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About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

6300 HOLLISTER AVENUE AT THE SANTA BARBARA AIRPORT | TELEPHONE: 967-3456 (AREA CODE 805)

GENERAL RESEARCH | CORPORATION

P.O. BOX 3587, SANTA BARBARA, CALIFORNIA 93105

28 November 1967

Professor David J. Rogers
Professor of Biology
Taximetric Laboratory
University of Colorado
Boulder, Colorado 80302

Dear Dr. Rogers:

I am sorry to be so late in sending this letter in response to yours of November 15 and our phone call after that date.

I am enclosing a description of our organization, a list of some of my past research activities and a xerox copy of the newspaper story mentioning Ehrlich's concern.

I hope you are able to get some similarity coefficients for me without too much of an expenditure of your time and effort. I look forward to hearing from you.

Sincerely yours,

John

John W. Rowen
Member of the Technical Staff

JWR:jkh
encls.

15 November 1967

Dr. John W. Rowen
General Research Corp.
P.O. Box 3587
Santa Barbara, Calif. 93105

Dear Dr. Rowen:

We have looked over your data listing and find that already it presents many problems that we should like to have a chance to discuss with you. There seem to be several kinds of programs that we have which might be of considerable interest to you and we feel that to get the m most "goody" out of your data we should talk over the structuring of the input. So we urge you to follow your present plan to come here with your briefcase full of your preliminary data recordings so that we may go over our project and program techniques with your research data.

Needless to say, we are very interested in your data and hope that we can provide some useful sort of output for you.

Sincerely,

David J. Rogers
Professor of Biology

DJR:GM

Dr. John W. Rowen
(805)964 6971
GENERAL RESEARCH CORPORATION
6300 Hollister Avenue • Phone (805) 967-3456
P.O. BOX 3587, SANTA BARBARA, CALIFORNIA 93105

S.O.G.

STANDARDIZED DATA

INPUT-OUTPUT DATA SHEET

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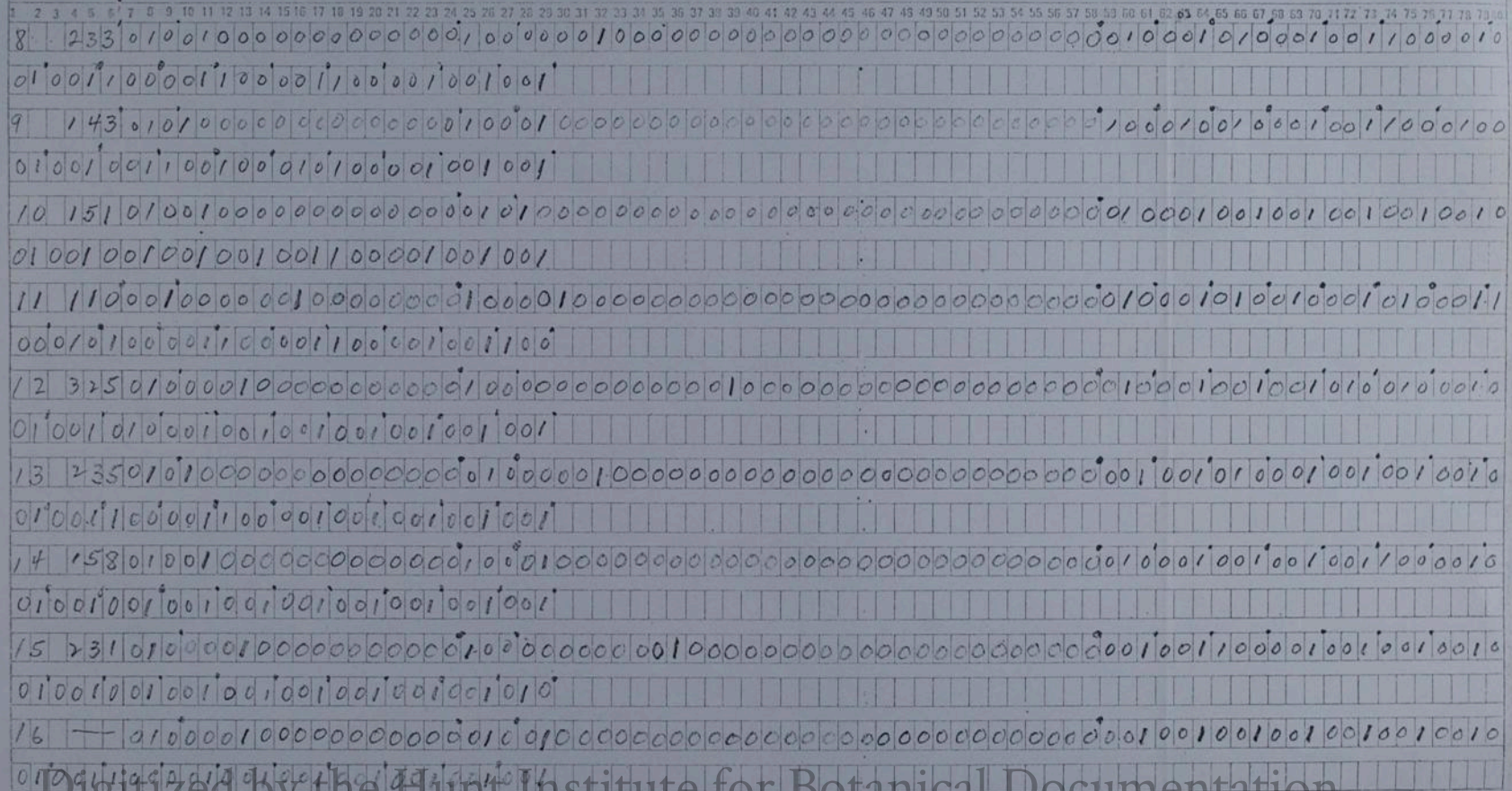

