

SUMMARY OF 2009-11 CENTERS OF EXCELLENCE APPLICATIONS - ROUND 2**HISTORY, AUTHORIZATION, AND FUNDING**

The 2005 Legislative Assembly approved Senate Bill No. 2032 establishing a centers of excellence program. The Centers of Excellence Commission created by the bill is responsible for the application process and for making funding award recommendations for commission-approved applications for centers of excellence. The applications that are being submitted have been approved by the Centers of Excellence Commission, the North Dakota Economic Development Foundation, and the State Board of Higher Education.

The following is a summary of funds appropriated by the Legislative Assembly for centers of excellence grants for the 2005-07 through 2009-11 bienniums:

Appropriations for Centers of Excellence			
	General Fund	Special Funds	Total
2005-07 legislative appropriation		\$20,000,000 ¹	\$20,000,000 ¹
2005-07 deficiency appropriation		1,300,000 ²	1,300,000 ²
2007-09 legislative appropriation		15,000,000 ³	15,000,000 ³
2007-09 deficiency appropriation	\$4,450,000 ⁴		4,450,000 ⁴
2009-11 legislative appropriation	15,000,000 ⁵	5,000,000 ⁵	20,000,000 ^{5,6,7}
Total	\$19,450,000	\$41,300,000	\$60,750,000

¹The 2005 Legislative Assembly authorized the Office of Management and Budget (OMB) to borrow up to \$15 million from the Bank of North Dakota and to distribute the funds to the centers of excellence as directed by the Centers of Excellence Commission for the 2005-07 biennium. The 2005 Legislative Assembly also authorized OMB to borrow up to an additional \$5 million from the Bank to be used for centers of excellence grants, subject to Emergency Commission and Budget Section approval, if the \$15 million was not adequate. Section 14 of 2005 Senate Bill No. 2018 provided legislative intent that the Legislative Assembly intends to provide a total of \$50 million for centers of excellence during the 2005-07 biennium and future bienniums.

²The 2005 Legislative Assembly provided funding of \$16 million from the permanent oil tax trust fund to OMB for repaying the Bank for loans and accrued interest relating to funds borrowed for centers of excellence grants during the 2005-07 biennium. The 2007 Legislative Assembly appropriated an additional \$5.3 million from the permanent oil tax trust fund to OMB for repaying the remainder of the Bank loan and accrued interest relating to funds borrowed during the 2005-07 biennium for centers of excellence. The amount reported above represents funding for accrued interest of \$1.3 million on the loan.

³The 2007 Legislative Assembly appropriated \$15 million from the permanent oil tax trust fund to OMB for centers of excellence grants and authorized OMB, as directed by the Centers of Excellence Commission with Emergency Commission and Budget Section approval, to borrow up to \$5 million from the Bank for providing additional funding for centers of excellence if the \$15 million appropriated from the permanent oil tax trust fund is committed. Although the commission awarded more than \$15 million in grants during the 2007-09 biennium, OMB did not borrow funds from the Bank (see footnote No. 4).

⁴The 2009 Legislative Assembly in House Bill No. 1015 provided \$4,450,000 from the general fund for transfer to the centers of excellence fund for 2007-09 centers of excellence-awarded projects in excess of the \$15 million appropriated from the permanent oil tax trust fund by the 2007 Legislative Assembly.

⁵The 2009 Legislative Assembly appropriated \$15 million from the general fund and a contingent general fund appropriation of \$5 million for transfer to the centers of excellence fund for providing funding to centers of excellence for the 2009-11 biennium. The Office of Management and Budget was permitted to transfer the contingent appropriation if actual general fund revenues for the period July 1, 2009, through December 1, 2009, exceeded estimated general fund revenues for that period by at least \$5 million. Revenues were determined sufficient by OMB and the transfer was made in December 2009.

