

## Overview and Summary of Recent Initiatives

In 2004, Alaska created an Office of Economic Development (OED), which is responsible for facilitating economic development and employment opportunities throughout Alaska, particularly rural Alaska. OED's efforts focus on three industrial sectors: tourism, fisheries, and minerals development. The bioscience sector has not been targeted for development, but the state has appropriated funding to support the development of new biological and biomedical facilities on the various campuses of the University of Alaska (UA).

## Building Bioscience R&D Capacity

### Recent state investments in facilities

The Biological Research and Diagnostics facility, the animal component of the Biological and Computational Sciences (BiCS) facility, is under construction on the UA Fairbanks (UAF) campus. This 42,000-square-foot facility will house UAF's science and research activities. It includes facilities for laboratory animal holding and care, procedure rooms, animal care administrative space, on-site biological waste handling, and building support space. Diagnostic laboratories and a surgical suite are planned in the future.

The Governor's proposed FY 2007 budget includes \$55 million for an Integrated Science Facility at UA Anchorage (UAA). It is proposed that funding Phase III of the development be raised by refinancing the state's tobacco settlement funds.

Previously funded facilities include

- Ecosystem and Biomedical Health facility at UAA—\$4.75 million (this facility will include instructional research space),
- BiCS facility at UAF—\$21.5 million, and
- School of Fisheries and Ocean Sciences at the University of Alaska Juneau—\$9 million.

### Research programs

The Governor's FY 2007 budget proposes that \$4 million be provided to the Alaska Board of Regents for university research investments.

## Making Capital Available

### Venture capital

**Alaska Growth Capital** is a commercial lending institution, originally capitalized by the state, that provides high-risk loans to companies. Alaska Growth Capital targets rural, minority-owned and technology companies. Investments in early-stage companies range from \$100,000 to \$10 million. Financing can be used for lines of credit, permanent working capital, equipment, and leasehold improvements.

In 2005, the trustees of the Alaska Permanent Fund approved investing 8 percent of the Fund's value into alternative assets, such as venture capital funds and hedge funds. The Alaska Permanent Fund was created in 1976 to invest proceeds from the sale of minerals, primarily oil transported through the Trans-Alaska pipeline system, for the benefit of current and future Alaskans. It was reported at the time that this level of investment could result in investing \$2.5 billion in equity capital.

