



CHESNEY ARCHIVES

JOHNS HOPKINS
Medicine
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William B. Kouwenhoven Collection

Dates: 1900-1977, 1950-1970

Collection Reference Code Element: KouW

The Alan Mason Chesney Medical Archives
5801 Smith Avenue, Suite 235
Baltimore, MD 21209
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<https://medicalarchives.jhmi.edu/>

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Processing Information: The William Kouwenhoven Collection at the Chesney Medical Archives was inventoried by Chesney Medical Archives volunteer Linda Weisfeldt from 2011-2014 and student employee Anna Chambers in 2010, both under the direction of Phoebe Evans Letocha. The William B. Kouwenhoven Papers Ms. 95 at Special Collections, Milton S. Eisenhower Library, were processed by Cynthia H. Requardt in May 1987. Linda Weisfeldt integrated the Eisenhower Library accrual into the Chesney Medical Archives' collection in 2013.

Collection Overview

Extent: 35.25 cubic feet (34 boxes)

Creator: Kouwenhoven, W. B. (William Bennett), 1886-1975

Administrative/Biographical History:

William B. Kouwenhoven
13 Jan 1886-10 Nov 1975

William B. Kouwenhoven was born in Brooklyn, New York. He received his E.E. in 1906 and his M.E. in 1907, both from the Polytechnic Institute of Brooklyn, and his doctoral degree in electrical engineering from Karlsruhe Technische Hochschule in Baden, Germany. He joined the faculty of the Johns Hopkins University School of Engineering in 1914, serving as dean of the school from 1938 until 1954. His research in electric shock and his study of the effects of electricity on the heart led to development of the closed chest electrical defibrillator and the technique of external cardiac massage. After his retirement from the school of engineering, Kouwenhoven was a lecturer at the school of medicine. In 1969, he received the first honorary degree ever conferred by the Johns Hopkins University School of Medicine.

Chronology: 1914-1975 - Johns Hopkins University School of Engineering
1956-1975 - Johns Hopkins University School of Medicine

Scope and Content:

The William B. Kouwenhoven Collection covers his engineering training and his years as a researcher and administrator at the Johns Hopkins University. Series include student notebooks, correspondence, meeting files, subject files, research notes, records of electric shock experiments, films, and material culture. Much of the collection consists of charts and graphs of research data from animal experiments from 1950 to 1970. A bound edition of Kouwenhoven's collected articles from 1965 to 1972 is also included.

Accruals Description: 1986-002, 2012-043, 2013-031, 2013-036, 2013-109, 2017-081, 2020-022, 2021-012, 2021-033, 2023-080

Custodial History:

In 1977, the bulk of the collection was donated by Mrs. William Kouwenhoven, wife of the creator, to the Alan Mason Chesney Medical Archives of the Johns Hopkins Medical Institutions. A separate accrual of papers was donated to the Milton S. Eisenhower Library in December 1983 by William Kouwenhoven, son of the creator of the papers. The Eisenhower Library placed their accrual in Special Collections and cataloged it as the William B. Kouwenhoven Papers Ms. 95. In April 2013, the accrual at Eisenhower Library was transferred to the Chesney Medical Archives and integrated into its William Kouwenhoven Collection. Additional accruals have later been donated by family members.

Language: English

Conditions Governing Access Element:

This collection may contain some restricted records. Materials pertaining to patients, students, employees, and human research subjects, as well as unprocessed collections and recent administrative records, carry restrictions on access. For more information about the policies and procedures for access, see the Archives Policy on Access and Use.

Use/Reproduction Restrictions:

When citing material from this collection, credit The Alan Mason Chesney Medical Archives of The Johns Hopkins Medical Institutions. For permission to reproduce images, contact the holder of the copyright.

Subject - Topical:

Defibrillators

Related Archival Material Element:

A related group of Kouwenhoven's papers were housed at Special Collections, The Milton S. Eisenhower Library, The Johns Hopkins University. A finding aid to that collection is available at: <http://ead.library.jhu.edu/ms095.xml> These materials were transferred to the Chesney Medical Archives in April 2013 and have been integrated into its finding aid for the Kouwenhoven Collection.

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Box 2013-031-05 Research Materials
Box 2013-031-06 Research Materials: Electro-shock and Defibrillator
Box 2013-031-07 Research Materials: Defibrillator
Box 2013-031-08 Lectures

Series 1: Student Notebooks and Related Educational Records - 1902-1914

Scope and Content: Kouwenhoven received his training in electrical engineering from the Polytechnic Institute of Brooklyn and from the Technischule, Karlsruhe in Baden, Germany. He kept many of his student notebooks and laboratory workbooks (50 items, 1902-1912). The notebooks from Karlsruhe are written in German. Series also includes his dissertation, his diplomas, and a photograph album apparently dating from his student days in New York .

Archival Arrangement: Series consists of boxes 2013-031-02 to 04.

Folder 3A/1: Student Notebook - Karlsruhe - Power Plants - 1910

Folder 3A/2: Student Notebook - Karlsruhe - Anchor Fields - 1907

Folder 3A/3: Student Notebook - Karlsruhe - Electric Fields I - 1910

Folder 3A/4: Student Notebook - Karlsruhe - Electric Fields II - 1910

Folder 3A/5: Student Notebook - Karlsruhe - Magnetic Fields - 1910

Folder 3A/6: Student Notebook - Karlsruhe - Winter Semester - 1910-11

Folder 3A/7: Student Notebook - Karlsruhe - Alternating Current Phenomena - 1911

Folder 3A/8: Student Notebook - Karlsruhe - Machinery - 1911

Folder 3A/9: Student Notebook - Karlsruhe - Electric Fields/Motors - 1911

Folder 3A/10: Student Notebook - Karlsruhe - Switchgear - 1911

Folder 3A/11: Student Notebook - Karlsruhe - Electromotive Plants - 1911

Folder 3A/12: Student Notebook - Karlsruhe - Generators - 1911

Folder 3A/13: Student Notebook - Karlsruhe - Electrostatic Fields - 1911

Folder 3A/14: Student Notebook - Karlsruhe - Magnetic Energy - 1911

Folder 3A/15: Student Notebook - Karlsruhe - Oscillating Factor - 1911

Folder 3B/2: Student Notebook - Karlsruhe - Machines - 1911

Folder 3B/3: Student Notebook - Karlsruhe - Theory of Commutation - 1911

Folder 3B/4: Student Notebook - Karlsruhe - Resistance - 1911

Folder 3B/5: Student Notebook - Karlsruhe - Instrument Construction - 1911

Folder 3B/6: Student Notebook - Karlsruhe - Railways - 1911

Folder 3B/7: Student Notebook - Karlsruhe - Alternating Current - 1911

Folder 3B/7: Student Notebook - Karlsruhe - Railways - 1911

Folder 3B/8: Student Notebook - Karlsruhe - Alternating Current II - 1911

Folder 3B/9: Student Notebook - Karlsruhe - Alternating Current III - 1911

Folder 3B/10: Student Notebook - Karlsruhe - Alternating Current IV - 1911

Folder 3B/11: Student Notebook - Karlsruhe - Power Plants - 1911

Folder 3C/1: Student Notebook - Karlsruhe - Electric Lines - 1911

Folder 3C/2: Student Notebook - Karlsruhe - High Frequency Measurements - 1911

Folder 3C/3: Student Notebook - Karlsruhe - Transients - 1912

Folder 3C/4: Student Notebook - Karlsruhe - Theory of Overvoltage - 1912

Folder 3C/5: Student Notebook - Karlsruhe - Wire - 1912

Folder 3C/6: Student Notebook - Karlsruhe - Electrical Discharge - 1912-13

Folder 3C/7: Student Notebook - Karlsruhe - Journal Notes - 1897-1912

Folder 2013-031-02: Photograph Album New York 1906-1914 - 1906-1914

Scope and Content: A majority of the photos are unidentified groups of people and settings, others are of a power plant.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - AC Current Lectures - 1913-14

Scope and Content: This folder contains one handwritten notebook from a series of lectures on AC current. It is unclear if Dr. Kouwenhoven was attending the lectures or presenting them. There are also some notations on problems taken from the text book "A.C. Machines" by Shelson Mason and Hausman.

Folder 2013-031-02: Student notebook - Polytechnic Institute of Brooklyn - Department of Electrical Engineering - undated

Scope and Content: This folder contains notes and related information on experiments dealing with Boyle's Law, Venturi Meters, the Air Thermometer and Specific Heat of Copper.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Department of Electrical Engineering - Electric Railways - May 1906

Scope and Content: This folder contains data and curves for studies of track resistance.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Department of Electrical Engineering - Power Transmission - March 1906

Scope and Content: This folder contains a study of a proposed installation of two connecting power lines.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Department of Electrical Engineering - Transformer Design - April 1906

Scope and Content: This folder contains data from a study of transformer design done by Dr. Kouwenhoven.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Differential Equations Lectures - Mid 1900's

Scope and Content: This folder contains one of Dr. Kouwenhoven's handwritten notebooks from his days as a student at the Polytechnic. It covers information from lectures about the standard rules for differential equations.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Direct Current Machines Lectures - unknown

Scope and Content: This folder contains one handwritten notebook outlining an evening course of 20 lectures. It is unclear if Dr. Kouwenhoven attended the lectures or presented them.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Electrical Experiments - Mid 1900's

Scope and Content: This folder contains data from electrical experiments, probably done during Dr. Kouwenhoven's days of graduate studies at the Polytechnic.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Text Problems - Mid 1900's

Scope and Content: This notebook contains electric circuit problems based in the first 266 pages of "Thomalen" by Harold Smith and Dr. Kouwenhoven's solutions to them.

Folder 2013-031-02: Student Notebook - Polytechnic Institute of Brooklyn - Analytic Mechanics - 1904

Scope and Content: This folder contains one handwritten notebook from Dr. Kouwenhoven's undergraduate days at the Polytechnic which contains mathematical equations.

Folder 2013-031-02: Student Notebooks - Polytechnic Institute of Brooklyn - Department of Electrical Engineering (Studies of Light) - undated

Scope and Content: This folder contains notes and related information on experiments using the photometer, focal length of lenses and wave lengths.

Folder 2013-031-04: Dissertation - Karlsruhe - "Over High Voltage Measurements" (Kouwenhoven) - 1914

Scope and Content: This is a reprint of Dr. Kouwenhoven's doctoral dissertation on the subject of electrical voltage.

Folder 2013-031-04: Electrical Engineering Studies (Kouwenhoven) - circa 1914

Scope and Content: This folder contains a hand-written notebook with Dr. Kouwenhovens notes, calculations and diagrams on several subjects including quadrant electrometers, resistance measurements, condensers and Ayrton Shunt.

Folder 2013-031-04: Student Notebook - Design Data for Alternators - unknown

Scope and Content: This folder contains a set of Dr. Kouwenhoven's hand-written notes and diagrams on alternator design and rotor dynamics.

Folder 2013-031-04: Student Notebook - Guide for the Exercises in Laboratory II - Part 2 - 1908

Scope and Content: This printed notebook was used by Dr. Kouwenhoven during his doctoral studies in Karlsruhe, Germany.

Folder 2013-031-04: Student Notebook - Karlsruhe - Guide for the Exercises in Laboratory I - Part I - 1910

Scope and Content: This is a printed lab book used by Dr. Kouwenhoven during his doctoral studies in Karlsruhe, Germany.

Folder 2013-031-04: Student Notebook - Karlsruhe - Electric Power Stations and Switching Systems - 1909

Scope and Content: This is a lengthy printed document used by Dr. Kouwenhoven during his doctoral studies in Karlsruhe, Germany.

Folder 2013-031-04: Student Notebook - Karlsruhe - Guide for the Exercises in Laboratory I - Part II - 1906

Scope and Content: This guide was used by Dr. Kouwenhoven during his doctoral studies in Karlsruhe, Germany.

Folder 2013-031-04: Student Notebook - Karlsruhe - Guide for the Exercises in Laboratory II - Part I - 1909

Scope and Content: This printed notebook was used by Dr. Kouwenhoven during his doctoral studies in Karlsruhe, Germany

Folder 2013-031-04: Student Notebook - Karlsruhe - Guide for the Exercises in Laboratory II - Part 3. - 1910

Scope and Content: This printed notebook is part of a lab series used by Dr. Kouwenhoven during his doctoral studies in Karlsruhe, Germany.

Series 2: Electric Shock Experiments on Animals - 1950-1970

Extent: 12 boxes

Scope and Content: Series contains records of Kouwenhoven's experiments on electric shock using animals. Experiments 0 to 1549 were on dogs, as were some unnumbered experiments from 1950-1953. A smaller number of experiments were done on rats and cats. Experiment files record the date of the experiment, identify the investigators performing the experiment and animal used, describe type of experiment, methods and results. Included are annotated electrocardiograms. Experiments included defibrillation stimulation with AC and DC currents.

Archival Arrangement: Series is arranged by experiment number.

Subject -- Topical: Animal experimentation

Box 80P: Electric Shock Animal Experiments, 1950-1954 - 1950-1954

Scope and Content: Results and analysis of series of experiments.

Archival Arrangement: Files had been at beginning of box 81P with files on individual experiments, but moved to separate box to ease over stuffed box.

Folder : Defibrillation in Man, Hand Electrodes Dog Experiments - 1951-1955

Scope and Content: Includes results of experiments on Dogs and Man. Manuscript, "Effects of Electricity on the Heart" from 1955.

Folder : Electric Shock - Fibrillation 1950-1951, Dogs Not Numbered - 1952-1953

Folder : Electric Shock - Studies 1951-1952 - 1951-1952

Folder : Electric Shock 1950-1951 - 1950-1951

Folder : Electric Shock Experiments 1952-1953 - 1952-1953

Folder : Experiments- J.H.H. 1953-1954 - 1953-1954

Box 81P: Electric Shock Animal Experiments, 0-210 - 1950-1955

Folder 0: #0 - Open Chest Defib. - Pulse - 1951-01-29

Folder 1: #1 - Defib. - 60c, Cap. - 1951-12-3

Folder 2: #2 - Defib. - 60 C, Cap. - 1951-12-07

Folder 3: #3 - Defib. - 60c, Resistance #4 - Defib. - cap. - 1951-12-07

Folder 4: #4a - Defib. - cap. - 1952-01-28

Folder 5: #5 - Defib. - cap. - 1952-01-28

Folder 6: #6 - Defib. - 60c Cap. #7 - Defib. - Cap. - 1952-02-01

Folder 7: #7b - Defib. - Cap., 60c #8 - Defib. - Cap., 60c - 1952-02-08

Folder 9: #14 - Defib. - Cap., 60c, Serial #9f - Defib. - Cap., 60c #15 - Defib. - Cap., Serial - 1952-03-10

Folder 9: #23 - Defib. - Cap., 60c, Serial #24 - Defib. - 60c #9j - Defib. - Cap. - 1952-05-07

Folder 9: #9 - Defib. 60c - 1952-02-19

Folder 9: #9b - Defib. - Cap., 60c #10 - Defib. - Cap., 60C - 1952-02-20

Folder 9: #9c - Defib. - Cap. #11 - Defib. - Cap., 60c, Serial - 1952-02-25

Folder 9: #9d - Defib. - cap., 60c #12 - Defib. - Cap. - 1952-02-27

Folder 9: #9e - Defib. - Cap., 60c #12b - Defib. - Cap., 60c Serial #13 - Defib. - Cap. - 1952-03-05

Folder 13: #13b - Defib. - 60c - 1952-03-07

Folder 16: #16 - Defib. - 60c, Serial #17 - Defib. - Cap., 60c, Serial #18 - Defib. - Cap., 60c, Serial - 1952-03-12

Folder 19: #19 - Defib. - 60c #20 - Defib. - 60c - 1952-03-14

Folder 19: #19b - Defib. - Cap. #20b - Defib. - Cap., Serial - 1952-03-17

Folder 19: #19c - Defib. - Cap., 60c - 1952-03-19

Folder 19: #19f - Defib. - 60c - 1952-04-28

Folder 21: #21 - Defib. - Heart Current - 1952-03-31

Folder 22: #22 - Defib. - Cap., 60c, Serial #19g - Defib. - Cap., 60c, Serial - 1952-04-30

Folder 25: #25 Defib. - Cap., 60c, Serial #26 Defib. - 60c - 1952-05-14

Folder 26: #26 Defib. - 60c - 1952-10-16

Folder 27: #27 Defib. - 60c - 1952-10-23

Folder 28: #28 Defib. - 60c - 1952-10-28

Folder 29: #29 Defib. - 60c - 1952-10-30

Folder 30: #30 Defib. - 60c - 1952-11-04

Folder 31: #31 - Defib. - Betz Cap., 60c - 1952-11-11

Folder 32: #32 Defib. - Betz Cap., 60c - 1952-11-13

Folder 33: #33 Defib. Betz Cap. - 195211-13

Folder 34: #34 Hazard - Defib. Betz, 60c - 1952-11-25

Folder 35: #35 Defib. - 60c - 1952-12-02

Folder 36: #36 Defib. Resist. 60c - 1952-12-04

Folder 37: #37 Defib. - 60c - 1952-12-09

Folder 38: #38 Anes. Accident - 1952-12-11

Folder 39: #39 Defib. - 60c, Electrical Massage - 1952-12-11

Folder 40: #40 Defib. - 60c - 1952-12-16

Folder 41: #41 Rousch Timer, Electrical Massage - 1952-12-18

Folder 42: #42 Defib. - 60c Rousch Timer, Mass. - 1952-12-18

Folder 43: #43 Defib. - 60c Serial - 1952-12-23

Folder 44: #44 Defib. - 60c Serial - 1953-01-06

Folder 45: #45 Defib. - 60c Electrical Massage - 1953-01-08

Folder 46: #46 Defib. - 60c - 1953-01-13

Folder 47: #47 Driving - 1953-01-27

Folder 48: #48 Driving - 1953-02-05

Folder 49: #49 - Driving - 1953-02-11

Folder 50: #50 Driving - 1953-02-17

Folder 51: #51 Driving - 1953-02-17

Folder 52: #52 Driving - Drugs - 1953-02-19

Folder 53: #53 Defib. - 60c - 1953-02-24

Folder 53: #53-b Defib. - 60c Serial - 1953-02-26

Folder 54: #54 Driving, Defib. - 1953-03-05

Folder 55: #55 Driving - 1953-03-10

Folder 56: #56 Driving - Cap., Square - 1953-03-17

Folder 57: #57 Driving - Cap., Square - 1953-03-19

Folder 58: #58 Defib - 60c - 1953-03-24

Folder 59: #59 Defib. - 60c and Serial - 1953-03-27

Folder 60: #60 Defib. - 60c, Electrical Massage - 1953

Folder 61: #61 Defib. - 60c, Hazard - 1953-04-07

Folder 62: #62 Defib. - 60c, Hazard - 1953-04-09

Folder 63: #63 Defib. - 60c, Hazard - 1953-04-14

Folder 64: #64 Defib. - 60c, Hazard - 1953-04-16

Folder 65: #65 60c Hazard, Defib., Kirby Thyatron - 1953-04-21

Folder 66: #66 60c Serial Defib. Hazard - 1953-04-23

Folder 67: #67 Defib. - 60c, Hazard - 1953-04-28

Folder 68: #68 Defib. - 60c, Serial, Hazard - 1953-04-30

Folder 69: #69 Defib. - 60c, Serial, Hazard - 1953-05-05

Folder 70: #70 60c Hazard, Defib. - 1953-05-07

Folder 71: #71 60c Hazard - 1953-05-12

Folder 72: #72 Defib. - 60c, Hazard - 1953-05-14

Folder 73: #73 60c Hazard, Subcut. Temp. - 1953-05-19

Folder 74: #74 60c Hazard, Subcut. Temp. - 1953-05-26

Folder 75: #75 60c Hazard, Subcut., Temp. - 1953-06-02

Folder 76: #76 60c Hazard., Subcut., Temp. - 1953

Folder 77: #77 Betz Defib. - 1953-08-03

Folder 78: #78 60c Hazard, Subcut., Temp. - 1953-04-14

Folder 79: #79 Defib. - 60c - 1953-08-20

Folder 80: #80 Defib. 60c - 1953-09-07

Folder 81: #81 Defib. - 60c, Serial Hazard - 1953-10-28

Folder 82: #82 Defib. - 60c - 1953-11-10

Folder 83: #83 TV 250 - 1953-11-13

Folder 84: #84 TV 250 - 1953-11-18

Folder 85: #85 TV 1000, 500 - 1953-11-20

Folder 86: #86 TV 1000 - 1953-11-30

Folder 87: #87 L-C Defib. - 60c Defib. - 1953-11-04

Folder 88: #88 Anesthesia Death - 1953-12-11

Folder 89: #89 Open Chest - Cap. Defib. - 1953-12-11

Folder 90: #90 L-C Defib. - 1953-12-14

Folder 91: #91 New Betz Defib. - 1953-12-14

Folder 92: #92 Defib. - 60c - 1953-12-18

Folder 93: #93 Defib. - 60c - 1953-12-28

Folder 94: #94 Defib. - 60c - 1954-01-04

Folder 95: #95 Defib. - 60c - 1954-01-04

Folder 96: #96 Defib. - 60c - 1954-01-06

Folder 97: #97 Defib. - 60c - 1954-01-06

Folder 98: #98 Defib. - 60c - 1954-01-08

Folder 99: #99 Defib. - 60c, Serial - 1954-01-25

Folder 100: #100 Defib. - 60c - 1954-01-25

Folder 101: #101 TV 250, 500, 1000 - 1954-02-01

Folder 102: #102 TV 500, 1000, 1500 - 1954-02-08

Folder 103: #103 Movie of Fib. - 1954-02-12

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Folder 114: #114 Cap. Discharges 25 Mfd. - 1954-03-29

Folder 116: #116 Cap. Discharges 25 Mfd. - 1954-04-05

Folder 120: #120 Cap. Discharges 25Mfd. - 1954-04-19

Folder 139: #139 Cap. Discharges 25 Mfd. - 1954-05-17

Folder 140: #140 Cap. Discharges 50 Mfd. - 1954-05-24

Folder 141: #141 Cap. Discharges 50 Mfd. . - 1954-06-07

Folder 144: #144 Cap. Discharges 50 Mfd. - 1954-06-14

Folder 145: #145 Cap. Discharges 50 Mfd. - 1954-06-18

Folder 146: #146 Cap. Discharges 50 Mfd. - 1954-06-16

Folder 149: #149 Cap. Discharges 50 Mfd. - 1954-06-21

Folder 150: #150 Cap. Discharges 50 Mfd. - 1954-06-28

Folder 151: #151 TV 2000 - 1954-07-06

Folder 152: #152 TV 2000 - 1954-07-07

Folder 153: #153 TV 2000 - 1954-07-09

Folder 154: #154 TV 2000 - 1954-07-12

Folder 155: #155 TV 3000 - 1954-07-13

Folder 156: #156 TV 3000 - 1954-07-14

Folder 157: #157 TV 3000 - 1954-07-14

Folder 158: #158 TV 3000 - 1954-07-19

Folder 159: #159 TV 3000 - 1954-07-26

Folder 160: #160 TV 3000 - 1954-08-02

Folder 161: #161 TV 3000 - 1954-08-06

Folder 162: #162 TV 3000 - 1954-08-09

Folder 163: #163 TV 3000 - 1954-08-11

Folder 165: #165 TV 3000 - 1954-08-13

Folder 166: #166 TV 3000 - 1954-08-16

Folder 168: #168 TV 3000 - 1954-08-18

Folder 169: #169 TV 3000 - 1954-08-23

Folder 171: #171 TV 3000 #172 TV 3000 - 1954-08-30

Folder 173: #173 TV 3000 #174 TV 3000 - 1954-09-03

Folder 175: #175 TV 3000 #176 TV 3000 - 1954-09-08

Folder 178: #178 TV 3000 - 1954-09-29

Folder 179: #179 TV 3000 #180 TV 3000 - 1954-10-06

Folder 181: #181 TV 3000 - 1954-10-13

Folder 182: #182 TV 3000 - 1954-10-20

Folder 183: #183 TV 3000 - 1954-10-27

Folder 184: #184 TV 3000 - 1954-10-27

Folder 185: #185 TV 3000 #186 TV 3000 - 1954-10-29

Folder 187: #187 TV 3000 - 1954-11-01

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Folder 197: #197 Defib. - 60c Stim. #198 Defib. - 60c Stim. - 1954-11-26

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Folder 211: #211 1/24/55 Defib. - 400c, #212 1/24/55 Defib.- 60c - 1955

Folder 213: #213 1/26/55 Esophag. Stim. - Defib. 60c - 1955

Folder 214: #214 1/16/55 Defib.- 60c - 1955

Folder 215: #215 2/21/55 Defib. - 60c - 1955

Folder 216: #216 2/28/55 Defib. - 60c Stim. - 1955

Folder 217: #217 3/2/55 Defib. - 60c, Stim. - 1955

Folder 218: #218 3/7/55 Cl. Chest Stim, Sq. - 1955

Folder 219: #219 3/9/55 Cl. Chest Stim., Sq. - 1955

Folder 220: #220 3/11/55 Cl. Chest Stim., Sq. - 1955

Folder 221: #221 3/16/55 Cl. Chest Stim., Sq. - 1955

Folder 221: #221 3/16/55 Defib. - 60c, Stim. - 1955

Folder 222: #222 3/18/55 Cl. Chest Stim., Sq. - 1955

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Folder 224: #224 4/13/55 Cl. Chest Stim., Zo11 - 1955

Folder 225: #225 4/20/55 Cl. Chest Stim., Zo11 - 1955

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Folder 229: #229 5/6/55 Acetylcholine Defib. - 1955

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Folder 235: #235 6/1/55 Cl. Chest Stim. Sq. - 1955

Folder 236: #236 6/8/55 Cl. Chest Stim., Sq. - 1955

Folder 237: #237 Cl. Chest Stim., Sq. C, L - 1955

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Folder 240: #240 7/6/55 Cl. Chest. Stim., Sq. - 1955

