

MEMORANDUM

To: Board of Regents
From: Board Office
Subject: The Establishment of the Center for Integrated Animal Genomics (CIAG) at Iowa State University
Date: September 9, 2002

Recommended Action:

Approve Iowa State University's request to establish the Center for Integrated Animal Genomics (CIAG).

Executive Summary:

Request pursuant to Board Policy Iowa State University is submitting a request to establish CIAG. The Board of Regents Policy Manual (§6.06) requires approval of proposed centers or institutes that require a "major commitment of funds" (amounts exceeding \$25,000). The proposed annual budget, which involves University funds from the Colleges of Agriculture and Veterinary Medicine, Department of Animal Science, and Office of the President, is \$273,333.

Goal of CIAG The goal of CIAG is to make Iowa State University the premier institution worldwide in integrated animal genomics by building on its top national ranking and international reputation in animal genetics and genomics and its current strengths in comparative genomics and animal-microbe interactions.

CIAG Activities

1. Develop a competitive grants program that emphasizes interdisciplinary collaborative research.
2. Sponsor workshops devoted to animal genetics and genomics.
3. Establish a Genomics Scholar Program to help faculty establish national and international collaborations and research opportunities.
4. Prepare future scientists for the challenges and opportunities in emerging areas of animal agriculture.

Interdisciplinary Collaboration CIAG is an interdisciplinary collaboration involving the Colleges of Agriculture, Veterinary Medicine, and Liberal Arts and Sciences.

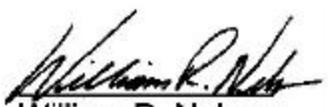
Reporting Structure The Center Director will report to the Dean of the College of Agriculture.

Non-duplicative There are no similar centers or institutes at any Iowa public or private higher education institutions.

Funding Sources Funding sources include (annual dollar amount):

1. Office of the President	\$100,000
2. College of Agriculture	73,333
3. College of Veterinary Medicine	50,000
4. Dept. of Animal Science	50,000
TOTAL	\$273,333

Regent Review Questions Attached are the responses from Iowa State University to the Regent Review Questions on proposed centers or institutes (pp. 3-7). The responses to the review questions appear to meet Board expectations.


William R. Nelson

Approved: 
Gregory S. Nichols

1. What is the title of the proposed center or institute?

Center for Integrated Animal Genomics

2. What is the administrative relationship of the proposed unit to other entities on campus, such as departments or colleges?

Administered by College of Agriculture with advice from the Colleges of Veterinary Medicine and Liberal Arts and Sciences

3. To whom will the administrative director of the unit report?

Dean of the College of Agriculture

4. Succinctly describe the basic purposes and objectives of the unit.

The goal of the Center is to make Iowa State University the premier institution worldwide in integrated animal genomics. The Center will build on current strengths in comparative genomics and animal-microbe interactions with the following objectives:

- Establish worldwide prominence in the area of animal genomics;
- Increase research funding and infrastructure in integrated animal genomics;
- Identify, map, and understand the function and control of genes for improvement of animal and human health;
- Train the next generation of scientists in applying integrative approaches to critical areas of animal agriculture;
- Promote international collaborations between Center faculty and scientists worldwide;
- Foster collaborations with scientists at the ISU Plant Sciences Institute, National Animal Disease Center, National Veterinary Services Laboratory, and the Center for Veterinary Biologics.

To achieve these objectives, the Center will:

- Develop a competitive grants program that emphasizes interdisciplinary collaborative research;
- Sponsor workshops devoted to animal genetics and genomics;
- Establish a Genomics Scholar Program to help faculty on campus establish national and international collaborations and research opportunities;
- Prepare future scientists for the challenges and opportunities in emerging areas of animal agriculture.

a. How will the activities of the unit relate to the general mission and teaching programs of the university?

The establishment of a Center for Integrated Animal Genomics will integrate research, teaching and outreach activities to enhance animal agriculture and human health.

