

CATALOG NUMBER: OH87.1
INTERVIEW: Adducci, Anthony J.
YEAR: 2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Anthony J. Adducci
DATE: August 9, 2000
PLACE: Roseville, Minnesota
INTERVIEWER: Kirk Jeffrey

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Anthony J. Adducci attended college in Minnesota. He joined Medtronic in the early 1960s. In the early 1970s, he helped found Cardiac Pacemakers, Inc., the company that manufactured the first lithium battery powered pacemaker. In the early 1980s, he founded Technology Enterprises and in the late 1990s, North American Banking Company.

SUBJECTS DISCUSSED: Education; early work experience; product marketing and working with surgeons for Medtronic; Cardiac Pacemakers, Inc. beginnings; Wilson Greatbatch's pacemaker with lithium battery; lawsuits between device companies; changes under FDA regulation; Lilly acquiring CPI; Technology Enterprises; current activities; growing startups.

COMMENTS ON INTERVIEW: The interview was recorded at low volume. The sub masters have a better audio quality than the original tapes. The user copies were recorded from the sub masters.

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Sub Masters: 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 2 hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 22 pages

ACCESSION NUMBER: AV 2001.104.1

CATALOG NUMBER: OH87.2
INTERVIEW: Amplatz, Kurt
YEAR: 2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Kurt Amplatz
DATE: October 23, 2000
PLACE: AGA Medical, Golden Valley, Minnesota
INTERVIEWER: Kirk Jeffrey

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Kurt Amplatz was born in Austria. He studied in Switzerland and France. He obtained his medical degree and then finished his training in the United States. He developed many medical devices and started two medical device companies, Kamca and AGA.

SUBJECTS DISCUSSED: Education; early training as a doctor; how he came to Minnesota and why he studied hearts; experiences as instructor in radiology; developing medical devices for neuroradiology, urology, and cardiac radiology. Starting Kamca, and then AGA (Amplatz Gougeon Afremov). Patents; main product of AGA—septal occluder; papers he has coauthored; future of small device companies; early beginnings of Medtronic; new products being developed; personal connection with pacemakers.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 1 60-minute cassette
 Original: 1 60-minute cassette

LENGTH OF INTERVIEW: 1 hour

RESTRICTIONS ON USE: None

TRANSCRIPT: 14 pages

ACCESSION NUMBER: AV 2001.104.2

CATALOG NUMBER: OH87.3
INTERVIEW: Bakken, Earl E.
YEAR: 1995-2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Earl E. Bakken
DATE: December 19, 1995 (*Conversazione*)
audio—January 10, 1997, August 28, 1997, September 11, 1997,
February 1, 1998
video—May 3, 1999; August 28, 2000
PLACE: Kiholo Bay, Hawaii; Fridley, Minnesota; Minneapolis, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral
History Project

BIOGRAPHICAL INFORMATION: Earl E. Bakken was born and educated in Minnesota. He started Medtronic Inc. and has developed many medical devices including the first battery operated pacemaker and the first implantable pacemaker. He founded the Bakken Library and Museum in Minneapolis.

SUBJECTS DISCUSSED:

December 19, 1995 (*Conversazione*)—One in a series of informal talks on the medical device industry sponsored by the Bakken Library and Museum.

January 10, 1997—Description of first battery operated pacemaker; production model; changes and improvements to the model; prototype; design features; how it was worn; internal workings; price; competition; assistance.

August 28, 1997—Childhood fascination with electricity; influence of Frankenstein movie; science fiction; devices he built as a child; using talent to help others; influential magazines; teaching in the Air Corps; college experiences; leadership opportunities; interest in research; science teachers; radiotelephone license; Medtronic journal-club to learn medical terminology; how Medtronic began.

September 11, 1997—More on pacemaker design—heart fibrillation; voltage divider circuit; vacuum tube devices; why he used a transistor in the first battery operated pacemaker; circuit for the pacemaker; reliability of transistors; batteries; epoxy resin; transformers; special therapeutic devices; “ready, fire, aim” philosophy.

