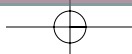
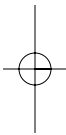


# Activities of the CRA

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ANNUAL REPORT



# Message from the Board Chair

As the importance and scope of computing research continue to grow, so too does the Computing Research Association. Recall that we have a four-pronged mission, easily remembered by the acronym CHIP:

- **Community** — contributing to the cohesiveness of the computing research community;
- **Human Resources** — encouraging more students to enter graduate school (especially women and minorities) and helping new faculty and researchers succeed in their careers;
- **Information** — collecting and disseminating information about the importance and the state of computing research; and
- **Policy** — working to influence government policies and funding as they affect computing research.

The past year was a very successful one for CRA. Here are a few of the highlights:

**Community:** CRA's biennial Conference at Snowbird broke previous attendance records (293 vs. 260 two years ago). Many participants described it as "the best yet."

**Human Resources:** CRA's Committee on the Status of Women in Computing Research (CRA-W) received a well-deserved Presidential Mentoring Award, presented by John Marburger, President Bush's Science Advisor. Founded in 1991, their programs have touched the lives of more than 2,500 women. Founding co-chairs Nancy Leveson and Maria Klawe shared CRA's 2004 Habermann Award for establishing CRA-W. CRA's February academic careers workshop for soon-to-graduate Ph.D. students and new faculty, organized by Lori Clarke, was oversubscribed with 101 participants. The next workshop will be in February 2006.

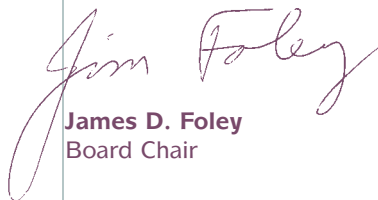
**Information:** CRA's electronic news bulletin has been resumed; to subscribe, visit <http://www.cra.org/cra-bulletin/home.html>. The Computing Research Policy Blog came on-line: visit <http://www.cra.org/govaffairs/blog/index.php> for the latest news on congressional appropriations for computing research, hearings, CRA testimony, and other policy events in Washington, DC.

**Policy:** CRA's Grand Research Challenges in Information Security and Assurance Conference, chaired by Gene Spafford and co-chaired by Rich DeMillo, established a research agenda that has been presented to the research community, Congress, and the press. Recommendations from our workshop report, "Road Map for the Revitalization of High End Computing," chaired by Dan Reed, became a part of the HPCCC revitalization plans issued by the White House Office of Science and Technology Policy. CRA Board members Lazowska, Reed, and Spafford testified before Congress six times: when CRA speaks, people listen.

Despite the weak economy and the slowdown in undergraduate CS enrollments, CRA membership grew slightly from 240 to 243 (219 academic departments and 24 labs and centers).

We thank our retiring board members for their dedicated service to CRA and the community: IEEE CS representative Doris Carver (Louisiana State), Barbara Grosz (Harvard), Jim Horning (McAfee Research, NAI), Dave Waltz (Columbia), and Ed Lazowska (University of Washington). Ed has served four terms, and was my predecessor as board chair (1997-2001).

It was a very good year for CRA. I am confident this year will be even better!



**James D. Foley**  
Board Chair

# Highlights

## RESEARCH POLICY

CRA's Government Affairs Committee has continued its efforts to position CRA as the "organization of record" for issues of relevance to the computing research community. Over the past year, CRA members have testified before House and Senate committees six times on topics including cyber security R&D, federal IT R&D funding, and the current state of high-end computing. In addition, CRA has been asked to brief Congress and members of the Administration on a range of topics relevant to computing research, including DARPA and IT R&D, the current state of basic research at the Department of Defense, the participation of women and minorities in computing research, and the "chilling effect" that some copyright legislation has on research.

In addition, the committee has stepped up its efforts to provide policy resources for the computing community. CRA's *Computing Research Policy Blog*, launched in February 2004, appears to be a popular resource. The committee's analysis of computing research in the President's FY 2005 budget continues to be a useful reference for policymakers and the science policy community. And the committee has produced a series of one-page advocacy documents for CRA members and others to use whenever they have the opportunity to make the case for computing research.

