Robert M. Kerr
Food & Agricultural Products Center

Adding Value to Oklahoma
Services & Programs

Location & Overview
The Robert M. Kerr Food & Agricultural Products Center is located on the campus of Oklahoma State University—Stillwater. It is chartered to discover, develop and deliver technical and business information to the food and agribusiness industries in Oklahoma to promote economic development.

Facility
The facility is a state-of-the-art food and agribusiness development, training, and processing center with 96,000 square feet of processing, laboratory, conference and office space. The FAPC has food and beverage processing, livestock harvesting and meat processing, grain milling and processing, vegetable and fruit processing and sensory evaluation facilities that support the Oklahoma food and agribusiness industries.

Faculty and Staff
There are resident faculty and staff members at the FAPC who represent business and technology disciplines of communications, business and marketing, agricultural and food industry economics, horticultural products, grain products, oilseed products, food engineering, bio-energy products, food safety and microbiology, food processing and technology, quality management and wood products.

Core Competencies

Services
• Analytical Chemistry
• Food Microbiology
• Food Processing
• Meat Processing
• Process Engineering
• Food Sensory Analysis
• Business and Marketing
• Communications
• Quality Management
**Mission Statement**
Discover, develop, and deliver technical and business information that will stimulate and support the growth of value-added food and agricultural products and processing in Oklahoma.

**Vision Statement**
The FAPC will continue to pursue programs, projects and activities that support innovation and growth in the agricultural and food industries in Oklahoma; increase food safety; assist in the development of students for careers in Oklahoma food and agribusiness industries; and support and enhance the impact of the FAPC on the state, region, and nation.

**Guiding Principles**
To accomplish its mission and vision, the Robert M. Kerr Food & Agricultural Products Center will:

- Provide a business and marketing incubator atmosphere that fosters business development.
- Provide an applied technology foundation that permits idea generation and opportunity creation for value-added food and agricultural products and processes.
- Train and educate students of all ages to optimize technical and business opportunities.
- Provide a climate of diversity and opportunity for high aspirations and mutual respect.

**Center Core Values**
- **Diversity:** A respect for diversity in employee and client character, in creative thought, in the expression of ideas, and in the workplace environment.
- **Integrity:** Principles of truth, honesty, fairness, impartiality, and professionalism.
Effectiveness, continued

• **Service:** Untiring and exceptional service to food and agricultural business industry clients in Oklahoma.

• **Excellence:** The pursuit of technical and business excellence in all endeavors.

• **Safety:** Safety in all processing, development, research, and outreach.

• **Education:** The encouragement of education and learning for students of all ages, particularly in the food and agricultural business industries of Oklahoma.

• **Fraternity:** The encouragement of civic fraternity and a respect for agriculture in our society.

**Center Goals**

• **Economic Development:** Provide technical, business, and marketing assistance to Oklahoma value-added food and agricultural production and processing industries.

• **Diversity:** Promote diversity and create an environment of respect.

• **Leverage Resources:** Maximize human, physical, and fiscal resources to achieve economic and technical development objectives.

• **Recognition:** Achieve and maintain excellence in activities to satisfy state expectations and national prominence.

• **Student Development:** Assist in the training of students of every age to be most productive in business life in Oklahoma.

**Impact of Activities**

• The FAPC was dedicated on November 13, 1996.

• During 1997, the facility acquired equipment, instrumentation and staff, and began helping the Oklahoma agribusiness and food industries.
The FAPC has had significant impact on diverse agribusiness and food industry sectors in Oklahoma. The general areas of support have been:
- Entrepreneurial and Small Businesses Assistance
- Wheat and Other Grain Products
- Food Oils and Oilseed Products
- Food and Food Process Engineering
- Business and Rural Economic Development
- Food Safety and Food Microbiology
- Meat and Poultry Processing and Technology
- Horticultural Products Processing
- Wood Products
- Beverage Processing
- Food Product Manufacturing
- Food Product Sensory Technology
- Continuous Improvement and Quality Manufacturing and Management
- Regulatory & Compliance

Project Statistics Include:
- More than 1,200 projects
- More than 850 Oklahoma clients
- More than 100 start-up companies

Economic Impact:
- A survey of FAPC clients revealed, collectively, these firms directly contributed to Oklahoma’s economy by generating more than 8,700 full-time jobs, 325 part-time jobs, and $1.9 billion in sales for 2006.
- The direct, indirect, and induced economic impacts attributable to FAPC were roughly 800 jobs and $308 million in economic activity for the state of Oklahoma in 2006.
Core Competencies

**Process Engineering**
Process engineering is a significant component of all food and agribusiness activities. The FAPC has two (2) professional process engineers, both holding the Ph.D. degree, who have responsibilities of industry support and applied process engineering research. They have offices and laboratories in the FAPC. Their work includes, but is not limited to, process design, process logic and development, facilities design, customized equipment design, and other process engineering related technologies.

