July 18, 2018

To: Fred Servello

From: Robert Causey

Subject: Request for additional information regarding faculty position requests.

Thank you for your update on the position requests for SFA. Responses are below:

**1. Please describe the rank order of priority for the three positions**

The rank order is:

Priority # 1. Lecturer Animal and Veterinary Science (critical teaching need)

Priority # 2. Assistant Professor of Agroecosystem Sustainability (critical for short-term and longer-term academic and research program success of the SAG program and for stakeholder needs)

Priority # 3. Assistant Professor of Animal and Veterinary Sciences (critical for success of current pre-tenured faculty, critical stakeholder need, and vital for long-term sustainability of program)

**2. Lecturer – Please clarify the specific courses to be taught by this position.**

Experiential and laboratory classes at the Witter Center are critical to the AVS teaching mission. In addition, due to increasing demand, the foundational animal science class (AVS 145/146 ) is overenrolled and now needs to be offered both Fall and Spring semesters. For these reasons the lecturer is ranked number 1.

The lecturer will provide general animal science instruction, while also offering species specific instruction depending on his/her background.

General classes will be:

AVS 145/ 146 - Introduction to Animal Science /with lab. 4 cr. (Fall and Spring)

*4 lab sections will be taught in fall and at least 2 lab sections in the spring*

AVS 396 - Field Experience in Animal and Veterinary Science. 1-4 cr. (Fall and Spring)

NFA 117 - Issues and Opportunities. 1 cr. (Fall).

Depending on the individual's background, he/she will instruct one or more of the following species-specific classes:

AVS 347 Dairy Cattle Technology Lab (Fall and Spring)

AVS 303 Equine Management Cooperative (Fall and Spring)

AVS 3XX Sheep Management (proposed; Fall and Spring)

AVS 349 Livestock Management (currently not taught due to insufficient faculty time)

AVS 351 Animal Science Techniques (currently not taught due to insufficient faculty time)

AVS 4XX Advanced Companion and Exotic Animals (proposed due to student interest)

The formal teaching commitment will be 9 credits a semester (18 credits total).

This lecturer will take on responsibilities in advising, recruitment and curriculum development alongside other faculty. This position potentially frees senior faculty to meet other teaching, research, or administrative needs.

**3. Assistant Professor Animal and Veterinary Sciences**

Microbiome science is at the forefront in development of novel products and efforts to mitigate antibiotic resistance on farms. This is reflected in federal funding opportunities, hiring trends in agricultural universities, and industry investment. Recent retirements in AVS provides a unique opportunity to advance our teaching and research program in this important new area. This position is therefore vital for the long-term sustainability of the AVS program and to ensure productivity of current pre-tenured faculty.

**Please provide a list of specific courses:**

AVS 401/402 – Senior Paper in Animal Science. 2 cr (Fall/Spring)

AVS 3XX - A survey class of the animal microbiome covering the major importance and applications of animal and dairy microbiome science, including discussions of nutrition, production, disease, antibiotic resistance, food safety and management of animal waste. This class could satisfy the General Education Population and the Environment requirement.

AVS 4XX/5XX - A graduate level class, focusing on the intestinal microbiome and its manipulation in animal nutrition, animal health, and new product development.

The formal teaching commitment will be equivalent to 9 credits a year.

This faculty member will take on responsibilities in advising undergraduate students and mentoring graduate students.

**Evidence that this position or an alternate one has clear support from the agricultural community of Maine:**

To demonstrate support as requested we will discuss this position in detail with agricultural stakeholders and key commodity groups in the coming weeks.

**Fit of this position to the current disciplinary portfolio of the AVS faculty relative to strategic need:**

The future of animal agriculture in the Northeast is influenced by trends towards organic production and small diversified farms, which has tended to influence recent hiring decisions. This position remains consistent with this approach. In synergy with our most recent hires (Dr. Juan Romero and Dr. Pauline Kamath) this individual will preserve a necessary critical mass of research capacity to meet stakeholder needs by addressing the safe production of healthy food on small or mid-size farms in Maine, and will help ensure success of current pre-tenure faculty.

**Evidence for high potential for nationally competitive extramural funding:**

This table shows fundable grant areas for animal microbiome research in the current year, with the maximum award.

|  |  |  |
| --- | --- | --- |
| **Institute** | **Grant area** | **Award Max ($)** |
| USDA-NIFA | Understanding Antimicrobial Resistance | 500,000 |
| USDA-NIFA | Agricultural Microbiomes in Plant Systems and Natural Resources | 750,000 |
| USDA-NIFA | Animal Health and Disease | 500,000 |
| USDA-NIFA | Animal Nutrition, Growth, and Lactation | 500,000 |
| USDA-NIFA | Improving Food Safety | 500,000 |
| USDA-NIFA | Function and Efficacy of Nutrients | 500,000 |
| USDA-NIFA | Nanotechnology for Agricultural and Food Systems | 500,000 |
| USDA-NIFA | Sustainable Agroecosystems: Functions, Processes and Management | 500,000 |
| SARE | Research and Education Grants | 200,000 |

1. **Assistant Professor of Agroecosystem Sustainability— Is there evidence that this disciplinary area is a critical need for sustainable agriculture in Maine or regionally and that it has support from agricultural stakeholders?**

The disciplinary area for this position is written broadly, in part, to allow hiring of the strongest possible candidate. We are not seeking a scientist who is narrowly focused in one disciplinary area, e.g. plant pathology, weed science, or soil science. Rather we seek someone with the expertise and motivation to work across disciplinary boundaries (crops, soils, water, sustainability, economics, policy) conducting research that addresses multiple objectives in the Maine food system and benefits diverse agricultural groups. It is clear that food systems analysis is a critical need in sustainable agriculture, nationally and regionally, with many of our fellow New England land grants hiring faculty with this expertise.

This position is not commodity focused, so seeking stakeholder support from a specific commodity sector, such as livestock or potatoes, isn’t feasible. However there is good reason to believe that Maine’s agricultural stakeholders would be supportive of this position for two major reasons.

One is that the Agricultural Council of Maine (AGCOM) Strategic Plan 2013-2020 lists about 25 key priorities across five major areas and many of these key priorities could be addressed by a faculty member with the type of expertise and interests described in this position justification. Of course one faculty member will not be able to address all of AGCOM’s priorities, and some of their priorities are not research-related, but the type of faculty member we seek would be well-positioned to contribute to many of the stated priorities. Examples of such priorities include: “improve efficiency from harvest to consumption; support innovation in both technology and energy use; cultivate hands-on programs for entry-level farmers through existing agriculture and educational organizations; support nutrition programs that connect consumers and farmers; protect Maine’s water resources, ensuring availability for farm use in crop, livestock and aquaculture production; continue to support successful land and water conservation practices for producers”. AGCOM is a forum and voice for all statewide agricultural organizations. Their strategic goals include ‘create profitability in farming’, ‘connect local food with healthy eating’, and ‘lead, advocate and protect Maine’s farm resources’. Some of the research that is foundational to reaching these goals could be conducted by a faculty member with the expertise we seek.

A second reason to believe that Maine’s agricultural stakeholders are likely to be supportive of this position is the key role this faculty member will play in the Sustainable Agriculture program. The Board of Agriculture has been supportive of the University offering an undergraduate degree in agriculture. This position will teach four key classes in the Sustainable Agriculture B.S. program. If we were to be unable to replace this retirement, it would be very difficult to offer a credible undergraduate degree program. If we do receive this replacement position, our Sustainable Agriculture program will be greatly strengthened, and we expect continuing increases in enrollment.