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## Register of the William J. Rutter Papers

Processed by Julia Bazar and Robin Chandler; machine-readable finding aid created by James Lake

UCSF Library & CKM

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### **Note**

History --History, California --GeneralBiological and Medical Sciences --Biological Sciences --BiochemistryBiological and Medical Sciences --Biotechnology

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## Register of the William J. Rutter Papers

### Collection number: MSS 94-54

UCSF Library & CKM

Archives and Special Collections  
University of California, San Francisco

#### Contact Information:

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Processed by:

Julia Bazar and Robin Chandler

Date Completed:

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Encoded by:

James Lake

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#### Descriptive Summary

**Title:** William J. Rutter Papers

**Collection number:** MSS 94-54

**Extent:** 13 cartons

**Repository:** University of California, San Francisco. Library. Archives and Special Collections.

San Francisco, California 94143-0840

**Shelf location:** For current information on the location of these materials, please consult the Library's online catalog.

**Language:** English.

#### Access

Collection is open for research, except for Subgroup 5, which is restricted.

#### Preferred Citation

[Identification of item], William J. Rutter Papers, MSS 94-54, Archives & Special Collections, UCSF Library & CKM

#### Biographical Statement

[This biographical statement is based primarily on information in extensive interviews with Dr. Rutter conducted in 1992-1993. Editing in progress; transcripts to be deposited in the Molecular Biology and Biotechnology Archives, Special Collections, UCSF Library.]

Born on August 28, 1928, William J. Rutter received a B.A. in Biochemistry from Harvard University in 1949, after a year at Brigham Young University and a stint in the Navy. He went on to get an M.S. in (?) from the University of Utah (1950) and a Ph.D. in (?) from the University of Illinois (1952).

After post-doctoral work at the University of Wisconsin (1952-1954) and the Nobel Institute in Sweden (1954-1955), Rutter joined the faculty at the University of Illinois (1955-1963). In 1962-1963, he went to Stanford on a Guggenheim Fellowship, and then returned to Illinois as a full professor for two years (1963-1965). He held a joint professorship in genetics and biochemistry at the University of Washington from 1965-1968, before becoming Hertzstein Professor of Biochemistry and Chairman of the Department of Biochemistry and Biophysics at UCSF in 1969.

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Chairman of the department until 1982, Rutter became the Director of the Hormone Research Institute at UCSF in 1983. In addition he held numerous extramural appointments, including serving on advisory committees for various national and international laboratories and scientific organizations. He also held offices in various professional societies and served on a number of journal editorial boards. Rutter became an emeritus professor in 1991.

Among Rutter's diverse research contributions are, discovery and characterization of the three RNA polymerase transcription systems operating in eucaryotic gene expression, cloning and structural and functional analysis of the insulin gene, nucleotide sequencing of hepatitis B virus, and development (with Chiron corporation and Merck) of the first commercial genetically engineered human vaccine, for hepatitis B.

Though an innovative researcher, Rutter is best known at UCSF for his leadership as chairman and his encouragement of a collaborative, interdisciplinary approach to research. He transformed a mediocre department into a vital and groundbreaking research facility that has become a foundation for the biotech industry centered in the San Francisco Bay Area. Another of his contributions is the promotion of biotechnology and the fostering of cooperative research efforts between industry and academia. In 1981, he and two colleagues formed Chiron Corporation, where he remains as chairman of the board of directors.

### **Education and Early Career**

Rutter became interested in parasitic diseases in high school after listening to his grandfather's descriptions of the tropical diseases he had observed as a British Military officer in India. He graduated from Harvard intending to go on to medical school, but after auditing medical school classes at the University of Utah, he decided to concentrate on the research sciences. He received a master's degree from Utah in 1950 and then a Ph.D. in 1952 at the University of Illinois. At the University of Illinois, Rutter completed a dissertation on galactosemia, a metabolic disease.

Rutter began his post-doctoral studies in enzyme chemistry with Henry Lardy at the Institute for Enzyme Research at the University of Wisconsin, Madison (1952-54). An interest in enzyme mechanism took him to Sweden for another year of post-doctoral work with future Nobel Prize winner, Hugo Theorell at the Nobel Institute (1954-55).

Returning to the University of Illinois, Urbana 1955 to take a tenure track position in the chemistry department(1955-65), Rutter continued his research on enzyme mechanism, concentrating on aldolase. During the mid-1950's, he became interested in biological problems and initiated studies of the regulation of RNA transcription. Fostering this interest, Rutter went to Stanford in 1962 on a Guggenheim Fellowship and worked with Clifford Grobstein, head of Biology, on embryonic development of the pancreas.

Returning to Illinois in 1965 with his new biological focus, Rutter found his position in the chemistry department less attractive. In 1965, he accepted a professorship in the Departments of Biochemistry and Genetics at the University of Washington (1965-69). He chose Washington because of its strong genetics department and modest teaching load which allowed him to concentrate on research. While continuing his work on defining the molecular basis of the pancreatic system, he also began to focus on the mechanisms of DNA transcription, using the simple eukaryotic systems (yeast) that the department, under Herschel Roman, had developed.

### **University of California at San Francisco**

In 1965 UCSF began attempts to recruit Rutter as chairman of the biochemistry department. Worried that administrative duties would restrict his research, he hesitated for four years. At the time, medical schools were not considered ideal settings to pursue research in molecular biology. However, in the mid 1960's, Holly Smith, head of Medicine, J. Englebert Dunphy, head of Surgery, and others decided to improve basic science at UCSF, and saw Rutter as one who could lead this endeavor. Rutter was also attracted by a large number of open positions in the department which would allow him to shape its direction.

Rutter finally accepted the chairmanship in 1969, committed to creating a eukaryotic biology program based on cooperative multidisciplinary research. He had the department renamed the Department of Biochemistry and Biophysics and began to recruit promising researchers interested in a molecular approach using the latest technology. Gordon Tomkins, recruited from the NIH in 1970 to be vice-chairman, was in partnership with Rutter, a vital force in restructuring the department until his untimely death in 1977.

Rutter and his large laboratory group conducted a diverse research program initially centered on gene structure and expression. Among the highlights are the cloning of the rat insulin gene in 1977, conducted against the backdrop of the recombinant DNA controversy and a fierce race with other laboratories. In 1977, Rutter and Herbert Boyer (of UCSF), co-inventor with Stanley Cohen of recombinant DNA technology, were asked to testify before the U.S. Senate regarding alleged misuse of a plasmid used in the cloning process.

He and his group later studied the structure of genes for other peptide hormones, including several growth factors, glucagon, and somatostatin. In the early 1980's, his laboratory turned to the problem of the regulation of gene expression in specific differentiated cells. Genetic engineering techniques were also applied to the analysis of hepatitis B virus.

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Collaborating with a group at the University of Washington, Rutter and coworkers at UCSF and Chiron cloned the gene for the outer viral coat, the component of the virus that induces an immune response. Largely because of the promise the hepatitis work had for the development of a vaccine, Rutter and two colleagues founded Chiron Corp., in Emeryville, CA, in 1981.

#### **Hormone Research Institute**

Suggestions of conflict of interest due to of his ties with the biotechnology industry prompted Rutter to step down as chairman in 1982. In 1983 he became director of the Hormone Research Institute (HRI), one of UCSF's independent research units. Succeeding Choh Hao Li, as director, he reoriented research to a molecular approach based on advanced technology. He relinquished the directorship 1989, but remained a member of the institute and head of a lab group. He retired from the university in 1994.

#### **Biotech (Hana, Chiron, etc.)**

Rutter played an active role in the development of the Biotech Industry. His most successful business venture was the establishment of Chiron, founded by Rutter and his former Stanford colleague, Ed Penhoet, in 1981. Chiron became one of the major biotechnology firms in the San Francisco Bay Region: In 1991 Chiron merged with Cetus, another local biotech firm. Rutter's success with Chiron placed him on a list of "Molecular Millionaires" issued by *Genetic Engineering News* in 1987, which reported him as holding Chiron stock worth over 20 million dollars. Rutter has been Chairman of the Board since the company's founding.

In addition to his Chiron activities, Rutter attempted in 1981 to help establish the Harbor Bay Isle bio-tech business park in Alameda, CA. Rutter's first Bio-tech venture, with his partners Michael Urdea and C.K. Chang, was the short lived company called Biopolymer. Rutter also served on the boards of Meridian Instruments (1982-1988) and HANA Biologics (1980 to 1983), which absorbed Biopolymer in 1981. Since 1995 he has served on the Board of Directors of Ciba-Geigy and the Board of Trustees of the Carnegie Institution of Washington. He acted as a consultant to Abbott Laboratories (1960-1975), Eli Lilly Co. (1977-1980) and Merck and Co. (1977-1981).

