

Postdoctoral Scholar's Handbook

*California Institute
of Technology*

This handbook summarizes the more important principles, policies, and administrative procedures of the Institute concerning Postdoctoral Scholars, Senior Postdoctoral Scholars, and Visitors. It may be modified from time to time by special memoranda as revisions or additions become necessary.

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Provost
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Chapter 1.

The California Institute of Technology

The California Institute of Technology, incorporated in 1891, is a privately endowed, nonprofit educational institution of university rank devoted to undergraduate and graduate instruction and research in science, engineering, and the humanities and social sciences. For financial support, the Institute depends on income from endowment funds, tuition fees, gifts, and contracts or grants involving federal, state, and local agencies. Research performed under such contracts or grants is chosen to be appropriate to the Institute's general program of advancing basic knowledge or else is responsive to an urgent public need.

As a private institution, the Institute is free to pioneer in education and research. It selects its own students and thus can concentrate on quality. It is able to conserve its resources for the most effective development of its students and for those programs of instruction and research that will make the greatest contribution to the acquisition of knowledge.

The History of the Institute

The Institute traces its origin to Throop, University, which the Honorable Amos G. Throop founded in Pasadena in 1891 to supply instruction in manual training, domestic science, and kindred subjects, and to prepare its students for teaching positions in these fields. Throop Polytechnic Institute (as it was known after 1892) offered college-level work leading to the bachelor's degree and, to round out its educational program, also maintained an academy and an elementary school.

Thus it continued for nearly two decades, housed in three buildings on a campus in the current business section of Pasadena. In 1907, under the influence of Dr. George Ellery Hale, then the Director of the Mount Wilson Observatory, the aim of the institution was redefined. It was to concentrate on engineering training, with the possibility that it might in time, with the friendly association of the Mount Wilson Observatory, develop into a center for instruction and research in both pure and applied science.

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In 1910, the Institute moved into Pasadena Hall (later Throop Hall), the first building on the present campus. For the next decade it continued primarily as an engineering college (known after 1913 as Throop College of Technology). The direction in which it was to develop, however, was broadened by the completion of the Gates Chemistry Laboratory in 1917 and the inauguration of instruction and research in chemistry and chemical engineering in the same year under the direction of Dr. Arthur Amos Noyes, Professor of Physical Chemistry and former Acting President of the Massachusetts Institute of Technology. Also in 1917, Dr. Robert A. Millikan, Professor of Physics at the University of Chicago, agreed to spend a part of each year at Throop developing a program of graduate instruction and research in physics.

World War I necessitated a temporary diversion of energies, but after its close, plans for reorganization and development were taken up again. In 1920, the name Throop College of Technology was changed to the California Institute of Technology. The following year, with the assurance of a permanent endowment fund and a physics laboratory, Dr. Millikan came to the Institute as Chair of the Executive Council.

In that same year, Noyes, Hale, and Millikan formulated the basic educational policy of the Institute. This policy, adopted by the Board of Trustees on November 29, 1921, has been largely responsible for the present character of the Institute and resulted in a graduate school that is recognized as one of the country's outstanding centers for advanced study and research. Similarly, an undergraduate school of distinctive quality developed, which merits recognition as making a contribution to collegiate education in science and engineering fully comparable to that which the graduate school makes to more advanced professional training.

For the five years beginning with the summer of 1940, the major part of the Institute's personnel and facilities were devoted to national defense for World War II. A part of the war effort involved research in rockets and jet propulsion, and the laboratories set up for these studies continue as the Jet Propulsion Laboratory in the upper Arroyo Seco. At the end of the war, the Institute returned rapidly to its primary objectives of undergraduate and graduate instruction and fundamental research.

In 1945, Dr. Millikan retired from the chairmanship of the Executive Council to become Vice President of the Board of Trustees. The following year, Dr. Lee A. DuBridge was elected President of the Institute and served in that position until 1969. He was succeeded first by Dr. Robert F. Bacher as Acting President and then by Dr. Harold Brown. In January 1977, Dr. Brown became the Secretary of Defense and Dr. Robert Christy, Caltech's Vice President and Provost, became Acting President. On July 1, 1978, Dr. Marvin L. Goldberger became President. Dr. Goldberger retired from the Presidency in 1987, and was succeeded by Dr. Thomas E. Everhart, who became President on September 1,

1987. Dr. David Baltimore succeeded Dr. Everhart as President on October 15, 1997 and is the current president of Caltech.

The Institute has moved rapidly ahead in improving the quality of its education and research in all fields. A complete account of these developments can be found in the annual *Caltech Catalog*.

Educational Policies and Objectives

The educational policy of the Institute has not changed from that formulated by Caltech's three founders. It is a wise and still pertinent statement of educational philosophy. Its substance is stated here.

"The four-year undergraduate engineering courses of the Institute shall include an unusually thorough training in the basic sciences of physics, chemistry, and mathematics, and a large proportion of cultural studies; the time for this being secured by eliminating some of the more specialized engineering subjects, which may be pursued in graduate courses by students desiring further professional training. It is hoped in this way to make the undergraduate courses of the Institute a combination of a fundamental scientific training with a broad cultural outlook, which will afford students with scientific interests a type of collegiate education which avoids the narrowness common with students in technical schools and the superficiality and the lack of purpose of many of those taking academic college courses. The instruction in the basic engineering subjects will, however, be maintained at the highest efficiency so that the graduates of the engineering courses may be prepared for positions as constructing, designing, operating, and managing engineers. Provision will also continue to be made, especially in the four-year courses of Physics and Engineering, Chemistry and Chemical Engineering, for the training of students for positions in the research and development departments of manufacturing industries.

"Every effort shall be made to develop the ideals, breadth of view, general culture, and physical well-being of the students of the Institute. To this end the literary, historical, economic, and general scientific subjects shall continue to be taught by a permanent staff ... of mature judgment and broad experience; the regular work in these subjects shall be supplemented by courses of lectures given each year by people of distinction from other institutions; the ... assemblies addressed by leading people in the fields of education, literature, art, science, engineering, public service, commerce and industry shall be maintained as effectively as possible; moderate participation of all students in student activities of a social, literary, or artistic character, as in the student publications, debating and dramatic clubs, musical clubs, etc., shall be encouraged; and students shall be required or encouraged to take regular exercise, preferably in the form of games or contests affording recreation Great importance is also

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attached to making the campus attractive in its architectural and landscape features, because of the influence of such surroundings on the students and on the public.

"In all the scientific and engineering departments of the Institute, research shall be made a large part of the work, not only because of the importance of contributing to the advancement of science and thus to the intellectual and material welfare of mankind, but also because without research the educational work of a higher institution of learning lacks vitality and fails to develop originality and creativeness in its students. To insure the development of research the Trustees will provide for it financially, not as is so often the case out of the residue that may be left after meeting the demands of the undergraduate work, but by duly limiting the extent of this work and by setting apart in advance funds for research and graduate study.

"In order that the policies already stated may be made fully effective as quickly as possible and in order that the available funds may not be consumed merely by increase in the student body, it is the intention of the Trustees, as previously announced, to limit the registration of students at any period to that number which can be satisfactorily provided for with the facilities and funds available. As students are not admitted on the basis of priority of application, but of a careful study of the merits of the individual applicants, the limitation has the highly important result of giving a select body of students of more than ordinary ability. A standard of scholarship is also maintained which rapidly eliminates from the Institute those who from lack of ability or industry are not fitted to pursue its work to the best advantage.

"For the same reasons it is the intention of the Trustees not to allow the work of the Institute to be extended into new branches of science or engineering until all the existing departments are brought to the highest efficiency and until the needs of student life are more fully provided for. This is in accordance with the policy pursued from the beginning of the Institute of undertaking only a few lines of work and doing these well. The Trustees consider that it is of more immediate importance to increase the salary scale, the staffs of instruction, and the laboratory facilities ... already established ... so that the undergraduate instruction may be improved, graduate courses offered, and research actively prosecuted. . . ."

Organization

The President of the Institute is elected by the Board of Trustees and is charged with the responsibility of administering the affairs of the Institute. The following officers are also approved by the Board of Trustees and are responsible to the President: Provost, Vice President for Business and Finance, Vice President for Development and Alumni Relations, Vice President for

Public Relations, Vice President for Student Affairs, General Counsel, Treasurer, Controller, Secretary of the Board of Trustees, and various other officers.

The Provost is the principal academic officer of the Institute. The Provost, aided by the Vice Provost, is responsible for the academic budget, faculty appointments, and promotions; acts as Dean of Faculty; serves as coordinator for curriculum development; acts for the President in his absence; and carries out such other academic duties as are assigned by the President.

The Vice President for Business and Finance is responsible for recommending and implementing policies concerning the Institute's business and financial operations.

The Vice President for Development and Alumni Relations is responsible for the staff functions involved in fund-raising, establishing and maintaining relations with the alumni association and the Associates, and related matters. The Vice President for Public Relations is responsible for the staff functions involved with press relations, publicity and government and community relations. The Vice President for Student Affairs is responsible for the various student administrative services and oversees the operation and organization of the student activities of the Institute. The Secretary of the Board of Trustees maintains the records of the Board of Trustees and performs such other duties as are directed by the Board.

Further information regarding the Board of Trustees and its committees and officers will be found in the Bylaws of the Corporation, available from the Secretary of the Board of Trustees.

For the work of instruction and research, the Institute is organized in six divisions, each under its own chair – the Division of Biology; the Division of Chemistry and Chemical Engineering; the Division of Engineering and Applied Science; the Division of Geological and Planetary Sciences; the Division of the Humanities and Social Sciences; and the Division of Physics, Mathematics and Astronomy.

The Institute Administrative Council (IAC) is composed of the principal academic and administrative officers of the Institute—the President, the Provost, the Vice President for Business and Finance, the Vice President for Development and Alumni Relations, the Vice President for Public Relations, the Vice President for Student Affairs, the Vice President and Director of the Jet Propulsion Laboratory, the Division Chairs, the General Counsel, the Vice Provost, the Chair of the Faculty, the Associate Vice President for Human Resources and Campus Services, the Assistant Vice President for Government and Community Relations, and others at the request of the President. The Institute Academic Council (IACC) is composed of the principal academic officers of the Institute—the President, the Provost, the Vice Provost, and the Division Chairs. The IACC is the Institute body charged with reviewing and

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approving academic appointments as well as the policies that guide the Institute's academic affairs.

Off-Campus Facilities

The Jet Propulsion Laboratory is a federally funded research and development center (FFRDC) owned by the National Aeronautics and Space Administration, and operated as a division of Caltech through a contract between NASA and Caltech, sometimes referred to as the Prime Contract. JPL's primary mission is to conduct challenging robotic space missions to explore our solar system, to increase knowledge of our planet and the universe, and to pave the way for human space exploration. JPL is headed by a Director who is a Caltech Vice President and responsible to the President of the Institute for the management of the Laboratory.

Astronomical observatories are operated by the Division of Physics, Mathematics and Astronomy: Palomar Observatory, San Diego County; Owens Valley Radio Observatory, Big Pine; Submillimeter Observatory, Mauna Kea, Hawaii; the W. M. Keck Observatories, Mauna Kea, Hawaii (operated in cooperation with the University of California); and the Laser Interferometer Gravitational – Wave Observatory (LIGO), Livingston, LA and Richland, WA. The Biology Division operates the William G. Kerckhoff Marine Laboratory in Corona del Mar. The Division of Geological and Planetary Sciences operates the Kresge Building, Seismological Laboratory in Pasadena.

Support Groups

Several groups are important means of support and of maintaining relations between the Institute and the local and national communities, but are not directly involved in teaching and research.

The Associates of the California Institute of Technology is comprised of public-spirited individuals interested in the advancement of learning. The nonprofit organization has been incorporated for the purpose of promoting the interests of the California Institute of Technology.

The Industrial Associates, a group of companies that have chosen to participate in an organized plan of cooperation with the Institute, is based on common interests in scientific and engineering research and in the training of scientists and engineers. This cooperation is maintained through an exchange of visits by personnel of the companies and faculty members, by special conferences, and by distribution of research reports.

The Earthquake Research Affiliates developed informally from a program designed for a group of companies that sponsored research at the Institute's Seismological Laboratory for many years. Member organizations are

kept informed of current research in seismology and earthquake engineering by distribution of publications, conferences, field trips, and informal exchanges with the Institute Faculty.

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Rules and Regulations Concerning Postdoctoral Scholars and Senior Postdoctoral Scholars

Postdoctoral and Senior Postdoctoral Scholars form a vital part of Caltech's research community. By engaging in research beyond their Ph.D. training they advance knowledge in science and engineering while adding to their own experience and education. Postdoctoral and Senior Postdoctoral Scholars also contribute to the education of Caltech undergraduates and graduate students. They always work under close supervision of one or more Caltech professorial faculty members. Postdoctoral scholars and senior postdoctoral scholars are a separate group, neither faculty, nor staff, nor students.

Academic Policies and Procedures

The Institute's policies and procedures on academic issues such as technology transfer and research fraud apply to the professorial faculty, research faculty, postdoctoral scholars, students, and staff. To the extent that postdoctoral scholars participate as principal investigators or as key members of research teams for sponsored projects, they are governed by the Institute's policies and procedures for sponsored research. The policies and procedures on academic issues and sponsored research are reproduced herein in Chapter 3.

Access to Data, Programs and Samples

The Institute places no restrictions on the rights or activities of postdoctoral scholars in their subsequent careers after they leave Caltech. If departing postdoctoral scholars require access to research data, computer programs, material samples, biological specimens, or other research materials which they helped develop while at Caltech, the Institute will negotiate with the departing individual to provide continuing reasonable access to such materials, appropriate to the circumstances and consistent with its legal requirement to maintain originals of such data and other results arising from sponsored research.

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Administrative Policies and Processes

The Institute has in place policies concerning administrative issues such as use of the Institute's name, lobbying, travel, conflict of interest, conflict of commitment, illegal harassment, and filing of grievances (see Chapter 3). With appropriate consideration of the status of the individuals where that is relevant, these policies apply to all members of the Caltech community.

Affirmative Action

The quality of instruction and research at the Institute depends first and foremost on the quality of its employees whether professors, administrators, staff, researchers, postdoctoral scholars, engineers, or artisans. To maintain its stature, the Institute must give its highest priority to searching for and promoting employees of exceptional qualifications at all levels. Within this context, the California Institute of Technology is an equal opportunity employer and, in every respect, is committed to an active Affirmative Action Program.

It is the stated policy of the Institute that all faculty and staff employees and applicants shall receive equal consideration and treatment. All recruitment, hiring, placements, transfers, and promotions will be on the basis of qualifications of the individual for the position being filled regardless of race, color, religion, national origin, age, sex, marital status, sexual orientation, nondisqualifying handicap or whether the individual is a disabled veteran or a veteran of the Vietnam Era. All other personnel actions such as compensation, benefits, layoffs, returns from layoff, termination, training (including apprenticeship and tuition assistance), and social and recreational programs are also governed by this policy.

In addition, the many federal and state laws, and regulations issued thereunder, which bar discrimination in employment and related activities, are also applicable.

The objective of the Institute's Affirmative Action Program is wherever possible to recruit actively and include for consideration for employment members of minority groups, women, veterans, and the handicapped. All decisions on employment and promotions must be made solely on the individual's qualifications (merit), bona fide occupational qualifications for the job in question, and the reasonableness of any necessary job accommodations. Any person needing additional information or assistance concerning the application of federal and state laws and regulations should contact the Provost's Office.

Appointments and Reappointments

Terms

All appointments must be sponsored or co-sponsored by a member of the professional faculty. Appointments are normally made in increments of one year; however, multi-year appointments are optional. The rank of postdoctoral scholar can be renewed up to a maximum of six years.

Due to the intensity of commitment required of postdoctoral scholars, the Institute makes such appointments with an expectation they will devote full-time to the research and education programs they have established with their faculty sponsors. For that reason, postdoctoral scholar appointments are made on a full-time basis only. Scholars may hold no other concurrent appointment(s). In rare circumstances, and only with approval of the faculty sponsor, Division chair, and Vice Provost, a postdoctoral scholar may be permitted to take on an additional assignment, the activities of which must be consistent with and supportive of her or his research.

Postdoctoral scholars who have held this rank for a minimum of one year may be promoted to the rank of senior postdoctoral scholar. The following documents are required for such appointments: curriculum vitae with publications and supporting memos from the faculty sponsor and Division Chair. Time served in the ranks of postdoctoral scholar and senior postdoctoral scholar combined cannot exceed a maximum of six years.

Persons who have held postdoctoral positions for a minimum of one year at other institutions may be appointed directly to the senior postdoctoral scholar rank. For such appointments the following documents are required: curriculum vitae with publications and letters of reference, and memos from the faculty sponsor and Division Chair. The position may be held for a maximum of six years.

Salary

Minimum postdoctoral scholar salary is reviewed and determined each year by the Provost with the concurrence of the Institute Academic Council (IACC).

Limitations

1. Postdoctoral scholars or senior postdoctoral scholars may be promoted to senior research fellow. Promotion from either position to senior research fellow requires a divisional committee review that includes three external letters of reference and approval by the IACC. In no instance may the combined period of appointment as postdoctoral scholar, senior postdoctoral scholar, and senior research fellow exceed a total of nine years.

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2. Caltech graduate students may be appointed postdoctoral scholars for up to one year, for the purpose of “tying up loose ends.” Continuation beyond one year is strongly discouraged. Any appointment beyond the initial one year period requires IACC approval.
3. Completion of all requirements for a Ph.D. degree or its equivalent is required for virtually all appointments. Candidates who have not completed their Ph.D. may be appointed temporarily to a visiting or other non-academic position.