- Animal agriculture will benefit through continued genetic improvement of important livestock qualities related to food quality and waste, through improvements in disease resistance and pre-harvest pathogen control and through improved design and utilization of livestock feeds.
- The fundamental scientific discoveries made using the integrated genomics approach will contribute to permanent improvements in animal health and production systems that will be compatible with current environmental concerns and long-term sustainability of agriculture.
- Human health benefits will accrue directly from food safety and public health considerations and indirectly through comparative genomics work with model species.
- Center activities will promote and enhance economic development in Iowa for the animal and food industries.
- Center activities will increase graduate training and research support, will strengthen collaborations among existing faculty, and will bring new faculty into basic research in animal biology.
- Center activities will create opportunities for undergraduate training in animal genomics.

b. How do they relate to the strategic plan of the department and/or university?

The activities of the Center for Integrated Animal Genomics Initiative strongly support the role of Iowa State University as a land-grant institution.

- The Center for Integrated Animal Genomics is aligned with the University Strategic Plan to enhance learning through increased research opportunities for graduate and undergraduate students; to promote discovery through interdisciplinary and collaborative research activities; and to address the needs and concerns of state, national and international communities.
- The goals of the Center are consistent with the College of Agriculture's commitment to excellence in basic and applied research contributing to the advancement of science and progress toward social, economic, and environmental goals, and with the College of Veterinary Medicine's dedication to enhancing the quality of animal and human life.
- The goals of the Center are consistent with the missions of animal science-related departments in the University to promote improvement of animal and human health.

5. Do similar units exist at other public or private colleges or universities in Iowa? If so, how does the proposed unit relate to them?

No unit similar to the proposed Center exists at any public or private college or university in Iowa. Iowa State University has an outstanding animal genetics/genomics group that is generally viewed as the top program in the United States and among the top three programs internationally. We have a strong microbial genomics faculty and excellent opportunities to collaborate with faculty in plant genomics and food safety. In addition to Iowa State, strong programs in animal genomics exist at the University of California at Davis, Cornell University, Texas A&M and the University of Nebraska. Excellent programs in microbial genomics are presently at Washington University, the University of Wisconsin and the University of Oklahoma. The University of Illinois and the University of Minnesota have strength in both animal and microbial genomics. The proposed Center for Integrated Animal Genomics will significantly increase our competitive situation in both federal grant procurement and graduate student recruitment and ensure that Iowa State continues to rank among the very best universities in animal and microbial genomics.

6. What are the proposed sources and annual amounts of funding for the unit? Please itemize. (Include faculty, staff, and clerical salaries; supplies; equipment; travel; other costs)

BUDGETARY ITEM	SOURCE OF FUNDS	ANNUAL AMOUNT
Faculty		
Support for Co-Directors	College of Agriculture	11,333
New Faculty Hires (2)	President	100,000
	Dept. Animal Science	50,000
	College of Veterinary Medicine	50,000
Clerical Staff and Supplies	College of Agriculture	7,000
Center Programs		
Workshops/Symposia	College of Agriculture	5,000
Competitive Grants	College of Agriculture	40,000
Genomics Scholar Program	College of Agriculture	10,000
TOTAL		273,333

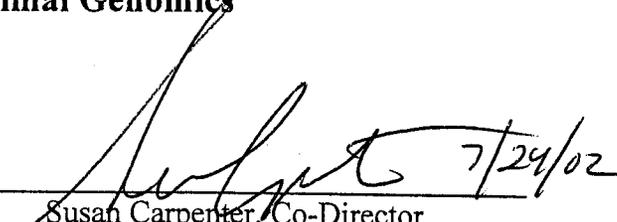
7. Which of the costs in item 6 represent new financial obligations to the general fund of the university?