#### **Other**

Rutter also served as Treasurer of the American Society of Biological Chemists (1970-1976), as President of the Pacific Slope Biochemical Conference (1975-76), and as President of the American Society for Developmental Biology (1975-1976). Elected to the National Academy of Sciences in 1984, and the American Academy of Arts and Sciences in 1987, Rutter also served on Advisory committees for National Laboratories (Los Alamos, Oak Ridge, the Naval Biosciences Center, and Scripps), International Laboratories (Hagedorn Research Laboratory of the Nordisk Labrotorium, Zentrum fur Molekulare Biologie, and International Centre for Genetic Engineering and Biotechnology) and Foundations (Cystic Fibrosis, March of Dimes, Keystone Life Science Study Center, and California Council on Science and Technology). Service on Boards or Committees also links him to the National Institute of Health and the National Science Foundation.

As of 1995 Rutter had well over 300 publications to his name.

#### **Scope and Content**

The Rutter Collection consists of 12 cartons and 1 manuscript box containing files primarily documenting his association with the University of California at San Francisco (1969-1994) as professor of biochemistry, department chair and lab director including associated professional commitments: membership in professional organizations, work on advisory boards, and consulting. Some material on his involvement in the Biotech industry is included, although there is little or no evidence of Chiron activities. Chiron was co-founded by Rutter and Edward Penhoet in 1981. The papers include administrative and professional correspondence, subject files, some financial and personnel documents, minutes and agendas, conference materials and other materials that he produced during his career at UCSF.

The collection does not include any documentation of actual research, i.e., lab notebooks or experimental data, though administrative files on MUAs, grants, and patents are a part of the collection. Photocopies of some experimental data are included in the Patent files, but the actual lab notebooks apparently no longer exist. There are also extensive correspondence files covering the exchange of scientific information and materials.

The papers in this collection were all created or collected by Rutter in the course of his career, but they come from various offices; having moved with him from the Department of Biochemistry and Biophysics to the Hormone Research Institute. Sally Hughes, a historian with the History of Health Sciences Department at UCSF arranged for the donation of the material as a part of her oral history research project with Rutter. The majority of the records came to Special Collections from the Hormone Research Institute office by way of Dr. Hughes. Additional records were transferred directly from the Hormone Research Lab.

The collection is organized into five subgroups. Each subgroup is arranged by series as necessary. The first covers Rutter's activities as Hertzstein Professor of Biochemistry (1969-1991), including his administrative duties as head of the Department of Biochemistry and Biophysics (1969-1981) and as director of the Hormone Research Institute (1982-1989).

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Rutter's filing system maintained no distinction between his activities.

The second subgroup documents Rutter's wider involvement with the UC system and UCSF (particularly membership on the School of Medicine Executive Committee and other committee work).

The third includes materials on his various Professional Commitments: membership in professional organizations, service on editorial boards and as a manuscript and grant reviewer, consultant work and service on a variety of advisory boards.

The fourth subgroup documents his Business Commitments.

Patent materials form the fifth subgroup. These materials are preserved for their historic value, but are temporarily restricted for sensitive legal reasons.

Folders are usually arranged alphabetically within their series or subseries, exceptions include Travel which is arranged chronologically, and a part of Correspondence which is arranged hierarchically.

#### **Related Collections**

**Title:** Department of Biochemistry and Biophysics: Annual Reports (1970- )

This collection contains photocopies of the Annual reports of the Department of Biochemistry and Biophysics beginning with Rutter's chairmanship. Of special interest would be the Chairman's Report and the research activities of individual lab groups.

**Title:** Rutter Oral History

Currently being edited, when completed a copy will be available as part of the Molecular Biology and Biotechnology Collection in the Archives.

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### **SUBGROUP 1: Hertzstein Professor, Chair Department of Biochemistry and Biophysics, and Director of the Hormone Research Institute, 1964-1992, n.d.**

#### **Scope and Content Note**

This subgroup contains materials covering the entire period of Rutter's connection to UCSF. It includes documents pertaining to William J. Rutter's roles as Hertzstein Professor of Biochemistry and chair of the Department of Biochemistry and Biophysics and later as director of the Hormone Research Institute, an independent research unit at UCSF.

#### **Series I. Correspondence, 1964-1992, n.d.**

##### **Additional Note**

Correspondence files range from his negotiations with the Administration prior to his arrival in 1969 as Chairman of the Department of Biochemistry and Biophysics (1969-1981), and Hertzstein Professor of Biochemistry (1969-1991), through his directorship of the Hormone Research Institute (1982-1989) and beyond.

This series includes memo's, departmental communications, correspondence with colleagues, letters to and from legislators, Christmas cards and more. Some reprints can also be found in these files.

Most of the correspondence (1970-1990) is arranged alphabetically. Some folders concern specific subjects, including memos between HRI and the Biochemistry Department and Rutter's Correspondence with the University negotiating his acceptance of the Chairmanship of the department.

Limited correspondence is also found in other series such as Series IV (Research), subseries D which includes letters between Rutter and Colleagues concerning exchanges of material.

**Series II. Administration, 1973-1992, n.d.**

**Additional Note**

This series consists of subject files relating to the administration of both the Biochemistry/Biophysics department and the Hormone Research Institute, which is classified as an Independent Research Unit within UCSF.

Subjects include issues of Lab safety, patent administration, financial matters and media coverage. Rutter's testimony to the U.S. Senate on the use of an unapproved plasmid during his insulin research is found in this section. Also included are files covering the creation of the Biomolecular Research Center (an on campus facility to provide advanced technologies in Biochemical and Molecular Biology to UCSF investigators) and the controversial lease and cooperation arrangements between the department, the University and the Howard Hughes Medical Center. In addition, there is a file documenting Rutter's receipt of the 1982 Faculty Research Lecturer Award. Series is arranged alphabetically

**Series III. Research, 1972-1991, n.d.**

**Scope and Content Note**

This collection does not contain any direct scientific experimentation data or lab notebooks. There are no files following a project from inception to completion, but some documentation of the various steps of research and the administration of research, as well as the dissemination information.

**Subseries A. Research Projects, 1972-1988, n.d.**

**Scope and Content Note**

The Research Projects subseries includes: correspondence, clippings, press releases drafts of articles and copies of reports on various projects. There are files concerning Rutter's research on Insulin, into the Hepatitis B vaccine and on Somatostatin. This subseries also includes files documenting interest in commercial dissemination of vectors and other materials.

**Subseries B. Memorandum of Understanding, 1972-1980.**

**Scope and Content Note**

MUAs (Memoranda of Understanding and Agreement), documents describing proposed grant supported experiments and the levels of biocontainment and other safety measures necessary, are submitted to the university Biosafety Commission for approval. They are then sent to the NIH for registration or approval. Disapproval by NIH of all or part of the MUA leads to the issuance of rewriting of NIH Grant award notifications. These files include some Grant award notifications.

**Subseries C. Grant Applications & Information, 1976-1990, n.d.**

**Scope and Content Note**

Grant applications and awards are necessary to fund research. This subseries includes grant applications and other information concerning the status of grants applied for by Rutter to fund his basic researches. Included are requests for funding research in Insulin, Karposi's Sarcoma (AIDS), Parasitic diseases, Hepatitis B Vaccine, among others.

**Subseries D. Collaboration and Cooperation (Exchange of Material), 1973-1993, n.d.**

**Additional Note**

One of the largest of the research subseries, subseries D consists of Rutter's files documenting his communication and collaboration with other scientists. These files include letters requesting Permission to use figures from Rutter's research, Rutter's requests of materials from others, and correspondence on collaborations. The majority of the documents are correspondence requesting materials (plasmids, vectors, etc.) from Rutter by other researchers. Most of these requests are filed alphabetically by the material requested. Some requests were separated out by type of research or researcher's name. Each of these are organized in separate alphabetical sequences within the subseries.

**SUBGROUP 2: University of California, San Francisco and University of California: Committees, Advisory Boards, etc., 1969-1994.**

**Scope and Content Note**

During his career at UCSF, Rutter was involved in committees and concerns that extended past the confines of the department of biochemistry and biophysics. He served on various committees, on-campus and within the larger UC system, as well as expressing concern about campus safety issues, testifying to the State Legislature about proposed biotechnology regulation, and dealing with additional governmental organizations. Documents in this series include agendas, minutes and correspondence, as well as flyers and other materials.