⁶Of the \$20 million the 2009 Legislative Assembly appropriated for centers of excellence, Section 23 of 2009 Senate Bill No. 2018 requires \$10 million be made available for centers of excellence enhancement grants during the biennium beginning July 1, 2009, and ending June 30, 2011. Through October 2010, the Centers of Excellence Commission has awarded \$8.65 million of the \$10 million appropriated for centers of excellence enhancement grants to the following projects:

University of North Dakota (UND)	
Center of Excellence for Unmanned Aircraft Systems Research, Education, and Training	\$2,754,000
Grand Forks Air Force Base realignment business transition	200,000
North Dakota Unmanned Aircraft Systems Airspace Initiative	100,000
Unmanned Aircraft Systems software and curriculum development	600,000
North Dakota State University (NDSU)	
Research 1 expansion	4,000,000
Materials and Nanotechnology Center	1,000,000
Total	\$8,654,000

⁷The 2009 Legislative Assembly established a centers of excellence fund in Senate Bill No. 2018 (North Dakota Century Code Section 15-69-06). Money in the fund is appropriated to the Department of Commerce on a continuing basis for implementing and administering the centers of excellence program. Interest earned on money in the fund is to be credited to the fund.

2005-07 APPROVED APPLICATIONS

During the 2005-07 biennium, the Budget Section approved the following centers of excellence grants:

Round 1		
Bismarck State College	National Energy Center of Excellence	\$3,000,000
Lake Region State College	Dakota Center for Technology-Optimized Agriculture	450,000
UND	National Center for Hydrogen Technology	2,500,000
NDSU	National Center of Excellence for Advanced Electronics Design and Manufacturing	3,000,000
Total - Round 1		\$8,950,000
Round 2		
Williston State College	Petroleum Safety and Technology Center	\$400,000
UND	Center of Excellence for Unmanned Aerial Vehicle and Simulation Applications	1,000,000
UND	Center of Excellence in Life Sciences and Advanced Technology	3,500,000
NDSU	Center for Agbiotechnology: Oilseed Development	2,000,000
NDSU	Center of Excellence for Surface Protection	2,000,000
Valley City State University	Enterprise Application Model	1,000,000
Total - Round 2		\$9,900,000
Round 3		
Dickinson State University	Center for Entrepreneurship and Rural Revitalization	\$1,150,000
Total - 2005-07 biennium		\$20,000,000

2007-09 APPROVED APPLICATIONS

In October 2007, the Budget Section gave final approval to six centers of excellence applications submitted by the Centers of Excellence Commission from Round 1. In September 2008, the Budget Section gave final approval to seven centers of excellence applications submitted by the Centers of Excellence Commission from Round 2 of the application process for the 2007-09 biennium.

Round 1		
NDSU	Center for Agbiotechnology: Oilseed Development II	\$1,500,000
NDSU	Center of Excellence for Surface Protection	2,000,000
UND	Biomedical Device Research, Development, and Commercialization	2,500,000 ¹
UND	Unmanned Aircraft Systems	1,500,000
Lake Region State College	Dakota Center for Technology-Optimized Agriculture	400,000
Minot State University	Great Plains Knowledge and Data Center	2,100,000 ¹
Total - Round 1		\$10,000,000 ¹
Round 2		
NDSU	Center for Integrated Electronic Systems	\$2,050,000
NDSU	Center for Biopharmaceutical Research and Production (CBRP)	2,000,000
UND	Passive Therapeutics	2,650,000
UND	SUNRISE BioProducts: A Center of Excellence for Chemicals, Polymers, and Composites From Crop Oils	2,950,000
UND	Petroleum Research, Education, and Entrepreneurship Center of Excellence	3,000,000
UND	Center of Excellence in Space Technology and Operations	1,000,000
Minot State University	Entrepreneurial Center for Horticulture - Bottineau	400,000
Total - Round 2		\$14,050,000
Subtotal 2007-09 approved applications		\$24,050,000

Discontinued centers of excellence		
UND	Biomedical Device Research, Development, and Commercialization	(\$2,500,000) ¹
Minot State University	Great Plains Knowledge and Data Center	(2,100,000) ¹
Total - Discontinued centers of excellence		(\$4,600,000) ¹
Total - 2007-09 biennium		\$19,450,000

¹The University of North Dakota discontinued its Biomedical Device Research, Development, and Commercialization Center of Excellence due to being unable to raise the level of match required, and Minot State University discontinued its Great Plains Knowledge and Data Center Center of Excellence due to problems with the transfer of data equipment from the university to a private sector partner. As a result, the Centers of Excellence Commission did not distribute the \$4.6 million awarded to these centers.

