

III. Executive Summary (limited to one page)

In the recent past there has been commercial interest in bringing biomedical research projects to North Dakota to take advantage of the engineering and medical experience and expertise, as well as the development incentives and opportunities that exist in the state. The UND and NDSU campuses through the two engineering schools and the UND medical school have also been developing expertise in biomedical devices with a view to initiating an inter-institutional biomedical engineering graduate degree program focused on biomedical device research and development. In a recent initiative, Enova Medical Technologies (EMT) of St. Paul, MN has indicated a desire to partner with the Minot Area Development Corporation to establish a manufacturing operation and with ND's research universities to undertake research, development and commercialization (RDC) activities in the field of biomedical devices. Specifically EMT wishes to develop and commercialize its existing intellectual property, and future intellectual property generated by the partnership, to create employment opportunities for Minot area residents through the expansion of EMT to Minot.

The integration of the RDC goals of EMT with a joint UND/NDSU graduate program in biomedical devices, and the creation of employment opportunities in Minot, results in a Center of Excellence proposal with outstanding synergy and potential. The development and manufacture of biomedical devices represents a high value, low volume industry that is well suited to North Dakota, and its economic development goals. The requested funding will be used over a three-year period in which the Center will be initiated, laboratories and offices equipped, staff hired, and graduate students enrolled. RDC activities will be undertaken in the engineering schools and in the medical school, and marketing and business plan support for the later stages of the project will be provided through UND's College of Business and Public Administration. The initial RDC activities will focus on EMT's existing exclusive license on an issued patent relating to clot removal in blood vessels. If successful, this will have the potential to create a new manufacturing operation with 200+ employees in Minot by 2012.

The mission of the proposed Center will be to serve the state by providing a RDC resource for a range of biomedical devices. Over time the Center will conduct multiple, concurrent projects for various biomedical companies and cities, thus providing the potential for economic development throughout the state and region.

1. REVISED BUDGET REQUEST

PERSONNEL	Site	YEAR 1	YEAR 2	YEAR 3	TOTAL
Director	UND	\$100,000	\$105,000	\$110,250	\$315,250
Program Manager (0.5 FTE)	EMT/Minot	\$40,000	\$42,000	\$44,100	\$126,100
Research Engineer (4)	UND(2)/NDSU(2)	\$300,000	\$157,500	\$165,375	\$622,875
Research Fellow (1)	UND			\$50,000	\$50,000
Graduate Students (4/8/8)	UND(2/4/4)/NDSU(2/4/4)	\$80,000	\$168,000	\$176,400	\$424,400
Clerical (0.5 FTE)	UND	\$12,000	\$12,600	\$13,230	\$37,830
Adjunct Faculty (5)	UND(2/3/3)/NDSU(2/2/2)	\$35,000	\$45,150	\$47,408	\$127,558
Fringe Benefits		\$141,908	\$136,044	\$155,346	\$433,298
Total		\$708,908	\$666,294	\$762,109	\$2,137,311

EQUIPMENT

Item A Fluoroscscopy / UND
Total (moved to match)

OPERATING

Travel	Conference, Workshops, Equipment, Suppliers, Agencies	\$5,000	\$5,000	\$5,000	\$15,000
Supplies	Minor Equipment, Office Supplies, Materials	\$10,000	\$45,000	\$90,000	\$145,000
Services	Animals, Testing	\$10,000	\$99,706	\$50,391	\$160,097
Communications	Phone, computing, mail	\$5,000	\$5,000	\$5,000	\$15,000
Miscellaneous	Recruitment, furniture, publications	\$16,092	\$9,000	\$2,500	\$27,592
Total		\$46,092	\$163,706	\$152,891	\$362,689

TOTAL COSTS **\$755,000** **\$830,000** **\$915,000** **\$2,500,000**

2. BUDGET MATCH (minimum)

EMT	Cash	\$1,239,000	\$1,340,000	\$1,135,000	\$3,714,000
	In-kind	\$100,000	\$100,000	\$100,000	\$300,000
	In-lieu				
Minot City	Cash	\$150,000	\$220,000	\$375,000	\$745,000
	In-kind				
	In-lieu				
Minot EDC	Cash			\$220,000	\$220,000
	In-kind	\$21,000			\$21,000
	In-lieu				
Total		\$1,510,000	\$1,660,000	\$1,830,000	\$5,000,000

Due to limitations within the university accounting system, the system does not provide for accumulating and reporting of expenses at the detail outlined above. The costs will be accounted for and reported at the category level. The detail above is presented for proposal evaluation purposes only.