**Series I. School of Medicine Executive Committee, 1969-1986.**

**Scope and Content Note**

Rutter was a member of the School of Medicine Executive Committee from 1969-1976. He retained files of minutes (incomplete), agendas, informational memos and other correspondence for every year except 1973. The collection also contains Executive Committee information from 1985-86. Topics covered include the creation of a Department of Genetics, increasing the size to the medical school class, and relationships between academia and business [see also series II].

**Series II. Other Committees, 1973-1991.**

**Scope and Content Note**

Rutter's other on-campus commitments, include an active involvement in discussions on the use and distribution of facilities [see "Facilities"] and on the relationship of academia to industry [see "Relationship to Industry"]. He was also involved in UC system-wide, serving on the Board for the UCLA Symposium and as a consultant to the UC Davis Molecular Biology program.

**Series III. Other UC/UCSF Related Commitments/Concerns, 1969-1988, n.d.**

**Scope and Content Note**

This series covers activities besides committee membership which had direct connections with his position at UCSF. These include testimony at the California State Legislature Recombinant DNA Hearing, and liaison work with ABAG (Association of Bay Area Governments) and the Fair Political Practices Commission. He also participated in the 1969 Vietnam Moratorium program on campus.

**SUBGROUP 3: Professional Commitments, 1974-1994.**

**Scope and Content Note**

This subgroup covers Rutter's various professional commitments including membership in a number of professional organizations; his service on editorial boards and as a manuscript and grant reviewer; and his service as a consultant and on advisory boards both domestic and international. These files include routine correspondence, personalized correspondence and other information. Some files include newsletters or other publications.

**Series I. Professional Organizations, 1974-1993.**

**Scope and Content Note**

Rutter was a member of a number of professional organizations. He was elected to the National Academy of Sciences in 1984 (files include information from the Committee on Human Rights and the Election of Foreign members). He was elected to the American Academy of Arts and Sciences in 1987 and became a fellow of the American Association for the Advancement of Science in 1992. He also belonged to several International scientific bodies, including the International Union of Biochemistry. As a member of the IUB's Biotech Group he was sent "ballots" on various funding proposals. He also served on the board of the California Council on Science and Technology.

**Series II. Consulting and Advisory Boards, 1980-1993, n.d.**

**Scope and Content Note**

Rutter served on numerous consulting and advisory boards, both national and international. Files contain correspondence and other materials (some minutes and agendas) relating to Rutter's participation in visiting committees, conference planning and boards of directors or scientific advising for Universities, Non-profits, and other research institutes or foundations. These include, among others: the California Foundation for Molecular Biology, a Columbia University Visiting Committee, the Cystic Fibrosis Foundation, the Oak Ridge National Laboratory, the Weizman Institute (Israel) and the Zentrum für Molekulare Biologie Heidelberg (Germany).

**Series III. Manuscript Reviews, 1982-1991.**

**Scope and Content Note**

He also served on manuscript review or editorial boards for several publications, including the Proceedings of the National Academy of Science (PNAS) and Diabetes. Some files (particularly PNAS), include manuscripts and reviews, some contain reviews without manuscripts and some contain only correspondence about the reviews or the reviewing process.

**Series IV. Grant Reviews, 1975-1990.**

**Scope and Content Note**

This series contains two folders of miscellaneous grant reviews and one folder of reviews for the U.S.-Israel Bi-National Foundation.

**Series V. Travel: Conferences, Seminars, Meetings and Retreats, 1973-1992.**

**Scope and Content Note**

Rutter attended numerous conferences, seminars, meetings and retreats world wide. There are scattered files from trips between 1973 and 1984. Extensive files exist for the year's 1985-1991. Materials in these files range from conference brochures, correspondence about speaking arrangements and other background material to expense reports and receipts. Some folders also include the texts of talks given by Rutter, abstracts or proceedings from the conference, or reprints of individual articles.

**SUBGROUP 4: Business Commitments, 1979-1987.**

**Scope and Content Note**

This subgroup includes folders on Hana Biologics, the Harbor Bay Isle biotech park and Meridian Instruments.

There are no files covering Rutter's co-founding of Chiron corporation or service on the Board of directors, though other files do make mention of business related endeavors, such as the "Outside Professional Activities Reports" in Subgroup 1, Series II (Administration).



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**SUBGROUP 5: Patents, 1973-1993. [RESTRICTED]****Scope and Content Note**

This series contains files covering Rutter's applications for patents for various inventions or processes. Included are files on Patent Interferences and lawsuits involving Eli Lilly and Genentech. These files are temporarily restricted.

**SUBGROUP 1 -- DEPARTMENT OF BIOPHYSICS AND BIOCHEMISTRY & HORMONE RESEARCH INSTITUTE, UNIVERSITY OF CALIFORNIA AT SAN FRANCISCO.**


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Carton Carton 1	<b>Series I -- Correspondence</b>
Carton Ctn. 1, Folder 1	<b>"A" 1973-1989, n.d.</b>
Folder 2	<b>"B" 1975-1989, n.d.</b>
Folder 3	<b>"C" 1974-1988, n.d.</b>
	Physical Description: [Tape]
Folder 4	<b>"D" 1975-1988</b>
Folder 5	<b>"E" 1976-1983</b>
	Physical Description: [PHOTOS]
Folder 6	<b>"F" 1971-1990</b>
Folder 7	<b>"G" 1970-1989, n.d.</b>
	Physical Description: [FAX]
Folder 8	<b>"H" 1973--1989, n.d.</b>
Folder 9	<b>"I" 1973-1984</b>
Folder 10	<b>"J" 1971-1989</b>
Folder 11	<b>"K" 1979-1991, n.d.</b>
Folder 12	<b>"L" 1972-1988, n.d.</b>
Folder 13	<b>"M" 1979-1988, n.d.</b>
	Physical Description: [Tape]
Folder 14	<b>"N" 1971-1987, n.d.</b>
	Physical Description: [PHOTOS, Newsprint]
Folder 15	<b>"O" 1979-1894, n.d.</b>
Folder 16	<b>"P" 1973-1990, n.d.</b>
Folder 17	<b>"R" 1975-1988</b>
Folder 18	<b>"S" 1972-1988, n.d.</b>
Folder 19	<b>"T" 1977-1989, n.d.</b>
	Physical Description: [PHOTO]
Folder 20	<b>"U" 1987, n.d.</b>
Folder 21	<b>"W" 1973-1986, n.d.</b>
Folder 22	<b>"General Correspondence -- 1990." 1990</b>
Folder 23	<b>"Biochemistry/Biophysics Department" 1983-1992, n.d.</b>
Folder 24	<b>"Archive Biochemistry Department" 1989-1990, n.d.</b>
Folder 25	<b>"Biochemistry Department to HRI" 1984-1990</b>
Folder 26	<b>"Archive Other Departments" 1989-1990</b>
Folder 27	<b>"Chancellor to WJR" 1988-1989</b>
Folder 28	<b>"WJR on Chairmanship" 1964-1969, 1972</b>
Folder 29	<b>"Rao, D. R. --Mysore India --CFTRI" 1986, n.d.</b>
Folder 30	<b>"High School Student's Information Request" 1977</b>
Folder 31	<b>"Christmas Cards" 1985-1987, n.d.</b>

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Folder 32	<b>"Christmas Cards" 1986, n.d.</b>
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Carton Carton 2	<b>Series II -- Administration</b>
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Carton Ctn. 2, Folder 1	<b>"Animal Research Approval" 1981-1991, n.d.</b>
Folder 2	<b>"Animal Research Approval" 1981-1991, n.d.</b>
Folder 3	<b>"Bayer" 1984, n.d.</b>
Folder 4	<b>"Biomolecular Research Center -- BRC" 1985, n.d.</b>
Folder 5	<b>"Biomolecular Research Center -- BRC" [PERSONNEL INFO] 1986-1988</b>
Folder 6	<b>"Bionet" 1984-1985, n.d.</b>
Folder 7	<b>"Faculty Research Lecturer Award" 1982</b>
Folder 8	<b>"Financial Matters" 1979-1981, n.d.</b>
Folder 9	<b>"Financial Memos, Materials" 1980-1981</b>
Folder 10	<b>"Hormone Research Center Donors" 1983, n.d.</b>
Folder 11	<b>"Howard Hughes Medical Institute--Lease, corresp" 1977, 1979-1980</b>
	Physical Description: [N]
Folder 12	<b>"Human Research Approval" 1983-1985</b>
Folder 13	<b>"Laboratory Business, misc." 1983-1988</b>
Folder 14	<b>"Laboratory Certification -- Biosafety Commission" 1987-1989, n.d.</b>
Folder 15	<b>"News Service" 1976-1979</b>
	Physical Description: [N]
Folder 16	<b>"News Service" 1980-1981</b>
Folder 17	<b>"NIH Guidelines for Research Involving DNA Molecules" 1986</b>
Folder 18	<b>"Outside Professional Activities Reports" 1981-1988</b>
Folder 19	<b>"Patents: Administration" 1973-1981, n.d.</b>
Folder 20	<b>"Patents: Administration (Supreme Court Rulings)" 1980, n.d.</b>
Folder 21	<b>"Radiation Safety" 1982-1988, n.d.</b>
Folder 22	<b>"Radiation Safety" 1986-1992, n.d.</b>
Folder 23	<b>"Research Reports" 1973-1985, n.d.</b>
Folder 24	<b>"Senate Sub-Committee Hearing, Washington, DC (pBR322)" 1977-1978</b>
Folder 25	<b>"University Statement of Economic Interest" 1982, n.d.</b>

