Grain Science Innovation Campus – Key Asset for the K-State Global Food Systems Initiative

Overview
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Presented by:
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“The global education, research and technology transfer leader for the grain & plant-based food, feed, fiber, fuel and bio-products supply chains.”
“To educate students and professionals, conduct innovative research, transfer new technologies and knowledge, offer high-quality outreach programs and services that impact the global grain & plant-based food, feed, fiber, fuel and bio-products supply chains.”
Strategic Plan Themes

1. **Educate** undergraduate and graduate students, and industry professionals.
2. Conduct innovative basic and applied **research**, and **transfer** new technology and knowledge to end users.
3. Offer high-quality **outreach** programs and services to meet domestic and international customer needs and stakeholder expectations.
4. Recruit, retain, reward and develop high quality **faculty**, and professional and classified **staff**.
5. **Develop**, maintain and utilize state-of-the-art **facilities** and **equipment**.
6. **Broaden** funding base and improve financial stewardship.

→ Department strategic plan aligns with K-State 2025 Visionary Plan and COA/KSRE Strategic Plan
Vision for KSU Grain Science Innovation Campus (ca. 1999)
International Grains Program Institute

Our Mission

To provide innovative and relevant education and technical programs to enhance the market preference, consumption and utilization of U.S. cereal grains, oilseeds and their value added products for the global grain industry.

The 20,000 ft², $4 million IGP Conference Center dedicated in May 2004 includes conference, meeting and class rooms for the continuing education of industry professionals from around the globe.
Bioprocessing & Industrial Value Added Products Innovation Center

To develop biomaterials processing technology and utilize agricultural-based materials to produce higher-value food, feed, and industrial uses products for economic development.

This 33,000 ft², $7 million facility houses Extrusion, Fermentation and Biomaterials labs. It was dedicated in March 2004.
Hal Ross Flour Mill

Complete 400 cwt/day (24 MT/day) flour mill and grain processing center for teaching, research, training and fee-for-service projects.

The 22,000 ft², $11 million Hal Ross Flour Mill was dedicated October 20, 2006.
KSU Grain Science Innovation Campus
Fall 2011
“This project represents the largest single research investment that wheat farmers have ever made in the U.S., and signals a bold step taken by the Kansas Wheat Commission to provide farmers access to advanced genetics and trait discovery.” — Richard Randall, KWC Chairman

This 35,000 ft², $10 million facility houses research labs, greenhouse rooms, and offices including Kansas Wheat and HPI. It was dedicated in April 2013.
This $16 million feed processing facility supports teaching, research, training and fee-for-service projects for the feed and animal production industries.

The facility is jointly operated by Grain Science & Industry and Animal Sciences & Industry.

It includes the Cargill Feed Safety Research Center which is the only BSL-2 pilot lab dedicated for feed and petfood safety research.

A second project phase will add the Feed and Petfood Science and Education wing with support from domestic and international grain, feed, petfood and animal nutrition industry and allied trades.

Project Timeline:
Fall 2011 – secure Phase 1 funds
Summer 2012 – start construction
Fall 2013 – complete & commission
October 11, 2013 – Dedication
KSU Grain Science Innovation Campus
Summer 2013
Final Projects:
- Add Milling Science & Education Wing to Hal Ross Flour Mill (HRFM)
- Add Feed & Petfood Science & Education Wing to O.H. Kruse Feed Technology Innovation Center (FTIC)
- Build Cereal Science & Bakery Technology Building (CSBT)

Envisioned completion of new Grain Science Innovation Campus (Minimum needed without AIB co-location)
Concentration of Globally Unique World Class *Grain Science* Infrastructure
Global Center for Grain-Based Foods

Partnership opportunity between KSU/GSI and AIB International, a supporting leg of the KSU Global Food Systems Initiative
Global Center for Grain-Based Foods
- Project Total: $55-$60 million
- Phase 1: 45,000 square feet
- Phase 1: $18-$20 million
- Phase 2: 107,600 square feet
- Phase 2: $37-$40 million
AIB-KSU Global Center for Grain Based Foods Time Line

Source: McGown Gordon Construction
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“Leaders & Knowledge for the Global Grain Industry”