

**RESEARCH &
SPONSORED PROJECTS**

Office of Research Administration

Highlights of Sponsored Activities during 1996-1997

A total of 288 proposals were submitted in FY1997. The amount of funding requested for the total project period for these proposals was \$62,508,500. The number of proposals submitted in FY1997 exceeded the number submitted in FY1996 by 25%, thereby setting a record for Boston College for the highest number of proposals submitted.

In FY1997, a record was also set for the number of award obligations received. There were 190 sponsored project award obligations made in FY1997 for a total of \$19,201,536. Total award obligations in FY1997 were 6% higher than those received in FY1996, an indication of the continued success of Boston College faculty.

Overall, there remains a general upward trend in sponsored project activities at Boston College. There are a greater number of faculty working with the Office of Research Administration to secure external funding from both Federal and non-Federal sponsors.

Source: Office of Research Administration

Summary of Sponsored Project Awards, 1996-1997*

	Number of Awards	Award Total		Number of Awards	Award Total
Biology	16	\$ 1,395,166	School of Education		
Chemistry	38	3,769,082	CDPRM/CASE	27	1,280,867
Economics	5	372,435	Campus School	5	1,873,794
Fine Arts	1	20,000	CSTEEP	11	2,920,406
Geology/Geophysics**	4	238,948	Law School	2	77,086
Music	1	50,000	School of Management	5	492,004
Mathematics	2	69,139	School of Nursing	11	498,191
Philosophy	1	30,000	Graduate School of Social Work	11	719,797
Physics	10	323,466	CCFCP	1	158,751
Political Science	3	106,720	Center for Work and Family	2	85,586
Psychology	5	193,493	Institute for Scientific Research	13	3,509,516
Slavic/Eastern Languages	1	4,000	Learning to Learn	1	175,100
Sociology	5	163,348	Social Welfare Research Institute	2	233,331
Theology	4	323,750	Other	2	69,300
Graduate School of Arts & Sciences	1	48,260	Total	190	\$19,201,536

* These amounts represent awards to the University during the period June 1, 1996 to May 31, 1997, and include only funds officially authorized in that year. They do *not* include the full amount of multi-year projects. Student aid funds managed by the Financial Aid Office are not included in this table. (They *are* included in the next two tables in this section provided by the Controller's Office.)

**Includes Weston Observatory.

Source: Office of Research Administration

Sponsored Projects*

Source and Application of Funding (Thousands of Dollars)

	1993	1994	1995	1996	1997
Source					
Government:					
Federal	\$ 14,437	\$ 14,821	\$ 17,671	\$ 19,609	\$ 18,957
State	1,041	1,127	1,213	864	1,001
Local	1,606	1,449	1,543	1,903	2,009
Corporations & Foundations	2,203	2,432	2,036	1,940	2,356
Total	\$19,287	\$19,829	\$22,463	\$24,316	\$24,323
Application					
Sponsored Research	\$ 10,290	\$ 10,307	\$ 11,691	\$ 12,542	\$ 12,902
Other Sponsored Programs	3,551	4,198	5,259	6,102	5,558
Student Aid	5,446	5,324	5,513	5,672	5,863
Total	\$19,287	\$19,829	\$22,463	\$24,316	\$24,323

* The amounts represent actual accounted expenditures (including Pell Grants) for the referenced fiscal year.

