

# **GRANTS & CONTRACTS**

## **ANNUAL REPORT**

**2002/2003**



**January, 2004**

## TABLE OF CONTENTS

	PAGE
<b>Executive Summary .....</b>	<b>i-ii</b>
<b>Grants and Contracts Revenue .....</b>	<b>1</b>
<b>Grants and Contracts Expenditures .....</b>	<b>2</b>
<b>Federal Revenues.....</b>	<b>3</b>
<b>State Revenues .....</b>	<b>4</b>
<b>Private Revenues .....</b>	<b>5</b>
<b>Cost Sharing .....</b>	<b>6-7</b>
<b>Indirect Cost Recovery .....</b>	<b>8-9</b>
<b>Research Expenditures .....</b>	<b>10-11</b>
<b>Proposals Submitted and Awarded.....</b>	<b>12-13</b>
<b>Campus Highlights .....</b>	<b>14-20</b>

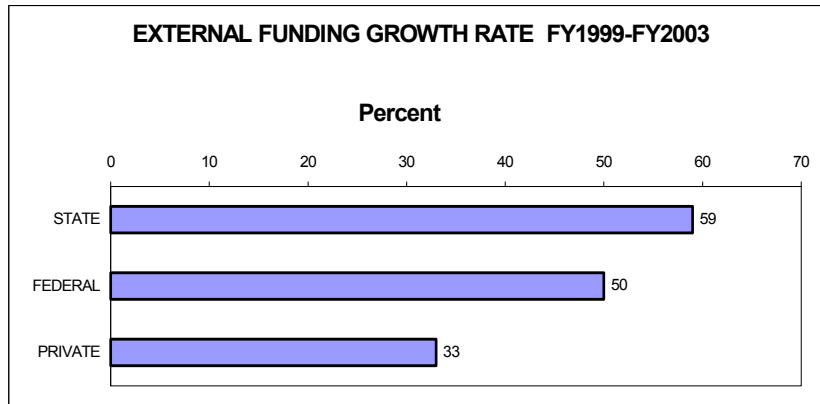
# GRANTS AND CONTRACTS 2002/2003

## EXECUTIVE SUMMARY

Grants and contracts are formal agreements between the University of Maine System and outside sponsors. They provide assistance and represent a mutual joining of interests on the part of the grantor and the University in the pursuit of a common objective, or they may be used to provide services for the direct benefit of the sponsor.

**I. GRANTS AND CONTRACTS REVENUE INCREASED BY \$9.6 MILLION TO \$117.7 MILLION IN FY2003.** Details concerning the sources of these increases by funding source and the expenditures by activity are shown in the table below. Grants and contracts support instruction, research, and public service projects that span from archaeological studies to research facility construction as well as extensive programs of the Cooperative Extension and research in agriculture, forestry, rural economic development, and marine studies through the Maine Agricultural & Forest Experiment Station.

REVENUE BY SOURCE (IN MILLIONS)				EXPENDITURES BY ACTIVITY (IN MILLIONS)			
SOURCE	FY2002	FY2003	CHANGE	ACTIVITY	FY2002	FY2003	FY2003 % OF TOTAL
FEDERAL	\$40.8	\$45.4	\$4.6	INSTRUCTION	\$21.7	\$21.7	19
STATE	26.9	29.5	2.6	RESEARCH	55.6	62.8	53
PRIVATE	16.0	16.6	.6	PUBLIC SERVICE	<u>30.8</u>	<u>33.2</u>	<u>28</u>
UNIVERSITY	<u>24.4</u>	<u>26.2</u>	<u>1.8</u>				
TOTAL	<u>\$108.1</u>	<u>\$117.7</u>	<u>\$9.6</u>	TOTAL	<u>\$108.1</u>	<u>\$117.7</u>	<u>100</u>



**State ( ↑ 59% )** Agencies such as the Maine Departments of Human Services, Education, and Behavioral and Developmental Services have increased their funding substantially over the past five years. These departments have increased their funding by 75%, or \$10 million over the past five years.

## EXECUTIVE SUMMARY

**Federal ( ↑ 50% )** The National Science Foundation and The Departments of Education and Agriculture accounted for \$12.3 million of the \$15.0 million net increase in federal revenues from FY1999 to FY2003. The Departments of Health & Human Services, Defense, and Commerce continue to be major sponsors as well.

**Private ( ↑ 33% )** Private support is comprised of funding from non-profit organizations, other governmental entities, educational institutions and business and industry. Private support increased by \$4.1 million from FY1999 to FY2003. The largest net increase was in the business and industry category.

- II. STATE RESEARCH AND DEVELOPMENT APPROPRIATIONS MADE AN IMPORTANT IMPACT IN FY2003.** \$40.7 million in research grants and contracts were generated by employing most of the \$10.2 million of available state appropriation in FY2003. A portion of the generated grants and contracts represent multi-year awards whose expenditures will appear in future grants and contracts reports.

For the 2-year period ended June 30, 2003, \$20.4 million in state funds attracted \$80.8 million in external grants and contracts funding.

\$2.9 million of the state appropriation dollars available in FY2003 were used for direct cost sharing and \$6.8 million was used for support of faculty and staff, direct equipment purchases, research space, and research in such areas as computer software & engineering, advanced materials engineering, advanced technologies for forestry and agriculture, aquaculture and marine sciences, biotechnology, technology transfer, information technology, and biosciences. The remaining balance was carried over for use in FY2004.

- III. THE FY2003 NET INDIRECT COST RECOVERY INCREASED BY 9% FROM \$9.8 MILLION IN FY2002 TO \$10.7 MILLION IN FY2003.** Indirect cost recovery is a negotiated rate applied to grant and contract expenditures to reimburse the University for the use of its physical plant and administrative cost associated with grants and contracts.

- IV. COST SHARING (THE FUNDS CONTRIBUTED BY THE UNIVERSITY TOWARD PROJECTS) HAS GROWN \$6.3 MILLION SINCE FY1999.** However, cost sharing as a percentage of external funding has remained relatively constant at an average of 30%. Also, the University share of total grants and contracts expenditures has remained constant at 23%.

- V. IN 2003, 946 GRANT PROPOSALS WERE SUBMITTED AND 669 WERE APPROVED TOTALING \$101.2 MILLION.** This compares with 886 submissions and 642 approvals amounting to \$94.1 million during FY2002. The average award for FY2003 was \$151,000, compared to \$146,000 in FY2002. Awards cannot be compared to current year expenditures since awards may be spent over a multi-year period.

## GRANTS AND CONTRACTS REVENUE

Grants and Contracts revenue is used only to meet expenses and is not a profit-generating item. Total revenue used to meet expenditures for FY2003 was \$117.7 million, an increase of \$9.6 million over FY2002 and an increase of \$36.4 million (45%) over FY1999. Federal grants and contracts revenue was 50% higher than four years ago, and State grants and contracts revenue (including Federal pass-through funds) was 59% higher. University cost sharing contributions are discussed on Page 6 of this report.