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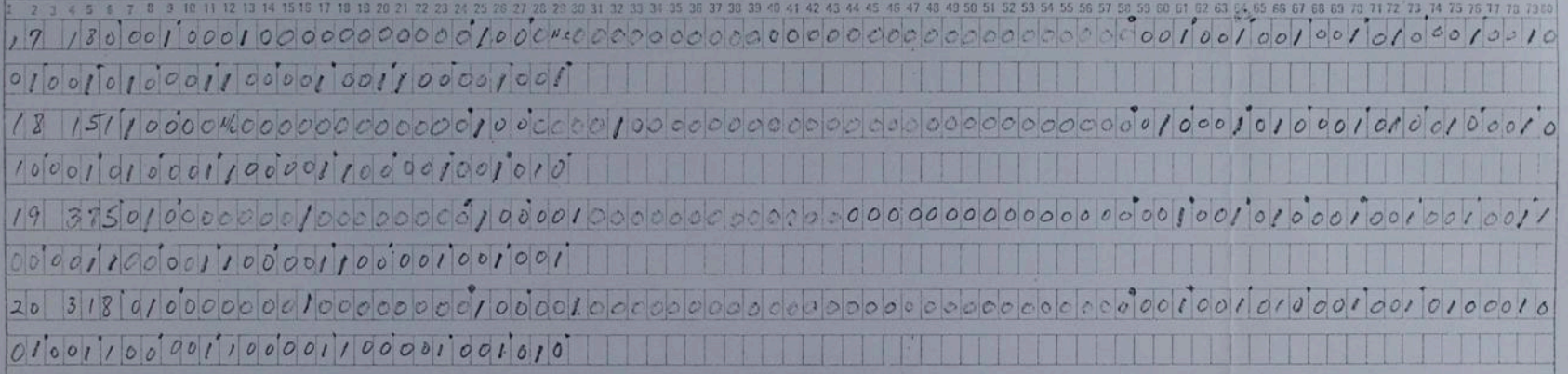

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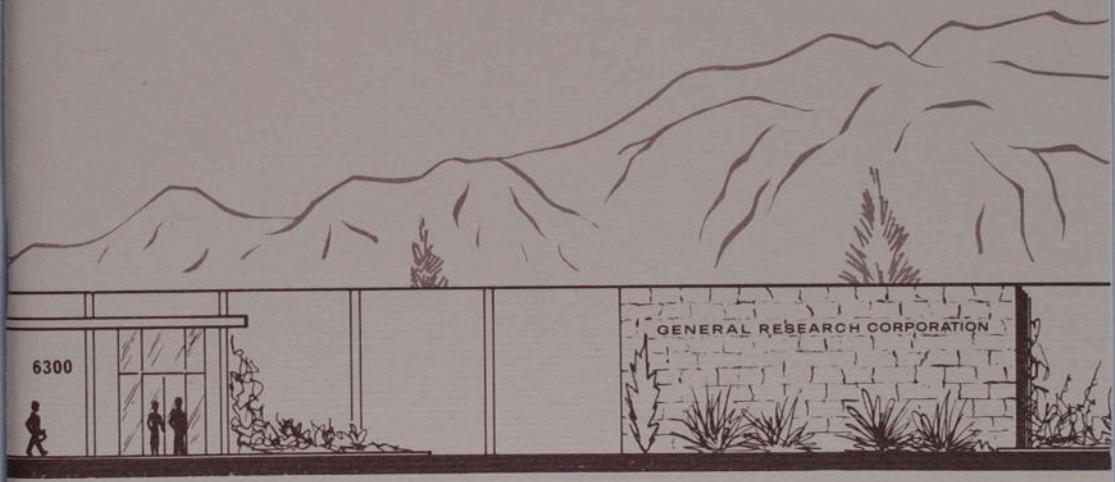