Folder 241: #241 7/13/55 Cl. Chest Stim. Sq. - 1955

Folder 242: #242 7/20/55 Defib. - 60c - 1955

Folder 243: #243 7/27/55 Vosburg's Needle - 1955

Folder 245: #245 8/3/55 Defib. - 60c Stim. - 1955

Folder 246: #246 10/31/55 Defib. 60c - 1955

Folder 247: #247 11/2/55 Defib. - 60c - 1955

Folder 248: #248 11/11/55 Defib. - 60c - 1955

Folder 249: #249 11/9/55 Defib. 60c - 1955

Folder 250: #250 11/21/55 Defib. 60c - 1955

Folder 251: #251 11/23/55 Defibrillation- 60c - 1955

Folder 252: #252 11/28/55 Short Shocks- 5c - 1955

Folder 253: #253 11/30/55 Short Shocks- 3, 10 c - 1955

Folder 254: #254 12/7/55 Short Shocks- 5, 8, 10 c - 1955

Folder 255: #255 12/12/55 Short Shocks - 6,10c, 18c - 1955

Folder 255: #255 7/12/55 Defibrillation, 60c. - 1955

Folder 256: #256 12/14/55 Short Shocks - 8c - 1955

Folder 257: #257 12/19/55 Short Shocks- 10c - 1955

Folder 258: #258 12/21/55 Short Shocks 12c, 22c - 1955

Folder 259: #259 12/28/55 Short Shocks 20c - 1955

Folder 260: #260 12/30/55 Capacitor Shock- 25 mfd - 1955

Folder 262: #262 1/4/56 Short Shocks- 22c - 1956

Folder 263: #263 1/6/56 Short Shocks- 22c - 1956

Folder 264: Dog #264 January 11, 1956 Short Shock 5,7,12, 21c - 1956

Folder 265: Dog #265 January 13, 1956 - 1956

Folder 266: Dog #266 January 16, 1956 Short Shocks 20c - 1956

Folder 267: Dog #267 January 18, 1956 Short Shocks 1/2, 9, 10, 108c - 1956

Folder 268: Dog #268 January 23, 1956 Short Shocks 10c - 1956

Folder 269: Dog #269 January 25, 1956 Hypothermic - 1956

Folder 270: Dog #270 & #271 January 27, 1956 Hypothermia - 1956

Folder 272: #272 2/6/56 Defib.- 60c Different Timers - 1956

Folder 273: Dog #273 February 6, 1956 Hypothermia - 1956

Folder 274: Dog #274 February 6, 1956 Short Shocks, 10, 12c - 1956

Folder 275: Dog #275 February 8, 1956 Short Shocks 20c, Defib. 60c - 1956

Folder 276: Dog #276 February 8, 1956 Short Shocks 20c - 1956

Folder 277: Dog #277 February 10, 1956 Short Shocks 17-22c - 1956

Folder 278: Dog #278 February 13, 1956 Short Shocks 17.5 c - 1956

Folder 279: Dog #279 February 15, 1956 Short Shocks 16.5- 18.5 - 1956

Folder 280: Dog #280 February 17, 1956 Short Shocks 24.5 c - 1956

Folder 282: Dog #282 February 20, 1956 Short Shocks 21.5 C - 1956

Folder 283: Dog #283 February 22, 1956 Short Shocks 18.5-22.5 - 1956

Folder 284: Dog #284 February 24, 1956 Short Shocks 21, 41c - 1956

Folder 285: Dog #285 February 27, 1956 Short Shocks 20-21 cycles - 1956

Folder 286: Dog 286 Short Shock Feb. 29, 1956 20-21 cycles - 1956

Folder 287: Dog #287 March 2, 1956 Short Shocks, 22 Cycles Elect. Massage - 1956

Folder 288: Dog #288 March 5, 1956 20-21 Cycles, Short Shocks - 1956

Folder 289: Dog #289 March 7, 1956 Short Shocks 20, 21 Cycles Elect. Massage - 1956

Folder 290: Dog #290 March 12, 1956 Short Shocks, 20, 2.5 cycles - 1956

Folder 291: Dog #291 March 14, 1956 Short Shocks 20 cycles - 1956

Folder 292: Dog #292 March 19, 1956 Short Shocks 20 cycles - 1956

Folder 293: Dog #293 March 21, 1956 Short Shocks- 1 sec. - 1956

Folder 294: Dog #294 March 26, 1956 Short Shocks 1 sec. - 1956

Folder 295: Dog #295 Elect. Massage March 1956 - 1956

Folder 295: Dog #295 March 28, 1956 Short Shocks 1 sec. - 1956

Folder 297: Dog #297 April 2, 1956 Short Shocks 1 sec. - 1956

Folder 299: Dog #299 April 4, 1956 Short Shocks 1-3 sec. - 1956

Folder 301: Dog #301 April 9, 1956 Elect Massage Short Shocks 1-2 sec. - 1956

Folder 301: Dog #301 April 9, 1956 Elect. Massage - 1956

Folder 302: Dog #302 April 11, 1956 Short Shocks 5 sec. - 1956

Folder 304: Dog #304 Short Shocks 4.5 cycles, April 18, 1956 Blood Flow Defib. Shock - 1956

Folder 305: Dog #305 Short Shocks April 23, 1956 - 1956

Folder 306: Dog #306 Short Shocks 5 Cycle April 25, 1956 - 1956

Folder 307: Dog #307 Short Shocks 5 Cycles May 7, 1956 - 1956

Folder 308: Dog #308 Short Shocks 5-17 cycles May 9, 1956 - 1956

Folder 308: Dog #308-A Elect. Massage May 9, 1956 - 1956

Folder 309: Dog #309 Short Shocks 5 cycles May 9, 1956 - 1956

Folder 310: Dog #310 Short Shocks, 3 Cycles May 14, 1956 - 1956

Folder 363: Dog #363 Short Shocks 1/2 Cycle - 1956-09-19

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Folder 369: Dog #369 Defibrillations After 1/3 to 1.05 min - 1956-10-12

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- Folder 370: Dog #370 Short Shocks 1/2 and 2 1/2 Cycles - 1956-10-29**
- Folder 371: Dog #371 Short Shocks 1/2 and 2 1/2 Cycles - 1956-10-31**
- Folder 372: Dog #372 Sound Record of Fib and Defib - 1956-11-02**
- Folder 373: Dog #373 Sound Record of Fib and Defib - 1956-11-02**
- Folder 374: Dog #374 Short Shocks 1/2 Cycle - 1956-11-05**
- Folder 375: Dog #375 Short Shocks 1/2 and 2 1/2 Cycle - 1956-11-07**
- Folder 381: Dog #381 Short Shocks 1 Min - 1957-01-09**
- Folder 382: Dog #382 A.C. Defib 1 1/2 and 2 Min. Fib. Duration - 1957-01-14**
- Folder 383: Dog #383 Elect. Massage - 1957-01-14**
- Folder 384: Dog #384 Short Shocks 1 Min. - 1957-01-16**
- Folder 385: Dog #385 Short Shocks 20 Cycle-Atrial Fib. - 1957-01-18**
- Folder 386: Dog #386 Elect. Massage - 1957-02-08**
- Folder 389: Dog #389 A.C. Defib.-2 Min. - 1957-02-20**
- Folder 390: Dog #390 Defibrillation and Stimulation - 1957-02-25**
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- Folder 392: Dog #392 Op Chest Stim (No data) - 1957-03-09**
- Folder 393: Dog #393 Short Shocks 20 Cycle - 1957-03-15**
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- Folder 399: Dog #399 Short Shocks 10 Cycles - 1957-03-22**
- Folder 400: Dog #400 Short Shocks 1 Min. & 5 Min. - 1957-03-27**
- Folder 401: Dog #401 Extra Systoles - Dr. Milnor - 1957-03-?**
- Folder 402: Dog #402 Short Shocks 2 Min. - 1957-03-29**
- Folder 404: Dog #404 Short Shocks 1 Min. - 1957-04-03**
- Folder 405: Dog #405 Short Shocks 1/2 Cycle - 1957-04-10**
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- Folder 415: Dog #415 Extra Systoles - 1957-06-24**

Folder 416: Dog #416 Extra Systoles Stimulation - Milnor - 1957-06-26

Folder 417: Dog #417 Extra Systoles Stimulation - Milnor - 1957-06-28

Folder 418: Dog #418 Thresh. Extra Systoles Round Sq - 1957-07-05

Folder 419: Dog #419 Thresh. Extra systoles Round Sq - 1957-07-08

Folder 420: Dog #420 Thresh. Extra Systoles round Sq - 1957-07-10

Folder 421: Dog #421 Thresh. Extra Systoles Round Sq - 1957-07-16

Folder 422: Dog #422 Thresh. extra Systoles Round Sq - 1957-07-16

Folder 423: Dog #423 Thresh. extra Systoles Round Sq - 1957-07-23

Folder 424: Dog #424 Thresh. Extra Systoles Round Sq - 1957-07-25

Folder 425: Dog #425 Thresh. Extra Systoles Round Sq - 1957-07-30

Folder 426: Dog #426 Thresh. Extra Systoles Round Sq - 1957-07-31

Folder 427: Dog #427 Thresh. Extra Systoles Round Sq - 1957-08-06

Folder 428: Dog #428 Thresh. Extra Systoles Round Sq - 1957-08-07

Folder 429: Dog #429 Anelectrotonus #430 Anelectrotonus - 1957-08-14 1957-08-16

Folder 430: Dog #431 Exp Standstill - 1957-08-21

Folder 432: Dog #432 Exp Standstill - 1957-08-22

Folder 433: Dog #433 Driving after Fib. - 1957-08-30

Folder 434: Dog #434 Elect. Massage - 1957-09-27

Folder 434: Dog #434a Standstill - Asphyxa - Elect. Massage - 1957-11-13

Folder 435: Dog #435 Tests of Heart Station Defib. - 1958-01-15

Folder 436: Dog #436 Defibrillation & Elec. Massage - 1958-01-31

Folder 437: Dog #437 Elect. Massage as a Blood Pump - 1958-02-12

Folder 438: Dog #438 Stim Op Chest Cap disc. - 1958-02-27

Folder 439: Dog #439 CI Chest Ex Sys Thresh Mapping - 1958-03-03

Folder 440: Dog #440 CI Chest Ex Sys Thresh Mapping - 1958-03-10

Folder 441: Dog #441 Zoll Pacemaker & Elect. Massage - 1958-03-12

Folder 442: Dog #442 Test of Electrode with Spring Switch/Elec. Massage - 1958-03-14

Folder 443: Dog #443 Elect. Massage - 1958-03-19

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Folder 445: Dog #445 CI Chest Ex Sys Comparison for Sup-vent and Vent Beats - 1958-03-27

Folder 446: Dog #446 Strain Gauge Elect. Massage - 1958-03-28

Folder 447: Dog #447 CI Chest Ex Sys Thresh Mapping - 1958-03-31

Folder 448: Dog #448 Rotameter - Blood Flow - 1958-04-02

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Folder 452: Dog #452 (#451 died) Anesthesia - 1958-04-09

Folder 453: Dog #453 1 Min. Defibrillation - 1958-04-10

Folder 454: Dog #454 Tape Recordings of Fibrillation Made - 1958-04-12

Folder 456: Dog #456 (#455) Blood Flow Rotameter - 1958-05-14

Folder 457: Dog #457 Serial Defibrillation - 1958-05-19

Folder 459: Dog #459 Defib. 1, 1 1/2, 2 Min. - 1958-05-21

Folder 460: Dog #460 2 Min. Serial defib. - 1958-05-26

Folder 461: Dog #461 Field Defibrillator Catalyst Research Corp. - 1958-05-27

Folder 462: Dog #462 2 1/2 Min. Defibrillation - 1958-05-28

Folder 463: Dog #463 Field Defibrillator - 1958-06-02

Folder 464: Dog #464 Field Defibrillator - 1958-06-04

Folder 465: Dog #465 Field Defibrillator - 1958-06-06

Folder 466: Dog #466 Field Defibrillator - 1958-06-09

Folder 467: Dog #467 Field Defibrillator - 1958-06-19

Folder 468: Dog #468 Field Defibrillator - 1958-06-23

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Folder 469: #469 6/25/58 Field Defib. - 1958

Folder 470: #470 6/27/58 Field Defib. - 1958

Folder 472: 7/7/58 #472 Field Defibrillator - 1958

Folder 473: Field Defibrillator Dog #473 and #474 (same as #473) - 1958

Folder 475: 7/16/58 #475 Field Defibrillator - 1958

Folder 476: Field Defibrillator Dog #476 7/17/58 - 1958

Folder 478: Field Defibrillator Dog #478 7/25/58 - 1958

Folder 479: Field Defibrillator and Effects of Expired CO2 Dog #479 7/29/58 - 1958

Folder 480: Field Defibrillator Dog #480 7/31/58 - 1958

Folder 481: 8/7/58 481 Field Defib. - 1958

Folder 482: 8/7/58 #482 Field Defib. - 1958

Folder 483: 8/13/58 #483 Field Defib. - 1958

Folder 485: 8/14/58 #485 Field Defib. - 1958

Folder 486: Field Defib. 8/18/58 #486 (8 cap) - 1958

Folder 487: #487 8/19/58 Field Defib. 10 cap. - 1958

Folder 488: 8/20/58 #488 Field Defib. 10 cap. - 1958

Folder 489: Dog #489 Aug. 21, 1958 Field Defib. 10-16 caps - 1958

Folder 490: 8/23/58 Field Defib. #490 10, 14, 18 caps - 1958

Folder 491: 8/23/58 #491 Field Defib. 18 cap. - 509375

Folder 492: #492 Field Defib. 8/26/58 22 cap. - 1958

Folder 493: Field Defib. 10/9/58 #493 30 cap. - 1958

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Folder 498: Dog 498 Nov. 3 1958 - 1958

Folder 499: Dog 499 Nov. 4, 1958 - 1958

Folder 500: Dog 500 11/6/58 Defib. Two 25 Mfd. Cap. at 1000 - 1958

Folder 501: Dog 501 Nov. 11, 1958 - 1958

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Folder 503: Dog 503 Nov. 17, 1958 - 1958

Folder 504: #504 Defib. 10 cap. & Ind. after 1 min. V.F. - 1958

Folder 505: Dog 505 Field. Defib. 12/3/58 - 509375

Folder 506: Dog 506 Field Defib. - 509375

Folder 507: Dog 507 Field Defib. Successes and One Failure 12/9/58 - 1958

Folder 508: Dog 508 Demonstration 12/11/58 & Dog 509 Defib. after 1 min. - 1958

Folder 510: Dog #510 Seven Defibrillations - 1958

Folder 511: Dog 511 12/17/58 - 1958

Folder 512: Dog #512 12/19/58 Hazard Shocks- 2000V - 1958

Folder 513: Dog #513 Hazard 2 cap. @ 25 mfd. Two Fibrillations 12/22/58 - 1958

Folder 514: Dog #514 12/26/58 Hazard & Defib. - 1958

Folder 515: Dog #515 Hazard Tests - 1959

Folder 515: Dog 515- Hazard Shock 1/15/59 - 1959

Folder 516: Dog #516 Jan. 7, 1959 FENCE - 1959

Folder 517: #517 Hazard Shocks & Defibrillations, 1/9/59 - 1959

Folder 518: Dog 518 Hazard Defib. Cap. 1/12/59 - 1959

Folder 519: Dog 519 Massage 1/14/59 Defibrillations after 10 min. - 1959

Folder 520: Dog 520 Massage Defibrillation after 10 min. 1/14/59 - 1959

Folder 521: Dog 521 Encephalogram 1/16/59 Massage & 10 min. V.F. - 1959

Folder 522: #522 Hazard Tests 1/19/59 - 1959

Folder 523: Dog 523 Hazard Defib. 1/21/59 - 1959

Folder 524: #524 1/23/59 Hazard & Defibrillation - 1959

Folder 526: Dog 526 1/30/59 - 1959

Folder 527: Dog 527 2/2/59 Hazard & Massage Rotameter - 1959

Folder 528: #528 Feb. 2, 1959 Hazard & 5 Min. Defib. Discharge Current Photos - 1959

Folder 529: #529 Hazard & Electric Fence Shocks 2/11/59 - 1959

Folder 530: #530- 2/13/59 Hazard & Fence Shocks - 1959

Folder 531: Dog 531- 2/16/59 Hazard & Fences - 1959

Folder 532: #532 2/18/59 Hazard, Fences, Spontaneous Defibrillation - 1959

Folder 533: Dog 533 Fences (Jones) - 1959

Folder 534: Dog 534 2/25/59 Hazard & Fence Tests - 1959

Folder 535: Dog #535 Hazard Tests - 1959

Folder 536: Dog #536 Mar. 4, 1959 - 1959

Folder 537: Dog #537 Mar. 10, 1959 5 Min. Defibrillation - 1959

Folder 538: #538- Massages & Defib. Movie - 1959

Folder 539: Dog #539 3/17/59 Variable Voltage Fence Controller - 1959

Folder 540: Dog #540 Fences Variable Controller, V.F. after 5 shocks of 120 M.A. - 1959

Folder 541: #541 Fences 3/20/59 Variable Controller Test - 1959

Folder 542: #542 3/23/59 Fences- Variable Voltage Controller Three V.F. - 1959

Folder 543: #543 Fence Variable Control 3/24/59 - 1959

Folder 544: Dog #544 3/25/59 Fences- Variable Voltage Controller - 1959

Folder 545: Dog #545 3/30/59 Elec. Fences Variable Voltage Controller - 1959

Folder 546: Dog #546 3/31/59 Fences- Variabel Voltage Controller - 1959

Folder 547: #547 Apr. 6, 1959 Fence- Variable Voltage Controller - 1959

Folder 548: Dog 548 Fence Controller Variable Voltage 4/14/59 - 1959

Folder 549: #549 Production Extrasystoles by DC on Epicardium - 1959

Folder 550: #550 Fence & Massage 4/25/59 Dr. Riley - 1959

Folder 551: Dog 551 Fences Variable Voltages Controller 4/23/59 - 1959

Folder 552: #552 Apr. 27, 1959 Test of New AC Defibrillator - 1959

Folder 553: Dog #553 Closed Chest Massage by Means at Artificial Respiration - 1959

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Folder 760: #760- Ostereich- Pole Top- CCM October 12, 1960 - 1960

Folder 761: #761 Defib. Test Presbyterian Hosp. N.Y. - 1960

Folder 762: Dog #762 Effect of Epinephrine on Defib. - 1960

Folder 763: #763 10/31/60 Attempts to insert a wire into left coronary - 1960

Folder 764: #764A Blood Pressure Meas. Dynamic and Differential Press. 11/7/60 - 1960

Folder 764: #764B- Coronary Artery Occlusion- 11/7/60 - 1960

Folder 765: Dog 765 Defibrillation Movie - 1960

Folder 766: #766 Check Defibrillators - 1960

Folder 767: WBK 767- Cranial Cooling During Arrest 2/9/61 - 1961

Folder 768: #768 Epinephrine- V.F. 2/13/61 - 1961

Folder 769: #769 3/23/61 Local Cooling of head during cardiac arrest - 1961

Folder 770: #770 3/27/61 Heart in Asystole & Defib. - 1961

Folder 771: Dog #771 3/28/61 Cardiac Output A,V, A-V Pressures & Massage - 1961

Folder 772: Dog #772 3/30/61 Cardiac Output, AV pressures - 1961

Folder 773: Dog #773 4/7/61 Cardiac Output- Internal and External Massage - 1961

Folder 774: Dog #774 4/13/61 Cardiac Output- External Massage - 1961

Folder 775: Dog #775 4/17/61 Ext. Massage- Cardiac Output - 1961

Folder 776: Dog #776 4/19/61 Tests of MSA Portable Defib. - 1961

Folder 776: Dog #776 April 26, 1961 Vertical Run-Head Down CCCM - 1961

Folder 777: Dog #777 4/28/1961 Vertical Massage, Head Down - 1961

Folder 778: Dog #778 May 2, 1961 Head Down on Pole - 1961

Folder 779: #779- P.T. in Horizontal Position- 5 min. success. - 1961

Folder 780: 780- 7/6/61 Mech. Mass - 1961

Folder 780: Dog #780- 5/11/61 Six Min. P.T. Massage - 1961

Folder 782: 782 7/7/61 Darby and Mech. Massager - 1961

Folder 783: #783 7/12/61 - 1961

Folder 784: #784 - 7/13/61 Fences - 1961

Folder 785: #785- July 14, 1961 Mini Safety Defib and Massage - 1961

Folder 786: #786 July 18, 1961 Blow-Flow P.T. & CCCM - 1961

Folder 787: #787 Hazard Test 7/28/61 Mine Safety NEW - 1961

Folder 788: Dog 788 Hazard Tests Mine Safety - 1961

Folder 789: #789 P.T. and Blood Flow Aug 7, 1961 - 1961

Folder 790: Dog #790 P.T. & Blood Flow Aug. 8, 1961 - 1961

Folder 791: #791 P.T. & Blood Flow Aug. 10, 1961 - 1961

Folder 792: #792 8/14/61 Effect of Complete Arrest for 8 min. - 1961

Folder 793: #793 Effect of Complete Arrest for 10 min. Aug 14, 1961 - 1961

Folder 794: #794 Field Defib. Mine Safety 8/18/61 - 1961

Folder 795: #795 9/28/61 Test of MSA Defib., Defib. & Hazard 110 & 6v - 1961

Folder 796: Dog #796 Differential Press. Arterial and Venous- Massage - 1961

Folder 797: #797 Differential Pressure Arterial- Venous- Massage 10/9/61 - 1961

Folder 798: #798 10/16/61 Blood Pressure - 1961

Folder 799: Experiment- Fence Controller #799 Oct. 19, 1961 - 1961

Folder 800: Dog #800- A.V. gradients in LV, RV, INC etc. 10/27/61 - 1961

Folder 801: #801 Blood Pressures - 1961

Folder 802: #802 A.V. Gradients RV, RA, IVC, SVC - 1961

Folder 803: #803 Nov. 21, 1961 Blood Pressure - 1961

Folder 804: #804 Nov. 30, 1961 Test Mine Safety Defib. - 1961

Folder 805: #805 12/7/61 AV gradients between AAA and SVC, IVC, RA, RV - 1961

Folder 806: #806 Ph, CO₂, O₂, & B.P. Press. 12/12/61 - 1961

Folder 807: #807 Blood Flow & Pressure 12/13/61 - 1961

Folder 808: #808 Ph, CO₂, O₂, BP Tests 12/14/61 - 1961

Folder 809: #809 12/18/61 Epinephrine Test Ph, CO₂, O₂ etc. - 1961

Folder 810: #810 Epinephrine & NaHCO₃ 12/26/61 - 1961

Folder 811: #811 1/2/62 Epi, Ph CO₂, O₂ No Recovery - 1961

Folder 813: Dog #813 1/4/62 Ph, O₂, CO₂ comb power & epinephrine injection - 1962

Folder 814: #814 Na CHO₃ 1/8/62 Experiment - 1962

Folder 816: #816 Jan 16, 1962 Test pH Meter - 1962

Folder 816: Dog 816 NaCHO₃ Test of pH Meter 1/17/62 - 1962

Folder 817: #817- Ventilation & Massage 1/22/62 O₂ Saturation Study - 1962

Folder 818: #818 2/6/62 NaCHO₃ Test - 1962

Folder 819: #819 2/7/62 O2 Meas. Pilot Run - 1962

Folder 819: #819 Contact Human Resist Meas. on GGK & WBK 2/14/62 - 1962

Folder 822: #822 2/8/62 Comprassion - Cam Pressures - 1962

Folder 823: #823 Study of Carris - Nov. 16, 62 - 1962

Folder 824: #824 Mar. 19, 1962 Study Cams and Drugs - 1962

Folder 825: 825 Use of KCS & Ca CO2 to Defibrillate- A complete failure - 1962

Folder 826: #826- Study of Cams and Some Data on Drugs 4/10/62 - 1962

Folder 827: #827- Lear Machine Flow- Aramine 4/12/62 - 1962

Folder 828: #828- Chemical Defibrillation ACH, Prostigmine, NaCl+, CaCl2, Epinephrine, EDTA 4/19/62 - 1962

Folder 829: #829 4/23/62 Chemical Defib. EDTA - 1962

Folder 831: #831 4/24/61 Chemical Defib. & EDTA - 1961

Folder 832: #832 4/30/62 Chemical Defibrillation, EDTA, Levophed - 1962

Folder 832: Dog #832 5/2/62 - 1962

Folder 834: #834 5/11/62 Chem. Defib.- Isolated Heart - 1962

Folder 835: 835 5/15/62 Isolated Heart, EDTA - 1962

Folder 836: #836 6/4/62 Ab. Aort. Flow, pH, grad (car., fem.) Aramine - 1962

Folder 837: 837A 6/6/62 Test of Dr. Crane's Defibrillator - 1962

Folder 837: Dog #837 6/6/62 Effects of Aramine - 1962

Folder 838: #838 6/7/62 Abd flow, pH, gradients (car. & fem.) Aramine - 1962

Folder 839: #839 6/8/62 Abd. aort. flow, pH, grad (car, fem) Aramine - 1962

Folder 840: #840 6/8/62 Abd flow, pH, gradients (car. & fem.) Levophed - 1962

Folder 841: #841 6/14/62 Abd flow, pH, gradient (car. & fem) - 1962

Folder 842: #842 6/14/62 Abd flow, pH, AV grad (car. & fem.) Levophed - 1962

Folder 843: #843 6/20/62 Abd aort. flow, pH, grad. (car. & fem.) Levophed - 1962

Folder 844: #844 6/22/62 Abd aorta flow, pH, grads. (car, fem) Epinephrine - 1962

Folder 845: #845 6/27/62 Abd aortflow, pH, gradients (car & fem) Epinephrine - 1962

Folder 846: #846 6/29/62 Abd, Aort, Flow, pH, grad (car, fem), Epinephrine - 1962