The Standards for Notice

Notice to a postdoctoral scholar or senior postdoctoral scholar of an intention to end an appointment prior to its expiration date is to be given in writing in accordance with the following standards:

1. For those who have been employed by the Institute for less than a year, the advance notice shall be three months;
2. For those who have been employed by the Institute at least one year but less than two years, the advance notice shall be six months, and
3. Those with two or more years at the Institute shall receive notice or such termination at least one year in advance.

In cases where termination of an appointment is for reasons of moral turpitude or other serious violation of Institute policy or practice, termination may be immediate and without prior notice.

Processes and Communication

A faculty sponsor normally initiates a postdoctoral scholar’s appointment or reappointment by submitting a nomination to the appropriate Division Chair. If the Division Chair approves the nomination, it is sent to the Postdoctoral Scholars Section of the Office for Human Resources for processing.

Appointments and reappointments are communicated to each individual concerned by means of an official letter signed by the President or Vice Provost. The recipient must sign and return to the Postdoctoral Scholars section of the Office of Human Resources an acceptance copy before the appointment can be effective.

Completion of Postdoctoral Scholar Appointments

The Institute will provide departing postdoctoral scholars with certificates showing the start and end dates of their research experience when:

1. The postdoctoral scholar has performed research at Caltech for a minimum of six (6) months,

2. The scholar completes the period in good standing, and
3. The postdoctoral scholar's faculty sponsor(s) concur with and sign certificate.

Benefits

Institute Facilities and Resources

Postdoctoral scholars of both ranks have access to Caltech libraries, computing facilities, and all Institute resources available to non-academic employees and enumerated in Chapter 4 of this Handbook. In addition, they are eligible for membership in the Athenaeum, they may sign up to use the athletic facilities, they are entitled to free unassigned parking, and to graduate housing on a space-available basis.

Fringe Benefits

1. Medical and Dental Insurance. Medical and dental coverage is the same as that offered to all other employees and their families. To be eligible for such coverage, a postdoctoral scholar must have a minimum monthly salary of at least \$1,000 or an offset by external funding source(s) of funding. Regardless of the source of funding support, postdoctoral scholars are to be provided an opportunity to enroll in Caltech's health and dental insurance plans.
2. Other Health and Welfare Programs. Depending on their source(s) of funding, Postdoctoral scholars may participate in other Institute benefit programs such as long-term disability insurance, personal accident insurance, life insurance, travel insurance, health care spending accounts, and dependent care spending accounts.
3. Retirement Plan. Neither postdoctoral scholars nor senior postdoctoral scholars participate in Caltech's TIAA-CREF retirement plan.
4. Tax-deferred Annuity. Depending on the tax status of their income, postdoctoral scholars and senior postdoctoral scholars may participate in Caltech's voluntary tax-deferred annuity savings program.
5. Leaves of Absence. Postdoctoral scholars of both ranks are entitled to:
 4. A 4-month unpaid leave of absence for pregnancy-related disability with reinstatement guaranteed, unless the position ceases to exist. During such periods the Institute will continue its contribution toward medical insurance coverage.

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5. Up to 12 weeks per year of unpaid family care leave after completion of one year of employment. During such periods of absence the Institute will continue its contributions toward medical insurance coverage. Family care leave is permitted in connection with birth or adoption of a child, placement of a foster child, or serious illness of the Scholar or the Scholar's spouse, child, or parents. Reinstatement is guaranteed, unless the position ceases to exist for reasons unrelated to the leave.

Vacation. Postdoctoral and senior postdoctoral scholars are entitled to one month of vacation a year. Initially, they may take up to three weeks of vacation after having completed nine months of service. Such vacation time must be scheduled with the faculty sponsor. The maximum amount of vacation a postdoctoral scholar may accumulate is 21 days (One month). Unused vacation will be paid at the time of termination.

6. Sick Leave. Sick Leave accrues at the rate of one day a month, or twelve days a year. Earnings from sick leave are coordinated with (offset by) income, if any, to which the postdoctoral scholar may be entitled either from Workers' Compensation or State Disability Insurance. Accrued, unused sick leave not used in any year may be carried forward to and used in subsequent years. Unused sick leave will not be paid at termination.

Caltech Postdoctoral Association

The Caltech Postdoctoral Association (CPA) is an independent organization of postdoctoral scholars that seeks to foster a sense of community, facilitate provision of resources for career development, and provide a framework for advocacy on issues important to postdoctoral scholars within the Caltech community. The CPA carries out its activities through several committees: a social committee, a career development committee, an advocacy committee, an organization and membership committee, and an outreach committee.

Educational Programs

Postdoctoral scholars cannot take Caltech classes for academic credit but can audit classes at the Institute with permission of their professorial sponsor and the instructor. In addition, the Institute endeavors to provide occasional, informal programs of direct interest to postdoctoral scholars on such career-oriented issues such as research funding, grant management, and scientific ethics. Postdoctoral scholars are not eligible for reimbursement of tuition expenses for classes taken at other colleges and universities.

Employment Status

Anyone holding the postdoctoral scholar or senior postdoctoral scholar rank is considered to be a temporary interim employee (it is hoped that certain loan repayments may be deferred for employees in this category.) Names of postdoctoral scholars will be listed in the *Caltech Catalog* in a special section for each division.

Grievance Procedures

A Postdoctoral or Senior Postdoctoral Scholar who has a serious, work-related complaint, should, first of all, if possible, seek informal resolution of the problem through discussion with colleagues and friends. A visit to the Caltech Ombuds Office is also strongly recommended. The Ombudsperson is a professional mediator and advisor, who may be able to help with problems of many kinds (see Chapter 3, page 4). In addition, Postdoctoral or Senior Postdoctoral Scholars with serious, work-related concerns may also contact the Director of Employee Relations in Caltech's Office for Human Resources. In addition to serving as one of the Institute officials designated in Caltech's Policy on Illegal Harassment, the Director of Employee Relations is responsible for addressing employees' work-related problems.

Should the Scholar wish to pursue a more formal grievance procedure, the first step is to take the matter up with the Scholar's faculty sponsor. It is the responsibility of the faculty sponsor to hear the complaint, look into it, and issue a prompt written response designed to resolve the problem.

If the Scholar finds the sponsor's response to be unsatisfactory, or if the faculty sponsor is directly involved in the issue in question, the same procedure should be pursued with the appropriate Division chair. If the Division Chair is involved (or if the Division Chair is the faculty sponsor) the procedure should be pursued with the Vice Provost.

If these steps fail to produce a satisfactory resolution, a formal Grievance Hearing Committee will be formed under the supervision of the Vice Provost. The Hearing Committee may consist of members of the faculty, Postdoctoral or Senior Postdoctoral Scholars, and other members of the Caltech community as deemed necessary and fair in the judgment of the Vice Provost.

The Hearing Committee should conduct hearings, take testimony from witnesses, examine documentation and otherwise do what seems necessary to resolve the problem. The Hearing Committee should seek advice from the Institute's General Counsel on how to proceed.

When the hearings are completed, the Hearing Committee should deliberate and, when it has reached a conclusion, meet with the President of the Institute to present its report and recommendations. The decision of the President will be final. A more detailed description of the Grievance Procedures

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may be obtained from the Postdoctoral Scholars Section of the Office for Human Resources, or from the office of each Division.

Harassment

The Institute attempts to maintain a climate of mutual respect among all members of the community. Harassment of any kind is not tolerated. Scholars who feel they have been harassed should lodge complaints promptly. The official policy statement and procedures regarding harassment is reproduced in this Handbook in Chapter 3, Page 16. Copies may also be secured from the Caltech Web Site, obtained from the Provost's Office or from any of the Divisional Offices. Scholars are encouraged to consult with their faculty sponsors, the Division Chairs, the Ombudsperson, or other appropriate persons regarding any instance of harassment.

Intellectual Independence and Academic Freedom

The Institute requires that postdoctoral scholars be accorded a significant degree of intellectual independence and academic freedom in the performance of their duties, recognizing that the amount of such freedom can vary with disciplines and circumstances and must be consistent with the required association with professorial sponsor's research program. Although an important part of many postdoctoral scholars' appointments is the opportunity to acquire further knowledge and to learn new skills under the guidance of a member of the professorial faculty, Caltech's policy is to help postdoctoral scholars develop their potential as independent scholars by providing them important measures of intellectual independence and academic freedom, and by providing them with appropriate recognition in publications and in other results of their research.

Postdoctoral scholars do not conduct independent research programs and normally they do not act as principal investigators on grant or contract proposals. Exceptions to this policy require the approval of the cognizant Division Chair and the Vice Provost.

All postdoctoral scholars and senior postdoctoral scholars are required to sign the Institute's non-academic patent agreement.

Patents and Intellectual Property

Postdoctoral scholars have the same rights and responsibilities concerning patents, copyrights, and royalties as professorial faculty, research faculty, students, and staff. Policies and procedures governing these matters are

given in Chapter 3, page 27 of this Handbook, the Faculty Handbook, and depending on the subject, in other administrative documents.

Postdoctoral Scholars Section of the Office for Human Resources

All Scholars must provide the Postdoctoral Scholars Section of the Office for Human Resources with the following information and promptly make notifications of any changes therein.

1. Changes in name and/or marital status.
2. Correct addresses and telephone numbers.
3. Forwarding addresses.
4. Honors and awards received.
5. Any change in visa status (inform the Office for International Scholar Services as well as the Postdoctoral Scholars Section of the Office for Human Resources).

Teaching, Consulting, and Professional Activities

Postdoctoral scholars are appointed to participate in the conduct of Institute programs in research. Participation in the teaching program occurs only occasionally, is voluntary, and requires the approval of the appropriate professorial sponsor. Temporary appointment to the rank of lecturer is also required, and compensation for teaching is normally returned to the research budget.

They may also consult outside the Institute or at JPL up to one day per calendar week, and participate in other outside professional activities with permission from their faculty sponsors(s). Consulting for an organization in which the Postdoctoral Scholar's sponsor has a significant involvement or significant financial interest requires the approval of the Division Chair. When permitted, such activities are governed by the policies reproduced or made reference to in this Handbook.

Scholars from Foreign Countries

Because of the temporary nature of their appointments, the Institute does not seek permanent residency for postdoctoral scholars. It will, however, assist postdoctoral scholars to obtain official documentation so they can pursue research beyond their Ph.D. training and add to their own experience and education. Further information on this topic is available from Caltech's Office of International Scholar Services.

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Administrative Policies and Procedures

Animal Research Involving Vertebrate Animals

The Committee on Animal Care and Use performs initial and continuing review of all research projects and activities in which the California Institute of Technology is concerned that involve the use of vertebrate animals or of tissues directly obtained from vertebrate animals. The committee is particularly concerned with procedures for the care, housing, use, and treatment of such animals.

Committee reviews are conducted in a manner to ensure the exercise of independent judgment of the members. Members will be excluded from judgment on projects or activities in which they have an active role or a conflict of interest.

No research project involving the use of vertebrate animals shall be undertaken and no application for funds for support of a research project involving vertebrate animals shall be submitted from the Institute without the knowledge and approval of this committee.

Academic Freedom and Tenure Committee Guidelines

The Academic Freedom and Tenure Committee (henceforth AFTC) deals with matters pertaining to infringement of academic freedom and appeals against non-reappointment of faculty or a decision not to grant tenure to a professor.

Faculty who wish to appeal a non-appointment or professors who wish to appeal a decision not to grant tenure must notify the Chair of the AFTC in writing within 30 days of being informed by the Provost of this decision. A member of the Caltech faculty or postdoctoral scholar who wishes the AFTC to investigate a possible infringement of academic freedom, must likewise contact the Chair in a timely manner, typically within a year of the alleged infringement.

If, after discussion with the Chair of the AFTC, the complainant still wishes the AFTC to consider the case, the hearing shall be conducted according to the following principles:

- a. Any member of the AFTC who has a prior involvement with the case or other conflict of interest, will be replaced by a former member of the

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- AFTC chosen by the AFTC Chair in consultation with the Chair of the faculty.
- b. To facilitate its considerations, the AFTC may delegate individual members or establish subcommittees to gather evidence and prepare recommendations for the full committee's consideration.
 - c. One member of the AFTC will be designated to maintain a record of the proceedings.
 - d. All committee members are expected to be present whenever the full committee discusses a case. A quorum for committee meetings comprises four of the six members in attendance.
 - e. In hearing a case, the committee shall review the entire record and may seek additional written or oral testimony related to the complaint, as is necessary. The committee's deliberations shall remain confidential to the committee until a final report is submitted.
 - f. The complainant and the person or persons against whom the complaint is primarily directed (for example, the President or Provost or Division Chair in the case of denials of reappointment or tenure) shall each be afforded the opportunity to meet with the committee before it completes its review, to present their views on the issues underlying the complaint. The complainant is entitled to be accompanied by another member of the Caltech faculty or a postdoctoral scholar as a non-participating observer during meetings with the committee.
 - g. At any stage of these proceedings, the complainant has the right to withdraw the complaint, at which point the AFTC's investigation will cease and any draft reports that may have been written will be destroyed. This provision is intended to facilitate informal resolution of the dispute.
 - h. If and when the committee completes its investigation and is ready to recommend upon the facts of the case, it will prepare a final written report. Copies of this report will be sent to the Chair and Vice Chair of the faculty, the grievant, and any additional person or persons against whom the complaint is primarily direct.

Candidacy for Public Office

Caltech recognizes that from time to time faculty members may choose to run for elective offices at the local, state, or national level. As long as this kind of activity can be carried out without seriously impairing the discharge of his or her duties, leave of absence will not be necessary; but when serious impairment is involved, a leave of absence without pay should be requested for the period of such involvement. The faculty member's supervisor should be kept informed as to the degree of involvement in this activity.

If a faculty member chooses to run for elective office, it is most important not to involve Caltech as an institution in the campaign. Caltech's status as a nonprofit, tax-exempt organization, as a corporation, and as a federal contractor is at stake. The faculty member should make certain that Caltech's name or seal is not used for political purposes, and that Caltech's equipment, services, or supplies are not used in the campaign (except, for example, at Graphic Arts, where there are established procedures for paying for these services). This limitation includes, among other things, reproduction machines, stationery, telephones, computers, mail service, and the like. Caltech's name may be used in the body (but not on the head) of written material intended for political purposes, where necessary to identify an individual or a group, e.g., the name of a Caltech club, but it should be clearly indicated that the people involved speak only as individuals and not for Caltech.

Classified Work on Campus

The Institute's policy is that no government contracts or grants are accepted if they require classified research to be carried out on campus. The Institute firmly intends to continue this policy.

However, in the past the Institute has undertaken classified studies at urgent government request in times of national emergency or critical need and would consider doing so if such circumstances arise in the future.

On several occasions, and on urgent government request, some campus facilities have been made available for limited periods for classified work by an off-campus group. This has been done when the facilities have not been available elsewhere, and the work could be done in a few days or at most a few weeks, and it was judged by the President of the Institute to be an emergency warranting an exception. Such work should be undertaken only after approval by the President upon recommendation of the responsible Division Chair for the specific instance.

Conflict of Interest, Conflict of Commitment, and Technology Transfer

Education and research in science and technology are central to the mission of Caltech. The Institute also wishes to serve society by encouraging businesses to transform results of research into products, processes, and services that will become available in the marketplace. Moreover, in many areas of research, contact with industry and entrepreneurship are essential for success, and need to be encouraged and rewarded. These legitimate interests of the Institute can sometimes come into conflict. For example, experience shows that research and teaching are best carried out in an environment that encourages the free exchange of ideas between all participants. On the other hand, private research sponsors may have good reasons for wanting to keep certain results

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secret, at least temporarily. To cite another example, the most effective means of transferring technology sometimes requires active participation by a Caltech researcher in a private enterprise, as an advisor or consultant. Researchers deserve to be compensated for their work and ideas in this process. However, activities of this kind may pose real or apparent conflicts with the integrity and objectivity of research at the Institute, and with the employee's primary professional commitment, which is to the Institute.

To help the faculty and all other investigators understand their duties and responsibilities in resolving these potential conflicts, the following principles and rules have been adopted by the Institute.

General Principles

Membership in the Caltech faculty involves a commitment that is full time in the most inclusive sense. Each faculty member is expected to accord complete professional loyalty to the Institute, and to arrange outside obligations, financial interests, and activities in such a way that they do not interfere with this primary, overriding commitment. This commitment applies as well to postdoctoral scholars. In addition, the Institute charges its faculty with a particularly heavy burden of responsibilities to safeguard the basic principles of research integrity, academic freedom, and public interest. When performing research sponsored by private interests, or negotiating with companies or entrepreneurs, or forming a company for commercial purposes, or engaging in any activity in which a conflict of interest may arise, it is the responsibility of the professorial faculty member¹ to protect:

1. The integrity of all research done at the Institute.
2. The good name of the Institute.
3. The academic freedom and economic rights of fellow faculty, students, postdoctoral scholars, and staff.

Students, postdoctoral scholars and research faculty must be able to discuss their work freely, present results at conferences and seminars, and so on. A faculty member must never exploit the work of students, staff, or researchers for personal or professional gain.

4. The public interest. When government funds are involved in the support of research, the Institute's accountability to the government and the public requires that the investigators take particular care to obey all rules and regulations of the government and the sponsoring agencies. Details are to be found in the document *Managing Conflict of Interest Requirements*

¹ The principles and rules also apply to emeritus faculty members who are active in research.

Under Federal Sponsored Awards, which is available in the Provost's Office, the Divisional Offices, and the Office of Sponsored Research.

Principles and Rules Concerning Investigator Responsibilities

1. A faculty member or postdoctoral scholar may not hold a position of line responsibility in an outside enterprise for pay or profit.²
2. A Caltech researcher may not spend more than an average of one day per calendar week consulting. See Consulting Activities (this chapter) for details.
3. Investigators are required to inform the appropriate Division Chair, promptly and in writing, of any consulting for, or substantial holdings in, a firm with which their research at the Institute becomes involved.³

Rules Concerning Patent Rights and Research Support

The Institute permits professors to seek research support from companies wishing to have the right to commercialize possible results of their research. To this end, it is willing to negotiate appropriate licenses to future patents in exchange for research support. In all dealings with private companies, however, the following principles and rules apply.