February 1, 1998—Medtronic 5800 pacemaker; patent; implantable pacemakers; differing doctor response to internal and external pacemakers; magnitude of health improvement with pacemaker use; public response; different ways to show output; why the first battery operated pacemaker was developed; color and purpose of blinking light; discussion of different models.

Video—May 3, 1999—Bakken addresses a group of students assembled at the Bakken Library and Museum. A video log is available in the Oral History Office.

August 28, 2000—Bakken's interest in electricity and Frankenstein; Frankenstein story as inspiration and social commentary; influence of mother and teachers; building robots; founding of, educational programs of, and future plans, hopes and dreams for the Bakken Library and Museum. A video log is available in the Oral History Office.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS:

User copies: 3 60-minute cassettes
(No tape for 1/10/1997 interview)

8/28/2000 video interview
Audio Dub: 1 90 minute cassette
(Audio from Video interview)

Conversazione—December 19, 1995
Audio Dub: 1 90-minute cassette
(Audio from Video interview)
(Video available at The Bakken Library and Museum)

Original: 3 60-minute cassettes
(No tape for 1/10/1997 interview)

VIDEO RECORDINGS:

User copies: 1 90 minute VHS tape
1 120 minute VHS tape

1 30 minute VHS tape
with time code window burn
2 60 minute VHS tape
with time code window burn
1 120 minute VHS tape
with time code window burn

Masters: 7 30 minute Beta masters

LENGTH OF INTERVIEWS: 7½ hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 83 pages (Transcript includes 1/10/1997 interview)

ACCESSION NUMBER: AV 2001.104.3

CATALOG NUMBER: OH87.4
INTERVIEW: Bakken, Earl E. and C. Walton
Lillehei
YEAR: 1997

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Earl E. Bakken, and C. Walton Lillehei
DATE: September 9, 1997
PLACE: University of Minnesota Hospital
Minneapolis, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral
History Project

BIOGRAPHICAL INFORMATION: Earl E. Bakken was born and educated in Minnesota. He started the Medtronic Corporation and has developed many medical devices including the first portable wearable pacemaker and the first implantable pacemaker. He founded the Bakken Library and Museum in Minneapolis.

C. Walton Lillehei was born and educated in Minnesota. In the early 1950s, he performed the first successful open-heart surgery. He developed new procedures and ideas for medical devices like pacemakers and heart valves to improve heart function. He served as a researcher and professor at the University of Minnesota Medical School. He was the Medical Director of St. Jude Medical's Heart Valve Division. He died in 1999.

SUBJECTS DISCUSSED: Memories; building layout; parents as oxygenators; cross-circulation; changes to operating rooms and procedures; Owen Wangensteen, Food and Drug Administration; experiences working together; animal labs; Earl Bakken's background; Richard DeWall; open-heart surgery and body temperature; methods for fixing defects like atrial septum defects and congenital valvular lesions; oxygenation; Grass physiological stimulator; uses of pacemaker for babies; developing a battery operated pacemaker; output measure in milliamps versus volts; ambient light; pacemakers as treatment of heart block in adults; batteries.

COMMENTS ON INTERVIEW: There is a video log available in the Oral History Office.

SOUND RECORDINGS:

Audio Dub: 2-60 minute cassettes
(Audio from Video interview)

VIDEO RECORDINGS:

User copy: 1 85-minute VHS tape
1 85-minute VHS tape
with time code window burn

Master: 3 30-minute Beta masters

LENGTH OF INTERVIEWS: 85 minutes
RESTRICTIONS ON USE: None
TRANSCRIPT: 24 pages
ACCESSION NUMBER: AV 1997.198

CATALOG NUMBER: OH87.5
INTERVIEW: Blackshear, Perry L. Jr.
YEAR: 2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Perry L. Blackshear, Jr.
DATE: August 21, 2000
PLACE: Minnesota History Center, St. Paul, Minnesota
INTERVIEWER: Kirk Jeffrey

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Perry L Blackshear, Jr. received his schooling in Georgia. He is a Professor Emeritus at a Minnesota university.