Folder 847: #847 7/2/62 Abd, Aort flow, pH, grad (fem & car) - 1962

Folder 848: #848 7/6/62 Abd aorta, flow, pH, gradients, 5mm Neo Synephrine, Start - 1962

Folder 849: #849 Boykin & Lear Massage Machines 7/9/62 - 1962

Folder 850: #850 7/10/62 Effect of Neosynephrine on Abd Aortic Flow - 1962

Folder 851: #851 7/13/62 pH, flow, grad (fem. & car.) & Neosynephrine - 1962

Folder 852: #852 Neosynephrine July 17, 1962 - 1962

Folder 854: #854 Effect Neosynephrine 7/22/62 - 1962

Folder 855: #855 Abd Aort Neosynephrine - 1962

Folder 856: #856 Neosynephrine - 1962

Folder 865: Dog #865 8/20/62 - 1962

Folder 866: Dog #866 8/21/62 VF Defibrill. 60 w-sec - 1962

Folder 867: Dog #867 VF- Defibrill. 8/21/62 100 w-sec - 1962

Folder 868: Dog 868 8/21/62 VF, Defibrill. 440 volts, 0, 25 sec. - 1962

Folder 869: Dog #869 8/22/62 VF- Defibrill, Mine Safety Defibrillator - 1962

Folder 870: Dog 870 8/23/62 CF 880 volts AC 0, 25 sec. - 1962

Folder 871: 871 8/24/62 CF 60 w-sec, 90 sec. VF - 1962

Folder 872: #872 CF 100 wsec Defibrillation 90" VF - 1962

Folder 874: #874 8/29/62 Hosp. Defib. (WBR) 440 V - 1962

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Folder 875: Dog #875 8/30/62 Defibrill. CF 440 Volt AC - 1962

Folder 876: Dog #876 8/30/62 880 CF AC Defibrill. - 1962

Folder 877: Dog #877 8/30/62 Defibrillator - 1962

Folder 878: Dog #878 9/4/62 100 wsec, 90 VF Defibrillator Study - 1962

Folder 879: #879 9/4/62 100 w-sec A-D - 1962

Folder 880: Dog #880 (1) A-D 200 w-sec 90 sec VF - 1962

Folder 881: #881 440 vAC Hopkins Defibrillator Study - 1962

Folder 882: #882 550 v AC Defibrillator Study - 1962

Folder 883: #883 Defibrillation Study CF 440 VAC 90 sec VF - 1962-09-05

Folder 884: #884 Defibrillation Study 440 VAC-CF 15" VF - 1962-09-10

Folder 885: #885 Defibrillation Study 100 w' sec CF 15" VF - 1962-09-10

Folder 886: #886 Defibrillation Study M S Diphasic 50 w' sec 15 VF - 1962-09-11

Folder 887: #887 Defibrillation Study 880 VAC CF 15" VF - 1962-09-11

Folder 888: #888 Defibrillation Study CF 100 w' sec Diphasic 15" VF - 1962-09-11

Folder 889: #889 Defibrillation Study 100 w' sec CF Mono - 1962-09-13

Folder 892: #892 Defibrillation Study 60" & 90" VF - 1962-09-14

Folder 893: #893 Defibrillation Study CF 100 w' sec Mono & Diph. - 1962-09-17

Folder 894: #894 Defibrillation Study CF 100 CF 100 w' sec Mono & Diph. - 1962-09-18

Folder 895: #895 Defibrillation Study AO-300 ws CF 440 - 1962-09-24

Folder 897: #897 Defibrillation Study Capacitator vs A.C. Defibrillation - 1962-10-02

Folder 898: #898 AO- 200 ws CF 440 - 1962-10-03

Folder 899: #899 AO 400 ws CF-AC-880 - 1962-10-05

Folder 900: #900 AO 300 ws CF 880 - 1962-10-09

Folder 901: #901 AO 200 ws CF 880 - 1962-10-10

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Folder 1245: #1245 BL Tag 649 - 1967-04-20

Folder 1246: #1246 BL Tag 634 - 1967-04-21

Folder 1247: #1247 BL Tag 695 - 1967-04-25

Folder 1248: #1248 BL Tag 649 - 1967-04-25

Folder 1249: #1249 BL Tag 647 - 1967-04-27

Folder 1250: #1250 BL Tag 732 - 1967-04-28

Folder 1251: #1251 BL Tag 634 - 1967-04-28

Folder 1252: #1252 Tag 767 - 1967-05-03

Folder 1253: #1253 Tag 695 - 1967-05-03

Folder 1254: #1254 BL Tag 763 - 1967-05-04

Folder 1255: #1255 Tag 732 - 1967-05-05

Folder 1256: #1256 Tag 767 - 1967-05-09

Folder 1360: 1360 AC-DC - 1968-02-08

Folder 1365: 1365 AC-DC - 1968-02-15

Folder 1372: 1372 Tag 1325 - 1968-02-27

Folder 1376: 1376 AC-DC - 1968-03-04

Folder 1377: 1377 AC-DC - 1968-03-05

Folder 1378: 1378 AC-DC - 1968-03-06

Folder 1379: 1379 Tag 1327 - 1968-03-07

Folder 1380: 1380 Tag 1420 - 1968-03-08

Folder 1381: 1381 Tag 1157 - 1968-03-11

Folder 1382: 1382 Tag 1325 - 1968-03-12

Folder 1383: 1383 Tag1385 - 1968-03-15

Folder 1384: 1384 Tag 1327 - 1968-03-18

Folder 1385: 1385 Tag 1470 - 1968-03-21

Folder 1386: 1386 Tag 1536 - 1968-03-25

Folder 1387: 1387 Tag 1325 - 1968-03-26

Folder 1388: 1388 AC-DC - 1968-03-27

Folder 1389: 1389 Tag 1653 - 1968-03-28

Folder 1390: 1390 Tag 1470 - 1968-03-29

Folder 1391: 1391 Tag 1536 - 1968-04-01

Folder 1392: 1392 Tag 1655 - 1968-04-02

Folder 1393: 1393 Tag 1649 - 1968-04-03

Folder 1394: 1394 Tag 1653 - 1968-04-04

Folder 1395: 1395 Tag 1470 - 1968-04-05

Folder 1396: 1396 Tag 1536 - 1968-04-11

Folder 1397: 1397 Tag 1653 - 1968-04-15

Folder 1398: 1398 Tag 1649 - 1968-04-16

Folder 1399: 1399 Tag 1655 - 1968-04-17

Folder 1400: 1400 Tag 1470 DC 100, 2000 mg thresh AC 20HZ 500 mg sub thresh - 1968-04-18

Folder 1401: 1401 Tag 1536 AC 20 HZ 200, 500, 1000 sub thresh - 1968-04-19

Folder 1402: 1402 AC-DC 1:1 2:1 Thresh - 1968-04-22

Folder 1403: 1403 1000 ms 20HZ 60HZ thresh - 1968-04-23

Folder 1404: 1404 AC-DC - 1968-04-24

Folder 1405: 1405 20 HZAC - 500 Mg Thresh Extra Sis with Concentric Cannula - 1968-04-25

Box 91P: Electric Shock Animal Experiments, 1406-1454 - 1968

Scope and Content: AC/DC Graphs, 1427-1454

- Folder 1406: 1406 AC DC - 500 Mg - 1968-04-26
- Folder 1407: 1407 AC DC - 500 Mg - 1968-04-29
- Folder 1408: 1408 Tag #1916 - 1968-04-30
- Folder 1409: 1409 Tag #1986 - 1968-05-01
- Folder 1410: 1410 Tag #2013 - 1968-05-02
- Folder 1411: 1411 Tag #1536 - 1968-05-03
- Folder 1412: 1412 Tag #1649 - 1968-05-06
- Folder 1413: 1413 Tag #2031 - 1968-05-07
- Folder 1414: 1414 Tag #2020 - 1968-05-08
- Folder 1415: 1415 Tag #2013 - 1968-05-09
- Folder 1416: 1416 Tag #1536 - 1968-05-10
- Folder 1417: 1417 Tag #1649 - 1968-05-13
- Folder 1418: 1418 Tag #2031 - 1968-05-14
- Folder 1419: 1419 Tag #2020 - 1968-05-15
- Folder 1420: 1420 Tag #2013 - 1968-05-16
- Folder 1421: 1421 Tag #2106 - 1968-05-17
- Folder 1422: 1422 Tag #2031 - 1968-05-21
- Folder 1423: 1423 Tag #2020 - 1968-05-22
- Folder 1424: 1424 Tag #1536 - 1968-05-27
- Folder 1425: 1425 Tag #2013 - 1968-05-27
- Folder 1426: 1426 Tag #2106 - 1968-05-28
- Folder 1427: 1427 500 mg 1:1 1:2.4 AC - 1968-05-31
- Folder 1428: 1428 500 mg Thresh, Extrasys. - 1968-06-03
- Folder 1429: 1429 Tag #2013 - 1968-06-04
- Folder 1430: 1430 1:1, 2.4:1, 1:2.4 AC - 1968-06-05
- Folder 1431: 1431 500, 200, 100 mg Thresh - 1968-06-06
- Folder 1432: 1432 100, 50 ms - 1000 ms - 1968-06-07
- Folder 1433: 1433 Attempted AV Block - 1968-06-07
- Folder 1434: 1434 100 mg Thresh - 500 ms - 20, 60 Hz - 1968-06-10
- Folder 1435: 1435 100 mg Thresh - 200 mg - 60 Hz - 1968-06-12

Folder 1436: 1436 - 1968

Folder 1436: 1436 100 mg Thresh - 200 mg - 60 Hz - 1968-06-13

Folder 1437: 1437 60, 20 Hz - 200, 1000 mg - 1968-06-14

Folder 1438: 1438 200, 2000 mg 20 Hz - 2000 mg 1:1, 1:2.4 - 1968-06-17

Folder 1439: 1439 100 mg 60 - 2000 mg AC, 1:1 - 1968-06-18

Folder 1440: 1440 500 mg - AC, 1:2.4, 2.4:1, 1:1 - 1968-06-19

Folder 1441: 1441 2000 mg 1:1, AC, 1:2.4, DC - 1968-06-20

Folder 1442: 1442 1000 mg - 1968-06-21

Folder 1443: 1443 500 mg - 1968-06-24

Folder 1444: 1444 200 mg - 1968-06-25

Folder 1445: 1445 2000 mg - 1968-06-27

Folder 1446: 1446 2000 mg - 1968-06-28

Folder 1447: 1447 2000 mg - 1968-07-01

Folder 1448: 1448 2000 mg - 1968-07-02

Folder 1449: 1449 2000 mg - 1968-07-03

Folder 1450: 1450 Tag #2106 - 1968-07-09

Folder 1451: 1451 Tag #2195 - 1968-07-10

Folder 1452: 1452 Tag #2020 - 1968-07-11

Folder 1453: 1453 Tag #1453 - 1968-07-15

Folder 1454: 1454 Tag #2106 - 1968-07-16

Box 92P: Electric Shock Animal Experiments, Dogs 1473-1549, Rats 1-68, Cats - 1967-1970

Scope and Content: Dog experiments 1473-1549 are from 1968-1970. Rat experiments 1-68 are from 1967-1968. 2 cat experiments are from 1967.

Folder : Six Shots Not Plotted - 1968

Folder : Summaries of Experiments- Breathing Failure - 1968

Folder 1473: Dog #1 4/24/68 #1473 - 1968

Folder 1474: Dog #2 4/25/68 #1474 - 1968

Folder 1475: Dog #3 5/6/68 #1475 - 1968

Folder 1476: Dog #4 (2057) 5/11/68 #1476 - 1968

Folder 1477: Dog #5 (2091) 5/15/68 #1477 - 1968

Folder 1478: Dog #6 2132 #1478 5/20/68 - 1968

Folder 1479: Dog #7 Tag 2136 Class Dog #1479 5/23/68 - 1968

Folder 1480: Dog #8 Tag 2138 #1480 5/24/68 - 1968

Folder 1481: Dog #9 2167 #1481 6/3/68 - 1968

Folder 1482: Dog #10 #1482 6/17/68 - 1968

Folder 1483: Dogs #11 & 12 (#1483 #1484) 6/20/68 Tags 2393 & 2404 - 1968

Folder 1485: Dog #13 Tage 2418 #1485 6/24/68 - 1968

Folder 1486: Dog #14 Tag 2433 6/28/68 #1486 - 1968

Folder 1487: Dog #15 Tag #2425, #1487 7/1/68 - 1968

Folder 1488: Dogs 16 & 17, Tags 2477, 7/3/68 to 7/8/68, #1488 - 1968

Folder 1489: Dog 18, Tag 2504 7/10/68, #1489 - 1968

Folder 1490: Dog 19, Tag 2525 7/16/68 #1490 - 1968

Folder 1491: Dog 20 Tag 2013, 7/19/68 #1491 - 1968

Folder 1492: Dog 21 Tag 2588 7/23/68 #1492 - 1968

Folder 1493: Dog 22 Tag 2020 #1493, 7/24/68 "Eyes" - 1968

Folder 1494: Dog 23 Tag 2668 7/30/68 #1494 - 1968

Folder 1495: Dog #24 Tag 2693 8/1/68 #1495 - 1968

Folder 1496: Dog 25 Tag 2694 8/2/68 #1496 - 1968

Folder 1496: Dog 25 Tag 2694 8/2/68 #1496 - 1968

Folder 1497: Dog 26 Tag 2628 8/6/68 #1497 "Biter" - 1968

Folder 1498: Dog 27 Tag 2742 8/7/68 #1498 - 1968

Folder 1499: Dog 28 Tag 2782 8/9/68 #1499 - 1968

Folder 1499: Dog 28 Tag 2782 8/9/69 #1499 - 1968

Folder 1500: Dog 29 Tag 2799 8/13/68 #1500 - 509372

Folder 1501: Dog 30 Tag 2853 #1501 8/15/68 - 1968

Folder 1502: Dog 31 Tag 2758 #1502 8/16/68 - 1968

Folder 1503: Dog 32 Tag 2106 8/27/68 #1503 "Mal" - 1968

Folder 1504: Dog 33 Tag 2936 8/29/68 #1504 - 509372

Folder 1505: Dog 34 Tag 2955 8/30/68 #1505 - 1968

Folder 1506: Dog 35 Tag 2621 9/5/68 #1506 - 1968

Folder 1507: Dogs 36, 37, 38, 39, 40 9/10, 9/12, 9/16 #1507, 1508, 1509, 1510, 1511 - 1968

Folder 1512: Dog 41 Tag 3115 Surface EEG 9/23/68 #1512 - 1968

Folder 1514: Dog 43 Tag 3351 10/15/68 #1514 EEG w/ Nembutal and no curate - 1968

Folder 1515: Dogs 44, 45 Tags 3250, 3360 #1515, 1516 10/28/68, 10/30/68 - 1968

Folder 1517: Dog Tag 3533 11/13/68 EEG w/ ether #1517 - 1968

Folder 1518: Dog 47 & 48 Tag 3510 12/9/68 #1518, #1519 Shock w/Morphine - 1968

Folder 1520: Dog 49 Tag 3235 12/18/68 #1520 Bramshocks & Decerebration - 1968

Folder 1521: Dog 50 Tag 8016 1/3/69 #1521 EEG ether cerebellum - 1969

Folder 1522: Dog 51 Tag 7976 1/6/69 #1522 Morphine EEG - 1969

Folder 1523: Dog 42 Tag 2767 10/7/67 #1523 Guy's Dog - 1967

Folder 1523: Dog 52 Tag 8109 1/9/69 #1523 Morphine EEG Pyramid Recording - 1969

Folder 1524: Dog 53 Tag 8078 1/13/69 #1524 Nembutal ESG Potential, Cut Dorsal Roots - 1969

Folder 1525: Dog 54 Tag 8157 1/15/69 #1525 No Anesthesia, RF-LH shock, AR for recovery - 1969

Folder 1526: Dogs 55, 56 1/16/69 #1526 (no anesthesia), 1527 (spinal transection, decerebration) - 1969

Folder 1528: Dog 57 Tag 8408 1/31/69 #1528 Decerebration, No anesthesia, Morphine - 1969

Folder 1529: Dog 58 Tag 8473 2/8/69 #1529 EEG Curare Only - 1969

Folder 1530: Dogs 59-68 #1530-39 - 1969

Folder 1540: Dogs 69, 70 #1540, 1541 Convulsions - 1969

Folder 1542: Dog 71 Tag 237 6/26/69 #1542 RF-LH, RF-LF, RF-RH shocks - 1969

Folder 1543: HASH Tag 1632 #1543 10/30/69 - 1969

Folder 1544: HASH Tag 1805 11/5/69 #1544 - 1969

Folder 1545: HASH Tag 1794 #1545 11/6/69 - 1969

Folder 1546: Current Transformer #1546 - 1969

Folder 1547: Pole Top 7/9/70 #1547 - 1970

Folder 1548: Pole Top 7/21/70 #1548 - 1970

Folder 1549: Pole Top 7/28/70 #1549 - 1970

Folder C1: Cat #1 6/26/67 - 1967

Folder C2: Cat #2 6/28/67 - 1967

Folder R: Current Rats RF-L4 - 1967

Folder R: Current Rats RF-LF - 1967

Folder R: Potential and Current Data Water Basin Rat 11/2/67 - 1967

Folder R: Rat Muscles 2,3,4 2/28,29/68 - 1968

Folder R: Terminated Rats RF-LF - 1968

Folder R: Terminated Rats RF-LH - 1968

Folder R1: Rat #1 7/3/67 - 1967

Folder R1: Rat Muscle #1 2/21/68 - 1968

Folder R2: Rat #2 7/7/67 - 1967

Folder R3: Rat #3 Respiration 7/10/67 - 1967

Folder R4: Resp. Rat #4 7/11/67 - 1967

Folder R5: Rat #5 7/13/67 - 1967

Folder R6: Rat #6 7/14/67 - 1967

Folder R7: Rat #7 7/17/67 - 1967

Folder R8: Rat #8 7/19/67 - 1967

Folder R9: Rats #9, 10, 11 7/20/67, 7/21/67 - 1967

Folder R12: Rat #12 7/25/67 - 1967

Folder R13: Rat #13 7/28/67 - 1967

Folder R14: Rat #14 8/1/67 - 1967

Folder R15: Rat #15 8/3/67 - 1967

Folder R16: Rats #16 & 17 8/4/67 - 1967

Folder R17: Rat #16 8/4/67 - 1967

Folder R18: Rat #18 8/8/67 - 1967

Folder R19: Rats #19 & 20 8/11/67, 8/15/67 - 1967

Folder R21: Rats #21 & 22 8/17/67, 8/31/67 - 1967

Folder R23: Rat #23 8/22/67 - 1967

Folder R24: Rat #24 8/25/67 - 1967

Folder R24: Rat #24 8/25/67 - 1967

Folder R25: Rat #25 8/28/67 - 1967

Folder R26: Rats #26, 27, 28 8/21-9/1-9/7-9/8/67 - 1967

Folder R29: Rats #29, 30 9/8, 19/67 - 1967

Folder R31: Rat #31 9/25-27/67 - 1967

Folder R32: Rat #32 10/3/67, #33 10/4-5/67 - 1967

Folder R34: Rat #34 - 1967

Folder R35: Resp. Rat #35 10/11/67 - 1967

Folder R36: Resp. Rat #36 10/12/67 - 1967

Folder R37: Rats 37, 38, 39 10/14,15,16/67 - 1967

Folder R40: Rats 40 & 41 10/17, 18/67 - 1967

Folder R42: Rat #42 10/19/67 - 1967

Folder R43: Rat #43 10/20/67 - 1967

Folder R44: Rat #44 10/21/67 - 1967

Folder R44: Rat #45 10/23/67 - 1967

Folder R46: Rats #46 & 47 10/24/67 - 1967

Folder R47: Rat #47 11/6/67 - 1967

Folder R48: Rats 48, 49, 50 11/8,10,13/67 - 1967

Folder R51: Rats 51-56 11/14-12/11/67 - 1967

Folder R57: Rats 57, 58, 59 12/18, 19/67 Electrocoat - 1967

Folder R58: Rats 58, 59 Cont'd and Rat 61 Succinylcholine 1/2,4/68 1/7/68 - 1968

Folder R60: Rat #60 1/7/67 Phrenic Stimulation - 1967

Folder R62: Rat #62 1/8/68 LH-RH Shock - 1968

Folder R63: Rats 63,64,65 2/7-2/12/68 30 sec. shocks - 1968

Folder R66: Rats 66,67,68 2/16-2/20/68 60 sec. shock - 1968

Series 3: Oversized certificates

Archival Arrangement: 3 folders of previously rolled certificates were grouped by size and are under collection boxes to be flattened. 2 oversized folders of certificates removed from frames are in oversized map drawer 7.

Folder : Oversized certificates

Extent: 2 folders

Series 4: Photographs

Folder : Greek letter society group portrait [Polytechnic Institute of Brooklyn?] - circa 1905

Extent: 1 photographic print

Subject - Kouwenhoven, W. B. (William Bennett), 1886-1975

Subject - Topical: Fraternities & sororities; Group portraits; Portrait photographs

Sub-series : Images compiled by Dr. William Kouwenhoven regarding CPR and electrical shock - circa 1962-1965

Folder 515051/01: Images regarding electrical towers - 1962-1963

Extent: 159 slides

Subject - Name: Jude, James R.
Kouwenhoven, W. B. (William Bennett), 1886-1975

Subject - Topical: Electrical Engineers; Mice; Animal experimentation; Publications

Folder 515051/02: Images regarding CPR and electrical towers - 1962-1963

Extent: 132 slides

Subject - Topical: Electrical Engineers; Shock; Laboratory technicians; Laboratory Techniques and Procedures

Folder 515051/03: Images regarding cardiopulmonary resuscitation (CPR) demonstrations, external defibrillators, burn victims, and external cardiac massage (ECM) - 1963-1965

Extent: 143 slides

Subject - Topical: Defibrillators; Burns; Cardiopulmonary Resuscitation; Cardiopulmonary Resuscitation--methods; Cardiopulmonary Resuscitation--statistics and numerical data

Series 5: Films

Scope and Content: Film Series includes motion picture films related to closed chest cardiac massage and defibrillation.

Series 6: Material Culture related to William Kouwenhoven

Scope and Content: Series contain items associated with William Kouwenhoven, including prototypes of the defibrillator and awards for his work on defibrillation and external cardiac massage.

Archival Arrangement: Items are catalogued individually within the Artifact database.

Artifacts Title: Internal Defibrillator Prototype

Artifacts Number: 1446A

Artifacts Title: doctoral gown

Artifacts Number: 2021.012.01

Artifacts Title: Doctor of Medicine academic hood

Artifacts Number: 2021.012.02

Artifacts Title: Doctor of Medicine academic hood

Artifacts Number: 2021.012.03

Artifacts Title: doctoral tam

Artifacts Number: 2021.012.04

Artifacts Title: mortar board cap

Artifacts Number: 2021.012.05

Artifacts Title: American Medical Association medal

Artifacts Number: 2021.012.06

Artifacts Title: American Heart Association medal

Artifacts Number: 2021.012.07

Artifacts Title: ID badge

Artifacts Number: 2021.012.08

Artifacts Title: kymograph

Artifacts Number: 2021.012.09

Artifacts Title: Stetson hat

Artifacts Number: 2021.012.10

Artifacts Title: Silver plate bowl for the Helen Taussig Award

Artifacts Number: 2021.033.01

Artifacts Title: Erasmus Hall medal

Artifacts Number: 2021.033.02

Artifacts Title: Polytechnic Institute of Brooklyn roundel

Artifacts Number: 2021.033.03

Artifacts Title: Westinghouse Kouwenhoven Half-Cycle Portable Defibrillator

Artifacts Number: 7686A

Artifacts Title: A.C. Defibrillator

Artifacts Number: 908A

Box 93P: KOUWENHOVEN PAPERS

Scope and Content: Correspondence, reprints, meetings

[File : Accidents \(Electric Shock\) - 1935-1953](#)

Scope and Content: This folder contains a variety of case studies of electrical accidents and several reprints of papers presented on the same subject. Government statistical reports on mortality from various causes and home accident fatalities are also included.

[File : Electrical Safety - 1952-58](#)

Scope and Content: This folder contains reprints of AIEE conference papers on the topic of electrical safety, as well as a variety of safety manuals and a printed bibliography on Electrical Safety - 1930-1953. Also included is a paper on AIEE safety standards and a copy of an address Herbert Hoover gave in response to receiving the Howard Conley Gold Medal conferred by the American Standards Association.

[File : Non-Conforming Shocks - 1957-58](#)

Scope and Content: This folder contains extensive correspondence between Dr. Kouwenhoven and power companies across the United States regarding episodes of electric shock. This exchange of information was an ongoing part of Dr. Kouwenhoven's research on the effect of electric shock on the human body.

File : Pole Top Resuscitation - 1939-45

Scope and Content: Included in this folder are articles on the Pole Top methods of resuscitating linemen after electric shock. Photographs are included.

File : Proceedings of the AIEE Feb. 1916 - Feb. 8-9, 1916

Scope and Content: This folder contains one copy of the Proceedings of the American Institute of Electrical Engineers, Vol. XXXV, No. 2, February, 1916. It details the papers to be presented at the 4th Midwinter Convention of the Institute.

File : Reprints - Electrical Studies - 1914-35

Scope and Content: The reprints of studies authored or co-authored by Dr. Kouwenhoven in this folder cover various topics in the field of electrical engineering, primarily on magnetic analysis of flaws in steel.

File : Resistance of the Human Body - 1921-34

Scope and Content: Several papers on the topic of the human body's resistance to direct and alternating electrical currents are found in this folder.

File : Resuscitation: Cardiac Massage (Open Massage) - 1941-56

Scope and Content: This folder contains several scientific reports and papers by other scientists on the successful use of cardiac massage in resuscitating patients.

File : Resuscitation: Countershock (Closed Chest) - 1939-63

Scope and Content: This folder contains copies of research papers and reprints of articles on the use of counter shock as a method of resuscitation on animal models and actual human cases.

