

Caltech

Career Development Center



A n n u a l R e p o r t

1997-98

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OUR MISSION



Career Development Center

The Career Development Center (CDC) at the California Institute of Technology (Caltech) offers a full range of career counseling, life planning and employment-related services to all Caltech students, postdoctoral scholars and alumni.

Our mission is to provide our clients with the knowledge, the support and the resources with which to make appropriate and satisfying career choices.

Our counseling and employment services are designed to enable clients to:

- engage in self-assessment,
- obtain timely and accurate occupational information,
- explore the full range of employment and graduate study opportunities,
- obtain employment or admission to graduate or professional school.

The CDC programs and services are designed to promote a greater awareness within the Caltech community of the work world and the need for and nature of career development over the life span.

We address the needs of diverse populations such as career changers of all ages, recent immigrants and dual-career couples. We regularly contact and do outreach to other universities, professional schools and employers worldwide.

During the past year we have continued to develop programs and services to meet the changing needs of both our student and our employer clients.

1997-98 HIGHLIGHTS



The 1997-98 academic year brought similar challenges for the Career Development Center as the previous year. Even more than last year, the major challenge was providing our usual level of service and accessibility with a reduced staff and the largest number of employers ever participating in on-campus interviewing and Career Day.

Recruitment Increases

It is no surprise that the job market for 1998 science and engineering graduates has been one of the best in recent history. Major newspapers have featured numerous career center directors all reporting that they cannot remember a year when so many firms came recruiting on-campus. Caltech was no exception to this national phenomenon. In fact, the demand for Caltech graduates, especially those with computer skills, was higher than the supply. Many disappointed employers cancelled schedules or visits due to lack of sufficient sign-ups.

The significant increases in scheduled visits, group meetings and Career Day put a strain on our already reduced staff and facilities. If there is as much interest in interviewing Caltech candidates from companies as last year, we may be forced to limit the number of schedules which a company can have in one day or actually limit the number of companies interviewing. We make every effort to bring in a variety of organizations to interview new graduates; however, there is such competition for those with computer science skills that these organizations are attempting to schedule interview dates much further ahead than usual. In fact, by mid-August of 1998 there are already over 120 organizations with interview dates scheduled for the coming year.

Staffing & Facilities

1997-98 was again a year with multiple staffing and space issues which impacted the delivery of our services in several ways, although overall we were able to maintain most of our on going programs and services. The Assistant Director continued to work in the CDC only half-time while spending the remainder of her time on the Caltech STAR project, and as of April 1998, she moved into that area full-time. In addition, the Director was on a leave of absence from January through March 1998. The result was a decrease in the number of individual counseling appointments available. Amy Malak, who had been a career counselor in the CDC since 1992 was promoted to the position of Associate Director in May and we are now recruiting for a full-time career counselor. The graduate intern has continued to work half-time and will continue through the end of December 1998. We anticipate obtaining another graduate intern to begin in January 1999.

Space for campus interviews, company information sessions and the CDC staff continues to be an issue, although there are plans to renovate a former graduate



student dormitory for Student Affairs offices to include the CDC and interview rooms. Until this is finalized and a date for a move is firm, we will continue to use rooms in the Student Activity Center (SAC) for interviews.

Joint Programming

During the past academic year the CDC collaborated with numerous student groups, faculty and staff to provide a variety of career development programs. We welcome the opportunity to work with others because of the great success in attracting appropriate audiences.

An exciting new collaborative group was formed this year to begin the Caltech Mentoring Program. This group, consisting of representatives from CDC, Ombuds Office, Alumni Association, International Student Programs, Women’s Center, Minority Student Affairs Office, and the Parents Office, has been meeting regularly over the past several months diligently working to establish a web-based site that provides mentoring education, resources, and connections. The web-based database, maintained by the Alumni Association, allows alumni, parents, faculty, postdocs and staff to enter their career information and the areas in which they are willing to mentor students. This fall, Caltech students will be able to search the database for individuals matching their criteria and be able to contact the mentor directly to seek advice.

Some other examples of joint programming include: career panels with the Alumni Office; Career Day Minority Student Reception with the Minority Affairs Office; workshop presentations to SURF students; Manners 101 reception with the Office of Residence Life; the Caltech-Japan Internship Program with the Japanese language instructor; and advising student organizations such as the Premed Club and SWE.

In addition, the CDC Director was an Avery House Associate and a Student Affairs Associate of Blacker House, and as such, participated in their activities as well as two of the MOSH dinners for students. The CDC also actively participates with the Admissions Office in the Prefrosh Weekend, Caltech 1a and Parents’ Weekend, as well as the New Student Orientation, International Student Orientations, YESS and Bridge Student Programs.

COUNSELING



“The availability of individual career counseling appointments for all interested students, postdoctoral scholars and alumni has long been a hallmark of the service orientation of the CDC.”

The availability of individual career counseling appointments for all interested students, postdoctoral scholars and alumni has long been a hallmark of the service orientation of the CDC and every effort has been made to continue this service in the face of two years of challenges. It is, however, an activity that can expand or contract depending upon staffing and proactive outreach efforts. The number of individual counseling appointments grew steadily every year through the 1995-96 year, when there were almost 1100 individual student appointments. Lack of sufficient professional career counseling staff for the past two years has resulted in a decrease of about 200 appointments per year; however, the total number of individual clients is still about 600 per year. The net result has been that students have had to wait longer for appointments and counselors have not been as free to see continuing clients on a walk-in basis, except at designated drop-in times. In spite of this, the number of clients seen for extensive career interest testing has remained the same for the past several years and the number of individual mock interviews has actually increased. Both of these activities are very time intensive and it is not clear whether they can be continued. The use of e-mail has been one tool that has allowed the counseling of large numbers of students even with reduced staff. Counselors routinely communicate with clients via e-mail after the first visit.

During the past year the Director saw only students interested in health careers and yet had individual appointments with 100 different students. The majority of these come for multiple appointments, especially during the year they are applying to medical school. If one takes out the premedical students who are primarily undergraduates, the breakdown of the type of client using counseling has been gradually shifting over the past three years. We are seeing more Ph.D. candidates and postdoctoral scholars each year, while the number of M.S. students has decreased to only a handful. About 45% of the counseling clientele are undergraduates, 30 % graduate students, 10% postdoctoral scholars and 12 % alumni, with the remainder being in miscellaneous other categories.

While the majority of issues raised in counseling sessions are related directly to employment issues, a substantial number are of a more general nature regarding issues of career choice, long term goals, changes in career or academic interests and values clarification. It is interesting to note that of the career testing packages given, just under 50% were to undergraduates, 25% to graduate students, and 25% to alumni.



International Students

Caltech has always attracted students from all over the world, especially at the graduate level, and currently about 45% of our graduate students and 10% of the undergraduate students are here on student visas. They come from 54 different countries with the largest number coming currently from China, Canada, India and Russia. While most international students come to Caltech with excellent communication ability in English, many are unfamiliar with the concept of career planning and development and come from countries where the entire process of seeking employment is quite different from that of the U.S. Each year the CDC presents workshops in coordination with the International Student Programs office on Job Search Strategies for International Students and Practical Training and Temporary Worker Visas. The international students interested in obtaining employment in the U.S. typically work very closely with the CDC staff and career counselors.

We also work with employers to educate them about the talents and capabilities of all Caltech graduates and the legal ways in which international students can be hired. Last summer a letter was sent to all on-campus recruiters explaining the employability of all of our students and encouraging employers to be open and flexible in selecting which candidates they wished to interview. The result of this and the generally improved employment situation was very helpful to international students during the past year. Most companies were also more consistent in their policies toward international students.

Even though their choices are somewhat more limited than those of U.S. citizens and permanent residents, Caltech Ph.D. graduates here on a student visa are just as successful in obtaining employment consistent with their education and goals.

Of the 193 companies interviewing last year, 90 were willing to see students on temporary visas. Those students who showed initiative by contacting employers who were reluctant to interview international candidates, prior to the campus interview date, were in almost all cases invited for a campus interview. Forty-one different companies made a total of 51 offers and 35 universities or national research laboratories made a total of 59 offers. For the coming year the workshop for international students will feature recent graduates who were successful in obtaining both industrial and academic positions and we anticipate that the coming year will be another successful year.