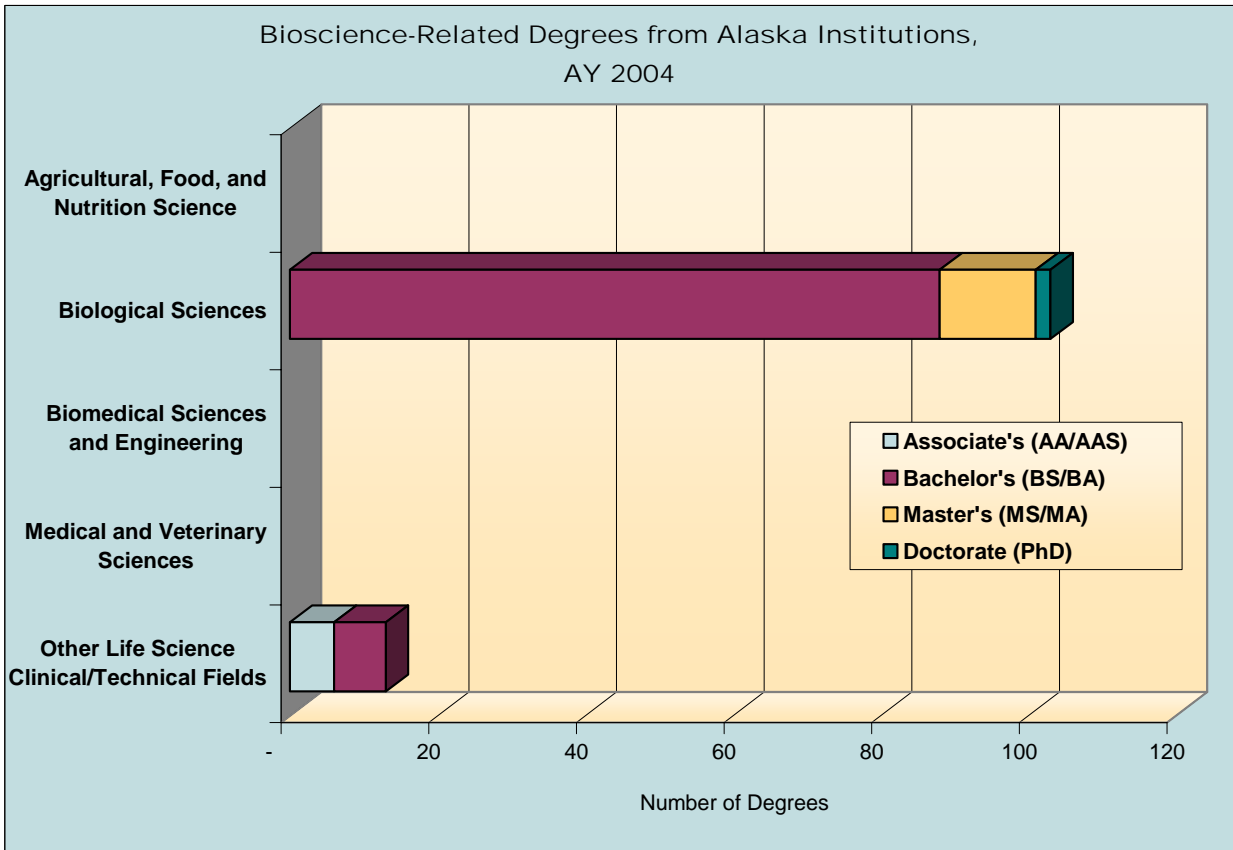