File : Resuscitation: Countershock (Open Chest) - 1932-48

Scope and Content: The research papers and news clippings in this folder relate to the topics of the effects of electric shock on the human body and electric shock treatment of ventricular fibrillation.

File : Resuscitation: Drugs - 1934-45

Scope and Content: The use of drugs in cardiac resuscitation is the topic of several reprints in this folder. Some of the studies were animal ones, the others involved human responses to the drugs.

File : Resuscitation: Cardiac Massage (Closed Chest) - March 1962-April 1963

Scope and Content: This folder contains several magazine articles on the then new technique of using closed-chest heart massage to resuscitate victims of cardiac arrest.

File : Safety: Cardiac Catherization - 1962

Creator: Ross, Richard S., 1924-2015

Scope and Content: This folder contains a copy of a thesis by Daniel I. Weinberg entitled "Electric shock Hazards in Cardiac Catheterization." It was submitted as a requirement for the degree of Master of Science in the Dept. of Electrical Engineering at Duke University. Included are comments on the thesis by Dr. Richard Ross and copies of other papers by Weisberg.

[File : Safety: Electrical hazards - 1941-62](#)

Scope and Content: A variety of reports and conference papers on electric shock hazards in several different industrial settings are found in this folder.

[File : Skin Resistance - 1928-69](#)

Scope and Content: Copies and reprints of research papers by Dr. Kouwenhoven and other scientists around the world on the topic of the reaction of human skin to electrical currents are found in this folder.

Box 94P: KOUWENHOVEN PAPERS

Scope and Content: Defibrillation Experiments: Reprints, Notes, Manuscripts, Correspondence

[File : Anesthesia](#)

Creator: Hanlon, C. Rollins; Johns, Thomas N.P.; Thomas, Vivien T., 1910-1985.

Scope and Content: This is a collection of other scientists' articles and copies of manuscripts on the topic of electrical anesthesia. Included is one article from Johns Hopkins: "An Apparatus for Anesthesia in experimental Thoracic Surgery" by C. Rollins Hanlon MD, Thomas N.P. Johns MD, and Vivien Thomas.

[File : Arrhythmias - 1964-1982](#)

Scope and Content: This folder contains 2 articles on the topic of cardiac arrhythmias and Dr. Kouwenhoven's hand written notes on one of them.

[File : Arrhythmias - Ventricular Fibrillation - 1932-33](#)

Extent: 2 copies of each

Scope and Content: This folder contains reprints of 2 papers relating to ventricular fibrillation from the American Journal of Physiology written by D. R. Hooker (Department of Physiological Hygiene of the JHU).

[File : Artful Organs - 1965](#)

Scope and Content: Two articles on replacement organs, including the heart, are in this folder.

[File : Atrial Fibrillation - 1924-1965](#)

Scope and Content: This folder contains reprints of articles on the subject of atrial fibrillation, including one translated by Dr. Kouwenhoven from the original Russian.

[File : Blood Cooling - 1959](#)

Scope and Content: This folder contains one article on blood cooling and the effects of hypothermia.

File : Break Down Voltage - 1953-68

Scope and Content: Letters and materials relating to the AIEE's publication entitled "American Standard for Measurement of Voltage in Dielectric Tests" and a draft for the updated document are found in this folder.

File : Cardio-Pulmonary Physiology - 1935-1962

Scope and Content: This folder contains a number of articles relating to cardio-pulmonary physiology, including topics on cardiac excitability, ventricular fibrillation and electrocardiography.

File : Cell Processes

Scope and Content: Several scientific articles on experiments at the cellular level relating to the heart and neurological system are in this folder.

File : Circulation - 1949

Creator: McKusick, Victor A. (Victor Almon), 1921-2008

Scope and Content: This folder contains reprints of several articles discussing methods of measuring the flow and rate of blood circulation. Two deal with radio-active means and the 3rd, by H. K. Wiskind and V. A. McKusick MD of JHU is entitled "Electric Analog of the Human Circulation for Study of Hepatic Hemodynamics."

File : Closed Chest Cardiac Massage - Use of Machines - 1966

Scope and Content: Reprints of 2 articles on use of mechanical devices for external cardiac massage

File : Current: Impulse Generator - ca early 1930s

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: This folder contains 2 articles co-authored by Dr. Kouwenhoven and Orthello R. Langworthy (Dept. of Neurology) on the effect produced by the discharges from the impulse generator. These electrical current studies were conducted on rats.

File : Edison - 1947

Scope and Content: This folder contains a variety of historic materials surveying the life and achievements of Thomas Alva Edison.

File : Electric Fence - 1939-1941

Scope and Content: Found in this folder are a variety of reports, brochures and an article on the topics of electric fence hazards, electric controllers and safety rules for electric fences.

File : Electric Shock References - 1933-1942

Scope and Content: This folder contains several lists of articles on the topic of electric shock requested by Dr. Kouwenhoven from others.

File : Emergency Care - 1963

Scope and Content: One reprint of an article that appeared in The American Journal of Nursing , April 1963 entitled "The Law and the Nurse: Nurse, Hospital and Emergency Care" by Nathan Hershey is in this folder. It covers topics which include obligations and risks in giving emergency care and the law and ethics.

File : Flash Tubes - 1948-1950

Scope and Content: Two articles on flash tube technology and its use in photography are in this folder.

File : Franco Paper Electric Shock & Cardiopulmonary Resuscitation - 1968

Scope and Content: A copy of a paper entitled "Electric Shock and Cardiopulmonary Resuscitation" by S. Charles France M.D. and correspondence with Dr. Kouwenhoven requesting permission to quote him are in this folder.

File : Injuries and Illnesses (other forms) - 1933-38

Scope and Content: This folder contains a variety of reprints on articles on thyroid disease, back injuries and nerve injuries all relating to the topic of electrical current.

File : Instruments (experimental) - 1933-65

Scope and Content: This folder contains miscellaneous articles about experimental instruments being developed for use in measuring blood flow, monitoring ECGs, and for recording arterial pulse wave forms.

File : Lighting (Emergency) - 1955-56

Scope and Content: This folder contains reprints of several conference paper (American Institute of Electrical Engineers)on batteries used in emergency lighting and emergency power for hospitals.

File : Mine Safety: Bills - 1958-64

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and the Mine Safety Appliances Company about his consultant agreement with them and information on the development of a mine safety portable defibrillator. It includes a photograph of Dr. Kouwenhoven using the instrument on a patient.

File : Mine Safety: Data, Reports, Meetings - 1957-66

Scope and Content: This folder includes ongoing correspondence betweenDr. Kouwenhoven and officials at the Mine Safety Appliances Company about the use of the Mine Safety Defibrillator, scientific papers written about it, and use if ut by others. Dr. Kouwenhoven was a consultant for the company.

File : Mine Safety: Field Debibrillator - 1959-71

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and officials of the Mine Safety Appliances Company about the research he was conducting on use of their Mine Safety Defibrillator. Photos of the components of the device are included as is information about the use of the device by others and Dr. Kouwenhoven's ongoing consultant relationship with the company. A copy of his 1960 agreement is also included.

File : Neurological Effects of Electricity on the Organism - 1932-1938

Scope and Content: Papers and abstracts written by scientists in the USA and abroad on the topic of neurologic effects of electric shock are accumulated in this file. Included is a Hebrew translation of an address on electrical accidents Dr. Kouwenhoven gave in 1937.

Box 95P: KOUWENHOVEN PAPERS - 1938-1974

Scope and Content: Correspondence, Meeting Files

File 95P: 1000 Chest Resist. Meas. - 1934-1936

File 95P: AIEE Dinner & Meeting May 19-20 - 1959

File 95P: AIEE Mid-Winter Meeting 1960 - 1959-1960

File 95P: Albert and Mary Lasker Foundation - 1973-1974

Scope and Content: Included in this file is a personal invitation to Dr. Kouwenhoven from Mary Lasker to attend the Lasker awards luncheon at which he would receive the 1973 award along with Dr. Paul M. Zoll. That year the awards were given in the field of life-saving advances in the treatment of acute heart attacks.

File 95P: AMA Award Meeting in Calif. June 1972 - 1972

Scope and Content: News articles and correspondence related to Dr. Kouwenhoven's AMA Scientific Award presentation are included in this folder. This was the second time he was highly honored by the AMA (in 1969 the Ludwig Hektoen Gold Medal was awarded to him).

File 95P: American Academy of Achievement Award, Salt Lake City June 27-29, 1974 - 1974

File 95P: American College of Cardiology - 1973-1974

File 95P: American Electric Power Co. Inc. Program on UHV, AEP, ASEA, & Ohio Brass- June 27 & 28 Cleveland - 1972

File 95P: American Heart Assoc. Meeting- St. Louis, MO Oct 21-23 - 1960

File 95P: American Society of Oral Surgeons- Phoenix Meeting 1960 - 1960

File 95P: Bertha L. Meurer - 1956-1970

File 95P: Blalock Apr. 2nd Southern Hotel - 1960

File 95P: Conference on Electric Shock- June 10, 1938 - 1938

File 95P: Consumers' Safety Conference (Bob Dohr) Lansing Feb 9-11, 1960 - 1960

File 95P: EEI Accident Prevention Comm. Portland Meeting September 1971 - 1971

File 95P: EEI APC October 8-11 1972, Salt Lake City, Utah - 1972

File 95P: EEI Meeting Chicago Aug 30- Sep 2 1970 - 1970

File 95P: EEI Meeting May, 1970 Washington, DC - 1970

File 95P: EEI Philadelphia Meeting May 21-24 - 1972

File 95P: Effect Cap. Discharges on the Heart- AIEE Weld. Conference Milwaukee - 1954-1955

File 95P: Electric Fence Code Chicago Nov. 21-22 - 1957

File 95P: Electric Shock- General 1937-1938 - 1937-1938

File 95P: IEEE Feb 1 Power Meeting - 1971-1972

File 95P: IEEE Jan. 29-30 1973 - 1973

File 95P: IEEE Meeting Jan 31- Dedication of the Power-Life Sc. - 1971

File 95P: IEEE Power Group Life Award July 14, 1970 - 1970-1971

File 95P: Insulation Resistance NEMA 1955 - 1955-1960

File 95P: J.D. Tebo, Class of '24- Bell Labs - 1969-1974

File 95P: Maryland Heart Association Taussig Award- Jan. 28, 1970 - 1970

Scope and Content: Correspondence relating to Dr. Kouwenhoven's attendance at the Maryland Heart Association meeting where he would receive the Helen Taussig award is included in this folder.

File 95P: Memberships - 1969-1976

Scope and Content: Several medical and electrical engineering membership cards are found in this file.

File 95P: Merck Sharpe & Dome - 1969-1970

File 95P: Notes- Electric Shock, WBK and D. Hooker 1930-1941 - 1930-1941

Scope and Content: Dr. Kouwenhoven's early hand-written notes on dog experiments studying the effects of electric shock are in this file.

File 95P: NY State Society of Anesthesiologists Dec. 7, 1960 Panel on C.C.C.M. - 1960

File 95P: Pertinent Facts WBK

File 95P: Power Engineering Society - 1973

File 95P: Public Utility Safety Course Georgia Tech. July 21-26 1958 - 1958

File 95P: Singewald, Martin M.D. - 1967-1974

[File 95P: St. Louis Meeting EEI- May 16-19 - 1970-1971](#)

[File 95P: Syracuse Univ. Honorary D. Sc. Degree- June 1970 - 1970](#)

[File 95P: Syracuse University](#)

[File 95P: Third World Congress of Cardiology Sept 14-21 1958 - 1958](#)

[File 95P: United Cooperatives Alliance, Ohio May 12 1959 - 1959](#)

[File 95P: Veterans Admin. Meeting- Balto. 11/3/60 Trenton Medical Area - 1960](#)

[File 95P: Western Penna. Chapter American Soc. Safety Engrs., March 26 1958 Pittsburgh - 1958](#)

[File 95P: What Electric Shock May do to You](#)

Box 96P: KOUWENHOVEN PAPERS - 1950-1970

Scope and Content: Correspondence, Meetings, CV, Manuscripts, Reprints

Folder : A Low Cost Treadmill for Experimental Animals - 1954

Scope and Content: Dr. Kouwenhoven and others invented a dog treadmill for use in their research laboratory and wrote the paper found in this folder describing how to build this instrument. It was accepted for publication in the Journal of Applied Physiology .

Folder : Accident Prevention Committee Edison Electric Institute Dallas Texas Oct. 1969 - 1969

Scope and Content: Correspondence relating to Dr. Kouwenhoven's attendance at this meeting and a draft of the paper he will present there ("A proposal for the Support of a Research Project on the Effects of Exposure to High Intensity Electric Fields") are found in this folder.

Folder : Accident Prevention Committee Meeting June 1-4,1969 Cincinnati Ohio - April-July 1969

Scope and Content: Materials in this folder relate to a meeting of the Edison Electric Institute's Accident Prevention Committee during which Dr. Kouwenhoven presented a proposal for "An Investigation of Possible Harmful Effects of Long Term Exposure to Electric Fields Alternating Sinusoidally at 60 Hertz." His hand written notes for the proposal and related research materials are included, as well as correspondence about the topic.

Folder : AIEE Defibrillation Paper Discussion - 1955

Scope and Content: This folder contains correspondence about a paper written by Dr. Kouwenhoven for the American Institute of Electrical Engineers entitled "Electric Defibrillation," a discussion of the paper by another engineer and Kouwenhoven's response to the discussion.

Folder : AIEE Safety Committee Mtg. Oct. 8,1957 Chicago - June-Oct. 1957

Scope and Content: This folder contains several items related to the Oct. 1957 AIEE Safety Committee Meeting: 2 reviews by Dr. Kouwenhoven of papers submitted for presentation, a listing of Committee members, Dr. Kouwenhoven's travel plans for the trip to Chicago and his hand-written notes on presentations made at the meeting.

Folder : [AIEE Winter General Meeting New York 1958 Feb. 3-7 - Feb. 1958](#)

Scope and Content: Materials from the February, 1958 AIEE Committee on Safety meeting, including a paper presented by Dr. Kouwenhoven entitled "Relative Hazard of 240 Versus 120 Volt A.C. Shocks" are included in this folder.

Folder : [American College of Physicians Award Distinguished Contributions - 1969](#)

Scope and Content: In April of 1968 Dr. Kouwenhoven was presented The American College of Physicians Medal for distinguished contributions in Science as related to Medicine. The program for the meeting as well as the paper Dr. Kouwenhoven presented are found in this extensive folder. Included are various stages of editing of the paper, entitled "The Development of the Defibrillator," its final version and correspondence related to its being published in the Annals of Internal Medicine. The paper is a personal account of Dr. Kouwenhoven's role in the development of the defibrillator and the history of the device.

Folder : [Annual Safety Conference Georgia Institute of Tech. Atlanta July 23 - July 1957](#)

Scope and Content: Dr. Kouwenhoven participated in a Public Utility Safety Director's Short Course sponsored by the Southeastern Electrical Exchange and held at the Georgia Institute of Technology in Atlanta. This folder contains the program listing Dr. Kouwenhoven's topic as "Resuscitation" and a copy of a paper by another presenter on Pole-Top Safety.

Folder : [APC California Meeting November 1968 - 1967-68](#)

Scope and Content: Materials and correspondence relating to Dr. Kouwenhoven's attendance at the 86th Meeting of the Accident Prevention Committee of the Edison Electric Institute being held on Los Angeles in Nov. 1968 are found in this folder. Included is a report he presented.

Folder : [Cardiopulmonary Seminar Hospital Aug. 12, 1968/Aug. 19, 1968 - 1968](#)

Scope and Content: Acceptances, refusals and financial accounting for the Seminar in Artificial Respiration and External Heart Compression held at Hopkins Hospital under the direction of Dr. Kouwenhoven are found in this folder.

Folder : [Curriculum Vitae 1965 - 1914-65](#)

Extent: Three copies

Scope and Content: This folder contains several copies of Dr. Kouwenhoven's Curriculum Vitae. It includes a chronological narrative of his career and society memberships, but does not list his bibliography.

Folder : [Dr. Kay - Electric Shock - Sept. 1950](#)

Creator: Handelsman, Jacob C.

Scope and Content: This folder contains one copy of a paper authored by Dr. Kouwenhoven, Dr. Jerome H. Kay and Dr. Jacob Handelsman entitled "Electrical Resuscitation of Ventricular Fibrillation During Surgery." All were Hopkins faculty members.

Folder : EEI Progress Report 1971-2 Biological Effects of Exposure to High Intensity Electric Fields (Parts 1 and 2) - March-Sept. 1971

Scope and Content: This folder contains the first 2 parts of an Edison Electric Institute project examining the progress in understanding the effects of electric current on the human body . Dr. Kouwenhoven is one of three authors.

Folder : EEI Progress Report 1971-2 Biological Effects of Exposure to High Intensity Electric Fields (Parts 3 and 4) - March-Sept 1972

Scope and Content: This folder contains parts 3 and 4 of an Edison Electric Insitute two year project examining the effects of electric current on the human body . Dr. Kouwenhoven was one of the two scientists who wrote the reports.

Folder : Electric Defibrillation - 1954-55

Creator: Milnor, William R.

Scope and Content: Drs. Kouwenhoven and Milnor prepared a paper entitled "Electric Defibrillation" which was presented at the American Institute of Electrical Engineers Winter meeting in early 1955. The original and final drafts of this paper are found in this folder, as well as related correspondence.

Folder : Electric Shock Experiments - 1931-65

Scope and Content: This folder contains several manuscripts and detailed notes on electrical shock experiments done by Dr. Kouwenhoven and others.

Folder : H.T. AIEE Paper JHU-Baltimore Oct. 18, 1957 - 1957

Scope and Content: This folder contains a paper by Dr. Kouwenhoven and others entitled "Properties of Laminated Thermosetting Plastics at Elevated Temperatures" and another entitles "Thermal Stability of Laminated Thermosetting Plastics, I." Several related conference papers and booklets are included.

Folder : Honorary Grad Degree June 6,1969 - April-May 1969

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and Hopkins University about his being presented an honorary Doctor of Medicine degree at commencement on June 6, 1969.

Folder : Knickerbocher's "Report on Experiences of Three Months Spent in Moscow..." 1963 - 1963

Creator: Knickerbocker, G. Guy

Scope and Content: This folder contains a report by Guy Knickerbocker on his work in the Laboratory of Experimental Physiology for Resuscitation in Moscow. He was participating in the Cultural and Scientific Exchange Program sponsored by the United States and the Soviet Union.

Folder : Maryland Heart Association November 15, 1957 Hopkins Hospital - Nov.-Dec. 1957

Scope and Content: The program for the scientific sessions of the 1957 Maryland Heart Association and letters of appreciation to Dr. Kouwenhoven for his participation in the meeting are in this folder.

Folder : Medical & Chirurgical Society Hershey, PA Sept 5, 1969 & Balto April 1, 1970 - 1969-70

Scope and Content: This folder contains correspondence related to Dr. Kouwenhoven's election to the Maryland Medical and Chirurgical Faculty as an honorary member and the program for the 1st meeting he will attend at the Alcazar Hotel in Baltimore.

Folder : Miscellaneous Publication - 1949-50

Scope and Content: This folder contains several papers by other scientists in the field of electrical engineering related to electrical safety and voltage.

Folder : National Research Council Pocono Manor Oct. 22, 1957 - Sept-Nov 1957

Scope and Content: This folder contains the talk Dr. Kouwenhoven gave at the National Academy of Sciences National Research Council Conference on Electrical Insulation of the Division of Engineering and Industrial Research at Pocono Manor, PA on Oct. 22, 1957, as well as a list of attendees and his travel expenses.

Folder : National Safety Council Talk Oct. 25, 1957 Chicago - Sept.-Oct. 1957

Scope and Content: This folder contains Dr. Kouwenhoven's travel plans, a copy of the paper he presented entitled "Physical Aspects of Low Voltage Electric Shocks" and a report of the meeting which he wrote and sent to NEMA members.

Folder : NEMA ILATC Reception Oct. 14, 1969 S.M. Hunn - August 1969

Scope and Content: Correspondence between Dr. Kouwenhoven and Sid Hunn of the National Electrical Manufacturers Association (NEMA) about a reception in Boston is found in this folder.

Folder : Paper for American Electro-Chem. Soc. Meeting in Washington May 13, 1957 - Feb-May 1957

Scope and Content: Dr. Kouwenhoven presented a paper on "Properties of Laminated Plastics at Elevated Temperatures" at the Electrochemical Society Meeting on May 14, 1957. This folder has his personal hand-written notes for the presentation and paper copies of the slides he used, as well as correspondence about his participation and the full program booklet.

Folder : Reprint - A Comparison of the Relative Efficiency of the Schafer and Pole-Top Methods of Artificial Respiration (Kouwenhoven, Hooker and Langworthy) Feb. 1941 - February 1941

Creator: Hooker, Donald R.; Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: This paper discusses the early stages of an investigation being conducted by scientists from the schools of engineering, hygiene and medicine at The Johns Hopkins University which deals with resuscitation, measuring ventilation of the lungs and comparing the prone-pressure method with the faster pole-top method.

Folder : Reprint - A Comparison of the Relative Efficiency of the Schafer and Pole-Top Methods of Artificial Respiration (Kouwenhoven, Hooker, and Langworthy) Aug. 1940 - August 1940

Creator: Hooker, D.R.; Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: This paper was presented at an AIEE meeting and discusses the relative effectiveness of two methods of artificial respiration used to save the lives of linemen.

Folder : Reprint - A Low Cost Treadmill for Experimental Animals (Kouwenhoven, Starzl and Baker) Nov 1954 - November 1954

Creator: Baker, Benjamin M.

Scope and Content: Reprinted from the Journal of Applied Physiology, this article describes a dog treadmill developed at Hopkins for use in research studies, its construction details, cost and effectiveness.

Folder : Reprint - A simple Electrical Apparatus for the Clinical Treatment of Ventricular Fibrillation (Kouwenhoven and Kay) Nov 1951 - November 1951

Scope and Content: Reprinted from the journal Surgery, this paper describes the electrical apparatus successfully used at Hopkins Hospital for the treatment of ventricular fibrillation.

Folder : Reprint - A simple Method of Cardiac Resuscitation (Kouwenhoven and Knickerbocker) Jan 1961 - January 1961

Creator: Knickerbocker, G. Guy

Scope and Content: Published in the Dental Digest this article describes in detail the procedure for administering closed chest cardiac massage and artificial respiration. It includes diagrams.

Folder : Reprint - A Through Type Current Transformer and Amplifier for Measuring Alternating Currents of a Few Milliampères (Kouwenhoven) Sept. 1931 - Sept. 1931

Scope and Content: Reprinted from The Review of Scientific Instruments, this paper examines effects of electric shock on rat hearts as current enters from various parts of the body and discusses the instrumentation used in the measurements.

Folder : Reprint - A-C Shocks Affecting the Heart (Kouwenhoven, Knickerbocker, Chestnut, Milnor, Sass May 1959 - May 1959

Creator: Knickerbocker, G. Guy; Milnor, William R.

Scope and Content: Published in the AIEE journal "Communication and Electronics," this article discusses effects of A-C shocks of varying durations and occurring at different places in the heart cycle of the dog and the effects of the use of the closed-chest defibrillator.

Folder : Reprint - An Experimental and Clinical Study of a Portable External Cardiac Defibrillator (Jude, Kouwenhoven, Knickerbocker) 1962 - 1962

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: Appearing in the "Surgical Forum," this article discusses the development and use of the portable defibrillator.

Folder : Reprint - An Experimental Study of Abnormalities Produced in the Organism by Electricity (Langworthy and Kouwenhoven) Feb. 1930 - Feb. 1930

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from The Journal of Industrial Hygiene, this paper discusses a variety of effects of electrical shock seen in rat and rabbit experiments.

Folder : Reprint - Articles in Translation About the Work of Kouwenhoven, Knickerbocker and Jude 1961/62 - 1961-1962

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: This folder contains one article in Italian and one in German about the work of Dr. Kouwenhoven and his team.

Folder : Reprint - Artificial Respiration (Kouwenhoven data reported in Accident Prevention) Aug 1959 - August 1959

Scope and Content: This item appeared in the Canadian IAPA publication Accident Prevention and quotes data from the Edison Electric Institute which was compiled by Dr. Kouwenhoven comparing the Pole Top and Schafer methods of artificial respiration .

Folder : Reprint - Baltimore City Fire Department Notches Another "First" in the First Aid Field (Capt. Martin McMahan) Sept 1960 - September 1960

Scope and Content: This article appeared in the journal "Fire Engineering" and discusses the work Kouwenhoven, Knickerbocker and Jude have done in the field of closed chest cardiac massage. It includes photos of fire and emergency professionals being trained.

Folder : Reprint - Bibliography (Unknown source/Topic: Cardiac Arrest and Resuscitaioin 1878-1960 Early 1960's - Early 1960's

Scope and Content: Bibliography from a manuscript of unknown origin.

Folder : Reprint - Body Currents in Live Line Working (Kouwenhoven, Miller, Barnes, Simpson, Rorden and Burgess) April 1966 - April 1966

Scope and Content: This article appeared in the "IEEE Transactions on Power Apparatus and Systems" and is a review of the effects on live line workers of different levels of electrical contact and the value to the workers of different types of shielding .

Folder : Reprint - Body Currents Measured in Live Line Work (Rorden, Kouwenhoven, Miller, Simpson) Nov 1964 - November 1964

Scope and Content: This article appeared in a McGraw-Hill publication entitled "Electrical World." It discusses measurement of body currents during live line work and the value of shielding workers.

Folder : Reprint - Cardiopulmonary Arrest (Chp 11) (Kouwenhoven, Jude, Hubbell) post 1970 - After 1970

Creator: Jude, James R.

Scope and Content: This chapter appeared in an unidentified publication and is a practical discussion of cardiac arrest, cardiopulmonary resuscitation and steps to take when an office patient goes into cardiac arrest.