Plans of International Students

Ph.D.	75	
Academic Employment, U.S.	37	49%
Industry Employment, U.S.	27	36%
Other	2	3%
Uncommitted	8	11%
No Information	1	1%
M.S.	58	
Graduate School Employment, U.S.	51	88%
Other	7	12%
B.S.	21	
Graduate School Employment, U.S.	13	62%
Other	5	24%
Uncommitted	1	5%
Uncommitted	2	10%

CAREER WEEK



Companies Attending Career Day 1998

ACT Networks - BNS
Adaptec
Adobe Systems, Inc.
Advanced Micro Devices, Inc.
AeroVironment, Inc.
Alesis Studio Electronics
Allied Signal
Altera Corp.
Andersen Consulting LLP
Anubis Solutions, Inc.
Applied Materials
Arete Associates
AstroTerra Corporation
Bio-Rad Laboratories
The Boeing Company
Cadence Design Systems
Calico Technology
Caltech
- Information Tech. Services
- Infrared Processing & Analysis Center
Credence Systems Corp.
CuraGen
CyberMedia, Inc.
D.E. Shaw & Company
Dassault Systemes of America
EG&G
Emulek, Inc.
ETOYS, Inc.
Failure Analysis Associates
First Quadrant
General Motors
GNP Computers
Gordian
Green Hills Software
Hughes Electronics Corp.
idealab!
IGEN International, Inc.
Intel Corporation
International Rectifier
Jet Propulsion Laboratory
KLA - Tencor Corp.
Lasergraphics, Inc.
Lawrence Livermore Nat'l Lab
Lockheed Martin / Missiles & Space
Lockheed Martin Tech. Operations

Manners 101 (Tuesday, February 17)

The CDC once again hosted Manners 101, a formal reception which featured a presentation by Pamela Hillings, President of Hillings Enterprises. Replacing the dinner of the previous year, Ms. Hillings presented information in reception format to assist students in successfully navigating the upcoming Career Day. Students were treated to an informative, fun evening where they learned how to make introductions, what to do if you forget a name, and generally how to feel comfortable and confident in almost any formal situation. All attendees received a copy of *Manners in a Minute*, an excellent summary of basic etiquette in business situations. Also invited to the reception were Caltech alumni. Everyone attending had positive comments on the presentation, the food and what they learned. The enthusiasm and help from the Alumni Association, Residence Life Office and Caltech Dining Services helped make the evening a great success.

Employer Reception (Wednesday, February 18)

For the second year, the CDC worked with the Minority Student Affairs Office to assist with their industry reception the evening prior to Career Day. The CDC was responsible for inviting and publicizing the reception to the recruiters and keeping track of all those who planned to attend. The MSA Office planned the actual reception and publicized the event to all students. The reception was hosted at the Alumni House and was well attended both by company representatives and students.

Career Day (Thursday, February 19)

The CDC Staff had already reached the conclusion that Career Day had outgrown the Winnett Student Center before we learned that the site would be closed for remodeling. The million dollar question was "Where?" Where could we house an event of this size that could also accommodate the inclement weather of El Nino?

This was the first of many issues posed by Amy Malak to the Career Day Committee made up of eight volunteer undergraduate and graduate students. Beginning in October, the Career Day Committee met every month - and then more frequently as the date grew closer. The students enthusiastically tackled many of the logistical problems associated with relocation and provided creative ideas to help promote the event to students. In addition, they were available on Career Day to assist with setting up, greeting recruiters, answering students' questions, and running errands. Their contributions to Career Day were a tremendous help to the CDC staff.



The committee unanimously chose Bechtel Mall (the garden/arches west of Millikan Library) as the best location for students and employers. Although there were 90 employers registered for Career Day, only 85 actually attended due to last minute cancellations and no-shows. Thirty-six of the companies were new to Career Day.

Caltech alumni are frequently asked to represent their companies at Career Day. Of the 190 representatives who attended Career Day, 42 were Caltech alumni. The recruiters were invited to brunch at the Athenaeum with faculty, students and staff. Opening remarks were provided by Chris Brennen, VP of Student Affairs and Professor of Mechanical Engineering. The Career Day Open House ran from 11:00 to 3:00 with undergraduates, graduates and faculty providing a steady flow to the booths. Although the day was overcast and cold, fortunately it did not rain.

This year we again provided a Career Day Handbook. Not only did the manual list employer advertisements and helpful hints on making Career Day successful, but it also provided small company profiles on the majority of companies attending. The manuals were handed out a few days prior to and on Career Day.

The door prizes donated by employers are always a big hit with our students. Some of the outstanding gifts offered were several Adobe software packages, a digital camera, Sharp PDA, Sony Playstation games, movie/book/theater gift certificates and T-shirts. Over 300 undergrads, graduates and postdocs submitted their resumes to enter the drawing.

Overall evaluations agreed that this Career Day was a roaring success. Our biggest concern for next year is figuring out a solution to the parking problem.

Career Day Companies cont...

Logicon DTG
Matrox Technology, Inc.
McKinsey & Co., Inc.
Medtronic, Inc.
Microsoft Corporation
Midac Corp.
MIT - Lincoln Laboratory
Mykotronx
Myricom, Inc.
Narrowline
Northrop Grumman Corp.
Oracle Corp.
Ortel Corporation
Orthodyne Electronics
Paracel, Inc.
Pioneer Magnetics
Quantum Corporation
Raytheon
REMEC, Inc.
Research & Development
Labs.
Rockwell Semiconductor
Systems
Sapient Corporation
Scholastic Recruits
SCO
Silicon Graphics, Inc.
Silicon Valley Internet Partners
Software Technologies Corp.
Sony Interactive Studios
America
Spectrolab
Structural Dynamics Research
Corp.
Sun Microsystems
Tanner Research, Inc.
Teach for America
Tenfold Corp.
Teradyne Inc.
Trilogy Development Group
TRW
U.S. Navy
Wilshire Financial Services
Group
WolfeTech
XonTech, Inc.

GRADUATE SCHOOL



Top Attended Grad Schools

Ten Year Summary

Stanford	135
UC Berkeley	90
Caltech	72
MIT	60
UC Santa Barbara	47
Cornell	47
UC Los Angeles	45
Harvard	42
UC San Diego	38
Princeton	32
Univ. of Washington	29
Univ. of Illinois	23
Univ. of Michigan	23
UC Irvine	19
UC San Francisco	14
USC	14
Columbia Univ.	13
Johns Hopkins Univ.	13
Univ. of Arizona	11
Univ. of Chicago	11
Carnegie Mellon	11
UC Santa Cruz	10

This year 41% of Caltech undergraduates will continue their education directly after graduation. This small decrease might be explained by the increase in recruitment activities. The majority choose the Ph.D. path but a handful each year pursue programs in law, business, and medicine. The CDC actively works to assist those pursuing higher education. Last year over 100 students sought career counseling for issues relating to graduate school and premedical counseling.

Letters of Recommendation

The letter of recommendation service is of special value to those students applying to several schools for very similar programs. It helps both the student and the recommender. Last year, 22 students applying to graduate programs used the service and sent letters to 35 schools. Those applying to medical school are strongly encouraged to use the service and most applicants do. Sixteen current students and three alumni maintained active files and sent letter of recommendation packets to 72 schools.

Each letter of recommendation packet includes a letter signed by the CDC director explaining the service and whether the file is confidential or open. For those applying to medical school the letter also explains the Premedical Advising process and includes a separate handout on the unique aspects of Caltech such as the Honor Code, the core curriculum, and the grading system.

Medical School

Medical school admissions continue to be very competitive although the total number of applicants nationwide declined slightly last year. Medicine and other health related careers continue to be of great interest to Caltech students and recent alumni and the Premed Club is quite an active organization. Caltech students continue to be successful in gaining admission to medical school. There are usually about twenty-five students in each undergraduate class, as well as a handful of graduate students, who are interested in medicine. One of the most popular events of the annual Prefrosh Weekend, to which all newly admitted undergraduates are invited, is the session on Caltech and medical school. It is usually attended by 40 to 50 high school students and a few parents, and always generates a lively discussion. In addition to the Premedical Advisor, newly admitted medical students are invited to discuss their experience at Caltech and their choice of medicine as a career. They are enthusiastic participants and effective spokespeople.



During the year the Premedical Advisor and the Premed Club jointly sponsor numerous events designed to help current students prepare each step of the way. Workshops on gaining health related experiences, preparing for the MCAT, the AMCAS personal statement, AMCAS and selecting schools, and the medical school interview are presented each year. In addition Caltech alumni currently in medical school or residences are invited to talk of their experiences.

During the past year the Premedical Handbooks for both students and faculty were revised and expanded and are available free to Caltech students and faculty, who have students interested in medicine in their classes or laboratories. Included in this are lists of many of the local places where students can volunteer to gain experiences. There are also handouts for the workshops on topics such as writing and interviewing. In preparation is a list of health related laboratory and clinical experiences available for the summer.

Caltech students continue to be very successful in the extremely competitive medical school admission process. This year twelve seniors, one graduate student and nine alumni applied to medical school and one senior applied to veterinary medical school. In all, seventeen were accepted, three M.D./Ph.D., eleven M.D. and one D.V.M. Three applicants chose Ph.D. programs, and one of these will apply for the M.D./Ph.D. for 1999. As has been true in the past, those candidates with GPA's of 3.5 and above, MCAT scores of at least 30, and good health-related or service experiences have been the most successful. Those candidate with GPA's of 3.3 and lower need to be quite extraordinary in many ways in order to be successful initially, although many are admitted when they reapply.