JOHN W. ROWEN

Education

1938	University of Chicago, B.S. (Chemistry and Mathematics)
1941	University of Chicago, Ph.D. (Physical Chemistry)

Professional Experience

1941 - 1945	U.S. Army Ordnance Department Research chemist at several ordnance works including Picatinny Arsenal (Chief Chemist at one). Design and testing of new high explosives and related problems (U.S. Patent Nos. 2,531,471 and 3,057,754).
1945 - 1950	National Bureau of Standards Senior physical chemist (P-4 and GS-13). Research on fundamental properties of materials; applied infrared and ultraviolet spectroscopy, surface phenomena, hydrodynamics and high polymers.
1950 - 1951	National Institutes of Health (On leave from the National Bureau of Standards) Special post-doctoral fellow. Molecular biology studies including measurements of light scattering from solutions of the double-stranded helices of the genetic material DNA.
1951 - 1956	University of California at Los Angeles Section head in the Atomic Energy Project of the Medical School and Associate Professor in Physiological Chemistry. Research on effects of radiation, size and shape of large molecules, birefringence properties of linear macromolecules, and their light scattering properties. Occasional undergraduate and graduate teaching.
1952 - 1953	Carlsberg Laboratorium, Denmark Post-doctoral fellow for the U.S. Public Health Service. Research on microtechniques, biophysics, enzyme kinetics, and statistical mechanics of surface layers.
1956 - 1959	Hughes Aircraft Company Research Physicist and group leader on microwave properties of dielectrics, high polymers, and other materials. Solid state chemistry and physics of ferroelectric materials, Laser materials, and organic semiconductors. Systems analysis of search and detection systems (both radar and infrared) followed by operations research on strategies and tactics.
1959 - 1961	System Development Corporation Operations Research Scientist. Study of command and control systems with particular emphasis on message switching centers. A model for simulation of priority queuing was developed for two computers.

1961 - 1963 Aerospace Corporation Staff Scientist in the materials laboratory. Investigated properties of electronic materials including synthetic aluminum oxide crystals. Thermal stability of organic materials.

1963 - 1964 Lear Siegler Corporation Consultant in design and development of a coherent light scattering apparatus and related experimental designs in medical physics research.

1964 - 1966 North American Aviation Inc. Space Scientist - Research, operations analysis, and modeling in the following areas: the life sciences, arms control, manned orbital research laboratory (MORL), and light scattering in zero-G fields.

1966 Defense Research Corporation Member of the technical staff.

Memberships

American Physical Society
Operations Research Society of America
American Chemical Society
American Institute of Physics (Rheological Society)
New York Academy of Science
Optical Society of Southern California
Polymer Group of Southern California

Honors

University of Chicago Board of Trustees Scholarship
Sigma Xi
American Men of Science
U.S. Public Health Service Post-Doctoral Fellow, 1952 (Carlsberg Laboratory, Denmark)
Lecturer in Mathematics, American University, 1948-1950

Publications

"Properties of Water Repellent Fabrics," J. of Research, National Bureau of Standards, 38, 103 (1947) (with Domenick Gagliardi).

"Absorption Spectra in the Detection of Chemical Changes in Cellulose and Cellulose Derivatives," J. of Research, National Bureau of Standards, 39, 133 (1947) (with Charles M. Hunt and Earle K. Plyler).

"Sorption of Nitrogen and Water Vapor on Textile Fibers," J. of Research, National Bureau of Standards, 39, 479 (1947), and Ind. and Eng. Chem., 39, 1659 (1947) (with R. L. Blaine).

"On the Distribution of Water in Cellulose and Other Materials," J. Amer. Chem. Soc., 70, 1663 (1948) (with Robert Simha).

"Interaction of Polymers and Vapors," J. Physical and Colloid Chem., 52, 921 (1949) (with Robert Simha).

"Is the Absorption of Water Vapor by Wool Photosensitive?" J. Society of Chem. Industries, 68, 118 (1949) (with Felix Moncodo and Carlos Camposortego).

"Submicroscopic Structure of Cellulose from Nitrogen Sorption Measurements," J. of Research, National Bureau of Standards, 43, 547 (1949) (with Charles M. Hunt and Raymond L. Blaine).

