Private and Public Funding: Creating a clearinghouse for information

Dr. Ed Pajor
Professor of Animal Welfare
Faculty of Veterinary Medicine
University of Calgary
Outline

- Funding sources and examples
  - Federal funds
  - State funds
  - Commodity organizations
  - Private Companies
  - Private organizations
- Funding concerns
- Funding/Research needs and opportunities
National Institute of Food and Agriculture (NIFA)

(Formerly USDA-ARS-CSREES)
<table>
<thead>
<tr>
<th>Funding Source</th>
<th>FY 2004</th>
<th>FY 2005</th>
<th>FY 2006</th>
<th>FY 2007</th>
<th>FY 2008</th>
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**Total Reported in CRIS**

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<th>Total</th>
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<td>2,849</td>
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**Total (NIFA Admin)**

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<tbody>
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<td>3,772</td>
<td>2,849</td>
<td>4,332</td>
<td>7,953</td>
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**Smith-Lever 3(b) and (c)**

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**1890 Extension**

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**Total Extension Reported in POW**

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<td>0</td>
<td>27</td>
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<td>Special Grants</td>
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<td><strong>Total Extension</strong></td>
<td>n/a</td>
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<td>n/a</td>
<td>633</td>
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Livestock Behavior Research Unit
NIFA-ARS

- Located in West Lafayette, IN
- 5 research scientists (post-docs, graduate students) working in animal well-being and food safety
- Poultry, swine and dairy
- Develop scientific measures of animal well-being, through the study of animal behavior, stress physiology, immunology, and neurophysiology, that will allow an objective evaluation of animal agricultural practices for swine, poultry and dairy cattle.

- Goal is to improve existing practices and develop new practices that can enhance animal well-being and increase animal productivity.

In addition, this unit uses and develops its knowledge of stress physiology and animal behavior to address concerns of pathogen contamination of swine and dairy cattle.
Agriculture and Food Research Initiative (AFRI)

- Animal well-being

- Total funding 2008
  - $1,500,000
  - Range 0-375,000
  - 2-3 years

- 3-4 grants per year for all species
- Longer term, higher risk than industry grants
Agriculture and Food Research Initiative (AFRI)

- Animal health

- Total funding 2008
  - $9,000,000
  - Range 0-375,000
  - 2-3 years
Agriculture and Food Research Initiative (AFRI)

- Animal well-being
- Enhance animal well-being
- Interactions with environment
- Respond to and develop management practices
- Global competitiveness
- Maintain consumer trust
- Decrease animal production and health costs
Motivation for Enriched Space

- Motivation can be assessed through operant tests
- Sows were trained to press an operant panel to gain access to the enriched group pen
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Started in 2001 to address research needs of poultry industry

- Increase efficiency, sustainability
- Multi-discipline research projects
- Industry: Federal matching program
- 40% Critical needs
- 20% Broiler
- 20% Turkey
- 20% layer
- 4 Million dollars since 2002
- Includes 40% funds from industry
- 124 research projects
- 10 animal welfare projects
  - Bill and beak trimming
  - Feeding space
Infrared beak trimmer
NOVA-Tech Engineering Inc.
MN

Heated blade trimmer
Lyon Electric Company, Inc.
CA
American Egg Board

- Social sustainability of Egg Production (Dr. Janice Swanson)

- Unique systems approach to study entire industry

National Pork Board
Animal Welfare Research
Research Priorities

- On-farm Euthanasia
  - Develop and evaluate new methods
  - Evaluate and Refine existing methods

- Gestation Sow Housing
  - Develop and evaluate new systems
  - Optimize existing systems
Research Priorities - Continued

- Handling and Transportation
  - Handling tools and techniques to reduce stress
  - Trailer design and on-board conditions for all ages of swine

- Production Practices
  - Castration
  - Tail docking
  - Weaning age
  - Etc....
Research Budgets

- 2007 – $433,870 spent
- 2008 - $453,740 spent
- 2009 - $502,004 spent
- 2010 - $235,000 available
07-’09 Funded Research

- Sow Housing: 9 studies
- Transportation: 1 study
- Euthanasia: 6 studies
- Production practices: 4 studies

Projects tend not to be multi-year
Slight incompatibility with graduate school timelines
Animal-Controlled Stall Project

- 3 different alley widths
  - 3, 7, 10 feet
- Behavior
- Physiology
- Immunology
- Production
- Impact of gestating space on piglet development
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- Funding concerns

- Funding/research needs and Opportunity
McDonald’s

- May 2009, McDonald’s (U.S.) announced its participation with leading animal welfare scientists, academics, Non-Government Organizations (NGOs) and egg suppliers in a commercial-scale study of housing alternatives for egg-laying hens

- Supported some gestation sow housing work in the past
Private companies

- New Methodology
  - BAS: USDA Pig-turn
- Feed Additives
  - Ractopamine, Beta-Glucan, Vitamin C
- Drug companies
  - NSAID, analgesics
- Housing
  - Chore-Time

- Companies provide few funds but are more likely to supply equipment, additives, drugs

- Support collaborative efforts, Maple Leaf Ducks and MPRP
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- Funding/Research needs and opportunities
Funding/Research Concerns

- Objectivity of Research, of Funding Institutions and of Universities themselves

- Aging infrastructure on land grant universities
  - Do facilities exist that are externally valid

- Duplication or EU research?
  - Basic Principles (maybe)
  - Management systems differ a great deal in certain circumstances
  - Bee aware of what’s been done elsewhere as animal welfare is an small but international area
Outline

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- Funding Concerns
- Funding/Research Needs
Role for AVMA

- Funding for research or curriculum development?

- Lobbying for additional funds to support animal welfare research (multi-disciplinary, focused on collaboration between veterinarians, animal welfare scientists, animal scientist and producer groups).
Bigger Picture

- Request for science based guidelines
- Remember that science can be narrow or broad in its applications.
- Broad multidisciplinary, integrated projects are necessary.
- Sustainability project
- EU welfare quality project
Welfare Quality Project

- Largest piece of integrated research work carried out in Animal Welfare in Europe
- Expanded to include 5 Latin American Countries
- 44 institutes and universities
- 17 countries
- 17 million Euros
“The time has come for a national dialogue about what to do about farm animal welfare. This dialogue needs to result in a consultative process that ensures transparency, accountability, and economic security for producers and consumers of animal products...Without such a process, we risk making changes that absolve the conscience of consumers, but at the expense of the animals themselves”

Mench, James, Pajor, and Thompson, 2008
“Knowledge is the Answer”

- Research and Education
- Shortage of scientists and educators trained in animal welfare
- Faculty positions in animal welfare at veterinary schools
Knowledge is the Answer

- Positions at UPEI, Guelph, Saskatoon, Calgary
- Ohio State, Iowa State, Washington State, Michigan State
- In order for new faculty and programs to be successful, funding is necessary
Opportunities for Collaboration

- Pain
- Illness
- Positive emotional states
- SOP’s and management
- Regulation and public policy
Research funding is the key to

- Training more scientists
- Training more teachers
- Educating students that will be producers, animal scientists, veterinarians in policy, academia, or clinicians
New Veterinary School

2nd year of students, 30 students per year

Required 33 h of animal behavior and welfare in 1st year

1-2 week rotation in animal welfare being considered for 3rd year

Integration of welfare across the curriculum, clinical skills, etc.

Animal Welfare and Pain, one of 4 strategic areas for research
Outline

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