inputs on Nebraska Farms

Investigator(s): G. Helmers and D. Conley

Status: New Hatch project effective May 1, 1995

NEB-12-236 (Agronomy) Events, Processes and Conditions Influencing the Stability of Weed Distributions

Investigator(s): D. A. Mortensen, C. A. Gotway, L. Young and A. R. Martin

Status: New Special Grant effective June 1, 1994
NEB-14-079 (Veterinary Science and Biomedical Sciences) Synergism Between Bacteroides spp. and Serpulina hyodysenteriae in Swine Dysentery
Investigator(s): G. E. Duhamel, M. Morrison and R. A. Moxley
Status: New State project effective July 1, 1994

NEB-14-080 (Veterinary Science and Biomedical Sciences) How Does the Fungal Toxin, Fumonisin, Induce Carcinogenesis?
Investigator(s): C. Jones and M. Dickman
Status: New State project effective July 1, 1994

NEB-21-055 (Plant Pathology) Avirulence Gene D From Pseudomonas in a Suicide Gene
Investigator: J. E. Partridge
Status: New State project effective July 1, 1994

NEB-27-014 (Agricultural Meteorology) The Consequences of Climate Variation and Change for Agriculture and Other Resources
Investigator: W. E. Easterling
Status: New Hatch project effective July 1, 1994

NEB-44-047 (Panhandle Research and Extension Center) Wheat Curli Mite Population Dynamics and Epidemiology of Wheat Streak Mosaic
Investigator(s): G. L. Hein, R. C. French, D. J. Lyon and J. E. Watkins
Status: New Special Grant effective May 1, 1994

NEB-44-048 (Panhandle Research and Extension Center) Control of Rhizomania and Nematode Diseases in Sugar Beet
Investigator: E. D. Kerr
Status: New Hatch project effective June 1, 1994

NEB-48-022 (South Central Research and Extension Center) Crop Insect Pest Management in Nebraska: Biological Control and Sampling
Investigator: R. J. Wright
Status: New Hatch project effective May 1, 1994

NEB-48-023 (South Central Research and Extension Center) Formulation of Nitrogen Fertilization Recommendations to Maximize Economic and Environmental Goals
Investigator: R. Selley
Status: New Hatch project effective June 1, 1994

TRAVEL TO REGIONAL RESEARCH COMMITTEE MEETINGS

Agricultural Research Division faculty currently participate in a large number of regional research projects and regional research coordinating committees. The ARD considers regional 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 regional committees normally meet annually and the ARD maintains a portion of the USDA-CSRS regional 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 is also 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 regional 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 regional 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 regional activities for the foreseeable future.

DR. DAVID STANLEY-SAMUELSON SELECTED FOR LEADERSHIP DEVELOPMENT COURSE

Dr. David Stanley-Samuelson, Associate Professor of Entomology, has been selected to participate in the 1994-95 ESCOP/ACOP Leadership Development Course. David will complete a three-phase program that features a week-long “introduction to leadership” workshop in Indianapolis; an Administrative Internship in the ARD Office from July 1994 to June 1995; and a capstone seminar with federal agency leaders, lobbyists, and Congressional staff personnel in Washington, D.C.

While serving as an intern, David will lead project reviews, participate in staff meetings, undertake several special projects, and study research administration. We are pleased to have Dr. Stanley-Samuelson working in our office during the next year.

Dr. Jim Partridge, Associate Professor of Plant Pathology, has also been selected for the Leadership Development Course. Jim’s participation is sponsored by the College of Agricultural Sciences and Natural Resources (CASNR). He will be serving as an Administrative Intern with CASNR during the next year.
PROJECTS APPROVED BY THE COMMODITY BOARDS
JULY 1, 1994 - JUNE 30, 1995

WHEAT BOARD

The following projects were approved by the Nebraska Wheat Board for July 1, 1994—June 30, 1995 funding:

- David R. Shelton, Selecting Nebraska Wheats for $32,715
  Processing Needs of Domestic and Foreign Markets
- P. Stephen Baenziger, C. James Peterson, and Robert A. Grayboeck, Utilisation of High-Quality Nebraska Wheats in the United Kingdom 6,230
- P. Stephen Baenziger, David R. Shelton, and David Baltensperger, Improving Hard Red Winter Wheat Varieties for Nebraska 38,500
- Drew J. Lyon and David D. Baltensperger, Control of Winter Annual Grasses in a Reduced Tillage Wheat System 11,840
- Lena A. Nelson, Gary L. Hein, and P. Stephen Baenziger, Variety Testing of Public Winter Wheat Varieties Developed Outside of Nebraska 12,000
- David D. Baltensperger, P. Stephen Baenziger, and Paul Nordquist, Use and Development of Russian Wheat Aphid Resistant Varieties in Winter Wheat Management Systems in Western Nebraska 9,962
- Amit Mitra, Les Lane, and P. Stephen Baenziger, Genetic Engineering of Wheat Plants for Wheat Stem Mosaic Virus Resistance 18,800
- C. James Peterson, P. Stephen Baenziger, David R. Shelton, and David Baltensperger, Hard White Wheat Development for Nebraska 65,000
- Yang Yan and P. Stephen Baenziger, Application of Chromosome Painting Technology in Wheat Breeding 5,000
- John E. Watkins and P. Stephen Baenziger, Lessening the Impact of Leaf Rust on Nebraska Wheat Varieties 15,000

