



Overview and Summary of Recent Initiatives

In January 2004, Governor Dirk Kempthorne created the **Office of Science and Technology** within Idaho Commerce and Labor. This office oversees the implementation of the Idaho Science and Technology Strategy, developed by the Governor's Science and Technology Advisory Council in 2000 and updated in 2004. The Governor's advisory council has identified four focus areas for the state's science and technology development effort, one of which is ag/biosciences. The Governor's proposed 2006 budget includes funding for increased investment in research and development, support services for high-tech businesses and entrepreneurs, and centralization of the state universities' technology transfer and patenting activities.

Building Bioscience R&D Capacity

Research programs

In November 2001 the University of Idaho (UI) received a 3-year, \$6 million National Institutes of Health (NIH) Biomedical Research Infrastructure Network (BRIN) award to create a statewide biomedical research network between the UI, Idaho State University (ISU), and Boise State University (BSU). BRIN funds were used to enhance research facilities at the three universities, provide seed money for new research projects, pay for graduate and undergraduate student support, allow for faculty release time from teaching, and supplement research start-up costs. NIH awarded Idaho BRIN two supplements totaling \$2.3 million to continue these projects and expand the network to other colleges and universities throughout the state. In July 2004, UI received a competitively awarded 5-year grant of \$16.1 million to expand the network and enhance opportunities for faculty and students at the other colleges and universities throughout Idaho.

In 2005, UI received a \$10.1 renewal grant from the NIH that will allow researchers to continue biomedical research focused on infectious diseases. The 5-year grant from the NIH Institutional Development Award (IDeA) program funds one of two UI Centers of Biomedical Research Excellence. This center is devoted to the study of molecular and cellular basis of hosting pathogen interactions. It also provides funds to support microscopy, cell separation and analysis, and molecular biology research infrastructure throughout the UI campus.

Governor Kempthorne has requested \$1 million in Idaho's FY 2007 budget for creation of a centralized technology transfer and patent office that will work to unify the research and development efforts of Idaho's universities, and for use as a source of matching funds to increase the universities' eligibility for federal cost-sharing grant programs. The matching grant funds will allow Idaho universities to

competitively bid for federal grant opportunities that require some form of cost sharing as a condition of successful award.

Moving Technology into the Marketplace

Commercializing university technology

As previously noted, Governor Kempthorne has requested funding for creation of a **centralized technology transfer and patent office** that will work to unify the research and development efforts of Idaho's universities. This office will also work to develop a statewide intellectual property agreement for the universities that is consistent, is responsive to the needs of the universities and businesses, and more clearly outlines the universities' policies.

Supporting bioscience entrepreneurs and emerging companies

The State of Idaho and Idaho National Laboratory (INL) provide support for three **TechConnect** offices located in eastern Idaho (Idaho Falls), western Idaho (Nampa), and northern Idaho (Post Falls). These offices conduct workshops, provide counseling, and connect entrepreneurs with resources at universities, INL, economic development agencies, state government, and the private sector. TechConnect staff provide information on access to capital, legal assistance, financial planning, and mentoring. Governor Kempthorne has requested \$300,000 in the FY 2007 budget to support a statewide Idaho TechConnect organization, its three current regional offices, and a proposed fourth office in the Magic Valley.

Making Capital Available

Pre-seed and seed capital

The Idaho Science and Technology Office has helped launch a number of initiatives, including the following, to help Idaho entrepreneurs access capital:

- In 2004, the Idaho Science and Technology Office joined with the Boise Metro Economic Development Council to create the **Boise Angel Alliance**. The office continues to promote an investor-friendly environment by assisting Boise Angel Alliance through administrative, marketing, and organizational support and by connecting Idaho businesses with investment groups located in Idaho and throughout the Northwest.
- The **Delta Angel Group** has been operating for 3 years in northern Idaho.
- **TechLaunch** is a competition and mentoring experience for emerging entrepreneurs and leads companies through the process of seeking investor funds. Presenting companies are coached, and a winner receives a small cash award.
- **KickStart** is an annual educational event that walks entrepreneurs through the various steps needed to launch a new endeavor. "Presenting to Investors" and several other seminars cover how to seek funding.
- The annual **Intermountain Venture Forum** has prescreened companies from throughout the region who present to venture capitalists and angel investors from a multistate area.

