University/Food Industry Partnerships for Human Resource Development and Technology Transfer

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Traditional examples

- Advisory input
- Career information
- Scholarship support
- Guest lectures
- Educational tours and field trips
- Internships / work experience
- Student projects

Traditional examples (cont.)

- Employment of graduates
- Faculty and student awards
- Research support (grants, contracts)
- Licensing of inventions
- Professional development programs
- Scientific/professional organizations (e.g., IFT)

Newer partnerships/alliances

Formal research cooperatives

• Food industry centers at universities

Factors driving new alliances

• University perspective: limited public funding for research

• Industry perspective: limited dollars for research resulting from mergers, downsizing, debt load

Food industry center examples

- Carnegie Mellon University: Spray Systems Technology Center
- Cornell University: New York State Food Venture Center
- Kansas State University: KSU Extrusion Center
- Michigan State University: Food Industry Institute

Food industry center examples

- North Carolina State University: Dairy
 Foods Research Center, and Center for
 Aseptic Processing and Packaging Studies
- Oklahoma State University: Oklahoma Food and Agricultural Products and Technology Center
- Ohio State University: Food Industries Center

Food industry center examples

- Oregon State University: Food Innovation Center
- Rutgers University: Center for Advanced Food Technology
- University of Georgia: Center for Food Safety and Quality Enhancement
- University of Nebraska-Lincoln: Food Processing Center

Variety of roles and services

- Clientele focus
- Basic research
- Technical assistance
- Product and process development
- Processing technologies/pilot plant facilities
- Analytical services

Variety of roles and services

- Commodity/food product focus
- Marketing and business plan assistance
- Networking with suppliers
- Involvement of government partners
- Regulatory information
- Confidentiality policies
- Employee training

Elements of success

- Active industry advisory group
- Membership models
- Flexible university polities
- High trust levels
- University reward structure
- Faculty culture

Beneficial outcomes: University partner

- Financial support (grants, contracts, fees)
- Stronger connection to industry
 - research focus
 - educational program influence
 - student project opportunities
 - faculty development opportunities

Beneficial outcomes: Industry partners

- Access to expertise precisely matched to goals and objectives
- Opportunity to build powerful teams
- Fluid arrangements
- Avoid long term personnel and capital investments for research projects
- Contact with students/potential future employees

UN-L's Food Processing Center

- Integrated food processing and marketing
- Initially in-state, small and emerging business focus
- Industry advisory council
- State government involvement (Economic Development)
- Food Industry Association established

Lessons learned in Nebraska

- Underestimated demand and projected levels of program activity
- National firms and larger companies also utilizing technical services and facilities
- High demand for marketing related and business planning services
- Evolution of faculty views regarding Center

References

• Giese, James. 1999. University Centers Ease Product Development. Food Technology 53 (11): 98.

• Hollingsworth, Pierce. 1998. Economic Reality Drives Industry-University Alliances. Food Technology 52 (7): 58.