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**Series III-- Research**

Carton Cartons 2-3	<b>Sub-series A -- Research Projects</b>
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Carton Ctn. 2, Folder 26	<b>"Hepatitis" 1972-1981</b>
	Physical Description: [N]
Folder 27	<b>"Insulin: MUA, corresp., press" 1977-1979</b>
	Physical Description: [N]
Folder 28	<b>"Insulin Expression" [CONFIDENTIAL - in French] 1978, n.d.</b>
	Physical Description: [N]
Folder 29	<b>"Insulin Correspondence" 1976-1977</b>
	Physical Description: [N]
Folder 30	<b>"Insulin Press Release and Photos" 1977, n.d.</b>
	Physical Description: [photos & negatives]
Folder 31	<b>"Insulin (Press)" 1977-1978</b>
	Physical Description: [N]

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Folder 32	<b>"Insulin (Plasmid 3 -- pBR322)" 1977</b>
Folder 33	<b>"Insulin Like Growth Factor paper (Morgan/Jarnigan/Roth)" n.d.</b>
Folder 34	<b>"Saccharomyces papers (L.J. DeGennaro)" 1977, n.d.</b>
Folder 35	<b>"Somatostatin" 1979-1981</b>
Carton Ctn. 3,	<b>"Amersham -- Commercial Distribution of Vectors" [CONFID] 1985-1987</b>
Folder 1	
Folder 2	<b>"Amersham -- Commercial Distribution of Vectors" [CONFID] 1986-1988</b> <b>Physical Description: [FAX]</b>
Folder 3	<b>"Genzyme --Commercial Distribution of PDI" 1985</b>
Folder 4	<b>"Merck --MUA's, misc." 1978-1981, n.d.</b>
Folder 5	<b>"Merck --Correspondence" 1977-1978</b>
Folder 6	<b>"Merck --Correspondence" 1977-1980</b>
Folder 7	<b>"Merck --Correspondence" 1977-1983</b>
Folder 8	<b>"Merck --Correspondence" 1981-1987</b> <b>Physical Description: [N] [TELEGRAM]</b>
Folder 9	<b>"Repligen" 1986</b>
Carton Carton 3	<b>Sub-Series B -- MUAs (Memorandum of Understanding and Agreement)</b>
Carton Ctn. 3,	<b>"Correspondence" 1977-1980, n.d.</b>
Folder 10	
Folder 11	<b>"AM-21344 (Pancreas)" 1979-1980</b>
Folder 12	<b>"GM-21830 (Yeast)" 1978-1980</b>
Folder 13	<b>"Eli Lilly" 1978-1979</b>
Folder 14	<b>"Merck" 1979-1980</b>
Folder 15	<b>"Miscellaneous" 1978-1980</b>
Folder 16	<b>"Miscellaneous" 1979-1980</b>
Folder 17	<b>"Superseded MUAs" 1972-1978</b>
Carton Carton 3	<b>Sub-Series C -- Grant Applications &amp; Info.</b>
Carton Ctn. 3,	<b>"BRC Joint Proposal to NIH (Insulin)" 1987, n.d.</b>
Folder 18	
Folder 19	<b>"Karposi's Sarcoma Grant Application" 1983-1984</b>
Folder 20	<b>"Karposi's Sarcoma Grant Application" 1983-1985</b>
Folder 21	<b>"Kroc Foundation (Insulin)" 1982-1984</b>
Folder 22	<b>"MacArthur Foundation Program--Biology of Parasitic Diseases" 1984</b>
Folder 23	<b>"Multiple User Request to Academic Senate (w/A.L. Burlingame)" 1983</b>
Folder 24	<b>"National Science Foundation - Electron Microscope 1980-1981</b>
Folder 25	<b>"National Science Foundation (rejected)" 1990</b>
Folder 26	<b>"NIH-NIDDDK (Differentiation in the Pancreas)" 1990-1992</b>
Folder 27	<b>"SCRC-- UC Grant Application (Hepatitis B Vaccine) 1982</b>
Folder 28	<b>"U.S. - Israeli Bi-National Foundation" 1990-1991</b> <b>Physical Description: [FAX]</b>
	<b>Sub-Series D -- Collaboration and Cooperation (Exchange of Materials)</b>
Carton Carton 3	<b>sub-sub Series 1 -- Collaborators (by name)</b>
Carton Ctn. 3,	<b>"Bachovchin, William" 1986</b>
Folder 29	
Folder 30	<b>"Barker, Peter -- Insulin Receptor" 1986-1988</b> <b>Physical Description: [Photos]</b>
Folder 31	<b>"Bartlett, Paul -- Carboxy" 1989-1991</b> <b>Physical Description: [FAX]</b>
Folder 32	<b>"Berhanu, Paulos" 1986-1991</b>
Folder 33	<b>"Carpentier, Jean-Louis" 1989-1991</b> <b>Physical Description: [FAX]</b>

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Folder 34	<b>"Damsky, Caroline" 1985, n.d.</b>
Folder 35	<b>"Davis, J. -- Duke University, NC. 1986</b>
Folder 36	<b>"Fahenestock, Margaret -- NGF" 1989</b> <b>Physical Description: [FAX]</b>
Folder 37	<b>"Fisher, Edward --Lysophospholipase" 1989</b>
Folder 38	<b>"Goldsmith, Betsy" 1990-1991</b> <b>Physical Description: [FAX]</b>
Folder 39	<b>"Grumbach, Melvin" 1986</b>
Folder 40	<b>"Hodes, M.E." 1980-1986</b> <b>Physical Description: [Photos]</b>
Folder 41	<b>"Huber, Klaus 1988</b>
Folder 42	<b>"Jarett, Leonard" 1987</b>
Folder 43	<b>"Jones, John Bryan" 1985-1986</b>
Folder 44	<b>"Kahn, Ronald" 1986</b>
Folder 45	<b>"Kaiser, E.T." 1982-1988</b>
Folder 46	<b>"Lane, Daniel" 1985</b>
Folder 47	<b>"Muller, Werner --IR, IGFI, IGFI-R" 1989</b>
Folder 48	<b>"Naor, David" 1991</b> <b>Physical Description: [FAX]</b>
Folder 49	<b>"Pawson, Tony" 1986</b>
Folder 50	<b>"Reddy, Jan" 1983-1986</b> <b>Physical Description: [Photo]</b>
Folder 51	<b>"Reddy, Jan -- Mounted Photos" n.d.</b> <b>Physical Description: [Photos]</b>
Folder 52	<b>"Rochefort, Henri" 1990</b>
Folder 53	<b>"Sheffield, James -- IGF's 1990</b>
Folder 54	<b>"Shows, Thomas" 1980-1983</b>
Folder 55	<b>"Siddle, Kenneth -- Insulin Receptor" 1985-1987</b>
Folder 56	<b>"Wang, L.H." 1986-1990</b> <b>Physical Description: [Photos]</b>
Carton Carton 4	<b>sub-sub Series 2 -- Collaborations (by type and Miscellaneous)</b>
Carton Ctn. 4,	<b>"American Type Culture Collection Deposits" 1981-1982</b>
Folder 1	
Folder 2	<b>"American Type Culture Collection" 1985-1986, n.d.</b>
Folder 3	<b>"Clinical Experiments" 1982</b>
Folder 4	<b>"Insulin Receptor Collaborations" 1985-1991</b>
Folder 5	<b>"IGF [Insulin-Like Growth Factor] II Collaborators" 1987-1990</b> <b>Physical Description: FAX</b>
Folder 6	<b>"Miscellaneous Collaborations" 1977-1993</b> <b>Physical Description: FAX [Photos on Paper]</b>
Folder 7	<b>"Miscellaneous Collaborations" 1981-1986, n.d.</b>
Folder 8	<b>"Permission to Use Figures" 1973-1992</b>
Folder 9	<b>"Papers with Rutter Acknowledgments" 1986-1988</b>
Carton Cartons 4-5	<b>sub-sub Series 3 -- Exchange of Materials</b>