Folder : Reprint - Cardiopulmonary Resuscitations by Trained Personnel (Wilder, Jude, Kouwenhoven, McMahan) Nov 1964 - November 1964

Creator: Jude, James R.

Scope and Content: This article appeared in the Journal of the American Medical Association and reviews the results of 153 attempts to use cardiopulmonary resuscitation by the trained ambulance service personnel of the Baltimore City Fire Department.

Folder : Reprint - Closed Chest Cardiac Massage (Kouwenhoven, Jude and Knickerbocker) - 1960

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: Reprinted from the Journal of the American Medical Association , this article describes the cardiac resuscitation method and several case studies.

Folder : Reprint - Closed Chest Resuscitation of Cardiac Arrest (Kouwehhoven) Feb 1961 - February 1961

Scope and Content: Dr. Kouwenhoven discusses his experiments and use of the debribrillator at Hopkins in this "Chicago Medicine" article.

Folder : Reprint - Closed-Chest Cardiac Massage (J.G. Fred Hiss M.D.) Feb 1961 - February 1961

Scope and Content: This article from the New York State Journal of Medicine summarizes the work of Dr. Kouwenhoven and associates in the field of closed-chest cardiac massage.

Folder : Reprint - Counter-Shock Resuscitation Studies (Kouwenhoven) Sept 1954 - September 1954

Scope and Content: Appearing in the publication Electrical World, this article discusses electric shock in terms of its effects on the human body and the use of counter-shock to restore heart action.

Folder : Reprint - Effect of Capacitor Discharges on the Heart (Kouwenhoven) April 1956 - April 1956

Scope and Content: This article appears in the AIEE publication "Power Apparatus and Systems." In it Dr. Kouwenhoven discusses the results of the defibrillation of dog hearts using capacitor discharges.

Folder : Reprint - Effect of Electric Shock (Kouwenhoven and Langworthy) Jan. 1931 - Jan. 1931

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Published in The Johns Hopkins Alumni Magazine, this paper summarizes the authors' works using the rat model to determine effects of electric shock at varying voltage levels.

Folder : Reprint - Effects of Electricity on the Human Body (Kouwenhoven) July 1949 - July 1949

Scope and Content: This short article appeared in the journal Industrial Medicine and Surgery of Trauma and summarizes the factors of voltage, skin resistance and values of the current that flows through the body, as well as effects of electric shock and treatment.

Folder : Reprint - Effects of Electricity on the Human Body (Kouwenhoven) March 1949 - March 1949

Scope and Content: Appearing in the AIEE publication Electrical Engineering, this article discusses the basic principles of electric shock and the physiological condition which result from shock.

Folder : Reprint - Electric Defibrillation (Kouwenhoven and Milnor) March 1955 - March 1955

Creator: Milnor, William R.

Scope and Content: Reprinted from the AIEE journal Electrical Engineering, this article summarizes work being done to develop an effective means of using electric current to recover a fibrillating heart.

Folder : Reprint - Electric Shock (Kouwenhoven) Dec. 1934 - December 1934

Scope and Content: This article appeared in the magazine "Municipal Utilities," a publication of the National Municipal Utilities Association covers the discovery of electric shock and scientific investigations, primarily at Johns Hopkins University, into the effects of electric shock.

Folder : Reprint - Electric Shock (Kouwenhoven) June 1931 - June 1931

Scope and Content: Published in the journal Engineers and Engineering, this paper offers a review of the history of electric shock as well as current experimentation using the rat model by Dr. Kouwenhoven and other scientists.

Folder : Reprint - Electric Shock Effects of Frequency (Kouwenhoven, Hooker and Lotz March 1936 - March 1936

Creator: Hooker, D.R.

Scope and Content: This article was written for the EIEE publication "Electrical Engineering and describes dog experiments which measured heart reactions to electric shock currents of different frequencies.

Folder : Reprint - Electrical Accidents (Kouwenhoven) Sept. 1937 - September 1937

Scope and Content: This article appeared in the AIEE publication "Electrical Engineering" and is an address presented at the celebration of the 25th anniversary of the Hopkins School of Engineering. It discusses the six factors influencing the result of an electric shock, preventive measures and use resuscitation methods.

Folder : Reprint - Electrical Technigues and the Heart in Health and Disease (Knickerbocker and Kouwenhoven) May 1961 - May 1961

Scope and Content: This an an AIEE Conference Paper which focuses on a discussion of the role of electrical measurement as it applies to the field of medicine.

Folder : Reprint - Electricity and the Human Body (Kouwenhoven) Aug 1950 - August 1950

Scope and Content: In this lengthy manuscript Dr. Kouwenhoven explores the factors involved in the flow of electric current through the body, and the many possible bodily effects of this flow. There is no indication where this paper may have been published in its exact form. It contains information found in many of the journal articles he authored.

Folder : Reprint - Exposure of Mice to a Strong AC Electric Field-An Experimental Study (Knickerbocker, Kouwenhoven and Barnes) April 1967 - April 1967

Creator: Knickerbocker, G. Guy

Scope and Content: This paper appeared in the "IEEE Transactions on Power Apparatus and Systems." In it the scientists describe an experiment to determine the effects of long term exposure to electric fields on adult male mice compared to a control group.

Folder : Reprint - External Cardiac Massage March 1961 - March 1961

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: This article appeared In "Spectrum," a publication of Pfizer Laboratories. It is a review of resuscitative techniques and focuses on the newest one developed by Kouwenhoven, Jude and Knickerbocker: closed chest resuscitation.

Folder : Reprint - Field Treatment in Electric Shock Cases - II (Kouwenhoven, Knickerbocker, Milnor and Jude Oct 1958 - October 1958

Creator: Jude, James R.; Knickerbocker, G. Guy; Milnor, William R.

Scope and Content: This paper was presented at the AIEE Winter General Meeting in Jan-Feb 1960 and is a follow-up to a study presented at the same meeting in 1957. It reports additional data on the field treatment of men made unconscious by electric shock.

Folder : Reprint - Field Treatment of Electric Shock Cases I (Kouwenhoven and Milnor) Oct 1956 - October 1956

Creator: Milnor, William R.

Scope and Content: This paper was presented at the January 1957 Winter General Meeting of the AIEE and subsequently reprinted in the proceedings and in the journal Electrical Engineering. It discusses the effects of electric shock on respiration and circulation. It includes a description of an apparatus for treating ventricular fibrillation.

Folder : Reprint - Heart Activation in Cardiac Arrest (Kouwenhoiven, Jude and Knickerbocker) Feb 1961 - February 1961

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: This article appeared in an American Heart Association publication and it discusses the Hopkins Closed-Chest A.C. Defibrillator (its development, scientific significance and clinical applications) in use since 1957. A photograph of the machine and diagrams accompany the text.

Folder : Reprint - How Electric Shock Affects the Body (Kouwenhoven) Feb. 1935 - February 1935

Scope and Content: This article appeared in a publication entitled "National Safety News" and discusses the injuries caused by various electrical factors: type of circuit, voltage, points of contact, human resistance, damage to nervous system and recovery by countershock.

Folder : Reprint - Injuries Produced by Contact with Electric Circuits (Longworthy and Kouwenhoven) Nov. 1932 - November 1932

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: This reprint from The American Journal of Hygiene reports recent studies of electric shock and suggestions for treatment.

Folder : Reprint - Medical Evaluation of Man Working in AC Electric Fields (Kouwenhoven, Langworthy, Singewald, Knickerbocker) April 1967 - April 1967

Creator: Knickerbocker, G. Guy; Langworthy, Orthello R. (Orthello Richardson), 1897-1996; Singewald, Martin L.

Scope and Content: This paper was presented at an IEEE meeting and appeared in the "IEEE Transactions on Power Apparatus and Systems. It is a study of the medical effects of HV 60-Hz ac fields on human beings.

Folder : Reprint - Medical Follow-Up Study of High Voltage Linemen Working in AC Electric Fields (Singewald, Langworthy, Kouwenhoven) Sept 1972 - September 1972

Scope and Content: This paper was presented at an IEEE meeting and discusses the final results of a 9-year study of the effects of linemen working in electric fields. The medical study was done at The Johns Hopkins Hospital. It confirmed an earlier conclusion that the health of the workers was not effected.

Folder : Reprint - Nerve injuries from Electric Shock (Kouwenhoven and Langworthy) Dec. 1931 - Dec. 1931

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from Electrical Engineering, this article discusses lab experiments on rats to determine effects of electric shock on the central nervous system.

Folder : Reprint - Portable Defibrillator (Knickerbocker, Becker and Kouwenhoven) Oct 1961 - October 1961

Creator: Knickerbocker, G. Guy

Scope and Content: This AIEE discusses the electrical and mechanical design of the portable defibrillator and its uses.

Folder : Reprint - Progress Report on Electrical Resuscitation Research Project (Kouwenhoven) Dec 1954 - December 1954

Scope and Content: This article appeared in The Edison Electric Institute Bulletin and is the text of a report presented at a meeting of the EEI Accident Prevention Committee. It discusses various aspects of electric shock and is an appeal for continuing funding from the Institute for the work being done at Hopkins on the closed chest method of resuscitating the heart.

Folder : Reprint - Recent Advances in Emergency Resuscitation: External Cardiac Massage and Defibrillation (Jude and Kouwenhoven) Sept 1960 - September 1960

Scope and Content: This is the transcript of a panel discussion presented at a meeting of the Maryland Medical and Chirurgical Faculty. Drs. Jude and Kouwenhoven spoke about external cardiac massage and defibrillation advances and Drs. Paeter Safar and Paul Hackett spoke about modern methods of artificial respiration.

Folder : Reprint - Recent Development in Field Treatment of Electric Shock (Horatio O. Baker) Oct 1960 - October 1960

Scope and Content: This article was written by a professional engineer for the NY State Telephone Assn. and references the work being done by Dr. Kouwenhoven and associates in the field of resuscitation after electric shock.

Folder : Reprint - Simple Closed-Chest Massage Revives Cardiacs Quickly April 1961 - April 1961

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: Appearing in the "Medical News," this is an article (with photos) about Dr. Kouwenhoven and his team's development of closed-chest cardiac massage and its great success.

Folder : Reprint - Status of Closed Chest Cardiac Massage (Kouwenhoven and Knickerbocker) July 1964 - July 1964

Creator: Knickerbocker, G. Guy

Scope and Content: This is an AIEE conference paper which discusses the development of the closed chest defibrillator and the results of its use at Hopkins.

Folder : Reprint - The Current Flowing Through the Heart Under Conditions of Electric Shock (Kouwenhoven, Hooker and Langworthy) April 1932 - April 1932

Creator: Hooker, Donald R.; Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from The American Journal of Physiology, this paper examines rat experiments to determine the effect of electric shock on the heart.

Folder : Reprint - The Development of a Portable Defibrillator (Kouwenhoven and Knickerbocker) Oct 1961 - October 1961

Creator: Knickerbocker, G. Guy

Scope and Content: This AIEE Safety Committee paper discusses the development of the Hopkins Defibrillator.

Folder : Reprint - The Effects of Electricity on the Human Body (Kouwenhoven) Dec 1964 - December 1964

Scope and Content: This article appeared in the "Bulletin of The Johns Hopkins Hospital" and is an historical review of scientific interest in the effects of electricity on the human body. It concludes with a discussion of the successful work on the defibrillator currently being done by Dr. Kouwenhoven and his team.

Folder : Reprint - The Effects of Electricity Upon the Human Body (Kouwenhoven) May 1952 - May 1952

Scope and Content: Presented at a colloquium at the Ballistic Research Laboratories, this paper summarizes what is known about the flow of electric current through the body and the resulting effects.

Folder : Reprint - The External Defibrillator (Kouwenhoven, Jude and Knickerbocker) Oct 1962 - October 1962

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: Presented in Mexico at a cardiology meeting, this paper discusses the development and electrical aspects of the Hopkins defibrillator developed by Dr. Kouwenhoven and his team.

Folder : Reprint - The Gray Area (Kouwenhoven) Oct 1965 - October 1965

Scope and Content: This paper appeared in "Industrial Medicine and Surgery" and was presented at the 53rd National Safety Congress. It discusses the effects of electric shock on breathing and the heart and the need to resuscitate and keep oxygenated blood flowing during the critical time known as the gray area (2-6 minutes after the heart stops and before the brain is biologically dead).

Folder : Reprint - The Injuries produced by Surge Discharges (Kouwenhoven and Langworthy Aug. 1931 - Aug. 1931

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from The Electric Journal, this paper focused on the results of rat experiments using the impulse generator and measuring surge effects on various parts of the body.

Folder : Reprint - The reactions of the Organism to Repeated Electric Shocks (Langworthy and Kouwenhoven) May 1932 - May 1932

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from the Journal of Industrial Hygiene, this paper focuses on the observation that rats who survived an initial shock were less affected by subsequent shocks.

Folder : Reprint - Traumatic and Therapeutic Effects of Electricity on the Heart (Kouwenhoven) Aug 1967 - August 1967

Scope and Content: This is a progress report on an NIH grant for the period 1963-67. It covers research on defibrillation techniques, cardiopulmonary resuscitation and effects of exposure to electrical fields.

Folder : Reprint - Troubles Physiologiques/Par Le Contact Avec Les Circuits Electriques (Kouwenhoven and Langworthy - in French translation) 1932 - 1932

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Extent: 2 copies

Scope and Content: Published by the Congres International D'Electricite Paris 1932, this paper explores Kouwenhoven and Langworthy's experimental work on the effects of electric current using the animal model.

Folder : [Summer General Meeting AIEE Montreal, Canada June 24-28, 1957 - April-June 1957](#)

Scope and Content: This folder contains 2 papers on Hazards in Reactor Operation (Parts I and II) which were presented by other researchers at the AIEE Conference Safety Session .

Folder : [Talk - AIEE Meeting Pittsburgh PA 1948](#)

Scope and Content: This is a paper entitled "Why Are Low Voltage Shocks Hazardous?" which was presented at an American Institute of Electrical Engineers meeting in Pittsburgh in Jan., 1948.

Folder : [The Polytechnic Engineer 1910 - 1910](#)

Scope and Content: This book is a publication by the undergraduates of the Polytechnic Institute of Brooklyn. William Kouwenhoven has an article in the publication entitled "Dr. Robinovith's Method of Resuscitation." It's a discussion of the effects of electric shock on the human body and the recent work of Dr. Louise Robinovith is using electric shock to resuscitation a patient.

Folder : [The Treatment of Ventricular Fibrillation Using a Capacitor Discharge - 1954](#)

Creator: Milnor, William R.

Scope and Content: This folder contains several drafts of a JHU Schools of Engineering and Medicine collaborative paper entitled "Treatment of Ventricular Fibrillation Using a Capacitor Discharge." It was authored by Dr. Kouwenhoven and Dr. Milnor and published in the American Journal of Physiology.

Folder : [Wilmington Section Instrument Society of America "Human Safety" - 1968-70](#)

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and the Instrument Society of America about his presentation of a paper at their November 1968 meeting in Wilmington Delaware at the Hotel Dupont. The paper entitled "Human Safety and Electric Shock" discusses the effects of shock on the body , both traumatic and therapeutic, and is included in this folder.

Box 97P: KOUWENHOVEN PAPERS - 1949-1972

Scope and Content: Correspondence, Notes, Cases, Reports, Reprints

File : [AIEE - Kouwenhoven for President 1944-45 - 1944](#)

Scope and Content: Several copies of the resume submitted in support of Dr. Kouwenhoven's candidacy for the presidency of the AIEE are in this folder.

File : [American Welding Society - Preparation of Papers for Presentation - 1934-46](#)

Scope and Content: Welding research papers and correspondence concerning them are included in this folder.

File : [Attempts to get Pressure Cycling Devices Prohibited in Cardiac Cases. - Nov. 1964](#)

Scope and Content: Several letters from Dr. Kouwenhoven to Power Company executives about his attempt to have the Medical Task Force endorse the idea of prohibiting the use of Pressure Cycling Devices in cardiac cases.

File : [Baltimore Gas & Electric Co. - Fatal Case August 5, 1964 - August 1964](#)

Scope and Content: This folder contains reports, photos and Dr. Kouwenhoven's personal notes on an electrical wire fatality that occurred in Baltimore when two men were using a crane to hoist a large metal tank onto a truckbed.

File : [Bernie Boykin York, Penna. - CCCM Device - 1961-62](#)

Scope and Content: Correspondence between Dr. Kouwenhoven and Mr. Bernie Boykin of the Boykin Products Company about development of an efficient cardiac massage machine is found in this folder. Several drawings and charts are included.

File : [Biomedical Engineering - Graduate Program - 1961-1967](#)

Scope and Content: This folder contains materials about the Hopkins graduate program in Biomedical Engineering references to collaborations with scientists from the Medical School.

File : [Cardiopulmonary Resuscitation \(Proposed instructions-Power Companies\) - 1962-64](#)

Scope and Content: This folder contains several written exchanges between Dr. Kouwenhoven and Power Company Safety Directors about their instructions to their supervisors and foreman on using cardiac resuscitation for electric shock.

File : [Cases of CCCM: \[patient name redacted\], Easton Md. - 1968](#)

Scope and Content: Correspondence between Dr. Kouwenhoven and Easton Memorial Hospital about the treatment of patient is in this folder.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File : [Cases of CCCM: \[patient name redacted\], Potomac Electric Power Co. - 1963](#)

Scope and Content: This folder contains correspondence about patient and copies of his ECG readings. He survived an electric shock with use of CPR.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File : [Cases of ECM - 1961-66](#)

Scope and Content: This is a list of the use of ECM , including data on voltage and saved vs. fatal results.

File : [CCCM - Inquiries about through 1962 - 1960-1962](#)

Scope and Content: Various correspondence between Dr. Kouwenhoven and police and fire officials and other scientists about use of closed cardiac massage are found in this folder.

File : [CCCM and Defibrillation Canada & Mexico, Australia & Africa - 1951-1964](#)

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and physicians and hospital officials abroad about closed chest cardiac massage and use of the defibrillator.

File : [CCCM and Defibrillation England and Europe - 1960-1964](#)

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and various physicians and electrical company administrators in European countries about the use of the defibrillator at Hopkins and abroad.

File : [External Cardiac Massage 1963 Resuscitation Cases - 1963](#)

Scope and Content: This folder has one employee work injury report from the Potomac Electric Power company - workman survived electric shock with medical treatment.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File : [Freeze-Wait-Reanimate: Life Extension Society - 10/64-1/65](#)

Scope and Content: In this folder is a letter from Ev Cooper, President of Life Extension Society soliciting Dr. Kouwenhoven's opinion on the future use of the freeze-wait-reanimate technique in saving lives. No response is included.

File : [Hazards in OR and ICU - 1964-67](#)

Scope and Content: This folder contains a variety of documents addressing electrical safety in the operating room, electrical work injuries and work Dr. Kouwenhoven did as a member of the IBM Biological-Medical Hazards Group, NFPA Committee on Hospitals.

File : [High Voltage - 1969-74](#)

Scope and Content: This folder contains a variety of articles and booklets on the topic of high voltage conferences, testing procedures and advances in equipment.

File : [Injuries Produced by Contact With Electric Circuits: A Review - unknown](#)

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Orthello R. Langworthy (Dept. of Neurology) and William Kouwenhoven (Electrical Engineering), both from JHU, co-authored this 59-paged review. The purpose of the paper was to report recent studies of electric shock, attempts to correlate the experimental material and to suggest treatments and subjects for future research.

File : [Inquiries re Constructing the Hopkins A.C. Defibrillator - 1957-1963](#)

Scope and Content: In this folder Dr. Kouwenhoven shares information with other scientists about constructing their own defibrillators. Note: The Hopkins defibrillator was not patented.

File : [Inquiries re Mine Safety - Portable Defibrillator & Purchase AMBU - 1961-1963](#)

Scope and Content: Correspondence between Dr. Kouwenhoven and several physicians and other medical personnel about purchasing the portable defibrillator and the AMBU Manikin from the Mine Safety Appliances Company is found in this folder.

File : [Inquiries re Purchase Hopkins A.C. Defibrillator 1957-62 - 1957-1962](#)

Scope and Content: This folder contains letters of correspondence between Dr. Kouwenhoven and many hospitals, physicians, dentists and electric company administrators from around the country about purchasing the closed chest defibrillator.

File : [Inquiries re Purchase Hopkins A.C. Defibrillator 1960-68 - 1960-1968](#)

Scope and Content: This folder contains extensive correspondence between Dr. Kouwenhoven and physicians, scientists and mine safety companies around the world about the purchase and use of the Hopkins defibrillator.

File : [Johns Hopkins University Budgeting and Procedures Manual - 1971-1974](#)

Scope and Content: This folder contains the Budgeting and Procedures Manual and updated information from the Comptroller's Office.

File : [Meeting-Pressure Cycling Devices JH Hospital 12/4/64 - 1965-1969](#)

Scope and Content: In this folder is correspondence between Dr. Kouwenhoven and others about the ineffectiveness of using automatic breathing devices as part of resuscitating electric shock victims. Two copies of the 1964 revised Edison Electric Institute's "Resuscitation Manual: A Guide for Electric Utility Companies" are included.

File : [Obligations - Paper - October 1950](#)

Scope and Content: This folder contains several copies of a paper presented by Dr. Kouwenhoven at an AIEE meeting in Baltimore entitled "Obligations of the Engineer." It expresses his views on the importance of developing well rounded young engineers.

File : [Skrivan Defibrillator Mfg. - 1958-64](#)

Scope and Content: This folder contains various orders for specialty wiring and transformers and correspondence between Dr. Kouwenhoven and Joseph Skrivan who's company in Towson, Md. was producing the defibrillators being tested and used at Hopkins.

File : [Stephenson Corporation Red Bank, N.J. - Elec. Shock Research - 1954-61](#)

Scope and Content: Correspondence between Dr. Kouwenhoven and Mr. William Stephenson, President of the Stephenson Corporation concerning the development and production of a defibrillator are found in this folder. Also of concern was the topic of university inventions and patent rights.

File : [The Development of the Defibrillator by W. B. Kouwenhoven - September 1969](#)

Scope and Content: This article by Dr. Kouwenhoven ("The Development of the Defibrillator") was printed in the Annals of Internal Medicine, Vol. 71, No. 3, September 1969.

File : [The Johns Hopkins University School of Medicine Purchasing Manual - May, 1968](#)

Scope and Content: Rules and procedures for making purchases in the School of Medicine are covered in this manual.

File : [University Rules and Regulations, etc. - 1966-68](#)

Scope and Content: This folder contains various memorandum and policy statements related to research grants, training grants, contracts in the School of Medicine, reimbursement of travel costs, gift accounts and payroll policies.

File : [Use of Pressure Cycling Devices - EEI Power Companies - 1964-65](#)

Scope and Content: Correspondence between Dr. Kouwenhoven and various power company officials regarding their experiences using external cardiac resuscitation and use of mechanical resuscitators. This exchange led to a recommendation to advise against the use of mechanical resuscitation when external heart compression is being used.

File : [Welding Papers - Translations - 1937-40](#)

Scope and Content: This folder contains several welding research papers in translation sent to Dr. Kouwenhoven by the Welding Research Committee of the Engineering Foundation. They appear to be from Germany.

File : [Welding, Electric Committee on 1949-52 - 1949-51](#)

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and several members of the A.I.E.E. Electric Welding Committee concerning research projects and meetings.

Box 99P: KOUWENHOVEN PAPERS

Scope and Content: Papers, References, Reprints, Manuscripts, Correspondence, Drafts of American Standard Definitions of Electrical Terms, Bibliography and Biographical Articles about Kouwenhoven

File : [American Standard Definitions of Electrical Terms Final Draft Group 45 Electromechanical Devices](#)

Scope and Content: Defined terms in this document are divided into two sections: Elevators and Cranes Derricks Hoists.

File : [American Standard Definitions of Electrical Terms Final Draft Group 55](#)

Scope and Content: The electrical definitions in this document relate to Photometric Quantities, Radiation, Color, Illuminants, and Photometric Standards and Tests.

File : [American Standard Definitions of Electrical Terms Final Draft Group 70 - Electron Devices Aug. 1954 - August 1954](#)

Scope and Content: This folder contains a 53 page document of definitions relating to electron devices and an additional listing entitled "International Electrotechnical Vocabulary."

File : [American Standard Definitions of Electrical Terms Group 05 Final Draft - General \(Fundamental and Derived\) Terms - 1948](#)

Scope and Content: This is the third and final draft of a 220 page document which covers definitions of general electrical terms. It was part of the work of the American Institute of Electrical Engineers (AIEE).

File : [American Standard Definitions of Electrical Terms Group 10-Rotating Machines-Final Draft - Dec. 1953](#)

Scope and Content: Proposed electrical definitions relating to rotating machines are in this 47 page document along with a notation that it was approved in 1954.

File : [American Standard Definitions of Electrical Terms Group 60 Final Draft Electrochemistry and Electrometallurgy 1951 - 1951](#)

Scope and Content: This is an 11 page document of defined electrical terms relating to the fields of electrochemistry and electrometallurgy.

File : [American Standard Definitions of Electrical Terms Group 95-Miscellaneous First Draft - February 28, 1951](#)

Scope and Content: Miscellaneous electrical terms are defined in this 3- page document.

File : [Data Edison Medal - Dec. 1961 - March 1962](#)

Scope and Content: Included in this folder are various newspaper clippings and journal articles about Dr. Kouwenhoven receiving the prestigious Edison Medal for his "...investigations of the effects of electricity on the human body with the successful development of countershock for the cure of fibrillation of the heart." Also included is his resume and list of his publications which were used in a pamphlet promoting his candidacy for the American Institute of Electrical Engineers presidency (also found in this folder).

File : [Electric Fences - Chas. F. Dalziel - 1949-50](#)

Scope and Content: This folder contains a reprint of a paper entitled "Electric Fences" by Charles F. Dalziel which was presented at the 1949 Winter Meeting of the AIEE. There are also copies of commentaries on the paper and correspondence between Professor Dalziel and Dean Kouwenhoven.

