

**BOARD OF REGENTS
MINUTES OF THE MEETING
August 17, 2012**

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**BOARD OF REGENTS
MINUTES OF THE MEETING
Board of Regents Conference Room
306 E. Capital Ave, Pierre, SD
August 17, 2012**

The Board of Regents convened via teleconference at 9:00 a.m. on August 17.

ROLL CALL:

Kathryn Johnson, President - PRESENT
Dean Krogman, Vice President - PRESENT
Randy Schaefer, Secretary - PRESENT
Terry Baloun, Regent - PRESENT
James Hansen, Regent - PRESENT
Harvey Jewett, Regent - PRESENT
Randy Morris, Regent - ABSENT
Carole Pagones, Regent - PRESENT
Patrick Weber, Regent - ABSENT

Also present during all or part of the meeting were Jack Warner, Executive Director and CEO; Monte Kramer, System Director of Finance and Administration; Claudean Hluchy, Budget Manager; James Shekleton, General Counsel; Janelle Toman, Director of Communications; Molly Weisgram, Executive Administrative Assistant; President David Chicoine, Barry Dunn, Daniel Scholl, Michael Walker, SDSU; Liza Clark, BFM; David Borofsky, DSU; Ken Curley, Brookings Register; Bob Mercer, media; Rick Vallery, Brenda Forman, Jim Faulstich, Lisa Richardson, Lyle Perman, and Randy England, commodities group representatives.

Regent President Johnson called the public meeting of the Board of Regents to order and declared a quorum present.

APPROVAL OF THE AGENDA

IT WAS MOVED by Regent Hansen, seconded by Regent Jewett to approve the agenda as published.

ROLL CALL:

Johnson - AYE
Krogman - AYE
Schaefer - AYE
Baloun - AYE
Hansen - AYE
Jewett - AYE
Morris - ABSENT
Pagones - AYE
Weber - ABSENT

The MOTION CARRIED.

REVIEW OF UPDATED AES BUDGET REQUEST ITEM

Dr. Monte Kramer explained that at the August BOR meeting, the board approved the FY14 budget request, with the provision that the AES item be revised to better respond to the needs of the commodities group. He summarized the revised item.

Discussion ensued related to whether or not the commodities groups should provide a portion of the funds needed. Dean Dunn said the way the system works is that faculty members need to be in place in order to apply for the grants. He said they have a good track record of leveraging external grant dollars.

Further discussion of whether the projected \$1.84M of grant dollars generated through these faculty members should be used to offset faculty salaries. Regent Baloun said that agriculture is 25% of the South Dakota's economy. If we successfully generate the projected monies, and he believes we will, we should grow the research rather than replace the salary dollars.

Regent Hansen said there is no guarantee that the grant dollars will be generated. Barry Dunn addressed this concern by saying their infrastructure for grant application and awards is in place, and their track record for grant awards is strong.

Regent Jewett described his interest in receiving an annual report by FTE of the amount of grants awarded and the amount of indirect payments per grant. He feels he needs more specificity of what the grants are engendered and for what subjects. Further discussion of indirect costs. Dean Dunn described the levels of indirect costs.

Regent Johnson agreed, saying not only would it track performance but the report could prove the benefit to the state of funding research scientists.

IT WAS MOVED by Regent Jewett, seconded by Regent Hansen to adopt the revised AES budget request item.

IT WAS MOVED by Regent Jewett, seconded by Regent Hansen to amend the motion to require annual reporting on the progress and return on investment of FTEs as well as indirect payment tracking.

The regents engaged in further discussion on the details of the report. Regent President Johnson noted that this is very similar to what the state has been doing with the 2010 centers, investing in people and watching what that investment has produced.

Regent Schaefer said he would fully expect that the return on this investment would likely be at least as much as they have shown in the past.

ROLL CALL:

Johnson - AYE
Krogman - AYE
Schaefer - AYE
Baloun - AYE

Hansen - AYE
Jewett - AYE
Morris - ABSENT
Pagones - AYE
Weber - ABSENT

The MOTION CARRIED and the amendment was adopted.

Dean Dunn gave background on how and why AES chose its priorities.

IT WAS MOVED by Regent Jewett, seconded by Regent Hansen to approve the revised AES request as amended.