Providing Space for Bioscience Companies

Incubators

Idaho has a number of incubators, three of which offer facilities for bioscience companies. The **UI Technology Incubator** is a \$1.8 million facility, with over 17,000 square feet of space, located adjacent to the UI campus in Moscow. The incubator provides space and an array of support services for young, growing companies. The incubator includes wet-lab space.

The **Idaho Innovation Center (IIC) and the Bonneville County Technology Center**, located in Idaho Falls near INL and ISU, provide start-up businesses and entrepreneurs with shared office support, technical and business management assistance, and affordable space. The IIC is a collaboration of resources focused on increasing the potential for success and survivability of start-up enterprises. The IIC provides services through its staff, the staff of the Idaho Small Business Development Center, the Service Corp of Retired Executives, TechHelp, the UI (Ag Extension Service), and ISU (Business and Engineering Colleges). There is 1,700 square feet of wet-lab space at the Bonneville County Technology Center, with an additional 17,000 square feet of space that could be converted.

Boise State University, West—Technology and Entrepreneurial Center (TECenter), located in Nampa, has 2,700 square feet of wet-lab space and more than two dozen clients.

Bioscience research parks

The **UI Research Park**, located in northern Idaho about 20 miles from Spokane, Washington, is a 125-acre research and technology park. The park offers resident businesses research space and the opportunity to participate in university research partnerships through next-door relationships with university faculty, academic departments, and research institutes and through specialized courses developed for the private sector.

The research park has one multitenant building, with construction of a second building planned in the near future. It currently houses UI's Center for Advanced Microelectronics and Biomolecular Research, which conducts research on special-purpose computer chips and biomolecular sensors, the university's food science laboratory, and nine private firms. The park has 1,200 square feet of wet-lab space.

Pending Proposals

The Governor's FY 2007 budget proposed the following:

- \$100,000 for SBIR financial assistance funding that will provide at least 25 eligible entrepreneurs and small businesses across Idaho with money to offset proposal development costs.
- \$1 million to the State Board of Education for creation of a centralized technology transfer and patent office that will work to unify the research and development efforts of Idaho's universities, and for use as a source of matching funds for the universities' application to federal matching grant programs.
- \$300,000 to support a statewide Idaho TechConnect organization, its three current regional offices, and a proposed fourth office in the Magic Valley.

In addition to the above initiatives, the Office of Science and Technology was also instrumental in gaining legislative approval establishing the Science and Technology Advisory Council as a permanent board of advisors to the Governor and Idaho Commerce and Labor.