File : [Electric Shock - Pole Top Investigation Experimental Data](#)

Scope and Content: Folder contains a list of commentaries entitled: "Asphyxia - Notes from Yandel Henderson's book 'Adventures in Respiration'."

File : [JHU School of Engineering Report to the Governor Jan. 1954 - January 1954](#)

Scope and Content: This is a formal report from the School of Engineering to the Governor and General Assembly of Maryland on its 1953 activities, achievements, needs and scholarship awards. The previous Dean of the school, Dr. Kouwenhoven, prepared this annual report from 1939 to 1953. His biography and photo are included in this report.

File : [List of Publications-Effects of Electricity on the Human Body WBK 1930-1958 - 1930-1958](#)

Scope and Content: The list of publications which Dr. Kouwenhoven authored or co-authored spans his scientific interests from electric shock injury to resuscitation and defibrillation.

File : [Polymen Publication Jan. 1954 - January, 1954](#)

Scope and Content: Published by the Brooklyn Polytechnic Alumni Association, this journal includes a photo and short biography of Dr. Kouwenhoven, class of 1906, in an article entitled "Poly Men Listed in 'Who's Who in America'." The bios appear to be copies of the entries from the book.

File : [Purchasers of CCCM Film - 1960-64](#)

Scope and Content: This folder contains the records of the 104 sales of the film "Closed Chest Cardiac Massage" and correspondence between Dr. Kouwenhoven and the purchasers. Included are many electric companies, Heart Associations and cities.

File : [Requisitions 1957-1964 - 1957-64](#)

Scope and Content: Purchase requests and forms requesting transfer of services/materials by Dr. Kouwenhoven's office are contained in this folder.

File : [The Bridge - Eta Kappa Nu Publication Winter 1957 - Winter 1957](#)

Scope and Content: The national engineering honor society Eta Kappa Nu included a biography of Dr. Kouwenhoven in this edition of its journal.

File : [The Johns Hopkins Magazine June 1953 - June, 1953](#)

Extent: 2 copies

Scope and Content: A brief article and photograph of Dr. Kouwenhoven appear in an article entitled "Three Retiring Hopkins Leaders - and a Pair of Their Successors." The other two featured in the article are Lowell Reed, vice-president of the Hopkins Hospital and University and Alan Chesney, dean of the School of Medicine.

File : [The Vector - JHU School of Engineering 1950-1953 - June 1950-November 1953](#)

Scope and Content: The Vector was a publication of the Johns Hopkins Student Engineers. This folder contains photocopies of articles related to Kouwenhoven from the June 1950 issue and two complete issues of the Vector (November 1952 and November 1953). The 1953 issue features a biographies of Dr. Kouwenhoven and Robert H. Roy the new Dean.

Box 100P: KOUWENHOVEN PAPERS

Scope and Content: Subject Files, Artificial Respiration, A-D, Reprints, Clippings, Papers Presented, Notes, Cases, list of dogs, Correspondence, Photographs

File : [A. C. Defibrillation of Man Cases - 1957](#)

Scope and Content: This folder contains Dr. Kouwenhoven's notes on 4 cases at Hopkins where closed chest defibrillation was used and some of the actual EKG readings.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File : [Artificial Respiration - Correspondence #2 - 1956-1962](#)

Scope and Content: A wide range of correspondence between Dr. Kouwenhoven and other researchers, government agencies, JHU personnel and electric company officials on the the topic of artificial respiration are in this folder.

File : [Artificial Respiration - Devices - ca 1965](#)

Scope and Content: Information leaflets on the devices known as the AMBU E-Valve, the AMBU Ruben Resuscitator amd the UNI/FLEX Rescue Breather are found in this folder.

File : [Artificial Respiration #1 EEI 1952-1957 - 1952-1957](#)

Scope and Content: This folder contains various correspondence between Dr. Kouwenhoven and others on the topic of artificial resuscitation: actual cases, scientific exchanges with electric company officials and other researchers, and commentaries on various resuscitation methods and mechanical devices.

File : [Artificial Respiration \(reprints, articles, etc.\) - 1956-67](#)

Scope and Content: Various articles, pamphlets, training instructions and manuals relating to proper use of artificial resuscitation are included in this folder.

File : [Atrial Fibrillation - Arrythmias - 1963-68](#)

Scope and Content: This folder contains copies of correspondence between Dr. Kouwenhoven and various other scientists relating to research and clinical observations on electrical shock and arrythmias.

File : [Batronic Ventilaide \(Resuscitator\) - Artificial Respiration - 1956-1964](#)

Scope and Content: Included here is an article on the use of an electronic glass wand developed by Batrow Laboratories in Connecticut for resuscitation and Dr. Kouwenhoven's comments on its practical value.

File : [Betz - Defibrillator Equipment - 1954-58](#)

Scope and Content: This folder contains various correspondence between Dr. Kouwenhoven and Dr. Paul Betz of the Baltimore Gas and Electric Co. and with officials of the Levinthal Electronic Products, Inc. The subject is the building of an external defibrillator. Two photos of the engine generator unit discussed in Dr. Getz's paper "Field Current Sources for Electric Defibrillation" are included as are several drawings of curcuitry done by Dr. Kouwenhoven.

File : [Betz - Electric Shock Equipment Data 1952-53 - 1952-54](#)

Scope and Content: Curves, charts and formulas relating to electric shock and curcuits are found in this folder in addition to some correspondence about the same subject matter.

File : [Betz - Generator Resus. Current - 1954](#)

Scope and Content: Technical information about a voltage regulator and alternating current generaor produced by Fidelity Instrument Corporation is in this folder.

File : [Birther Corp. Defibril. Los Angeles - 1961](#)

Scope and Content: Advertisements for the Birther Defibrillator and correspondence between Dr. Kouwenhoven and the company are found in this folder.

File : [Brochures sent by Utilities, etc. - 1968](#)

Scope and Content: Included are brochures from Con Edison, NJ Electric and Gas Co., Florida Power and Light Co. relating to use of CPR and an article about a Rockford, IL CPR training program. Several small photos accompany the latter.

File : [Burns - 1954-68](#)

Scope and Content: Various correspondence and papers are included in this folder which relate to burns caused by electric shock.

File : [Cardiac Arrest - Trauma and Treatment of Cases - 1954-69](#)

Scope and Content: This folder contains a variety of news clippings, professional articles and papers on the subject of the use of cardiac resuscitation, as well as Dr. Kouwenhoven's hand-written notes and commentaries related to articles on the topic written by other scientists.

File : [Cardio-Pulmonary Resuscitation \(Heart Assoc of MD\) Revision Manual - 1962-69](#)

Scope and Content: Dr. Kouwenhoven worked on a revised edition of the Maryland AHA's publication entitled "Cardio-Pulmonary Resuscitation: A Manual for Instructors-Prepared and Published by the Heart Association of Maryland." The original manual, his suggestions for changes and other related articles are included in this folder.

[File : Cases of CCCM - 1960-65](#)

Scope and Content: Cases described in this folder cover a range of uses of external cardiac massage, from electric shock to drownings, to gas poisoning, and cardiac disease. It was also used on an African lion. News clippings and letters from grateful patients are included.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

[File : Cases Saved by Artificial Respiration - 1963-68](#)

Scope and Content: Several articles about successful use of respiration without cardiac massage and a letter by Dr. Kouwenhoven about the topic are included in this folder.

[File : CCCM - Fire Department - May, 1960](#)

Scope and Content: A letter inviting Dr. Kouwenhoven to the Fire Department graduation exercises, an editorial for the International Medical Digest entitled "Resuscitation Outside the Hospital," and a news clipping from Milwaukee about the use of artificial respiration without cardiac massage are found in this folder.

[File : Chicago Paper - Status of Closed Chest Cardiac Massage IEEE Oct. 21, 1964 - 1964-1965](#)

Scope and Content: This folder includes a copy of the paper presented (Status of Closed Chest Cardiac Massage), correspondence about having it printed in the IEEE publication Transactions and the galley.

[File : Conductive Clothing - June 21, 1969](#)

Scope and Content: Article entitled "Graphite Fibers Coming of Age" from Science news

[File : Counter Shock Apparatus Paper](#)

Creator: Blalock, Alfred, 1899-1964.

Scope and Content: Included in this file are the hand-written version and final copies of a paper entitled "Apparatus for Electrical Arrest of Ventricular Fibrillation" by W.B. Kouwenhoven, Jerome Kay and Alfred Blalock, as well as supporting diagrams and photos. There is also a 1951 correspondence between Dr. Kouwenhoven and V.L. Vosburgh about an electrocardiac resuscitator developed by the General Engineering Laboratory in Schenectady, N.Y.

[File : Debibrillation - Horse - May 1972](#)

Scope and Content: Reprint of an article entitled "Trans-Chest Electrical Ventricular Debibrillation of a 277 Kg Horse."

[File : Defibrillation Data and Brochures - 1954-1971](#)

Scope and Content: This folder contains a wide variety of information, reprints, articles and brochures relating to different defibrillators from the US and abroad.

File : Defibrillator - Serial Discharge Generator Mine Safety Company - May 27, 1958

Extent: 4 booklets

Scope and Content: This folder contains 4 copies of the "Operational Manual For Serial Discharge Generator Mark 1 Mood O" printed by the Catalyst Research Corporation of Baltimore.

File : Defibrillator Demonstrations 1956- - 1956-57

Scope and Content: This folder contains the program from a Postgraduate Course in Cardiac Medicine, Oct. 18, 1956, during which the 1st public demonstration of the defibrillator occurred, as well as Dr. Kouwenhoven's notes on 2 subsequent demonstrations.

File : Dental Publications Regarding ECM - 1965 - 66

Scope and Content: Correspondence in this folder relates to a chapter Dr. Kouwenhoven wrote for a book entitled "Dental Clinics of North America." Also included are reprints of articles on external cardiac massage and management of medical emergencies in the dental office published in the Journal of the Canadian Dental Association.

File : Discharge Characteristics Mono and Di Phasic. Defib. Grayson - 1963

Scope and Content: Photographs of defibrillator responses (Negovsky Russian model and Mine Safety Defibrillator) are accompanied by correspondence from Laurence Grayson, Assistant Professor of Electrical Engineering at Hopkins.

File : Dr. Arthur Keith-Swenson - Electric Shock from Polishing Machine - "frozen" tissues - 1966-67 - 1966-67

Scope and Content: Contained in this folder is correspondence between Dr. Kouwenhoven and a Brooklyn, NY physician about a patient of his who suffered a shock while using an electric floor polisher.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File : Drugs-Arlidin CCCM - Aug.-Sept. 1962

Scope and Content: Found in this folder is one set of correspondence between Dr. Kouwenhoven and Franklin Teller, MD of the U.S. Vitamin & Pharmaceutical Corp. regarding a sample of a new vasodilator (Arlidin) the latter sent to the doctor.

File : EEI 1964 Resuscitation Manual - 1962-64

Scope and Content: Included in this folder is an edited copy of the Edison Electric Institute's "Resuscitation Manual: A Guide for Electric Utility Companies" and correspondence between Dr. Kouwenhoven and Mr. Robert Coleman of the Baltimore Gas and Electric Company about the manual.

File : Electric characteristics of Human Body Tissues

Scope and Content: Hand written notes about conductivity of cells in different organs of the body are in this folder.

File : Electric Shock - Article Reprints - Misc. - 1958-1971

Scope and Content: Articles on the theory of conductance, reducing shock hazard, intensity of electric shock, current leakage and circuit protection in swimming pools.

File : Experimental Data CCCM - 1961

Scope and Content: This folder contains one page of Dr. Kouwenhoven's hand written notes on a report made to him by Dr. Wilder from City Hospital on Closed Chest Cardiac Massage experiment results (dogs).

File : External Cardiac Massage - Pumps - April 1962

Scope and Content: Two items are in this folder: 1) A Cleveland Clinic Quarterly magazine with a highlighted article sent to Dr. Kouwenhoven entitled "An Intrathoracic Pump to Replace the Human Heart: Current Developments at the Cleveland Clinic" by Willem J. Koloff, MD and 2) Notes Dr. Kouwenhoven made about an article by Marvin M. Nachlas about the Westinghouse Massage Machine.

File : Guy R. Radley - Artificial Respiration - 1953-60

Scope and Content: A long term correspondence between Dr. Kouwenhoven and Guy Radley, a safety consultant from White Plains NY on research each is doing on the efficacy of artificial resuscitation methods. Their presentations at the AIEE meetings is also discussed. Copies of Radley's papers are included, as is other related correspondence between Dr. Kouwenhoven and AIEE officials.

File : HLR Heart-Lung Resuscitator (Archer Gordon) & Monopulse 807 - 1965

Scope and Content: This folder contains brochures on the Travenol HLR Heart-Lung Resuscitator and its Monopulse 807 Defibrillator.

File : Hopkins Defibrillator

Scope and Content: Multiple copies and the original ditto of an information sheet entitled "Principal Items - Hopkins Defibrillator" are found in this folder. It is a listing of the components used in this defibrillator.

File : Info - Articles - Clippings - 1962-68

Scope and Content: This folder contains miscellaneous news clippings sent to Dr. Kouwenhoven during the 1960's relating to successful use of closed cardiac message and the defibrillator.

File : List of Dog Experiments 1956-1963 - 1956-1963

Scope and Content: This folder contains a hand-written log of dog experiments related to the study of electrical shock performed over an eight year period.

File : List of Dogs - 1951-1957

Scope and Content: Dr. Kouwenhoven's hand written logs on the 408 dogs used over a 6 year period of time.

File : Mechanical - CCCM Devices - 1961-66

Scope and Content: This folder contains various brochures about cardiac compression machines, cardiac presses, other mechanical external cardiac devices, and the Resusci-Anne. Several pieces of correspondence between Dr. Kouwenhoven and the developers of these devices are also included.

File : Morris Defibrillator 1952 - Oct. - Nov. 1952

Scope and Content: Contained in this folder is information about the Morris Defibrillator (invented by a Naval Engineer) and Dr. Kouwenhoven's assessment of its value.

File : [Papers - 1964-65](#)

Scope and Content: Miscellaneous papers written by other scientists relating to electric shock and blood flow.

File : [Power Company Cases of CCCM - Folder #1 1962, 1964, 1965 - 1962-1966](#)

Scope and Content: Reports on fatal electric shock accidents and reports on successful resuscitation came to Dr. Kouwenhoven from many public service companies nationwide and are found in this folder. Dr. Kouwenhoven's correspondence with these companies was extensive and is continued in a second folder.

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File : [Power Company Cases of CPR - Folder #2 - 1966-68](#)

Scope and Content: This folder is a continuation of reports Dr. Kouwenhoven received from many different power companies across the nation about fatal electric shock accidents and successful use of resuscitation. His responses are included.

File : [Rand Development Corp. - Russian Defibrillator - Feb.-April 1963](#)

Scope and Content: This folder contains the brief correspondence between Dr. Kouwenhoven and H. J. Rand regarding using a Russian Discharge Defibrillator and the MD-33 Rand Discharge Defibrillator in future experiments.

Box 101P: KOUWENHOVEN PAPERS

Scope and Content: Subject Files D-Z

File 101P: [\[name redacted\] Case \(Kentucky Power Company\) - 1964-1965](#)

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File 101P: [A.C. Defibrillator- Publicity and its Use - 1957-1959](#)

File 101P: [AC Closed Chest Defibrillator - early 1960's](#)

Extent: multiple copies

Scope and Content: Multiple copies of a brochure describing the Hopkins A.C. Closed Chest Defibrillator are in this folder.

File 101P: [AC Defibrillator Electrodes- Open Chest Corres. - 1957-1959](#)

File 101P: [AR- BPAL- PT- Schafer - 1958-1971](#)

File 101P: [Bethlehem Steel Company Defib. Confer. Sparrows Point - 1963](#)

File 101P: [Cambridge External Defibrillator - 1962-1963](#)

File 101P: Correspondence Regarding Movie on Defibrillation- DOG - 1958-1961

File 101P: D.C. Defibrillator (Amer. Optical- Dr. Lown) - 1962-1964

File 101P: Defib. 400 Equipment - 1954-1955

File 101P: Defibrillations, Also Catalyst Models - 1955-1960

File 101P: Defibrillator - 1970

File 101P: Defibrillator (Dr. Bahnson) - 1954-1958

File 101P: Defibrillator- 1959-1961 - 1959-1961

File 101P: Defibrillator- Advertisements - 1960-1963

Scope and Content: Materials from various companies producing equipment for use in electrical stimulation of the heart are in this file.

File 101P: Defibrillator Characteristics- R, Volts, etc. - 1962-1963

File 101P: Defibrillator Equipment- Timer Data- Johns Hopkins Hospital - 1955-1966

Scope and Content: Correspondence between Dr. Kouwenhoven and several companies about the purchase and use of circuit timers in his electrical current research.

File 101P: Defibrillator Sign Out Sheet - 1959-1961

File 101P: Defibrillator- Single Cycle AC - 1963-1967

File 101P: Defibrillator Studies - 1963-1964

File 101P: EKG Records- Lightning and Electric Shock Cases - 1955-1968

Creator: Taussig, Helen B. (Helen Brooke), 1898-1986.

Scope and Content: This is a folder containing miscellaneous papers and correspondence related to Dr. Kouwenhoven's research in effects of electric shock (including one authored by Dr. Helen Taussig entitled "Death from Lightning-and the Possibility of Living Again").

File 101P: Elect. Shock- Equipment 1950 - 1951-1962

File 101P: Electric Shock Papers Dr. K Has Read Recently Apr. 1973 - 1973

File 101P: Electrical Defibrillation of Calves, Horses, etc. - 1966-1968

File 101P: Equipment- Motors- General Elec. Catalog - 1966

File 101P: Insulating Oils- B.P. Kang - 1965

File 101P: Magnetic Fields

File 101P: Myocardial Infarction - 1967

File 101P: Pressure Transducers - 1961-1966

File 101P: Residential- Higher Voltages- Safety Considerations

File 101P: Rubber Gloves Accident Death - 1957

File 101P: Rubber Gloves- Skarshaug Testing Lab - 1955-1957

File 101P: Self- Excited Pacemakers - 1971

File 101P: Some Effects of Electrical Discharges on the Heart of Mammals by Prevost & Batelli - 1930

File 101P: South Carolina Electric & Gas Co. (Static Discharge Accident) [name redacted] - 1954

Conditions Governing Access Element: PHI - Includes discussion of individual case.

File 101P: Suggested Revision of D 150-34 T

File 101P: Tampa Electric Co. Fatality - 1963

Conditions Governing Access Element: PHI - Includes discussion of individual case.

Box 102P: KOUWENHOVEN PAPERS - 1960-1973

Scope and Content: Meetings and Presentations, includes correspondence and manuscripts

File : 1962 National Health Forum (Dr. Kennedy) Cleveland Mar. 20-22, 1962 - Oct. 1961 - April 1962

Scope and Content: Correspondence between Dr. Kouwenhoven and organizers of a meeting sponsored by the National Health Council entitled "Accident Prevention and Emergency Care" is found in this folder. Included is the full program from the meeting. Dr. Kouwenhoven conducted a 3 hour session entitled "First Aid - Artificial Respiration and Circulation."

File : Academy of Achievement "Salute to Excellence" Golden Plate Award, San Diego Dec. 27-30, 1962 - October-December, 1962

Scope and Content: This folder contains correspondence between Hy Peskin, Director of the Academy of Achievement, and Dr. Kouwenhoven regarding his invitation and acceptance to being honored by the Academy at its 2nd annual banquet. Short biographies of the honorees (from varied professional fields and from a wide range of ages) are included, as well as a copy of the first year's program. In early December Dr. Kouwenhoven had to cancel his trip to San Diego because of his wife's illness.

File : Ad Hoc Committee on CPR, National Research Council, Washington, May 23, 1966 - May, 1966

Scope and Content: The National Academy of Sciences sponsored this meeting which included reps from many organizations. This folder includes various information related to the meeting.

File : AIEE Middle Eastern District Meeting, Wilmington, DE., May 7, 1962 - February-May, 1962

Scope and Content: Contained in this folder is a program from the meeting and correspondence about Dr. Kouwenhoven having received second place in an American Institute of Electrical Engineers writing contest.

File : AIEE Winter Meeting New York Jan. 27-Feb. 3, 1963 - Dec., 1962-Jan., 1963

Scope and Content: Correspondence regarding Dr. Kouwenhoven's participation in the Safety Committee meeting of the American Institute of Electrical Engineers is contained in this folder. He was scheduled to present a paper on Portable Defibrillators. Also included are the minutes from the previous Safety Committee meeting and two photographs of Dr. Kouwenhoven and a photo of a poster entitled "Steps in External Cardiac Resuscitation."

File : American Heart Assn. NE Regional Conf. on CPR Baltimore Holiday Inn 11/11, 12, 1966 - Oct. - Nov., 1966

Scope and Content: Correspondence regarding Dr. Kouwenhoven's participation in an AHA meeting and the meeting program are in this folder. He agreed to present a report of CPR cases handled by the Baltimore City Fire Department.

File : American Heart Association of Maryland 1962 Annual Meeting Nov. 14, 1962 - 1962

Scope and Content: Contains a flyer announcing the upcoming meeting.

File : American Heart Association, Materials on Cardiopulmonary Resuscitation, Hopkins Apr. 13-14, 1964 - April, 1964

Scope and Content: Correspondence related to the meeting, a program schedule, and supporting Maryland and Michigan Heart Association materials are included in this file.

File : Baltimore Association of Dental Surgeons Jan. 17, 1963, 6:30 PM - October, 1962

Scope and Content: Contains one letter to Dr. Kouwenhoven from John Michael, D.D.S. confirming the date and time of a dental meeting at which Dr. Kouwenhoven will speak.

File : Baltimore Association of Dental Surgeons Jan. 17, 1963 - Oct. 24, 1962

Scope and Content: This folder contains one letter confirming Dr. Kouwenhoven's acceptance of an invitation to speak to the Baltimore Association of Dental Surgeons.

File : Colloquim on Electrical Hazards Harvard Univ. Feb. 27-28, 1962 - Nov. 1961-March 1962

Scope and Content: Contained in this folder is correspondence between Dr. Kouwenhoven and the organizer of a meeting at Harvard University at which he made a presentation and his expenses for the trip.

File : Consolidated Edison Co., Preview "To Save a Life," Union Club N.Y. Oct. 4, 1962 - September-October, 1962

Scope and Content: Contained in this folder is correspondence concerning Dr. Kouwenhoven's attending the preview of a film produce by Consolidated Edison on the newest techniques it is using combining resuscitation and external cardiac massage.

File : CPR 1966 Dr. Flynn - 1966

Scope and Content: This folder includes several schedules for CPR classes at The Johns Hopkins Hospital coordinated by Dr. Kouwenhoven. There is also a script for slides used in the presentations and a list of training films in CPR.

File : [Dr. W. R. Lee Univ. of Manchester England - 1960-1974](#)

Scope and Content: Dr. Lee, Dept. of Occupational Health at the Univ. of Manchester and Dr. Kouwenhoven exchanged many letters and articles relating to exposure to high intensity electrical fields. They shared data and personal views and Dr. Kouwenhoven read and commented on Dr. Lee's M.D. thesis.

File : [Eastern Regional Safety Conference New York April 5-9, 1965 - July, 1964 - June, 1965](#)

Scope and Content: Included here is the correspondence between Dr. Kouwenhoven and the organizers of the conference related to his acceptance of the position as Chairman of the Electrical Hazards Session, as well as a copy of the full program.

File : [EEI Accident Prevention Committee, Grand Rapids, Michigan 1966 - 1966-68](#)

Scope and Content: This folder contains a copy of Kouwenhoven's paper entitled "Ten-Year Analysis of EEI Electric Shock Cases" and later related data (1967-68). He expresses disappointment in the proficiency of using CPR.

File : [First Training Class Duquesne Light Co. Jan 17-18, 1963 - December, 1962-January, 1963](#)

Scope and Content: Registration information for the attendees and itemized expenses for the CPR training session held at Hopkins are included in this folder.

File : [Honorary Membership Veterans of Safety, Chicago, Oct. 29, 1962 - August-October, 1962](#)

Scope and Content: This folder contains various correspondence related to Dr. Kouwenhoven's acceptance of the honor of becoming an honorary member of the Veterans of Safety and attending the banquet with his wife Abigail. A copy of the By-Laws of the organization is included as well as an article announcing the award that appeared in the Baltimore Sun.

File : [Hospitals Comm. NFPA Subcomm. Elec. Hazards Philadelphia 9/24/68 - 1968-1969](#)

Scope and Content: Correspondence about Dr. Kouwenhoven's attendance at a meeting of the subcommittee on electrical hazards of the Hospitals Committee of the National Fire Protection Association in 1968 is contained in this file.

File : [IEEE Sumer Power Meeting - Hotel Jung - New Orleans, July 10-15,1966 - May - July 1966](#)

Scope and Content: Correspondence related to Dr. Kouwenhoven's attendance and presentation at the meeting

File : [IEEE Summer Power Meeting Detroit 6/29/65 - April-June, 1965](#)

Scope and Content: Included in this folder is the program for the meeting,, a list of slides Dr. Kouwenhoven used for his presentation and his hand written notes for the talk, a reprint of the paper entitled "Body Currents in Live Line Working," and correspondence vis a vis the presentation.

File : [IEEE Winter Meeting New York Feb. 2-5, 1964](#)

Scope and Content: Included here are the minutes of the IEEE Safety Committee which Dr. Kouwenhoven attended, a reprint of a paper by the committee for publication ("Electrical Shock Hazard of Underwater Swimming Pool Lighting fixtures" by A.W. Smoot and C.A. Bentel, both IEEE members) and correspondence related to the meeting.