ROLL CALL:

Johnson - AYE
Krogman - AYE
Schaefer - AYE
Baloun - AYE
Hansen - AYE
Jewett - AYE
Morris - ABSENT
Pagones - AYE
Weber - ABSENT

The MOTION CARRIED.

ADJOURN

IT WAS MOVED by Regent Baloun, seconded by Regent Jewett to adjourn the meeting of the full board at 9:45 a.m.

ROLL CALL:

Johnson - AYE
Krogman - AYE
Schaefer - AYE
Baloun - AYE
Hansen - AYE
Jewett - AYE
Morris - ABSENT
Pagones - AYE
Weber - ABSENT

The MOTION CARRIED.

SOUTH DAKOTA BOARD OF REGENTS

Full Board

AGENDA ITEM: 2

DATE: August 17, 2012

SUBJECT: Revised AES FY14 Budget Request

At their regular business meeting on August 9, 2012, the board approved the final FY14 Budget Request for refinement and presentation to the Governor’s Budget Office, subject to a telephonic meeting of the board to review the AES request and ensure its revision lined up with the needs of the commodity groups as well as identifies a return on investment. Attachment I provides the revised AES FY14 Budget Request.

RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Discuss and approve the revised AES request.

**SOUTH DAKOTA BOARD OF REGENTS
FY14 BUDGET REQUEST**

South Dakota Agricultural Experiment Station: Increased Agricultural Research Investments in Animal Health, Biofuels and Grasslands Productivity

Base General Funds	\$998,592
FTE	8.0

Approximately 25% of South Dakota's GDP is derived from production agriculture. Global food demand and the demand for energy independence provide significant opportunities for South Dakota agriculture to grow and continue to prosper. To realize these opportunities will require new knowledge and new know-how driven from strategic investments to increase research capabilities in the South Dakota Agricultural Experiment Station (AES). Critical additional research investments are needed:

- to improve the profitability of animal agriculture through improved nutrition and infectious disease prevention, diagnostics and therapeutics,
- to create advanced, next generation biofuels, and
- to improve productivity, profitability and sustainability of South Dakota's grasslands, which comprise over 50 percent of South Dakota's land area.

Animal Health and Nutrition

Meat animal and dairy production lead all South Dakota agriculture sectors in value of production and are the major market for South Dakota's feed crop sector. Infectious diseases undermine profitability through increased morbidity and mortality, decreased production efficiencies, and increased costs per unit of output. Prevention of infectious diseases is the key strategy for improved profitability. Optimal nutrition combined with immunological enhancement is the pathway to prevention and thus enhanced profitability of South Dakota beef, pork, dairy and sheep industries. Three additional FTE faculty AES scientists will focus on the pathway:

Associate Professor AES Scientist -- viral- and bacterial-immunology
 Assistant Professor AES Scientist -- nutrition of disease resistance
 Assistant Professor AES Scientist -- epigenetics

The 3 FTE AES scientists will be added to the current research capacity of 3.9 FTE in animal health research and 3 FTE in nutrition research. The additional capacity is expected to yield an increase in grant and contract research awards of \$690,000 per year.

Next Generation BioFuels for Energy Independence

The drive to energy independence in the U.S. is based substantially on the development of next generation biobased transportation fuels. South Dakota was a leader in the creation of the corn ethanol industry and gained first mover advantage because of a portfolio of research discoveries and their go-to market application. South Dakota can continue to lead in developing next generation biofuels through enhanced research investments in feedstock development, including new crops and new crop varieties customized to excel in South Dakota and advanced biofuel processing technologies, including conversion technologies for lignocellulosic feedstocks and improvements in overall processing efficiencies (lower cost per unit of output). These advancements will enable the production of next generation biofuels both for a drop-in fuel market and a pyrolytic conversion fuel market. This opportunity can be realized through creative,

new and innovation-based enhanced science and technology capabilities that drive biobased supplies to meet both the growing demand for food and for biofuels. One key is to develop new, non-food feedstocks that flourish on marginal lands under the more arid climate of South Dakota and then their post-harvest cost-effective conversion into drop-in biofuels. Three faculty scientist FTEs are requested for this key investment:

Association Professor AES Scientist -- biosystems and processing engineering

Assistant Professor AES Scientist -- molecular oilseed plant genetics

Assistant Professor AES Scientist -- molecular plant physiology

The 3 FTE AES scientists will be added to the current research capacity of 5 FTE scientists across bioengineering and processing, the microbiology of feedstock conversation and feedstock breeding and development. The additional capacity is expected to yield an increase in grant and contract research awards of \$690,000 per year.