**Bio-Based Energy Programs**
The FAPC has developed programs for support of the developing bio-sourced energy models for businesses in Oklahoma. Work has been done with the processing and agribusiness industries in the state in the capture and use of processing waste for same-plant energy, field crop sourced biomass with the conversion to ethanol, oil seed crushing by-product capture and conversion to biodiesel, and other consultative and support work. The core engineering and chemistry knowledge and competencies are resident at the FAPC.

**Food Microbiology**
Food microbiology continues to take a center-stage position at the FAPC. Food safety and security, and the role of certain bacteria in reducing food contamination and promoting health (probiotics) have been core technologies at the FAPC for some time. There are two (2) food microbiologists at the FAPC who work in pathogen reduction relative to foodborne illnesses and lactobacillus-based probiotic research, mostly focused on beef and dairy cattle and on pets. Significant licensing royalties are received at the FAPC for this probiotic applied research.

**Food Chemistry**
Food chemistry is fundamental to all aspects of value-added food processing, and there is a core competency for food chemistry at the FAPC. This core technology spans food and beverage products, and almost always works in a team aspect with other technical and business disciplines in client work.

**Analytical Chemistry**
The FAPC has a sound analytical chemistry base with several common-use laboratories containing current-technology equipment and instrumentation including the GC, MS, HPLC, other spectroscopy instrumentation, and all the supporting equipment and specialized technician support needed for client work.
Core Competencies, continued

Product and Process Development
Product and process development occupies the greatest proportion of work time at the FAPC. This client support varies greatly from the type given to entrepreneurial and small business clients to the large food industries in the state, and, those that retain us who do not have facilities in the state. The work ranges from highly specialized engineering-based product and process development to the food-technologist base product development.

Quality Management and Manufacturing
Issues of quality, quality manufacturing, the management of quality, 6-Sigma Manufacturing, Lean Manufacturing, Baldrige Criteria quality management, and several other combinations of quality criteria, including ISO manufacturing are core strengths of the FAPC. There is a resident Quality Management Specialist who is American Association of Quality certified, he is a Baldrige auditor, and leads all quality team work at the FAPC. Increasingly, quality management and some aspect of quality manufacturing is taking leading places in the food and agribusiness industries in Oklahoma, and the FAPC is supporting our clients in this important area.

Business Planning, Market Development, and Communications
Without the leadership of the Business and Marketing Group at the FAPC, the broad array of work would be ill-managed. All client work is lead by a business and marketing specialist, and that specialist coordinates all client project needs, ensures all project work is managed correctly, ensures the work stays on the project time line, ensures work and costs accountability, and then ensures technology is commercially applied. Training and education makes up a significant part of the role of this group. Support includes business plan and marketing plan development support, advertisements, branding, and general marketing support.

Economics and Economic Modeling
The FAPC has a professional economist and ensures market economic evaluations, cost-benefit modeling and economic prediction evaluations are part of the project teams where appropriate. The FAPC has been broadly utilized across the state by businesses, cooperatives, trade associations, and state agencies to evaluate or predict economic outcomes for food or agribusiness proposals.

Other Competencies
The FAPC has additional technology and business strengths that may be of use to your organization. Additional discussions will bring these needs versus capabilities to light.
Accessing Services

All client services are accessed through the Business and Marketing Group. All new client requests are first directed to Ms. Erin Early, FAPC business/marketing client coordinator. She will discuss needs and direct the client through the FAPC “Client Success Paths” process and will ensure a project manager is appointed to manage all client work for that client. Once a client manager is assigned, that manager accepts the responsibility for that specific client in all subsequent activities.

The client and the work predicates the costs billed to the client. All non-Oklahoma processors and clients must pay for all expense and overhead costs. The FAPC budget is structured to support Oklahoma food and agribusiness industries with significantly subsidized costs.
Advisory Committee

The advisory committee was established in 1997 by State Statute 2-5-60.

Governor-Appointed Members
- Mr. Danny DuPree, Bar-S Food Company, national food processor
- Mr. John Griffin, Griffin Food Company, national food processor
- Mr. Tommy Kramer, Durant Industrial Authority, economic development
- Ms. Jill Stichler, Redland Juice Company, Oklahoma food processor

President Pro-Tempore of the Senate-Appointed Members
- Mr. Gary Crane, Ralph’s Packing Company, Oklahoma food processor
- Mr. David Howard, Unitherm Food Systems, industrial/pharmaceutical
- Mr. Rodger Kerr, Southwest Technology Center, textiles sector
- Mr. Dave McLaughlin, Advance Food Company, Inc., food transportation