File : [IV World Congress of Cardiology, Mexico City, Oct. 7-13, 1962 - 1962-1964](#)

Creator: Jude, James R.; Knickerbocker, G. Guy; Kouwenhoven, W. B. (William Bennett), 1886-1975

Scope and Content: This folder contains the paper Dr. Kouwenhoven presented at the World Congress ("The External Defibrillator"), correspondence about having the manuscript printed and requests for purchasing a copy of the proceedings and multiple copies of his paper. The manuscript was authored by Kouwenhoven, Jude and Knickerbocker.

File : [Johns Hopkins Hospital F.W. McRae Surgical Society Feb. 23, 1965 Demonstration - Dec., 1964 - Feb., 1965](#)

Scope and Content: This folder contains the program of the meeting during which Dr. Kouwenhoven presented a demonstration of cardiac resuscitation.

File : [Johns Hopkins Hospital, Cardiac Defibrillation, May 13, 1963 Topics in Clinical Medicine meeting - May, 1963](#)

Scope and Content: Included here is the program from the annual Topics in Clinical Medicine (May 13-18, 1963) and Dr. Kouwenhoven's notes from the meeting. He and Dr. Jude also participated in a presentation on Cardiac Defibrillation.

File : [LaFrance, Timothy Frank - 1973](#)

Scope and Content: Contained in this folder are copies of letters written by Mr. LaFrance, a Research Engineer working with Dr. Kouwenhoven, requesting information and parts availability for the external defibrillator. Also included is a letter requesting an application for Mr. LaFrance for membership in the IEEE and a denial letter for reduced rate parking for Mr. LaFrance at Hopkins.

File : [Lecture to Undergraduate Student Body, Shriver, April 17, 1962 - March-April, 1962](#)

Scope and Content: Contained in this folder is correspondence about Dr. Kouwenhoven presenting a lecture entitled "What to Do for the Treatment of Sudden Death" to undergraduate JHU students which was planned by the Student Council Assembly Committee.

File : [Lee, Ralph H. Wilmington, Del. - 1968-1971](#)

Scope and Content: This folder contains a series of correspondence between Dr. Kouwenhoven and Dr. Lee, an Electrical Engineer at the E. I. DuPont De Nemours & Company regarding their mutual interest in electrical safety. An article by Dr. Lee in the IEEE "Spectrum" drew strong criticism from Drs. Kouwenhoven and Knickerbocker regarding inaccuracies about closed chest massage. The corrections were approved by the Hopkins doctors and printed in a subsequent issue of the journal.

File : [Maryland Heart Assn. JH Hospital Seminar May 3, 1962 - May 3, 1962](#)

Scope and Content: Included in this folder is the schedule for a meeting entitled "Cardiopulmonary Instructor's Seminar" and a list of attendees (Maryland leaders in the field of cardiology) who will be responsible for training other professionals under the guidance of the Maryland Heart Association.

File : N.A.S.A. (Manned Spacecraft) Houston Texas (Lippitt, Fagin, etc.) 1967 1968 - 1965-1968

Scope and Content: This folder contains a paper entitled "Electric Shock" [no author given], plus 3 reprints of papers relative to space flight electrode measurements of physical and psychological effects.

File : National Academy Science National Research Council - 1968-1969

Scope and Content: This folder contains a written version of the proceedings of a workshop on Electrical Hazards in Hospitals in which Dr. Kouwenhoven participated and his edited version of the transcript.

File : National Electronics Conference Chicago Oct. 19-21, 1964 - May-Oct., 1964

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and others related to his presentaion of a a paper, co-authored with Guy Knickerbocher entitled "Status of Closed Chest Massage." Also included is a copy of the paper, the conference program and hand written notes from the conference.

File : National Medal of Science - June, 1962

Scope and Content: Included here is correspondence related to Dr. Kouwenhoven's nomination for the IEEE's National Medal of Science Award and a reprint of an article about his receiving the award.

File : National Power Conference (Lord Baltimore Hotel) 9/24-26, 1962 - July-September, 1962

Scope and Content: This is An exchange of letter between Westinghouse Corporation and Dr. Kouwenhoven regarding His attending a luncheon in Baltimore at The National Power Conference.

File : National Safety Congress, Chicago Oct. 26, 1965 - 1965

Scope and Content: This folder contains a copy of the paper "The Gray Area" (topic: resuscitation) which Dr. Kouwenhoven presented at the meeting , correspondence regarding the presentation, and the full program booklet.

File : National Safety Council, Metropolitan Safety Award, Chicago, Oct. 30, 1962 - May-November, 1962

Scope and Content: The folder contains reprints of articles about the work in CPR and defibrillation done by Dr. Kouwenhoven which led to receiving the Metropolitan Life Insurance Award (which is judged by the National Safety Council), travel expenses for the meeting and miscellaneous correspondence relative to receiving the award.

File : Oak Ridge National Laboratory - Oak Ridge, Tenn. June 11-13, 1963 - May - Aug., 1963

Scope and Content: Included here is the correspondence between the Laboratory (operated by Union Carbide Nuclear Company) and Dr. Kouwenhoven about his and Dr. Jude's visit there, their schedule, travel expenses and honorarium agreement.

File : Philadelphia Safety Group SK&F-Bellevue Stratford Phila. March 7, 1962 - February - April, 1962

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and the organizers of a Philadelphia Safety Council meeting in which he participated ("life in Your Hands"). The full program is included.

File : Rensselaer Polytechnic Institute April 1966 - February-May, 1977

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and Professor Winsor regarding the latter's invitation to Kouwenhoven to present a talk on his research at a graduate colloquium.

File : Safety Committee IEEE New York Mar. 21, 1967

Scope and Content: This folder contains the minutes of the 3/67 IEEE Safety Committee meeting in New York, as well as Kouwenhoven's correspondence with the hotel and the committee chairman, Mr. R. H. Herman. At the last minute he sent Guy Knickerbocher in his place.

File : Safety Committee of IEEE New York Hilton 3/23/65 9:30 AM - Nov., 1964 - May, 1965

Scope and Content: Dr. Kouwenhoven agreed to participate in the Safety Session of the meeting, but an illness prevented his participation. Minutes from that meeting are in this folder.

File : Second National Conference on Cardiovascular Diseases 1122-24/64 Washington D.C. - Nov. - Dec., 1964

Scope and Content: This folder contains correspondence in which Dr. Kouwenhoven expresses his concerns about the failure of the use of mechanical devices in cardiopulmonary resuscitation. Kouwenhoven's hand written notes from the meeting, the program booklet, a list of attendees and his travel expenses are also included.

File : Seminar at Hopkins Cardio-Pulmonary Resuscitation May 20, 1963 - April-May, 1963

Scope and Content: Contained in this folder is correspondence between Dr. Kouwenhoven and seminar attendees from 21 U.S. electric and safety companies. Expenses related to holding the meeting are also included.

File : Seminar Cardiopulmonary Resuscitation Dec. 1, 1964 Hospital - Oct. - Dec., 1964

Scope and Content: Expense records for the meeting are in this folder as well as correspondence with attendees from electric companies around the country and the program schedule.

File : Sixth International Congress Rome 9/19 - 21, 1963 - Oct. 1962 - Sept. 1963

Scope and Content: Although invited to attend this meeting, Dr. Kouwenhoven had to decline because of the unavailability of travel funds.

File : Society of Clinical Surgery Johns Hopkins Hospital Apr. 24-25, 1964 - April, 1964

Scope and Content: This folder contains the program of the meeting and correspondence about Dr. Kouwenhoven's participation in it. He presented a paper entitled "The Developmental Story of Cardiac Defibrillation and External Massage."

File : Southeastern Electric Exchange - Roanoke Meeting Oct. 6, 1966 -AEPSCO (Rorden) Thurs AM - August-October 1966

Scope and Content: This folder contains the program of the meeting, correspondence between Dr. Kouwenhoven and organizers of the meeting and executives of the Southeastern Electric Exchange. It also contains reprints of papers presented by H.L. Rorden, Charles J. Miller, Jr., and D.P. Dumont. A confirmation for a room at the Hotel Roanoke and Motor Inn (room rate \$14) is included.

File : Taping for TV Program 5/8/66 - 1966

Scope and Content: This folder contains correspondence with TV 13 regarding Dr. Kouwenhoven's appearance on the show "Johns Hopkins Review" ("Professors Without Equal" series) and letters of congratulations on his appearance. A list of advanced questions is included.

File : [Training Class New Jersey Dept. of Health 2/14/63 - Jan.-April, 1963](#)

Scope and Content: A list of attendees at this CPR training session are in this folder as well as a copy of a report Dr. Kouwenhoven wrote on direct and alternating current external defibrillators.

File : [Training Course at Hopkins CCCM & DFN. Feb. 25, 1963 - Jan.-March, 1963](#)

Scope and Content: Contained in this folder is registration correspondence between Dr. Kouwenhoven and the 19 participants in this CPR training course held at Hopkins. Attendees were from various power and electric companies and the Baltimore City Health Department.

File : [Training Course at Hopkins CCCM and Defibrillation April 1, 1963 - March-April, 1963](#)

Scope and Content: Correspondence regarding registration for this training course in artificial respiration, closed chest heart compression and defibrillation is contained in this folder. Also included are 2 photos of a group of attendees from the Long Island Lighting Co. watching Dr. Kouwenhoven perform CPR.

File : [U.S.A. Standard Leakage Current 1968 Underwriters" Labs Spring Meeting - 1967-1968](#)

Scope and Content: This folder contains papers from the Underwriters' Laboratories' Standards Committee relating to effects of electrical leakage, a report on reaction currents, a report on leakage current for electrical appliances and copies of correspondence between the committee and Dr. Kouwenhoven.

File : [Underwriter's Lab Annual & Council Meeting May 8, 9, 1969 - 1969](#)

Scope and Content: This folder begins with an invitation from the Trustees of Underwriters' Laboratories to Dr. Kouwenhoven to become a member for a 4-year term. He was also honored in May, 1969, with their Distinguished Service Award. Correspondence about these events and the meeting information are contained in this folder.

File : [University of Maine, Orono, Maine, September 11, 1962 - July, 1962 - January, 1963](#)

Scope and Content: A summary of the paper "Resuscitation From Sudden Death" which Dr. Kouwenhoven was scheduled to present at the Electrical Safety Seminar is found here, as is correspondence about his attending the meeting. because of an operation he was unable to attend and the paper was presented by Mr. g. Guy Knickerbocker.

File : [University of Miami May 20-24, 1965 - Masy, 1965](#)

Scope and Content: James Jude, M.D. hosted a conference at the University of Miami entitled "Recent Advances in Cardiac and Respiratory Resuscitation" where Dr. Kouwenhoven was the honored Guest Lecturer. Included here is the program, Dr. Kouwenhoven's travel plans and personal correspondence with Jude. Mrs. Kouwenhoven accompanied him and they were guests at the home of Dr. Jude.

File : [USPHS Cardiopulmonary Resus. Seminars Dr, Brady, Arlington May 2 &23, 1967 - May, 1967](#)

Scope and Content: Dr. Kouwenhoven conducted two seminars in cardiopulmonary resuscitation at Hopkins. The agendas, correspondence and participant lists are included in this folder.

File : [Virginia Safety Association Conference, Roanoke, Va., May 18,1962 - January-May, 1962](#)

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and the Virginia and Electric Power Co. regarding his participation in an annual safety conference. He spoke about resuscitation of electric shock victims ("Life in Your Hands").

File : [Visit to Princeton University 5/28/63 - Accelerator - April - June, 1963](#)

Scope and Content: Dr. Jude joined Dr. Kouwenhoven in participating in a Princeton Seminar on Cardio-Pulmonary Resuscitation on May 28, 1963 and included here is correspondence and travel expense information related to this meeting.

File : [WBK Cruise - Caribbean - Feb. 22 - March 8, 1967 - 1967](#)

Scope and Content: Correspondence between Dr. Kouwenhoven and a travel agent regarding his cancellation of a cruise and Holland-America Line brochure are in this folder.

File : [Workshop on Hazards in Hospitals - Committees on Anesthesia and Shock, Natl. Acad. of Sciences, April 4-5, 1968 - April 4-5, 1968](#)

Scope and Content: This folder contains the program and reprints of the papers presented at this Workshop and related articles. The papers include: Artley, John, Dr. Eng, Performance Criteria for Electrical Apparatus and Electronic Instruments; Schall, G.E., Jr., M.E.E., Electrical Appliances for Hospital Use; Beitz, Richard C., B.A., Design for Living:Reduction of Electrical Hazards in Instruments for Use on Patients; Zarnstorff, William C., M.S.E.E., Testing for Transient Leakage Currents; Hopps, J.A., B.Sc.E.E., Electrical Hazards in Hospitals: the Systems Approach to Protection; and Testing Grounding Systems in Hospitals; Morse, Allan R., B Sc. (EE), Standards for Hospital Wiring; Leech, Graham J., M.A., An Instrument for Measuring Leakage Current; Hermach, F.L., B.E.E., Testing Hospital Electric Equipment for Safe Performance; Bruner, John M.R., M.D., The Horror of Common Practices; Soares, Eustace C., P.E., Grounding for Safety in Hospitals; Camishion, Rudolph C., M.D., Professional Education; Pratt, Leonard C., Application of Insulating Materials for Double Insulated Portable Electric Tools; Hickes, W.F., Intrinsic Safety;Aronow, Ph.D., Education of Engineers; Lloyd, Richard, Protection of Power Supply and Surge Protection; Weinberg, Daniel I., B.E.E., M. Sc., Safe Use of Electrical Equipment in Intensive Care Units. The Articles included in the folder are: The Journal of Japanese Medical Instruments, Sept. 1, 1966, Provisional Safety Standard for Electro-Medical Apparatus (Draft 6/66); McCormick, James M., D.M., The Role of the National Fire Protection Association's Committee on Hospitals in Promoting Better Patient Care; Meyer, James A., Lt. Col. M.C., U.S.A., Electrical Hazards in Medical Instrumentation; Geshman, Ronald, The Tiny Flaws in Medical Design Can Kill (from Electrical Design 9/1/67).

Box 103P: KOUWENHOVEN PAPERS - 1961-1962

Scope and Content: Meeting and Presentations

File : [AMA Exhibit - Hektoen Gold Medal June 26-30, 1961 - Nov. 1960 - July. 1961](#)

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: This folder covers logistical and financial arrangements made by Dr. Kouwenhoven in connection with his attendance at the 1961 AMA meeting in New York. At the meeting he was joined by Dr. James Jude and Mr. Guy Knickerbocher in presenting an exhibit entitled Closed Chest Cardiac Massage and Defibrillation. Included are drawings of the exhibit, photos used in it and articles about their exhibit being awarded the Hektoen Gold Medal for originality and excellence of presentation. The Medal was given by Dr. Kouwenhoven to Mr. Knickerbocher who in turn presented it the JHU Medical Archives in 2012.

File : American Acad. of Occupational Medicine Pittsburgh Feb. 8, 1962

Scope and Content: Dr. Kouwenhoven presented a talk at this meeting entitled "Cardiac First Aid." Miscellaneous correspondence relating to this presentation and a copy of the meeting program are found in this folder.

File : American Heart Association Paper by Dr. Jude Miami Meeting 10/21/61 - Oct. 21, 1961

Creator: Jude, James R.

Scope and Content: Dr. James Jude presented this paper accompanied by slides entitled "Closed Chest Cardiac Massage" at a meeting of the AHA in Miami. Methods of resuscitation and case histories are discussed.

File : American Heart Association Teaching Program March-May, 1961 - 1961

Scope and Content: This folder contains correspondence related to Dr. Kouwenhoven's plans to conduct a course for the Texas Heart Association on closed chest cardiac resuscitation. There is also a complete schedule of AHA presentations on the same topic which Dr. Jude and Dr. Kouwenhoven conducted in Chicago, Boston, Seattle, and Denver. Sessions were also conducted by Dr. Crane and Mr. Knickerbocher in Chicago, Richmond and Atlanta. These sessions were formally called "Teaching Institutes for Physicians on Closed Chest Resuscitation." Other related correspondence and itemized expenses are included.

File : American Public Power Assn. Memphis Feb. 8, 1962 (Guy speaks)

Creator: Knickerbocher, G. Guy

Scope and Content: Guy Knickerbocher presented a paper ("Closed Chest Heart Massage") about his work with Dr. Kouwenhoven at this meeting. A copy of the talk and related correspondence are in this folder.

File : American Surgical Association Boca Raton March 21-23, 1961 - March-June, 1961

Creator: Jude, James R.; Knickerbocher, G. Guy

Scope and Content: A copy of the paper entitled "A New Approach to Cardiac Resuscitation" which Dr. Kouwenhoven presented at this meeting is in this folder. It was co-authored by Dr. Jude and Mr. Knickerbocher. A copy of another paper on the same topic by Dr. Jude is included ("Closed Chest Cardiac Resuscitation"), as are Dr. Kouwenhoven's itemized expenses for attending the meeting, and the complete program.

File : Association of Military Surgeons of the U.S. Washington, Nov. 8, 1961 - 1961

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and Scientific Program Chairman Dr. Thomas J. Kennedy Jr., about his speaking at the meeting on "Closed-Chest Massage and Closed-Chest Defibrillation." A complete program from the meeting is included. Dr. Alfred Blalock recommended him as the speaker.

File : Central Ohio Heart - Columbus (Ohio) Academy of Medicine Nov. 16,1961 - 1961

Scope and Content: Dr. Kouwenhoven delivered a keynote address at this meeting on "External Cardiac Massage and External Defibrillation." The program is found in this folder as well as correspondence with the Association, Dr. Kouwenhoven's expenses and a Columbus Dispatch news article based on an interview with him.

File : Chicago Medical Society Feb. 28/March 1-3, 1961 - 1961

Scope and Content: A copy of the lecture Dr. Kouwenhoven gave at the meeting ("Closed Chest Resuscitation of Cardiac Arrest") is in the folder as well as his notes and information about his participation in a Color Television program at the meeting. He was on a panel discussing "Respiratory and Circulatory Resuscitation."

File : Cleveland Academy of Medicine March 24, 1961 - Jan.-May, 1961

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and Dr. John R. Reed, Chairman of the Committee on Education & Scientific Work of the Academy of Medicine of Cleveland about Dr. Kouwenhoven presenting his work at a meeting sponsored by the Academy. His talk was entitled "External Cardiac Massage and External Defibrillation." His itemized expenses are included.

File : Demonstration U.S. Naval Dental School Hopkins 1/23/62

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and Captain George W. Ferguson (Dental Corps - U.S. Navy) about his CCCM demonstration and lecture for the students and staff of the Naval Dental School. The group came from Bethesda to Hopkins.

File : Edison Medal Jan. 1962 - Nov. 1961-Jan. 1962

Scope and Content: Correspondence between Dr. Kouwenhoven and the American Institute of Electrical Engineers regarding his being awarded the prestigious Edison Medal for 1961 is found in this folder. Also included are 2 copies of his acceptance speech, an introductory talk given by Ferdinand Hamburger, Jr., the January 29th program for the AIEE Winter General Meeting, and a list of Dr. Kouwenhoven's personal associates who were invited to attend the luncheon and ceremony.

File : Gilbert Associates, Inc. (Jack Leslie) New York City April 10, 1961 - 1961

Scope and Content: Dr. Kouwenhoven spoke at this Safety Conference sponsored by Gilbert Associates, Inc, an engineering and safety consulting company on closed chest heart massage. Safety brochures and related information are included in this folder.

File : Heart Association of Maryland Orientation Session for Board and Committee Members Jan. 10, 1961 - 1960-61

Scope and Content: Materials include the agenda for the meeting, names of Board Members and their professional affiliations, and various pamphlets published by the Heart Association (e.g. Stroke, Heart Attack and Varicose Veins Guides).

File : JHU Medical and Surgical Association Hopkins 2/24-25/61 - February 24-25, 1961

Extent: 2 copies

Scope and Content: The program booklet for the Biennial Meeting of The Johns Hopkins Medical and Surgical Association (2/24-25/61) is found in this folder. The dinner speaker was Milton S. Eisenhower [President of the University]. Dr. Kouwenhoven spoke on the topic "Experiences with Closed Chest Defibrillation."

File : [Maryland Heart Association Agenda Council on Professional Education 2/9/61 - February 9, 1961](#)

Scope and Content: Dr. Kouwenhoven was a member of this Council. The agenda for the meeting is found in this folder.

File : [Marymount Hospital Ohio Oct. 16, 1961](#)

Scope and Content: This folder contains one letter of thank you from Dr. Kouwenhoven to the Program Director of the Medical Staff at this hospital and his itemized expenses .

File : [N.Y. Heart Association May 22, 1961 - May, 1961](#)

Creator: Jude, James R.

Scope and Content: This folder contains a letter from Dr. Jude to the N.Y. AHA explaining the conditions under which he and Dr. Kouwenhoven can present their work (\$150 honorarium each plus expenses). Dr. Kouwenhoven's itemized expenses are included as well as a letter of thank you from the Association .

File : [National Resuscitation Society New York March 10, 1961 - 1960-61](#)

Scope and Content: This folder contains correspondence between Dr. Kouwenhoven and Dr. Paluel J. Flagg, Executive Director of the National Resuscitation Society about his attending the course and demonstrating closed chest cardiac massage (using a dog).

File : [Niagara Mohawk Power Corporation Syracuse, N.Y. Oct. 25-26, 1961 - Oct. 1961](#)

Scope and Content: Dr. Kouwenhoven's travel schedule, expenses and a few notes from the meeting are included in this folder.

File : [Talk to U.S. Ordinance Feb. 20, 1962 Aberdeen, Md. - Jan. - March 1962](#)

Scope and Content: Dr. Kouwenhoven presented a lecture and demonstration on "Closed Chest Massage" to army ordinance personnel at Aberdeen as part of an effort there to increase safety awareness. Correspondence related to this talk is found in this folder as well as a copy of the Aberdeen Proving Ground newspaper which contains a photo of Dr. Kouwenhoven and a statement about his presentation.

File : [Winter Meeting AIEE Jan. 30, 1962 - May 1961-Feb. 1962](#)

Scope and Content: Dr. Kouwenhoven presented a paper to the AIEE Safety Committee on his work on the portable closed chest defibrillator the day after he was presented the Edison Medal by the AIEE. This folder contains miscellaneous correspondence relating to giving that talk and his expenses for the trip.

Box 103P: KOUWENHOVEN PAPERS

Scope and Content: Papers, Translations, References, Correspondence, Speech, Meetings, CPR and Industry Training Manuals

File : ["Cardiac Arrest Resuscitative Procedure" by WBK 1960 - 1960](#)

Extent: 30 copies

Scope and Content: This 3 page paper explores the symptoms of cardiac arrest and application

File : ["External Cardiac Massage" Film Folders \[Booklets\] - undated](#)

Scope and Content: This booklet describes a technique developed at Johns Hopkins Hospital for resuscitation without opening the chest. Smith Kline & French Laboratories published it in conjunction with a film by doctors James R. Jude, W.B. Kouwenhoven and G. Guy Knickerbocker.

Related Archival Materials Element: Film #172043 "External Cardiac Massage" available in Medical Archives film collection.

File : [A.S.T.M. Sub-Com. VII on Electrical Tests \(Revision of D-150-34T\) 1940-1951 - 1954-1956](#)

Scope and Content: The documents included in this folder are approved final drafts of Definitions of Electrical Terms and American Standard Definitions of Electrical Terms. Also included is one revised draft. They are work done in conjunction with the American Institute of Electrical Engineers.

File : [AIEE - Definitions, Tebo's Com. 0-5 #2 - 1946-1958](#)

Scope and Content:

This folder includes correspondence spanning a period of twelve years between D. Kouwenhoven and the American Institute of Electrical Engineers regarding his committee work on the definitions of electrical terms. Also included are copies of correspondence with the U.S. Dept. of Commerce and The National Research Council.

File : [AMBU International Manikin: Reports for Distribution - January 1961](#)

Extent: 19 copies

Scope and Content: The report titled "Principles and Experiences for the AMBU-MANIKIN" was presented at the AMBU International, Kastaniealle 22, Copenhagen. The rationale for using a manikin in

File : [American Heart Association Posters \(Resuscitation\) - 1965](#)

Scope and Content: Two AHA posters are in this folder: "Definitive Therapy: Heart-Lung Resuscitation" and "Emergency Measures: Heart-Lung Resuscitation."

File : [Article: Relationship Between Displacement and Pressure in Closed-Chest Cardiac Compression - 1964 May 23](#)

Scope and Content: This folder contains the article and a reprint. It appeared in The Lancet and was co-authored by Johansen and Ruben, both from Copenhagen, Denmark. It refers to Kouwenhoven's work and focuses on studies done on pressure in external cardiac massage.

File : [Baltimore Meeting - October 1950 - October 4, 1950](#)

Scope and Content: Wm. Kouwenhoven Spoke to a gathering of engineers at the Engineers Club in Baltimore in October of 1950. This file contains a copy of the speech as well as hand written notes possibly used in its preparation. The focus is on aviation engineering. The need for highly trained and experienced engineers, including electronics specialists and physicists, is emphasized. The approach to continuing education at the Glenn L. Martin Company in Baltimore is discussed. WW II brought a rapid expansion in the industry and the difficult challenges of increased production of aircraft. Kouwenhoven also discusses the future work being done at the Martin Co., notably the development of the first successful high altitude research rocket (The Viking), the first successful pilotless aircraft (The Gorgon) built for the Navy, and significant advances in airplanes. Included in this file is a related reprint of a paper presented a month after this speech entitled "Continue Your Education - A Message to Young Engineers" by J. C. McKeon.

[File : Bulletin of the Johns Hopkins Hospital January, 1952 - January 1952](#)

Scope and Content: This issue contains a series of papers on chronic constrictive pericarditis.

[File : Cardio-Pulmonary Resuscitation \(Heart Assoc. of MD.\) - 1962 April](#)

Creator: Farr, Mary; Jude, James R.; Scherlis, Leonard

Extent: 4 copies

Scope and Content: This is a comprehensive 28 page manual of instruction for physicians responsible for training others in CPR. It contains information about the fundamentals of CPR, steps in organizing and executing a training program, teaching aids, equipment and selected readings.