Source: Office of the Controller

Sponsored Projects by Department

Total Accounted Expense (Thousands of Dollars)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Arts & Sciences										
Biology	\$ 415	\$ 446	\$ 438	\$ 615	\$ 680	\$ 551	\$ 751	\$ 937	\$ 1,085	\$ 1,330
Black Studies	-	-	-	-	-	-	-	-	10	2
Chemistry	1,634	1,748	1,957	2,264	2,052	2,185	2,612	3,193	3,353	3,270
Classical Studies	-	-	-	-	5	-	-	-	-	-
Economics	19	65	157	123	23	108	168	97	269	341
English	-	-	-	4	72	-	-	-	-	-
Fine Arts	-	-	-	-	-	-	10	55	-	8
Geology/Geophysics ¹	803	583	393	427	504	536	516	390	603	497
History	1	8	23	56	3	69	43	19	1	-
Mathematics	-	-	13	18	15	22	16	39	10	62
Mathematics Institute	5	10	3	22	42	224	658	640	700	629
Music	-	-	-	-	35	95	-	-	-	40
Philosophy	44	39	42	11	-	-	1	44	74	41
Physics	724	600	803	709	407	209	147	165	180	184
Political Science	-	-	12	72	35	55	37	61	47	1
Psychology	159	81	64	75	191	157	146	250	201	216
Romance Languages	1	-	-	-	-	-	2	2	-	-
Slavic/Eastern Languages	-	-	-	-	-	-	-	-	30	12
Sociology	57	16	-	-	3	4	28	51	49	95
Theology	54	97	104	122	105	241	362	223	240	309
College of Arts & Sciences	-	-	-	12	82	97	60	56	194	192
McMullen Art Museum	-	-	-	20	-	-	-	5	46	-
Subtotal	3,916	3,693	4,009	4,550	4,254	4,553	5,557	6,227	7,092	7,229
School of Education										
CDPRM/CASE ²	1,894	2,139	2,200	2,225	2,202	2,102	1,941	2,348	2,675	2,969
CSTEEP ³	158	210	803	1,071	1,089	1,192	1,237	2,655	2,819	2,613
Subtotal	2,052	2,349	3,003	3,296	3,291	3,294	3,178	5,003	5,494	5,582
Law School	104	232	146	146	100	96	176	369	282	276
School of Management	355	409	458	482	512	513	535	521	511	481
School of Nursing	359	219	162	188	206	256	372	375	441	444
Grad. Schl. of Social Work	159	123	204	218	285	450	473	365	229	305
Athletics	46	68	47	54	54	62	71	78	66	65
AVP-Dean of Faculties	1	1	-	-	-	-	5	-	-	-
CCCR ⁴	-	-	-	117	45	26	90	26	2	33
Center for Work & Family	-	-	-	-	-	-	-	-	-	36
Financial Aid	5,112	6,034	5,601	4,938	5,149	5,446	5,324	5,513	5,672	5,863
Human Resources	-	-	-	-	-	-	-	-	10	-
Inst. for Scien. Research	1,950	2,288	2,832	3,929	4,500	4,248	3,723	2,981	3,206	3,421
Jesuit Institute	-	-	-	-	-	20	34	-	-	-
O'Neill Library	-	-	3	5	3	12	25	732	1,029	268
Student Affairs VP	116	106	122	118	140	143	151	150	141	142
SWRI ⁵	293	179	94	73	111	168	115	123	141	178
Total	\$14,463	\$15,701	\$16,681	\$18,114	\$18,650	\$19,287	\$19,829	\$22,463	\$24,316	\$24,323

¹Includes Weston Observatory.

²The two departments of the School of Education are Counseling, Developmental Psychology, and Research Methods (CDPRM) and Curriculum, Administration, and Special Education (CASE). The dollar amounts in this line include the Campus School.

³The Center for the Study of Testing, Evaluation, and Educational Policy (CSTEEP)

⁴The Center for Corporate Community Relations (CCCR)

⁵The Social Welfare Research Institute (SWRI)