SUBJECTS DISCUSSED: Reasons for coming to Minnesota; experiences as a mechanical engineer researching medical applications in field of fluid mechanics; devices developed from research; graduate students' role in research; University's role in the development of new industries; future of bioengineering in Minnesota.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 1½ hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 19 pages

ACCESSION NUMBER: AV 2001.104.4

CATALOG NUMBER: OH87.6
INTERVIEW: Dann, Norman
YEAR: 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Norman Dann
DATE: June 26 and July 23, 1998
PLACE: Shorewood, Minnesota and the Bakken Library and Museum in
Minneapolis, Minnesota.
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral
History Project

BIOGRAPHICAL INFORMATION: Norman Dann was born in Ohio. He graduated from college in Pennsylvania. He has headed his own medical device design and servicing companies, one of which was acquired by Medtronic. He worked for Medtronic after the acquisition. He has done consulting and administered venture capital funds. He is now working with several non-profit organizations.

SUBJECTS DISCUSSED: Biography; schooling; family; education; his father's medical device and apparatus business; Norman Dann's experiences building, repairing and servicing medical equipment; the Dann Company; philosophy of customer service; sales representatives versus direct sales; ideas on improving sales; Medtronic; changes under FDA regulation; Xytron pacemaker; batteries; ramifications of technology leaps; benefits of technology control; impressions of Bill Chardack and others; consulting experiences; operations management; evaluating medical device firms for venture capital firms; experiences starting and successes and failures of three venture capital funds; Local, regional and national competition in the medical device industry; experiences as a board member for various companies; involvement with non-profits; the regulation process; ideas on revising University and industry relations; thoughts on present state and future of the medical device industry and on Medical Alley.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 4 60-minute cassettes
 Original: 4 60-minute cassettes

LENGTH OF INTERVIEW: 4 hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 68 pages

ACCESSION NUMBER: AV 2001.104.5

CATALOG NUMBER: OH87.7
INTERVIEW: DeWall, Richard
YEAR: 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Richard DeWall
DATE: October 28, 1998
PLACE: The Bakken Library and Museum, Minneapolis, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Richard DeWall was born attended school and college in Minnesota. He developed the bubble oxygenator, a temperature controlled oxygenator, and a capillary type oxygenator. He helped found a medical school and heart surgery program at an Ohio university. He has since retired.

SUBJECTS DISCUSSED: Early life; why he chose medicine as a profession; education; choice of school. History of oxygenators; how he developed the bubble oxygenator, the capillary oxygenator, and Temptrol, a temperature controlled oxygenator. Description of other oxygenators: filming oxygenator, screening oxygenator, and disk oxygenator. His relationship with Dr. C. Walton Lillehei, Dr. Richard Lillehei, Vince Gott, and Richard Varco. His association with medical school and its' heart surgery program at Wright State University in Dayton, Ohio. His connection with the Kaster-Lillehei heart valve.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 1 hour, 15 minutes

RESTRICTIONS ON USE: None

TRANSCRIPT: 23 pages

ACCESSION NUMBER: AV 2001.104.6

CATALOG NUMBER: OH87.8
INTERVIEW: Hollenhorst, Sandra
YEAR: 2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Sandra Hollenhorst
DATE: March 7 and April 28, 2000
PLACE: Bloomington, Minnesota
INTERVIEWER: Kirk Jeffrey

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Sandra Hollenhorst is an equity researcher in the investment industry.