Medical School Admissions

M.D./Ph.D. Programs

UC Irvine
UC Los Angeles
UC San Francisco

M.D. Programs

Georgetown
Harvard
St. Louis University
Stanford
Thomas Jefferson Medical College
UC San Diego
UC San Francisco
University of Chicago
USC
University of Texas, Southwestern

Veterinary Program

UC Davis, School of Veterinary Medicine

Medical School Applicants

	Applied	Accepted
B.S. '98	13	10
Alumni	9	6
Ph.D.	1	1

STUDENT EMPLOYMENT



Japanese Companies *Caltech Internships*

Asahi Glass Co., Ltd.
Hitachi Chemical Co., Ltd.
The Japan Development Bank
Kubota Corporation
Mitsubishi Chemical Corporation
Mitsubishi Electric Corporation
Mitsubishi Materials Corporation
Nippondenso Co., Ltd.
NKK Corporation
NTT Research and Development
Seiko Epson Corporation
Sekisui Chemical Co., Ltd.
Sony Corporation
Tokyo Gas Co., Ltd.
Toray Industries, Inc.
Toshiba Corporation
TIS (Toyo Information Systems Co., Ltd.)

In the Career Development Center, one of our goals is to provide students with experiences which will enhance their career choices and ultimately their future career success. We sponsor various programs including ASPIRE (A Summer Position in Research or Engineering), the Japan Internship Program, and provide employment opportunities in a wide variety of areas including work study, tutoring, and off-campus part-time employment.

The Japan Internship Program

The Caltech-Japan Internship Program program originated the summer of 1994 under the direction of Dr. Kayoko Hirata, Instructor of Japanese at Caltech. She worked closely with Mr. Tetsuo Nishide, from the Japanese Ministry of International Trade and Information (MITI) developing contacts with Japanese companies. Every year since then, students who have completed two years of Japanese language study have spent from eight to twelve weeks working at a company in Japan on a project related to their academic and career goals.

During the spring of 1996 the CDC was asked to oversee this program. The director, Sally Asmundson, along with Dr. Hirata and Mr. Nishide, planned a successful visit to Japan in the summer to see the interns and meet key company personnel. Most companies were visited and a reception for the interns and company representatives at the Japanese External Trade Organization (JETRO) office was well attended.

The 1998 academic year was particularly challenging for the program due both to staff issues and the small number of eligible students. A successful Employer Roundtable was held in March; however, ultimately only two students were able to participate in the program this summer. Both are having excellent experiences with two different Japanese companies. This program, as well as other international opportunities, will be reviewed in the fall and plans will be generated to both improve opportunities and monitor the experiences more directly. Companies in Japan are still very interested in participating and there may be future opportunities for students with slightly less background in the Japanese language. There is also a new campus committee which will look at international opportunities for continuing students throughout the world.



ASPIRE

One of the easiest and most effective ways for students to gain experiences which will help them make career decisions is through career-related summer employment opportunities. We help students get these experiences by sponsoring the ASPIRE program. We provide individual counseling and workshops to any student interested, advertise positions directly to students via the Web, send out newsletters to students featuring articles about summer job search issues, and do outreach to employers participating in on-campus recruiting and Career Day.

The On-Campus Recruitment Program is another tool Caltech undergraduates can use to locate summer employers. During the 1997-98 academic year, 37 companies established schedules to interview students for summer 1998 positions.

Part-time Employment

Other part-time employment opportunities for students can contribute much needed information for career decision-making, as well as the more practical financial support for their education. The position of choice for Caltech students remains the on-campus position, whether as a work study employee or simply as a part-time employee. We have been able to enhance the advertising process for both Caltech employers and students by placing these positions on the Web through JobTrak. In addition, students may use their work-study funds to work with a community support agency in the Los Angeles area. Information on these opportunities is maintained in the Caltech Y.

Part-time, off-campus employment is a less popular form of employment for students; however, tutoring off-campus students continues to be very popular with both graduate and undergraduate students. Tutors typically earn between \$15 and \$20 per hour.

1997 Summer Employers of Caltech Students

AG Communication Systems
Abaris Technologies
Allied Signal
Applied Materials, Inc.
Applied Research Labs
Boeing - Rocketdyne Tech. Services
Chamberlain Group
Cognos, Inc.
Computer Services of Carolina
Fairchild Semiconductor
Giornyi Institute
Herzog-Hart Corp.
Honeywell, Inc.
Hughes Electronics
Hughes Space & Communications
IBM
Intel
Lehman Brothers
Lockheed Martin
Microsoft
Mitsubishi Electric Corporation
Montgomery Watson
NEC
Naval Air Warfare Center
Northrop
Oregon Metallurgical Corporation
Rosendin Electric Inc.
SCO, Inc.
Sierra Research & Technology, Inc.
Silicon Graphics
Space Telescope Science Institute
Systems & Process Eng. Corp.
TRW Systems Integration
Thermotrex Corp.
Xerox

RECRUITING



Recruiters at Caltech

Abbott Laboratories
 ACT Networks-BNS
 Active Voice
 Activision, Inc.
 Adaptec
 ADC Telecommunications
 Adept Technology, Inc.
 Adobe Systems, Inc.
 Advantech Pacific, Inc.
 Aerojet
 Aerospace Corp.
 AeroVironment, Inc.
 Agouron Pharmaceuticals, Inc.
 Air Products & Chemicals, Inc.
 AirFiber, Inc.
 Alesis Studio Electronics
 Allied Signal, Inc.
 Altera Corp.
 AMD/Advanced Micro Devices
 American Cyanamid
 Amgen, Inc.
 Amoco Chemical Corp.
 Andersen Consulting LLP
 Anritsu Co.
 Anubis Solutions, Inc.
 Applied Materials
 Arbor Software
 Arete Associates
 Aris Corp.
 Astex
 AstroTerra Corp.
 Autodesk, Inc.
 Bain & Co.
 Bank of America
 Bayer Corp./Pharmaceutical Div.
 Bellcore - Applied Research
 Bio-Rad Laboratories
 BOC Group
 Boehringer & Ingelheim
 Pharmaceuticals
 Boeing Co.
 Boston Consulting Group
 BP America Co.
 Bristol-Myers Squibb
 C-Cube Microsystems
 Cadence Design Systems
 Calico Technology
 Caltech - IPAC
 Center for Naval Analyses (CNA)
 Charles River Assoc.
 Cinram Disc Mfg.
 Cognex Corp.
 Comrise Technology
 Coopers & Lybrand
 Credence Systems Corp.
 Credit Suisse First Boston
 CuraGen
 CyberMedia, Inc.

The number of organizations wanting to schedule on-campus interviews for both full time and summer positions has continued to increase over the past three years as the economy and the demand for new college graduates with high level technical and analytical skills has increased. The last time the demand has been so high was the period from 1984 to 1986 when there were also close to 200 different organizations which scheduled on-campus interviews. Even though there are signs that the 1998-99 year will not experience the growth of the last year, requests for interview dates are already ahead of last year and by August 1998 over 120 organizations have scheduled dates for the coming year. An even more dramatic indication of the demand is the increase in the size of the annual Career Day, from an average of less than fifty even in the peak years of 1984-86 to the record of 85 last year. The CDC has been using the job listing services of JobTrak since 1990 and the increase in listings has been phenomenal. Reports of that first year indicate there were just over 700 positions listed during that period. Contrast that to the 6700 positions from 2700 different employers listed during the first six months of 1998.

An extremely broad range of organizations are interested in Caltech and its graduates. Counting those attending Career Day and individual divisions of companies, 225 organizations were on campus seeking graduates. While the majority were involved broadly in aerospace, communications, computer hardware and software and electronics, even these organizations represented varying types of opportunities, mission, diversity and organization size. More than a dozen of these were companies founded by Caltech alumni. There were thirty-three organizations in the chemical, pharmaceutical, biotechnology and consumer products area and most of them were seeking chemists, chemical engineers and biologists. Government agencies, non-profits and technical services and research consultants were also recruiting in larger numbers than in several years. There were also five

Campus Interviews

1993 - 1998

	1993-94	1994-95	1995-96	1996-97	1997-98
Recruiting Organizations	144	134	176	186	193
Interviews	1425	1366	1933	2110	1913
Individuals Involved - Totals	252	276	314	310	321
Graduating Students	103	103	118	118	143
Non-Graduating Students	98	108	130	136	124
Postdoc Scholars, Alumni	51	65	66	56	54



petroleum or energy related organizations, some of which were back on campus after an absence of several years. The interest of management consulting and investment banking firms has continued to increase and this past year a record 25 were on campus seeking candidates at all degree levels, with especially high interest in Ph.D. candidates and postdoctoral fellows. Contacts leading to offers of employment are made at Career Day and through JobTrak as well as through formal on-campus interviewing. Career Day is especially helpful to students seeking summer positions or positions with organizations which are unable to schedule formal interviews.