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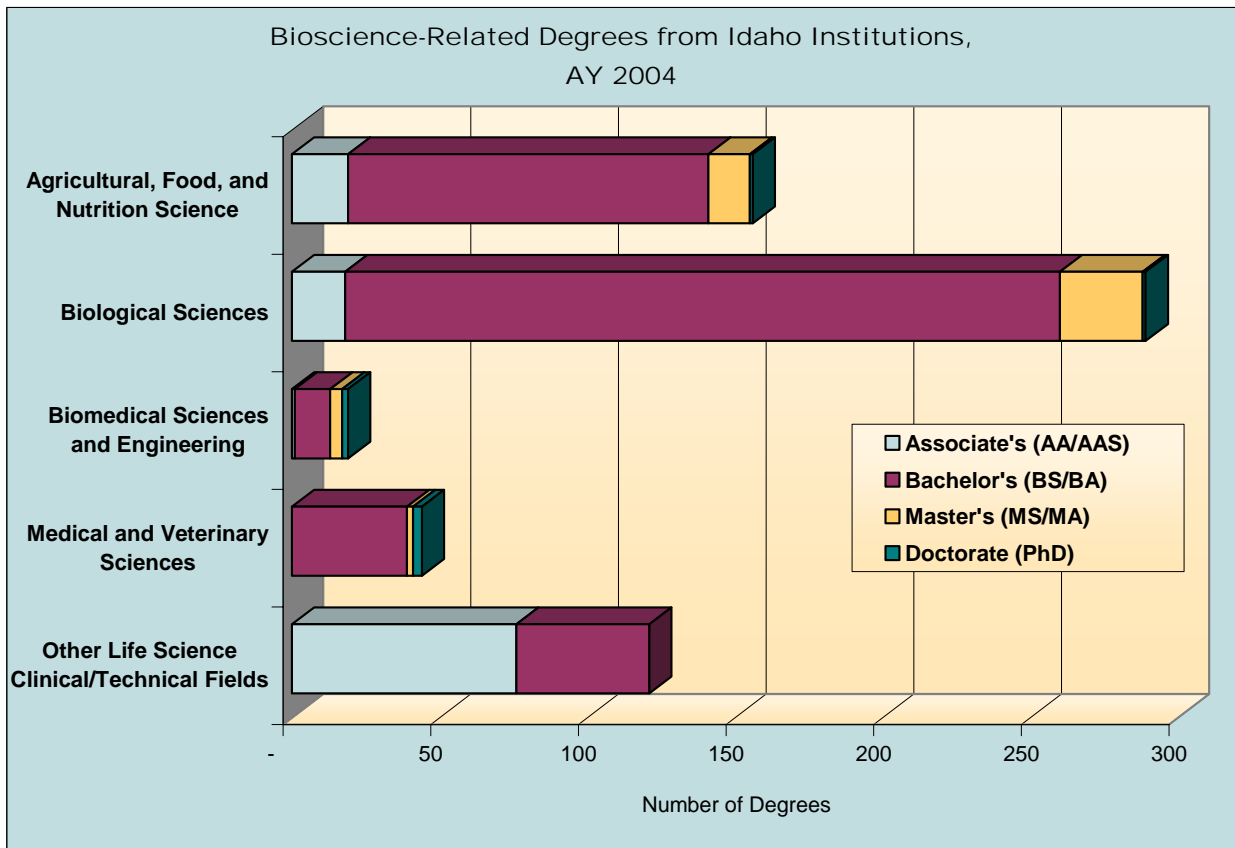
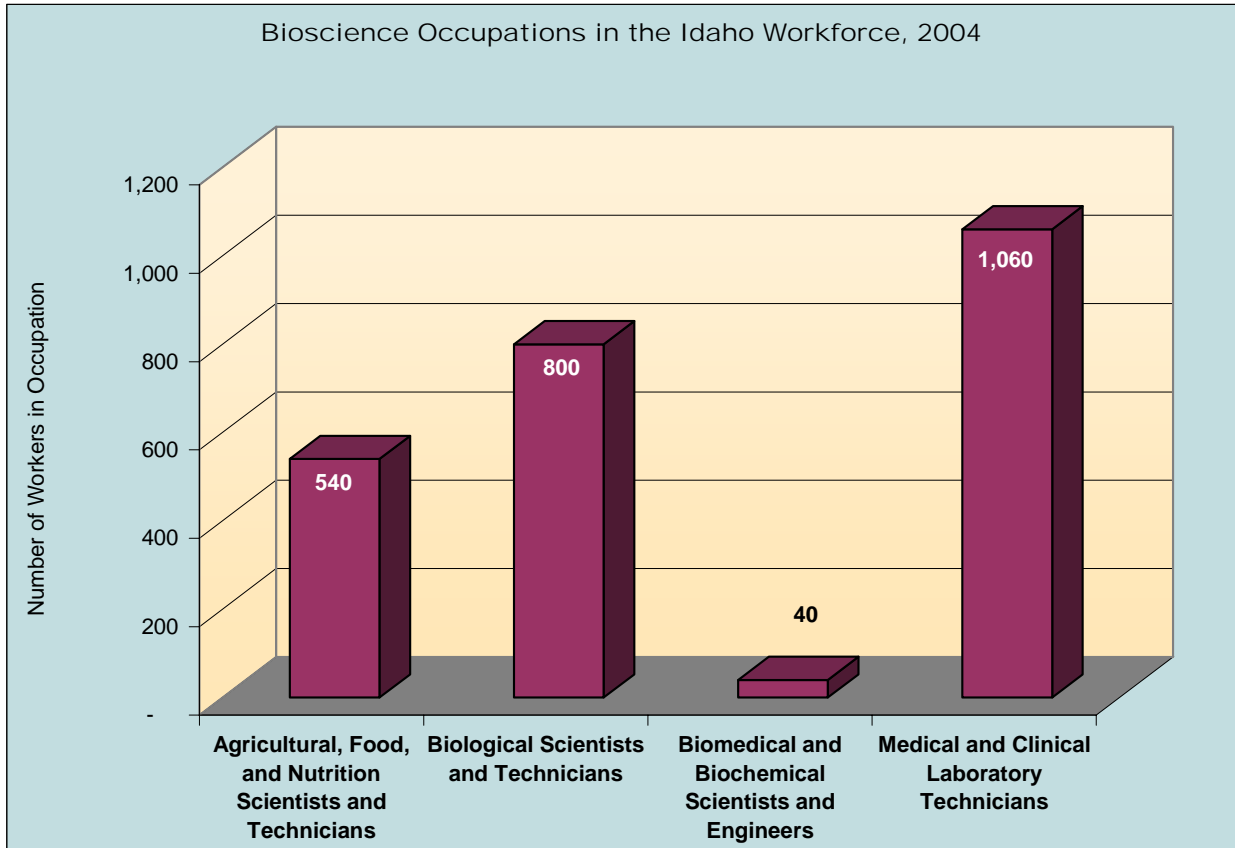
The Idaho Bioscience Association (bioIdaho) is a nonprofit organization that brings together corporate, academic, and political leaders to educate the public and to promote bioscience activities in the state. bioIdaho works with organizations across the state to attract and retain bioscience talent, enterprise, and funding.

