

**MONTANA BOARD OF REGENTS**  
**NEW ACADEMIC PROGRAM PROPOSAL SUMMARY**

Institution: Montana State University-Billings College of Technology  
Program: Associate of Applied Science in Radiologic Technology  
Date: September 21-23, 2005

**1. How does this program advance the campus' academic mission and fit priorities?**

In August 2003, the Board of Regents approved a Level I request by Montana State University-Billings College of Technology to offer an Associate of Applied Science in Radiologic Technology. After completing three semesters (Fall 2004, Spring 2005, and Summer 2006) of offering the Radiologic Technology program, the University is now requesting the program be considered for Level II approval.

The mission of Montana State University-Billings College of Technology is to be the College of first choice, dedicated to the development of workforce capacity by providing top quality learning opportunities and services to meet a variety of career choices and customer needs by being responsive, flexible, and market-driven.

The MSU-Billing College of Technology is committed to addressing the educational needs of individuals and business entities within the local area and the state. Health care has been identified as an area of critical need. Radiologic technologists are identified locally, statewide, and nationally as being in short supply and with increasing demand anticipated as the field of radiology develops more diverse applications. The development of the COT Radiologic Technology program is the result of a partnership with Saint Vincent Healthcare and Deaconess Billings Clinic of Billings, Montana. Under this collaborative effort, the two hospitals are providing financial support for the Radiologic Technology program by providing and financing a clinical instructor at each hospital.

**2. How does this program fit the Board of Regents' goals and objectives?**

The mission of the Montana University System is to serve students through the delivery of high quality, accessible postsecondary educational opportunities, while actively participating in the preservation and advancement of Montana's economy and society.

The MUS Goals are

- To provide a stimulating, responsive, and effective environment for student learning, student living, and academic achievement.
- To make a high quality, affordable higher education experience available to all qualified citizens who wish to further their education and training.
- To deliver higher education services in a manner that is efficient, coordinated, and highly accessible.
- To be responsive to market, employment, and economic development needs of the State and the nation.
- To improve the support for and understanding of the Montana University System as a leading contributor to the State's economic success and social and political well-being.

The Radiologic Technology program provides accessible, affordable, efficient, and practical learning opportunities for individuals in Billings and Montana. Given the current economic climate affecting education, this program has potential for improving health care, local economy, and personal/professional growth in an educationally sound manner. Responsiveness and service to the community are central to the mission of the College of Technology. MSU-B COT was approached by Saint Vincent Healthcare and Deaconess Billings Hospital to develop and offer this program as a collaborative partnership between the

three entities. Both hospitals are funding full time clinical instructors and helping to fund the Program Director's salary.

**3. How does this program support or advance Montana's needs and interests?**

As the current labor pool ages and workers retire, Montana's radiology workforce needs will continue to increase. Healthcare and Social Services are projected to have the largest sector increase for Montana nonagricultural civilian payroll for 2003-2005 as per the Labor Day Report 2004. Radiologic Technology and Technician job growth is expected to increase from 710 in 2002 to 890 in 2012 for an increase of 26%. The average annual job openings in radiologic technology during this time period are projected at 30 positions per year. Due to the wage difference between Montana and other states, it has been very difficult for the healthcare community to recruit Radiologic Technologists from out of state.

The Radiologic Technology program at MSU-Billings College of Technology will increase pool of certified technologists and thereby assist in meeting the local, state and national shortage. Without an available resource pool of technologists to perform radiographic examinations, the resultant shortage of qualified radiologic technologist could have an adverse impact on the quality of healthcare in Montana.

State and National Trends				
Montana	Employment		Percent Change	Average Annual Job Openings
	2002	2012		
Radiologic Technologists and technicians	710	890	+26%	30
United States	Employment		Percent Change	Average Annual Job Openings
	2002	2012		
Radiologic Technologists and technicians	174,100	214,100	+23%	7,250

Source: U.S. Dept. of Labor, America's Career InfoNet: Occupation Profile

**4. How will this program contribute to economic development in Montana?**

The healthcare industry in Montana is one of the largest economic segments of the State of Montana. The major healthcare organizations in Yellowstone County who draw patients from Montana and Wyoming requested the development of this program in order to address the need to fill personnel shortages with trained individuals in this profession.

Once established, the Radiologic Technology program will have the potential to graduate 16 students per year for the healthcare industry at a salary range of approximately \$35,000 per year. The 16 graduates each year will be compensated approximately \$560,000 each yearly salary, which will have an effect on the local economy.

**5. What is the Program's planned capacity?**

- Break-even point            14 FTE students
- Enrollment / year        16
- Graduates / year         15
- MT jobs / year            The average annual job openings due to growth and net replacement are estimated at 30 openings per year.

\* Source: U.S. Dept. of Labor, America's Career InfoNet: Occupation Profile

**6. Resource Allocation**

Total program budget	\$78,811
Program Director/ Faculty FTE	1.0 FTE
Clinical Instructors hired and paid by Hospitals	2.0 FTE
Staff FTE	None

**7. Does this program require new resources?**

Personal Services and operating budgets have been allocated to this program. Grants have been written and received to help with start up costs and equipment.

**8. How will the campus fund the program?**

Funding for program costs will come from monetary assistance from our collaborative hospital partners, Current General Operating Funds, tuition revenue, student fees, state appropriations and grants.

MSU Billings College of Technology has been awarded the following grants that have helped to fund the start-up and initial years of the Radiologic Technology Program:

- FY 2004 & 2005 Department of Education Congressionally Directed Grant  
Healthcare Degree & Certificate Training Programs \$438,398
- 2 Year Ed Equipment Grant: HealthCare & Safety \$349,462
- Annual Industry Partner Financial Commitment from  
Saint Vincent Healthcare & Deaconess Billings Clinic and Hospital \$ 30,800

**9. If internal reallocation is necessary, name the sources.**

No reallocation is necessary.