[File : Cardio-Pulmonary Resuscitation \(Heart Assoc. of MD.\) - 1962 April](#)

Creator: Farr, Mary; Jude, James R.; Scherlis, Leonard

Extent: 4 copies

Scope and Content: This is a 28 page manual of instruction for physicians responsible for training others in CPR.

[File : Cleveland Electric Illuminating Co.1961: "First Aid Training Techniques - 1961](#)

Extent: 80 Pamphlets

Scope and Content: First-Aid resuscitation indications and techniques are discussed and illustrated.

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[File : Closed Chest Cardiac Resus. 1961 J.R. Jude, M.D. \(American Heart Association\) - 1961](#)

Extent: 7 copies

Scope and Content: This paper, written for physicians and distributed as a service by the AHA, describes indications for resuscitation and methods. It also includes information about drug therapy, use of the EKG

[File : Emergency Squad Manual Ohio State University - 1959](#)

Extent: one copy of the manual plus additional related informational materials

Scope and Content: The manual covers a wide range of topics including emergency vehicles, victim care, methods of resuscitation, first aid, waterfront operations and post mortems.

File : [Folders from AMBU INTERNATIONAL \(Reports 6, 7, 8, 9E & Leaflet 1962 - 1962\)](#)

Extent: 19 leaflets

Scope and Content: Folder contains only Report No. 7E (leaflet) entitled "Training Aid for Closed Cardiac Massage. It describes

File : [Fort Monmouth Oct. 23, 1956 NACA - October, 1956](#)

Scope and Content: The National Academy of Sciences Material Advisory Board was responsible for reviewing the Dept. of Defense Program on Materials Research and Development. Wm. Kouwenhoven was a member of the Dielectrics Panel of this group. This file contains correspondence and his expenses for a visit to Fort Monmouth in New Jersey, and a 2-volume final report of the Advisory Board's findings.

File : [Guy's Hospital Gazette 29 July 1961 - July 29, 1961](#)

Extent: One copy

Scope and Content: The focus of this issue is an article by Donald Ross entitled "The Management of Cardiac Arrest." It was a clinical lecture given at Guy's Hospital by the author. It includes dia

File : [Joint Comm. on Medicine & Biology MEETING - New York - November 7-8 - November 1956](#)

Scope and Content: This folder contains the program for the meeting, Kouwenhoven's notes and correspondence requesting an advance copy of Drs. Shields and Geohegan's paper on cardiac resuscitation.

File : [Letters of congratulations on Award of Edison Medal Jan. 1962 - 1961-1962](#)

Scope and Content: This folder contains many letters and telegrams of congratulations to Dr. Kouwenhoven and his responses. The prestigious Edison Medal for outstanding accomplishments was presented to him by the American Institute of Electrical Engineers.

File : [May 24, 1956 Tech. Panel on Diel. Nat. Acad. of Sci. Washington, D.C. - May 24, 1956](#)

Scope and Content: This file contains background information on the first meeting of a panel on dielectrics sponsored by the National Academy of Sciences and a letter from Kouwenhoven expressing his regret at not being able to attend the meeting.

File : [Meeting - National Academy of Sciences - Dielectrics Washington Dec. 17, 1956 - December, 1956](#)

Scope and Content: This files contains expenses and correspondence related to Dr. Kouwenhoven's attendance at a meeting of the Technical Panel on Dielectrics of the Materials Advisory Board of the National Academy of Sciences.

File : [Metodo A Torax Cerrado Para La Resuscitacion Cardio-Respiratoria - May, 1964](#)

Extent: One copy

Scope and Content: This is a copy of a paper by 6 authors from the Departments of Anesthesiology and Cardiology at the University Hospital, Caracas, which was sent to Dr. Kouwenhoven. It covers methods of resuscitation and electrical defibrillation. It includes a short summary of emergency treatment at the end in English.

File : [Northern States Power Co. 1962 Minneapolis Cards for NSP Employees - 1962](#)

Extent: 9 cards for External Heart Massage directions

Scope and Content: Two pamphlets describe Northern Power Company's embracing the External Heart Massage rescue technique developed at Johns Hopkins for all company employees. Pocket sized cards describing the steps in resuscitation are included for distribution to employees.

File : [Pamphlet: Electric Shock and Resuscitation in the Electric Utility - December, 1965](#)

Extent: 2 copies

Scope and Content: Topics include effect of electric current on man , human resistance to electrical currents, method of arranging a hitch to lower a man from an electrical pole and resuscitation techniques.

File : [Pamphlet: First Aid in Cardiopulmonary Resuscitation - Discussion Guide - 1964](#)

Creator: Farr, Mary; Jude, James R.; Scherlis, Leonard

Extent: one copy

Scope and Content: This Heart Association of Maryland publication accompanies a set if slides for use by physicians or other trained persons teaching first aid in cardio-pulmonary resuscitation.

File : [Pamphlet: When Seconds Decide - Modern Co-Operation in Rescuing - 1963](#)

Extent: 2 copies

Scope and Content: Briefly describes how rescuing is performed in Denmark and how the population are trained. Photographs accompany text.

File : [Papers, trans., refernces, etc. - 1954-1962](#)

Scope and Content: This folder contains miscellaneous papers, foreign language articles and translations relative to cardio-pulmonary resuscitation.

File : [Required Characteristics of a Portable Capac. Type Ext. Dfb. 1961 \(WBK\) - 1961 November 03](#)

Extent: multiple copies

Scope and Content: This a a one-page paper listing 19 required characteristics of a portable capacitor type external defibrillator.

File : [Rubber Gloves Meeting - American Standards Asso. 7/26/56 - 1956/July/07](#)

Extent: This folder contains a copy of proposed American Standard Specifications for Rubber Protective Equipment for Electrical workers. Also included is an article entitled " Rubber Gloves Can Kill You" by G. Ross Henninger and Paul E. Skarshaug and correspondence related to the article.

File : Save a Life! Rescue Breathing and Heart Compression - Pocket-size Pamphlets - February, 1964

Extent: multiple copies

Scope and Content: Prepared by the Florida Agricultural Extension Service, University of Florida, this pamphlet describes and illustrates the methods for rescue breathing and heart compression.

File : The External Defibrillator 1961

Extent: 15 copies

Scope and Content: This 2-page paper lists the desirable characteristics of the external defibrillator and the names of the companies producing them

File : The Fire Fighter and Electrical Equipment - A Guide to Self Protection

Scope and Content: This booklet was written cooperatively by a variety of organizations in the state of Michigan to help fire fighters understand electrical installations, hazards and procedures for rescue. It contains a chapter on resuscitation and first aid.

Box 104P: KOUWENHOVEN PAPERS

Scope and Content: Past Meeting EEI, Accident and Prevention Committee. Medical Task Force, Resuscitation Sub Committee

File 104P: Accident Prevention Buffalo - 1960

File 104P: Accident Prevention Committee Detroit - 1962

File 104P: Accident Prevention Committee Meeting Grand Rapids - 1966

File 104P: Accident Prevention Committee Meeting Tampa - 1963

File 104P: Edison Electric Institute Acc. Preven. Comm. (Atlanta) - 1967

File 104P: Edison Electric Institute Accident Prevention Committee (Boston) - 1966

File 104P: Edison Electric Institute Accident Prevention Committee Minneapolis - 1964

File 104P: EEI Accident Preven. Comm. - 1967

File 104P: EEI Accident Prevention Committee Meeting - 1968

File 104P: EEI Accident Prevention Committee Meeting Birmingham - 1961

File 104P: EEI Accident Prevention Committee Meeting New Orleans - 1964

File 104P: EEI Accident Prevention Committee Meeting Oklahoma City - 1962

File 104P: EEI Accident Prevention Committee Meeting Williamsburg - 1963

File 104P: EEI Accident Prevention Committee New York - 1965

File 104P: EEI Meeting Chicago - 1961

File 104P: EEI Meeting Tuesday Session- San Francisco - 1965

File 104P: Medical Task Force EEI - 1961

File 104P: Task Force- Denver - 1967

Box 105P: KOUWENHOVEN PAPERS - 1948-1960

Scope and Content: Past Meetings EEI, Accident Prevention Committee, Medical Task Force Resuscitation Committee

File 105P: Accident Prevention Comm. Meeting St. Louis 1956 - 1956

File 105P: Accident Prevention Committee Atlantic City 1959 - 1959

File 105P: Accident Prevention Committee Los Angeles 1959 - 1959

File 105P: Accident Prevention Committee Pittsburgh 1957 - 1957

File 105P: Accident Prevention Committee St. Petersburg 1960 - 1960

File 105P: Accident Prevention Meeting Miami 1957 - 1957

File 105P: EEI Accident Prevention Committee Meeting New York 1958 - 1958

File 105P: EEI Accident Prevention Committee Toledo 1958 - 1958

File 105P: Fall Mtg. - Hartford 1956 - 1956

File 105P: Nov. 30, 1956- Resuscitation Sub-Committee Meeting + Company Doctors- Defibrillation - 1956

File 105P: Proposal for Research on Electrical Resuscitation- Reprints - 1951

File 105P: Proposal for Research on Resuscitation from Electric Shock - 1948

Box 2013-031-01: Correspondence, Awards, and Certificates - 1950-1972

Creator: Kouwenhoven, W. B. (William Bennett), 1886-1975

Folder : American Heart Association Award of Merit - 1969

Scope and Content: Presentation remarks and the certificate are in this folder.

Folder : American Medical Association Award of Merit - 1972

Scope and Content: Program booklet and correspondence related to receiving the award are in this folder.

Folder : Awards and Certificates - 1950-1969

Scope and Content: This folder contains certificates of merit and statements of appreciation from a variety of electrical engineering organizations.

Folder : Benson Dinner - 1974

Scope and Content: The menu from a dinner in honor of Don and Marge Benson is in this folder. It was autographed by Don Benson and thanked Dr. Kouwenhoven for his mentorship and happy times teaching CPR.

Folder : Biographical Material 1886-1970 - 1886-1970

Scope and Content: Several biographies listing Dr. Kouwenhoven's accomplishments are in this folder.

Folder : Certificates: Tau Beta Pi, Johns Hopkins University Electrical Engineering Classes of 1920-1921 - 1927; 1921

Scope and Content: This folder contains certificates of merit and statements of appreciation from a variety of electrical engineering organizations.

Folder : Commemoration Day - 1963

Scope and Content: This folder contains a copy of the JHU 1963 Commemoration Day program and correspondence related to it.

Folder : Congratulatory Letters - Miscellaneous 1969-74 - 1969-1974

Scope and Content: This folder contains letters of congratulations to Dr. Kouwenhoven acknowledging various awards and copies of his letters of appreciation.

Folder : Degree Appointment - JHU Doctor of Medicine - June, 1969

Scope and Content: Included in this folder is the program booklet from the Conferring of Degrees ceremony (June 6, 1969), the presentation speech conferring the honorary MD degree upon Dr. Kouwenhoven and correspondence between Dr. Kouwenhoven and various friends and colleagues.

Folder : Degree Appointments - 1944-1970

Scope and Content: Correspondence related to several academic appointments is found in this folder.

Folder : IEEE Power Life Award - 1970

Scope and Content: This folder contains news clippings and correspondence about Dr. Kouwenhoven having received the first Power-Life Award for his research on the effects of electricity on the human body and for the development of closed-chest cardiac massage. The award is given by the Institute of Electrical and Electronics Engineers for "significant contributions in the field of harmonious development of man and his environment."

Folder : Memorial Tributes - 1975

Scope and Content: Printed tributes to Dr. Kouwenhoven and the program from the JHU Memorial Service (Dec. 5, 1975) held in his honor are in this folder. Participants in the service were Professors George Benton, Willis Gore, Richard Ross MD, Abel Wolman and George Zuidema MD.

Folder : New York State Engineers License - 1935

Scope and Content: Copies of letters supporting Dr. Kouwenhoven's application for a professional engineer's license in New York State and related correspondence are in this folder .

Folder : Polytechnic Institute of Brooklyn Distinguished Alumnus Award - 1972

Scope and Content: Certificate, correspondence and photo of engraved wall plaque are in this folder.

Folder : Portrait Presentation - May 14, 1954

Scope and Content: The speech given at the time of the Kouwenhoven JHU portrait presentation is in this folder (presenter unknown).

Folder : Security Clearances - 1956-65

Scope and Content: Correspondence relating to several requests for security clearances required in relation to Dr. Kouwenhoven's research are in this folder.

Folder : Who's Who in America - 1931`

Scope and Content: A letter from the Marquis publishing company requesting a personal sketch is in this folder along with a second request.

Box 2013-031-05: Research Materials - 1921-1940s

Folder : Electric Shock - "A Report of the Injuries in the Central Nervous System by Electric Currents" (Langworthy & Kouwenhoven - 1929

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: This folder contains a copy of a report on the effects of electric current done on rats using both alternating and continuous currents.

Folder : Electric Shock - "Effects of Electric Shock" (Kouwenhoven & Langworthy) - 1929

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Several copies of this paper are found in the folder. There is no indication as to where it was presented.

Folder : Electric Shock - News Articles - 1931-36

Scope and Content: This folder contains a variety of general news clippings about electric shock and one article about Dr. Kouwenhoven being honored for his research.

Folder : Electric Shock Papers 1931-57 - 1931-57

Scope and Content: This folder contains a variety of reprints of articles of work on electric shock done by other national and international scientists over a 26-year period.

Folder : Electric Shock Research 1926-29 - 1926-29

Scope and Content: This folder contains a variety of materials related to Dr. Kouwenhoven's research of the effects of electric shock: correspondence, fatality records from electric shock incidents, and a copy of a paper by H.W. Ian Urquart entitled "Experimental Electrical Shock."

Folder : Electric Shock Research 1929 - 1929

Scope and Content: This folder contains a copy of a paper about the effects of electric current using rats . The title page is missing as is any information on the authorship of the paper.

Folder : Electric Shock Research 1929-39 - 1929-39

Scope and Content: This folder contains a variety of hand-written notes by Dr. Kouwenhoven, reprints of articles and comments on the works of other scientists in the field of effects of electric shock.

Folder : Magnetic Tests of A. S. T. H. Drills - Correspondence - 1921-23

Scope and Content: Various items of correspondence between Dr. Kouwenhoven and others interested in his work on magnetic testing of drills is found in this folder.

Folder : Magnetic Tests of A. S. T. H. Drills - original notes (Kouwenhoven) - 1921

Scope and Content: Contained in this folder are Dr. Kouwenhoven's original hand-written notes and manuscript for his paper entitled "Magnetic Tests of A. S. T. M. Drills."

Folder : Magnetic Tests of A. S. T. H. Drills - Reports - 1921-22

Scope and Content: Reports of work done on magnetic testing of drills done at other research sites are included in this folder.

Folder : Magnetic Tests of Drills - Patents - 1914-24

Scope and Content: This folder contains several patent reprints sent to Dr. Kouwenhoven by Leon Edelson and a note relating them to Kouwenhoven's own work on magnetic testing of drills.

Folder : Relex Actions - unknown

Scope and Content: Research notes and photographs of electrical studies done on different cell types are in this folder.

Folder : Reprint - Magnetic Tests of A. S. T. M. Drills (Kouwenhoven) - 1923

Scope and Content: This is a study for the American Society of Testing Materials of 51 high speed steel drills made by the Cleveland Twist Drill Company. Results, diagrams and conclusions are presented.

Folder : Reprint - Oscillographic Study of the Current and Voltage in a Permeameter Circuit (Kouwenhoven and Berry) - 1923

Scope and Content: This AIEE paper presents the results of a study of the voltage-time and current-time curves in a permeameter circuit and how to reduce the time required for the reversal of the magnetizing current. Oscillogram recordings are included.

Folder : Defibrillator Research - 1/2 Cycle 1969-71 - 1969-71

Scope and Content: The notes and summaries by Dr. Kouwenhoven and others from several electric shock experimental series using dogs are in this folder. Included are numbers 1168-1193, 1195-1204, and 3351-3518.

Folder : Defibrillator Research - 1/2 Cycle AC Monophasic Defibrillator 1967 - 1967

Scope and Content: This folder contains a description and diagrams of the 1/2 cycle AC defibrillator which Dr. Kouwenhoven constructed and correspondence with others about research being done using it.

Folder : Defibrillator Research - AC Theory and AC Machinery Notes - 1940's

Scope and Content: Dr. Kouwenhoven's prolific hand-written notes on AC theory, including mathematical equations, are in this folder

Folder : Defibrillator Research - Comparison Data (Dogs) - 1960's

Scope and Content: This folder contains data from a variety of electric shock dog experiments. The researcher's name is not indicated on the data summary sheets. Experiment numbers 869 through 906 are included.

Folder : Defibrillator Research - Westinghouse 1965-69 - 1965-69

Scope and Content: Results of electric shock experiments on dogs using the Westinghouse Defibrillator and correspondence with the Westinghouse Electric Corporation are in this folder. Dogs numbered 865 through 1164 are included.

Folder : Defibrillator Research (Dogs) - 1958

Scope and Content: This folder contains several series of Dr. Kouwenhoven's data on electric shock using the dog model. Experiments numbered 439 through 507 are included.

Folder : Electrocutation - Case Study / Photos 1968 - 1968

Scope and Content: This folder contains one case study of an injured linemen and a series of apparently staged photos showing linemen at work and use of closed chest cardiac massage on an injured worker.

Folder : Electrocutation - Miscellaneous Articles/Brochures 1938-39 - 1938-39

Scope and Content: Several articles and brochures that relate to electrical safety are in this folder.

Folder : Electrocutation - Original Data (Rats) 1928-29 - 1928-29

Scope and Content: This folder contains several sets of Dr. Kouwenhoven's data on electric shock experiments using the rat model.

Folder : Electrocutation - Presentations of Data 1930-36 - 1930-36

Scope and Content: This folder contains Dr. Kouwenhoven's hand-written notes for various talks he gave around the country from 1930 through 1936 on the subject of electric shock.

Folder : Reprint - An Outline for Research in Penology (Robert H. Roy) - 1964

Scope and Content: Reprinted from Operations Research, this article discusses a proposed model for prison confinement.

Box 2013-031-07: Research Materials: Defibrillator - 1950s-1970s

Folder : IEEE Summer Meeting: "The Great Environmental Debate and the Power Industry" - 1970

Scope and Content: Program from the meeting which included panelists Wm. Gould, R. Philip Hammond, John Vukasin, Frederick Warren, and James Watson.

Folder : Minnesota Hospital Survey - Defibrillation Research - 1963

Scope and Content: The large notebook in this folder contains survey results of use of cardiac defibrillators in many cities and hospitals in Minnesota. The survey looks at types of defibrillators, voltage used and safety issues.

Folder : Reprint - "A Simple Electrical Apparatus for the Clinical Treatment of Ventricular Fibrillation" (Kouwenhoven and Kay) - 1951

Scope and Content: Reprinted from Surgery, this article describes the electrical defibrillator in use at Hopkins Hospital.

Folder : Reprint - "Closed Chest Cardiac Resuscitation: Methods - Indications - Limitations" (Jude) - unknown

Creator: Jude, James R.

Scope and Content: This paper is a discussion of cardiac arrest and various methods of treating it, including Closed Chest Cardiac Massage, drugs, and external defibrillation.

Folder : Reprint - "Closed Chest Defibrillation of the Heart" (Kouwenhoven, Milnor, Knickerbocker, and Chestnut - 1957

Creator: Knickerbocker, G. Guy; Milnor, William R.

Scope and Content: Reprinted from Surgery, this article is a discussion of the history of defibrillation, research results using the dog model and a description of the defibrillator in current use at Hopkins Hospital.

Folder : Reprint - "Field Treatment in Electric Shock Cases" (Kouwenhoven and Milnor - 1957

Creator: Milnor, William R.

Scope and Content: This article was a report presented at the AIEE 1957 winter meeting. It discusses defibrillation experiments on dogs and the closed chest method of defibrillation used on humans.

Folder : Reprint - "Men in Insulation: Dr. William Bennett Kouwenhoven" - 1958

Scope and Content: Appearing in the October 1958 issue of the publicaion "Insulation," this article is a biographical sketch of Dr. Kouwenhoven and his work in the field of insulation.

Folder : Reprint - "The Current Flowing Through the Heart Under Conditions of Electric Shock" (Kouwenhoven, Hooker and Langworthy - 1932

Creator: Hooker, Donald R.; Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from The American Journal of Physiology, this article presents data on the effects of electric shock on rats.

Folder : Reprint - "The Effect of Alternating Electrical Currents on the Heart" (Hooker, Kouwenhoven and Langworthy) - 1933

Creator: Hooker, Donald R.; Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: Reprinted from The American Journal of Physiology, this article presents data on the effects of electric shock using the dog model.

Folder : Reprint - "Three Russian Papers on EHV/UHV Transmission Line and Substation Design" - 1975

Scope and Content: In this folder is a booklet which contains reprints in translation of 3 papers presented at a meeting of The American-Soviet Committee on Scientific and Technical Cooperation in the Field of Research, Design, and Operation of UHV Transmission.

Folder : Reprint - Cochlear Microphonics in Man (Reuben, Knickerbocker, Sekula, Nager and Bordley) - 1959

Creator: Knickerbocker, G. Guy

Scope and Content: Published in The Laryngoscope, this article discusses the findings of a study done at Johns Hopkins in the Department of Otolaryngology using some of Dr. Kouwenhoven's electronic equipment.

Folder : Reprint - Contemporaries - William B. Kouwenhove, Dr. Ing. - 1967

Scope and Content: This NSP publication on "Safety - Conference Topics" contains information about the work of Dr. Kouwenhoven and his biography.

Folder : Reprint - Effects on the Heart of Electric Shock from Low Frequency AC and DC, Separately and in Combination (Knickerbocker and Kouwenhoven) - 1969

Creator: Knickerbocker, G. Guy

Scope and Content: This lengthy final report reflects work done by The Bell Telephone Laboratories and Dr. Kouwenhoven's laboratory. The results of the animal study are in the report.

Folder : Reprint - Electrical Safety Regulations in the United States, Canada and Europe (Price and Michener-AIEE) - 1959

Scope and Content: This is a paper presented at an AIEE Safety Committee Conference. The authors compare safety codes, enforcement and standards in approval of electrical equipment in the U.S., Canada and several European countries.

Folder : Reprint - External Cardiac Resuscitation (Jude, Kouwenhoven and Knickerbocker) - 1964

Creator: Jude, James R.; Knickerbocker, G. Guy

Scope and Content: Reprinted from Monographs in the Surgical Sciences, this is a lengthy look at the historic context of external cardiac massage and its current advances.

Folder : Reprint - Field Treatment in Electric Shock Cases-II (Kouwenhoven, Knickerbocker, Milnor and Jude) - 1960

Creator: Jude, James R.; Knickerbocker, G. Guy; Milnor, William R.

Scope and Content: Reprinted from Electrical Engineering, this article discusses treatment of respiratory failure and ventricular fibrillation and the use of the defibrillator.

Folder : Reprint - Intravenous Drug Therapy of Stokes-Adams Disease (Zoll, Linenthal, Gibson, Paul and Norman) - 1958

Scope and Content: Reprinted from Circulation, this article describes research done at the Beth Israel Hospital (Harvard, Boston) on the efficacy on ventricular rhythmicity and atrioventricular conduction.

Folder : [Reprint - Resuscitation - Miscellaneous Articles by Other Authors - 1958-65](#)

Scope and Content: This folder contains a range of articles on closed-chest resuscitation, effects of electric currents on the heart, resuscitation after drowning and hypoxia. Hand-written notes, possibly Dr. Kouwenhoven's are also in the folder.

Folder : [Reprint - The Development of the Defibrillator \(Kouwenhoven\) - 1969](#)

Scope and Content: Reprinted from the Annals of Internal Medicine, this article traces the development of the defibrillator from its conceptual basis (Prevost and Battelli 1899) through research in the 1930's to the development by Kouwenhoven of the Hopkins machine.

Folder : [Resuscitation Manuals - 1959](#)

Scope and Content: This folder contains several instructional guides on resuscitation.

Box 2013-031-08: Lectures - 1940s-1960s

Folder : [Lectures - Electric Shock 1930's - 1930's](#)

Scope and Content: Hand written notes on index cards and paper from several lectures are in this folder.

Folder : [Lectures - Electric Shock 1940-44 - 1940-44](#)

Scope and Content: Notes from several lectures on Dr. Kouwenhoven's research work written by hand on paper and index cards are in this folder.

Folder : [Lectures - Electric Shock 1945-49 - 1945-49](#)

Scope and Content: Hand-written notes on index cards from several of Dr. Kouwenhoven's lectures on his research are in this folder.

Folder : [Lectures - Electric Shock 1951-54 - 1951-54](#)

Scope and Content: This folder contains hand written notes on paper and notecards from lectures given by Dr. Kouwenhoven on his research work in effects of electric shock.

Folder : [Lectures - Electric Shock 1967-70 - 1967-70](#)

Scope and Content: This folder contains hand written notes on notecards for lectures given by Dr. Kouwenhoven on his research work on the effects of electric shock on humans.

Folder : [Lectures - Electricity in Medicine 1903 - 1903](#)

Scope and Content: This folder contains the hand written notes and typed copy of Dr. Kouwenhoven's introduction from a lecture about the partnership between medicine and engineering. Both specialties were represented in the audience.

Folder : [Lectures - Thomas A. Edison 1947 - 1947](#)

Scope and Content: This folder contains the lecture notes and complete talk (slide presentation) given by Dr. Kouwenhoven in honor of the 100th anniversary of the birth of Thomas A. Edison. The observation was held in Baltimore.

Folder : [Reprint - Life Saving Research \(Kouwenhoven and Langworthy\) 1972 - 1972](#)

Creator: Langworthy, Orthello R. (Orthello Richardson), 1897-1996

Scope and Content: The paper and notes in this folder cover the history of electric shock studies done from 1938-1972 and the creation of the defibrillator. Included are detailed chronologies of the work done by Dr. Kouwenhoven and others.

Artifacts