NOTE OF PROVENANCE

Dr. Ralph Engle donated the papers from 1989-1992.

BIOGRAPHICAL NOTE:

Dr. Ralph Engle Jr. was born on June 11, 1920 in Philadelphia. He was married in 1945 to Dr. Mary Allen Engle. Both were on the staff of the New York Hospital-Cornell Medical Center. He received a BS degree at the University of Florida in 1942 and his MD degree from Johns Hopkins University School of Medicine in 1945.

He completed his internship and residency at New York Hospital. In 1949, he began his career at Cornell University Medical College at the rank of Assistant in Medicine and rose in the ranks of Professor in the Departments of Medicine and Public Health. At the hospital, he started at the Assistant Attending Physician rank in 1954 and became Associate Attending Physician in 1957. He also worked at the Veterans Administration Hospital in Montrose, NY and the Bellevue Hospital. In 1961, he became the Chief of Hematology Division of the Department of Medicine at the Cornell Medical Center.

His specialty was Hematology and Biochemistry of Immunoglobulins. He was interested in the history of Medical Records and the use of computers as aids for physicians in medical diagnosis.

In 1967, Dr. Engle and Betty Flehinger from IBM and Cornell University Graduate School of Medical Sciences developed the HEME/HEME2 computer program for the Hematology Division. The program used the Thomas Bayes theorem to diagnose blood disorders and diseases.

Dr. Engle died on October 7, 2000.

SCOPE AND CONTENTS

The collection is divided into four series: General Files (1945-1987), Medical Diagnosis and Computers (1950-1982), HEME/HEME2 Computer Program (1957-1982), and Reprints and Publications (1950-1982).

General Files, 1945-1987

The series, arranged alphabetically by subject, includes the Associated Medical Schools of New York and New Jersey, Library Committee, minutes, 1972-1987, Autopsies Reports from July 1945-June 1946, Clinical Chemotherapy Cancer Control Program, 1975, Medical Passport Foundation, 1984 and the National Cancer Institute, Cancer Control and Rehabilitation Advisory Committee, May 2-3, 1978, Cancer Control Treatment and Rehabilitation Review Committee, 1977
Medical Diagnosis and Computers, 1950-1982


HEME/HEME2 Computer Program, 1957-1982

This series, arranged chronologically, contains the background information for Dr. Engle’s HEME/HEME2 Computer program for diagnosing blood disorders and diseases.

Reprints and Publications, 1950-1982

This series, arranged chronologically, by publication date contains Dr. Engle articles and speeches on his hematology and computers in medicine research.

ACCESS RESTRICTIONS

Patient records are protected under the HIPAA privacy rule.

BOX AND FOLDER LIST

BOX 1: GENERAL FILES

<table>
<thead>
<tr>
<th>Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>American Journal of Medicine, Reviewer, 1973</td>
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<td>2-4</td>
<td>Associated Medical Schools of New York and New Jersey Library Committee, minutes and correspondence, 1972-1987</td>
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<td>5-6</td>
<td>Autopsy Experience of an Intern in Pathology, July 1, 1945-June 30, 1946, autopsy reports (Restricted)</td>
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<td>7</td>
<td>Center of Alumni Council, correspondence, 1983</td>
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<tr>
<td>8</td>
<td>Christenson, Dr. William, correspondence, 1985</td>
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<tr>
<td>9</td>
<td>Clinical Chemotherapy Cancer Control Program, budget, proposal and accounts, 1975</td>
</tr>
<tr>
<td>10</td>
<td>Directions for Making and Staining a Blood Smear, n.d.</td>
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**BOX 2: GENERAL FILES**

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<tr>
<th>Folder</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Medical Passports Foundation, 1984</td>
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<td>3</td>
<td>Merhige, Kenneth, medical intern, 1979</td>
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<tr>
<td>4</td>
<td>National Cancer Institute, Cancer Control and Rehabilitation Advisory Committee, May 2-3, 1978</td>
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<tr>
<td>5</td>
<td>National Cancer Institute, Cancer Control Treatment and Rehabilitation Review Committee, 1977</td>
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<td>6</td>
<td>Special Review Committee for Model Cancer Prevention Program at Community Level, 1979</td>
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<td>7</td>
<td>Toxicology Information Program Committee, 1973</td>
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<td>8</td>
<td>Society for the Study of Blood, 1965</td>
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**BOX 3: MEDICAL DIAGNOSIS AND COMPUTERS**

<table>
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<tr>
<th>Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Articles, Bayes Theory, Decision Making Problem Solving, 1958-1963</td>
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<tr>
<td>2</td>
<td>Articles, Computer in Medicine, 1950s-1960s</td>
</tr>
<tr>
<td>3</td>
<td>Articles, Medical Diagnosis using Computers, 1960s (early papers hard to find)</td>
</tr>
<tr>
<td>4</td>
<td>Berkley, Carl, papers re. Medical Diagnosis using Computers, 1962-1964</td>
</tr>
<tr>
<td>5</td>
<td>Brodman, Keeve, papers re. Medical Decision Making Materials and the Cornell Medical Index, 1960's</td>
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<tr>
<td>6</td>
<td>History of Decision Making, 1981-1982</td>
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<tr>
<td>7</td>
<td>History of Diagnosis, n.d.</td>
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<tr>
<td>8</td>
<td>History of Medical Records, n.d.</td>
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<tr>
<td>9</td>
<td>Knill-Jones, Dr. R. P., correspondence re. Computers in Medicine, 1977</td>
</tr>
<tr>
<td>10</td>
<td>Medical Diagnosis, printout, n.d.</td>
</tr>
<tr>
<td>11</td>
<td>Sigbio Newsletter, 1973</td>
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<td>12</td>
<td>Zworykin, Dr. V. K., 1969-1985</td>
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</table>