Dollar Amount of Sponsored Project Awards Received By Department (Thousands of Dollars)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Arts & Sciences										
Biology	\$ 579	\$ 328	\$ 635	\$ 600	\$ 621	\$ 572	\$ 1,084	\$ 923	\$ 1,274	\$ 1,395
Chemistry	1,909	1,517	2,298	2,151	1,908	2,439	3,232	3,255	3,369	3,769
Economics	32	164	108	70	153	83	75	253	348	372
English	-	-	-	76	-	-	-	-	-	-
Fine Arts	-	-	-	20	-	-	25	57	38	20
Geology/Geophysics ¹	360	413	395	539	472	482	530	805	433	239
History	25	5	60	-	75	-	63	2	-	-
Mathematics ²	-	-	17	48	988	47	788	793	737	69
Music	-	-	-	-	-	-	-	-	-	50
Philosophy	-	-	-	-	-	-	90	-	45	30
Physics	95	523	952	465	279	127	170	216	173	323
Political Science	-	-	104	82	3	31	35	89	32	107
Psychology	100	129	35	207	163	177	203	232	265	193
Romance Languages	-	-	-	-	-	-	4	-	-	-
Slavic/Eastern Languages	-	-	-	-	-	-	-	-	40	4
Sociology	-	-	-	-	8	-	147	-	5	163
Theology	-	90	-	114	241	287	385	341	325	324
Grad. School of A&S	-	-	-	-	-	-	50	52	75	48
Subtotal	3,100	3,169	4,604	4,312	4,911	4,245	6,881	7,018	7,159	7,108
School of Education										
CDPRM/CASE ³	912	912	823	776	659	794	642	1,172	816	1,281
Campus School	1,124	984	1,407	1,365	1,442	1,421	1,456	1,519	1,804	1,874
CSTECP ⁴	20	847	753	890	1,152	1,204	2,333	2,977	2,278	2,920
Subtotal	2,056	2,743	2,983	3,031	3,253	3,419	4,431	5,668	4,898	6,075
Law School	44	182	59	46	-	-	252	334	379	77
School of Management	452	444	477	421	553	486	557	533	451	492
School of Nursing	415	100	101	226	215	340	342	374	559	498
Grad. Schl. of Social Work	173	118	153	417	337	501	292	299	326	720
CCCR ⁵	-	-	-	-	-	-	41	-	-	-
CCFCP ⁶	-	-	-	-	-	-	-	-	-	159
Center for Work & Family	-	-	-	-	-	-	-	-	-	86
Inst. for Scien. Research	1,346	2,346	5,034	4,092	4,550	3,935	3,409	2,926	3,786	3,510
Learning to Learn	-	-	-	-	-	-	-	-	-	175
SWRI ⁷	350	78	122	-	279	133	109	92	153	233
Other	164	462	163	282	457	426	220	2,239	335	69
Total	\$8,100	\$9,642	\$13,696	\$12,887	\$14,557	\$13,487	\$16,531	\$19,480	\$18,046	\$19,202

¹ Includes Weston Observatory.² Includes the Mathematics Institute.³ The two departments of the School of Education are Counseling, Developmental Psychology, and Research Methods (CDPRM) and Curriculum, Administration, and Special Education (CASE).⁴ The Center for the Study of Testing, Evaluation, and Educational Policy (CSTECP)⁵ The Center for Corporate Community Relations (CCCR)⁶ The Center for Child, Family, and Community Partnerships (CCFCP)⁷ The Social Welfare Research Institute (SWRI)

Note: Student aid funds managed by the Financial Aid Office are *not* included in this table. (They *are* included in other tables in this section provided by the Controller's Office.) In some cases dollar amounts in columns may not add to the column total due to rounding.