### GRANTS AND CONTRACTS REVENUE BY SOURCE OF FUNDS (\$ in thousands)

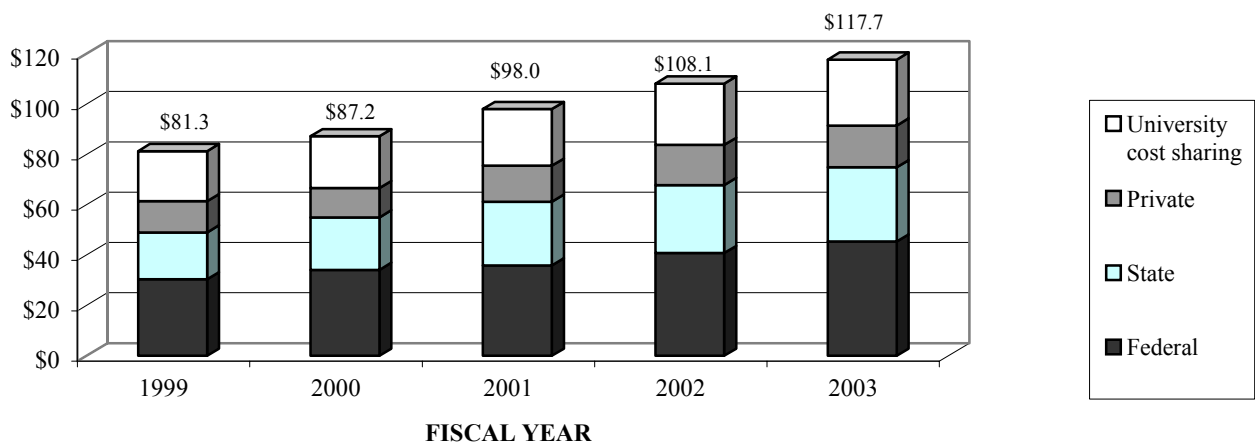
	FY1999		FY2000		FY2001		FY2002		FY2003	
	\$	%	\$	%	\$	%	\$	%	\$	%
Federal	\$ 30,354	37	\$ 34,096	39	\$ 35,893	36	\$ 40,836	37	\$ 45,384	39
State	18,622	23	20,936	24	25,310	26	26,921	25	29,525 **	25
Private	12,424	15	11,574	13	14,345	15	15,958	15	16,563 **	14
University cost sharing	19,895	25	20,639	24	22,418	23	24,381	23	26,236	22
<b>Total</b>	<b>\$ 81,295</b>	<b>100</b>	<b>\$ 87,245</b>	<b>100</b>	<b>\$ 97,966</b>	<b>100</b>	<b>\$ 108,096</b>	<b>100</b>	<b>\$ 117,708</b>	<b>* 100</b>

\* Includes \$22.6 million for the Maine Agricultural and Forest Experiment Station (MAFES) and UM Cooperative Extension (UMCE) :

	<u>MAFES</u>	<u>UMCE</u>
Federal	\$ 4.3	\$ 2.7
State	.6	1.9
Private	.3	.6
University cost sharing	<u>6.3</u>	<u>5.9</u>
Total	\$ 11.5	\$ 11.1

\*\* Includes federal pass-through funds (see pages 4 – 5).

### GRANTS AND CONTRACTS REVENUE BY SOURCE (In millions)



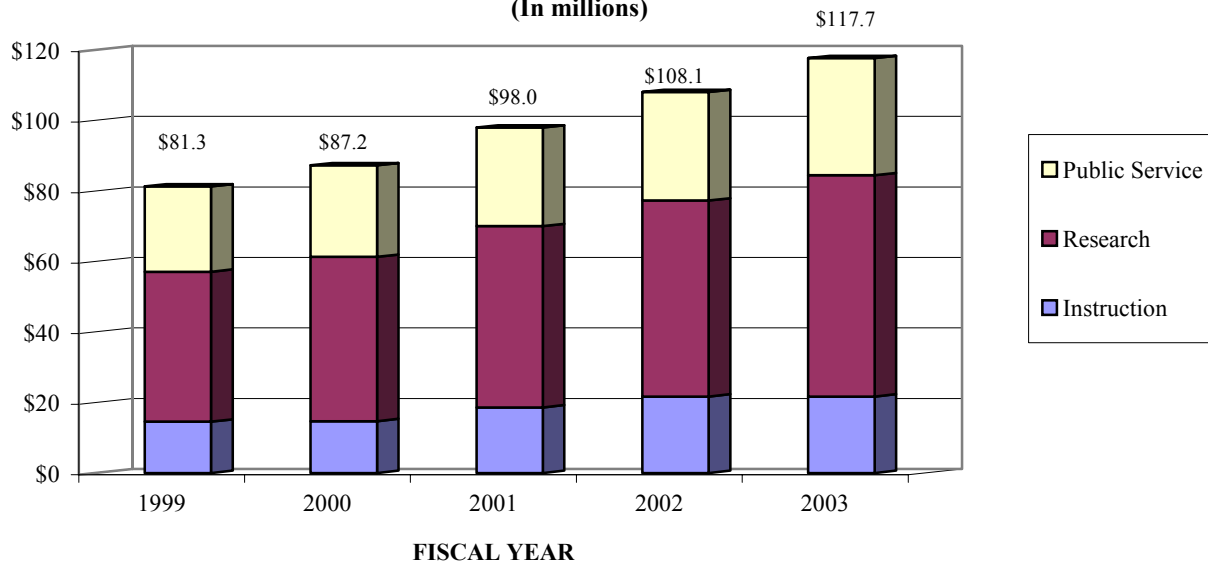
# GRANTS AND CONTRACTS EXPENDITURES

During FY2003, 54% of total grants and contracts expenditures were incurred for Research, 28% for Public Service, and 18% for Instruction.

## GRANTS AND CONTRACTS EXPENDITURES BY ACTIVITY (\$ in thousands)

	FY1999		FY2000		FY2001		FY2002		FY2003	
	\$	%	\$	%	\$	%	\$	%	\$	%
Instruction	\$ 14,571	18	\$ 14,731	17	\$ 18,573	19	\$ 21,700	20	\$ 21,721	18
Research	42,522	52	46,563	53	51,413	52	55,636	52	62,755	54
Public Service	24,202	30	25,951	30	27,980	29	30,760	28	33,232	28
<b>Total</b>	<u>\$ 81,295</u>	<u>100</u>	<u>\$ 87,245</u>	<u>100</u>	<u>\$ 97,966</u>	<u>100</u>	<u>\$ 108,096</u>	<u>100</u>	<u>\$ 117,708</u>	<u>100</u>

## GRANTS AND CONTRACTS EXPENDITURES BY ACTIVITY (In millions)



## UNIVERSITY EXPENDITURES BY ACTIVITY FY2003 (\$ in thousands)

	INSTRUCTION		RESEARCH		PUBLIC SERVICE		TOTAL	
	\$	%	\$	%	\$	%	\$	%
University of Maine	\$ 2,924	14	\$ 46,057	74	\$ 16,525	50	\$ 65,506 *	55
University of Maine Augusta	72	-	5	-	2,509	8	2,586	2
University of Maine Farmington	1,383	6	927	1	636	2	2,946	3
University of Maine Fort Kent	-	-	49	-	247	1	296	-
University of Maine Machias	27	-	61	-	9	-	97	-
University of Southern Maine	14,960	70	15,632	25	11,690	35	42,282	36
University of Maine Presque Isle	96	-	7	-	811	2	914	1
System-Wide Services	2,259	10	17	-	805	2	3,081	3
	<u>\$ 21,721</u>	<u>100</u>	<u>\$ 62,755</u>	<u>100</u>	<u>\$ 33,232</u>	<u>100</u>	<u>\$ 117,708</u>	<u>100</u>

\* Includes \$22.6 million for the Maine Agricultural and Forest Experiment Station and Cooperative Extension.

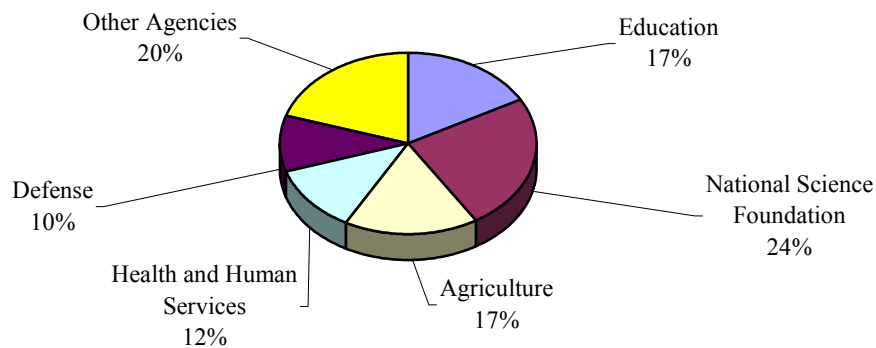
## FEDERAL REVENUES

The table and graph below indicate the level of funding received from Federal agencies. The National Science Foundation was the top source of federal revenues in FY2003 (an increase of \$2.4 million from FY2002), followed by the Departments of Education and Agriculture.