Degrees Sought by Employers

Degree	Number of Employers	Percent
B.S.	19	7%
B.S./M.S.	71	27%
B.S./Ph.D.	0	0%
M.S./Ph.D.	21	8%
Ph.D.	59	23%
All Degrees	93	35%
Totals	263	100%

Employers visiting the campus are also seeking candidates at all degree levels and in most specialty areas. A few companies seek only B.S. level candidates and about 34% seek those at either the B.S. or the M.S. level. Last year 23 % sought candidates only at the Ph.D. level and 35% were interested in all degree levels. Because of the broad science education required of all undergraduates and the interdisciplinary nature of the graduate programs, companies coming to campus are encouraged to be as flexible as possible about the disciplines and the degrees that they will consider.

While there is no guarantee that companies with active recruiting programs and other contacts at Caltech will be successful in hiring, every year they generally do very well. This year over 50 % of our survey respondents reported multiple job offers, several as many as five or six. New Ph.D.'s and postdoctoral scholars had some very interesting choices between postdoctoral positions, industry research in their field of study, or consulting or investment banking. Of new graduates at all degree levels, 281 have accepted positions; 181 in business, industry or government and 100 in academia as postdoctoral scholars or faculty. We also were able to obtain more information this year from the many postdoctoral scholars who used the office and eighteen reported receiving industrial offers.

- Cypress Semiconductor
- D.E. Shaw & Co. LP
- Dassault Systemes of America
- Defense Nuclear Facilities Safety Board
- Deloitte Touche Consulting Group
- Documentum, Inc.
- Eastman Kodak Co.
- EDS / Electronic Data Systems
- EG&G
- EISAI Research Institute
- Electronics for Imaging
- Elf Atochem No. America, Inc.
- Eli Lilly & Co.
- Emulek, Inc.
- ETOYS, Inc.
- Exeter Group
- Exxon Corp.
- Failure Analysis Assoc.
- First Quadrant
- General Electric Co.
- General Motors - Truck Div.
- Glaxo Wellcome, Inc.
- GNP Computers
- Goldman Sachs
- Gordian
- Green Hills Software
- Group One Trading, LP
- GTE / Data Services
- Hershey Engineering Services
- Hewlett-Packard Company
- Hon Co.
- Hughes Electronics Corp.
- I-Cube Co.
- ichat, Inc.
- idealab!
- IGEN International, Inc.
- ILCO Industries
- IndyMac
- Inktomi Corp.
- Inso Corp.
- Institute for Defense Analyses
- Integrated Device Technology
- Intel Corp.
- International Rectifier
- Jet Propulsion Laboratory
- KartoffelSoft
- KLA Instruments (KLA-Tencor Corp.)
- Lasergraphics, Inc.
- Lawrence Livermore Nat'l Lab
- Lear Astronics Corp.
- Lehman Bros.
- Ligand Pharmaceuticals
- Lincoln Laboratory - MIT
- Lockheed Martin
- Logicon
- Long-Term Capital Mgt., LP
- Los Alamos National Laboratory

RECRUITING



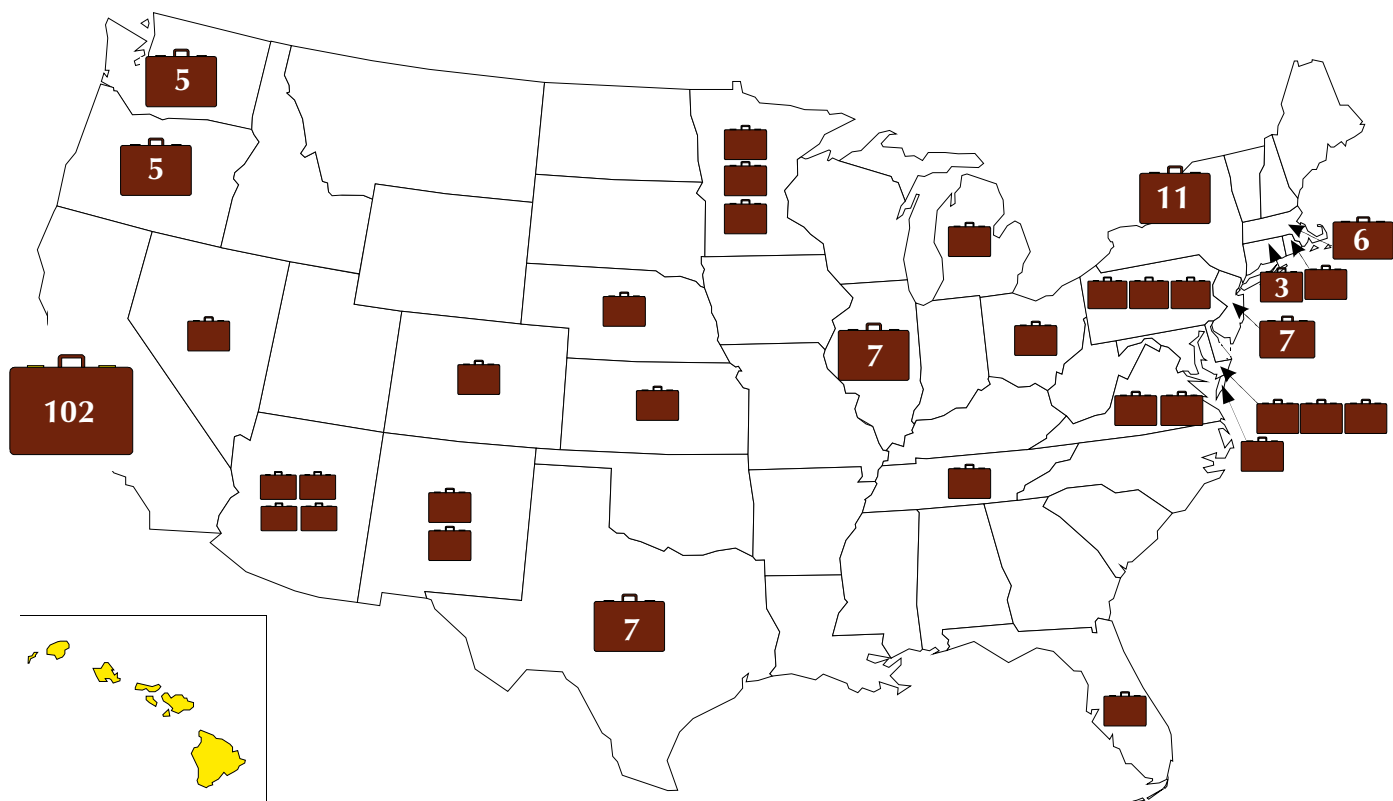
Lucent Technologies
Matrox Technologies
McKinsey & Co./ New York
Medtronic, Inc.
Merck Research Labs
Merrill Lynch Corp.
Microsoft Corp.
MicroStrategy, Inc.
Midac Corp.
Millennium Pharmaceuticals
Mitchell Madison Group
Mitsubishi Electric America, Inc.
MMM/3M Co.
Mobil Corp.
Morgan Stanley & Co.
Motorola
Myers-Holum, Inc.
Mykotronx
Myricom, Inc.
Narrowline
NCR Corp.
Nestle's USA
Netscape Communications
Northrop Grumman Corp.
Ontogen Corp.
Oracle Corp.
Ortel Corp.
Othrodyne Electronics
PaineWebber Inc.
PairGain Technologies
Paracel, Inc.
Pfizer, Inc.
Pharmacopeia
Pharsight Corp.
Pioneer Magnetics
Plumtree Software, Inc.
Powerwave Technologies
Price Waterhouse LLP
Proctor & Gamble
Quantum Corp.
Rand Corp.
Raychem
Raytheon (T. I.) Systems
RealNetworks, Inc.
REMEC, Inc.
Research & Development
Laboratories
Rio Grande Medical Technologies,
Inc.
Roche Bioscience
Rockwell Science Center
Rockwell Semiconductor Systems
Rohm & Haas Co.
S.C.O., Inc.
Salomon Brothers
Sandia National Labs
SAP Technology
Sapient Corp.

While not all companies or students respond completely to our annual survey, we do have data that 88 of the organizations who recruited on campus or attended Career Day made a total of 203 offers. This excludes all faculty and postdoctoral scholar offers. Where we know the name of the company, 113 of the 135 offers to B.S. graduates were from companies with active campus involvements. Most organizations hired only one Caltech candidate; however, 26 of those who came on campus hired two or more, a few hired more than five and one even hired nine graduates. The result is that slightly over 67% who accepted non-academic positions went with on-campus recruiters.

Schering-Plough Research Institute
Schlumberger
Scholastic Recruits
Seagate Technology
Sharp Microelectronics, Inc.
Siebel Systems, Inc.
Silicon Graphics
Software Technologies Corp.
Sony Interactive Studios America
Spectrolab
Structural Dynamics Research Corp.
Sun Microsystems
Susquehanna Investment Group
Symantec Corp.
Symvionics, Inc.
Tanner Research, Inc.
Teach for America
Teledyne Electronic Technologies
Telos Corp.
Tenfold Corp.
Teradyne, Inc./ Megatest Div.