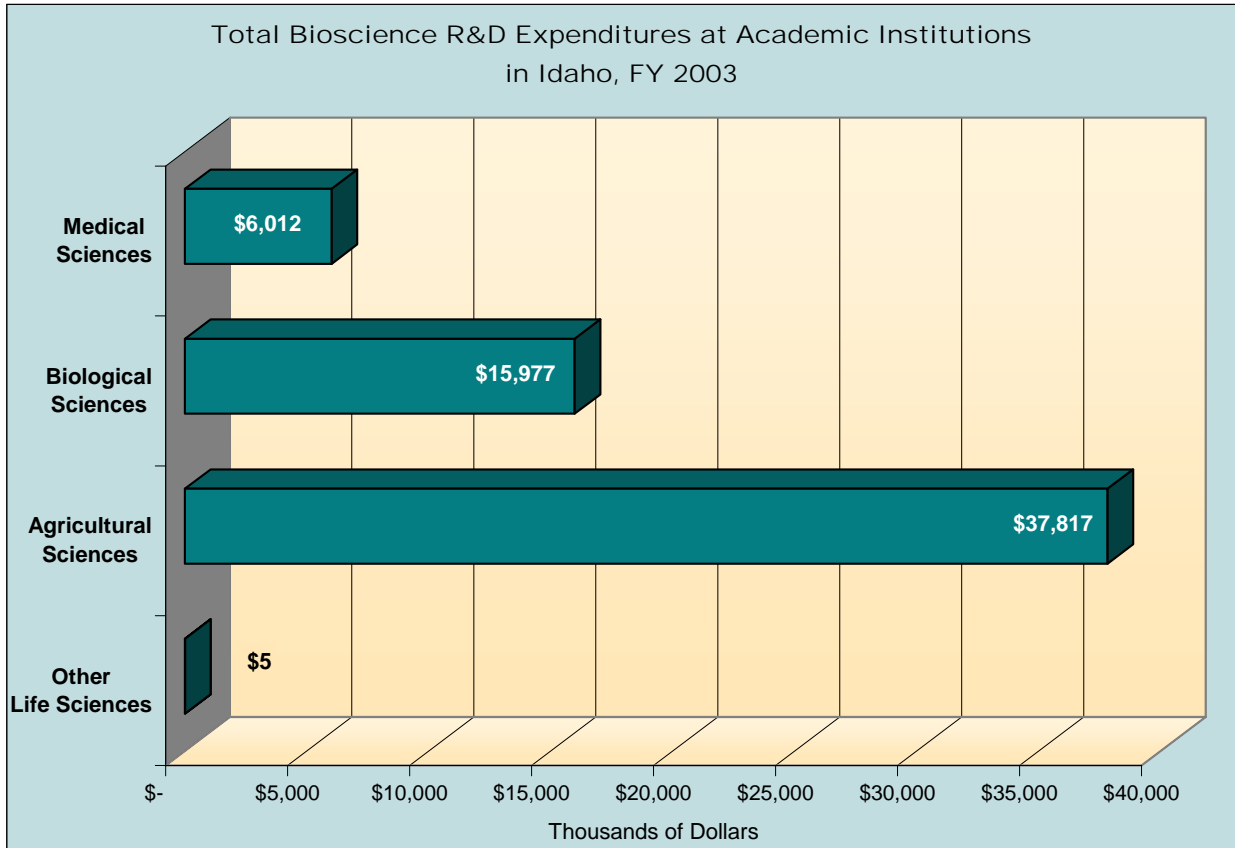
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Industry Subsector	Idaho	United States
Agricultural Feedstock & Chemicals		
Establishments 2004	37	2,111
2001-2004 Establishment % Change	31.4%	0.4%
Employment 2004	910	104,893
2001-2004 Employment % Change	-14.8%	-6.9%
Share of U.S. Employment	0.9%	100.0%
Location Quotient	1.96	n.a.
Average Annual Wage 2004	\$48,619	\$63,383
Direct-Effect Employment Multiplier	6.75	10.91
Total Employment Impact	6,148	1,212,094
Drugs & Pharmaceuticals		
Establishments 2004	11	2,589
2001-2004 Establishment % Change	113.9%	-0.6%
Employment 2004	27	313,207
2001-2004 Employment % Change	-91.2%	2.7%
Share of U.S. Employment	0.0%	100.0%
Location Quotient	0.02	n.a.
Average Annual Wage 2004	\$77,366	\$79,303
Direct-Effect Employment Multiplier	4.86	9.51
Total Employment Impact	131	2,731,321
Medical Devices & Equipment		
Establishments 2004	96	15,190
2001-2004 Establishment % Change	17.1%	0.2%
Employment 2004	936	411,460
2001-2004 Employment % Change	-6.5%	-3.6%
Share of U.S. Employment	0.2%	100.0%
Location Quotient	0.51	n.a.
Average Annual Wage 2004	\$34,652	\$56,449
Direct-Effect Employment Multiplier	2.27	4.56
Total Employment Impact	2,127	1,817,705
Research, Testing, & Medical Laboratories		
Establishments 2004	119	20,565
2001-2004 Establishment % Change	13.7%	19.4%
Employment 2004	3,804	413,550
2001-2004 Employment % Change	-3.6%	8.2%
Share of U.S. Employment	0.9%	100.0%
Location Quotient	2.08	n.a.
Average Annual Wage 2004	\$62,190	\$65,414
Direct-Effect Employment Multiplier	2.45	3.15
Total Employment Impact	9,307	1,272,936
TOTAL PRIVATE SECTOR		
Establishments 2004	46,402	8,156,137
2001-2004 Establishment % Change	6.3%	4.8%
Employment 2004	482,702	109,249,195
2001-2004 Employment % Change	3.4%	-0.7%
Share of U.S. Employment	0.4%	100.0%
Location Quotient	n.a.	n.a.
Average Annual Wage 2004	\$29,426	\$39,003

Source: Battelle calculations -- based on Bureau of Labor Statistics QCEW data from the Minnesota Implan Group, RIMS II Employment Multipliers from the Bureau of Economic Analysis, and the Census Bureau's Economic Census.

Note: n.a. = metric is not applicable.





	Idaho	United States	Rank
University R&D Expenditures, FY 2003			
Total (\$ thousands)	\$105,039	\$40,104,621	48
Life Science R&D (\$ thousands)	\$60,916	\$24,062,088	45
Percent of Total R&D	58.0%	60.0%	
Life Sciences Per Capita	\$44.58	\$82.74	
Change in Life Sciences FY 1999–2003	36.5%	52.7%	
NIH Support to Institutions, FY 2004			
Total (\$ thousands)	\$10,770	\$22,556,459	50
Per Capita Expenditures	\$7.88	\$77.56	
Change in Expenditures FY 2000–2004	157.5%	53.2%	
Higher Education Degrees in Bioscience Fields, AY 2004			
	629	111,329	39
Bioscience Occupations in the Workforce, 2004			
	2,440	616,140	39