SUBJECTS DISCUSSED: March 7, 2000--Education, early career, career as medical device industry analyst, involvement with Minnesota Emerging Medical Organizations; experiences with start-ups; consulting work; equity research for the brokerage industry with an emphasis on the medical device industry; implanted cardioverter defibrillators; innovation.

April 28, 2000—MEMO; Medical Alley; how medical device companies are established; acquisition; Food and Drug Administration; market-specific products; entrepreneurs; patent issues; cost containment and future of device industry; university research and device development; medical professionals; availability of venture capital; local and national competition.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 2 hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 19 pages

ACCESSION NUMBER: AV 2001.104.7

CATALOG NUMBER: OH87.9
INTERVIEW: Holloran, Thomas E.
YEAR: 1996 & 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Thomas E. Holloran
DATE: December 17, 1996 (*Conversazione*) July 16, 1998 (audio interview)
PLACE: Bakken Library and Museum and the University of St. Thomas,
Both in Minneapolis, Minnesota
INTERVIEWER: David Rhees
PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral
History Project

BIOGRAPHICAL INFORMATION: Thomas E. Holloran was born and educated in Minnesota. He served as Medtronic's legal representative, a board member, and as a company executive. He worked for a major investment firm and now teaches at a Minnesota university.

SUBJECTS DISCUSSED: (*Conversazione*) One in a series of informal talks on the medical device industry sponsored by the Bakken Library and Museum.

(Audio interview) Early life; Medtronic—experiences as Medtronic's legal representative, board member, and executive; company changes; strategy, building a distributor network; increasing manufacturing capability; growth; expansion; facilities expansion; attracting venture capital; capital sources, bank line of credit; infancy of the medical device industry; selling products and establishing distributorships in Europe; contracting distributors; development of line of coronary care units; mission statement; building sales network; acquiring distributorships; Food and Drug Administration and regulation of the medical device industry; transition from law background to managing a technical business; vertical integration; adding sales force; spinoffs from Medtronic; research and development; Governor's Commission for Health Care Promotion; why the medical device industry developed as it did in Minnesota; impressions of Earl Bakken, Palmer Hermundslie, Charlie Cuddihy, Les Kotval, and other leaders of the company.

SOUND RECORDINGS: Audio interview
User copy: 2 60-minute cassettes
Original: 2 60-minute cassettes
Conversazione
Audio Dub: 1 90-minute cassette
(Audio from Video interview)
(Video available at The Bakken Library and
Museum)

LENGTH OF INTERVIEWS: 1 hour (*Conversazione*) and 1 hour, 40 minutes

RESTRICTIONS ON USE: None

TRANSCRIPT: 19 pages (*Conversazione*) and 28 pages (audio interview)

ACCESSION NUMBER: AV 2001.104.9

CATALOG NUMBER: OH87.10
INTERVIEW: Lillihei, C. Walton
YEAR: 1997 & 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: C. Walton Lillihei
DATE: May 8, 1998 (audio interview)
PLACE: St. Jude Medical, Little Canada, Minnesota (audio)
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: C. Walton Lillihei was born and educated in Minnesota. In the early 1950s, he performed the first successful open-heart surgery. He developed new procedures and ideas for medical devices like pacemakers and heart valves to improve heart function. He served as a researcher and professor at the University of Minnesota Medical School. He was the Medical Director of St. Jude Medical's Heart Valve Division. He died in 1999.

SUBJECTS DISCUSSED: Work on babies and children with heart defects: hypothermia, controlled cross-circulation, heart-lung machines, Richard DeWall, inventor of the bubble oxygenator, open-heart surgery in Rochester and at the U of M, membrane oxygenator. Work on adults: valvular lesions, anuloplastry, replacing valves. Artificial valves: ball valve and problems with it, Lillehei-Nakib valve, Lillehei-Kaster valve, pulse duplicator, pyrolytic carbon, St. Jude valve, Omniscience valve. Manuel Villafaña and St. Jude Medical. Tissue replacement valves.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 70 minutes

RESTRICTIONS ON USE: None

TRANSCRIPT: 28 pages

ACCESSION NUMBER: AV 2001.104.9

CATALOG NUMBER: OH87.11
INTERVIEW: Matricaria, Ronald A.
YEAR: 2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Ronald A. Matricaria
DATE: April 21, 2000
PLACE: St. Jude Medical, Little Canada, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Ronald A. Matricaria was born in Connecticut and attended college in Massachusetts. He has been an executive and board member for Eli Lilly, Cardiac Pacemakers, Inc. and St. Jude Medical.