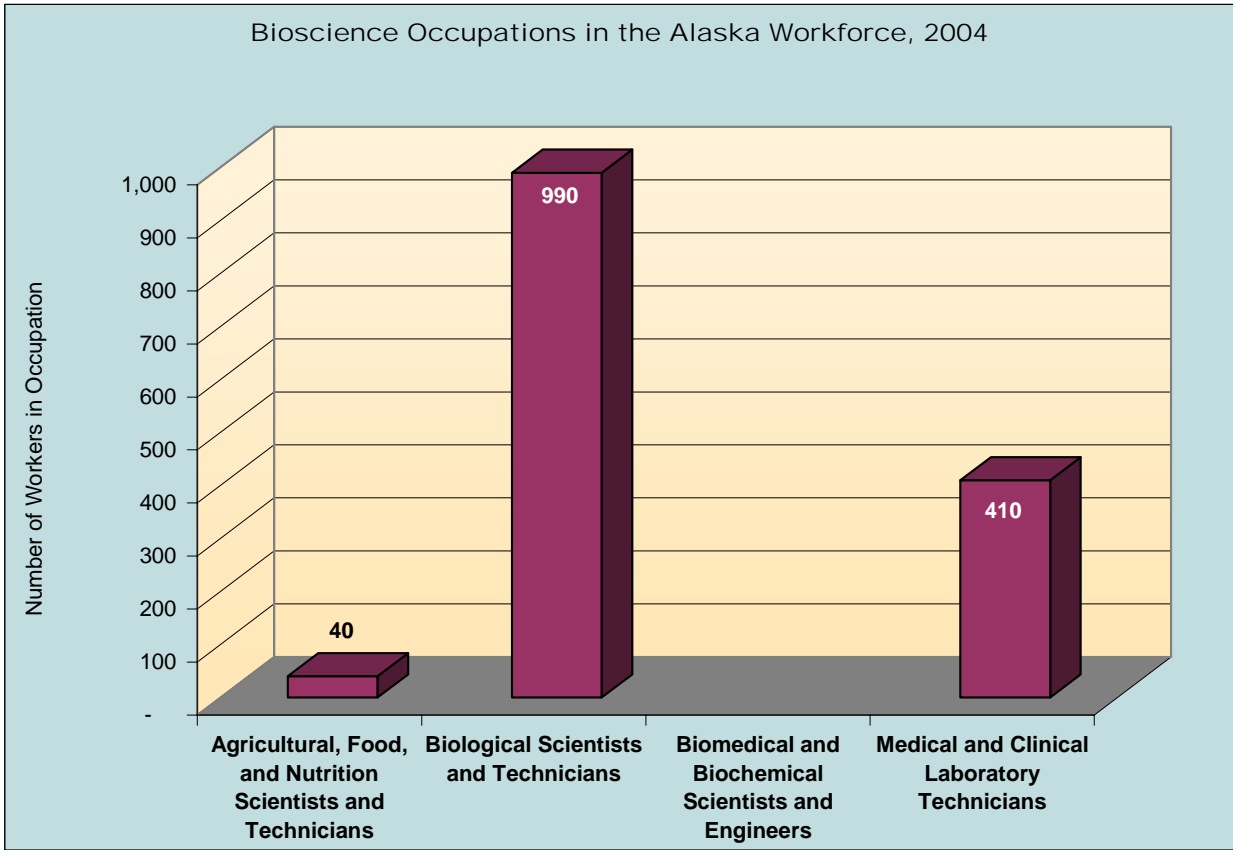
## Contact