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Carton Ctn. 4, Folder 10 Folder 11 Folder 12 Folder 13 Folder 14 Folder 15	<b>"Requests from Rutter to Others" 1980-1986, n.d.</b>  <b>"Requests from Rutter to Others" 1984-1993, n.d.</b> <b>"Alkaline Phosphatase" 1985-1992</b> <b>"Amylase" 1982-1994</b> <b>"Beta-Gal RSV" 1986-1989</b> <b>"Beta-Gal RSV" 1986-1994</b> <b>Physical Description: FAX</b>
Folder 16	<b>"Carboxypeptidase" 1984-1993</b> <b>Physical Description: FAX</b>
Folder 17	<b>"Cells" 1987-1992</b> <b>Physical Description: FAX</b>
Folder 18 Folder 19 Folder 20	<b>"Chymotrypsin" 1990-1994</b> <b>"C-jun cDNA" 1989, 1995</b> <b>"EGF" 1984-1993</b> <b>Physical Description: PHOTO</b>
Folder 21 Folder 22 Folder 23 Folder 24 Folder 25	<b>"Elastase, Lipase, Chymotrypsin" 1981-1994</b> <b>"Hepatitis" 1980-1991, n.d.</b> <b>"Human Placental Library" 1984-1990</b> <b>"Insulin" 1978-1987</b> <b>"Insulin" 1986-1990</b> <b>Physical Description: FAX</b>
Folder 26	<b>"Insulin" 1990-1994</b> <b>Physical Description: FAX</b>
Folder 27 Folder 28	<b>"Insulin Receptor" 1985-1986</b> <b>"Insulin Receptor" 1985-1988</b> <b>Physical Description: PHOTOS</b>
Folder 29	<b>"Insulin Receptor" 1988-1994</b> <b>Physical Description: FAX</b>
Folder 30 Folder 31 Folder 32	<b>"Insulin-Like Growth Factor (IGFI &amp; IGFII) 1987-1990</b> <b>"Insulin-Like Growth Factor I - Receptor (IGFI-R) 1988</b> <b>"Insulin-Like Growth Factor I -Receptor 1988-1995</b> <b>Physical Description: PHOTOS, FAX</b>
Folder 33	<b>"Insulin-Like Growth Factor II - Receptor (IGFII-R) 1987-1989</b> <b>Physical Description: FAX</b>
Folder 34	<b>"Insulin-Like Growth Factor II - Receptor 1989-1995</b> <b>Physical Description: FAX</b>
Folder 35 Carton Ctn. 5, Folder 1	<b>"Libraries (other than placental)" 1986-1989</b> <b>"MRL3" 1990-1993</b> <b>Physical Description: FAX</b>
Folder 2 Folder 3	<b>"Nerve Growth Factor" 1983-1986</b> <b>"Nerve Growth Factor" 1986-1989</b>

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## Series III-- Research

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Folder 4	<b>"Nerve Growth Factor" 1990-1995</b> Physical Description: FAX
Folder 5	<b>"PANS" 1990-1994</b> Physical Description: FAX
Folder 6	<b>"PDI" 1986-1990</b> Physical Description: FAX
Folder 7	<b>"PDI" 1990-1994</b> Physical Description: FAX
Folder 8	<b>"Probe -- Flag-enterokinase-HMK" 1992</b> Physical Description: FAX
Folder 9	<b>"Somatostatin" 1981-1986</b>
Folder 10	<b>"Somatostatin" 1986-1989</b>
Folder 11	<b>"Somatostatin" 1989-1994</b>
Folder 12	<b>"Trypsin" 1987-1990</b>
Folder 13	<b>"Vectors" 1980-1986</b>
Folder 14	<b>"Vectors" 1983-1992</b>
Folder 15	<b>"Vector -- Lambda gt22" 1987-1990</b>
Folder 16	<b>"Vector -- Lambda gt22" 1987-1991</b> Physical Description: FAX
Folder 17	<b>"Vector -- pECE" 1986-1990</b> Physical Description: FAX
Folder 18	<b>"Vector -- pECE" 1987-1992</b> Physical Description: FAX
Folder 19	<b>"Vector--Pur1" 1993</b>

**SUBGROUP 2 -- UNIVERSITY OF CALIFORNIA, SAN FRANCISCO AND UNIVERSITY OF CALIFORNIA: COMMITTEES, ADVISORY BOARDS, ETC.**

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Carton Carton 5	<b>Series I -- Executive Committee</b>
Carton Ctn. 5, Folder 20	<b>"School of Medicine Executive Committee" 1969-1970</b>
Folder 21	<b>"School of Medicine Executive Committee" 1970-1971</b>
Folder 22	<b>"School of Medicine Executive Committee" 1971-1972</b>
Folder 23	<b>"School of Medicine Executive Committee" 1974-1975</b>
Folder 24	<b>"School of Medicine Executive Committee" 1975-1976</b>
Folder 25	<b>"School of Medicine Executive Committee" 1976-1977</b>
Folder 26	<b>"School of Medicine Executive Committee" 1985-1986</b>

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Carton Carton 6	<b>Series II -- Other Committees</b>
Carton Ctn. 6, Folder 1	<b>"Academic Senate" 1990-1991, n.d.</b>
Folder 2	<b>"Board of Overseers Meeting" 1980</b>
Folder 3	<b>"Council of Chairmen" 1973-1974</b>
Folder 4	<b>"Council of Chairmen -- Chairmen's Retreat" 1975</b>
Folder 5	<b>"Diabetes Steering Committee" 1992</b>
Folder 6	<b>"Epidemiology Review Committee" 1987-1988, n.d.</b>

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## Series II -- Other Committees

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Folder 7	"Facilities: Ad-hoc Committee to Advise Dean on Space" 1984
Folder 8	"Facilities: Dean's Space Committee - WJR" 1983-1984
Folder 9	"Facilities: Dean's Retreat" 1988
Folder 10	"Facilities: UCSF Long-term Planning Committee" 1990-1992
Folder 11	"Facilities: Campus Facilities" 1991, n.d.
Folder 12	"Facilities: Second Campus Committee" 1992, n.d.
Folder 13	"Institute of Health and Aging -- UCSF" 1984-1994
Folder 14	"Laurel Heights" 1987-1988
	Physical Description: [N]
Folder 15	"Liver Core Center" 1983, 1988
Folder 16	"Markey Award" 1985-1987
Folder 17	"PIBS (Programs in Biological Sciences)" 1988
Folder 18	"President's Fellowship Program" 1987-1988
Folder 19	"Relationship to Industry, Advisory Panel" 1981-1983
Folder 20	"Relationship to Industry, Advisory Panel" 1981-1983
Folder 21	"Relationship to Industry" 1987
Folder 22	"Rights to Intellectual Property Committee --UCSF" 1982
Folder 23	"School of Medicine -- Advisory Committee" 1969-1971
Folder 24	"School of Medicine -- Advisory Committee" 1972-1975
Folder 25	"School of Medicine -- Advisory Committee" 1976-1977
Folder 26	"School of Medicine -- Dean's Advisory Committee, etc." 1984-1988
Folder 27	"School of Medicine -- Development Committee" 1992
Folder 28	"Search Committee: Capitol Projects Coordinator" [includes some reference letters] 1985
Folder 29	"Search Committee: Res. Associate, Structural and Mass Spectrometry" 1983
Folder 30	"UC Davis Molecular Biology Consultant" 1986
Folder 32	"UCLA Symposium Board" 1982-1986
Folder 33	"UCLA Symposium Board" 1986-1988
	Physical Description: FAX
Folder 34	"UCLA Symposium/Keystone Center Collaboration" 1986-1989, 1992
Folder 35	"UCSF 1984 Symposium on HBV- Organizing Committee" 1981-1984
Folder 36	"University Committees" 1987-1988
Folder 37	"V.A. Hospital Committee" 1981