## INFORMATION ACTIVITIES

As a further step in its initiative to increase CRA's visibility among constituent groups, the Communications Committee created a project to provide information about CRA's activities to member departments for distribution to new faculty members, beginning in fall 2004. Additional progress was made last year on improving the website to facilitate access for faculty, students, and others.

CRA conducted the 33rd annual *Taulbee Survey* of Ph.D.-granting CS&CE departments. Board members and staff responded to a sharp increase in requests to provide statistical information about student enrollments in CS and CE due to concerns about offshoring. The annual *Salary Survey of Computer Science Researchers in Industrial Laboratories* was once again conducted last fall.

In December 2003, CRA published the report *Workshop on the Road Map for the Revitalization of High End Computing*, outlining the results of an earlier workshop sponsored by NITRD. A new "best practices" memo on "University-Industry Sponsored Research Agreements" was published in September. *Computing Research News*, the new *Computing Research Policy Blog*, and CRA's electronic bulletin, *CRB* — along with regular e-mail communications to chairs of U.S. and Canadian Ph.D.-granting CS&CE departments via the *Forsythe List of Ph.D.-Granting Institutions* — continued to provide current items of interest to the computing research community.



## HUMAN RESOURCES

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The Committee on the Status of Women in Computing Research (CRA-W) experienced an exceptional year with innovative new projects, continued growth in its successful ongoing programs, and recognition of its activities through a Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. Funding was provided by CRA, the National Science Foundation, USENIX, Microsoft Research, The Henry Luce Foundation, ACM SIG Project Fund, Lucent Technologies, and EOT-PACI.

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CRA-W's Distributed Mentoring Project (DMP) continued to see an increased demand from both undergraduate student applicants and potential mentors. Forty-five students were matched with twenty-eight mentors for a summer research experience. The DMP was expanded to allow new modes of funding and broader participation. The Collaborative Research Experiences for Undergraduates (CREU) was expanded to encourage students from all underrepresented groups to engage in collaborative research projects during the academic year. A new Graduate Cohort Program was designed to improve the graduate school experience and retention of women graduate students. It began with a mentoring workshop for 102 first-year students with follow-up activities planned. The new Cohort for Associate Professors Project (CAPP) brought together newly tenured women and distinguished full professors in a successful mentoring workshop to discuss advanced career development and leadership roles.

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CRA's awards programs once again recognized outstanding contributions to the community. Maria Klawe, Princeton University, and Nancy Leveson, MIT, jointly received the 2004 *A. Nico Habermann Award* for their role as founding co-chairs of the highly successful CRA-W Committee. In addition, awards were made to the following undergraduates for their outstanding research potential: Winners: Thuc Vu, Carnegie Mellon University, and Anna Cavender, University of Oregon; Runners-up: Ethan Eade, Duke University, and Heather Wake, University of South Carolina. Seven students were selected as Finalists, and a number were cited for Honorable Mention. Mitsubishi Electric Research Labs sponsored the undergraduate awards last year.

The Coalition to Diversify Computing (CDC, <http://www.cdc-computing.org>), a joint committee of the ACM, CRA, and IEEE Computer Society, has recently named Patricia Teller, an Associate Professor in the Department of Computer Science at The University of Texas at El Paso, as its new Chair, effective July 1, 2004. In October 2003, CDC organized the very successful Richard Tapia Celebration of Diversity in Computing Conference in Atlanta. Preliminary planning is under way for the next conference, scheduled for Albuquerque, NM, in October 2005. CDC has continued its project of Sending Students and Mentors to Technical Conferences; the next deadline is in September 2004. In addition, CDC is working with CRA-W to expand its highly successful CREU project to include minorities. The new initiative, called CREU, is funded by the National Science Foundation and is now under way.