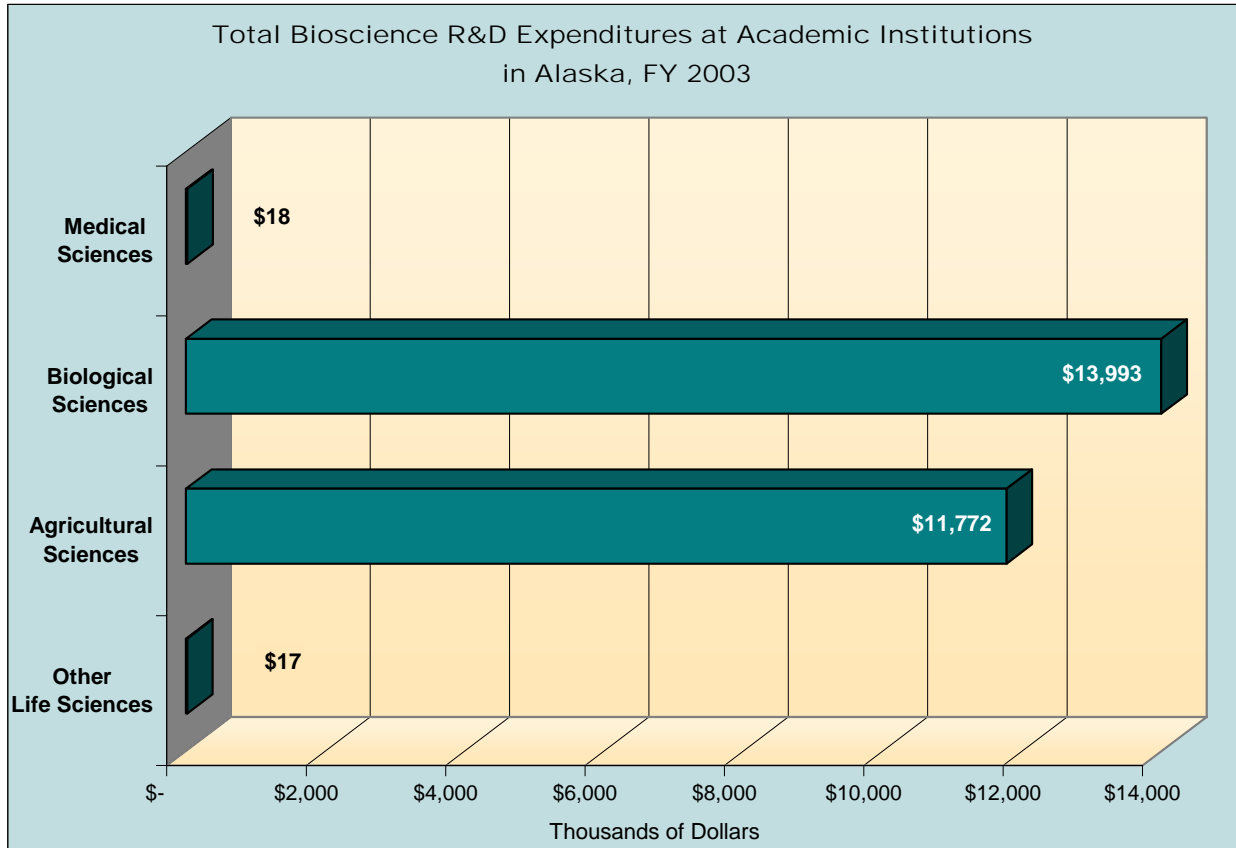
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Industry Subsector	Alaska	United States
<b>Agricultural Feedstock &amp; Chemicals</b>		
Establishments 2004	2	2,111
2001-2004 Establishment % Change	-81.5%	0.4%
Employment 2004	285	104,893
2001-2004 Employment % Change	17.1%	-6.9%
Share of U.S. Employment	0.3%	100.0%
Location Quotient	1.34	n.a.
Average Annual Wage 2004	\$75,164	\$63,383
Direct-Effect Employment Multiplier	5.74	10.91
Total Employment Impact	1,635	1,212,094
<b>Drugs &amp; Pharmaceuticals</b>		
Establishments 2004	1	2,589
2001-2004 Establishment % Change	-8.8%	-0.6%
Employment 2004	2	313,207
2001-2004 Employment % Change	-24.8%	2.7%
Share of U.S. Employment	0.0%	100.0%
Location Quotient	0.00	n.a.
Average Annual Wage 2004	\$24,603	\$79,303
Direct-Effect Employment Multiplier	2.27	9.51
Total Employment Impact	5	2,731,321
<b>Medical Devices &amp; Equipment</b>		
Establishments 2004	20	15,190
2001-2004 Establishment % Change	19.4%	0.2%
Employment 2004	70	411,460
2001-2004 Employment % Change	0.0%	-3.6%
Share of U.S. Employment	0.0%	100.0%
Location Quotient	0.08	n.a.
Average Annual Wage 2004	\$37,541	\$56,449
Direct-Effect Employment Multiplier	1.47	4.56
Total Employment Impact	103	1,817,705
<b>Research, Testing, &amp; Medical Laboratories</b>		
Establishments 2004	48	20,565
2001-2004 Establishment % Change	54.7%	19.4%
Employment 2004	365	413,550
2001-2004 Employment % Change	21.0%	8.2%
Share of U.S. Employment	0.1%	100.0%
Location Quotient	0.44	n.a.
Average Annual Wage 2004	\$41,452	\$65,414
Direct-Effect Employment Multiplier	1.80	3.15
Total Employment Impact	656	1,272,936
<b>TOTAL PRIVATE SECTOR</b>		
Establishments 2004	18,379	8,156,137
2001-2004 Establishment % Change	4.7%	4.8%
Employment 2004	220,932	109,249,195
2001-2004 Employment % Change	5.4%	-0.7%
Share of U.S. Employment	0.2%	100.0%
Location Quotient	n.a.	n.a.
Average Annual Wage 2004	\$37,692	\$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.





	Alaska	United States	Rank
<b>University R&amp;D Expenditures, FY 2003</b>			
Total (\$ thousands)	\$140,641	\$40,104,621	43
Life Science R&D (\$ thousands)	\$25,800	\$24,062,088	52
Percent of Total R&D	18.3%	60.0%	
Life Sciences Per Capita	\$39.76	\$82.74	
Change in Life Sciences FY 1999–2003	47.5%	52.7%	
<b>NIH Support to Institutions, FY 2004</b>			
Total (\$ thousands)	\$10,770	\$22,556,459	51
Per Capita Expenditures	\$16.60	\$77.56	
Change in Expenditures FY 2000–2004	201.0%	53.2%	
<b>Higher Education Degrees in Bioscience Fields, AY 2004</b>			
	116	111,329	52
<b>Bioscience Occupations in the Workforce, 2004</b>			
	1,440	616,140	47