The Capital Group Companies, Inc.
Thermotrex Corp.
Torrey Science Corp.
Toyon Research Corp.
Trilogy
TRW
Tularik, Inc.
U.S. Air Force
U.S. Navy
United McGill Corp.
Vehicle Research Corp.
ViewLogic Systems, Inc.
Visualize, Inc.
Vitesse Semiconductor Corp.
Western Digital Corp.
Wilshire Financial Services Group,
Inc.
Wolfe Tech
Xerox Corp.
XonTech, Inc.
Zeneca Pharmaceuticals

COMPANIES OFFERING JOBS



Index

= Company

= # Companies

Total Companies = 180

PLANS OF GRADUATES

B.S.

This year Caltech granted 219 bachelor of science degrees

and the plans of the graduates encompass a multitude of career choices. Forty-one percent of the graduates chose to continue on to graduate school. Although this is a small decrease from previous years, the top choices of schools still remain Stanford, Caltech and UC Berkeley.

While most will be entering programs in science and engineering, one graduate will pursue a Bachelors degree in Fine Arts.

Our graduates continue to be successful in competitive graduate fellowships. This year 11 National Science Foundation Fellowships were awarded to seniors and five to recent Caltech graduates. Other fellowships awarded include the Hertz, the Churchill, the Marshall, the Rotary and the Watson. One student accepted to medical school will travel throughout China for ten weeks this summer on the Durfee Fellowship and then travel to Scotland for one year at the University of Edinborough on a Rotary Fellowship.

Several students have made career choices based more on their long range goals and their commitment to service. One student will be working in Japan, one in Switzerland, one will work as a Jesuit volunteer in Nepal, and another will be a fellow at the Mickey Leland Hunger Center.

Those students seeking career employment found an active and varied job market and many graduates reported several job offers. While not all the graduates in the "Uncommitted" category are actively seeking employment, it is a measure of how easily new graduates are able to find employment.

There were 49 different organizations which hired at least one B.S. graduate, with Aerojet, Applied Materials, First Quadrant, Integrated Computing Engines, Intel, Mitchell Madison Group and Tenfold Corporation each hiring more than one. Even students in the biological sciences who wanted to work for a year or two before applying to medical or graduate school were successful in finding interesting and challenging laboratory research positions.

Option	Number	Graduate School	Employment	Uncommitted	Other Plans	No Information
AMa	3	1	1	0	0	1
APh	11	8	2	0	0	1
Ay	4	2	1	1	0	0
Bi	33	14	8	4	4	3
Ch	14	8	1	2	3	0
ChE	15	7	4	2	2	0
EE*	23	13	9	2	0	0
Eng+	70	14	48	4	2	2
Ge	2	2	0	0	0	0
Ma	10	2	6	1	0	1
Me	8	2	6	0	0	0
Ph	26	16	4	4	1	1
Totals	219	89 (41%)	90 (41%)	20 (9%)	12 (5%)	9 (4%)

Option Abbreviation Guide on Page 32

* Includes a student going to graduate school and working.
 + Includes a student receiving both a B.S. and M.S. degree.



M.S.

Option	Number	Graduate School	Employment	Uncommitted	Other	No Information
Ae	13	8	3	2	0	0
AM	2	2	0	0	0	0
APh	7	7	0	0	0	0
Ay	2	1	1	0	0	0
Bi	4	3	1	0	0	0
CDS	2	1	1	0	0	0
CE	3	2	1	0	0	0
Ch	6	2	3	1	0	0
ChE	9	7	1	0	1	0
CNS	1	1	0	0	0	0
CS	5	5	0	0	0	0
EE	25	19	5	0	0	1
Env	10	9	1	0	0	0
Ge	5	4	0	1	0	0
Ma	5	4	1	0	0	0
ME+	6	4	2	0	0	0
MS	8	7	0	0	1	0
Ph	3	2	0	0	1	0
SS	5	5	0	0	0	0
Total	121	93 (77%)	20 (17%)	4 (3%)	3 (2%)	1 (1%)

Because the majority of Caltech graduate students come for a Ph.D., most M.S. degree holders plan to remain at Caltech to complete their studies.

Of the 93 continuing toward a Ph.D., only three will transfer to another school.

Most of the 20 who have accepted employment reported receiving several offers. Some of the employers were: Amgen, Anubis, Caltech, JPL, UCLA, Oracle, Allied-Signal,

Altera, Vitesse, idealab!, Lockheed-Martin-Missiles & Space, and Credence.

One student recorded in the Other section is returning to his home country to start his own business.

+ Includes a student receiving both a B.S. and M.S. degree.

Engineering

Each year a small number of Engineer degrees are awarded in selected engineering specialties. The work includes advanced studies and research beyond the Masters. This year of the three students who received the Engineer degree, two accepted industrial positions.

Degree	Option	Number	Grad School	Employment	No Information
Engineer	Ae	1	0	1	0
	CE	1	0	1	0
	ME	1	0	0	1
Total		3	0 (0%)	2 (67%)	1 (33%)

PLANS OF GRADUATES



Ph.D.

The majority of the 195 Ph.D. graduates divided their job search between academic and industrial positions and several in the uncommitted category had not yet decided among several excellent offers. This year, 100 Ph.D.s accepted academic positions and 70 accepted industrial positions.

There were 12 graduates who accepted tenure-track faculty positions and 88 who accepted postdoctoral positions. Some of the universities where our graduates accepted tenure-track positions were: Univ. of Minnesota, Univ. of Illinois at Chicago, Rice Univ., Univ. of Pennsylvania, Univ. of Nairobi, Georgia Tech, Univ. of Wisconsin, and Ohio State Univ., and Caltech.

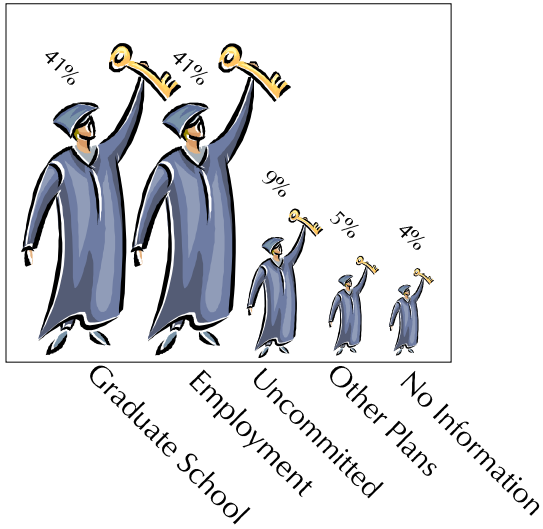
The majority of degree candidates in the academia category, however, accepted postdoctoral positions. A number were for positions worldwide, including National Univ. (Mexico), Institut für Biotechnologie (Switzerland), Canadian Institute for Theoretical Astrophysics (Canada), Univ. of Western Australia (Australia), Cambridge Univ. (England), Max Planck Institute for Gravitational Physics (Germany), and Univ. of Toronto (Canada).

Several organizations hired more than one Ph.D. including: General Electric, Los Alamos National Lab, Mitchell Madison, TRW, Toyon Research, McKinsey & Company, Allied Signal, and Applied Materials.

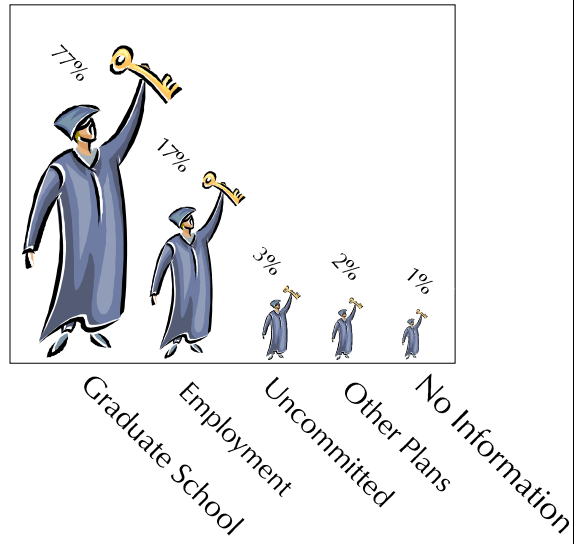
Option	Number	Graduate School	Employment				Other Plans	No Information
			Academic	Industrial	Uncommitted			
Ae	7	0	4	3	0	0	0	
AM	3	0	1	2	0	0	0	
AMa	5	0	2	2	0	1	0	
APh	10	0	2	6	1	1	0	
Ay	7	0	7	0	0	0	0	
Bi	16	2	10	3	0	1	0	
CE	1	0	0	1	0	0	0	
Ch	37	0	24	12	0	1	0	
ChE	6	0	3	3	0	0	0	
CNS	8	0	6	1	1	0	0	
CS	8	0	3	4	1	0	0	
EE	10	0	5	5	0	0	0	
Env	8	0	4	1	3	0	0	
ES	1	0	1	0	0	0	0	
Ge	16	0	5	6	3	2	0	
Ma	6	0	1	1	3	1	0	
ME	5	0	2	2	1	0	0	
MS	4	0	1	3	0	0	0	
Ph	32	0	15	14	1	1	1	
SS	5	0	4	1	0	0	0	
Total	195	2 (1%)	100 (51%)	70 (36%)	14 (7%)	8 (4%)	1 (1%)	