Agency	FY1999		FY2000		FY2001		FY2002		FY2003	
	\$	%	\$	%	\$	%	\$	%	\$	%
National Science Foundation	\$ 3,272	11	\$ 3,992	12	\$ 5,784	15	\$ 8,187	19	\$ 10,626	24
Education	4,933	16	5,923	17	7,107	20	8,290	21	8,332	17
Agriculture *	5,925	20	6,844	20	7,061	20	7,385	18	7,502	17
Health & Human Services	3,757	12	4,288	13	4,400	12	4,812	12	5,449	12
Defense	4,367	14	7,353	22	6,021	17	4,760	12	4,355	10
Commerce	4,260	14	1,472	4	733	2	1,460	4	2,148	5
Justice	369	1	439	1	900	3	1,272	3	1,897	4
Environmental Protection	784	3	968	3	792	2	679	2	948	2
Interior	605	2	813	2	945	3	804	2	817	2
Labor	56	0	328	1	443	1	769	2	813	2
NASA	417	2	378	2	422	1	772	2	667	1
Small Business Administration	561	2	500	1	295	1	814	2	438	1
Transportation	0	0	0	0	230	1	73	0	392	1
Corp for Nat'l & Community Svc	301	1	325	1	438	1	456	1	385	1
Energy	223	1	137	0	59	0	98	0	378	1
Veteran's Administration	180	1	185	1	192	1	179	0	198	0
National Found Arts/ Humanities	91	0	50	0	37	0	13	0	28	0
Other	41	0	45	0	34	0	11	0	11	0
Executive	99	0	1	0	0	0	2	0	0	0
Information Agency	113	0	55	0	0	0	0	0	0	0
	<u>\$ 30,354</u>	<u>100</u>	<u>\$ 34,096</u>	<u>100</u>	<u>\$ 35,893</u>	<u>100</u>	<u>\$ 40,836</u>	<u>100</u>	<u>\$ 45,384</u>	<u>100</u>

\* FY2003 revenue includes \$3.4 million for MAFES and \$2.2 million for UMCE. Various other agencies listed above also provided funding for MAFES and UMCE, bringing total federal revenues for these projects to \$4.3 million and \$2.7 million, respectively.

### FEDERAL REVENUES BY AGENCY FY2003



## STATE REVENUES

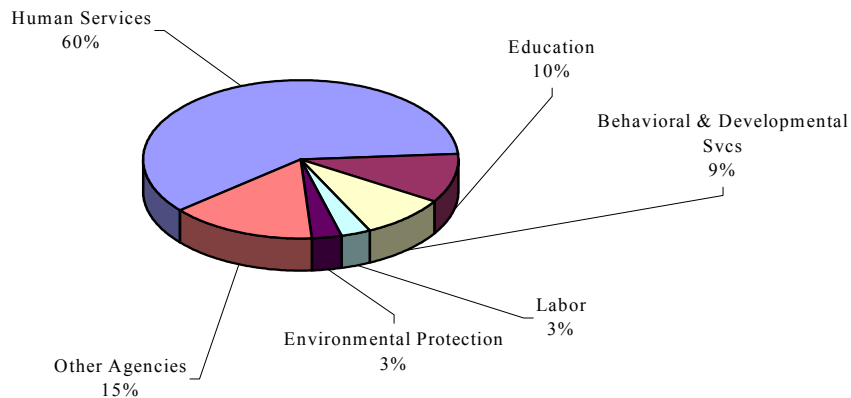
The table and graph below indicate the level of revenue from State agencies, which includes federal funding passed through to the University. The Department of Human Services continues to be the major source of state revenues.

### STATE REVENUES BY AGENCY (\$ in thousands)

Agency	FY 1999		FY 2000		FY 2001		FY 2002		FY 2003	
	\$	%	\$	%	\$	%	\$	%	\$	%
Human Services	\$ 10,411	56	\$ 12,569	60	\$ 15,222	60	\$ 16,829	62	\$ 18,053	60
Education	1,909	10	2,219	11	2,320	9	2,238	8	3,076	10
Behavioral & Developmental Svcs	1,353	8	1,640	8	1,481	6	2,090	8	2,809	9
Labor	784	4	760	4	752	3	804	3	904	3
Environmental Protection	185	1	128	1	566	2	665	2	786	3
County UMCE Funds	527	3	572	3	570	2	578	2	574	2
Agriculture	692	4	538	3	645	3	592	2	543	2
Small Business Commission	0	0	0	0	830	3	0	0	511	2
Transportation	250	1	282	1	864	3	1,018	4	456	2
Corrections	101	0	220	1	246	1	200	1	306	1
Economics & Community Development Planning	864	5	808	4	437	2	844	3	245	1
Marine Resources	204	1	236	1	223	1	156	1	210	1
Inland Fish & Wildlife	658	4	364	2	301	1	185	1	191	1
Conservation	237	1	228	1	154	1	163	1	177	1
Public Utilities Commission	0	0	0	0	0	0	0	0	164	1
Legislative	0	0	0	0	0	0	0	0	152	1
Public Safety	140	1	98	0	166	1	184	1	90	0
Judicial	101	0	44	0	45	0	99	0	67	0
Executive Department	144	1	120	0	274	1	21	0	58	0
Other	13	0	17	0	35	0	78	0	48	0
Other	49	0	93	0	179	1	177	1	105	0
<b>Total *</b>	<b>\$ 18,622</b>	<b>100</b>	<b>\$ 20,936</b>	<b>100</b>	<b>\$ 25,310</b>	<b>100</b>	<b>\$ 26,921</b>	<b>100</b>	<b>\$ 29,525</b>	<b>100</b>

\* Includes Federal Pass-through funds of: \$ 9,069 49 \$ 13,433 64 \$ 18,167 72 \$ 19,558 73 \$ 20,087 68

### STATE REVENUES BY AGENCY FY2003



## PRIVATE REVENUES

The table and graph below indicate the level of revenues from private sources broken down into four categories. Non-profit organizations continue to provide the majority of private revenues.

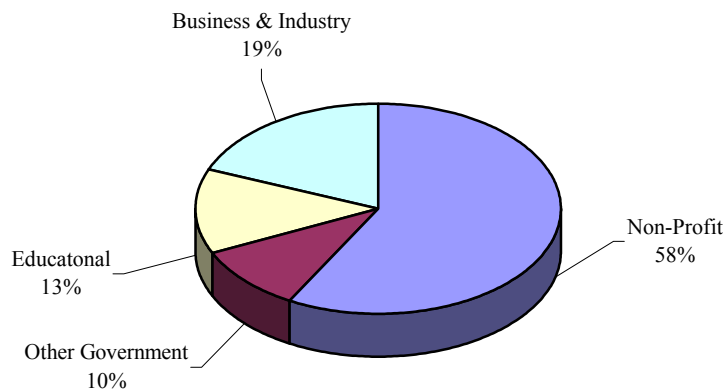
### PRIVATE REVENUES BY SOURCE OF FUNDS (\$ in thousands)

	FY 1999		FY 2000		FY 2001		FY 2002		FY 2003	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-profit Organizations	\$ 7,332	59	\$ 6,277	54	\$ 8,401	59	\$ 9,229	58	\$ 9,679	58
Business and Industry	1,170	10	1,089	9	1,895	13	2,089	13	3,138	19
Educational Institutions	1,633	13	2,337	20	1,940	13	2,130	13	2,155	13
Other Governmental Entities*	<u>2,289</u>	<u>18</u>	<u>1,871</u>	<u>17</u>	<u>2,109</u>	<u>15</u>	<u>2,510</u>	<u>16</u>	<u>1,591</u>	<u>10</u>
	<u>\$ 12,424</u>	<u>100</u>	<u>\$ 11,574</u>	<u>100</u>	<u>\$ 14,345</u>	<u>100</u>	<u>\$ 15,958</u>	<u>100</u>	<u>\$ 16,563</u>	<u>** 100</u>

\* Entities other than the Federal Government and State of Maine Agencies.

\*\* Includes Federal Pass-Through funds of \$6.3 million.