SUBJECTS DISCUSSED: His work at Eli Lilly; fundamental differences between medical device development and pharmaceutical discovery process; Cardiac Pacemakers, Inc.; Carbomedics and pyrolytic carbon; St. Jude Medical; benefits—venture capital community, infrastructure, quality workforce—and liabilities—climate—of Minnesota location for large device companies; the state, University, and venture capital's ability to adjust quickly to demands and changes of the economy; cooperation and competition between large device companies: Medical Alley, Health Industry Manufacturers Association; patent infringement suits.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 1 60-minute cassette
 Original: 1 60-minute cassette

LENGTH OF INTERVIEW: 1 hour

RESTRICTIONS ON USE: None

TRANSCRIPT: 16 pages

ACCESSION NUMBER: AV 2001.104.10

CATALOG NUMBER: OH87.12
INTERVIEW: Neuman, Patricia
YEAR: 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Patricia Neuman
DATE: January 14, 1998 and February 12, 1998
PLACE: Department of Trade and Economic Development, Metro Square Building and Minnesota History Center, both in Saint Paul, Minnesota
INTERVIEWER: David Rhees
PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Patricia Neuman graduated from college in Pennsylvania. She has worked primarily in public relations and marketing for the Children’s Home Society, St. Mary’s Hospital, Health Resources, the Minnesota State Department of Health and the Minnesota State Department of Trade and Economic Development. She developed the “Minnesota, Great State of Health” campaign.

SUBJECTS DISCUSSED: Education, interest in health care; her experiences doing public relations and marketing work for hospitals in an era of hospital mergers; experiences with the state health department—Governor’s Commission on Promoting Minnesota’s Health Care Resources, promoting state through “Minnesota, Great State of Health” campaign. Moving to the Department of Trade and Economic Development—Minnesota Health Care Council, Medical Alley Association: involvement with Medical Alley board, publishing a directory of companies, forming the trade association, hosting monthly meetings and other events, names of members of the various boards and commissions; state support of Medical Alley Association efforts, hosting a WorldMed meeting—showcasing latest and greatest in the industry; changes necessitated by budget cuts; why Minnesota is a health care industry leader; what attracts or discourages different companies from coming to Minnesota; availability of venture capital; role of startups; globalization of the industry.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 2 hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 45 pages

ACCESSION NUMBER: AV 2001.104.11

CATALOG NUMBER: OH87.13
INTERVIEW: Nicoloff, Demetre M.
YEAR: 2000 & 2001

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Demetre M. Nicoloff
DATE: November 27, 2000 and May 16, 2001
PLACE: (Video) Minneapolis, Minneapolis
INTERVIEWER: Kirk Jeffrey

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Demetre M. Nicoloff grew up in Ohio. He received his medical degree from an Ohio university. He continued his training in Minnesota, worked as a researcher Dr. Owen Wangenstein, and received two advanced degrees. He was involved in the development of the first bi-leaflet all carbon heart valve, the St. Jude valve.

SUBJECTS DISCUSSED: Education, development of his career, and principal areas of research: gastro-intestinal, thoracic, cardiac. His experiences working with Dr. Owen Wangenstein as intern, resident, and researcher. Owen Wangenstein's mentoring, influence and illness. Relationship with Castaneda; surgical research at the VA hospital; returning to University of Minnesota to do cardiac work; leaving the university for private practice; forming the Heart Institute; designing St. Jude heart valve with Chris Possis. His views on and the history of St. Jude Medical and the St. Jude heart valve. Experiences with clinical trials, minimally invasive surgery, advances in heart surgery and cardiac devices.