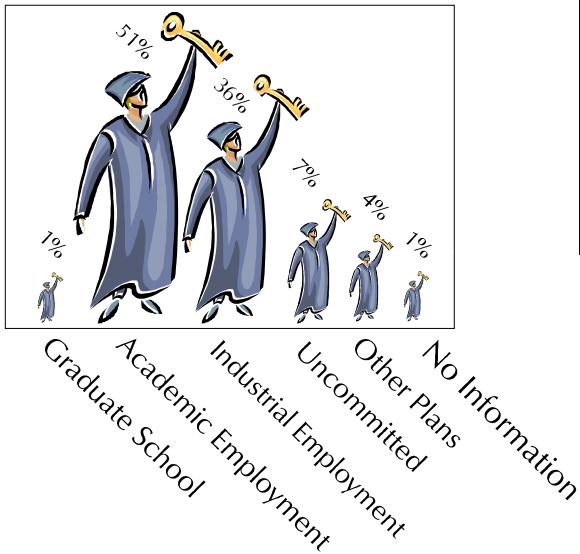
Plans of B.S. Graduates



Plans of M.S. Graduates



Plans of Ph.D. Graduates



SCHOOL CHOICES



B.S. GRADUATES

	O P T I O N												Total
	AMa	Aph	Ay	Bi	Ch	ChE	CS	EE	EAS	Ge	Ma	Ph	
ARIZONA													
Univ. of Arizona			1							1			2
CALIFORNIA													
Caltech				1				1	3	1		2	8
Stanford Univ.				1		1		3	3			1	9
Scripps Research Institute					1								1
University of California:													
*Berkeley		1			1	1		3	2		1		9
*Davis, School of Veterinary Medicine				1									1
*Irvine, College of Medicine				1					1				2
*Los Angeles						1							1
*Los Angeles, School of Medicine				1									1
*Santa Barbara		1						2				2	5
*San Francisco, School of Medicine				1									1
*Santa Cruz			1										1
*San Diego		1		2	2			1				1	7
Univ. of Southern California				2									2
HAWAII													
University of Hawaii at Manoa												1	1
ILLINOIS													
Univ. of Chicago, Pritzker School of Medicine					1								1
Univ. of Illinois, Urbana-Champaign						1		1					2
MARYLAND													
Johns Hopkins Univ.						1							1
MASSACHUSETTS													
Brandeis Univ.									1				1
Harvard Univ.		1										1	2
MIT		1						1				1	3
MICHIGAN													
Univ. of Michigan		1											1
MISSOURI													
St. Louis Univ., School of Medicine				1									1
Washington Univ., School of Medicine					1								1



	O P T I O N												Total
	AMa	APh	Ay	Bi	Ch	ChE	CS	EE	EAS	GE	Ma	Ph	
NEW JERSEY													
Princeton Univ.		2							1			1	4
NEW YORK													
Columbia Univ.												1	1
Cornell Univ.	1				1	1			2			1	6
NORTH CAROLINA													
Duke Univ., School of Law								1					1
Univ. of North Carolina, Chapel Hill					1				1				2
PENNSYLVANIA													
Carnegie Mellon Univ.						1	1					1	3
Jefferson Medical College				1									1
RHODE ISLAND													
Univ. of Rhode Island									1				1
TEXAS													
Univ. of Texas, Austin												1	1
WASHINGTON													
Univ. of Washington												1	1
Unknown University				2							1	1	4
Total	1	8	2	14	8	7	1	13	15	2	2	16	89

TEN YEAR SUMMARIES

B.S. 1989-1998

On the average just under 200 bachelors degrees are awarded each year and while there are small variations on an annual basis, both the number of graduates in each option and the career choices are quite stable over time.

Each year several graduates receive degrees in more than one option. Only the primary option is counted in these tables.

55-57% of the degrees are in Engineering and Applied Science

21-23 % in Physics, Math and Astronomy

7-9% in Biology

9-10% in Chemistry and Chemical Engineering

2% in Geology and Planetary Sciences

1% in Humanities and Social Sciences

The number of graduates continuing their education immediately after graduation is also quite consistent, at over 50% during the past 20 years. Those with degrees in the sciences, especially physics, mathematics, biology and chemistry, pursue advanced degrees at a rate of close to 70%, while a large number of other graduates choose immediate employment. Other contacts with alumni also show that a significant number of graduates do continue their education at a later date.

Division and Option	School	Employment	Other	Total			
Engineering & Applied Science							
Applied Mathematics	21	57%	8	22%	8	22%	37
Applied Physics	68	64%	18	17%	21	20%	107
Electrical Engineering	129	45%	110	39%	46	16%	285
Engineering & Applied Science	249	35%	283	40%	179	25%	711
Division Total	467	41%	419	37%	254	22%	1140
Physics, Mathematics & Astronomy							
Astronomy	17	59%	8	28%	4	14%	29
Mathematics	63	63%	13	13%	24	24%	100
Physics	189	69%	30	11%	56	20%	275
Division Total	269	67%	51	13%	84	21%	404
Biology							
Biology	143	64%	30	13%	51	23%	224
Division Total	143	64%	30	13%	51	23%	224
Chemistry & Chemical Engineering							
Chemical Engineering	50	59%	23	27%	12	14%	85
Chemistry	79	66%	20	17%	21	18%	120
Division Total	129	63%	43	21%	33	16%	205
Geological & Planetary Sciences							
Geology	25	52%	7	15%	16	33%	48
Division Total	25	52%	7	15%	16	33%	48
Humanities & Social Sciences							
Economics	9	38%	10	42%	5	21%	24
Literature	1	25%	0	0%	3	75%	4
Social Science	1	20%	2	40%	2	40%	5
Independent Studies Program	2	40%	2	40%	1	20%	5
Division Total	13	38%	14	37%	11	29%	38
Caltech Total	1046	51%	564	27%	449	22%	2059



**M.S.
1989-1998**

While Caltech offers a masters degree in many options, most students come to Caltech for a Ph.D. Electrical Engineering and a few other options in the Engineering and Applied Science Division offer a masters degree that is normally completed in one year of coursework.

The variation in the number of graduates receiving a masters degree and the number accepting employment is accounted for primarily by the changing number of students in the M.S. Electrical Engineering program. The number of M.S. graduates seeking and accepting employment has decreased substantially since 1986. That was the last year with a large number of MSEE graduates and the last year of extremely active hiring by aerospace companies.

Year	Graduates	School	Work	Other	Uncommitted
1989	151	63%	25%	7%	4%
1990	156	61%	23%	5%	10%
1991	159	74%	16%	3%	6%
1992	132	75%	15%	5%	3%
1993	160	78%	13%	4%	4%
1994	116	72%	15%	3%	10%
1995	117	78%	12%	6%	3%
1996	105	81%	14%	1%	4%
1997	104	75%	19%	2%	4%
1998	121	77%	17%	2%	3%

Note: Total percentages do not reflect those graduates for whom information was not available.

TEN YEAR SUMMARIES

Ph.D. 1989-1998

The graduate program has grown slightly over the past ten years from just under 1000 in 1986 to a peak of 1152 in 1993. Over the past ten years the percentage of academic positions accepted has ranged from 51% to 63% and industrial positions from 29% to 41%. These variations are based on a multitude of factors, including comparative salaries offered, availability of appropriate positions, personal career issues and the perceived long term opportunities.

During this period, the salaries for academic positions have become more competitive with industrial salaries. Yet more new Ph.D.s are frequently having to take postdoctoral positions before obtaining a tenure track or career industrial position. This can be seen in the Ph.D. salary tables beginning on page 28.

Year	Ph.D.'s	Academic Positions	Percent	Industrial Positions	Percent
1989	134	85	63%	40	30%
1990	148	86	58%	49	33%
1991	153	90	58%	45	29%
1992	134	70	52%	55	41%
1993	158	81	51%	62	39%
1994	151	81	54%	54	36%
1995	166	93	57%	58	34%
1996	164	88	54%	54	33%
1997	173	81	47%	76	43%
1998	195	100	51%	70	36%

Note: Total percentages do not reflect those graduates for whom information was not available or had other plans

SALARY SUMMARY



There were more reported industrial offers to B.S. graduates than in previous years. All graduates, except M.S. graduates showed a significant salary increase in the acceptances. These averages continue to be higher than the national averages prepared by the National Association of Colleges and Employers.