Enhanced Profitability and Sustainability of Grasslands

Three, dramatically different, ecological zones exist in South Dakota that vary both geologically as well as climatologically. The challenges and opportunities faced in each of these zones are considerably different. Recurring drought, especially in western grasslands, continues to undermine sustained productivity. Resource conservation and management continue to rise as critical, and fundamental, building blocks of sustainable profitable agriculture in more arid grasslands regions. Sustainable, highly productive grasslands are the foundation of South Dakota's cow-calf sector and its continued growth, development and profitability.

Plant biotechnology offers great promise in the development of new robust, enhanced agronomic attributes of grasses and legumes, such as drought tolerance, that enable more sustainable and profitable grasslands agriculture in the most challenging production environments in South Dakota. Understanding and translating factors such as drought resistance, hardiness and adaptability from exotic and often invasive plant species to commercially viable grasses and legumes has the potential to improve sustainability and profitability of the state's grasslands and thus the profitability of the all-important cow-calf sector. Two faculty scientist FTEs are requested for this enabling investment:

Associate Professor AES Scientist -- plant molecular genetics.

Assistant Professor AES Scientist -- succession grasslands ecology.

The 2 FTE AES scientists will be added to the current research capacity of 2.5 FTE scientists. The additional capacity is expected to yield an increase in grant and contract research awards of \$460,000 per year

Return of Investment (ROI)

Investing \$998,592 in the three targeted research themes will drive research-derived new knowledge, new technologies and new know-how that when transferred to the marketplace will create new and expanded economic opportunities and help grow South Dakota agriculture and South Dakota's economy. The immediate direct impact will be the additional grant and contract research awards won by the requested 8 FTE faculty AES scientists. AES scientists in FY12 won 2.6 times their salaries and benefits in extramural research grant awards. The requested 8

FTEs are expected to win research grant and contract awards of \$1,840,000 per year, once their research programs become established.

The estimated long-run internal rate of return to the South Dakota economy from research investments in the South Dakota AES measured as direct agricultural economic value is 22.3 percent (Plastina and Fulginiti, 2009). In another study Battelle (2011) found the overall direct and indirect annual contribution to a state's economy in the North Central Region derived from a state's investment in agricultural research ranged between 15 and 25 times the original investments.

The expected internal rate of return (ROI) on the additional state investment of \$998,592 in agricultural research through the AES will be, based on these studies, at least 20 percent.

The financial structure of the FY14 budget request

Each AES faculty scientist FTE will be structured similarly:

Personal Services	
Salaries(ave. of \$93,750 per FTE)	\$750,000
Benefits	\$160,592
Subtotal P/S	\$910,592
FTEs	8.0
Operating Expenses	
Capital Assets	\$88,000
Subtotal OE	\$88,000
Total Base Expansion	\$998,592

The \$88,000 in capital assets will be used for start-up costs as well as ongoing operating expenses. Once the start-up period is over, the allocation will be moved to cover operating expenses such as travel, contractual services, supplies, etc. The start-up costs will be supplemented with Federal capacity funds and matched to external funds. This amount accounts for 8 FTE at \$11,000 each.

References

Plastina, A. and Fulginiti, L. 2009. Rates of Return to Public Agricultural Research in 48 U.S. States. Contributed Paper prepared for presentation at the International Association of Agricultural Economists Conference, Beijing, China, August 16-22, 2009

Battelle Technology Partnership Practice and BioDimensions. 2011. Power and Promise: Agbioscience in the North Central United State.

South Dakota Field Office. 2012. South Dakota Agriculture. National Agriculture Statistics Service.

The South Dakota Board of Regents adjourned its special business meeting on August 17 and will meet again in regular session on October 10-11 in Vermillion, South Dakota.

I, Jack Warner, Executive Director and CEO of the South Dakota Board of Regents, declare that the above is a true, complete and correct copy of the minutes of the Board of Regents meeting held on August 17, 2012.

A handwritten signature in black ink, appearing to read "Jack Warner", written in a cursive style.

Jack Warner
Executive Director and CEO