DAIRY SCIENCE
Strategic Planning Department Meeting
March 30, 2012 9:30 -10:30 AM

Presentation

- Have 2 vacancies
  - One is filled and will arrive later this Spring
  - Other is being searched
- Strong mission of research and a connection with industry
- SDSU one of only 2 in the nation that have Dairy Production and Dairy Manufacturing programs
  - Other is Cal Poly – St. Luis Obispo
  - Double majors do quite well
- Department Chair meets with all freshman in the Fall
- Majority of undergraduates
  - From Minnesota
  - Second is South Dakota
- Concerned for our international students
  - Lack of transportation is difficult
- Job market for undergraduates have been very good
  - 100% placement
- Goal is have 100 undergraduate majors
- Almost all graduate students are supported by assistantships
- Very happy with their facilities
- Future:
  - Enrollment to 100 for undergraduate
  - Upgrades to Dairy Farm
  - Want more endowed professorships
  - Need to address online teaching
  - Optimize facilities

What are the goals for graduate students?

- Have between 15-20 graduate students at any one time
- Evenly split between production and management
- About 100% are Ph.D.s
- Total of 25 Ph.D.s
- Would like to move both the number of Masters and Ph.D. students up
- Have active undergraduate research
  - Has inspired some to go on to graduate school
- Have unwritten rule that students have an external internship experience
• On Plant side, try to bring students their first year
  o Before they’re done have to show that they know
  o Then can get hired to work at plant
• Internship at the Farm is different
  o Lots of hands on experience
• All graduate students have had a requirement that they work in both facilities

Are the students working in the Dairy plant university employees?
• Yes, after they have completed their 50 hours of field experience

How is the relationship with Aramark going with the management of the store?
• There was a steep learning curve early on
• Overall now it’s going fairly well
• Amount of ice cream being sold has increased
• Meet with Aramark at least once a month
• Store is PR vehicle for the University
• Will get questions about the University and need to be prepared to answer
• Give priority to hiring Dairy Science students
• Do hire others as well

What about the downtown operation?
• Started Hobo Day 2010
• It’s there and functioning
• Need to do better with marketing
• Run by Dairy Science
• Popular in the summer months

Are the pools good for faculty searches?
• Had a search fail last Fall
• This is the one currently underway
• Have lost some female candidates
• Bel Brands may be one factor in helping us recruit
• Most manufacturing graduate students
  o Males – International
  o Females – Domestic
• Not easy for International faculty members

How is the $75 fee going?
• Undergraduates – not one question
• Graduates – some people have asked about it
• This is first year of this fee
• Would like a report on how resources were used programmatically
• How has it enhanced the quality?
• Discipline fee (as opposed to a lab fee) is more flexible

Need to make sure farm and plant remain operational
• Research component is expanding
• Teaching load stays the same
  o But it is growing too much
• Are you buying out your teaching with grants you receive?
• Have started to see more value to industry and production farms
• If they are part of the Jackrabbit Council and/or they are graduates we get asked to do some testing
  o Don’t have a mechanism to address these requests
  o As business grows should be able to recoup the costs
• When moved from 12 month to 10 month
  o First to use money for is to cover the missing 2 months
  o Would like insight/advice
• BOR allows all of us to do consulting at a day a week
  o If use University resources have to compensate the University
  o Could set up a sponsored service agreement to work with industry ....
  o And have to cover the costs
  o If there is enough volume to warrant could set up a service entity
• Need to have an open conversation of what can be done for free and what needs compensation
• Could set up a faculty consulting company
  o Hire someone to manage and market it
• Have reached a level where they need to take the next step
• Think about 3 things
  o Engineering Technology & Management
    ▪ Visit with them
  o Opportunity to incorporate the management core
  o Vision for the farm

The dairy industry is running short of trained professionals. SDSU could become a dairy center. What does this mean?
• Students here know how to feed a cow

We have other resources at the University that could be applied to Dairy Science issues.
• SDSU could lead
Need to mobilize this across campus
Dairy Science: Now and the Future

http://www.sdstate.edu/ds

Programs

• Undergraduate programs
  – Dairy Production
  – Dairy Manufacturing

http://www.sdstate.edu/ds
Demographics

• 55:45 – Production: Manufacturing
• 55:45 – Female: Male
• 9 US States, 3 Countries

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Enrollment

http://www.sdsstate.edu/ds
Programs

- Graduate Programs
  - Biological Sciences
- Dairy Science Specialization
  - Dairy Production
  - Dairy Manufacturing

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Faculty Members

- Total 9 faculty members
- 2 Managers (farm and plant)
- Department head

http://www.sdstate.edu/ds
# Faculty Members

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<th>Name</th>
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# FTE

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Research Highlights

• Vitamin D and cattle health
• Dairy cattle nutrition - by-product feeding
• Reduced fat dairy products
• Impact of feeding on products
• Midwest Dairy Foods Research Center

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Research Highlights

• Currently 24 active externally funded research projects
• Total budget - $3.3 million

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Research Highlights

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External Funding

- $9.3 million dairy plant
- Approximately $80,000 in scholarships each year
- Approximately $1 million in research expenditures through grants each year

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Active Engagement

• Dairy Development
• American Dairy Science Association
• Animal Society for Animal Sciences
• South Dakota Dairy Producers
• North Central Cheese Ind. Assoc.
• SD Holstein Breeders Association
• Food and Agricultural Organization

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Davis Dairy Plant
Alfred Dairy Science Hall

http://www.sdstate.edu/ds
Davis Dairy Plant

http://www.sdstate.edu/ds

Dairy Judging

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Opportunities for Students

- 100% placement
- Starting salaries
- Job interviews – approximately 15 companies per year

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The Future

- Enrollment
- Dairy Farm
- Endowed professorships
- On-line teaching
- Optimization of new facilities for research

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