## COMMUNITY - BUILDING

CRA's Grand Research Challenges Conference on Information Security and Assurance was held in November 2003, supported by the National Science Foundation. It was followed by a panel discussion on Capitol Hill and a press briefing at the National Press Club.

For the 10th year, CRA hosted the Computing Leadership Summit in February, bringing together the presidents, executive directors, and other senior leadership of CRA and its six affiliate societies — AAI, ACM, CACS/AIC, IEEE Computer Society, SIAM, and USENIX — and NRC's Computer Science and Telecommunications Board. This annual event provides a venue where common interests and potential cooperative efforts are discussed.

Two *Distinguished Service Awards* were given by CRA to David Clark, MIT Computer Science and Artificial Intelligence Laboratory, and Barbara Simons, ACM Past-President and USACM Co-Chair.

CRA continued its efforts to build the research community and provide lab managers an opportunity to share experiences by helping to develop regional meetings of lab directors. CRA also continued to support meetings of the heads of schools of information science in an effort to identify areas of common interest. This group continues to meet twice a year as an adjunct to CRA board meetings.

## Affiliate and Labs/Centers members

THE FOLLOWING ORGANIZATIONS HELD MEMBERSHIP IN CRA FOR ALL,  
OR IN A FEW CASES PART, OF THE PERIOD JULY 2003 TO JUNE 2004

### AFFILIATE PROFESSIONAL SOCIETIES

American Association for Artificial Intelligence  
Association for Computing Machinery  
Canadian Association of Computer Science (CACS/AIC)

IEEE Computer Society  
Society for Industrial and Applied Mathematics  
USENIX Association

### LABS AND CENTERS

Accenture Technology Labs  
Avaya, Inc.  
Computer Science Research Institute at Sandia National Labs  
Fraunhofer CREG, Inc.  
Fujitsu Laboratories of America  
Hewlett-Packard Co.  
Honda R&D Americas, Inc.  
IBM Research  
IDA Center for Computing Sciences  
Intel Corp.  
Lawrence Berkeley National Laboratory  
Los Alamos National Laboratory

Lucent Technologies, Bell Labs  
McAfee Research, NAI  
Microsoft Corp. (Sustaining Member)  
Mitsubishi Electric Research Labs  
National Center for Atmospheric Research  
National Center for Supercomputing Applications  
NEC Laboratories America, Inc.  
Panasonic Information & Networking Technologies Lab  
Ricoh Innovations, Inc.  
San Diego Supercomputer Center  
Sun Microsystems, Inc. (Supporting Member)  
Telcordia Technologies

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# Academic Members



THE FOLLOWING DEPARTMENTS HELD MEMBERSHIP IN CRA FOR ALL,  
OR IN A FEW CASES PART, OF THE PERIOD JULY 2003 TO JUNE 2004

Arizona State University • CSE  
 Auburn University • CSSE  
 Ball State University • CS  
 Boston College • CS  
 Boston University • CS  
 Bowdoin College • CS  
 Bradley University • CS  
 Brandeis University • CS  
 Brigham Young University • CS  
 Brown University • CS  
 Bryn Mawr College • MCS  
 Bucknell University • CS  
 California Institute of Technology • CS  
 California Polytechnic State University • CS  
 California State University, Chico • CS  
 California State University, Hayward • MCS  
 Carnegie Mellon University • CS  
 Carnegie Mellon University • ECE  
 Case Western Reserve University • EECS  
 City University of New York, Grad. Ctr. • CS  
 Clemson University • CS  
 Colgate University • CS  
 College of Charleston • CS  
 College of William & Mary • CS  
 Colorado School of Mines • MCS  
 Colorado State University • CS  
 Columbia University • CS  
 Cornell University • CS  
 Cornell University • ECE  
 Dalhousie University • CS  
 Dartmouth College • CS  
 DePaul University • CS  
 Drexel University • CS  
 Duke University • CS  
 Emory University • MCS  
 Florida Atlantic University • CSE  
 Florida Institute of Technology • CS  
 Florida International University • CS  
 Florida State University • CS  
 Florida State University • IS  
 George Washington University • CS  
 Georgia Institute of Technology • CS  
 Georgia Institute of Technology • ECE  
 Georgia Southern University • IT  
 Georgia State University • CIS  
 Georgia State University • CS  
 Grinnell College • MCS  
 Harvard University • CS  
 Harvey Mudd College • CS  
 Illinois Institute of Technology • CS  
 Illinois State University • ACS  
 Indiana University • CS  
 Indiana University • I  
 Iowa State University • CS  
 Johns Hopkins University • CS  
 Johns Hopkins University • SI  
 Juniata College • IT  
 Kalamazoo College • MCS  
 Kansas State University • CIS  
 Kent State University • CS  
 Lehigh University • CSE  
 Long Island University • ICS  
 Louisiana State University • CS  
 Loyola University, Chicago • CS  
 Massachusetts Institute of Technology • EECS  
 Miami University • CS  
 Michigan State University • CS  
 Michigan Technological University • CS  
 Mississippi State University • CS  
 Montana State University • CS  
 Naval Postgraduate School • MOVES/CS  
 National University of Singapore • CS/IS  
 Naval Postgraduate School • CS  
 New Jersey Institute of Technology • CCS