Speaker of the House-Appointed Members
- Mr. Jay Cowart, Plains Cotton Cooperative Association, food marketing
- Mr. Bill Wiley, Oklahoma Refrigerated Services, Inc., food distribution
- Mr. Paul Schatte, Head County Bar-B-Q, Oklahoma food processor
- Mr. Gary Conkling, Producers Coop Oil Mill, industrial/pharmaceutical

Dean and Director-Appointed Members
- Dr. Charles Nichols, Davison & Son Cattle Company, agricultural producer
- Mr. Virgil Jurgensmeyer, J-M Farms, agricultural producer
- Mr. John Williams, Chef’s Requested Foods, Oklahoma food process
Faculty & Staff

**FAPC Director**
The FAPC Director is the senior administrator of the Rober M. Kerr Food & Agricultural Products Center. The Director also is the budget manager for the Center. The Director is responsible for all day-to-day activities of the FAPC and sets short-, medium-, and long-term objectives of the FAPC.

The FAPC Director is responsible to maintain an industry and business focus for all applied research, product development, business development, and outreach activities while maintaining close associations with academic departments on campus. The FAPC Director administratively reports to the Vice President, Dean and Director of DASNR, but has a statutory reporting responsibility to the Robert M. Kerr Food & Agricultural Products Center Industry Advisory Committee (State Statute 2-5-60).

- Dr. J. Roy Escoubas, Director and Professor

**Faculty**
The FAPC has 10 faculty members resident at the FAPC. Each faculty member represents a particular sector or function of the food industry in Oklahoma.

Faculty members function as the science and technology foundation of the FAPC. They function as principal investigators of all research projects, and contribute to the validity of all published project results. Faculty members of the FAPC typically have both research and extension appointments through which they contribute to the food industry in Oklahoma.

- Dr. Danielle Bellmer, Food Process Engineer
- Dr. Timothy Bowser, Food Process Engineer
- Dr. Christina DeWitt, Food Chemist
- Dr. Nurhan Dunford, Oil/Oilseed Chemist
- Dr. Stanley Gilliland, Food Microbiologist
- Dr. Salim Hiziroglu, Wood Products Specialist
- Dr. Rodney Holcomb, Agricultural Economist
- Dr. William McGlynn, Horticultural Products Processing Specialist
- Dr. Peter Muriana, Food Microbiologist
- Dr. Patricia Rayas-Duarte, Cereal Chemist
Professional Staff
The FAPC has 14 professional staff members. All are resident at the FAPC and report to the FAPC Director. These professional staff members serve as the front line of direct support to the food industry in Oklahoma.

Business Planning and Market Development
- Mr. Jim Brooks, Business Planning and Marketing Services Manager
- Ms. Erin Early, Business/Marketing Client Coordinator
- Ms. Andrea Graves, Business Planning and Marketing Specialist
- Mr. Charles Willoughby, Business Planning and Marketing Relations Manager

Quality Management
- Mr. Jason Young, Quality Management Specialist

Food Processing
- Mr. David Moe, Pilot Plant Manager
- Mr. Kyle Flynn, Meat Pilot Plant Manager
- Mr. Scott Grumbles, Meat Pilot Plant Assistant Coordinator

Food Sensory Technology
- Mr. Darren Scott, Food Scientist/Sensory Specialist

Communications
- Ms. Mandy Gross, Communications Services Manager

Analytical Chemistry
- Dr. Guadalupe Davila-El Rassi, Analytical Services Manager
- Dr. Veneta Dobreva, Analytical Chemistry Specialist

Milling and Baking
- Ms. Renee Albers-Nelson, Milling and Baking Specialist

Meat Processing
- Mr. Jacob Nelson, Meat Processing Specialist

Clerical Staff
There are four full-time clerical staff who administer to all clerical needs of the FAPC.

- Ms. Betty Rothermel, Administrative Assistant
- Ms. Colleen Fleming, Senior Financial Assistant
- Ms. Karen Smith, Administrative Support Specialist/Workshop Coordinator
- Ms. Terra Brown, Administrative Support Assistant II
Technical Staff
There are six full-time research associates at the FAPC. These research associates function as the laboratory managers for each of the faculty members. Their technical research support disciplines include:

- **Mr. Jeff Gruntmeir**, Food Microbiology Research Specialist
- **Mr. Pal Kalyanaraman**, Wheat Research Specialist
- **Ms. Angie Lathrop**, Analytical Chemistry Research Specialist
- **Ms. Sandra McCoy**, Food Microbiology Research Specialist
- **Ms. Richelle Stafne**, Horticultural Food Technology Research Specialist
- **Ms. Aihua Su**, Oil/Oilseed Chemistry Research Specialist

Graduate Students
There are about 40 graduate students supported by the FAPC. All of these graduate students work under the supervision of faculty and staff members of the FAPC, and contribute to the accomplishments of the FAPC.