2009-11 APPROVED APPLICATIONS - ROUND 1

The Budget Section approved the following two centers of excellence applications submitted by the Centers of Excellence Commission and approved by the Emergency Commission from Round 1 of the application process during the 2009-11 biennium:

NDSU	Center for Sensors, Communications and Control	\$2,800,000
NDSU	Center for Advanced Technology Development and Commercialization	3,900,000
Total		\$6,700,000

2009-11 APPLICATION SUMMARY - ROUND 2

The schedule below summarizes the statutory **requirements and other considerations** contained in Chapter 15-69 related to centers of excellence as well as additional information requested by the Emergency Commission in prior rounds of application reviews. Upon approval of the application by the Centers of Excellence Commission, the State Board of Higher Education, North Dakota Economic Development Foundation, and **Budget Section (after a recommendation by the Emergency Commission)**, an entity may be provided a funding award and be designated as a "center of excellence."

The Budget Section is being asked to consider the following centers of excellence application totaling \$3,015,000 for Round 2 of the 2009-11 biennium application process. Of the \$20 million appropriated by the 2009 Legislative Assembly for centers of excellence, Section 23 of 2009 Senate Bill No. 2018 requires \$10 million be used for centers of excellence enhancement grants. With this restriction, \$10 million of funding was available for Round 1 of the 2009-11 biennium application process. The Budget Section approved Round 1 centers of excellence applications totaling \$6.7 million, \$3.3 million of the total \$10 million appropriated for centers of excellence grants for the 2009-11 biennium remains unawarded.

The December 2010 centers of excellence application submitted for approval for Round 2 totals \$3,015,000 and is listed below, along with the statutory provisions and summary information for the application. The application is seeking additional funding for the 2008 approved center of excellence--CBRP--as CBRP 2.0. If the \$3,015,000 is approved, \$285,000 of the total \$10 million appropriated for centers of excellence grants for the 2009-11 biennium would remain unawarded.

Description Emergency Commission Request No./Project	Project - Application Summary 1765/ NDSU - CBRP 2.0
Center of excellence funding request	\$3,015,000
Requirements A center must be an institution of higher education or a nonprofit university- or college-related foundation under the control of the State Board of Higher Education (Section 15-69-02(1)).	NDSU
The institution or nonprofit foundation must be working in partnership with the private sector (Section 15-69-02(1)).	SomahLution Avianax Aldevron Altravax
A center shall use funds awarded under this chapter to enhance capacity and leverage state, federal, and private sources of funding. A center awarded funds under this chapter may not use the funds for infrastructure, to supplant funding for current operations or academic instructions, or to pay indirect costs (Section 15-69-05(1)).	Centers of excellence awarded funding will primarily be utilized for personnel (\$2,864,362) and equipment (\$200,638). Personnel includes salaries and fringe benefits for an associate research professor, an assistant research professor, two postdoctoral researchers, two laboratory technicians, an administrative assistant, a regulatory administrator, two business developers, a clinical researcher, and three graduate assistants. Matching funds will be used for operational, contractual, and other needs.
Total matching funds anticipated (\$2 of matching funds are required for each \$1 of state funds) (Section 15-69-05(3)).	\$6,630,000
Major considerations In making funding recommendations and designation determinations, the commission, board, foundation, and Budget Section shall give major consideration to the portion of matching funds provided in cash by the private sector . Of the \$2 of matching funds, at least \$1 must be cash, of which at least 50 cents must be from the private sector (Section 15-69-05(3)).	Private sector partners Private sector cash \$1,130,000 ¹ Other cash reserved 500,000 ¹ In-kind asset 3,000,000 Local economic development funds Growth initiative fund - Fargo ² 2,000,000 Total \$6,630,000 ¹ Section 15-69-05(3) requires at least 25 percent of the required matching funds to be cash from the private sector. Based on this request, \$1,507,500 is required to be cash from the private sector. The application includes \$1,130,000 of cash provided by the private sector partners of Avianax and SomahLution and \$500,000 of cash reserved by SomahLution to be expended on behalf of CBRP. ² A letter of support was provided from the Greater Fargo Moorhead Economic Development Corporation and the growth initiative fund indicating that it would take action on the CBRP request for \$2 million in late November.
Other considerations (Section 15-69-04(3)) In deciding whether to approve or disapprove an application, the commission is to consider whether the center will: <ul style="list-style-type: none"> Use university or college research to promote private sector job growth and expansion of knowledge-based industries or use university or college research to promote the development of new products, high-tech companies, or skilled jobs in this state. Create high-value private sector employment opportunities in this state. 	The Center for Biopharmaceutical Research and Production will collaborate with area institutions and the various departments at NDSU. Area institutions include UND, UND Research Foundation, Minnesota State University Moorhead, and Concordia College. The Center for Biopharmaceutical Research and Production expects to initiate collaboration with the Center of Excellence for Passive Immunotherapy at the UND Research Foundation. Approximately 40 to 60 jobs The Center for Biopharmaceutical Research and Production expects creation of over 40 high-value private sector jobs, including 10 new direct hire jobs by CBRP. Additional job creation is expected through new startups in the biopharmaceutical area and by attracting biotechnology company activities to the area.