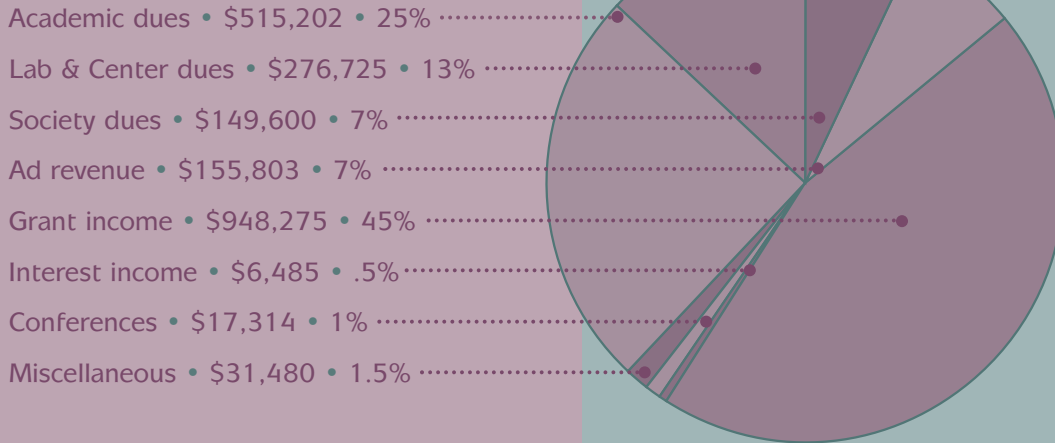
New Mexico State University • CS  
 New York University • CS  
 North Carolina State University • CS  
 Northeastern University • CIS  
 Northwestern University • ECE  
 Oakland University • CSE  
 Ohio State University • CIS  
 Ohio University • EECS  
 Oklahoma State University • CS  
 Old Dominion University • CS  
 Oregon Health & Science University • CSE  
 Oregon State University • CS  
 Pace University • CSIS  
 Pennsylvania State University • CSE  
 Pennsylvania State University • IST  
 Polytechnic University • CIS  
 Portland State University • CS  
 Princeton University • CS  
 Purdue University • CS  
 Purdue University • ECE  
 Rensselaer Polytechnic Institute • CS  
 Rice University • CS  
 Rochester Institute of Technology • CS  
 Roosevelt University • CS&T  
 Rutgers University, Busch Campus • CS  
 Santa Clara University • CE  
 Simon Fraser University • CS  
 Singapore Management University • IS  
 Southern Illinois University, Carbondale • CS  
 Southern Methodist University • CSE  
 Southern Polytechnic State University • CSE  
 Stanford University • CS  
 State University of New York, Albany • CS  
 State University of New York, Binghamton • CS  
 State University of New York, Stony Brook • CS  
 Stevens Institute of Technology • CS  
 Swarthmore College • CS  
 Syracuse University • IS  
 Temple University • CIS  
 Texas A&M University • CS  
 Tufts University • CS  
 Tulane • EECS  
 University at Buffalo • CSE  
 University at Buffalo • IS  
 University of Alabama, Birmingham • CIS  
 University of Alabama, Tuscaloosa • CS  
 University of Alberta • CS  
 University of Arizona • CS  
 University of Arkansas at Little Rock • I  
 University of Calgary • CS  
 University of California, Berkeley • EECS  
 University of California, Berkeley • IMS  
 University of California, Davis • CS  
 University of California, Irvine • ICS  
 University of California, Los Angeles • CS  
 University of California, Riverside • CSE  
 University of California, San Diego • CSE  
 University of California, Santa Barbara • CS  
 University of California, Santa Cruz • CE  
 University of California, Santa Cruz • CS  
 University of Central Florida • CS  
 University of Chicago • CS  
 University of Cincinnati • ECECS  
 University of Colorado, Boulder • CS  
 University of Delaware • CIS  
 University of Denver • CS  
 University of Florida • CISE  
 University of Georgia • CS  
 University of Hawaii • ICS  
 University of Houston • CS  
 University of Idaho • CS  
 University of Illinois, Chicago • CS  
 University of Illinois, Urbana Champaign • CS