As is frequently the case, Caltech graduates do not always accept the highest offer, since the average salary accepted can be slightly less than the average salary offered. Because salaries are not always reported by graduates or interviewing companies, one or two offers that are either very high or very low can affect the average significantly. Offers also can vary greatly depending on the discipline and the special qualities of the individual candidates.

The salary information reported in the following tables by degree level and option offers a more accurate picture.

Degree	Year	Number	Offers		Acceptances		
			Mean	Increase	Number	Mean	Increase
B.S.	1994	45	35,895	-0.1%	30	36,083	3.9%
	1995	62	37,784	5.2%	36	37,871	4.9%
	1996	95	41,128	8.9%	45	39,409	4.1%
	1997	101	43,443	5.6%	48	43,657	10.8%
	1998	124	47,551	9.5%	69	46,404	6.3%
M.S.	1994	16	44,075	7.7%	13	44,246	1.3%
	1995	19	42,825	-2.8%	10	41,976	5.1%
	1996	8	45,622	6.5%	5	45,928	9.4%
	1997	12	55,541	21.7%	9	51,222	11.5%
	1998	12	46,925	-15.5%	8	49,625	-3.1%
Ph.D. Industrial	1994	42	56,550	-2.5%	27	55,577	7.1%
	1995	62	61,478	8.7%	38	59,438	6.9%
	1996	50	61,911	0.7%	30	64,000	7.7%
	1997	90	65,802	6.3%	46	64,962	1.5%
	1998	85	73,887	12.3%	45	70,598	8.7%

SALARIES

B.S.

This year 69 students reported salaries for a total of 124 job offers. Twenty-one of the 90 students accepting full time employment, however, did not report their salary. Salaries reported at the low end of the range were primarily laboratory research positions at universities and non-profit organizations. The majority of the offers from both large and small companies were in the \$40,000- \$59,000 range. Twenty-two offers of \$60,000 and above were reported.

Salaries Offered

Option	Number	Salary Ranges									Mean
		Under 34,999	35,000-39,999	40,000-44,999	45,000-49,999	50,000-54,999	55,000-59,999	60,000-64,999	65,000-69,999	70,000+	
AMa	1		1								
APh	2			1	1						
Ay	1	1									
Bi	5	5									24,147
ChE	4				3		1				
EE	14			4	6	1		3			48,926
Eng	78	3	2	8	25	12	10	8	9	1	50,829
Ma	6	2	2	1	1						31,936
ME	9		1	4	2	1			1		45,856
Ph	4	1			3						
Total	124	12	6	18	41	14	11	11	10	1	47,551

Salaries Accepted

Option	Number	Salary Ranges									Mean
		Under 34,999	35,000-39,999	40,000-44,999	45,000-49,999	50,000-54,999	55,000-59,999	60,000-64,999	65,000-69,999	70,000+	
AMa	1		1								
APh	1				1						
Ay	1	1									
Bi	5	5									24,147
ChE	4				3	1	1				
EE	8			1	5	6		1			49,183
Eng	35	1	1	4	9		4	5	5		51,504
Ma	5	1	2	1	1	1					35,936
ME	6		1	2	1				1		47,450
Ph	3	1			2						
Total	69	9	5	8	22	8	5	6	6	0	46,404

Note: Mean figures are not calculated for options with less than five offers.



Over the past several years the number of masters degree graduates seeking full time employment has been quite small. Consequently, the number of reported offers has been very low. There were eight students reporting twelve offers. However, 12 students of the 20 who accepted full time employment did not report their salary. Most salaries offered ranged from \$42,000 to \$51,000.

M.S.

Salaries Offered

Option	Number	Salary Ranges						Mean
		Under 41,999	42,000-44,999	45,000-47,999	48,000-50,999	51,000-53,999	54,000+	
Ay	1	1						
CE	4	1	3					
ChE	1			1				
EE	5			2	1		2	52,200
ME	1				1			
Total	12	2	3	3	2	0	2	46,925

Salaries Accepted

Option	Number	Salary Ranges						Mean
		Under 41,999	42,000-44,999	45,000-47,999	48,000-50,999	51,000-53,999	54,000+	
CE	1		1					
ChE	1			1				
EE	5			2	1		2	52,200
ME	1				1			
Total	8	0	1	3	2	0	2	49,625

Note: Mean figures are not calculated for options with less than five offers.

SALARIES

Ph.D.

Salary offers to Ph.D. candidates are grouped into three separate categories because of the varying nature of the employers, positions and salaries. Industrial offers include both career and two- to three-year industrial postdoctoral positions; but since the salaries vary by a significant amount, about \$12,000 per annum, they are reported in separate tables.

While these salary tables do provide valuable information they are not complete as 23 of the 70 graduates who reported taking industrial positions did not divulge their salary.

The average industrial salary offer ranges from \$60,000 to \$80,000.

The range of offers for faculty positions also varies greatly depending on the discipline, the type of school and the location. Several offers this year were from universities outside of the United States. These tables also offer only part of the picture as 43 of the 100 graduates who accepted academic positions did not report their salary.

Industrial Salaries Offered

Option	Number	Salary Ranges										Mean
		Under 49,999	50,000-59,999	60,000-69,999	70,000-79,999	80,000-89,999	90,000-99,999	100,000-109,999	110,000-119,999	120,000-129,000	130,000+	
Ae	8		2	4	1	1						64,000
AM	4			2	2							
AMa	3			1			2					
APh	8	1	1	2	3	1						64,500
Bi	2				1		1					
CE	1			1								
Ch	14		3	9	1						1	67,021
ChE	2			2								
CS	11				5		1	1	1	2	1	97,909
EE	5	1	1		3							60,800
Env	1		1									
Ge	4	2			1					1		
ME	3			2	1							
MS	1					1						
Ph	12	2	2		3			3	1		1	81,250
SS	6	4						1			1	79,167
Total	85	10	10	23	21	3	4	5	2	3	4	73,887

Note: Mean figures are not calculated for options with less than five offers.

Industrial Salaries Accepted

Option	Number	Salary Ranges										Mean	
		Under 49,999	50,000-59,999	60,000-69,999	70,000-79,999	80,000-89,999	90,000-99,999	100,000-109,999	110,000-119,999	120,000-129,000	130,000+		
Ae	3			2	1								
AM	2			1	1								
AMa	2			1				1					
APh	5		1	1	3								65,600
Bi	2				1			1					
CE	1			1									
Ch	8		2	5								1	70,600
ChE	2			2									
CS	3							1	1			1	
EE	2	1	1										
Env	1		1										
Ge	3	2			1								
ME	2			1	1								
MS	1						1						
Ph	7	1	2		2				1			1	77,143
SS	1	1											
Total	45	5	7	14	10	1	3	2	0	0	3	70,598	

Industrial Postdoctoral Salaries Offered

Option	Number	Salary Ranges			Mean
		Under 39,999	40,000-49,999	50,000+	
Ch	4	1	3		
CS	1			1	
Total	5	1	3	1	42,400

Industrial Postdoctoral Salaries Accepted

Option	Number	Salary Ranges			Mean
		Under 39,999	30,000-49,999	50,000+	
Ch	1	1			
CS	1			1	
Total	2	1	0	1	

Note: Mean figures are not calculated for options with less than five offers.

SALARIES



Academic Salaries Offered

Option	Number	Salary Ranges					Mean
		Under 54,999	55,000-58,999	59,000-62,999	63,000-66,999	67,000+	
AM	2		1	1			
CS	3		1	2			
EE	5	1	2	2			55,000
Env	4	1		2			
ES	1				1	1	
SS	1					1	
Total	16	2	4	7	1	2	61,750

Academic Salaries Accepted

Option	Number	Salary Ranges					Mean
		Under 54,999	55,000-58,999	59,000-62,999	63,000-66,999	67,000+	
AM	1			1			
CS	1			1			
EE	1			1			
Env	2			1	1		
ES	1					1	
SS	1					1	
Total	7	0	0	4	1	2	67,714

Note: Mean figures are not calculated for options with less than five offers.

Academic offers are also separated into tenure-track faculty and postdoctoral scholar positions. The postdoctoral positions are usually of one to three years in duration and salaries are usually in the \$20,000 to \$40,000 range.

The range of offers for faculty positions also varies greatly depending on the discipline, the type of school and the location. Several offers this year were from universities outside of the United States. These tables also offer only part of the picture as 43 of the 100 graduates who accepted academic positions did not report their salary.

Academic Postdoctoral Salaries Offered

Option	Number	Salary Ranges							Mean
		Under 24,999	25,000-29,999	30,000-34,999	35,000-39,999	40,000-44,999	45,000-49,999	50,000+	
Ae	2			2					
Ay	9			2	6	1			35,167
Bi	8	5	3						24,375
Ch	22	8	11	2		1			26,159
ChE	2		2						
CNS	2		1		1				
CS	1				1				
EE	2				2				
GE	4			1	3				
ME	2		1				1		
MS	1			1					
Ph	12			4	5	3			35,896
SS	2						1	1	
Total	69	13	18	12	18	5	2	1	31,178

Note: Mean figures are not calculated for options with less than five offers.