1. Neither the direction of Caltech research nor the interpretation of research results should be altered or appear to be altered by the commercial interests of a company. To help ensure this result, a professor must not have substantial holdings in a company that supports the professor's research, by any means other than an unrestricted grant.
2. Any contract granting to a company rights to license future patents arising from research sponsored by the company must clearly delineate the scope of that work in order to distinguish it from research supported by other funds, especially public funds for which the Institute has a special responsibility.

² A person who makes decisions and to whom others report has line responsibility. A member of the Board of Directors, or a person who only gives advice, does not.

³ The word "substantial" is purposely left vague. For externally supported research, the sponsor's regulations may specify what constitutes substantial holdings. Otherwise, its interpretation will vary according to circumstances. At present, a useful rule of thumb is, holdings of more than 1% of the company or more than \$500,000 value are substantial. "Holdings" is defined broadly to include equity or debt (bonds, debentures), held by the faculty member, spouse, or minor child. Holdings in mutual funds or in blind trust are not included. The final decision as to what constitutes substantial holdings will be made by the Provost, unless it is specified by government regulations.

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3. The Institute may, in some circumstances, consider accepting financial interest in a company in exchange for licenses to patents, present or future. The Institute must then be sensitive to potential institutional conflicts of interest. It cannot, for example, permit a faculty member, postdoctoral scholar, or graduate student to work on behalf of the company as part of that person's Institute duties. It cannot accept research funds from the company except in the form of an unrestricted grant, unless arrangements are made to ensure that the research cannot be influenced by the financial interests of the Institute.
4. Circumstances may arise in which the most effective way to develop new technology is to award a subcontract, or to license a patent or copyright to a company in which either the Institute or a member of its research community has substantial financial interest. In such cases, it may appear to outside agencies or to competing companies that Caltech has acted unfairly. When a company in which the Institute or a member of its research community has substantial financial interest is chosen as a subcontractor to sponsored research, or as a licensee to a Caltech patent or copyright, care must be taken that the nature of the financial interest is fully disclosed to all relevant parties, and that sound, objective business reasons for choosing the company as subcontractor or licensee are fully documented.
5. The university may support the commercial sector, but it should not compete with it or be a member of it. Hence, Caltech laboratories should not perform specific commercially available tasks for the primary purpose of gaining income, nor should Caltech facilities be used to develop and commercialize a product. (See Item 4 under "Policies Governing Sponsored Research," this chapter).
6. Caltech is willing to keep sponsors fully informed about the research they support, but the Institute does not grant to outside organizations the right to delay submission or to refuse publication of research papers.
7. Royalty payments, consulting, or other forms of financial dealings with a commercial firm may require filing a financial disclosure when applying for research support from a federal agency (see *Managing Conflict of Interest Requirements Under Federal Sponsored Awards* for details).

These principles and rules are designed to protect the essential interests of the Institute and its faculty, postdoctoral scholars and students while encouraging creative relationships between research and commerce by establishing guidelines within which investigators can safely operate. When a specific instance arises where interpretation of these principles and rules is required, investigators are encouraged to discuss the matter with the Division

Chair, the Vice Provost, or the Provost so that a sensible and legal resolution may be achieved.

Consulting Activities

The Institute encourages internal consultation and exchange of information among all members of the faculty and among and within all Divisions of the Institute. Such collegial consultation and interchange is expected of all faculty members. However, in exceptional cases, where an unusual or prolonged consulting project is involved requiring the attention and time of an individual to an extent that impinges on normal academic duties, the President or Provost may authorize a stipend for such services to be paid to the individual and charged against the project that is served, whether or not the project is operating under a sponsor. Such arrangements are subject to the approval of the sponsoring agency.

It is recognized that a faculty member may undertake outside consulting work, provided it does not interfere with Institute duties. Consulting work is limited as follows: an average of one day per week for those on a twelve-month basis for the calendar year or one day a week for the academic year for those on a nine-month basis. Consulting should not exceed a continuous period of more than one week during the fall, winter, or spring quarters. For those on twelve-month appointments, consulting should not involve more than a single period of two weeks during the summer quarter. Accumulation of consulting time beyond these limits is not consistent with the year-round nature of faculty appointments.

Consulting privileges impose obligations on the faculty member that must be clearly understood, and in cases of doubt, the appropriate Division Chair should refer the case to the Provost.

There is a possibility of conflict of interest between outside activities and work at the Institute. In such a conflict, obligations to the Institute take priority. The federal government may become involved in questions of conflict of interest either through support of a faculty member's research or because a faculty member participates in an advisory capacity or serves on a government committee. The statement on the subject of conflict of interest issued by the American Council on Education and the American Association of University Professors, to which the Institute subscribes in principle, is available in the Provost's Office. The Institute's policy may be found earlier in this chapter. It is the responsibility of any faculty member who accepts outside obligations that might generate a conflict of interest, either with obligations to the Institute or obligations under federally financed research, to consult the Division Chair or the Provost for advice on these problems.

Consulting work represents the personal effort of the faculty member and will not be the subject of a contract involving the Institute. Scrupulous care

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must be taken to ensure that the name of the Institute and its letterhead are not used directly in any correspondence between the faculty member and the client, nor in any reports that the faculty member may submit. It is important that the name of the Institute not appear in any publicity or commercial presentation either in promotion of future consulting services and activities or in the results of such consulting work.

To protect the Institute, the faculty member should notify the client in writing that the work is being done by an individual, that no position of line responsibility for the work can be accepted, that the Institute assumes no responsibility for the work, and that the name of the Institute may not be used in reports or publicity resulting from the work. The client should acknowledge this statement as evidence of the understanding upon which the work is to be done.

In a consulting activity, the faculty member may need to use Institute equipment. Such equipment may not be used except to a limited extent and only if it can be used without interfering with normal Institute activities. Its use must be approved by the appropriate Division Chair and the Vice President for Business and Finance who may decide that a charge for the use of the equipment may be made. Charges for the use of equipment or facilities and arrangements regarding stipends and insurance coverage for assistants other than Institute faculty or students are to be established in consultation with the Vice President for Business and Finance. If government or sponsor-owned equipment is to be used for consulting purposes, prior permission of the owner should be obtained through the Office of Sponsored Research. All unusual cases of the use of Institute facilities outside a faculty member's line of duty should be referred for approval to the Provost.

In connection with the use of Institute facilities or equipment, it should be noted that the Institute Patent Policy (later in this chapter) contains the statement: "Inventions made by employees in line of Institute duty or with the use of Institute facilities may be patented in order to protect and benefit the Institute and the public." Such patent properties are to be assigned in accordance with the Institute Patent Policy. Consulting work done by a staff member often involves developments for which the client may wish to obtain patent protection. "Consulting" will be interpreted by definition as being outside the staff member's "line of duty." Interpretation of "use of Institute facilities" is more difficult because in the literal sense an Institute facility could mean a trivial detail. There, as in the actual conduct of the consulting work itself, a considerable amount of discretion and judgment on the part of the staff member and the Division Chair must be used. Obviously, the use of Institute facilities must be kept to a minimum, but to permit no use whatever of Institute equipment in consulting work is both unrealistic and inconsistent with the Institute's expressed desire to be of service to the community, particularly when unique facilities are available. In the event that the faculty member and the

Division Chair are in doubt concerning possible Institute patent rights in a particular consulting arrangement, a recommendation should be obtained from the Provost.

On-Campus Activities Outside the Line of Duty

The appropriateness of a faculty member's conducting significant personal business on Institute premises is to be reviewed by the cognizant Division Chair and to be approved by the Provost. The non-trivial use of Institute facilities outside a faculty member's line of duty is to be referred for approval to the Provost.

Off-Campus Teaching

Institute policy allows members of the professorial faculty to engage in consulting activities up to one day a week (see "Consulting Activities," this chapter). Teaching or participation in classes or seminars at other colleges or universities is permissible under these guidelines. Such teaching arrangements are to be short-term only, one-time commitments. Faculty may receive compensation for these efforts and, if listed in the catalog of another institution, should be listed with the "visiting" prefix before their title.

Even though these off-campus teaching activities fall under the general guidelines of consulting, they present some unique problems. Fixed time commitments, if the course is taught as a regular part of the curriculum of another institution, and the high visibility of such teaching arrangements, create a potential for misunderstanding. Therefore, all such arrangements must be approved by the Division Chair in advance. Note that the total commitment of time for all consulting and outside teaching activities must not exceed the one day a week limit.

Discrimination and Harassment

This section contains two policies, one for equal employment opportunity discrimination, and the other for harassment, and a set of procedures to deal with possible violations of either of these policies.

Policy on Nondiscrimination and Equal Employment Opportunity (EEO)

It is the policy of Caltech to provide a work and academic environment free of discrimination. Consistent with this policy, illegal harassment will not be tolerated at Caltech, which will take all reasonable steps to eliminate it in its work and academic environment. (See the related harassment policy for more details.)

Caltech is committed to equal opportunity for all persons without regard to sex, race, creed, color, religion, national origin, ancestry, age, marital

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status, pregnancy, sexual orientation, status as disabled veteran, a veteran of the Vietnam Era or other eligible veteran, and for otherwise qualified individuals with a disability.

Caltech is an affirmative action employer and will, whenever possible, actively recruit and include for employment members of minority groups, females, disabled veterans, veterans of the Vietnam era, other eligible veterans, and otherwise qualified persons with disabilities. Caltech will hire, place, transfer, and promote based on the qualifications of the individual and administer these functions to ensure equal consideration and fair treatment of all. All other employment actions, such as work assignments, compensation, evaluations, training (including apprenticeships and tuition assistance), benefits, layoffs, and terminations are governed by this policy. Personnel actions will be reviewed to ensure adherence to this policy.

The Provost has been designated as the Equal Employment Coordinator for faculty, the Director of Employee Relations for staff employees and the Dean of Students for students. Inquiries concerning the interpretation and application of this policy should be referred to the appropriate designated individual. These coordinators are responsible for program administration, monitoring progress, and implementing goals and action-oriented programs. Likewise, management is responsible for monitoring decisions regarding personnel actions to ensure that these decisions are based solely on the individual's merit, and legitimate, nondiscriminatory job requirements for the position in question and the reasonableness of any necessary accommodations for persons with a disability. Managers' performance in connection with Caltech's affirmative action goals and objectives will be evaluated, as is their performance on other Institute goals.

Anyone who witnesses or experiences conduct they believe to be in violation of this policy is urged to contact any of the above-identified coordinators, the individuals identified in the related harassment policy, or the Employee Relations office immediately. Complaints will be investigated promptly and individuals who violate this policy will be subject to disciplinary action up to and including termination or expulsion.

To achieve the goals of our affirmative action program and to ensure employment opportunity and nondiscrimination, each member of the Caltech community must understand the importance of this policy and his/her responsibilities to contribute to its success.

Policy on Unlawful Harassment

It is the policy of the Institute to provide a work and academic environment free of unlawful harassment and retaliation. Harassment is the creation of a hostile or intimidating environment in which verbal or physical

conduct, because of its severity and/or persistence, is likely to interfere significantly with an individual's work or education, or affect adversely an individual's living conditions. **Harassment in any form, based on sex, race, color, age, national origin, disability, religion, sexual orientation, or any other characteristic protected by state or federal laws, is prohibited, as are all forms of sexual intimidation and exploitation.** All faculty, students, and staff should be aware that the Institute will not tolerate any conduct that constitutes illegal harassment. Complaints of harassment will be promptly and thoroughly investigated and appropriate action, including disciplinary measures, will be taken when warranted.

Faculty, students, and staff, at all levels, are responsible for maintaining an appropriate environment for study and work. This includes conducting themselves in a professional manner, actively discouraging harassment, and taking appropriate corrective action to prevent and eliminate harassment.

Faculty, students, and staff have the right at any time to raise the issue of harassment without fear of retaliation. Any faculty, student, or staff who feels that he/she has been harassed should review the Procedures for Investigating and Resolving Unlawful Harassment and Sexual Harassment Complaints at Caltech and immediately bring the matter to the attention of his/her supervisor or any of the individuals listed below. They will handle matters brought to their attention with sensitivity and discretion.

Deans
Director, Employee Relations
Division Administrators
Division Chairs
Employee Relations Specialists
Provost
Student Affairs Directors (including Master of Student Houses)

The Institute also offers members of the Caltech community the choice of seeking confidential counseling outside the Institute's formal mechanisms for resolving harassment complaints. These confidential counseling services are intended for the personal benefit of the individual and offer a setting where various courses of action can be explored. Those seeking this type of assistance should check with the offices listed below, each of which has its own mandate and guidelines for providing services:

Counseling Center
Ombuds Office
Staff and Faculty Consultation Center
Women's Center

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Information for faculty, students, and staff is also available from the Women's Center, Ombuds Office, Staff and Faculty Consultation Center, any Student Affairs office or Resident Associates.

Any member of the Caltech community who believes he/she has been a witness to or a target of harassment is urged to report promptly the facts of the incident(s) to any of the above individuals. Delay in reporting may impede the Institute's ability to take appropriate action. In addition, an employee who believes he/she has been harassed has the right to file a complaint with the federal Equal Employment Opportunity Commission or the California Department of Fair Employment and Housing, which have the authority to remedy violations; students may file complaints with the federal Office of Civil Rights. No member of the Caltech community will be retaliated against for making a good faith report of alleged harassment or for participating in an investigation, proceeding, or hearing conducted by the Institute, or by a state or federal agency.

Guidelines Regarding Harassment

Harassment

Harassment is the creation of a hostile or intimidating environment, in which verbal or physical conduct, because of its severity and/or persistence, is likely to interfere significantly with an individual's work or education, or affect adversely an individual's living conditions. Abusive or harassing behavior, verbal or physical, which demeans, intimidates, threatens, or injures another because of his or her personal characteristics or beliefs, is subject to the Institute's disciplinary process. Examples of personal characteristics or beliefs include race, ethnicity, national origin, religion, disability, age, sex and sexual orientation.

Harassment must be distinguished from behavior which, even though unpleasant or disconcerting, is appropriate to the carrying out of certain instructional, advisory or supervisory responsibilities or is objectively reasonable under the circumstances. Similarly, instructional responsibilities require appropriate latitude for pedagogical decisions concerning the topics discussed and the methods used to draw students into discussion and full participation. There are, however, obligations of civility and respect for others that underlie rational discourse. Behavior evidently intended to dishonor such characteristics as race, gender, national origin or ethnic group, religious belief, sexual orientation, age or disability is contrary to the pursuit of inquiry and education and may be discriminatory harassment, which violates state and federal law as well as Institute policy. Some examples of incidents that may constitute illegal harassment follow:

- An adviser tells a minority student not to take a certain course because the adviser says that other minority students have had difficulty in the course.
- A disabled individual is not included in an off-site outing because of lack of mobility.
- A supervisor assigns only menial tasks to a minority staff member.
- An older employee is disciplined for insubordination when the same conduct is tolerated from younger employees.
- Swastikas have been painted on the door of a room often used to prepare for the observance of the Jewish Sabbath.

Of course, in order to make an accurate judgment as to whether these incidents are illegal or violate policy, the full context in which these actions were taken or statements made must be considered. Conduct of this type, therefore, will initiate an investigation since making tolerance of illegal harassment or submission to it a condition of employment, evaluation, compensation or advancement is a serious offense.

Sexual Harassment

Sexual harassment is unlawful, violating Title VII of the Civil Rights Act of 1964, as amended, Title IX of the Education Code, and California state law. Sexual harassment is defined as follows: unwelcome sexual advances, request for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education.
2. Submission to or rejection of such conduct by an individual is used as the basis for decisions affecting such an individual.
3. Such conduct has the purpose or effect of unreasonably interfering with an individual's performance or creating an intimidating, hostile, or offensive environment.

The test for "unwelcome" is not whether the participation was voluntary; the test is whether the conduct was unwelcome.

Peer or co-worker sexual harassment is a form of prohibited sex discrimination where the objectionable conduct creates a hostile educational or work environment. Both males and females are protected from peer sexual harassment. Moreover, sexual harassment is prohibited regardless of the sex of the harasser, e.g. even where the harasser and the person being harassed are members of the same sex. Some examples of conduct that may constitute sexual harassment are:

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- Unwanted sexual advances.
- Offering employment benefits in exchange for sexual favors.
- Making or threatening reprisals after a negative response to sexual advances.
- Making sexual gestures, displaying sexually suggestive objects, pictures, cartoons, posters, calendars or computer screens.
- Making or using derogatory comments, epithets, slurs, or jokes of a sexual nature.
- Verbal sexual advances or propositions.
- Creating or obtaining sexually explicit materials using Institute resources or time that are not directly related to legitimate business of the Institute.
- Verbal abuse of a sexual nature, graphic commentaries about an individual's body, sexually degrading words used to describe an individual, suggestive or obscene letters, notes, or invitations.
- Unwelcome, intentional, and/or repeated touching of a sexual nature.
- Stalking.
- Ostracizing individuals from group activities because of their sex or because they objected to harassing behavior.

Even when relationships are consensual, care must be taken to eliminate the potential for harassment or other conflicts. Institute practice, as well as more general ethical principles, precludes individuals from evaluating the work or academic performance of those with whom they have amorous and/or sexual relationships, or from making hiring, salary or similar decisions. Upon learning about such a relationship, the supervisor, Dean or Division Chair has the authority to eliminate any direct administrative or academic relationship between the involved individuals.

When a consensual personal relationship arises and a power differential exists, consent will not be considered a defense in a claim that the Institute policy has been violated. The individual in the relationship with greater power will bear the burden of accountability.