Source: Office of Research Administration

Number of Sponsored Project Awards Received By Department

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Arts & Sciences										
Biology	9	4	10	7	8	9	10	12	15	16
Chemistry	23	19	24	28	23	30	33	34	35	38
Economics	1	3	4	3	2	3	2	8	6	5
English	-	-	-	1	1	-	-	-	-	-
Fine Arts	-	-	-	1	-	-	2	3	2	1
Geology/Geophysics ¹	5	4	5	6	5	8	7	5	5	4
History	1	1	2	-	1	-	2	1	-	-
Mathematics ²	-	-	1	2	4	2	2	2	1	2
Music	-	-	-	-	-	-	-	-	-	1
Philosophy	-	-	-	-	-	-	1	-	2	1
Physics	2	10	8	7	6	7	4	4	3	10
Political Science	-	-	3	4	2	2	1	3	2	3
Psychology	1	2	1	5	3	4	6	7	8	5
Romance Languages	-	-	-	-	-	-	1	-	-	-
Slavic/Eastern Languages	-	-	-	-	-	-	-	-	1	1
Sociology	-	-	-	-	2	-	2	-	1	5
Theology	-	1	-	1	2	2	6	2	2	4
Grad. School of A&S	-	-	-	-	-	-	1	2	3	1
Subtotal	42	44	58	65	59	67	80	83	86	97
School of Education										
CDPRM/CASE ³	15	12	14	10	11	12	11	17	18	27
Campus School	7	4	6	5	5	4	5	5	4	5
CSTEEP ⁴	2	3	5	8	14	9	7	4	9	11
Subtotal	24	19	25	23	30	25	23	26	31	43
Law School	1	3	1	2	-	-	2	3	4	2
School of Management	3	3	6	4	6	3	5	4	2	5
School of Nursing	4	4	2	12	9	10	10	9	12	11
Grad. Schl. of Social Work	3	3	3	7	7	6	7	9	6	11
CCCR ⁵	-	-	-	-	-	-	3	-	-	-
CCFCP ⁶	-	-	-	-	-	-	-	-	-	1
Center for Work & Family	-	-	-	-	-	-	-	-	-	2
Inst. for Scientific Research	5	9	19	16	18	14	14	15	16	13
Learning to Learn	-	-	-	-	-	-	-	-	-	1
SWRI ⁷	3	1	2	-	4	2	1	2	2	2
Other	2	3	2	4	5	104	4	5	6	2
Total	87	89	118	133	138	137	149	156	165	190

¹ Includes Weston Observatory.

² Includes the Mathematics Institute.

³ The two departments of the School of Education are Counseling, Developmental Psychology, and Research Methods (CDPRM) and Curriculum, Administration, and Special Education (CASE).

⁴ The Center for the Study of Testing, Evaluation, and Educational Policy (CSTEEP)

⁵ The Center for Corporate Community Relations (CCCR)

⁶ The Center for Child, Family, and Community Partnerships (CCFCP)

⁷ The Social Welfare Research Institute (SWRI)

Source: Office of Research Administration

Number of Sponsored Project Proposals Submitted By Department

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Arts & Sciences										
Biology	12	12	16	19	19	23	23	26	21	31
Black Studies	-	-	-	-	-	-	-	2	-	-
Chemistry	31	27	35	36	28	36	35	39	47	57
Economics	5	8	5	4	3	3	7	10	8	7
English	-	-	1	-	-	-	1	-	-	1
Fine Arts	1	-	3	-	2	5	4	4	4	2
Geology/Geophysics ¹	12	6	13	12	13	15	14	12	13	12
Germanic Studies	-	-	-	-	-	-	-	-	-	1
History	1	3	2	1	1	2	5	3	1	3
Honors Program	-	-	-	-	-	-	-	-	1	-
Mathematics ²	-	1	1	4	1	2	3	3	3	2
Philosophy	-	-	-	-	2	1	-	1	3	1
Physics	18	16	13	10	9	7	10	5	7	22
Political Science	6	-	3	2	1	-	1	1	3	3
Psychology	3	6	2	10	10	8	17	14	6	8
Romance Languages	-	-	1	-	-	-	3	-	-	-
Slavic/Eastern Languages	-	-	-	-	-	-	-	-	2	3
Sociology	1	1	1	-	4	6	4	6	5	8
Theology	-	-	2	2	1	1	5	1	2	2
College of Arts & Sciences	-	-	-	-	-	-	-	1	1	-
Graduate School of A&S	-	-	-	-	-	-	-	2	-	-
Subtotal	90	80	98	100	94	109	132	130	127	163
School of Education										
CDPRM/CASE ³	6	11	27	13	12	16	20	33	31	43
Campus School	13	5	5	2	1	3	5	8	5	4
CSTEEP ⁴	3	5	5	4	12	7	7	6	13	13
Subtotal	22	21	37	19	25	26	32	47	49	60
Law School	2	1	-	-	2	3	3	5	2	3
School of Management	1	6	3	7	4	5	5	4	1	9
School of Nursing	12	7	9	20	17	27	14	18	21	16
Grad. Schl. of Social Work	6	10	9	6	12	12	10	7	15	12
CCCR ⁵	-	-	-	-	-	-	1	-	1	1
CCFCP ⁶	-	-	-	-	-	-	-	-	-	1
Center for Work & Family	-	-	-	-	-	-	-	-	-	5
Inst. for Scien. Research	8	6	10	6	6	11	7	13	10	12
International Programs	-	-	-	-	-	-	1	-	-	-
Jesuit Institute	-	-	-	-	-	-	1	-	-	1
Learning to Learn	-	-	-	-	-	-	1	1	1	1
SWRI ⁷	1	1	-	1	3	3	2	1	3	2
Other	3	8	2	7	4	9	3	3	1	2
Total	145	140	168	166	167	205	212	229	231	288