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Carton Carton 6

**Series III -- Other UC/UCSF Related Commitments/Concerns**

Carton Ctn. 6,	"ABAG (Association of Bay Area Governments) Academic Research and Biotech Survey" 1987-1988
Folder 38	
Folder 39	"California State Legislature-- Recombinant DNA Hearing" 1981
Folder 40	"Campus Violence" 1980
Folder 41	"Fair Political Practices Commission" 1981-1983
Folder 42	"Gifts to the University" 1981-1982
Folder 43	"Gifts to the University" 1981, n.d.
Folder 44	"Report of the President to the Regents" 1985, 1988
Folder 45	"Vietnam Moratorium (Rutter)" 1969

**SUBGROUP 3 -- PROFESSIONAL COMMITMENTS**

Carton Carton 7

**Series I -- Professional Organizations**

Carton Ctn. 7,	"American Academy of Arts and Sciences" 1987-1991
Folder 1	
Folder 2	"American Academy of Arts and Sciences" 1992-1993
	Physical Description: [Memorabilia]

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Folder 3	<b>"American Academy of Arts and Sciences and American Association for the Advancement of Science" 1993-1994</b>
Folder 4	<b>"American Association for the Advancement of Science -- Ad Hoc Expert Panel on Genetic Engineering" 1981</b>
Folder 5	<b>"American Society for Biological Sciences" 1985-1986</b>
Folder 6	<b>"American Society for Cell Biology" 1974-1975, 1990, n.d.</b>
Folder 7	<b>"American Society for Cell Biology" 1985-1991, n.d.</b>
Folder 8	<b>"American Society for Microbiology" 1986-1991</b> <b>Physical Description:</b> [Mem. Cards]
Folder 9	<b>"California Council on Science and Technology" 1989</b> <b>Physical Description:</b> FAX
Folder 10	<b>"California Council on Science and Technology" 1989-1990</b> <b>Physical Description:</b> FAX
Folder 11	<b>"California Council on Science and Technology" 1988, 1990, n.d.</b> <b>Physical Description:</b> FAX
Folder 12	<b>"COSTED (Commission on Science and Technology in Developing Countries" 1984-1985</b>
Folder 13	<b>"Endocrine Society and Molecular Endocrinology" 1986-1989</b>
Folder 14	<b>"Endocrine Society" 1988-1991</b>
Folder 15	<b>"International Society of Developmental Biologists" 1982-1984</b>
Folder 16	<b>"International Union of Biochemistry -- Biotech Group" 1985-1988</b>
Folder 17	<b>"International Union of Biochemistry -- Biotech Group" 1988-1991</b> <b>Physical Description:</b> FAX
Folder 18	<b>"International Union of Pure and Applied Chemistry" 1985</b>
Folder 19	<b>"National Academy of Science--Correspondence" 1984</b>
Folder 20	<b>"National Academy of Science--Correspondence" 1985</b>
Folder 21	<b>"National Academy of Science--Correspondence" 1986</b>
Folder 22	<b>"National Academy of Science--Correspondence" 1987</b>
Folder 23	<b>"National Academy of Science--Correspondence" 1988</b>
Folder 24	<b>"National Academy of Science--Correspondence" 1989</b>
Folder 25	<b>"National Academy of Science--Correspondence" 1990</b>
Folder 26	<b>"National Academy of Science--Correspondence" 1991</b>
Folder 27	<b>"National Academy of Science--Correspondence" 1992</b>
Folder 28	<b>"National Academy of Science -- Letter to Members " 1986-1992</b>
Folder 28	<b>(same ) -- "By-laws" 1988, 1991</b>

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Carton Cartons  
7-8

**Series II -- Consulting and Advisory Boards**

Carton Ctn. 7, Folder 29	<b>"California Foundation for Molecular Biology" [inc. Finan. 1988-1990</b>
Folder 30	<b>"California Foundation for Molecular Biology" records, tax 1982-1992</b>
Folder 31	<b>"California Foundation for Molecular Biology" returns, etc.] 1987-1993, n.d.</b>
Carton Ctn. 8, Folder 1	<b>"Columbia University -- Visiting Committee" 1980</b>
Folder 2	<b>"Cystic Fibrosis Foundation" 1982-1985</b>
Folder 3	<b>"Cystic Fibrosis Foundation" 1985-1986</b>
Folder 4	<b>"Cystic Fibrosis Foundation" 1985-1987</b>
Folder 5	<b>"Development Center for Biotechnology -- Taipei" 1990</b>
Folder 6	<b>"Institute for the Advancement of Health" 1983</b>
Folder 7	<b>"International Rice Research Institute" 1985</b>
Folder 8	<b>"Japan -- Human Frontier Science Program" 1987</b>

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Folder 9	<b>"Japan -- Misc. Consulting" 1986-1988</b>
Folder 10	<b>"Life Science Research Foundation" 1981-1989</b>
Folder 11	<b>"Life Science Research Foundation" 1983-1994</b>
Folder 12	<b>"Life Science Research Foundation" 1990-1991, n.d.</b>
Folder 13	<b>"Livermore-Los Alamos Project -- Chromosome Specific Human DNA Library" 1983-1985</b>
Folder 14	<b>"March of Dimes Advertisement (and telethon)" 1984</b> <b>Physical Description:</b> [slides, photos]
Folder 15	<b>"Naval Bioscience Laboratory" 1982, 1984</b>
Folder 16	<b>"Nordisk Laboratory" 1981, n.d.</b>
Folder 17	<b>"Oak Ridge National Laboratory" 1984, n.d.</b>
Folder 18	<b>"Oak Ridge National Laboratory" May 1985</b>
Folder 19	<b>"Oak Ridge National Laboratory" Nov. 1985</b>
Folder 20	<b>"Oak Ridge National Laboratory" 1986</b>
Folder 21	<b>"Oak Ridge National Laboratory" March 1987</b>
Folder 22	<b>"Oak Ridge National Laboratory" Oct. 1987</b>
Folder 23	<b>"Oak Ridge National Laboratory" 1985-1988, n.d.</b>
Folder 24	<b>"OSCC - Pancreatic Cancer Working Group" 1984-1985</b>
Folder 25	<b>"OSCC - Pancreatic Cancer Working Group" 1985-1986</b> <b>Physical Description:</b> PHOTO
Folder 26	<b>"OSCC - Pancreatic Cancer Working Group" 1986-1987</b>
Folder 27	<b>"OSCC - Pancreatic Cancer Working Group" 1987-1989</b>
Folder 28	<b>"OSCC (Organ Systems Coordinating Center) Newsletter" 1986-1988</b>
Folder 29	<b>"Scleroderma Research Foundation" 1991</b>
Folder 30	<b>"Scripps Institute" 1975-1987</b>
Folder 31	<b>"Weizman Institute -- Israel" 1985-1989</b> <b>Physical Description:</b> [fax]
Folder 32	<b>"Zentrum fur Molekulare Biologie - Heidelberg" 1982-1984, n.d.</b>
Folder 33	<b>"Zentrum fur Molekulare Biologie - Heidelberg" 1983-1985</b>
Folder 34	<b>"Zentrum fur Molekulare Biologie - Heidelberg" 1984-1987</b>

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Carton Carton 9

**Series III -- Manuscript Reviews**

Carton Ctn. 9, Folder 1	<b>"Archives of Biochemistry and Biophysics" 1984-1985</b>
Folder 2	<b>"Brenner-Lennox Journal (Molecular Biology and Medicine)" 1982-1986</b>
Folder 3	<b>"Diabetes" 1982-1985</b>
Folder 4	<b>"Encyclopedia of Human Biology" 1987</b>
Folder 5	<b>"Journal of Molecular Engineering" 1989</b>
Folder 6	<b>"Proceedings of the National Academy of Sciences (PNAS) -- Miyamura" 1980-1990</b> <b>Physical Description:</b> FAX, PHOTOS
Folder 7	<b>"PNAS -- Aghib" 1992</b>
Folder 8	<b>"PNAS -- Cross, et al" 1993</b> <b>Physical Description:</b> PHOTOS
Folder 9	<b>"PNAS -- Walker, et al" 1993</b> <b>Physical Description:</b> PHOTOS on Paper
Folder 10	<b>"PNAS -- Yeh, et al" 1993</b>
Folder 11	<b>"Protein Engineering" 1985-1988</b>
Folder 12	<b>"Manuscript Review--Correspondence 1983-1987</b>

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Carton Carton 9	<b>Series IV -- Grant Reviews</b>
Carton Ctn. 9, Folder 13	<b>"U.S. - Israeli Bi-National Foundation" 1976-1977, 1986, 1988, 1990-1991</b>
Folder 14	<b>"Grant Reviews - Miscellaneous" 1975-1990</b>
Folder 15	<b>"Grant Reviews - Miscellaneous" 1980-1985</b>