**BOX 4: HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)**

<table>
<thead>
<tr>
<th>Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Bitzmac Electronic Business Systems, 1957</td>
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<tr>
<td>2</td>
<td>NYU Progress Rept: Electronic Data Processing in Hematology, 01/1963</td>
</tr>
<tr>
<td>3</td>
<td>Computers as Diagnosis Tool, Hematology, correspondence, 1963-1978</td>
</tr>
<tr>
<td>4</td>
<td>NYU Master Code in Hematology, 1964</td>
</tr>
</tbody>
</table>
NYU Final Report: Electronic Data Processing in Hematology, 01/1966-1967
Hematological Studies: Hospital Case Histories, 02/1966
Heme (Administration), correspondence, 1967-78
Friedman, Richard, medical intern, 1968-1976
Equipment and Methods Potentially Useful in Gathering Clinical Information for Computer Input in Computer Assisted Medical Diagnosis, 1968
Grant Application: Decision Making Models for Diagnosis & Therapy, 1969-1974
Master Code List, 1969
Teletype, 1970
RCA, correspondence, 1971

BOX 5: HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)

Folder Description

Computer – Assisted Differential Diagnosis of Hematological Diseases
1-2 Vol I, 1971
3-4 Vol II, 1971
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BOX 6: HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)

Folder Description

1 Worksheets, 1972-74
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5 Teletype, 1973
6 Teletype Instructions (original), 1973
7-8 Scott, Allen, printouts, 1974
9 Sample Computer printouts & worksheets, 1975
10 Patient Cases, 1975-79 (Restricted)
11 AAAS Symposium: Computers and Medical Knowledge, 1976
12 Lantern Slides, 1976
13 Medical Students, Elective Course, 1976
14 Summary paper for Aspen Bioscience Conference, October 1976
BOX 7:  HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)

Folder Description

1  Aspen Interdisciplinary Symposium, October 1976
2  Aspen Bioscience Community Seminars, October 1976
3  Recordkeeping Programs, 1976
4  Biomedical Research Support, grant, 1976-77
5  Patient cases, 1977 (Restricted)
6  HEME2, Syllabus, 1977
7  Terminal Secos, 1977
8  Trial of Hematology Diagnosis Program as a Teaching Aid. Report on Work Conducted under Biomedical Research Support Grant, 1977
9  Blankenship, Jim, 1978
10  Engle Cases, 1978
11  Summary of Experience with HEME program, 1979
12  Cases, 1979 (Restricted)
13  Aisen, Paul, January 1979

BOX 8:  HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)

Folder Description

1  HEME2 instructions, 1982
2  Aisen Console, 1982
3  Questionnaires and Coding Sheets, 1982
4  Washington Meeting, October-November 1982
5  Hematology Code, Algorithms, n.d.
6  Hematology, Normal Lab Values, n.d.
7  HEME1 Operating Instructions, n.d.
8  Programmed Questionnaires, n.d.
9  HEME2 Questionnaires, n.d.

BOX 9:  HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)

Hematology computer data printouts, 1957-1983

BOX 13:  HEME/HEME2 COMPUTER PROJECT (HEMATOLOGY)
# BOX 10: REPRINTS AND PUBLICATIONS

Folder Description

1. Reprints, 1950-1959
2. Phylogensis of Plasma Cells and Plasma Proteins, Lab Notes, 1957
3. Conference on Storage and Retrieval of Health Information, 10/7 -9/1959
5. Untitled paper, 1962
6. Speech: Medical Diagnosis: The Diagnosis Process, Proceedings of Conference at the Univ. of Michigan, May 9-11, 1963

On shelf Diagnostic Process: Proceedings of a Conference held at the University of Michigan, May 9-11, 1963

On Shelf Atamer, M.A. Blood Diseases, 1963


On Shelf Chester, Robert. editor Information in the Health Sciences Working to the Future, 1972

On Shelf Jacquez, John, MD editor Computer Diagnosis and Diagnostic Methods, 1972

On Shelf Gabrielli, E. R. editor Clinically Oriented Documentation of Laboratory Data, 1972

# BOX 11: REPRINTS AND PUBLICATIONS

Folder Description

1. Diagnosis Process: I Role of Physician, 1974
2. Computer in Diagnosis, I General Principles, 1975
5. Computer Aided Medical Consulting, 1976

7 Columns from the Bulletin of the American Society for Information Science, Vol 3, No. 3., 1977


8 HEME2, article drafts, 1981

9 Attempt to Use Computers as Diagnostic Aids in Medical Decision Making 30 year Experience, February 1991

10-11 Documentation of a Patient's Illness: A History of the Medical Record 1793-present by NYH records

11a The Evolution, Uses and Present Problems of the Patient's Medical Record as Exemplified by the Records of the New York Hospital from 1795 to the Present, n.d.


13 Speeches given on trips, n.d.

14 Why Computer Aided Medical Diagnosis is not being Generally Used: A Valedictory Opinion, n.d.

**BOX 12: NEGATIVES**

Negatives from the Phylogensis of Plasma Cells and Plasma Proteins, Lab Notes, 1957