SOYBEAN BOARD

The following projects were approved by the Nebraska Soybean Board for July 1, 1994—June 30, 1995 funding:

- George Graef, Development of Improved Soybean Varieties for Nebraska $ 91,550
- Milford Hanna, Soybean Oil as Drip Oil for Irrigation Pumps 3,622
- Milford Hanna and Lloyd Bullerman, Microbial Stability of Methyl-Soyate and Diesel Fuels Blends 17,915
- Hossein Noureldin, Soybean-Based Biodiesel: Utilization of By-Product 24,640
- Delmar Timm, Building Materials from Recycled Paper and Soybeans 48,862
- Richard Grant and Silvia Abel, Uses of Soybean Lipids to Improve Nutritional Value of Milk, Fat and Protein from Dairy Cows 14,192
- Jim Steadman and George Graef, Initiation of a Search for Resistance to Sclerotinia sclerotiorum, Cause of Sclerotinia Stem Rot of Soybean 18,672
- George Graef and Jim Steadman, Winter Nursery Support for Soybean Breeding and Genetic Research 18,850
- Donald Lee and George Graef, Maintenance of Cytoplasmic and Nuclear DNA Diversity in Soybean Populations After Several Cycles of Outcrossing 9,000
- Delmar Timm and Hossein Noureldin, Biodegradable Plastics: Block Copolymers 25,755

CORN BOARD

The following projects were approved by the Nebraska Corn Development, Utilization and Marketing Board for July 1, 1994—June 30, 1995:

- Robert Hutkins, Improving the Ethanol-Producing Ability of Genetically Modified Lactobacilli $ 22,760
- Michael Meagher and Tyrrell Conway, Economic Improvement of Corn Wet Milling by Optimizing Steep Conditions 14,538
- Milford Hanna, Starch-Vinyl Polymer Grafts for Chemical Intermediates and Biodegradables 20,000
- David S. Jackson, Application of Fundamental Chemical/Physical Properties to Corn Quality Measurement and Improvement 21,498
- Curtis Weller, Randy Wehling, and Glenn Froning, Supercritical Recovery of Zein from Alcohol Extraction Solvent 19,260
- David Jackson, Development of a Nebraska Corn Quality Database 12,500
- V. M. Ghorpade and Milford Hanna, Levulinic Acid as an Antifreeze 19,475
- V. M. Ghorpade and Milford Hanna, Continuous Reactive Extraction Production of Cyclodextrins 19,475
- Milford Hanna, Japan Corn Starch Association Research Assistant 15,000

SORGHUM BOARD

The following projects were approved by the Nebraska Grain Sorghum Development, Utilization and Marketing Board for July 1, 1994—June 30, 1995 funding:

- Robert Kleina, Paul Nordquist, Fred Roeth, and Charles Francis, Nebraska Hybrid Grain Sorghum Seed Growout $ 7,500
- P. S. Baenziger, Jeffrey Pedersen, and Heidel Kropf, Gene Transfer to Sorghum Using Silicon Carbide Fibers 12,500
- David Andrews and Paul Nordquist, Screening Sorghum for Germination and Seedling Vigor Tolerance to Cool Soil Temperatures 5,720
- Paul Nordquist, Breeding Sorghum for Nebraska Growing Conditions 9,610
- Jerry Eastin, Development of Stress Resistance Improved Seed Size Sorghums 18,070
- James Partridge, Development of Molecular Tools for Heat Stress Selection 11,190
GRANTS AND CONTRACTS
RECEIVED
JUNE AND JULY, 1994

Agricultural Meteorology
Verma, S., Ullman, F., and Arkebauer, T. — NASA $41,000
Walter-Shea, E. — NASA 7,329
Walter-Shea, E. and Arkebauer, T. — NOAA 150,000

Agronomy
Baenziger, S. — Pioneer Hi-Bred 25,000
Deiter, D. — Purdue University 13,163
Mortensen, D. — USDA/ARS 36,900
Mortensen, D., Getway, C., Yung, L., Wyse, D. and Martin, A. — USDA/NCIPM 75,000
Shea, P. — Ohio State University 17,000
Miscellaneous Grants under $5,000 each 24,000