"Effect of Deuteration, Oxidation and Hydrogen-Bonding on the Infrared Absorption Spectrum of Cellulose," J. of Research, National Bureau of Standards, 44, 3 (1950) (with Earle K. Plyler).

"Cotton Powder for Infrared Transmission Measurements," J. of Research, National Bureau of Standards, 45, 109 (1950) (with Florence H. Forziati, Walter K. Stone and William D. Appel).

"Effect of Changes in Crystalline Structure on the Infrared Absorption Spectrum of Cellulose," J. of Research, National Bureau of Standards, 46, 38 (1951) (with Florence H. Forziati).

"Spectrophotometric Determination of Carboxyl Groups in Cellulose," J. of Research, National Bureau of Standards, 46, 288 (1951) (with Florence H. Forziati and Earle K. Plyler).

"Sorption of Water by Proteins and Polymers," J. of Polymer Science, 7, 289 (1951) (with A.D. McLaren).

"Spectrophotometric Evidence for the Absence of Free Aldehyde Groups in Periodate-oxidized Cellulose," J. Amer. Chem. Soc., 73, 4484 (1951) (with Florence H. Forziati and Richard E. Reeves).

"Sorption of Vapors by Polymers," J. Polymer Science, 9 93 (1952) (with Terrell L. Hill).

Installation and Calibration of a Streaming Birefringence Apparatus, UCLA Report No. 318, Technical Information Service (1954) (with Reginald W. Dickinson).

Sorption and Orientation of Macromolecules, UCLA Report No. 347, Technical Information Service, 1954 (with Hyla Cook).

"Dielectric Increment at Microwave Frequencies," J. of Polymer Science, 28, 225 (1958) (with Herbert R. Hope).

"Polymer-Vapor Isotherms," J. of Polymer Science, 31, 199 (1958).

"Rapid Determination of Moisture Capacity, Diffusion Coefficient, and Activation Energy in Plastic Laminates," Modern Plastics, 36, 222 (1958) (with R.K. Laudenslager).

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"The Polymerization of Diallyl Phthalate, an Investigation by Infrared Spectroscopy," J. Polymer Science, 37, 431 (1959) (with Robert A. Spurr and Betty M. Hanking).

Thermal Stability of Organic Materials, Aerospace Corp. Report No. 61-1850.1-16, October 1961.

Calibration and Operation of a Modified Flame Fusion Apparatus, Aerospace Corp. Report No. TDR-169(3240-10) TR-1, October 1962 (with J. A. Osmer and Hugh S. Gutherie).

"Aerospace Program Plans (Laser and Electronic Materials Section)," July 1962.

Biophysics:

"A Direct Colorimetric Method for the Determination of Insulin in Blood and Urine," J. Biol. Chem., 127, 609 (1939), (with Alf S. Alving and B.J. Miller).

"The Renal Excretion of Insulin at Low Plasma Concentrations. . .In Hypertensive Individuals," J. Clinical Investiation, 19, 89 (1940) (with Alf. S. Alving and B.J. Miller).

"Sunburn and Para-aminobenzoic Acid," J. Investigative Dermatology, 5, 445 (1942) (with S. Rothman).

"Fermentative and Photochemical Production of Hydrogen in Algae," J. General Physiology, 26, 219 (1942).

"Phosphorolysis of Nicotinamide Riboside," J. Biol. Chem., 193, 497 (1951) (with Arthur Kornberg).

"Molecular Characteristics of Sodium Desoxyribonucleate," Biochimica et Biophysica Acta, 10, 89 (1953) (with Murray Eden and Herbert Kahler).

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"Hyaluronic Acid and the Proteins of Vitreous Humor," Federation Proc., 13 (1954).

"Proteins and Hyaluronic Acid of Beef Vitreous Humor," Trans. of Am. Ophth. Soc., 52 (1954) (with B. Brunish and R. Irvine).

"Size of Desoxyribonucleic Acid Molecules in E. coli," Archives Biochem. and Biophysics, 51, 524 (1954) (with Amos Norman).

"Form and Dimensions of Isolated Hyaluronic Acids," Biochimica et Biophysica Acta, 19, 480 (1956) (with Robert Brunish and Francis W. Bishop).

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"Effects of irradiation in vivo on bacterial deoxyribonucleic acid," Biochim. Biophys. Acta, 22, 203 (1956) (with Amos Norman).

Operations Research:

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"Simulation of Priority Queuing in a Message Switching Center," System Development Corporation Field Note FN-4089 (8 August 1960).

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"Clinical and Special Laboratories," Chapter VI, System Development Corporation N-13784, 8 November 1960.

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"Technical Proposal for a Space Station Mission Simulation Mathematical Model," North American Aviation, Inc. NAA-SID 65-1452-1, 3 November 1965.