¹Includes Weston Observatory.²Includes the Mathematics Institute.³The two departments of the SOE are Counseling, Developmental Psychology, and Research Methods (CDPRM) and Curriculum, Administration, and Special Education (CASE).⁴The Center for the Study of Testing, Evaluation, and Educational Policy (CSTEEP)⁵The Center for Corporate Community Relations (CCCR)⁶The Center for Child, Family, and Community Partnerships (CCFCP)⁷The Social Welfare Research Institute (SWRI)

Source: Office of Research Administration

Selected Sponsored Project Awards 1996-1997

Title	Source of Funding	Amount
Biology Department		
Fibril Formation by Alzheimer's Disease	NASA	\$ 153,272
Amyloid in Microgravity		
Methylation of Atypical Protein Aspartyl Residues	National Institutes of Health	246,558
Chemistry Department		
Heterogeneous Gas-Liquid Interactions Related to Tropospheric Ozone Formation-Destruction Process	EPA	111,837
New Methods in Stereoselective Synthesis	National Science Foundation	116,000
Molecular Basis for Cellular Control Mechanisms	National Institutes of Health	256,023
Osmoregulation in Methanogens	U.S. Department of Energy	95,999
Economics Department		
Demonstration Effect in Intergenerational Transfers	National Institutes of Health	222,928
Geology and Geophysics Department		
New England Seismic Network	U.S. Geological Survey	162,000
Institute for Scientific Research		
Magnetospheric Dynamics: A Comprehensive Study	U.S. Air Force	1,495,310
Infrared Backgrounds to Database and Model Development	U.S. Air Force	364,210
Geophysical Modeling for Environmental Applications and Elastic Wave Decoupling Studies	U.S. Air Force	408,176
Psychology Department		
Preoptic Area Neuroanatomy and Maternal Behavior	National Science Foundation	105,000
Physics Department		
Plasma Instability Driven Coherent Submillimeter Radiation Emitters	U.S. Army Research Office	70,000
Political Science		
Getting the Young Involved: Churches, Organizations and Civic Engagements	Pew Charitable Trusts	63,887
School of Education		
Pre-Service Program for Educators of Individuals with Visual Disabilities	U.S. Department of Education	124,200
Chapter 636 Services	City of Boston	264,136
Ongoing Monitoring of Issues and Legislation Related to the Creation of a National Exam System	Ford Foundation	166,000
School of Management		
Database of Internet Business Cases	Mainspring Communications, Inc.	60,000
School of Nursing		
Immigrant Stressors and Psycho-Social Adaptation	National Institutes of Health	75,364
School of Social Work		
Massachusetts Families for Kids Initiative	Children's Services of Roxbury, Inc./ Kellogg Foundation	138,000
Sociology Department		
Media Research and Action Project	Boston Foundation	60,000

Source: Office of Research Administration

Research Institutes and Centers

The Center for Corporate Community Relations

Established in 1985, The Center for Corporate Community Relations is a leader in creating an understanding of the interdependence of community vitality and business success. It works in partnership with businesses worldwide to strengthen their community involvement and relationships in order to achieve healthy, sustainable, vibrant communities in which to live, work, and do business.