Animal Science
Miscellaneous Grants under $5,000 each 26,205

Biochemistry
Banerjee, R. — March of Dimes Birth Defects Foundation 40,000
Gobleck, J. — NSF 10,000
Wei-ping Lu — NSF 92,000
O’Leary, M. — NIH 169,233

Biological Systems Engineering
Franti, T. — UN Foundation 20,000
Miscellaneous Grants under $5,000 each 350

Biometry
Miscellaneous Grants under $5,000 each 3,000

Center for Sustainable Ag
Franz, C. — W. Kellogg Foundation 8,000

Entomology
Forster, J. — Pioneer Hi-Bred Int’l, Inc. 22,700
Forster, J. and D’Croz-Mason, N. — Pioneer Hi-Bred Int’l, Inc. 42,300
Siegfried, B. — Ohio State University 12,000
Stanley-Samuelson, D. — Oklahoma State University 21,350
Miscellaneous Grants under $5,000 each 50,580

Food Processing Center
Taylor, S. and Neuemelster, D. — USDA/CSRS 44,372
Miscellaneous Grants under $5,000 each 6,897

Food Science and Technology
Hutkins, R. — Nat’l Dairy Promotion and Research Board 30,000
Jackson, D. and Weibling, R. — Pioneer Hi-Bred 28,500
Taylor, S. — USDA 443,726
Miscellaneous Grants under $5,000 each 5,160

Forestry, Fisheries and Wildlife
Brandt, J. — U. S. Forest Service 24,000
Hogland, K. — Michigan State University 77,256
Hogland, K. — U. S. Fish and Wildlife Service 57,597
Jellinski, D. — NASA 87,900
Jellinski, D. — U. S. Fish and Wildlife Service 124,804
Miscellaneous Grants under $5,000 each 100

Horticulture
Klorasan, T. — Crenshaw and Dogues Turfgrass Program 26,460
Shearmen, R. — National Turfgrass Evaluation 60,055
Miscellaneous Grants under $5,000 each 7,355

Northeast Research and Extension Center
Kranz, W. and Powell, T. — Nebraska Pork Producers Ass’n 18,500
Miscellaneous Grants under $5,000 each 33,250

Nutritional Science and Dietetics
Schneff, M. — Henkel Corporation 10,640

Panhandle Research and Extension Center
Hauen, C., French, R., Lyon, D. and Watkins, J. — USDA/NCIPM 75,000
Welchenthal, B. — Nebraska Department of Agriculture 8,000
Miscellaneous Grants under $5,000 each 90,443

Plant Pathology
Powers, T. — NIH 90,399
Wysong, D. — University of Iowa 6,000
Miscellaneous Grants under $5,000 each 3,200

South Central Research and Extension Center
Elmore, R., Cahoon, J., Selley, R., and Ferguson, R. — Crop Production Trust Fund — via UN Foundation 10,047
Miscellaneous Grants under $5,000 each 20,300

Veterinary and Biomedical Sciences
Jones, C. — Nebraska Department of Health 30,000
Kelling, C. — Syntexvet, Inc. 11,502
Oestri, F. — Nebraska Pork Producers 17,765
Miscellaneous Grants under $5,000 each 16,905

Water Center/Environmental Programs
Watts, D. — USDA 400,000

West Central Research and Extension Center
Jacey, P. — UN Foundation — Gudmundsen Sandhills 12,657
Wicks, G. — Anna Elliot Fund — UN Foundation 8,900
Miscellaneous Grants under $5,000 each 17,033

Grand Total $2,831,483

FY1995 CRSP BUDGET PROJECTION

Discretionary spending in the FY1995 USDA budget was reduced by 6 percent from FY1994. This reduction was translated into level or reduced budgets for USDA Science and Education agencies by the Senate and House Agriculture Appropriations Committees. The budgets recently ratified by the House and Senate are provided below. A conference committee will work out the differences in the appropriations. We are disappointed that several programs important to Nebraska are being eliminated or reduced by 10 percent in the FY1995 budget.

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<td>7,400</td>
<td>7,400</td>
<td>8,825</td>
</tr>
<tr>
<td>Supp. &amp; Altern. Crops</td>
<td>1,818</td>
<td>1,818</td>
<td>1,818</td>
<td>650</td>
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<tr>
<td>Rangeland Res.</td>
<td>461</td>
<td>461</td>
<td>461</td>
<td>0</td>
</tr>
</tbody>
</table>
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* In partnership with 12 other North Central Region universities.
** In partnership with Arkansas, Iowa State and Missouri.
INSTITUTIONAL REVIEW BOARD (IRB) GUIDELINES FOR THE PROTECTION OF HUMAN SUBJECTS AND THEIR APPLICATION TO TEACHING AND RESEARCH ACTIVITIES

The IRB is designed to protect human subjects' rights when they provide information for teaching and research projects. Faculty and students at the University of Nebraska who abide by the regulations will be legally supported by the institution if their research is challenged on ethical issues. The IRB results from a federally mandated act, and UNL abides by the regulations to protect federal funds.