COMMENTS ON INTERVIEW: Both interviews cover the same material. A video log is available in the Oral History Office.

SOUND RECORDINGS: Audio interview
User copy: 2 60-minute cassettes
Original: 2 60-minute cassettes
Video interview
Audio Dub: 1 60-minute cassette
(Audio from Video interview)

VIDEO RECORDINGS: **User copy:** 1 60 minute VHS copy
1 60 minute VHS copy
with time code window burn
Master: 2 30-minute Betas

LENGTH OF INTERVIEW: 1 1/2 hours (audio interview)
1 hour (video interview)

RESTRICTIONS ON USE: None

TRANSCRIPT: 25 pages (audio interview)
12 pages (video interview)

ACCESSION NUMBER: AV 2001.104.12

CATALOG NUMBER: OH87.14
INTERVIEW: Timm, Gerald
YEAR: 2000

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Gerald Timm
DATE: August 21, 2000
PLACE:
INTERVIEWER: Kirk Jeffrey

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Gerald Timm was born in Minnesota, and completed undergraduate and graduate studies there. He has developed many medical devices for urological disorders and has started several companies to market the various devices. Additionally, he worked as a researcher and professor at a Minnesota university.

SUBJECTS DISCUSSED: Early career, interest in medical engineering applications, and tailoring education for medical technology work. University career: research, teaching, developing courses and interdisciplinary major. Development of medical devices for urological disorders and companies that sold them: electrical stimulation of bladder device and Mentor; hydraulic artificial urinary sphincter and American Medical Systems also inflatable penile prosthesis; urodynamics equipment and Dacomed: instrumentation products to help diagnosis of urinary incontinence, nocturnal penile tumescence monitor, two styles of malleable penile prostheses; penile cuff device and vaginal exercise weights and Timm Research Company. Consolidation of various companies into Timm Medical Technologies. Sales, marketing, and licensing of devices. Company capital sources. Drug therapy versus medical devices.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 1 60-minute cassette
 Original: 1 60-minute cassette

LENGTH OF INTERVIEW: 1 hour

RESTRICTIONS ON USE: None

TRANSCRIPT: 21 pages

ACCESSION NUMBER: AV 2001.104.15

CATALOG NUMBER: OH87.15
INTERVIEW: Villafaña, Manuel
YEAR: 1997 and 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Manuel Villafaña
DATE: November 20, 1997 (*Conversazione*)
January 21, 1998 and May 20, 1998 (audio interview)
PLACE: ATS Medical, Plymouth, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Manuel Villafaña was born and attended school in New York. He has worked for Medtronic as sales manager for Latin America. He is an entrepreneur who has begun several medical device companies.

SUBJECTS DISCUSSED: (*Conversazione*) One in a series of informal talks on the medical device industry held at the Bakken Library and Museum.

(Audio interviews) His early life, school experiences; early interest in science and technology; first jobs; experiences with Medtronic; customer services representative; international aspects of the business and product information; service as first international employee and then as representative and manager for Latin America; life in Argentina; Medtronic mission statement; selling methods and prowess; relationships with doctors; importance of education in selling technical products; starting up Cardiac Pacemakers, Inc. (pacemaker with lithium battery); St. Jude Medical (bileaflet heart valve made from pyrolytic carbon); GV Medical [Grabek Villafaña] (laser angioplasty system); Helix Bio-Core precursor to ATS [Advancing the Standard]: product, management/support staff, technical expertise, funding, and selling; views on venture capital; impressions of famous heart doctors.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: Audio interview
User copy: 4 60-minute cassettes
Original: 4 60-minute cassettes
Conversazione
User copy: 2 60-minute cassettes
Original: 1 90-minute cassette