SALARIES



Ph.D.

Academic Postdoctoral Salaries Accepted

Option	Number	Salary Ranges							Mean
		Under 24,999	25,000-29,999	30,000-34,999	35,000-39,999	40,000-44,999	45,000-49,999	50,000+	
Ae	2			2					
Ay	6			2	3	1			34,667
Bi	5	2	3						24,600
Ch	16	6	7	2		1			26,344
ChE	2		2						
CNS	1				1				
CS	1				1				
EE	2				2				
GE	2			1	1				
ME	1		1						
MS	1			1					
Ph	9			3	4	2			36,083
SS	2						1	1	
Total	50	8	13	11	12	4	1	1	31,315

Note: Mean figures are not calculated for options with less than five offers.



PostDoc

Each year about 300 new Ph.D. recipients come to Caltech for postdoctoral study. While many of them will be seeking a full time position in an academic institution at the completion of their work here, many are considering positions in business and industry and make extensive use of the CDC.

Sixty-five went through the CDC orientation workshop and participated in on-campus interviews and another 79 scheduled individual counseling appointments. Many also spent time in the library researching companies, watching the interviewing videotapes and reading job search materials. Postdoctoral scholars are able to utilize all the services of the CDC, including on-campus recruiting.

Most organizations seeking candidates at the Ph.D. level are equally interested in postdoctoral scholars and several reported excellent industrial offers this year. We survey postdoctoral scholars who had on campus interviews and their responses are reported here.

Industrial Salary Offers

Option	Number	Salary Ranges						Mean
		Under 39,999	40,000 - 49,999	50,000 - 59,999	60,000 - 69,999	70,000 - 79,999	80,000 +	
Ch	11	1	1	1	4	4		61,136
EAS	2			1	1			
Ph	5			1		2	2	85,600
Total	18	1	1	3	5	6	2	68,136

Academic Postdoctoral and Tenure-Track Salary Offers

Option	Number	Salary Ranges							Mean
		Under 24,999	25,000 - 29,999	30,000 - 34,999	35,000 - 39,999	40,000 - 44,999	45,000 - 49,999	50,000 +	
Ay	3				2			1	
Bi	2			1			1		
Ch	17	3	3	1	3*	4*	1*	2	36,468
EAS	2				1			1	
Ph	13		2	4	3	4			34,580
Total	37	3	5	6	9	8	2	4	36,621

* Includes one tenure-track offer.

APPENDIX



Academic Divisions & Options

Division of Biology

Biochemistry
Biology
Computation and Neural Systems

Division of Chemistry & Chemical Engineering

Chemical Engineering
Chemistry

Division of Engineering and Applied Science

Aeronautics
Applied Mathematics
Applied Mechanics
Applied Physics
Civil Engineering
Computer Science
Control and Dynamical Systems
Electrical Engineering
Engineering Science
Materials Science
Mechanical Engineering

Division of Geological and Planetary Sciences

Geological Sciences
Planetary Science

Division of Humanities and Social Sciences

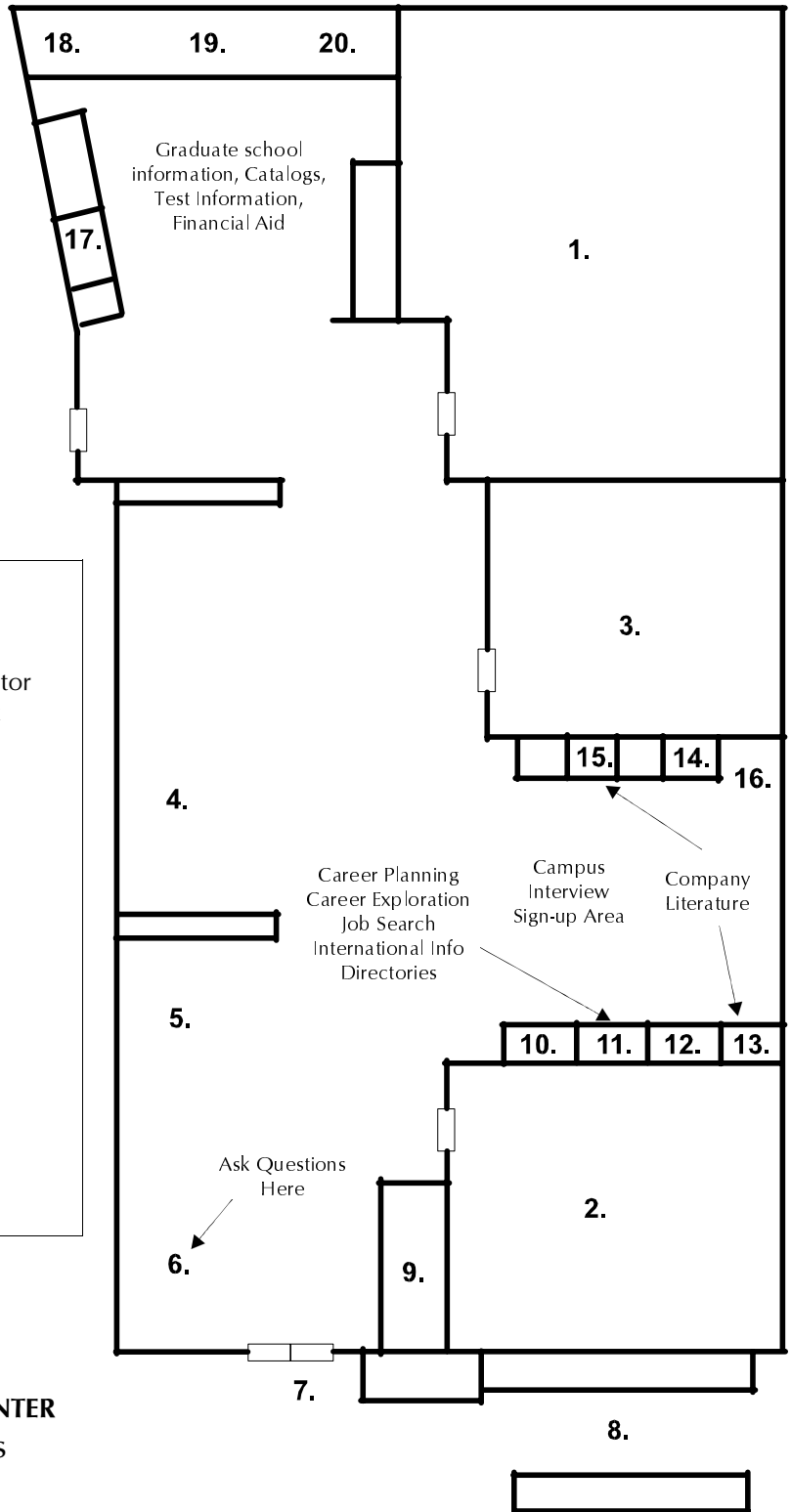
Economics
History
Independent Studies Program
Literature
Science, Ethics and Society
Social Science

Division of Physics, Mathematics & Astronomy

Astronomy
Mathematics
Physics

Option Abbreviation Guide

Ae	Aeronautics
AM	Applied Mechanics
AMa	Applied Mathematics
APh	Applied Physics
Ay	Astronomy
BiCh	Biochemistry
Bi	Biology
CDS	Control and Dynamical Systems
CE	Civil Engineering
Ch	Chemistry
ChE	Chemical Engineering
CNS	Computation and Neural Systems
CS	Computer Science
E&AS	Engineering and Applied Science
Ec	Economics
EE	Electrical Engineering
Eng	Engineering
Env	Environmental Engineering Science
ES	Engineering Science
Ge	Geology
H	History
ISP	Independent Studies Program
Lit	Literature
Ma	Mathematics
Ph	Physics
SES	Science, Ethics & Society
SS	Social Science
ME	Mechanical Engineering
MS	Material Science
Ph	Physics
SS	Social Science



- | | |
|-----|--|
| 1. | Sally J. Asmundson, Director |
| 2. | Amy Seidel Malak, Associate Director |
| 3. | Debi Tuttle, Intern |
| 4. | Dianne McLaughlin, Recruiting Coordinator |
| 5. | Cathreen Oracion, Department Assistant |
| 6. | Lois Russell, Receptionist
Linda Powell, Receptionist |
| 7. | Entrance |
| 8. | Free Literature |
| 9. | Free Literature and Announcements |
| 10. | Career Planning |
| 11. | Job Search |
| 12. | Recruiting and Job Listings |
| 13. | Company Information |
| 14. | ASPIRE Listings |
| 15. | Company Literature Files |
| 16. | JobTrak Job Listings |
| 17. | Catalogs, Grad Schools, Med Schools |
| 18. | TV-VCR, Videotapes |
| 19. | Typewriter |
| 20. | Computers |

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