

III. Executive Summary (limited to one page)

The purpose of COE for Passive Therapeutics is for UNDRF, UND, Avianax, and partners to develop passive (antibodies) therapeutics for people exposed to or infected with viral infectious diseases using value added agricultural products. Of immediate interest are viral diseases that have affected North Dakota, West Nile Virus, which has plagued the State since 2002, or those that have potential impact, H5N1 Avian Influenza. Research conducted with UND has shown that passive antibody treatments are effective against West Nile Virus. Once shown efficacious in pre-clinical and clinical trials, therapeutic products utilizing antibodies from goose eggs will be produced in their entirety in the North Dakota. Partners include Aldevron and two new North Dakota companies, Schiltz Goose Farms, North and Schiltz Goose R&D. Other future partners include NovaDigm Therapeutics and Cangene.

The \$2.65 million requested will be used with federal dollars (\$5.2 million) and corporate cash and in-kind match (\$3.198 million) totaling \$8.398 million. The specific goals of the COE for Passive Therapeutics are to 1) hire 6-7 researchers to advance development of therapeutic antibodies as an effective treatment for West Nile Virus and H5N1 Avian Influenza; 2) produce and process goose antibody materials to conduct pre-clinical research and for Phase 1 clinical trials; 3) provide new training and job opportunities to retain students enrolled in the Life Sciences; 4) develop and produce high value products in North Dakota utilizing raw agricultural materials; 5) fit-out and equip two additional BSL-3 and BSL-2 laboratories; and 6) create 40-50 high paying jobs over the next 3-5 years in North Dakota.

The objective of the partnership with Grand Forks EDC and nearby Tolna is to continue the paradigm change in economic development for Life Sciences in Grand Forks and impact other regions of North Dakota by building research center and providing funding through corporate and university research partnerships that enhance and build research opportunities to lead to long term, sustainable job creation.

ATTACHMENT 2

ONE PAGE BUDGET AND NARRATIVE

Funds will be used as follows according to a two-year timeframe:

	Year 1	Year 2	Two Yr Total
Research			
Wages & Benefits	\$ 470,780	\$ 497,227	\$ 968,007
Research Equipment	\$ 579,934	\$ 109,846	\$ 689,780
Materials & Supplies	\$ 153,000	\$ 101,000	\$ 254,000
Training	\$ 8,000	\$ 12,000	\$ 20,000
IT & Computers	\$ 28,000	\$ 22,000	\$ 50,000
Travel	\$ 17,000	\$ 23,000	\$ 40,000
Total Research	\$ 1,256,714	\$ 765,073	\$ 2,021,787

Infrastructure

Lab Fit-out Costs	\$ 628,213		\$ 628,213
Total Research + Infra	\$ 1,884,927	\$ 765,073	\$ 2,650,000

During the first year, most of the monies allocated for fit-out costs for the two BSL-3 and two research laboratories and two companion offices including the purchase of equipment for these laboratories and offices. Funding for research activities, including research personnel and materials and other activities required to perform research, would be spent more in the 2nd year than the first year as research is ramped up.

- Wages & Benefits: allow hiring 6-7 researchers including a staff Ph.D., post-doctoral scientist and 4-5 MS/BS levels technicians at average annual W&B of \$67,250.
- Research Equipment: enable the UND Research Foundation to continue its role in the commercialization of inventions discovered by or in conjunction with the UND and partners.
- Materials & Supplies: reflect the expenses of life sciences research.
- Training & Travel: provides researchers both training workshops and scientific meetings to facilitate their research.
- IT and Computers: are for basic operational support for the researchers.