One must have IRB approval for any research study involving human subjects when the findings will contribute to generalizable knowledge by being published in professional journals or presented at professional meetings. This means one needs IRB approval when:

1. Findings will be published in a professional teaching or research journal.
2. The research may be part of a larger study where someone else may publish results.
3. Findings will be presented at professional state, regional, or national meetings where presentations contribute to generalizable knowledge.
4. The research is part of grant dollars external to the Nebraska system.

Potential risk associated with research. Research considered to be less than minimal risk is research in which there is no known risk. Research considered minimal risk is that which presents only the kinds of risks encountered in daily life by most people (e.g., moderate exercise testing, psychological tests producing minor stress, surveys involving sensitive topics such as drugs, sex). Greater than minimal risk procedures are those that may include risk beyond that ordinarily encountered by subjects (e.g., venipuncture, maximal exercise testing, stressful psychological testing).

Exempt and non-exempt research. Research studies needing IRB approval fall either into “exempt research” or “non-exempt research” categories. Research that falls into the non-exempt category are those that deal with:

1. Sensitive topics (e.g., situations that deal with sensitive or highly personal aspects of the subject’s behavior such as recreational drug use, sexual practices, alcohol use by minors, criminal actions, etc.)
2. Vulnerable subjects (e.g., situations where data is gathered from children under 18 when they are not in educational settings, victims, persons with mental retardation, etc.)

Decision Tree for Identifying if IRB Approval is Needed

If you answer YES to any of the following questions, you should check into obtaining IRB approval. If you answer NO to all of the questions, you probably do not need IRB approval.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the findings be published in a professional teaching or research journal?</td>
<td></td>
</tr>
<tr>
<td>Will the findings be shared at state, regional, or national meetings where they will contribute to generalizable knowledge?</td>
<td></td>
</tr>
<tr>
<td>Is the research part of external grant or contract dollar?</td>
<td></td>
</tr>
<tr>
<td>Will the data collection process present a situation that is minimal or greater than minimal risk?</td>
<td></td>
</tr>
<tr>
<td>Does the research involve sensitive topics?</td>
<td></td>
</tr>
<tr>
<td>Does the research involve vulnerable subjects?</td>
<td></td>
</tr>
<tr>
<td>Will videotaping or photography be used to collect data?</td>
<td></td>
</tr>
<tr>
<td>Will the information gathered be used beyond the requirements of the class?</td>
<td></td>
</tr>
</tbody>
</table>
Additional Information

Previously Collected Data. If you have already collected data and decide that it is publishable, you should still submit an IRB protocol. Be aware that the protocol cannot receive a project number, but it can be verified that the rights of the subjects were protected.

Informed Consent. Mail and telephone surveys that are anonymous do not need separate written informed consent. However, subjects must be informed about the use of the data, assured about confidentiality, given the opportunity to not participate and given phone numbers to contact in case of dissatisfaction. A sample statement for a survey is:

Your responses are confidential. If you have questions or concerns about the survey, you can call (name and telephone number). By returning the survey (or answering the questions), you will certify that you decided to participate. You have the right to not participate or to withdraw at any time without damaging your relationship with UNL.

If you are obtaining responses in a controlled environment, such as a classroom, where the subject cannot easily leave, then you must obtain a signed consent form from each subject. An example consent form is given in the IRB Guidelines Manual (August 1993). If data is collected in the classroom, ideally the instructor should not be present.

1 If you cannot maintain strict confidentiality, you can change the wording to “Efforts will be taken to maintain confidentiality.”

Requesting IRB Approval

Additional information and directions for applying for IRB approval are found in the University of Nebraska-Lincoln Institutional Review Board Guidelines for the Protection of Human Subjects in Research Studies, August 1993. All Department Heads have a copy of the guidelines. Additional copies are available from:

Institutional Review Board
University of Nebraska-Lincoln
103 Whittier Building
P.O. Box 830849
Lincoln, NE 68583-0849
E-mail: IRB6965@UNL.EDU
Fax: (402) 472-9323
Phone: (402) 472-6965

The Unit Review Committee (URC) that considers teaching and research proposals for IRB approval is:

(1994-95)
Maurice Baker
Susan Cuppett
Osmund Gilbertson
Kay Rockwell

Send the original and four copies of your proposal to:

The IANR Unit Review Committee (URC)
c/o Associate Vice Chancellor
202 Agricultural Hall
UNL, 68583-0708