LENGTH OF INTERVIEW: 1+ hours (*Conversazione*) and 4 hours (audio)

RESTRICTIONS ON USE: None

TRANSCRIPT: 19 pages (*Conversazione*) and 46 pages (audio)

ACCESSION NUMBER: AV 2001.104.14

CATALOG NUMBER: OH87.16
INTERVIEW: Wallin, Winston R.
YEAR: 1997 and 1998

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: Winston R. Wallin
DATE: October 21, 1997 (*Conversazione*)
April 3, 1998 (audio interview)
PLACE: Metropolitan Center, Minneapolis, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: Winston R. Wallin was born in Minnesota and graduated from a Minnesota university. He was a grain trader, executive, and board member for a major Minnesota food company. From the late 1970s until the mid 1990s, he was a board member, and served the last five years as a chief executive, of Medtronic.

SUBJECTS DISCUSSED: (*Conversazione*) One in a series of informal talks on the medical device industry sponsored by the Bakken Library and Museum.

(Audio interview) Education, family, early career, impressions of Pillsbury Company; challenges as operating head of Pillsbury; early impressions of Medtronic; work on the board; diversification; role of technology and research and development; increased strategic planning; Medtronic's culture and atmosphere; impact of layoffs; quality control; liability issues; sales force; relationship of company with medical community; advantages and disadvantages of pioneering technology; acquired companies; Food and Drug Administration; Medtronic's relationship with colleges and universities; reason for large number of medical device companies in Minnesota; thoughts on his management style.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: Audio interview
User copy: 2 60-minute cassettes
Original: 2 60-minute cassettes
Conversazione
User copy: 1 90-minute cassette
Original: 1 90-minute cassette

LENGTH OF INTERVIEW: 1+ hours (*Conversazione*) and 75 minutes (audio)

RESTRICTIONS ON USE: None

TRANSCRIPT: 19 pages (*Conversazione*) and 21 pages (audio)

ACCESSION NUMBER: AV 2001.104.15

CATALOG NUMBER: OH87.17
INTERVIEW: Waters, George
YEAR: 1999

MINNESOTA HISTORICAL SOCIETY ORAL HISTORY INTERVIEW

NAME: George Waters
DATE: August 12, 1999
PLACE: Rochester, Minnesota
INTERVIEWER: David Rhees

PROJECT SERIES: Pioneers of the Medical Device Industry in Minnesota Oral History Project

BIOGRAPHICAL INFORMATION: George Waters was born in South Dakota. He was educated in Minnesota. He graduated from college in Massachusetts. He has headed several companies that designed and manufactured medical devices from the late 1940s until the early 1970s. He remained a board chairman until the early 1990s.

SUBJECTS DISCUSSED: Family background, service in World War II, education, his father's manufacturing background, Waters-Conley company: phonographs, development of home pasteurizer for farmers. Waters Instruments: oximeters, densitometers, cardiometer, and kymographic camera, and merging with Flowtronics. Sales at trade shows, engineering and entrepreneurs prompted by medical institutions and physicians. Consolidation in the medical device industry. Impact of Device Control Act and FDA regulation. Membrane oxygenator and pulsatile preservation for kidneys. Experiences working with the Mayo Clinic. Dye curve catheter versus thermal dilution curve catheter. Change in Mayo Clinic's attitude toward commercialization. Thoughts on development of Medical Device Industry in Minnesota: role of Mayo Clinic, labor pool, support services, and capital. Experiences running a manufacturing concern.

COMMENTS ON INTERVIEW:

SOUND RECORDINGS: **User copy:** 2 60-minute cassettes
 Original: 2 60-minute cassettes

LENGTH OF INTERVIEW: 1½ hours

RESTRICTIONS ON USE: None

TRANSCRIPT: 30 pages

ACCESSION NUMBER: AV 2001.104.16