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Carton Cartons 9-10	<b>Series V -- Travel: Conferences, Seminars, Meetings, Retreats</b>
Carton Ctn. 9, Folder 16	<b>"International Symposium on the Control of Transcription -- Calcutta" Feb. 12-15, 1973</b>
Folder 17	<b>"Tehran Symposium -- Tehran, Iran" May 2-6, 1976</b>
Folder 18	<b>"China Trip" (1979-1984?) Oct.-Nov. 1979</b>
Folder 19	<b>"American Diabetes Association -- San Antonio" June 14, 1983</b>
Folder 20	<b>"Wright State University, Ohio" June 16, 1983</b>
Folder 21	<b>"IUB-Genome Lecture Tour -- Costa Rica" Aug. 21-Sept. 3, 1983</b>
Folder 22	<b>"Modern Approaches to Vaccines -- Cold Spring Harbor, NY." Aug. 31-Sept. 4, 1983</b>
Folder 23	<b>"Lawrence Livermore Lab Advisory Meeting-- Livermore, CA." Sept. 12, 1983</b>
Folder 24	<b>"Whitehead Institute Symposium -- MIT -- Cambridge, MA" Oct. 2-4, 1983</b>
Folder 25	<b>"Berzelius Lectureship -- Karolinska Institutet -- Stockholm" Oct. 11, 1983</b>
Folder 26	<b>"Inter-Center Seminar on IARCs &amp; Biotechnology -- Philippines" April 23-27, 1984</b> <b>Physical Description: PHOTOS</b>
Folder 27	<b>"NIH -- Rockville, Maryland" Oct. 6-9, 1985</b>
Folder 28	<b>"West Central State Biochemistry Conference -- Lawrence, KS" Oct. 24, 1985</b>
Folder 29	<b>"Biotechnology Conference -- Tokyo" Dec. 3-4, 1985</b> <b>Physical Description: [TRANSPARENCIES]</b>
Folder 30	<b>"Faculty Retreat -- Asilomar, CA" Jan. 3-5, 1986</b>
Folder 31	<b>"Roche-UCLA Symposium -- Viruses and Human Cancer -- Park City, UT" Feb. 2-9, 1986</b>
Folder 32	<b>"Western Winter Workshop -- UCLA Symposium -- Vectors for Gene Transfer in Animals -- Lake Tahoe, CA" Feb. 9-12, 1986</b>
Folder 33	<b>"Lilly-UCLA Symposium -- Proteases in Biological Control and Biotechnology -- Park City, UT" Feb. 9-15, 1986</b>
Folder 34	<b>"Gordon Research Conference -- Kallikreins &amp; Kinins -- Oxnard, CA" Feb. 17-21, 1986</b>
Folder 35	<b>"Li Luye, Chinese (PRC) Ambassador to U.N. at Syntex -- Palo Alto, CA" Feb. 24, 1986</b>
Folder 36	<b>"First Annual ASM Conference on Biotechnology -- Washington, DC" Mar. 20-23, 1986</b>
Folder 37	<b>"UCLA Symposium Board -- Keystone, CO" April 6, 1986</b>
Folder 38	<b>"March of Dimes -- Basic Research Advisory Committee -- Scottsdale, AZ" April 6-9, 1986</b>
Folder 39	<b>"U of Michigan biomedical Research Council Forum -- Ann Arbor" April 26, 1986</b>
Folder 40	<b>"UNIDO -- PSA Meeting of the ICGEB -- NY" May 17-18, 1986</b>
Folder 41	<b>"Tribute to Melvin Grumbach -- UCSF" May 23, 1986</b>
Folder 42	<b>"Kroc Lecture -- Boston" May 28-29, 1986</b>
Folder 43	<b>"Cold Spring Harbor Symposium -- Molecular Biology of Homo Sapiens -- NY" June 1-4, 1986</b>
Folder 44	<b>"FASEB -- ASBC Meeting -- Receptor Kinase Function -- Washington, DC." June 10, 1986</b>
Folder 45	<b>"Genetic Phsico-Chemical Approaches for Analysis of Biological Catalysts -- Florence" June 16-20, 1986</b>
Folder 46	<b>"Society of Chinese Biochemists in America -- San Francisco" June 30 -July 2, 1986</b>
Folder 47	<b>"FASEB Symposium on Somatic Cell Genetics -- Vermont" July 6-11, 1986</b>

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Folder 48	"Brown-Hazen Lecture (WJR Presenter) --Albany, NY" Sept. 25-26, 1986
Folder 49	"Basel Liver Meeting -- Basel, Switzerland" Oct. 13-15, 1986
Folder 50	"BIO Fare Tokyo -- Tokyo" Oct. 15-19, 1986
Folder 51	"Weizman Review Board -- Israel" Nov. 4-7, 1986
Folder 52	"Kroc Lecture (WJR) -- U of Texas -- Houston" Dec. 15, 1986
Folder 53	"Upjohn NDDM Conference -- Augusta, MI." Jan. 12-14, 1987
Folder 54	"UCSF Faculty Retreat -- Asilomar, CA" Jan. 15-17, 1987
Folder 55	"NIH Symposium on Animal Virology -- Bethesda, MA" Feb. 2-3, 1987
Folder 56	"Battelle Biotechnology Workshop -- San Francisco" Feb. 17-18, 1987
Carton Ctn. 10,	"U. of Calgary --Insulin Action and Diabetes" -- Calgary" Mar. 26-27, 1987
Folder 1	
Folder 2	"March of Dimes -- Basic Research Advisory Committee -- Scottsdale, AZ" March 28-April 1, 1987
Folder 3	"Roche-UCLA Symposium --Mechanisms of Control of Gene Expression -- Steamboat Springs, CO" March 28-April 2, 1987
Folder 4	"107th Annual Meeting Pharmaceutical Association -- Kyoto" April 2-4, 1987
Folder 5	"Protein Engineering '87 -- Oxford, UK" April 5-8, 1987
Folder 6	"Indiana Research Expo -- Indiana U. -- Bloomington, IN" Apr. 22-23, 1987
Folder 7	"National Academy of Science -- Annual Meeting -- DC." Apr. 26-29, 1987
Folder 8	"Notre Dame University -- South Bend, IN" Apr. 27-29, 1987
Folder 9	"Gastroenterology Research Group Symposium -- U. of Michigan -- Ann Arbor" May 10, 1987
Folder 10	"ZMBH -- Molecular Biology of Pathogens -- Heidelberg" May 21-23, 1987
Folder 11	"Nobel Conference -- Pathogenesis of Non-Insulin Dependent Diabetes Mellitus -- Stockholm" May 25-27, 1987
Folder 12	"American Society of Biological Chemists -- Annual Meeting -- Philadelphia" June 7-11, 1987
Folder 13	"Capri Lecture in Biotechnology --- Regulation of Mammalian Cell Growth -- Capri, Italy" Sept. 27 -Oct. 2, 1987
Folder 14	"Fritz Lipmann Memorial Symposium -- Berlin" Oct. 4-6, 1987
Folder 15	"Kroc Lecture -- U. of Pennsylvania -- Philadelphia" Dec. 13-14, 1987
Folder 16	"UCSF Faculty Retreat -- Asilomar, CA" Jan. 15-17, 1988
Folder 17	"Nature -- Horizons in Molecular Biology -- Tokyo" Jan. 26-28, 1988
Folder 18	"UCSF/Hong Kong Postgraduate Course -- Hong Kong" Jan. 30-31, 1988
Folder 19	"New England Area Insulin Action Committee -- Boston" Feb. 8, 1988
Folder 20	"2nd World Conference on Diabetes Research -- Juvenile Diabetes Foundation International -- Monaco" March 6-9, 1988
Folder 21	"UCLA Symposium Board Meeting -- Los Angeles " Apr. 27-28, 1988
Folder 22	"Molecular Responses to Virus Infection -- Stanford" May 9, 1988
Folder 23	"International Conference on Immunopharmacology -- Osaka, Japan" May 15-19, 1988

## Physical Description: FAX

Folder 24	"Bicentennial Biochemistry Conference -- Adelaide, Australia" May 17-20, 1988
Folder 25	"Dynamics of Protein Development and Function -- Heidelberg" June 26, 1988
Folder 26	"IUB -- International Congress of Biochemistry -- Prague" July 10-15, 1988
Folder 27	"British Society for Cell Biology -- Oxford" Sept. 20-23, 1988
Folder 28	"Cold Spring Harbor -- Pancreatic B Cell -- NY" Oct. 17, 1988
Folder 29	"International Diabetes Federation Conference -- Sydney" Nov. 23, 1988
Folder 30	"Hans Popper Memorial Symposium -- New Concepts in Medicine and Biology -- CUNY -- NY" Dec. 8, 1988