Investigations

The Institute is firmly committed to resolving allegations of harassment fairly and quickly. To ensure that open and forthright dialog occurs, attorneys are not permitted to accompany individuals during interviews, nor are interview sessions recorded in any manner. Those interviewed are always entitled to submit a written statement if they so choose or to consult with others regarding the interview, keeping in mind that these proceedings must be kept as confidential as possible.

Procedures for Investigating and Resolving Discrimination, Unlawful Harassment, and Sexual Harassment Complaints at Caltech

I. BASIC PRINCIPLES

Caltech is dedicated to the free exchange of ideas and intellectual development as part of the campus milieu. A crucial part of Caltech culture is respect for one another; no member of the Caltech community should take unfair personal advantage of another member of the community.

The Institute is committed to maintaining a work and study environment for all members of the Caltech community that is free of unlawful harassment, including sexual harassment. Harassment compromises the tradition of intellectual freedom and the trust placed in the members of the Caltech community. This policy is not intended to stifle vigorous discussion and debate, teaching methods or freedom of expression generally. Harassment, as defined in the Institute's policy on harassment, is neither legal nor the proper exercise of academic freedom. Retaliation against an individual for reporting any type of harassment is also prohibited by law and Caltech policy.

Copies of the Institute's discrimination and harassment policies are available from the Human Resources Office, any Student Affairs office, the Women's Center, the Ombuds office, the Staff and Faculty Consultation Center, the Provost's office, and is published in the Caltech catalogue, the employee handbook and is on the Caltech website. The policy and these procedures identify appropriate people on campus to contact with complaints.

II. PROCEDURES

A member of the Caltech community who believes he or she has been subjected to harassment, including sexual harassment, should review the Institute's policy. There are several courses of action available to address the problem, each with different consequences and implications with respect to confidentiality and resultant action. These include the following five possibilities.

STEPS 1-4:

In general, the goal of steps 1-4 is to put an end quickly to the offending behavior without utilizing disciplinary action. Third parties with an official status at Caltech as described in step 4 are expected to follow up with the complainant to make sure that the issue has indeed been resolved. Mutually agreeable administrative changes are sometimes possible to ease an uncomfortable situation. Complainants should consider at the outset whether such changes might be desirable.

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1. Talk personally with the offending individual, or write a letter asking him/her to stop. This is a personal step taken solely among the relevant parties.
2. Speak to members of the Counseling Center, the Ombuds office, the Staff and Faculty Consultation Center, or the Women's Center. Such conversations are confidential and are not communicated to individuals within or outside the Institute
3. Resolve the complaint informally with the help of a third party who does not have a faculty, supervisory, or managerial position at Caltech. This could be a peer for staff; or, for students, a peer, a Resident Associate, a member of the Board of Control or the Graduate Review Board. The goal here is to allow the parties to resolve complaints without an investigation and without elevating the complaint within the Institute. The person here is not obligated to share this information with other persons holding positions of responsibility at Caltech.
4. Resolve the complaint informally with the help of a third party who has a faculty, supervisory, or managerial position at Caltech. The goal here is also to allow the parties to resolve complaints without an investigation and without elevating the complaint within the Institute. However, a person in these positions is obligated to follow up to be sure the situation has been resolved. This action might include referring to an appropriate individual within the Institute or sharing some of this information with other persons holding positions of responsibility at Caltech.

STEP 5: FORMAL COMPLAINTS

A formal complaint is a request that the Institute takes action.

Complainants may file a formal complaint by reporting the offending conduct to individuals holding any of the following positions: Provost, Dean, Director of Employee Relations, Employee Relations Specialist, Student Affairs Director (including Master of Student Houses), Division Chair, Division Administrator. The complaint is then taken to the Provost, Director of Employee Relations, or Dean(s) as appropriate (for faculty or postdoctoral scholars, staff, and students, respectively). This individual initiates an investigation. Step 5 is described more fully below.

These options are not mutually exclusive. The complainant has the right to choose which course to follow and is urged to submit a formal complaint in the event that informal steps do not stop the behavior.

Protection of complainant: The Institute encourages staff, faculty and students to report and address incidents of harassment. Accordingly, retaliation against any member of the Caltech community is strictly prohibited. Overt or

covert acts of reprisal, interference, discrimination, intimidation or harassment against an individual or group for exercising his/her rights under this policy will be subject to appropriate, prompt disciplinary or remedial action.

Administrative and/or academic changes may be needed in order to protect the rights of the complainant. These changes should be discussed with the appropriate parties: Provost, Director of Employee Relations, Dean(s). Changes might include transfer of supervisory or evaluative responsibility regarding grading, supervision, tenure review, letters of recommendation, etc. Care will be taken to protect both the complainant and the respondent with the greatest degree of confidentiality. Complainants may have an advisor or support person present when reporting harassment. However, the proceeding is an internal Caltech function and, therefore, the presence of legal counsel is not permitted by anyone during the conduct of these procedures.

DETAILS OF FORMAL COMPLAINTS

Formal complaints of harassment can be made orally but should, in the end, be submitted in writing. Complaints should be brought to the attention of one of the following individuals: Provost, Dean, Director of Employee Relations, Employee Relations Specialist, Student Affairs Director, Division Chair, and Division Administrator. They will ensure that complaints reach the Provost, Director of Employee Relations, or the Dean(s), as appropriate. Within a reasonable length of time the accused party (“the respondent”) will be notified of the nature of the complaint, and an investigation will begin. If administrative changes are needed to protect the rights of the complainant during the investigation, the appropriate Administrators shall see that they are made.

All formal complaints will be investigated within a reasonable length of time of the notification of the complaint, normally within 120 days. The investigation may be carried out by an individual, a committee, or an outside consultant. The purpose of the investigation is to determine the facts relating to the complaint.

Each individual or team member who conducts an investigation will be trained on various aspects of harassment. Because of the sensitive nature of these investigations, he/she will consult with General Counsel for legal assistance in investigative techniques, in applying legal standards regarding harassment and in determining the Institute’s legal duties and obligations.

The complainant and respondent will be informed of the relevant procedures, and will have an opportunity to comment on the suitability of the investigator(s). The Institute’s EEO and harassment policy and policy against retaliation will be reviewed with both parties. The complainant and respondent shall be given the opportunity to present their cases separately to the investigator(s) and to suggest others who might be interviewed. Subsequently the investigator(s) can, if appropriate, interview other parties to reach findings and conclusions. The investigator(s) will summarize for the respondent the

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evidence in support of the complaint to allow the respondent the opportunity to reply. The investigation will remain confidential to the extent possible.

All parties who participate in interviews may submit written statements. Investigatory meetings will not be recorded. Findings and conclusions in the case will be reported, along with recommendations regarding resolution and sanctions appropriate to the case, to the respondent's management/administration within 30 days of the investigation being concluded. They should also recommend measures that could prevent the occurrence of similar instances.

Exceptions to or modification of these procedures can be made by the Provost, Dean(s), or Director of Employee Relations if required for fairness or practical necessity. Exceptions must be made in writing and notice provided to both the complainant and respondent. Other administrative issues regarding the conduct of the investigation will be decided by the Provost, Dean(s), and Director of Employee Relations, as needed.

Investigative files are confidential and will be maintained in the appropriate administrator's office.

RESOLUTION

The conclusions that the investigation might reach include, but are not limited, to the following possibilities. In each case the investigator(s) should summarize the evidence that supports the conclusion.

1. A violation of the Institute's EEO and/or harassment policies occurred.
2. Inappropriate behavior occurred, but did not constitute a violation of the Institute's policies on discrimination and/or harassment. For example, the respondent improperly used the power of his or her position, used poor judgment, or violated applicable standards of ethical behavior.
3. The charges were not supported by the evidence.
4. The charges were brought without any basis or without a reasonable belief that a basis existed.

As soon as practicable after receiving the findings of the investigator(s), management/administration shall review the findings with the Dean(s), managers, Division Chairs and others as necessary. Both the complainant and respondent shall be informed of the results.

If a violation of the Institute EEO and/or harassment policies occurred, sanctions shall be imposed. Depending on the severity of the case and role at Caltech, possible sanctions include, but are not limited to:

- Verbal counseling/training
- A formal written warning placed in the respondent's file
- Suspension of the right to accept new graduate students or postdoctoral scholars
- Transfer of advisees and/or removal from positions of administrative responsibility
- Removal from student housing
- Removal from a supervisory position
- Enforced leave of absence/suspension
- Termination of employment or permanent dismissal

If the respondent was not found to have violated Institute policy on harassment, but the investigation concludes that he/she violated other Institute policy or committed some other wrongful or improper act, or if the complainant is found to have brought charges without any basis or without a reasonable belief that a basis existed, appropriate sanctions will be imposed.

APPEALS

Appeals must be in writing and within 30 days of notification of the decision.

- Appeals by a faculty member of decisions or actions by the Provost that affect academic freedom and tenure can be made to the Faculty Committee on Academic Freedom and Tenure as indicated in Chapter 3 of the Faculty Handbook. Other appeals for faculty and appeals by Postdoctoral Scholars can be made to the President.
- Student appeals can be made to the Vice President for Student Affairs.
- Staff appeals can be made to the Assistant Vice President for Human Resources.

Further complaints

The complainant should notify the Provost/Division Chair, Dean(s), or Director of Employee Relations immediately if the corrective action does not end the harassment, or if any retaliatory action occurs. In such cases, the complainant has the right to file another complaint.

Electronic Resources, Policy on Accepted Use

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Caltech provides electronic information resources (including, but not limited to, computers, computer accounts and services, networks, software, electronic mail services, electronic information sources, video and voice services, servers, web pages and related services) to assist members of the Institute community in the pursuit of education and research. This policy, in conjunction with other applicable Caltech policies, sets forth the acceptable use of all Caltech electronic information resources owned or managed by Caltech, and describes the rights and responsibilities of the Institute, and faculty, staff, students and other members of the Institute community with respect to use of these resources.

Electronic information resources are intended to be used to carry out the legitimate business of the Institute, although some incidental personal use is permitted. As is the case for the use of other Institute property, faculty, staff, students, and other members of the Institute community who use campus electronic information resources should be guided by the Institute's Honor System, which prohibits any member of the Institute community from taking unfair advantage of another. In addition, by using the Institute's electronic information resources, faculty, staff, students, and other members of the Institute community assume responsibility for their appropriate use and agree to comply with all relevant Institute policies, and all applicable local, state and federal laws.

Users of Institute electronic information resources may not use these resources for inappropriate or unauthorized uses. Some examples of inappropriate use are sending a communication or using electronic information resources including web pages, to discriminate, or illegally harass, defame, or threaten individuals or organizations, or to engage in other illegal conduct or conduct that violates Institute policy; destruction or damage to equipment, software or data belonging to others; disruption or unauthorized monitoring of electronic communications; interference with use of Institute systems; violations of computer security systems; unauthorized use of accounts, access codes, or identification numbers; use of facilities in ways that intentionally impede the legitimate computing activities of others; use of facilities for commercial purposes; use for political or lobbying activities that jeopardize the Institute's tax exempt status and therefore violate Institute policy; violation of copyrights, software license agreements, patent protections and authorizations, protections on proprietary or confidential information, or unauthorized use of Caltech's trademarks; violations of another's privacy; academic dishonesty; sending chain mail; spamming; or intrusion into computer systems to alter or destroy data or computer programs (i.e. hacking or cracking); or sending communications that attempt to hide the identity of the sender or represent the sender as someone else.

Password capabilities and other safeguards are provided to members of the Caltech community in order to safeguard electronic messages, data, files, and other records (including computer files and records, electronic mail and voicemail) from unauthorized use. However, these safeguards are not intended to provide confidentiality from the Institute with respect to personal messages or files stored on Institute systems. Electronic information resources are Institute property. Faculty, staff, students, and other members of the Institute community should not have an expectation of privacy with respect to their use of Institute electronic information resources or data, files, or other records generated, stored, or maintained on Institute resources.

The Institute may routinely examine network transmission patterns such as source/destination, address/port, flags, packet size, packet rate and other indicia of traffic on the servers. While the Institute will not, as a routine matter, review the content of electronic messages or other data, files, or records generated, stored, or maintained on Institute electronic information systems, the Institute retains the right, in its discretion, to inspect, review, or retain the content of electronic messages and other data, files, or records generated, stored, or maintained by faculty, staff, students or other members of the Institute community at any time without prior notification, for legitimate Institute reasons. These legitimate reasons include, but are not limited to, responding to lawful subpoenas or court orders, investigating misconduct and determining compliance with Institute policies, and locating electronic messages, data, files, or other records. Faculty, staff, students, and other members of the Institute community should also understand that electronic messages, data, files, and other records generated, stored, or maintained on Institute electronic information systems may be electronically accessed, reconstructed, or retrieved even after they have been deleted. Institute access to the content of electronic mail, data, files, or other records generated, stored, or maintained by any member of the Caltech community may only be requested 1) by the Provost for faculty; 2) by the Assistant Vice President, for Human Resources for employees; and 3) by the Vice President for Student Affairs for students. In all cases, Institute access requires prior consultation with the Office of General Counsel.

The use of Institute electronic information resources is a privilege, not a right, and the Institute may revoke this privilege at any time for misuse. Inappropriate uses of Institute resources may result in administrative discipline up to and including separation from the Institute. Suspected illegal acts involving Institute electronic information services may be reported to state and federal authorities, and may result in prosecution by those authorities. Any questions concerning the appropriate use of any of the Institute's electronic information resources or relevant Institute policies should be directed to the Associate Provost for Information and Technology, the Director of Information Technology Services, the Assistant Vice President for Human Resources, or the Undergraduate or Graduate Dean.

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Employment Policies and Affirmative Action

The quality of instruction and research at the Institute depends first and foremost on the quality of its employees whether professors, administrators, staff, researchers, engineers, or artisans. To maintain its stature, the Institute must give its highest priority to searching for and promoting employees of exceptional qualifications at all levels. Within this context, the California Institute of Technology is an equal opportunity employer and, in every respect, is committed to an active Affirmative Action Program.

It is the stated policy of the Institute that all faculty and staff employees and applicants shall receive equal consideration and treatment. All recruitment, hiring, placements, transfers, and promotions will be on the basis of qualifications of the individual for the position being filled regardless of race, color, religion, national origin, age, sex, marital status, sexual orientation, nondisqualifying handicap or whether the individual is a disabled veteran or aveteran of the Vietnam Era. All other personnel actions such as compensation, benefits, layoffs, returns from layoff, termination, training (including apprenticeship and tuition assistance), and social and recreational programs are also governed by this policy.

In addition, the many federal and state laws, and regulations issued thereunder, which bar discrimination in employment and related activities, are also applicable.

The objective of the Institute's Affirmative Action Program is wherever possible to recruit actively and include for consideration for employment members of minority groups, women, veterans, and the handicapped. All decisions on employment and promotions must be made solely on the individual's qualifications (merit), bona fide occupational qualifications for the job in question, and the reasonableness of any necessary job accommodations.

Any person needing additional information or assistance concerning the application of federal and state laws and regulations should contact the Provost's Office.

Gifts to the Institute

In order to ensure that the conditions involved conform to Institute policy and in the interests of good long-range relations with donors of private funds, members of the faculty are expected to inform the Office of the Vice President for Development and Alumni Relations of intentions to negotiate for gifts from individuals, corporations, or foundations. Such notice is to be given and approval granted prior to the actual negotiations with prospective donors to

minimize possible misunderstandings that could result from multiple and uncoordinated approaches to the same donors.

In addition, those faculty members who wish to solicit prospective donors on their own or wish to enlist the help of the Development Office in soliciting private funds for their own particular projects are to first obtain approval from their Division Chair and the Provost. The Development Office then will assist faculty members in their solicitations with the understanding that the time allotted to any particular project must be a function of Institute priorities. To be regarded as a gift, the terms should not include specific deliverables, nor any intellectual property rights for the donor.

When negotiations result in a favorable response, the faculty member should request or draft a letter to be sent by the donor outlining the terms of the gift to the Institute.

The President's Office, after consultation with the Provost, the Vice President for Business and Finance, and the Vice President for Development and Alumni Relations concerning approval of any special financial conditions or other conditions involved, will write a letter accepting the gift under the terms agreed to, a copy of this letter going to the appropriate Division Chair and to the Provost, the Vice President for Business and Finance, and the Vice President for Development and Alumni Relations.

The Vice President for Development and Alumni Relations may seek the help of faculty members in making suitable presentations and proposals to potential donors.

Grievance Procedures

It is the policy of the Institute to establish and maintain the necessary atmosphere for a sound faculty/administration relationship. To this end, individual faculty members must have the opportunity to submit complaints or grievances arising from their service at the Institute. The Institute has provided the following procedures to give such cases careful consideration and to try to bring them to a fair and speedy solution.

Consultation

Faculty members may consult with the Provost's Office, the Human Resources Office, and/or the Ombuds Office prior to or during the processing of any grievance.

Informal Procedures

If a faculty member or a group of faculty members has a complaint or grievance it may be useful to discuss the matter informally with the appropriate Division Chair, the Provost, or the Chair of the faculty. There is also a faculty ombudsperson who will hear the complaints and grievances of faculty members

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and to help, through conciliation, with their resolution. The faculty ombudsperson can often serve in a useful intermediary role, particularly in circumstances that involve misunderstandings or lack of proper information. The Chair of the Faculty Committee on Academic Freedom and Tenure may be able to provide useful guidance in matters within the purview of the committee.

Formal Requests for Consideration of a Grievance

If informal procedures fail to resolve a grievance satisfactorily, the faculty member may file a report of the grievance with the Provost. This should be a clear, concise statement including the faculty member's understanding of the decisions already rendered by the Division Chair or other administrative personnel, and the faculty member's desired remedy or correction. The Provost will then obtain from the faculty member's Division Chair a written statement of the Division Chair's view of the grievance stated by the faculty member and will take such steps as would be useful or effective in response to the faculty member's grievance. The Provost will subsequently answer the faculty member in writing with a suggested resolution of the grievance.