### PRIVATE REVENUES BY SOURCE OF FUNDS FY2003



## COST SHARING

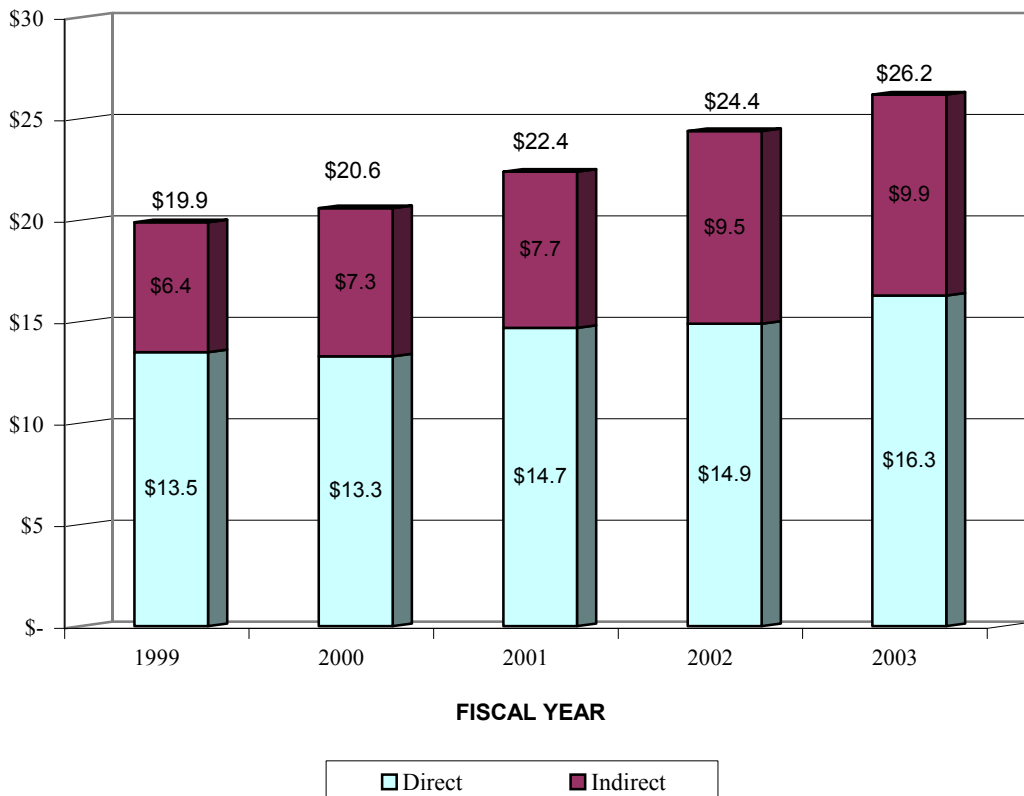
Cost sharing (matching) is University resources contributed to the support of a grant or contract. Many sponsoring agencies, both governmental and private, require recipients to share in the costs of a grant or contract.

**Direct** cost sharing occurs when University funds are used to fulfill a matching requirement. In FY2003, \$16.3 million was used to support grants and contracts. Educational & General matching funds for the Maine Agricultural and Forest Experiment Station and the Cooperative Extension Service accounted for \$11.6 million or 71% of the direct cost sharing in FY2003.

**Indirect** cost sharing, which totaled \$9.9 million in FY2003, occurs when the allowable indirect costs are not recovered in full. These indirect costs are used by the University to meet the sponsor's matching requirements for grants and contracts.

Since FY1999, total cost sharing as a percentage of total grants and contracts expenditures has changed very little, ranging from 22% to 25%. In FY2003 it was 22%.

**UNIVERSITY COST SHARING**  
(In millions)



**DIRECT COST SHARING BY SOURCE/ACTIVITY**  
**(\$ in thousands)**

SOURCE	ACTIVITY	FY1999		FY2000		FY2001		FY2002		FY2003	
		\$	%	\$	%	\$	%	\$	%	\$	%
Federal:	Instruction	\$ 129	-	\$ 367	3	\$ 372	3	\$ 361	3	\$ 267	2
	Research	6,774	63	6,904	61	7,580	62	8,326	63	8,696	60
	Public Service	3,943	37	4,048	36	4,328	35	4,565	34	5,426	38
		<u>\$10,846</u>	<u>100</u>	<u>\$11,319</u>	<u>100</u>	<u>\$12,280</u>	<u>100</u>	<u>\$13,252</u>	<u>100</u>	<u>\$ 14,389</u>	<u>100</u>
State:	Instruction	\$ 101	12	\$ 88	15	\$ 57	6	\$ 64	7	\$ 77	8
	Research	136	16	134	22	135	14	137	15	239	23
	Public Service	616	72	372	63	786	80	706	78	705	69
		<u>\$ 853</u>	<u>100</u>	<u>\$ 594</u>	<u>100</u>	<u>\$ 978</u>	<u>100</u>	<u>\$ 907</u>	<u>100</u>	<u>\$ 1,021</u>	<u>100</u>
Private:	Instruction	\$ 161	9	\$ 83	6	\$ 21	2	\$ 51	7	\$ 73	9
	Research	1,404	80	1,267	90	1,324	93	592	79	506	60
	Public Service	192	11	52	4	74	5	104	14	262	31
		<u>\$ 1,757</u>	<u>100</u>	<u>\$ 1,402</u>	<u>100</u>	<u>\$ 1,419</u>	<u>100</u>	<u>\$ 747</u>	<u>100</u>	<u>\$ 841</u>	<u>100</u>
Totals:	Instruction	\$ 391	3	\$ 538	4	\$ 450	3	\$ 476	3	\$ 417	3
	Research	8,314	62	8,305	62	9,039	62	9,055	61	9,441	58
	Public Service	4,751	35	4,472	34	5,188	35	5,375	36	6,393	39
		<u>\$13,456</u>	<u>100</u>	<u>\$13,315</u>	<u>100</u>	<u>\$14,677</u>	<u>100</u>	<u>\$14,906</u>	<u>100</u>	<u>\$ 16,251</u>	<u>100</u>

**INDIRECT COST SHARING BY SOURCE/ACTIVITY**  
**(\$ in thousands)**

SOURCE	ACTIVITY	FY1999		FY2000		FY2001		FY2002		FY2003	
		\$	%	\$	%	\$	%	\$	%	\$	%
Federal:	Instruction	\$ 162	13	\$ 245	19	\$ 363	24	\$ 661	29	\$ 303	12
	Research	823	68	912	72	1,021	67	1,385	60	1,877	72
	Public Service	227	19	116	9	146	9	284	11	418	16
		<u>\$ 1,212</u>	<u>100</u>	<u>\$ 1,273</u>	<u>100</u>	<u>\$ 1,530</u>	<u>100</u>	<u>\$ 2,330</u>	<u>100</u>	<u>\$ 2,598</u>	<u>100</u>
State:	Instruction	\$ 2,200	58	\$ 2,341	57	\$ 2,778	56	\$ 3,315	57	\$ 3,169	51
	Research	1,099	29	1,190	29	1,373	28	1,722	29	2,088	34
	Public Service	493	13	567	14	837	16	894	14	970	15
		<u>\$ 3,792</u>	<u>100</u>	<u>\$ 4,098</u>	<u>100</u>	<u>\$ 4,988</u>	<u>100</u>	<u>\$ 5,931</u>	<u>100</u>	<u>\$ 6,227</u>	<u>100</u>
Private:	Instruction	\$ 229	16	\$ 341	18	\$ 408	34	\$ 457	39	\$ 377	34
	Research	1,032	72	1,356	69	645	53	497	41	549	47
	Public Service	174	12	256	13	170	13	260	20	234	19
		<u>\$ 1,435</u>	<u>100</u>	<u>\$ 1,953</u>	<u>100</u>	<u>\$ 1,223</u>	<u>100</u>	<u>\$ 1,214</u>	<u>100</u>	<u>\$ 1,160</u>	<u>100</u>
Totals:	Instruction	\$ 2,591	40	\$ 2,927	40	\$ 3,549	46	\$ 4,433	47	\$ 3,849	39
	Research	2,954	46	3,458	47	3,039	39	3,604	38	4,514	45
	Public Service	894	14	939	13	1,153	15	1,438	15	1,622	16
		<u>\$ 6,439</u>	<u>100</u>	<u>\$ 7,324</u>	<u>100</u>	<u>\$ 7,741</u>	<u>100</u>	<u>\$ 9,475</u>	<u>100</u>	<u>\$ 9,985</u>	<u>100</u>
Total Cost Sharing		\$19,895		\$20,639		\$22,418		\$24,381		\$ 26,236	
% of Total Grants/Contracts		25%		24%		23%		23%		22%	

## **INDIRECT COST RECOVERY RATES**

The University is required to negotiate several rates with the Federal government to assure that the institution is reimbursed for the use of its physical plant and administrative cost associated with grants and contracts. These rates are negotiated on a system-wide basis using past and estimated future costs.