University of Iowa • CS  
 University of Kansas • EECS  
 University of Kentucky • CS  
 University of Louisiana at Lafayette • CACS  
 University of Louisville • CECS  
 University of Maine • CS  
 University of Manitoba • CS  
 University of Maryland • CLIS  
 University of Maryland • CS  
 University of Maryland, Baltimore Co. • CSEE  
 University of Massachusetts, Amherst • CS  
 University of Michigan • EECS  
 University of Michigan • I  
 University of Michigan, Dearborn • CIS  
 University of Minnesota • CSE  
 University of Mississippi • CIS  
 University of Missouri, Rolla • CS  
 University of Montana • CS  
 University of Nebraska, Lincoln • CSE  
 University of Nebraska, Omaha • CS/IST  
 University of Nevada, Las Vegas • CS  
 University of Nevada, Reno • CS  
 University of New Brunswick • CS  
 University of New Hampshire • CS  
 University of New Mexico • ECE  
 University of North Carolina at Chapel Hill • CS  
 University of North Carolina, Charlotte • IT  
 University of North Dakota • CS  
 University of North Texas • CS  
 University of Notre Dame • CSE  
 University of Oklahoma • CS  
 University of Oregon • CIS  
 University of Pennsylvania • CIS  
 University of Pittsburgh • CS  
 University of Pittsburgh • IS  
 University of Puget Sound • MCS  
 University of Rochester • CS  
 University of South Alabama • CIS  
 University of South Carolina • CSE  
 University of South Florida • CSE  
 University of Southern California • CS  
 University of Tennessee, Knoxville • CS  
 University of Texas, Arlington • CSE  
 University of Texas, Austin • CS  
 University of Texas, Dallas • CS  
 University of Texas, El Paso • CS  
 University of Toledo • EECS  
 University of Toronto • CS  
 University of Tulsa • MCS  
 University of Utah • CS  
 University of Virginia • CS  
 University of Washington • CSE  
 University of Washington • I  
 University of Washington, Bothell • CS  
 University of Washington, Tacoma • CSS  
 University of Waterloo • CS  
 University of Wisconsin, Madison • CS  
 University of Wisconsin, Milwaukee • EECS  
 University of Wyoming • CS  
 Utah State University • CS  
 Vanderbilt University • EECS  
 Virginia Commonwealth University • CS  
 Virginia Tech • CS  
 Wake Forest University • CS  
 Washington State University • EECS  
 Washington University in St. Louis • CS  
 Wayne State University • CS  
 West Virginia University • CSEE  
 Western Michigan University • CS  
 Williams College • CS  
 Worcester Polytechnic Institute • CS  
 Wright State University • CSE  
 Yale University • CS  
 York University • CS