Appeals

Three types of grievances are recognized, and each type is handled differently. (1) Appeals to decisions by the Provost involving issues of academic freedom or tenure, including a decision not to reappoint a tenure-track professorial faculty member, are heard by the Academic Freedom and Tenure Committee. An appeal contesting termination of a continuous professorial appointment or a term faculty appointment prior to its expiration may, if requested by the faculty member, be considered by the Academic Freedom and Tenure Committee. (2) If the Academic Freedom and Tenure Committee declines to consider the case on jurisdictional grounds, the appeal will be heard by a Faculty Hearing Committee. A Faculty Hearing Committee may also consider appeals deemed by the Chair of the faculty to be appropriate for such a committee. (3) All other appeals are heard by an Ad Hoc Appeals Committee. Each of these cases is presented in more detail below.

If the concern of a faculty member involves issues dealing with either academic freedom or tenure, including a decision not to reappoint a tenure-track professorial faculty member, appeals from decisions of the Provost will be heard by the Academic Freedom and Tenure Committee. The chair of the committee should be given a written complaint detailing what is to be investigated. The committee will conduct its deliberations and investigations, and transmit its findings and recommendations in the manner prescribed by the Academic Freedom and Tenure Committee guidelines (this chapter). A written report need not be given if the complaint is withdrawn by the complainant or if the issue is resolved informally prior to the submission of a written final report. A faculty

member considering filing an appeal should review the Academic Freedom and Tenure Committee guidelines in this chapter. If the case involves termination of a continuous professorial appointment, or of a term faculty appointment prior to its expiration, the Board of Trustees will take final action after reviewing the recommendations of the President, the report of the faculty Academic Freedom and Tenure committee, comments, if any, by the Chair of the faculty, and comments, if any, by the complainant and the person or persons against whom the complaint is primarily directed.

Where termination of a continuous professorial appointment, or of a term faculty appointment prior to its expiration, is involved, and the Academic Freedom and Tenure Committee has either not been requested to hear the appeal, or has declined to do so, the appeal will be heard by a faculty Hearing Committee. The faculty Hearing Committee will conduct interviews, take evidence, and provide an opportunity for the complainant to be heard and challenge its findings. A record of the proceedings will be maintained by a designated member of the committee. The complainant shall have the right to bring a non-participating faculty colleague to any meeting of the faculty Hearing Committee that the complainant attends. The faculty Hearing Committee shall be constituted and shall make its recommendation as prescribed by the faculty bylaws. A written report need not be given if the appeal is withdrawn by the complainant or if the issue is resolved informally prior to the submission of a written final report. The Board of Trustees will take final action after reviewing the recommendation of the President, the report of the faculty Hearing Committee, comments, if any, by the Chair of the faculty, and comments, if any, by the complainants and the person or persons against whom the complaint is primarily directed.

If the subject of the faculty member's complaint does not fall within the purview of the Academic Freedom and Tenure Committee or a faculty Hearing Committee, or if both of those committees decline to make recommendations on all of the substantive issues, within one month of receipt of the Provost's suggested resolution of the grievance, the faculty member may submit to the Chair of the faculty a written request for consideration of an appeal. The Chair of the faculty will then appoint a five faculty-member Appeals Committee to review the matter. This committee will begin its deliberations within fifteen working days of receipt of the notice of its appointment and proceed with all deliberate speed. The faculty Appeals Committee will conduct interviews, take evidence, and provide an opportunity for the complainant to be heard and to challenge its findings. The complainant shall have the right to bring a non-participating faculty colleague to any meeting of the faculty Appeals Committee that the complainant attends. A written report need not be given if the appeal is withdrawn by the complainant or if the issue is resolved informally prior to the submission of a written final report. The recommendations of the faculty Appeals Committee shall be submitted in writing to the Chair and Vice Chair of

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the faculty, to the complainant, to the Provost, to the person or persons against whom the complaint is primarily directed, and to the President. The President's decision will be final, and all parties will be so notified.

Human Subjects Protection

The Committee for Protection of Human Subjects performs initial and continuing review of all research projects and activities in which the California Institute of Technology is concerned that involve any use of human subjects or of tissues directly obtained from human subjects. The committee is particularly concerned that:

1. The rights and welfare of subjects are adequately protected.
2. The risks to subjects are outweighed by potential benefits.
3. Appropriate informed consent of subjects is obtained.

Committee reviews are conducted in a manner to ensure the exercise of independent judgment of the members. Members will be excluded from judgment on projects or activities in which they have an active role or a conflict of interest.

No research project involving the use of human subjects shall be undertaken and no application for funds for the support of a research project involving human subjects shall be submitted from the Institute without the knowledge and approval of this committee.

Lobbying and Political Endorsements

Because Caltech is a tax-exempt, nonprofit organization, no substantial part of its activities may be involved in attempts to influence federal, state, or local legislation. Therefore, any lobbying that might involve, in any way, Caltech as an institution must be coordinated with the Assistant Vice President for Government and Community Relations, the Vice President for Public Relations, or the President's Office, so that Caltech's tax-exempt status is not jeopardized. This includes contacts by faculty members, on behalf of or using the name of Caltech, with members of Congress, state legislatures, boards of supervisors, and other law or rule-making bodies, or their staffs, for the purpose of influencing the passage or defeat of proposed legislation.

Faculty members endorsing a political candidate or a political position may use their titles and place of employment only for purposes of identification.

Nepotism

When a close relative of a faculty member is being considered for employment, appointment, reappointment, promotion, salary increase, or tenure in the same Division, the responsible Division Chair should seek advice from sources other than the faculty member in question. The Provost and, if appropriate, the Vice President for Business and Finance will review all cases.

It is the policy of the Institute to discourage situations where Institute employees act as supervisors of close relatives or spouses, or others with whom they have a close relationship outside the Institute that might influence their judgment in a supervisory role.

New Facilities Acquisition Procedure

Policies and procedures on new facilities are guided by the Board of Trustees through its Committee on Buildings and Grounds.

Requests and justification for new facilities will be presented to the Provost and the Vice President for Business and Finance. Subsequent major steps include further definition of fund sources, description, location, and costs. Additional major steps in the process include retention of architect, facility program, schematic design, working documents, contractor selection, construction, and activation. Authorization to proceed from one major step to another is usually contingent upon review and approval by the President and the Trustees' Committee on Buildings and Grounds.

Patent Policy

Inventions made by employees in the line of Institute duty or with the use of Institute facilities may be patented in order to protect and benefit the Institute and the public. Title to such patents is to be assigned to the Institute or the sponsor, if appropriate. The cost of acquisition of such patents shall in no instance be borne by the employee.

It is the policy of the Institute that such patents be used for the public benefit. If there are innovations or discoveries that result in the filing of patent applications and the acquisition of patents, the Institute intends to serve the public interest by prudent and appropriate efforts to transfer the technology to those who will facilitate public use. When this result is achieved by the licensing of inventions to private industry, royalty income may accrue to the Institute under terms negotiated at the Institute's discretion. Where such royalty income is derived, the inventor or inventors, collectively, will receive 25% of the income received by the Institute after the deduction of unreimbursed patent expenses associated with obtaining and maintaining the patents. In lieu of personally receiving 25% of this net sum, an inventor or inventors may opt to

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have all or any part of their share of the net sum applied to support research of their choosing within their Division or research group. The Institute will then match the amount contributed by the inventor(s) for research so as to provide total research support from such income of up to 50% of the net amount received by the Institute. Inventors who select the latter option may subsequently elect to receive their share of the net sum for future royalties under the first option. The remainder of income derived by the Institute from the licensing of patents, after payment of the inventor(s) shares, will be applied to the furtherance of instruction and research. The Institute retains the right not to pursue the filing of any patent application, and not to pursue commercialization of any invention. In that event, the Institute may choose to assign the patent rights to the inventor(s) if that is consistent with its legal obligations.

All Institute employees shall sign a Patent and Copyright Agreement assigning their rights to patents or inventions that they may make in the line of their duties, or with Institute facilities, to the Institute or its sponsor. A copy of the agreement may be obtained from the Faculty Records Office.

Individuals who work on governmental or industrial projects undertaken by the Institute may be required to sign such supplemental agreements as are necessary to enable the Institute to fulfill its contractual obligations in regard to patents.

All employees shall report to the Institute immediately any innovation or discovery that might reasonably be considered to be of a patentable nature and that arises in the line of their duties, or as the result of the use of Institute facilities. This obligation is not intended to interfere with the prompt publication of research results.

Inventions made by employees or students outside the line of their duties, and without the aid of Institute facilities, are not the property of the Institute. Patents from such inventions should be administered so as not to involve the Institute name.

It is important that inventors disclose to the Institute any funding from an agency of the United States Government that may relate to inventions. The Federal Bayh-Dole Act and implementing regulations (37 C.F.R. 401) grants patent rights to the Institute for inventions made under most federally funded research. In return, the Institute has reporting obligations regarding such inventions to the funding agency, and must grant a license to the government for its own use.

Any dispute concerning this policy or the distribution of royalties shall be resolved by appeal to the Provost.

The Institute places no restrictions on the rights or activities of postdoctoral scholars and research faculty in their subsequent careers after they leave Caltech. If departing research faculty or postdoctoral scholars require access to research data, computer programs, material samples, biological

specimens, or other research materials that they helped develop while at Caltech, the Institute will negotiate to provide continuing reasonable access to such materials, appropriate to the circumstances and consistent with its legal requirement to maintain originals of data and other results arising from sponsored research.

Publications of the Staff

Costs of Publications

Insofar as possible, when contract or grant support is not available, it is the Institute's policy to bear reasonable expenses involved in the publication of the results of research in the various professional journals. Staff members should consult the Chairs of their Divisions for the procedures to be followed.

Depositing Publications

The Archives collects, by gift or purchase, a copy of each book written by a member of the staff. All members of the faculty are encouraged to deposit reprints of their publications in their Division offices for the benefit of their colleagues and graduate students.

Distribution of Technical Papers to the Industrial Associates

The Office of Industrial Associates distributes preprints of journal articles, appropriate technical papers and reports, Ph.D. theses, and reprints from technical journals to the member companies on request.

Research Misconduct Policy

Preamble

Research misconduct is historically a rare occurrence, especially at Caltech, where all members of the community are bound by a very effective code of honor. However, should an instance arise of either real or apparent misconduct, the Institute must act swiftly and decisively, while affording maximum possible protection both to the "whistle blower" (complainant) and to the accused (respondent). That is the intent of this policy.

The term *research misconduct* has been chosen instead of the narrower scientific misconduct to describe this policy. It refers to all research conducted at the Institute. The Chair of each Division is responsible for informing the Division's faculty, staff, and students of the Institute's policy with regard to research misconduct, and for interpreting this policy. This policy is not intended to deal with other problems, such as disputes over order of authorship, or violation of Institute or federal regulations, that do not amount to research misconduct.

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Definitions

Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

- Fabrication is making up data or results and recording or reporting them.
- Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
- Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
- Research misconduct does not include honest error or differences of opinion.

Findings

A finding of research misconduct requires that:

- There be significant departure from accepted practices of the scientific community for maintaining the integrity of the research record;
- The misconduct be committed intentionally, or knowingly, or in reckless disregard of accepted practices; and
- The allegation be proven by a preponderance of evidence.

Procedure

The procedures to be followed have three stages: Inquiry, Investigation, and Adjudication, or Resolution. These are the stages required by regulations issued by the Federal government applicable to sponsored research. Those responsible for conducting each phase should bear in mind the following important responsibilities:

1. The Institute must vigorously pursue and resolve all charges of research misconduct.
2. All parties must be treated with justice and fairness, bearing in mind the vulnerabilities of their positions and the sensitive nature of academic reputations.
3. Confidentiality should be maintained to the maximum practical extent particularly in the inquiry phase.
4. All semblance of conflict of interest must rigorously be avoided at all stages.
5. All stages of the procedure should be fully documented.
6. All parties are responsible for acting in such a way as to avoid unnecessary damage to the general enterprise of academic research.

Nevertheless, the Institute must inform appropriate government agencies of its actions, and if it is found that misleading data or information have been published, the Institute is responsible for setting the public record straight, for example, by informing the editors of scholarly or scientific journals.

A. INQUIRY

The purpose of this stage is to determine, with minimum publicity and maximum confidentiality, whether there exists a sufficiently serious problem to warrant a formal investigation. It is crucial at this stage to separate substantive issues from conflicts between colleagues that may be resolved without a formal investigation.

1. *Initiating the Inquiry*

All allegations of research misconduct arising from inside or outside the Institute, should be referred directly to the Division Chair (DC) concerned. If more than one Division is involved, more than one DC may be informed. If either the complainant or the DC perceives a possible conflict of interest the case may be taken directly to the Provost who will act as prescribed below for DCs, but the DC must be informed immediately and confidentially. A DC may initiate an inquiry without a specific complaint if it is felt that evidence of suspicious academic conduct exists.

When a complaint comes forth, the DC's first job is to provide confidential counsel. If the issue involved does not amount to research misconduct, satisfactory resolution through means other than this policy should be sought. However, if there is an indication that research misconduct has occurred, the DC must pursue the case even in the absence of a formal allegation. Moreover, the case must be pursued to its conclusion even if complainant(s) and/or respondent(s) resign from their positions at the Institute.

The DC should also counsel those involved that, should it be found at either the inquiry or the investigation stage that the allegations were both false and malicious, confidentiality may not be further maintained and, in fact, sanctions may be brought to bear against the complainant.

2. *Inquiry Procedure*

The DC is responsible for conducting the inquiry (except, as noted above, where a conflict of interest might be perceived). The DC may call upon one or more senior colleagues for help where specific technical expertise is required, but this need should be carefully weighed against the importance of confidentiality at this stage. Confidentiality is likely to be a

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rapidly decreasing function of the number of persons involved in the inquiry.

The DC may wish to notify the President and Provost, and call upon Institute legal counsel at this stage. Every effort should be made to make personal legal counsel unnecessary for either complainant or respondent at this and all other stages, but all parties should recognize the Institute counsel always acts on behalf of the Institute, not one or the other party.

An inquiry is formally begun when the DC notifies the respondent in writing of the charges and process to follow. This and all other documents are to be preserved in a secure file in the Division offices for at least three years.

The nature of the inquiry will depend on the details of the case, and should be worked out by the DC in consultation with the complainant and respondent, with any colleague the DC calls on for assistance, and with Institute legal counsel. At this stage, every effort should be made to keep open the possibility of resolving the issue without damage to the position or reputation of either the complainant or the respondent. However, the DCs primary allegiance is not to the individuals but to the integrity of academic research, and to the Institute. If research misconduct has been committed, it must not be covered up.

The inquiry should be completed and a written record of findings should be prepared, within 30 days of its initiation. If the 30-day deadline cannot be met, a report should be filed citing progress to date and the reasons for the delay, and the respondent and other involved individuals should be informed.

1. *Findings of the Inquiry*

The inquiry is completed when a judgment is made of whether a formal investigation is warranted. An investigation is warranted if a reasonable possibility of research misconduct exists. A written report shall be prepared that states what evidence was reviewed, summarizes relevant interviews, and includes the conclusions of the inquiry. The individual(s) against whom the allegation was made shall be given a copy of the report of the inquiry. If they comment on that report, their comments may be made part of the record. The DC must inform the complainant whether the allegations will be subject to a formal investigation.

If the allegation is found to be unsupported but has been made in good faith, no further action is required, aside from informing all parties, and attempting to heal whatever wounds have been inflicted. If confidentiality has been breached, the DC may wish to take reasonable steps to minimize the damage done by inaccurate reports. If the allegation is found not to have

been made in good faith, the DC should inform the Provost and the President who will consider possible disciplinary action.

If a complainant is not satisfied with a DC's finding that the allegations are unsupported, the result may be appealed to the Provost, or if the Provost has made the finding, to the President.

2. *Notifications*

The relevant responsible agency (or agencies in some cases) should be informed of the allegation upon completion of an inquiry, if (1) the allegation involves Federally funded research (or an application for Federal funding) and meets the Federal definition of research misconduct which is the same as the one given above, and (2) there is sufficient evidence to proceed to an investigation.

The relevant responsible agency should continue to be informed of the progress of the investigation, its outcome, and any actions taken.

1. Other Reasons to Notify the Agency.

At any time during an inquiry or investigation, the institution will notify the relevant Federal agency if public health or safety is at risk; if agency resources or interests are threatened; if research activities should be suspended; if there is reasonable indication of possible violations of civil or criminal law; if Federal action is required to protect the interests of those involved in the investigation; if the Provost and DC believe the inquiry or investigation may be made public prematurely so that appropriate steps can be taken to safeguard evidence and protect the rights of those involved; or if the scientific community or public should be informed.

B. INVESTIGATION

An investigation is initiated within 30 calendar days when an inquiry results in a finding that an investigation is warranted. The purpose of the investigation is to determine whether research misconduct has been committed. If an investigation is initiated, the Provost and DC should decide whether interim administrative action is required to protect the interests of the subjects, students, colleagues, the funding agency, or the Institute while the investigation proceeds. Possible actions might include temporary suspension of the research in question, for example. If there is reasonable indication of possible criminal violations, cognizant authorities must be informed by the Provost within 24 hours. Note the provisions of Section A.4 above requiring the Institute to notify the agency if it ascertains at any stage of the inquiry or investigation that specified conditions exist.

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1. *The Investigation Committee*

The Provost in consultation with the DC, shall appoint an Investigation Committee. The principal criteria for membership shall be fairness and wisdom, technical competence in the field in question, and avoidance of conflict of interest. Membership of the committee need not be restricted to the faculty of the Institute.

The respondent and complainant should be given an opportunity to comment, in writing, on the suitability of proposed members before the membership is decided. The committee should be provided with a budget that will enable it to perform its task. The Provost and DC should write a formal charge to the committee, informing it of the details of its task.