### **FEDERAL INDIRECT COST RATES**

<u>INDIRECT COST RATE</u>	<u>FY2003*</u>
Research	
On-Campus	47.0%
Off-Campus	26.0%
Instruction	
On-Campus	56.7%
Off-Campus	26.0%
Public Service	
On-Campus	27.9%
Off-Campus	21.8%

\* The University is in the process of negotiating new rates for the four year period FY2004 to FY2007. These rates for FY2003 are to be used as provisional rates until negotiations are finalized.

### **FEDERAL EMPLOYEE BENEFIT RATES**

Applied to All Non-Student Salaries and Wages

	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>
Nonfaculty temporary employees	8.4%	8.1%	8.1%	8.5%	8.1%
All other employees	33.0%	33.4%	33.0%	34.6%	36.7%

## **INDIRECT COST RECOVERIES**

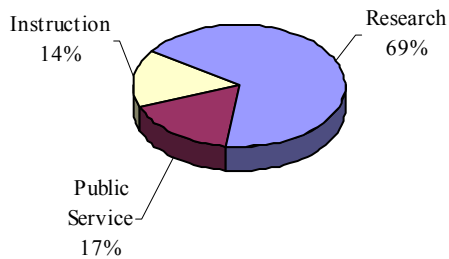
The amount of allowable indirect facilities and administration costs is calculated on each grant or contract using the appropriate negotiated rate as described above. The rate is applied to the total direct costs of an individual grant or contract to arrive at the total allowable indirect costs. The total calculated indirect costs for FY2003 amounted to \$20.6 million.

Indirect cost sharing, as described on page 6, occurs when recovery of indirect costs is forgone to satisfy cost sharing requirements. This type of cost sharing amounted to \$9.9 million in FY2003, resulting in \$10.7 million of indirect cost recoveries actually being received from grants and contracts activity.

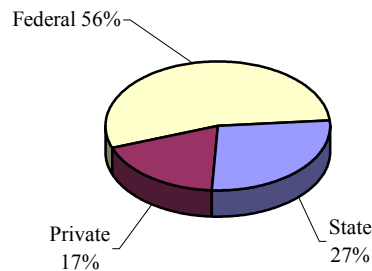
The Federal government is the University's major source of indirect cost recovery revenue, providing more than 50% of such revenues since FY1999. Research activities have provided over 60% of total indirect cost recoveries since FY1999.

		FY1999		FY2000		FY2001		FY2002		FY2003	
		\$	%	\$	%	\$	%	\$	%	\$	%
Federal:	Instruction	\$ 111	4	\$ 210	5	\$ 225	5	\$ 223	4	\$ 268	4
	Research	2,420	78	3,409	81	3,449	80	4,158	79	4,965	83
	Public Service	550	18	597	14	643	15	910	17	787	13
		<u>\$ 3,081</u>	<u>100</u>	<u>\$ 4,216</u>	<u>100</u>	<u>\$ 4,317</u>	<u>100</u>	<u>\$ 5,291</u>	<u>100</u>	<u>\$ 6,020</u>	<u>100</u>
State:	Instruction	\$ 685	46	\$ 747	44	\$ 994	42	\$ 1,097	41	\$ 1,026	35
	Research	469	32	418	25	772	32	946	35	1,137	39
	Public Service	321	22	541	31	626	26	631	24	760	26
		<u>\$ 1,475</u>	<u>100</u>	<u>\$ 1,706</u>	<u>100</u>	<u>\$ 2,392</u>	<u>100</u>	<u>\$ 2,674</u>	<u>100</u>	<u>\$ 2,923</u>	<u>100</u>
Private:	Instruction	\$ 327	23	\$ (115)	(9)	\$ 105	7	\$ 171	9	\$ 214	12
	Research	970	68	1,219	96	1,274	83	1,468	80	1,308	74
	Public Service	129	9	167	13	132	10	177	11	225	14
		<u>\$ 1,426</u>	<u>100</u>	<u>\$ 1,271</u>	<u>100</u>	<u>\$ 1,511</u>	<u>100</u>	<u>\$ 1,816</u>	<u>100</u>	<u>\$ 1,747</u>	<u>100</u>
Totals:	Instruction	\$ 1,123	19	\$ 842	12	\$ 1,324	16	\$ 1,491	15	\$ 1,508	14
	Research	3,859	64	5,046	70	5,495	67	6,572	67	7,410	69
	Public Service	1,000	17	1,305	18	1,401	17	1,718	18	1,772	17
		<u>\$ 5,982</u>	<u>100</u>	<u>\$ 7,193</u>	<u>100</u>	<u>\$ 8,220</u>	<u>100</u>	<u>\$ 9,781</u>	<u>100</u>	<u>\$ 10,690</u>	<u>100</u>

**NET INDIRECT COST RECOVERY  
BY ACTIVITY  
FY2003**



**NET INDIRECT COST RECOVERY  
BY SOURCE  
FY2003**



## RESEARCH EXPENDITURES

The University's research activities include not only grants and contracts research, but also institutes and research centers and project research funded by E&G monies and also projects funded with the State of Maine Research and Development Appropriation. The total cost of all research activity for FY2003 was \$75.1 Million, a growth of \$28.6 million since FY1999.

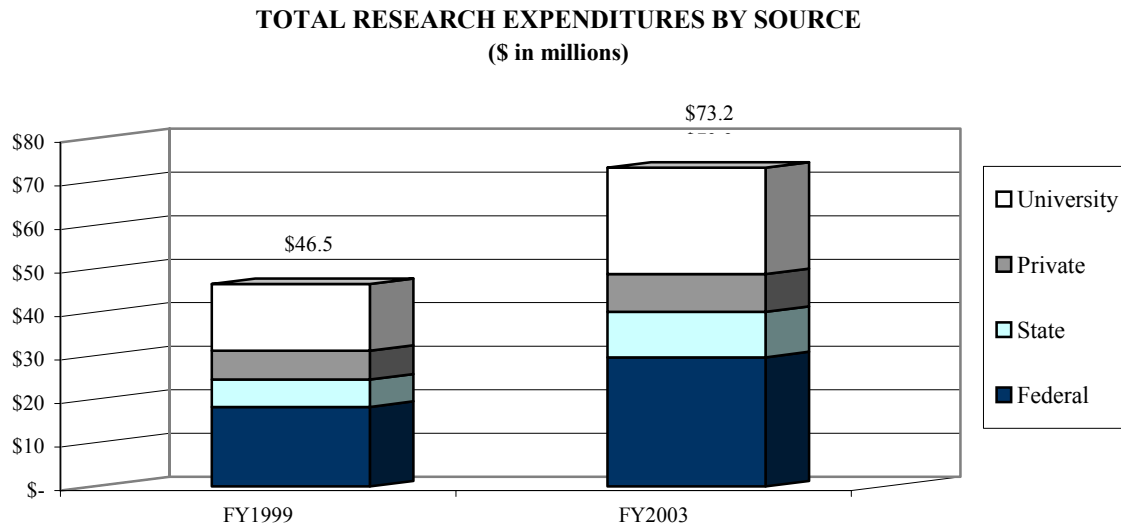
The following table shows total research expenditures funded by grants and contracts and E&G monies from FY1999 to FY2003. Research expenditures related to grants and contracts are broken down by source of funds: Federal, State, Private, and University cost sharing, which includes direct and indirect cost sharing and E&G funding for MAFES.