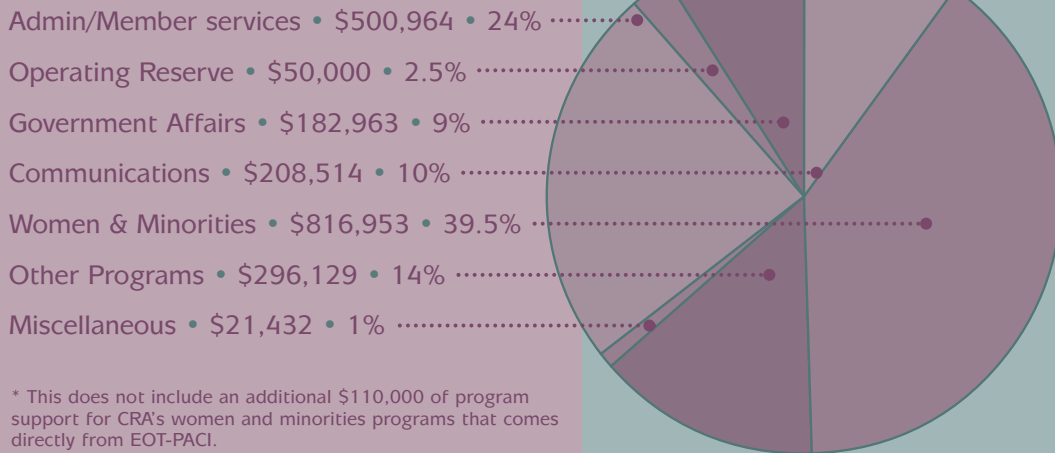
# CRA financial statement

JULY 2003 - JUNE 2004

## Revenue (\$2,100,884)\*



## Expenses (\$2,076,955)\*



\* This does not include an additional \$110,000 of program support for CRA's women and minorities programs that comes directly from EOT-PACI.

The financial data supplied here are based on unofficial records kept by the CRA staff. Divisions into revenue and expense categories are approximate. Official books prepared by CRA's external auditors will be available for review in January 2005.

## cash position

AS OF JUNE 30, 2004

Unrestricted Funds FY 2004	\$207,799
Unrestricted Funds FY 2005	147,607
Accounts Receivable	138,370
Restricted (projects)	90,278
Restricted (operating reserve)	583,521
Total	\$1,167,575

# Board of Directors

AS OF JUNE 30, 2004

## BOARD OFFICERS

James D. Foley, *Chair* • Georgia Institute of Technology  
 Janice Cuny, *Vice Chair* • University of Oregon  
 Kathleen McKeown, *Secretary* • Columbia University  
 Philip Bernstein, *Treasurer* • Microsoft Research

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*Indiana University*

Randy Bryant  
*Carnegie Mellon University*

Doris Carver (until 2/04)  
*Louisiana State University*  
*(IEEE Computer Society representative)*

Lori Clarke  
*University of Massachusetts, Amherst*

Carla Ellis  
*Duke University*

Timothy Finin  
*University of Maryland, Baltimore County*  
*(AAAI representative)*

Oscar Garcia (as of 2/04)  
*University of North Texas*  
*(IEEE Computer Society representative)*

Barbara Grosz  
*Harvard University*

James Horning  
*McAfee Research, NAI*

Leah Jamieson  
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*IBM Corp.*

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Elaine Weyuker  
*AT&T Labs – Research*

Stuart Zweben  
*Ohio State University*  
*(ACM representative)*

# CRA staff

AS OF JUNE 30, 2004

Andrew Bernat  
 Peter Harsha  
 Dana Neill  
 Susanne Pile  
 Carla Romero  
 Jean Smith  
 Jay Vegso

Executive Director  
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 Business Manager  
 Administrative Assistant  
 Director of Programs  
 Senior Communications Associate  
 Manager of Membership & Information Services

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