Description	Project - Application Summary
Emergency Commission Request No./Project	1765/ NDSU - CBRP 2.0
<ul style="list-style-type: none"> • Provide for public/private sector involvement and partnerships. • Leverage other funding, including cash from the private sector. • Increase research and development activities that may involve federal funding from the National Science Foundation Experimental Program to Stimulate Competitive Research (EPSCoR). • Foster and practice entrepreneurship. • Promote the commercialization of new products and services in industry clusters. • Become financially self-sustaining. • Establish and meet a deadline for acquiring and expending all public and private funds specified in the application. 	<p>A strategic cornerstone of CBRP's mission is public-private sector involvement and partnerships with existing North Dakota biopharmaceutical companies and health care systems. The Center for Biopharmaceutical Research and Production has initiated partnerships or plans to partner with the following entities:</p> <ul style="list-style-type: none"> • Aldevron • CSM • Avianax • Altravax • Cetero • Sanford Health <p>The Center for Biopharmaceutical Research and Production has leveraged \$3,130,000 in cash from private sector partners and local economic development funds. Additionally, SomahLution will expend \$500,000 in contracts for manufacturing in the state of North Dakota as a cash reserved match.</p> <p>The Center for Biopharmaceutical Research and Production will use equipment, materials, salary, and travel as a match to attain federal funding from EPSCoR and National Institutes of Health (NIH) competitive grants and contracts. The Center for Biopharmaceutical Research and Production anticipates research may provide solutions to other commercial problems, such as biologic products for catalysis and processing high-value protein products. At maturation, CBRP will submit competitive research proposals to EPSCoR and NIH.</p> <p>The Center for Biopharmaceutical Research and Production's core business model will enable and foster entrepreneurship. The Center for Biopharmaceutical Research and Production will help develop new startup companies that would utilize intellectual property developed by CBRP or through the use of licensed intellectual property as the foundation for their business models. The Center for Biopharmaceutical Research and Production will also assist startups to obtain funding through venture and angel investors. Entrepreneurship is also highly promoted and encouraged by the NDSU Research and Technology Park.</p> <p>The Center for Biopharmaceutical Research and Production will help generate and attract new businesses in biotechnology and biopharmaceuticals, stimulate private investment and create jobs, encourage the expansion and retention of existing companies, and provide businesses in North Dakota with workforce training and product development. The Center for Biopharmaceutical Research and Production activities will promote significant commercialization in the biopharmaceutical services sector. The Center for Biopharmaceutical Research and Production expects these activities to contribute to growth of North Dakota's gross state product.</p> <p>Presently, CBRP is funded by centers of excellence grants; contracts from the state, regional, and federal grant agencies; and sponsored research funding by private sector partners. The Center for Biopharmaceutical Research and Production expects to be self-funded within five years through a combination of grants and contracts. In the future, self-sustaining revenues will be generated through licensure of patented technologies. It also anticipates that personnel associated within CBRP will begin their own regional biopharmaceutical companies based on product development or fee-for-service research and development. The Center for Biopharmaceutical Research and Production expects these new companies to create expertise and experience that can build on itself and eventually reach the point where North Dakota life sciences and biopharmaceutical industries are of a size that they can attract significant investment capital from major investors and companies.</p> <p>The Center for Biopharmaceutical Research and Production plans to spend the funds over three years.</p>
<p>Responses to previous Emergency Commission questions</p> <p>The potential new private sector jobs that will be created if the center of excellence proposal is funded, including the nature of the jobs and the number of new jobs</p>	<p>The Center for Biopharmaceutical Research and Production's goal is to assemble a comprehensive group and structure to enable discovery research through clinical development of private sector partners and to enable CBRP to develop internal research and development of products derived from CBRP research. The goal and the mission of CBRP through development of private sector partners and through internal programs is to create many high-value job opportunities in the Red River Valley Research Corridor region and the state of North Dakota. In addition to generating jobs to attract biotechnology professionals, CBRP will undertake teaching and training of undergraduates, graduate students, and postdoctoral researchers to generate a quality workforce to attract biotechnology businesses to the area.</p>