	(\$ in Thousands)				
	<u>FY1999</u>	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
Federal	\$ 18,276	\$ 22,311	\$ 22,970	\$ 25,092	\$ 29,720
State	6,347	5,474	7,367	8,897	10,373
Private	6,633	7,015	8,996	8,987	8,707
University*					
MAFES Cost Sharing	6,202	6,496	6,863	6,677	6,307
Other Direct Cost Sharing	2,691	2,238	2,607	2,711	3,414
Other Indirect Cost Sharing	2,373	3,029	2,610	3,272	4,234
	<u>11,266</u>	<u>11,763</u>	<u>12,080</u>	<u>12,660</u>	<u>13,955</u>
<b>Total Grants and Contracts</b>	<b><u>\$ 42,522</u></b>	<b><u>\$ 46,563</u></b>	<b><u>\$ 51,413</u></b>	<b><u>\$ 55,636</u></b>	<b><u>\$ 62,755</u></b>
<hr/>					
<b>Total E&amp;G and State Appropriation*</b>	<b><u>\$ 4,013</u></b>	<b><u>\$ 5,953</u></b>	<b><u>\$ 11,453</u></b>	<b><u>\$ 9,819</u></b>	<b><u>\$ 12,392</u></b>
<b>Total Research Expenditures</b>	<b><u>\$ 46,535</u></b>	<b><u>\$ 52,516</u></b>	<b><u>\$ 62,866</u></b>	<b><u>\$ 65,455</u></b>	<b><u>\$ 75,147</u></b> **

\* Includes expenditures funded by the annual State of Maine research and development appropriation, which totaled \$10.2 million in FY2003, an increase of \$5.7 million over FY1999.

\*\* As noted at the top of this page, the University's research activities include not only grants and contracts research (see page 2 of this report), but also research funded by E&G monies. This total represents the costs of all research activities.

The graph below shows a comparison of total research expenditures for FY1999 and FY2003.



When compared with the other New England Land Grant institutions, Maine ranks lowest in total research expenditures. FY2001, FY2002, and FY2003 are summarized below.

**TOTAL RESEARCH EXPENDITURES AT  
NEW ENGLAND LAND GRANT UNIVERSITIES\***  
(\$ in Thousands)

	FY2001	FY2002	FY2003
University of Massachusetts - Amherst	\$ 73,843	\$ 80,862	\$ 87,631
University of Connecticut	\$ 62,087	\$ 65,422	**
University of New Hampshire	\$ 72,765	\$ 75,724	\$ 83,019
University of Rhode Island	\$ 51,413	\$ 53,282	\$ 57,563
University of Vermont	\$ 54,790	\$ 66,282	\$ 74,800
<b>University of Maine</b>	<b>\$ 45,555</b>	<b>\$ 49,520</b>	<b>\$ 52,983</b>

\* Excludes indirect cost recovery and plant fund expenditures for consistency at all institutions.

\*\* Information not available at this time.

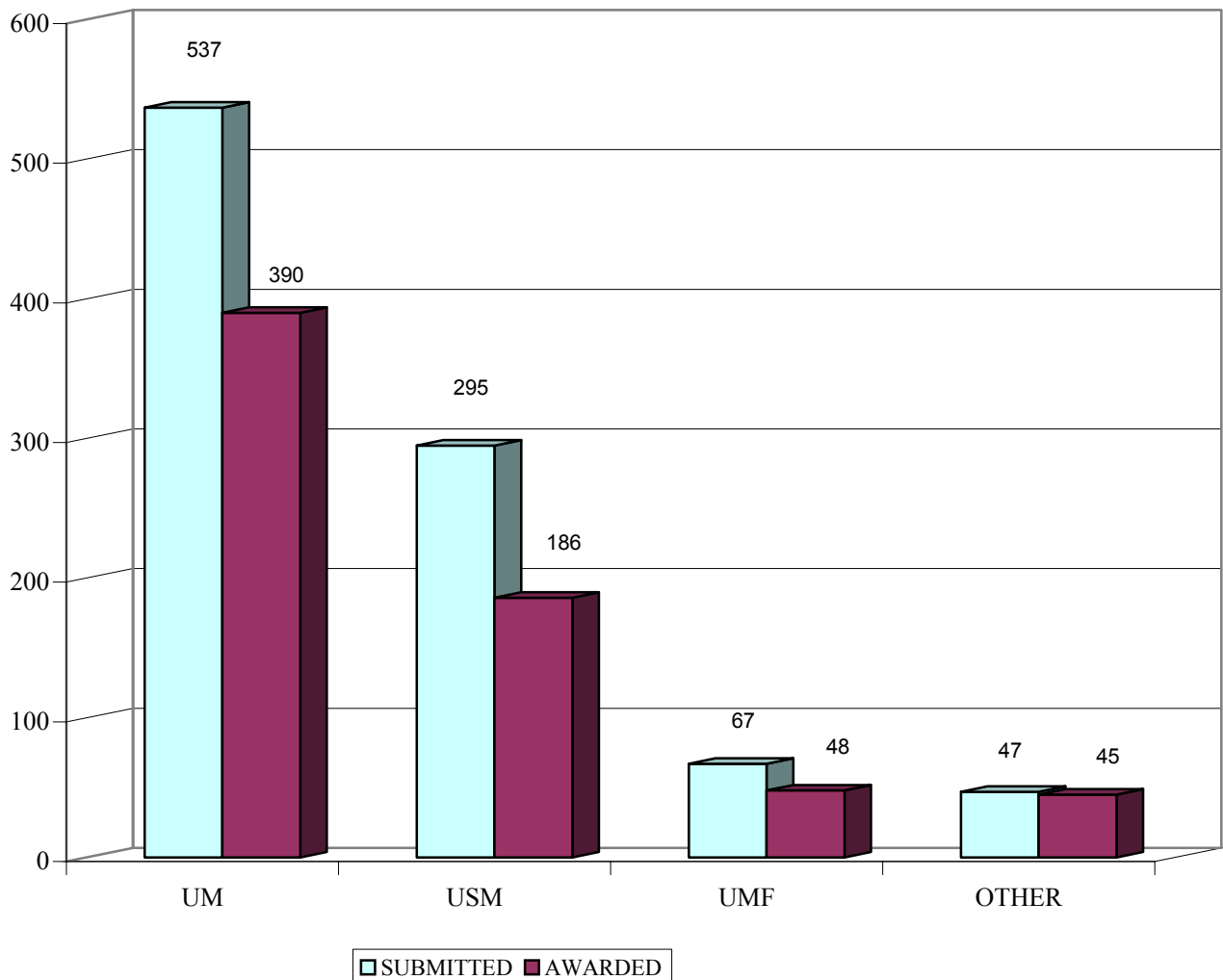
## PROPOSALS SUBMITTED AND AWARDED

Grant proposals are submitted to outside agencies for specific programs. Proposals for contracts are negotiated with agencies and companies to provide specific services.

During FY2003, Sponsored Program Departments throughout the University of Maine System submitted 946 proposals to agencies for funding of a wide range of grants and contracts. Proposals awarded during FY2003 amounted to \$101.2 million. All proposals submitted are not awarded and those which are awarded, are not funded until the year the services are provided. Thus, the dollar amount of proposals awarded during the current year cannot be compared to current year expenditures since expenditures may occur over a multi-year period.

Significant proposal activity is indicated on the following graph and table.

**NUMBER OF PROPOSALS SUBMITTED & AWARDS RECEIVED  
FY2003**



## PROPOSAL STATUS REPORT FY2003

(\$ in thousands)

Proposals approved during FY2003 may include prior year submissions, and some FY2003 submissions may be included in future year approvals.