A major objective of The Center is to promote Boston College as the worldwide center for the study and teaching of corporate citizenship. Part of the University's Wallace E. Carroll School of Management, The Center's activities are focused in three areas: research and policy development, management and professional development, and information resources.

The Center's research and development are dedicated to advancing understanding and creating new technologies for the practice of corporate citizenship. In its approach to research, the Center strives to combine rigorous methodological design with a focus on producing results that are useful and relevant to the corporate practitioner.

The Center is the only organization to offer Certificates in Corporate Community Relations, available to those who complete a track of courses on topics such as strategic philanthropy, measuring community involvement, allying strategically with advocacy groups, and operational planning. The Center has trained over 2,000 corporate executives—including CEOs, general managers, and community relations professionals—from more than 500 corporations worldwide.

The Center offers a Resource Center on Corporate Citizenship that is the only one of its kind. It maintains a collection of corporate citizenship materials from more than 1,000 corporations and background materials on more than 400 nonprofit organizations. It provides quick-response, customized searches to support the information needs of its members and others needing information about corporate citizenship. The Center produces a number of publications on corporate citizenship, including the monthly *Corporate Community Relations Letter*, the annual *Community Relations Index*, and a biannual *Profile of the Community Relations Profession*. The Center also conducts an annual competition seeking the best paper on corporate community relations by an MBA student, for which the winner receives a \$5,000 award.

The Jesuit Institute

The Jesuit Institute was established in 1988 to engage and foster the Jesuit, Catholic identity of Boston College — to strengthen the Catholic character of Boston College precisely

as a university. The Institute is a research institute that works in cooperation with existing schools, programs and faculties, primarily but not exclusively, at Boston College. Its overarching purpose is to promote both research and collaborate interchange upon those issues that emerge at the intersection of faith and culture. An example of such a program fostered by the Institute is the Interdisciplinary Seminar on "God and the World of the Sciences" focusing on the interrelationship between the knowledge gained in science and the commitments that obtain in faith. It numbers faculty from physics, geology, geophysics, chemistry, biology, philosophy, and theology. Seven other interdisciplinary faculty seminars also take their focal problems from the concerns of the Church. The newly funded *Journal of Religion and the Arts* began as an Institute seminar. The Institute offers annual visiting fellowships for distinguished research scholars to contribute to the intellectual life throughout the University and to advance their own research. The Institute also sponsors conferences, most recently an international conference entitled "The Jesuits: Culture, Learning and The Arts - 1540 - 1773." In addition, the Institute funds visiting lecturers nominated by departments of Boston College to complement the work being done in those departments. The Institute also fields an annual set of some eight lectures dealing with issues of faith and culture. The Institute is sponsoring a three year lecture series by distinguished American Catholic women theologians on a variety of topics. The Catholic identity of Boston College contributes directly to its life as a University. Thus, the Institute has grown to play an increasingly important part within the academic community that is Boston College and to offer the University a quality and intensity of support that is unique among Catholic as well as Jesuit universities. Michael J. Buckley, S.J. is the first holder of the newly established Peter Canisius Chair, named for one of the Jesuit Order's first distinguished educators, writers, and theologians. The endowment for the Chair comes from an anonymous gift, and an additional \$500,000 towards the Institute's endowment - a challenge for Boston College to match.

The Social Welfare Research Institute

The Social Welfare Research Institute (SWRI) is a multidisciplinary research center specializing in the study of spirituality, wealth, philanthropy, and other aspects of cultural life in an age of affluence. Founded in 1970, SWRI is a recognized authority on the relation between economic wherewithal and philanthropy, the motivations for charitable involvement, and the underlying meaning and practice of care. SWRI has received generous support from the T. B. Murphy Foundation Charitable Trust, and from the Indiana University Center on Philanthropy, the W. K. Kellogg Foundation, and the Lilly Endowment, Inc.