The College of Agriculture has committed operational funds for three years. The operational funds will support the Center programs, and provide the clerical support and supplies and partial salary support for the co-directors. The President has committed funds for a new faculty position in integrated animal genomics, if participating unit(s) provide matching funds for a second faculty position. The Dept. of Animal Science and the College of Veterinary Medicine have committed 0.5 FTE each as matching funds for new faculty hires in integrated animal genomics.

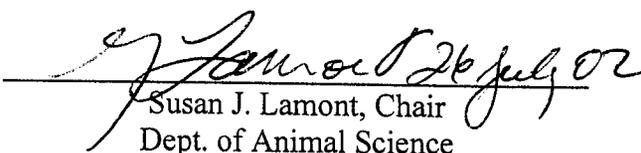
Center for Integrated Animal Genomics
(CIAG)

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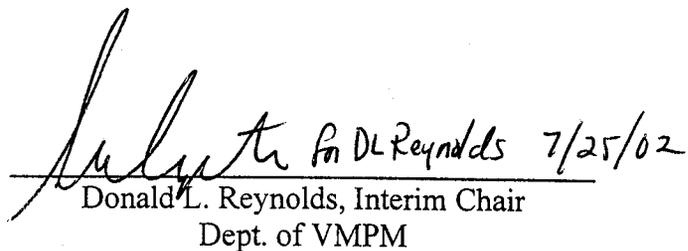
Max F. Rothschild, Co-Director
Dept. of Animal Science
College of Agriculture

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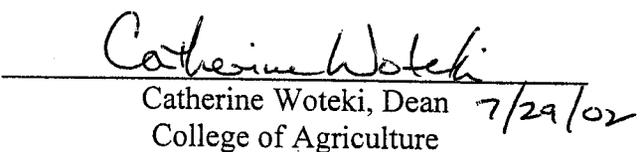
Susan Carpenter, Co-Director
Dept. Veterinary Microbiology and
Preventive Medicine
College of Veterinary Medicine

 26 July 02

Susan J. Lamont, Chair
Dept. of Animal Science

 7/25/02

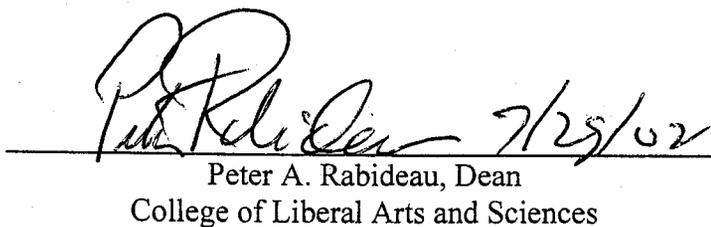
Donald L. Reynolds, Interim Chair
Dept. of VMPM

 7/29/02

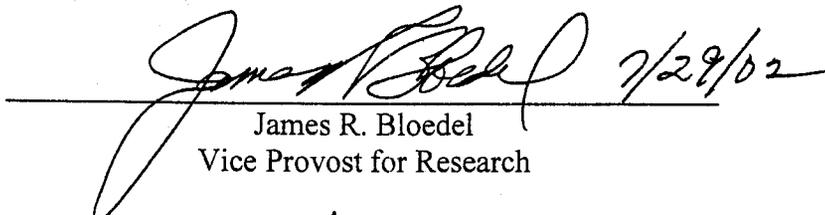
Catherine Woteki, Dean
College of Agriculture

 7/26/02

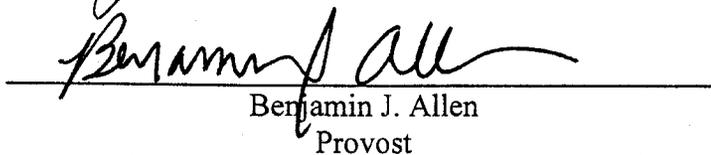
Norman F. Cheville, Dean
College of Veterinary Medicine

 7/25/02

Peter A. Rabideau, Dean
College of Liberal Arts and Sciences

 7/29/02

James R. Bloedel
Vice Provost for Research



Benjamin J. Allen
Provost