	SUBMITTED DURING FY2003	APPROVED DURING FY2003	
	#	#	\$
<b>UNIVERSITY OF MAINE</b>			
Academic Affairs	0	1	\$ 14
College of Business, Public Policy, and Health	24	16	1,461
College of Education and Human Development	31	33	6,573
College of Engineering	82	45	8,139
College of Liberal Arts and Sciences	69	30	2,851
College of Natural Sciences, Forestry, & Agriculture	223	180	18,438
Cooperative Extension	40	23	3,628
Cultural Affairs and Libraries	4	4	817
Division of Lifelong Learning	3	3	555
President's Office	1	0	0
Research	58	53	9,848
Chief Financial Officer	1	1	178
Graduate School	1	1	96
Total	<u>537</u>	<u>390</u>	<u>\$ 52,598</u>
<b>UNIVERSITY OF SOUTHERN MAINE</b>			
College of Arts & Sciences	51	23	\$ 1,451
College of Education & HD	24	20	2,625
Muskie Institute for Public Affairs	120	90	31,331
School of Applied Sciences	19	10	2,550
School of Business	15	9	1,493
School of Law	15	9	140
College of Nursing	11	6	932
Lewiston-Auburn College	16	9	171
Bioscience Research Institute	12	4	221
Women's Studies	2	0	0
Other University Programs	10	6	228
Total	<u>295</u>	<u>186</u>	<u>\$ 41,142</u>
<b>UNIVERSITY OF MAINE AT AUGUSTA</b>	17	20	\$ 1,726
<b>UNIVERSITY OF MAINE AT FARMINGTON</b>	67	48	\$ 3,380
<b>UNIVERSITY OF MAINE AT FORT KENT</b>	4	4	\$ 331
<b>UNIVERSITY OF MAINE AT MACHIAS</b>	4	3	\$ 649
<b>UNIVERSITY OF MAINE AT PRESQUE ISLE</b>	18	14	\$ 920
<b>SYSTEM WIDE SERVICES</b>	<u>4</u>	<u>4</u>	<u>\$ 500</u>
<b>SYSTEM TOTALS FOR FY2003</b>	<u><u>946</u></u>	<u><u>669</u></u>	<u><u>\$ 101,246</u></u>
<b>SYSTEM TOTALS FOR FY2002</b>	<u><u>886</u></u>	<u><u>642</u></u>	<u><u>\$ 94,065</u></u>

# UNIVERSITY HIGHLIGHTS

## UNIVERSITY OF MAINE

- **Wood Composites Job Creation Efforts get boost from The National Science Foundation** - A \$575,543 grant from the National Science Foundation was received as part of ongoing efforts to create jobs through the commercialization of wood composites technology. The money will support marketing and business development activities in the UMaine Advanced Engineered Wood Composites Center (AEWC). AEWc engineers and scientists specialize in research and development of products made with wood and fiber-reinforced polymers or FRPs. UMaine was selected as one of 12 universities in the nation to receive the grant through the NSF Partnerships for Innovation program. Efforts will focus on working with businesses to develop wood composite beams using low-grade hardwood, disaster-resistant housing using FRP-reinforced OSB sheathing panels and long-strand-composite lumber (LSCL) beams and columns produced by mechanically crushing low-value logs.
- **Business Incubators** - Technology-Based Business Incubation is a recent effort in Maine to nurture the technology start-up companies in Maine. The Advanced Technology Development Centers Program, run through the Department of Economic and Community Development helped establish 7+ targeted technology incubators throughout Maine. The University of Maine is directly involved in running three centers. The Target Technology Center was opened in early 2002 and serves as the Information Technology Incubator in the state. Stillwater Scientific Instruments is a spin-off company from the University of Maine Laboratory for Surface Science Technology, commercializing technology developed with National Science Foundation funding. They moved into the Target Incubator in the spring of 2002 to get assistance with the business start-up issues that plague many new business owners. Intelligent Spatial Technologies started in the spring of 2003 and is a spinout from our National Center for Geographic Information. FoxTech is a start-up company in computer-aided design that has re-located from Michigan and works closely with the Advanced Manufacturing Center. In addition, the University of Maine operates the Aquaculture Advanced Technology Center in partnership with the Maine Aquaculture Innovation Center. The Aquaculture Center has business incubation spots available at the Darling Marine Center, the Center for Cooperative Aquaculture Research in Franklin and the Washington County Technical College in Eastport. The Darling Center space was completed in June of 2002 and is now occupied by a spin-off activity of MicroTechnologies, a Richmond-based Fish Biotechnology company.
- **Wood Composites Center Receives International Certification To Help Companies Develop New Products** - Structural and materials tests performed by the Advanced Engineered Wood Composites (AEWC) Center at the University of Maine have received an international stamp of approval that will help companies develop new products. The International Accreditation Service (IAS), Inc. has certified AEWc as a laboratory that meets standards for 47 different tests of plastics, wood products, composites, adhesives and structural panels and assemblies. The IAS is a nonprofit subsidiary of the International Code Council that provides the foundation for quality control functions used by industrial

# UNIVERSITY HIGHLIGHTS

(Continued)

associations and government agencies around the world. The AEW Center currently works with over 100 Maine companies in the wood products, construction, and composite materials areas to help them develop better products. Such products include composite ships, bridges, consumer products, and building materials. The UMaine Center is one of four university laboratories in the U.S. that have received this type of accreditation, but it is the only facility whose certified testing procedures cover such a wide range, according to Stephen Shaler, assistant AEW director and professor of wood science and technology. In addition, it is the only such laboratory in Maine. Maine businesses will benefit through an AEW initiative to commercialize new products and develop new building technologies. The Maine Technology Institute has awarded a \$250,000 grant to the AEW to create business collaborations using the center's testing facilities and business services in cooperation with the Maine Manufacturing Extension Partnership, the Maine Composites Alliance, and the Composite Technology Development Centers in Sanford and Greenville.

- ***\$2.6 Million NSF Grant Supports New Genomics Ph.D. Program at UMaine, The Jackson Lab and MMCRI*** - With a \$2.6 million five-year grant from the National Science Foundation (NSF), three Maine research organizations are poised to take a major step in genomics research and graduate education. The grant will allow the University of Maine, The Jackson Laboratory (TJL) and Maine Medical Center Research Institute (MMCRI) to establish an interdisciplinary Ph.D. program in functional genomics. The program, which is offered under UMaine's Interdisciplinary Ph.D. umbrella, introduces a new graduate education paradigm that will prepare students for fundamental changes in the approach to the biological/biomedical sciences. The structure of the program also increases the level of interaction and cross-disciplinary collaboration among faculty members in the three institutions. The study of functional genomics focuses on the interplay between genes and the biological machinery that enables an organism to live and reproduce. It involves further refinement of our understanding of genome "language" and of how that information is organized and used. The initiative is funded under an NSF program known as Integrative Graduate Education and Research Traineeship, or IGERT.
- ***New U.S. Weather Station Located at UMaine*** - A new U.S. weather station located at the University of Maine's Rogers Farm in Old Town is part of a system that will provide national climate data for the 21st century. The automated facility is part of the Climate Reference Network being developed by the National Oceanic and Atmospheric Administration (NOAA). The UMaine site is one of over 100 similar stations being erected to monitor the weather across the country. The only other network station in Maine has been located in the Aroostook Wildlife Refuge at Limestone. NOAA expects the complete network to have 250 stations altogether. The goal is to provide data for climate trend analysis with a minimum of adjustments for changes in monitoring conditions. The facility includes three temperature sensors as well as equipment to monitor wind speed, relative humidity, solar radiation and precipitation. Data from the UMaine station is transmitted by satellite to the Oak Ridge National Laboratory in Tennessee where it is made available to researchers and the public.

## **UNIVERSITY HIGHLIGHTS**

**(Continued)**

- Total grants and contracts awarded in FY2003 amounted to \$52.6 million.
- Total grants and contracts expenditures for FY2003 were \$65.5 million.

### **UNIVERSITY OF MAINE AT AUGUSTA**

- The Maine Community Policing Institute received one grant in the amount of \$300,000 from the Office of Community Oriented Policing (COPS) of the U.S. Department of Justice to provide Community Policing related training to the State of Maine.
- The Maine Community Policing Institute also applied for two additional grants from the Office of Community Oriented Policing. Each grant application was for \$350,000.
- Maine Centers for Women, Work, and Community received 2 grants from The John Merck Fund and U. S. Department of Agriculture, Rural Business Enterprise Grant totaling \$95,000 to expand access to markets for rural entrepreneurs. “First Markets” participants will clarify their goals, enhance marketing tools and technical skills, including e-commerce, build a plan for increasing sales, and make marketing connections through affinity groups and other resources.
- Maine Centers for Women, Work, and Community received a grant from the Butler Family Foundation in the amount of \$20,000 to support their coordination of the Family Development Account (FDA) Program. FDA’s are matched savings accounts which assist individuals in achieving specific asset goals, such as education and home or business ownership. These funds will help advance the FDA Program statewide through effective marketing, fundraising, and outreach to new target groups, and coordination of financial literacy training classes.
- Total grants and contracts awarded in FY2003 amounted to \$1.7 million.
- Total grants and contracts expenditures for FY2003 were \$2.6 million.