Research Institutes and Centers (continued)

Current SWRI projects include: (1) *The Boston Area Diary Study*, the first-ever diary study of giving and volunteering, and the subsequent *SWRI-Kellogg / MacArthur National Diary Study*. (2) *The Study on Wealth and Philanthropy* analyzing the moral biographies of millionaires, their intergenerational transmission of financial care, and their strategies for carrying out philanthropy. (3) *The Contradictions of Christmas: Troubles and Traditions in Culture, Home, and Heart* exploring the daily spiritual conflicts in the lives of a random sample of Boston area residents. (4) Evaluation of the methodology, analysis, and interpretation of survey data on charitable giving and volunteering in the United States. (5) *Philanthropy and the Spiritual Horizon of Wealth and Identification and Association: The Spiritual Foundations of Caritas and the Empirical Dynamics of Charity* investigating the empirical association among philanthropy, income, and wealth; the determinants of giving; and the implications for fundraising.

The Institute for Scientific Research

Formed in 1954, the Institute for Scientific Research (ISR) is the largest sponsored research center at Boston College. With annual funding peaking at \$4.5 million in 1992, the ISR team has aided the Department of Defense and NASA by developing data support systems for numerous space missions, as well as conducting theoretical research in space studies sponsored by the National Science Foundation.

ISR's professional staff hold advanced degrees in geophysics, mathematics, applied mathematics, physics, engineering, and applied statistics, and the ISR has utilized this diversity of knowledge to develop highly sophisticated techniques for analyzing raw scientific and engineering data and presenting it in useful ways. The Institute is a forerunner in scientific data analysis and interpretation using statistical data analysis; digital signal and image processing; mathematical signal modeling; animated visualization of real and simulated data; the manipulation and interpretation of scientific images; and the design of specialized databases.

ISR employs the most sophisticated solution approaches — fractal geometry, chaos theory, wavelet analysis, and neural networks. The ISR has the skills and resources to answer research needs within the realm of earth and space sciences, environmental studies, biomedical studies, and financial and economic analyses.

The Center for the Study of Testing, Evaluation, and Educational Policy

The Center for the Study of Testing, Evaluation, and Educational Policy (CSTEEP) at Boston College was established in

1980 to meet the measurement, research, and evaluation needs of local educational agencies as well as those of government agencies, private foundations, and private corporations. The aim of the Center is to advance the study of educational testing, evaluation, and policy so as to improve both the quality and fairness of education. CSTEEP is the International Study Center of the Third International Mathematics and Science Study (TIMSS), the largest comparative study of educational achievement ever undertaken. Other CSTEEP projects include the Ford Project which examines proposals to create and implement a national testing system in the United States, the CoNECT Project to develop a model of school accountability, and the Clark Project to help the districts improve their annual reporting of progress toward high academic achievement for all middle school students. In addition, CSTEEP housed the National Commission on Testing and Public Policy (NCTPP). Boston College and its School of Education have made a strong commitment to CSTEEP both by housing it on the B.C. campus and by providing it with a substantial budget for proposal development and related costs. CSTEEP provides a variety of testing, consulting, optical scanning, and data analysis services to Boston College faculty and staff. Additionally, the Center regularly administers various national admissions tests.

Weston Observatory

Boston College's Weston Observatory, a research institute of the Department of Geology and Geophysics, was founded in 1928 by the Society of Jesus. Two years later its first seismograph began recording earthquakes, beginning a tradition of geophysical research that has ranked Weston Observatory as a nationally renowned research institution.

Today the Observatory's faculty and staff of geologists and geophysicists engage in many varied state-of-the-art research projects in geophysics, geology, geotechnical engineering, environmental problems, and geographic information systems. Graduate students conduct scientific research as a part of a Master's in Science (M.S.) degree. Weston Observatory operates a seismic network with 15 stations located around the New England region. In addition to research on naturally occurring seismic events, the Observatory also participates in research aimed at monitoring nuclear test ban treaties.

Source: Individual Institute and Center directors