2. *The Investigation Process*

Once the Investigation Committee is formed, it should undertake to inform the respondent of all allegations so that a response may be prepared. It is assumed that all parties, including the respondent will cooperate fully with the Investigation Committee. The committee should call upon the help of Institute legal counsel in working out the procedure to be followed in conducting the investigation. The complainant and respondent should be fully informed of the procedure chosen.

At this stage, the demands of confidentiality become secondary to the necessity that a vigorous investigation make a conclusive determination of the facts. Nevertheless, every attempt should be made to protect the reputations of all parties involved.

The investigation should be completed, and a full report filed with those parties requiring notice within 120 days of its initiation. If this deadline cannot be met, an interim report of the reasons for delay and progress to date should be filed, with appropriate persons and agencies.

A draft of the committee report should be submitted to both complainant and respondent for comment before the final report is written. The respondent should be given the opportunity for a formal hearing before the Investigation Committee. Institute legal counsel should be called upon to assist in working out the procedure to be followed in conducting such a hearing.

If an investigation results in a finding, based on a preponderance of the evidence, that research misconduct occurred, an adjudication, or resolution phase follows whereby the recommendations are reviewed and appropriate action determined.

C. RESOLUTION

Adjudication or resolution decisions are separated organizationally from the agency's or research institution's inquiry and investigation

processes. Any appeals process should likewise be separated organizationally from the inquiry and investigation.

The committee findings may be grouped into two broad categories:

1. No Finding of Research Misconduct

All federal agencies or other entities initially informed of the investigation should be notified promptly. A full record of the investigation should be retained by the Institute in a secure and confidential file for at least three years. The Provost and DC should decide what steps need to be taken to clear the record and protect the reputations of all parties involved.

If the allegations are found to have been maliciously motivated, the Provost and DC may wish to recommend to the President appropriate disciplinary action. If the allegations are found to have been made in good faith, steps should be taken to prevent retaliatory actions.

2. Finding of Research Misconduct

The Provost and DC should decide on an appropriate course of action to deal with misconduct, to notify appropriate agencies, and to correct the scholarly or scientific record. The Provost and DC should forward the committee report to the President with a recommendation of sanctions and other actions to be taken. Possible sanctions include:

1. Removal from the project
2. Letter of reprimands
3. Special monitoring of future work
4. Probation or suspension
5. Salary or rank reduction
6. Termination of employment

The President should review the full record of the inquiry and investigation. The respondent may at this stage appeal to the President on grounds of improper procedure or a capricious or arbitrary decision based on the evidence in the record. New evidence may lead the President to call for a new investigation or further investigation, but not to an immediate reversal of the finding. After hearing any appeal and reviewing the case, the President should make a decision, or, in appropriate cases, recommend a final disposition to the Board of Trustees. The decision of the Board is final. In deciding what administrative actions are appropriate, the President should consider the seriousness of the misconduct, including whether the misconduct was intentional or reckless; was an isolated event or part of a pattern; had significant impact on the research record; and had significant impact on other researchers or institutions.

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For research sponsored by a relevant responsible agency (or agencies) a final report should be submitted to describe the policies and procedures under which the investigation was conducted, how and from whom information was obtained relevant to the investigation, the findings, and the basis for the findings, and include the actual text or an accurate summary of the views of any individual(s) found to have engaged in misconduct, as well as a description of any sanctions or other administrative action taken by the Institution.

In addition to regulatory authorities and sponsors, all interested parties should be notified of the final disposition of the case and provided with any legally required documentation. The list may include:

1. The complainant
2. Coauthors, coinvestigators, collaborators
3. Editors of journals that have published compromised results
4. Professional licensing boards and professional societies
5. Other institutions that might consider employing the respondent
6. Criminal authorities

Royalties and Copyrights

Copyrights to and royalties from textbooks, reference works, submissions to scientific journals, and other copyrightable materials (except for computer software, which is treated below) produced by faculty members as a part of their normal teaching and scholarly activities at the Institute and that do not result from projects specifically funded in whole or in part by the Institute or by a sponsor of the Institute, shall belong to the author or authors and may be retained by them. If, on the other hand, the Institute provides funds, or a sponsor's funds, to finance (in whole or in part) a specific research or educational project and copyrightable materials are produced by employees as a result of the project, copyrights and royalty rights shall be owned by the Institute.

All rights to computer software, including computer programs, computer databases, and associated documentation ("computer software"), whether copyrightable or patentable, produced by employees or students in the line of Institute duty or with the use of Institute facilities, shall be owned by or assigned to the Institute, regardless of the source of funds used to produce the computer software. Computer software produced outside the line of Institute duty and on the author's own time, and without the use of Institute facilities, is not the property of the Institute.

Where the Institute receives income from the licensing or use of computer software or other copyrightable material belonging to the Institute, the

author or authors, collectively, will receive 25% of the income received by the Institute after the deduction of unreimbursed legal expenses associated with obtaining and maintaining protection for the copyrightable material. In lieu of personally receiving 25% of this net sum, an author or authors may opt to have all or any part of their share of the net sum applied to support research of their choosing within their Division or research group. The Institute will then match the amount contributed by the author(s) for research, so as to provide total research support from such income of up to a maximum of 50% of the net amount received by the Institute. Authors who select the latter option may subsequently elect to receive their share of the net sum for future royalties under the first option. The remainder of income derived by the Institute from the licensing or use of copyrights or computer software, after payment of the author's shares, will be applied to the furtherance of instruction and research. The Institute retains the right not to pursue the registration or commercialization of any copyrightable material, including computer software. In that event, the Institute may choose to assign the copyrightable material to the author(s) if that is consistent with its legal obligations.

All Institute employees shall sign a Patent and Copyright Agreement assigning their rights in copyrightable materials authored in the manner set forth above. A copy of the agreement may be obtained from the Faculty Records Office.

All employees shall report to the Institute immediately any matter that might reasonably be considered to be of a copyrightable nature and that arises in the line of their duties, or as the result of the use of Institute facilities. This obligation is not intended to interfere with the prompt publication of research results. Any dispute concerning this policy or the distribution of royalties shall be resolved by appeal to the Provost.

The Institute places no restrictions on the rights or activities of postdoctoral scholars and research faculty in their subsequent careers after they leave Caltech. If departing research faculty or postdoctoral scholars require access to research data, computer programs, material samples, or other research materials that they helped develop while at Caltech, the Institute will negotiate to provide continuing reasonable access to such materials, appropriate to the circumstances and consistent with its legal requirement to maintain originals of data and other results arising from sponsored research.

Sponsored Research and Other Sponsored Activities

This section outlines the policies and procedures involved in soliciting and accepting financial support from external sponsors for research and other types of externally supported activities.

The Office of Sponsored Research is the Institute administrative office responsible for providing information and administrative guidance to faculty and

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staff in the preparation and submission of proposals as well as the negotiation and acceptance of awards for the external support of sponsored research and other activities. The office is the official Institute contact point for sponsored activities when a formal agreement, grant, contract, or cooperative agreement with the Institute is contemplated that includes terms and conditions such as ownership of intellectual property and/or data; rights to publish; specification of deliverable items (e.g., periodic research reports, hardware, software, etc.); limitations on the use of funds; specification of milestones, objectives, or spending plans that are required for collecting funds; or specified time periods over which the activity is to be conducted in order for the Institute to receive payment. The sponsors include federal agencies, state and local government agencies, corporations, other universities, independent or government supported research laboratories, voluntary health organizations, or other organizations that customarily support research at colleges and universities.

The Offices of Corporate or Foundation Relations within the Development Office provide assistance and guidance in approaching philanthropic foundations and corporations for obtaining gifts and grants that can be used for the support of research where the contemplated award to the Institute does not impose conditions on reporting, deliverables, and accountability that are generally found in sponsored projects.

Policies Governing Sponsored Research

The extent of the Institute's research program and its ability to be a leader in performing world-class research has been facilitated by the extensive external support obtained from grants and contracts awarded by federal and non-federal sponsors. While it may be considered desirable to have such external support in order to maintain the magnitude of the Institute's research programs, it is essential that the Institute retain control of its research program and undertake research activities that contribute to its educational and scholarly objectives. To these ends the following policies have been established:

1. Faculty members of professorial rank and senior research faculty, under conditions described in Chapter 3, may serve as principal investigators on sponsored research projects. Other faculty, members of the Beckman Institute, postdoctoral scholars, members of the professional staff, or, on rare occasions, other staff members, with the approval of their Division Chair and the Vice Provost, may serve as principal investigator under special circumstances and with the understanding that a supervising professorial faculty member assumes responsibility for the validity and importance of the research. The Institute discourages the use of the term co-principal investigator, except in unusual circumstances. Normally, each

project should have a single Principal Investigator, with collaborating individuals listed as co-investigators.

2. Principal investigators and other key members of the sponsored project research team are expected to comply with Institute policies regarding performance of research at the Institute. In addition, they must pay particular attention to those policies and procedures of the sponsor (particularly the federal government) covering certain types of compliances and associated assurances that the Institute must submit when seeking support from the sponsor. The principal investigator will assume the responsibility for seeing that all key members of the research team are familiar with these regulations and policies and that all required assurances and compliances are filed in a manner consistent with good project management and/or required deadlines. Typical federal statutory requirements include assurance of freedom from federal debt; assurance that notification will be given of debarment, suspension, or other personal legal action involvement with a unit of local, state, or federal government; agreement to disclose any type of lobbying activities; familiarity and compliance with procurement integrity and anti-kickback requirements; compliance with policies on ownership of intellectual property, data, and other forms of products resulting from research; adherence to government-approved Institute policies and assurances governing the use of human subjects and animals, the use of radioactive materials or radiation-producing sources, the use of techniques involving recombinant DNA molecules, and the use, transportation, or disposal of hazardous materials; and compliance with policies governing conflict of interest or misconduct in science, to name a few. Information on or copies of these regulations and associated assurance documents can be obtained from the Office of Sponsored Research.
3. The Institute accepts awards, in the form of a grant, contract, or other type of legal agreement, from an external sponsor for the support of a faculty member's research project if the terms and conditions are consistent with the following principles:
 - a. The scope of the work shall involve research falling clearly within the Institute's educational and research program, supplementing or making a positive addition to that program, and being of such nature that the Institute would undertake the research if its own funds were adequate.
 3. The Institute shall be free to publish and otherwise disseminate the results of sponsored research performed by faculty, staff, or students.
 4. To comply with the sponsor's requirements on distribution and other uses of research results, the Institute will normally own the technical

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data and other products generated from a sponsored project, with the principal investigator and other key members of the research team being permitted to retain copies of such data and information for their own use.

5. Ownership of intellectual property generated from the research shall be governed by the Institute's current policies. Generally, the Institute will retain title to all inventions and possible resulting patents arising from externally sponsored research (see "Patent Policy," this chapter). The sponsor will be given a nonexclusive, royalty-free license, without the right to sublicense, to use or practice a patented invention made solely by Institute employees and resulting from work supported by that sponsor at the Institute. Under some circumstances, the Institute may negotiate to grant the sponsor the option of securing an exclusive royalty-bearing license on such inventions and resulting patents (see "Rules Concerning Patent Rights and Research Support," under "Conflict of Interest, Conflict of Commitment, and Technology Transfer," this chapter). Inventions and resulting patents made jointly by Institute and sponsor employees shall be jointly owned. Copyrights shall be owned by the Institute when the copyrighted work is considered to be a work made in the line of Institute duty or with the use of Institute facilities (see "Royalties and Copyrights," this chapter). Licensing of Institute-owned copyrights will generally follow the same policies as for licensing of inventions and patents. Other rights may be granted to the sponsor only with the approval of the Patents and Relations with Industry Committee and, in some cases, the Board of Trustees.

6. The Institute will not undertake classified or proprietary research. Further, the Institute normally does not desire to receive information that the sponsor considers proprietary or confidential.

7. Arrangements with the sponsor shall not impose restrictions on the Institute that are in conflict with its established policies and practices, and should permit performance of the research in the same manner as research financed with the Institute's own funds.

8. Any deviation from the policies set forth under (a) through (f) above requires specific approval of the committee(s) concerned, the President, and if deemed by the President to be desirable, the Board of Trustees. In particular, with suitable approval, awards for work falling outside the Institute's normal program may be undertaken for the government in times of emergency, or if it in other ways qualified as a unique service to the community or the nation's security or well being.

9. Results of sponsored research or testing shall not be used for advertising, publicity, or other commercial purposes, nor shall the name of the Institute be used in any way, whether in the form of written or verbal statements, that could constitute or imply an endorsement by the Institute of

any commercial product or service, without the prior written approval of the Institute.

4. The Institute has certain unusual, or even unique, items of equipment or facilities for conducting tests and investigations of various kinds. When mutually advantageous arrangements can be agreed upon, and when the work cannot be conducted as well in the sponsor's own laboratories or in a commercial laboratory, such equipment or facilities may be used for conducting tests or investigations for outside agencies, or the Institute may undertake to design, build, and operate special facilities on a sponsored basis.
5. An individual serving as a principal investigator on, or assigned to participate in, sponsored research (whether or not any portion of the individual's salary is charged to the sponsored research funds) shall not by virtue of such an arrangement receive extra compensation unless there is clear and compelling evidence that such duties constitute added responsibilities above and beyond the individual's normal work assignment. When in the judgment of the President or a designee, the direction of important Institute affairs (whether sponsored or not) warrants an adjustment in salary, the individual may be awarded an increase in recognition of the increased responsibilities. Such an increase should be clearly designated as contingent upon the continuation of the additional responsibilities or activities, and the individual will be informed as to what portions, if any, of the salary are on a contingent basis.

Procedures for Submitting Proposals and for Accepting Awards

1. Before making any commitment to a potential sponsor, or submitting a written proposal or application for a contract, grant, cooperative agreement, or restricted gift, the faculty member who is to serve as principal investigator or otherwise assume responsibility for the performance of the research program shall make sure that:
 4. The project is consistent with the mission and objectives of the Institute and, where appropriate, the Division;
 5. The personnel, space, and other necessary physical resources are available or have been provided for in the budget;
 6. Commitments for Institute cost sharing or matching funds have been secured;
 7. Commitments by proposed participating individuals and/or organizations have been secured; and
 8. Required Institute and sponsor clearances, approvals, and where necessary, permissions to deviate from Institute policies, have been

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identified and steps are under way to have these obtained in a timely manner.

2. The following offices or individuals can be contacted for guidance and assistance in dealing with a potential sponsor and submitting a proposal or application:
 4. The Division Office—to resolve issues about the content of the planned program; the level of effort of principal investigator and other key individuals; potential possible conflict of interest situations; availability of required resources such as required matching funds, space, and undergraduate and graduate students; and any other matters that would impact the Division or the faculty member's functioning within the Division.
 5. The Office of Sponsored Research—for application forms, information on sponsoring agency and Institute policies on sponsored research, budget preparation assistance, and required certifications and/or assurance documents. Sponsored Research can supply sample agreements for use with non-federal sponsors and will normally negotiate the sponsored award terms and conditions on behalf of the Institute.
 6. The Offices of Foundation Relations or Corporate Relations—to obtain information and assistance in pursuing restricted or unrestricted gift support or grants from corporations or philanthropic organizations.
 7. The Office of the Vice President for Business and Finance—for unusual financial requirements or deviations from the Institute's normal policies on costs to be included in research proposal budgets.
 8. The Office of Intellectual Property Counsel or the Office of Technology Transfer—for advice and assistance on matters pertaining to disclosure, ownership, and/or licensing of intellectual property.
 9. The Vice Provost—for matters pertaining to the Institute's policies governing research and for approval to serve as a principal investigator for individuals who do not hold a professorial faculty appointment.
 10. The Provost—for matters pertaining to academic policy.
 11. The President—for matters of general policy.
10. Formal proposals or applications requesting external funding for research and other sponsored activities must be submitted either by the Office of Sponsored Research or the Offices of Foundation Relations or Corporate Relations. All applications for new, non-competing continuation, renewal, or supplemental awards or revisions to proposals or program budgets requested by the sponsor must be accompanied by a completed Division Approval Form (DAF) that will have the signatures of the appropriate Institute officials who are required to approve certain aspects of the

application and contemplated research program. Both new and renewal proposals for sponsored research are required to be reviewed and approved by the Administrative Committee on Sponsored Research, prior to acceptance of any award resulting from the submission. In addition, new proposals that have proposed budgets of \$1,000,000 per year or more and renewal proposals having budgets in excess of \$2,000,000 per year, or any proposals that the President designates, must receive approval from the Executive Committee of the Board of Trustees prior to acceptance of an award. In cases where an agreement is negotiated between a potential sponsor and the Institute prior to submission of a formal proposal, or funds are awarded by a sponsor with the submission of a proposal through normal Institute channels, a statement of work, a budget, and a completed DAF must be processed through the Office of Sponsored Research and approved by the Administrative Committee on Sponsored Research and, when appropriate, the Executive Committee of the Board of Trustees before the Institute will execute the agreement or accept the award. The Office of Sponsored Research will arrange for these reviews and for the necessary Institute signatures on the proposal or application and will negotiate any requirements contained in the award document offered by the sponsor that impact compliance with Institute policies on sponsored research.

11. Proposals for testing programs require approval from the Division Chair or other official responsible for oversight of the laboratory or facility to be used in the testing program, and the Office of Sponsored Research.
12. Requests for restricted and unrestricted gifts to the Institute (for divisional or institutional research) shall be reviewed by the office of the Vice President for Development and Alumni Relations and the Provost before approval by the President.
13. Proposals for awards to support graduate student fellowships, individual graduate student financial support applications, and institutional graduate student traineeship applications, require the approval of the Dean of Graduate Studies on the DAF, in addition to the normal Division approval, prior to submitting the application to the Office of Sponsored Research for processing and signature.
14. Requests for support of educational projects, summer Institutes, and similar activities, as well as proposals for support for the purchase of equipment or renovation of facilities shall be handled by the same procedures as described above except that no review and approval by the Administrative Committee on Sponsored Research is required.