### **UNIVERSITY OF MAINE AT FARMINGTON**

- FY2003 grants and contract awards increased by \$594,111 or 21% over FY2002 awards.
- UMF was awarded State of Maine contracts totaling \$920,812 to conduct medical services related research.
- UMF was awarded a \$127,330 National Science Foundation grant to study carbonaceous main-belt asteroids (MBAs) using radar – derived constraints on target shape, topography, rotation state, composition and near-surface roughness to define similarities and differences between the various taxonomic classes containing dark objects and between carbonaceous MBAs and other asteroids. This research is possible due to the upgraded radar system at the Arecibo Observatory.

## **UNIVERSITY HIGHLIGHTS**

**(Continued)**

- UMF was awarded a \$100,000 grant from the State of Maine to create the Infant Toddler Institute. This Institute will provide child care providers with courses and training to improve child care programs within the State.
- UMF received a \$65,865 National Science Foundation grant to adapt key elements of the core curriculum developed by the National Council for Geographic Information and Analysis, combining these materials already used on some campuses. This is a collaborative project designed to benefit the five universities that are part of this project: USM, UMFK, UMM, UMA and UMF. The broader purpose of this collaborative project is to enhance GIS science education throughout the state.
- UMF received a \$375,000 federal training grant to provide scholarships to students enrolled in the Rehabilitation Education program. This grant will provide \$75,000 per year over five years for 16 full scholarships to qualified UMF junior and senior students majoring in rehabilitation services.
- Total grants and contracts awarded in FY2003 amounted to \$3.4 million.
- Total grants and contracts expenditures for FY2003 were \$2.9 million.

### **UNIVERSITY OF MAINE AT FORT KENT**

- The U.S. Department of Education Grant for Student Support Services Program was renewed with an award of \$266,345.
- Professor of Forestry & Environmental Studies, David Hobbins, continues to work on a three year grant entitled (GIS) Geographic Information Systems and (GPS) Global Positioning Systems Curriculum Development, currently in its second year; (first year \$47,681), (second year \$15,260), (third year \$15,046), for a total of \$77,987.
- The Maine Arts Commission/Maine Humanities Council awarded \$815 to support the grant entitled Cultural Self-Discovery and the Maine Franco-American Experience which explores the complexities and multiple realities of contemporary Maine Franco-American identity through the presentation of a dramatic work followed by an audience discussion facilitated by a humanities scholar. The amount of matching funds is \$1,455 for a total of \$2,270.
- The State Department of Education awarded \$47,602 for a part-time faculty member to teach courses for special education certification course via a multi-modal distanced education and recruitment delivery plan.
- Total grants and contracts awarded in FY2003 amounted to \$331 thousand.
- Total grants and contracts expenditures for FY2003 were \$296 thousand.

# UNIVERSITY HIGHLIGHTS

(Continued)

## UNIVERSITY OF MAINE AT MACHIAS

- Professor of Marine Biology Brian Beal, in partnership with the Downeast Institute for Applied Marine Research and Education, was awarded a three year NSF grant entitled “Creating New Economic Opportunities in Downeast Coastal Maine by Enhancing Marine Education and Research Capacity: Developing the Infrastructure for Innovation.”
- Assistant Professors of Biology, Ellen Hostert and Gerry Zegers, contracted for a second year with National Marine Fisheries for atlantic salmon adult stocking related genetic testing in the Machias, Dennys, and St. Croix rivers.
- With funding from a State Improvement Grant, the university is providing Special Education Certification training in Washington County.
- Total grants and contracts awarded in FY2003 amounted to \$649 thousand.
- Total grants and contracts expenditures for FY2003 were \$97 thousand.

## UNIVERSITY OF SOUTHERN MAINE

- With funding from the Bank Street College of Education, the College of Education & Human Development completed the third year of their five-year Strengthening and Sustaining Teachers program, establishing mentoring systems for pre-service teacher interns in the Portland Public Schools.
- The College of Nursing and Health Professions received funding from the US Department of Health and Human Services to expand the Generic Baccalaureate Nursing Program to Lewiston-Auburn College in order to improve access to quality healthcare by increasing the number of nursing graduates in central and western Maine.
- Funded by the Robert Wood Johnson Foundation, the Institute for Health Policy at the Muskie School of Public Service serves as the National Program Office for the Community Partnerships for Older Adults, helping communities develop and sustain long-term care and supportive services for vulnerable older adults and their caregivers.
- With funding from the National Veterans Business Development Corporation, the School of Business launched FastTrac for Veterans, a unique non-credit outreach course designed to address the training needs of veterans who want to start their own businesses and to provide networking and mentoring with the local business community.
- Funded by the Baldwin Foundation, the Healthy Learners Program at Lewiston-Auburn College trains students as Child Associates who provide individual play intervention to

# UNIVERSITY HIGHLIGHTS

(Continued)

elementary school children in order to promote school social adjustment and to encourage these children to reach their full potential as learners.

- The Maine Bar Foundation and the Maine Department of Corrections provided funding for the School of Law's Cumberland Legal Aid Clinic to establish the Prisoner Assistance Clinic, which assesses prisoners' needs for legal assistance and provides civil legal aid and referrals to inmates in the Maine Correctional Center.
- In the College of Arts & Sciences, the Ann Schroth Dietz Fund of the Maine Community Foundation funded the Photovoice Project, which matched students in Social Work with refugee children to produce photographs and narratives that expressed the children's struggles, identities and hopes for the future.
- With funding from the National Institutes of Environmental Health Sciences, the School of Applied Science, Engineering & Technology is investigating metal-induced carcinogenesis in human lung cells by examining how the physio-chemical properties of hexavalent chromium affect its potency as a carcinogen.
- The Honors Program received funding from the Davis Educational Foundation to support the university-wide initiative "General Education in the 21<sup>st</sup> Century: Achieving National Excellence," which examined major issues related to general education, interdisciplinary approaches to education and the core curriculum.
- Total grants and contracts awarded in FY2003 amounted to \$41.1 million.
- Total grants and contracts expenditures for FY2003 were \$42.3 million

## UNIVERSITY OF MAINE AT PRESQUE ISLE

- Two TRIO program grants for Student Support Services and Upward Bound received a total of \$618,600 from the U.S. Department of Education to support higher education opportunities for students of low-income and first-time college-goers.
- UMPI, as a member of the Central Aroostook Council on Education, a consortium of 7 public school districts in northern Maine, received \$150,647 in grants for in-service and pre-service teachers.
- As a member of a Bachelor of Social Work education consortium, the UMPI BSW program received \$20,507 for a third year of funding through the Department of Health and Human Services/Administration on Children, Youth and Families.
- Total grants and contracts awarded in FY2003 amounted to \$920 thousand.
- Total grants and contracts expenditures for FY2003 were \$914 thousand.

# UNIVERSITY HIGHLIGHTS

(Continued)

## SYSTEM-WIDE SERVICES

### **Maine CITE FY 2002-2003 Grant Awards:**

- \$324,744 from the Maine Department of Education: The grant award reflects a partnership between the University of Maine System and the Department of Education to implement a federally funded initiative to help make assistive and universally designed technology more available to Maine children and adults with disabilities. Major activities include coordination of information, support to partner organizations, production of public awareness materials, training and policy development.
- \$8,100 from Adaptive Environments (New England Regional ADA and Accessible Information Technology in Education Center). This grant award is to assist the Regional ADA and Accessible Information Technology Center to implement its accessible IT in education goals in Maine. Activities include assistance with information dissemination, review of materials, and participation in regional board meetings.

### **Maine POINT 2002-2003 Grant Awards:**

- RIT -\$33,000 ... The contract is to improve and expand services for deaf and hard of hearing students in postsecondary programs in Maine. The program provides resources for the ADA and Disability Support personnel in Maine's public and private universities.
- Maine DOE- \$134,000...The grant focuses on work related to access issues and support services for deaf and hard of hearing students in k-12 programs in Maine. It supports ADA compliance for Maine's ATM network.
- Total grants and contracts awarded in FY2003 amounted to \$500 thousand.
- Total grants and contracts expenditures for FY2003 were \$3.1 million.