Description	Project - Application Summary																				
Emergency Commission Request No./Project	1765/ NDSU - CBRP 2.0																				
Details concerning the private sector match for each proposal, including description and value of any in-kind match	<table> <tr> <td>Private sector cash</td><td></td></tr> <tr> <td> Avianax</td><td>\$380,000</td></tr> <tr> <td> SomahLution</td><td>750,000</td></tr> <tr> <td>Private sector cash reserved</td><td></td></tr> <tr> <td> SomahLution</td><td>500,000</td></tr> <tr> <td>Private sector in-kind match</td><td></td></tr> <tr> <td> Altravax</td><td>3,000,000</td></tr> <tr> <td>Local economic development funds</td><td></td></tr> <tr> <td> Growth initiative fund - Fargo</td><td>2,000,000</td></tr> <tr> <td>Total private sector</td><td><u>\$6,630,000</u></td></tr> </table>	Private sector cash		Avianax	\$380,000	SomahLution	750,000	Private sector cash reserved		SomahLution	500,000	Private sector in-kind match		Altravax	3,000,000	Local economic development funds		Growth initiative fund - Fargo	2,000,000	Total private sector	<u>\$6,630,000</u>
Private sector cash																					
Avianax	\$380,000																				
SomahLution	750,000																				
Private sector cash reserved																					
SomahLution	500,000																				
Private sector in-kind match																					
Altravax	3,000,000																				
Local economic development funds																					
Growth initiative fund - Fargo	2,000,000																				
Total private sector	<u>\$6,630,000</u>																				
For the center's executive summary and budget detail, see the attached appendix .																					
Emergency Commission recommendation/vote	Approval with the provision that matching cash and in-kind funds are verified prior to the release of state funds. 6-0.																				

APPROVAL PROCESS

In order to receive a funding award and be designated a center of excellence, each application must:

1. Be approved by the Centers of Excellence Commission - The commission may modify the application request (Section 15-69-02(1)).
2. Be approved by the North Dakota Economic Development Foundation (Section 15-69-02(2)).
3. Be approved by the State Board of Higher Education (Section 15-69-02(2)).
4. Be reviewed by the Emergency Commission. The Emergency Commission makes a recommendation on each application to the Budget Section (Section 15-69-02(2)).
5. Be considered by the Budget Section. The Budget Section, in considering each proposal, has the following options:
 - a. Approve the proposal.
 - b. Reject the proposal.
 - c. Rerefer the proposal to the Centers of Excellence Commission with recommended modifications.

If, upon receiving a rereferred recommendation, the commission modifies the recommendation or retains the recommendation and provides additional information within 30 days, the Emergency Commission may meet and either approve or reject the recommendation. If the Emergency Commission does not meet to consider the rereferred proposal within 30 days, the proposal will be considered at the next Budget Section meeting as modified or retained with additional information (Section 15-69-02(2)).

ATTACH: 1