## Physical Description: FAX

Folder 31	"American Diabetes Association Research Symposium -- Laurel Heights, UCSF" Dec. 16, 1988
Folder 32	"AAAS Annual Meeting -- San Francisco" Jan. 15-16, 1989

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SUBGROUP 3 -- PROFESSIONAL COMMITMENTS

Series V -- Travel: Conferences, Seminars, Meetings, Retreats

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Folder 33	<b>"Swiss Diabetes Foundation Annual Meeting (in Honor of A. E. Renold) -- Geneva" Jan. 20-21, 1989</b> <b>Physical Description: FAX</b>
Folder 34	<b>"UCSF Postdoctoral Panel" Jan. ?, 1989</b>
Folder 35	<b>"Forum on Cancer Research, U. of Tennessee -- Cell Regulators and Cancer -- Memphis" April 14, 1989</b>
Folder 36	<b>"Jacques Monod Conference -- Receptors -- Paris" June 26-30, 1989</b> <b>Physical Description: FAX</b>
Folder 37	<b>"Trends in Biotechnology -- Stockholm" Mar. 11-14, 1990</b> <b>Physical Description: FAX</b>
Folder 38	<b>"International Symposium: Gene Expression and Signal Transduction -- UC-Irvine" Apr. 22-24, 1990</b>
Folder 39	<b>"New Approaches to the Structure-Function Analysis of Proteases -- Castle Szirak, Budapest, Hungary" Aug. 19-24, 1990</b> <b>Physical Description: FAX</b>
Folder 40	<b>"Advances in Receptor-ligand Interactions -- Rutgers, NJ" Sept. 26-28, 1990</b>
Folder 42	<b>"Stanford Human Genome Project -- Boon or Bane? --CA" Jan. 11-13, 1991</b>
Folder 43	<b>"2nd International IGF Symposium -- San Francisco" Jan. 12-16, 1991</b>
Folder 44	<b>"Isidore S. Edelman Symposium -- Columbia U. -- NY" April 18, 1991</b>
Folder 45	<b>"Chemistry &amp; Genetics -- Workshop on Structure and Function of Mutated Proteins -- Florence" Aug. 26-30, 1991</b> <b>Physical Description: PHOTOS</b>
Folder 46	<b>"3rd Pacific Rim Biotech Conference -- Taipei [1988-1992]" Aug. 19-21, 1992</b>
Folder 47	<b>"Table Ronde Roussel" N.d.</b> <b>Physical Description: PHOTOS</b>
Carton Carton 10	<b>SUBGROUP 4 -- BUSINESS COMMITMENTS</b>
Carton Ctn. 10,	<b>"Biomedical Research, Inc. (BMR) -- Chang &amp; Susor" 1979</b>
Folder 48	
Folder 49	<b>"Hana Biologics" 1981-1986</b>
Folder 50	<b>"Harbor Bay Isle" May-September 1981</b>
Folder 51	<b>"Harbor Bay Isle -- California Biotechnical Institute" July-Aug. 1981, n.d.</b>
Folder 52	<b>"Harbor Bay Isle" July-Nov. 1981</b>
Folder 53	<b>"Harbor Bay Isle -- Biotechnology Research Park" 1980, Aug.-Nov. 1981</b>
Folder 54	<b>"Harbor Bay Isle" 1981-1983</b>
Folder 55	<b>"Harbor Bay Isle -- California Biotechnical Institute" n.d.</b>
Folder 56	<b>"Meridian Instruments" 1982-1985, n.d.</b>
Folder 57	<b>"Meridian Instruments" 1985-1987</b>
Folder 58	<b>"Miscellaneous Commercial 1980-1983</b>
Carton Cartons 11-13	<b>SUBGROUP 5 -- PATENT FILES [RESTRICTED]</b>
Carton Ctn. 11,	<b>European Patent Applications - 1961-1980</b>
Folder 1	
Folder 2	<b>UC6-UC6c: Hepatitis - "Non Passageable Viruses" 1979-1984</b>
Folder 3	<b>UC6-UC6c: Hepatitis - "Non Passageable Viruses" 1978-1984</b>
Folder 4	<b>UC6-UC6c: Hepatitis - "Non Passageable Viruses" 1979-1985</b>
Folder 5	<b>UC6-UC6c: Hepatitis - "Non Passageable Viruses" 1979-1993</b>
Folder 6	<b>UC6a: Hepatitis - "Non Passageable Viruses" --Notes 1981, n.d.</b>
Folder 7	<b>UC6ab: Hepatitis - "Non Passageable Viruses" 1980-1990</b>
Folder 8	<b>UC12: "Expression of Hormone Genomic Clones" (abandoned) 1980-1984, n.d.</b>

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Folder 9	<b>UC16: "DNA Expression Vector Suitable for Direct Expression of a Foreign Gene" (approved) 1980-1992</b>
Folder 10	<b>UC17: "Novel Somatostatins" (discontinued) 1980-1987, n.d.</b>
Folder 11	<b>UC19: "Amplified Expression Vector" (approved) 1980-1983</b>
Folder 12	<b>UC22: "Vaccine Capable of Eliciting Multivalent Antibodies" 1980-1987</b>
Folder 13	<b>UC24: "Production of High Levels of Hepatitis B Antigens in Mammalian Cells" 1980-1987, n.d.</b>
Folder 14	<b>UC25: "Yeast Expression Vectors and the Isolation of Yeast High Expression Promoters" (active) 1981-1982, n.d.</b>
Folder 15	<b>UC26: "Synthesis of Human Virus Antigen by Yeast" (approved) 1977-1983</b>
Folder 16	<b>UC26: "Synthesis of Human Virus Antigen by Yeast" 1981-1985</b>
Folder 17	<b>UC26: "Synthesis of Human Virus Antigen by Yeast" 1981-1988</b>
Folder 18	<b>UC118-80: "Amylase Preparation by Cloning" (rejected) 1980-1985, n.d.</b>
Carton Ctn. 12,	<b>UC Case # 84-108-1: "Differntiative Expression Modules" 1984-1987</b>
Folder 1	
Folder 2	<b>UC Case # 84-108-1: "Differntiative Expression Modules" 1988-1993</b>
Folder 3	<b>UC Case # 84-108-1: "Differntiative Expression Modules" 1993-1994</b>
Folder 4	<b>UC Case # 84-108-1: "Differntiative Expression Modules" 1984</b>
Folder 5	<b>UC Case # 84-108-1: "Differntiative Expression Modules" 1984</b>
Folder 6	<b>UC Case # 85-068-01: "Molecular Cloning of Human Placental Alkaline Phosphatase" (discontinued) 1985</b>
Folder 7	<b>UC Case # 87-035-3: "General Method for Producing and Selecting Peptides w/ Specific Properties" (approved) 1987-1993</b>
Folder 8	<b>UC Case #87-246: "Recombinant Nerve Growth Factor" (rejected) 1987-1993</b>
Folder 9	<b>Interference # 100,596: "Gilbert, et al., v. Rutter, et al." 1977-1983</b>
Folder 10	<b>Interference # 100,596: "Gilbert, et al., v. Rutter, et al." 1979-1991</b>
Folder 11	<b>Interference # 100,596: "Gilbert, et al., v. Rutter, et al." -- Lab Notes n.d.</b>
Folder 12	<b>Interference # 100,596: "Gilbert, et al., v. Rutter, et al." -- Lab Notes n.d.</b>
Folder 13	<b>Interference # 100,596: "Gilbert, et al., v. Rutter, et al." -- Lab Notes n.d.</b>
Folder 14	<b>Gilbert/Murray 1978-1991</b>
	<b>Physical Description: FAX</b>
Folder 15	<b>Genentech -- European Patent Applications -- Insulin and Somatostatin 1977-1979</b>
Folder 16	<b>Genentech Dispute 1978-1982</b>
Folder 17	<b>Genentech Dispute 1976-1982, n.d.</b>
Box Box 13,	<b>Eli Lilly Correspondence 1977-1979</b>
Folder 1	
Folder 2	<b>Eli Lilly -- Contracts and Agreements 1978-1979</b>
Folder 3	<b>Eli Lilly - Genentech Settlement 1978, 1980</b>
Folder 4	<b>UC v. Genentech, Genentech v. Eli Lilly -- Legal Papers 1978-1991, n.d.</b>
Folder 5	<b>UC v. Genentech, Genentech v. Eli Lilly -- Defendants Exhibits #64-75 1991</b>