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Taping of Public Speeches

It is the practice of the Institute to tape public campus speeches of topical or historical interest. (Public speeches are defined as those given outside normal academic channels in settings easily accessible to public attendance.) However, no taping will be undertaken by the Institute, and no Institute tapes will be made available to the public, without the speaker's permission.

Travel and Transportation

All travel will be in accordance with the administrative procedure, "Travel Procedures and Reporting Instructions" issued by the Office of Financial Services, or as they may be amended, together with any special instructions enumerated below. Information regarding coverage under the Institute's blanket trip-insurance policy may be obtained from the Human Resources office.

The Board of Trustees has ruled that Institute employees are not permitted to use privately owned aircraft while traveling on Institute business.

Travel to Meetings

Within the limits of their budgets, and in the absence of contract or grant support, the Divisions may provide financial assistance to faculty members who are presenting papers at meetings of national professional societies or are attending important committee meetings in this country.

In many cases, the Development Office may be able to provide travel assistance to Faculty members who wish to attend national meetings and are willing to make visits to laboratories of Industrial Associate organizations that are in the vicinity of the meeting or on the way.

The Institute is required for income tax purposes to report payments for travel unless an accounting has been filed showing that the travel expense was equal to or in excess of the travel grant.

Travel on Institute Business

Faculty members and other employees who travel on authorized Institute business will be reimbursed for necessary expenses incurred in connection with such travel. Upon return, the individual is required to submit a travel expense report to the Travel Section of Accounts Payable Department, itemizing expenses of the trip. Travel in connection with scheduled visits to laboratories that are members of the Industrial Associates is considered travel on Institute business.

Travel Chargeable to Special Funds and Government Agreements

Reimbursement of travel expenses from special appropriations or funds requires the approval of the person responsible for administering the fund. Travel performed in connection with a government agreement will, in addition, be regulated by the provisions of that agreement.

Tuition Exemption

Children of employees may attend the Institute as undergraduate students without payment of the tuition fee, subject to the following provisions:

4. The parent must a full-time, benefit basis employee who has fulfilled the probationary period of employment with the Institute.
1. The children must satisfy the regular entrance requirements of the Institute, whether for admission to the freshman class or to one of the upper classes by transfer from another institution of college rank;
2. The children must maintain standards of scholarship and conduct considered satisfactory by the deans;
3. The children of eligible parents will continue to be eligible if the parent remains at the Institute, retires under an established Institute retirement plan, is on a disability leave of absence, or dies;
4. If a parent, whose children are receiving tuition benefits, ceases to be eligible for reasons other than retirement, disability, or death, such tuition benefits shall cease; and
5. Children of employees may complete the term they are currently enrolled in if their eligible parent is on leave of absence without salary.

Children are defined as natural born, legally adopted, stepchildren, and foster children, provided that foster children have been living in the home of an employee and shall have been supported primarily by the employee for at least three (3) years immediately prior to registration at the Institute.

Eligibility for tuition exemption does not exclude such undergraduate students from consideration, on the same basis as other undergraduates, for cash grants, which may be made to students of high scholastic standing upon demonstration of financial need.

Use of the Institute's Name

Caltech does not approve or endorse specific commercial products or services. Normally the Institute does not permit its name to be used at all in publicity for such products or services, but specific exceptions to this rule may be approved by the Vice Provost if they are deemed to be in the best interests of the Institute.

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Other rules concerning the use of the Institute's name may be found in this chapter under "Consulting Activities" and "Candidacy for Public Office."

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Services and Facilities

Archives

The Caltech Archives is located in the Beckman Institute (BI) and serves as the collective memory of the school. Its holdings include manuscript collections, oral histories, an on-line database of images from the archives' substantial collection of visual material (PhotoNet), audio-visual recordings, fine art, medals, and historical artifacts, ranging from scientific equipment to school pins. It is open to researchers during the week. The archives also houses an important collection of rare books in the history of science going back to the 16th century, as well as current monographs, and provides support for the Science, Ethics, and Society option. Slides of the campus and of scientists associated with Caltech may be borrowed or made. Finding aids are available in the archives for most of the archives' manuscript collections. Many of these are also currently accessible and searchable through the Online Archives of California (OAC). Other services that are available include an on-line searchable archive database, grants-in-aid to use the manuscript collections, and a small self-guided Beckman exhibit room on the first floor of the BI.

Athenaeum

Athenaeum membership is open to the teaching, research, administrative staffs and graduate students of the Institute, and the staff of the Huntington Library and Art Gallery, the Mount Wilson and Las Campanas Observatories, and to others who have demonstrated their interest in advancing the educational objectives of the Institute. The purpose of the Athenaeum is to provide a common meeting place for its members that will facilitate their association and create a center for intellectual and social life.

Bookstore

In addition to a complete stock of required books and supplies, the bookstore carries many reference books, technical equipment, and stationery

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supplies, as well as other items. Individual orders are taken for books and special items not carried in stock.

In order that required or recommended books and supplies be available when needed for classes, requests should be made to the bookstore by May 1 for fall term, by November 1 for winter term, and by February 15 for spring term.

Located within the store is Caltech Wired, Caltech's computer store. Caltech Wired provides computers (including hardware and supporting software and instructional material) that support Caltech's educational and research functions.

Career Development Center

The Career Development Center offers career counseling, life planning, and employment services to students, postdoctoral scholars, senior postdoctoral scholars, and alumni. Workshops on job search, resume preparation, interviewing, and graduate and professional schools are presented and individual counseling on career issues is available.

The office is a source for students seeking work-study and other part-time and summer employment as well as full-time employment after graduation. Faculty members are encouraged to refer outside job listings and inquiries to the Career Development Center and to list their own part-time and summer opportunities, both work-study and regular.

Other resources available are college catalogs, scholarship and fellowship information, salary surveys, company literature, and test applications. In addition, many companies conduct on-campus interviews for graduating students and research fellows.

Central Engineering Services

Central Engineering Services (CES), a department of Physical Plant, provides design, engineering, and fabrication services for all Institute departments. Included is state-of-the-art machining equipment such as a computer-numerically controlled (CNC) mill. Welding, from structural arc to fine high vacuum welds, on virtually all materials is also available. CES is able to deliver services on material up to 6 feet in diameter. In addition, CES can provide project management including supervision of in-house fabrication and off-campus specialized subcontractors.

CES maintains a library of catalogs listing various specialties. Engineering staff offer consultation, recommendations, and problem solving. Charges are based on direct labor costs plus a service charge to defray operating expenses.

Credit Union

The Caltech Employees Federal Credit Union is employee-owned. Membership is available to all paid members of the Faculty, other employees, and members of their immediate families. The Credit Union was established for the purpose of providing a safe and profitable means of saving and of making loans available at reasonable interest rates.

Government and Community Relations

The Office of Government and Community Relations helps coordinate the Institute's activities related to developing and maintaining relationships with local and state governments and with the federal government. Assistance in communicating with government officials and agencies will be provided upon request. Requests for Institute involvement in community projects and organizations should be routed through this office.

Graphic Arts Facilities

Graphic Arts Facilities has the responsibility to provide graphic reproduction services including technical illustration, photo lab, and offset printing. Copy services include "while you wait" as well as high volume copiers for proposals and technical reports and reproductions of engineering drawings. Graphic Arts is also responsible for overseeing a centralized copier program. Passport photos are also available. Mailing lists or addressing services for Institute business can also be obtained from Graphic Arts.

Health Center

The facilities of the Archibald Young Health Center are available to faculty members, but not to members of their families, for treatment of on-the-job injuries, and for inoculations. Fees will be charged according to established schedules, plus cost of medication. For the purpose of eligibility, a faculty member is defined as one who is eligible to be listed in the faculty section of the *Caltech Catalog*.

Human Resources

The Human Resources Office is responsible for recruiting staff personnel; administering transactions for postdoctoral scholars, maintaining personnel records; issuing and interpreting approved personnel policies and procedures, including affirmative action; and acting in an advisory capacity for all staff personnel. The Human Resources Office is also responsible for all

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wage, salary and stipend payments, administering fringe benefits programs, and overseeing immigration activities for all Institute employees.

Industrial Relations Center

The Industrial Relations Center develops and offers programs on linking emerging technologies with management strategies and practices, improving the effectiveness of manufacturing operations, developing the leadership skills of technical professionals, and encouraging new business ventures. Courses and forums are presented on campus and are open to executives and managers in technology-based organizations, Caltech students, faculty, and staff. Fees are waived for Caltech students who participate in the Center's programs.

Information Technology Services

Information Technology Services (ITS) addresses the computing support needs of the distributed computing environment at the Institute.

ITS provides support for the personal computers in use on the campus, provides resources to support educational computing, manages and maintains CITNET (Caltech's campus wide local area network), supports supercomputing at the San Diego Supercomputer Center, and operates a Campus Computing Information Center for the Institute.

Library System

The Caltech Library System (CLS) encompasses the central library in the Millikan Memorial, including the collections for biology, chemistry, mathematics, physics, social sciences, and the humanities; the Sherman Fairchild Library with collections in engineering (chemical, electrical, civil, mechanical, environmental, and aeronautical), computer science, applied mathematics, and materials science; the departmental libraries for astrophysics, geology, and public affairs; and the Management Library in the Industrial Relations Center.

The CLS website at <<http://library.caltech.edu>> is the gateway to the library system's growing array of electronic services. CLAS is the electronic catalog of library holdings; it links all circulation, acquisitions, and cataloging functions to show up-to-date information. CLAS also includes course reserve lists and links to electronic journals. SCISearch provides cited as well as source information for science, technology, humanities, and social sciences literature. IBID is an integrated document request tracking and fulfillment system for document delivery and interlibrary loan that accepts online requests from most

databases provided by the Library System. The CLS website also provides links to relevant selections from the broad spectrum of information sources and resources on the Web.

Other special services that are available through the Caltech Library System include computerized literature searches, web classes, library user instruction, and a faculty and research liaison program.

Mail Services

The mailroom, a U.S. post office substation, is located in the Keith Spalding Building and provides both personal and Institute mail services. Incoming Institute mail is distributed and delivered by mailroom personnel who also collect outgoing mail for rating, metering, and dispatch. Stamps are available and packages may be mailed.

Information concerning mailing lists or addressing services for Institute business can be obtained by contacting the manager of the mailroom.

Miscellaneous Services

Notaries

The services of a notary public are available in several locations on campus. Consult the *Personnel Directory*.

Rental Listings Service

As a free service to the Caltech community, JPL, and affiliates, the office of Campus Auxiliary and Business Services maintains a listings service of non-Caltech owned rental properties in Pasadena and adjacent areas. This list is available on the World Wide Web. Listings include houses, apartments, and rooms for rent. Some listings are noted "to share." Listings are updated once a week, by noon on Wednesdays. You are welcome to visit the listings website at www.caltech.edu/~cabs/housing/listings.

Parking

The Security Office handles the assignment of campus parking spaces and the enforcement of campus parking regulations and assumes responsibility for the safety of all students, faculty, and staff on the Caltech campus.

Assigned parking spaces are available to members of the voting faculty, equivalent visiting faculty, and administrative officers who report directly to a Division Chair, a Vice President, or the Vice Provost. The fees for assigned parking are determined by the administration. Parking applications may be made to the manager of the Security Office.

Chapter 3

Ombuds Office

The Ombuds Office provides the entire Caltech community with confidential, informal assistance in resolving conflicts, disputes, and grievances, and in promoting fair and equitable treatment within the Institute. The office provides complete confidentiality to visitors, except in cases of serious threat to individuals or the Institute.

Physical Plant

The Physical Plant Department is a service unit responsible to the Vice President for Business and Finance, for designing and constructing new facilities when approved by the Board of Trustees; for operating and maintaining the buildings and grounds of the Institute; providing, upon request, special services to the academic and administrative units and auxiliary activities of the campus; and performing special alterations and modifications to the physical facilities.

Other functions of this service unit include, but are not limited to, administration of uniform building and safety codes, custodial services, key control services, refuse disposal, special events (arrangement), telecommunication services, transportation services, and utilities (purchase and distribution).

Public Events Office

The Public Events Office is the service organization that coordinates and administers campus and public events held in various Caltech facilities. The office specifically schedules Beckman and Ramo Auditoriums, and Dabney Lounge. All required promotional, production, and ticketing services are provided for official Caltech events. The Public Events Office also operates the campus wide audio-visual service unit (located at 330 S. Michigan Avenue), supplying audio-visual equipment and operating personnel for curricular as well as extracurricular activities, and the campus closed-circuit TV system. The Public Events Office also includes the Caltech Ticket Office, located at 332 S. Michigan Avenue. Through the Ticket Office, tickets may be purchased for all Caltech events.

Public Relations

The Public Relations Office is responsible for the Institute's media relations, publications, periodicals, and general public relations activities.

Media Relations

Media Relations provides announcements, news releases, and general information about the Institute to the press and handles requests from the press for information about Institute activities. Staff members are available to help Faculty members prepare statements to the news media and to organize press conferences, and to aid faculty in handling requests from television, radio, and print media. Media Relations welcomes notification by faculty of upcoming publications, scientific papers, speeches, and other information that should be released to the press.

Publications

The Publications staff provides assistance to those Caltech faculty members who want to convey written information about the Institute. The staff can help in all phases of writing, editing, and production of reports, brochures, posters, letterheads, fund-raising material, promotional literature, programs, and other materials. General photographic services are available.

The staff produces several Institute publications: *Caltech Catalog*, *Personnel Directory*, *Roster*, *Weekly Calendar*, *Annual Report*, various undergraduate student recruitment materials, and a visitors brochure.

Periodicals

Three periodicals are published for various Caltech audiences. The 16,000-circulation of *Engineering & Science*, published quarterly, includes members of the Alumni Association, JPL, corporations, foundations, libraries, high schools, and the media, as well as faculty and students. The magazine carries articles primarily on research at Caltech. *Caltech News*, which is distributed four times a year to all alumni, and to faculty, students, and friends of the Institute (a total of 22,000), reports on a broad spectrum of current affairs at Caltech and on fund-raising and alumni activities. *On Campus*, a monthly newspaper for employees (staff, Faculty, graduate students), provides articles and information of interest to the campus community.

Additional Services

The *Weekly Calendar*: Published by Public Relations each Monday of the academic year, the *Weekly Calendar* publicizes campus activities throughout the Institute and to interested off-campus individuals and organizations.

Tours: Student-conducted tours, sponsored daily by Public Relations, begin at 315 S. Hill Avenue. Please call for further information. Speakers Bureau: Outside requests for presentations to community and scientific organizations may be routed to Public Relations.

Chapter 3

General Information: Specific or general requests for information on the Institute may be referred to Public Relations for handling.

Purchasing

The Purchasing Department is responsible for the procurement of all materials, supplies, equipment, and services required by the Institute. Buyers are assigned to departments and work closely with faculty and staff members to expedite the procurement process.

Disposal of surplus government property is handled by the Purchasing Department. Suppliers' catalogs and other source references are available.

Safety

The Caltech Safety Office is responsible for maintaining an environment for its faculty, staff, students, and visitors that will not adversely affect their health and safety, insofar as it is reasonably within the control of the Institute to do so. The Institute will comply with federal, state, and local health and safety regulations, or in their absence will use the standards of nationally recognized advisory bodies.

The Safety Office has technical expertise in the fields of radiation, industrial hygiene, fire safety, chemical toxicity, and general industrial safety, and will provide information and assistance on procedures, safe handling techniques, availability of special safety equipment, emergency response, and disposal of hazardous materials. The Safety Office also administers the Institute Workers' Compensation Program.

All functions of the Safety Office are supportive in nature. They in no way relieve individual Faculty, employees, and supervisors of their direct responsibilities for safety.

Radiation Safety

It is the policy of the Institute that all activities involving the use of radioactive materials or machines producing ionizing radiation shall be conducted so as to minimize the risk of radiation exposure insofar as is reasonably achievable. Persons involved in these activities must comply fully with regulatory requirements of the state of California and the federal government and with any additional regulations established by the Institute.

The Administrative Committee on Radiation Safety, appointed by the President, establishes uniformity of radiation policy throughout all Institute facilities. The members advise the President and administrative officers on general matters involving radiation safety.

Procurement or possession of radioactive materials and radiation-producing machines, and plans for new construction or alteration of existing buildings and facilities in which these materials and machines will be used, require the prior approval of the Committee and notification of the Institute Health Physicist in the Safety Office.

Security

Security provides for a 24-hour emergency assistance and coordination of outside emergency units, such as the Pasadena Police Department, Fire Department, and Paramedics. This office is responsible for the assignment of parking spaces and the enforcement of the Institute's parking regulations. The Caltech Security Office also is responsible for maintaining programs to assure both Plant and Classified Document Security.

All services of the Security Office are supportive in nature and do not relieve individuals of their direct responsibilities for security.

Escort service is available at any time. For escort service call the Security Office at Extension 4701. For emergencies, day or night, call extension 5000 (on campus) or 395-3000 (off campus).

Staff and Faculty Consultation Center

(An Employee Assistance Program)

The Staff and Faculty Consultation Center (SFCC) provides free confidential counseling to help resolve issues that are affecting an employee's life. Issues may involve marriage and family relationships, substance abuse, finances, and personal issues in the workplace. The service is also available to family members. The center consults with management and faculty regarding difficult employee situations as well.

In addition, this office provides community information such as child care referrals, legal, financial, and other social service resources.

Women's Center

Open to both women and men, the Caltech Women's Center addresses gender-related concerns of Caltech students, faculty, and staff through policy development, educational programs for the community, and advocacy for individuals. The Women's Center serves as a resource center and meeting location as well as work space and library.

APPENDIX 1

Faculty and Staff Appointments and Promotions

The appointment or promotion of a faculty member will, in general, be initiated by a recommendation from the appropriate Division Chair to the Institute Academic Council (IACC). After careful consideration, which for senior Faculty will usually include external letters of recommendation and, if necessary or desirable, appropriate interviews, the Provost will make a formal recommendation to the President. Appointments and promotions acceptable to the President will be submitted to the Board of Trustees or its Executive Committee for approval, except for those faculty for whom the Board has delegated the power of approval to the President.

Appointments and promotions approved by the Board of Trustees or its Executive Committee shall be communicated to each individual concerned by means of an official letter of appointment prepared by the Provost or Vice Provost and signed by the President or Vice Provost. The recipient must sign and return to the Provost's Office an acceptance copy before the appointment or promotion can be effective.

Administrative Appointments of Faculty Members

Faculty members in administrative positions serve in those positions at the pleasure of the President or Provost. The duration of such appointments is usually for a period of five years with the understanding that a review at that time may lead to a renewal of the appointment for a further five-year period. A five-year commitment is long enough for the appointee to grow to the position and to achieve significant results but short enough so that return to full-time teaching and research is possible. A second appointment would normally allow completion of a comprehensive set of objectives in an administrative position. A third such appointment would therefore be unusual, but is not excluded. In recognition of administrative service, a salary increment, specified in the letter of appointment, may be added to the base salary of the faculty member for the duration of the administrative appointment only. Individuals appointed to administrative positions from outside the Institute are subject to a similar set of considerations.

Chapter 3

Administrative Committees

The Administrative Committees of the Institute are appointed by the President or Provost. A list of the current committees and their members may be found in the *Caltech Catalog*.

Faculty Members Emeriti

It has been the tradition at Caltech that many retired faculty members continue to maintain close contacts with the Institute. The continuation of this association can be enjoyable and beneficial to the retired faculty members, and it is of substantial advantage to the Institute. It reduces the abruptness of retirement, it maintains academic relationships, it fosters useful work, and it provides the younger faculty members with invaluable sources of experience and wisdom.

Any professorial members of the faculty of age 62 or greater who have served on a full-time basis for ten years or more prior to their retirement or resignation may be considered for appointment to appropriate emeritus status. Recommendations, based upon distinguished academic accomplishments at the Institute, will be made by the appropriate Division Chair to the Provost for the approval of the Board of Trustees. Privileges of Professors Emeriti may be found in Chapter 5 of the Faculty Handbook.

Research Faculty

Research faculty members have traditionally played an important role in keeping the research activities of the Institute at the forefront. Because of changes that occur in research support, directions, resources, and professorial personnel, it is necessary that research appointments be made on quite specific terms. Any exceptions to the following guidelines for appointment of research faculty members must be specifically stated in each letter of appointment or reappointment.

Research faculty appointments are nontenure-track and require the association of the appointee with a specific professorial faculty member. Appointments are contingent on continuation of the appointee's research area and its level of funding. In case of discontinuation of the appointee's research area or significant diminution of fiscal support for the appointee's work in it, the Institute, at its option, may give notice of termination. Such termination will be effective twelve months after the date of notice or at the previously specified appointment expiration date, whichever comes first. Notice of non-reappointment or of intention not to reappoint senior research faculty made for

other reasons shall conform to “The Standards for Notice,” as specified in Chapter 3 of the Faculty Handbook.

A senior research faculty member may be a principal investigator on a grant or contract only with the approval of the cognizant Division Chair and of the Vice Provost, and only for the projects for which a member of the professorial faculty is either co-investigator, or assumes formal responsibility for the validity and importance of the research. Within the scope of the general guidelines, senior research faculty (senior research associates and senior research fellows) may be cooperative or independent in research.

Non-research-related activities, including any occasional or voluntary teaching or service on administrative or faculty committees by the members of the research faculty, should be consistent with the purpose of the source of salary support, which is most often wholly from outside grants or contracts. Institute teaching assignments for research faculty members are to be undertaken only on an occasional and strictly voluntary basis. Temporary appointment to the rank of Lecturer is required, and compensation is normally paid to the research budget rather than to the individual. Supervision of thesis research undertaken by graduate students is permitted provided the responsible thesis advisor is a member of the professorial faculty.

Evaluation of the performance of research faculty is made primarily on the basis of their contributions to research. Senior research faculty appointments and reappointments are recommended and approved according to administrative procedures for Faculty status as described in the first section of this chapter.

Senior Research Associates

Senior research associate appointments are made of individuals who have achieved national and international recognition for research and scholarly achievement. The appointment is normally for three years. Performance as senior research associate, and the desirability of continuation of the association of the appointee with the Institute, will be reviewed by a committee appointed by the cognizant Division Chair at regular intervals, not to exceed five years.

Senior Research Fellows

Appointments as senior research fellow are made for terms up to three years, but the rank of senior research fellow may only be held for a total of six years. In no instance may the amount of time spent in the combined ranks of postdoctoral scholar, senior postdoctoral scholar and senior research fellow exceed nine years. Renewal after the first two or three years as senior research fellow will be made on the basis of recommendations by a review committee appointed by the cognizant Division Chair.

Chapter 3

Faculty Associates and Senior Faculty Associates

The title of faculty associate or senior faculty associate may be conferred on a few individuals who have high professional attainments and who would be expected to make a substantial contribution to the Institute's research program. All appointments with this title will be without additional stipend from the Institute and will be for a definite term not to exceed three years and carry no implication of tenure. These appointments will not be extended beyond a total of five years without review by the faculty of the Division concerned. All appointments of faculty associates will be recommended and approved by the procedures used for senior research associates. Faculty associates may hold research grants only with the approval of the Division Chair and Provost, and if the grant proposals are cosponsored by a member of the professorial faculty. JPL senior faculty associates may use resources from such grants to offset their normal JPL salary only.

Instructors

An appointment as instructor at the Institute is normally for full-time teaching and research. Appointments may be made for one or two years but the rank of instructor may be held for no more than a total of three years. Appointment as instructor is not tenure-track and time served as instructor, whether at the Institute or elsewhere, does not count toward academic tenure.

Lecturers

Lecturer appointments are not tenure-track and are primarily for specific teaching assignments customarily on a part-time basis. In rare instances and on an individual basis, lecturers with substantial teaching loads and long service will be given multi-year continuous appointments that also make them eligible for participation in the faculty retirement plan. Time served as lecturer at the Institute or elsewhere does not count toward the probationary period of academic tenure. In the case of a lecturer who does not hold another Institute appointment, no appointment will be made for a sixth year except on the basis of a review by a committee appointed by the Chair of the Division concerned, unless it is clear that the sixth year will be the last year. Subsequent to this, appointments will be extended on the basis of review no less frequently than every third year. The appointment of a Lecturer who holds another position will be extended only on the basis of reviews made at any time that the Lectureship has been held for five years without such review.

Visiting Members of the Faculty

Visiting Professors

Visiting professors (of the different ranks) must teach at least one course while in residence at the Institute.

Visiting Associates

Visiting associates are appointed for study or research. Teachers or investigators associated with other institutions who expect to stay at the Institute more than one month, or who will spend the equivalent of one day per week or more on campus over an extended period of time, should receive this appointment. The Division Chair concerned recommends the visitor's appointment to the Provost, and an official notice of appointment is sent by the President. Appointments of visiting faculty members will be extended beyond a cumulative total of five years only on the basis of recommendations resulting from a review by a committee appointed by the cognizant Division Chair.

Faculty Records Office

Faculty members must provide the Faculty Records Office with the following information and promptly make notifications of any changes therein.

1. Changes in name and/or marital status.
2. Correct addresses and telephone numbers.
3. Forwarding addresses.
4. Honors and awards received.
5. Any change in visa status (inform the Faculty Records Office and the Office for International Scholar Services)

Other Members of the Staff of Research, Instruction, and Professional Service

Visitors

Visitors are appointed for terms of no more than one year, and may be reappointed for a total of up to three years. They may be full-time or part-time; paid or unpaid. Visiting appointees should meet the following criteria:

- They must be nominated by an active professorial faculty member who is a colleague and is responsible for making the visitor's stay at Caltech mutually beneficial.
- They must have a position at another academic or research institution.
- They must have been awarded a Ph.D. or equivalent degree in an appropriate and relevant academic field.

Chapter 3

- If a foreign national, they must show evidence of a current J-1 or H-1B visa that will remain valid for the duration of the proposed appointment.

Visitors are entitled to a “visitor” identification card for access to campus facilities, and listing in the campus directory, and are eligible for membership in the Athenaeum. Visitors may not serve a Principal Investigators or Co-Investigators on sponsored research grants or contracts. The Postdoctoral Scholars Section of the Office for Human Resources processes Visitor appointments.

Graduate Student Assistants

Graduate assistantships require services related to teaching or research for which no academic credit is given. Graduate fellowships and scholarships require study and research for which academic credit is given. Some fellowships involve teaching duties as well. In general, graduate scholarships provide only tuition grants.

All official appointments or terminations of registered graduate students to fellowships, scholarships, and graduate assistantships are made through the Office of the Dean of Graduate Studies on the basis of recommendations made by the appropriate Divisions. Appointees are members of the staff of research and instruction but are not members of the faculty.

Members of the Professional Staff, Members of the Beckman Institute, and Librarians

Members of the professional staff have educational backgrounds, daily activities, and contributions to the scientific and technical operation and planning of the Institute that are in many ways comparable to those of the staff of research and instruction. Members of the Beckman Institute are scientists or engineers who, on the basis of their experience and abilities, are expected to make major contributions to the activities of one of the Resource Centers of the Beckman Institute. Their designation as members of the professional staff or members of the Beckman Institute conveys special recognition and appreciation by their colleagues and the Institute. The librarians are individuals who have a high level of knowledge and expertise in the field of library science, and who have demonstrated outstanding leadership, initiative, and ability to anticipate and implement changes to improve library operations.

Special Students

Students at other institutions or individuals who do not meet criteria required for appointment to the categories described above may be considered for a short-term experience as a member of the Caltech community through

appointment as a Special Student. Faculty members wishing to “employ” an individual as a Special Student should direct requests for information to the Postdoctoral Scholars section of Human Resources, who will coordinate such appointments with the Office of Student Affairs, the Caltech organization responsible for review, approval, and oversight of such appointments.

Staff Employees

Complete information on appointment, promotion, and termination of staff employees (support, professional and managerial) is given in Institute policies and personnel memoranda, which are provided to supervisors and available on the Caltech web site.

APPENDIX 2

Policies Relating to Students

Absence Reports

Although class attendance records are not required, faculty members are requested to report to the Dean of Students any continued absence on the part of students in their classes.

Auditing Courses

With the consent of the instructor in charge of the course and the Division Chair, persons not regularly enrolled in the Institute may be permitted to audit courses upon payment of a fee in the amount specified in the current issue of the *Caltech Catalog*. Registered students are not charged for auditing. No grades for auditors are turned in to the Registrar's Office, and no official record is kept of the result of the work done.

Course Changes

The phrase "course changes" is to be construed as including the introduction of new and the dropping of old subjects of instruction, and changes in the curriculum or requirements of any option of study.

1. All course changes are to be submitted first to the appropriate Division Chair, then, if approved, to the Chair of the Curriculum Committee and/or the Graduate Study Committee. Whenever new courses are involved, the Division Chair should see that each is provided with a course number, a total number of units (with the unit distribution as to class, laboratory, and preparation), the specific term or terms in which the course will be offered, a brief description to appear in the catalog, the prerequisites (if any), and, if possible, the name of the instructor.
2. On receipt of the recommendations of the faculty committees, the Faculty Board takes action, subject to possible reviews by the faculty as a whole as provided in the faculty bylaws.

It is obviously desirable that course changes appear in the *Caltech Catalog* for the academic year in which they go into effect. To this end, they should be initiated as early as possible. The courses cannot appear in the catalog for the next academic year unless they are approved at or before the last Faculty Board meeting of the academic year, which is normally in mid-May.

Chapter 4

Appropriate time should be allowed for consideration by the faculty committees in advance of the Faculty Board meeting.

Examinations

Special examinations for individual students are to be avoided except when required by schedule conflicts, illness, or other special circumstances. The time and place for special examinations are to be arranged by the instructor.

The last day for the removal of conditions and incompletes is scheduled about three weeks after the beginning of each term. The exact date appears in the calendar in the catalog. If an examination is necessary, it should take place before that date. These are not considered special examinations and are subject to the same rules as are other scheduled tests.

Faculty Responsibilities for Students

Faculty members are expected to act as advisors to the undergraduates. All freshmen are assigned to Faculty advisors who interest themselves in the freshman's progress and advise on questions or problems. All members of the three upper classes are assigned to option advisors who interest themselves in the students' selection of courses, their progress toward their degrees, and, eventually, in their placement in industry or graduate school.

Serving as thesis advisor to a graduate student is often among the most important responsibilities of a faculty member. In addition, in the graduate options, graduate students may be academically associated with an informal group of the faculty governing the option. Faculty members from each area of graduate study are also available for consultation on problems concerning academic programs, degree requirements, financial aid, etc. Faculty members serve on thesis examining committees and oral examinations for graduate degrees.

Faculty/Student Relations

Coordination and cooperation between students and faculty with regard to campus affairs are secured through the presence of students on faculty committees through the Office of the Vice President for Student Affairs, and by means of other less formal mechanisms.

Guidelines for the Graduate Student-Faculty Advisor Relationship

This section is repeated in the Caltech Catalog under Graduate Policies and Procedures. Please see the catalog version for up-to-date page references.

The relationship between a faculty advisor and graduate student should be founded on mutual respect and open communication. Advisors and students should discuss the nature of their working relationship early and continue this discussion throughout their period of collaboration to ensure mutually understood and compatible expectations. These discussions should be frequent and open, and should include not only work, research goals, and performance reviews, but also change of status, time for personal and family responsibilities, time off (see catalog), and concerns about academic or work situations. Both the student and advisor have the obligation to initiate meetings as necessary to ensure the success of the relationship.

The graduate student-faculty advisor relationship should be guided by norms of fairness and professionalism. Both faculty and graduate students should avoid relationships that conflict with their respective roles and duties at Caltech. Both are bound by the prevailing policies prohibiting discrimination and harassment (see catalog). Concerns relating to academic or work situations should be raised promptly between the persons directly involved and handled informally if possible. Both students and advisors have the responsibility to raise and address concerns and conflicts promptly, honestly, and in a manner that conforms with academic integrity and professionalism. Caltech policy requires that students' concerns be addressed fairly and promptly and prohibits the retaliation or discrimination against students for appropriately voicing or raising a concern.

If a problem remains unresolved or if direct discussion is not possible, a student can seek assistance from Division officers (e.g., Option Representatives), the Dean of Graduate Studies, the Ombudsperson, the Assistant Vice President for Student Affairs, or the office of International Student Programs. At any time a student may request that discussions remain confidential. For more details about sources of assistance, consult the graduate option regulations (see catalog) and the Student Grievance Procedure (see catalog).

Field Trips

Instructors in charge of field trips should notify the Registrar's Office at least five days in advance of the date of such trips. The Registrar's Office will, in turn, notify the instructors whose classes will be affected by the absence of students. In the case of small groups, students should notify their instructors.

Chapter 4

The Honor System

The Honor System at the Institute also covers course work including examinations, tests, laboratory reports, and homework. It applies to both undergraduate and graduate students. Instructors should always keep in mind that an honor system cannot work unless it has been made perfectly clear to the students how much collaboration, if any, is permitted on laboratory reports and homework. This should be done at the first meeting of each term.

Most examinations are of the take-home variety, although a room for the examination may be reserved at the instructor's discretion. Even if a room is reserved, the instructor should not be present during the examination, and students should be free to come and go as they please. Instructors should specify clearly the ground rules for all examinations. It is the responsibility of the students to follow the announced ground rules.

Administration of the honor system is in the hands of the undergraduate student Board of Control and the graduate student Graduate Review Board, and any violation of the honor system that comes to the attention of an instructor should be reported to the Chairs of the respective boards or to one of the Deans—undergraduate or graduate as the case may be.

Length of Classes

Classes start on the hour and last fifty-five minutes. Classes should be dismissed promptly so that students will not be late to the next class.

Overloading of Students

The faculty has gone on record as definitely opposing overloading of students through the requirement of more time in class, laboratory, or outside preparation than is allowed by the number of units allotted to a course. Instructors should use great care in determining whether a significant proportion (perhaps 20 percent) of their students find it necessary to put in extra time in laboratories, on laboratory reports, or on homework.

Scholastic Grading

The system of scholastic grading is explained in detail in the *Caltech Catalog*. In general, the faculty has gone on record as being opposed to the so-called "curve system" in which grades in a section or a course are determined by any method which results in a certain number of A's, B's, C's, etc., being automatically awarded. The instructor should have in mind a standard of excellence for each level and should award each grade on the basis of this

standard. Thus, it might be possible for every member of a section in a given course to receive A's. As long as the selection of students—and perhaps the faculty's teaching abilities—cannot be perfect, this situation is not likely to occur, but if the Institute's objectives are being realized even fairly well, it is unreasonable to assume that in every section or course some students must necessarily receive low grades. For freshmen, term-end grades are limited to Pass/Fail for the first and second terms. All others are allowed to register for one course per term on a Pass/Fail basis.

Senior Ditch Day

The faculty has officially recognized Senior Ditch Day. This holiday, the date of which is determined and announced by the senior class, is a prerogative of the seniors. Other impromptu interruptions of the academic calendar, whether by class or by section, should not be permitted.

Summer Research

Undergraduate and graduate students in residence may be permitted, with the recommendation of their Division, to register for and to carry on research during the summer vacation period without additional tuition payment. Work for which stipends are paid is not eligible for academic credit. Registration for summer research is held on Monday of the May preregistration week for undergraduates. (See the Academic Calendar in the *Caltech Catalog* for the exact date.)