# CURRICULUM VITAE

NAME: Donald Douglas Hickey
DATE & PLACE OF BIRTH: June 24, 1944 - Buffalo, New York
CITIZENSHIP: USA
MARITAL STATUS: Married
Wife: Lucinda Coulter Hickey
Children: Jerilyn Jenne Hickey
Benjamin McEntire Hickey

MILITARY STATUS: Honorable Discharge from United States Naval Reserve with permanent rank of Lieutenant.

## ACADEMIC HISTORY:

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| 1967 | A.B., Oberlin College, Oberlin, Ohio, with a major in Geology |
| 1978 | M.D., School of Medicine, State University of New York at Buffalo |
| 1978-1979 | Surgical Internship, Robert Packer Hospital, Sayre, Pennsylvania |
| 1979 | Theodor Billroth postgraduate course in surgical anatomy (32 hrs). Loma Linda University School of Medicine, Loma Linda, Calif. |
| 1979 | License to practice medicine in New York State |
| 1979 | U.S. Navy Diving Medical Officer Course, Naval School of Diving and Salvage, Washington, D.C. (96 hrs) |
| 1982 | FAA Course in Aviation Medicine, Boston, Massachusetts (26 hrs) |
| 1983, 1989 | Completed American Heart Association Course in Advanced Cardiac Life Support |
| 1984 | Completed American College of Surgeons Course in Advanced Trauma Life Support |
| 1983-1986 | Completed Residency in General Surgery, Millard Fillmore Hospital, Buffalo, New York |
| 1988 | Certified in General Surgery by the American Board of Surgery |
| 1989 | Certified for Added Qualifications in Surgical Critical Care by the American Board of Surgery |
| 1990 | Completed Laparoscopic Laser Cholecystectomy Workshop at Advanced Laparoscopy Training Center, Marietta, Georgia |
| 1996 | Recertified in General Surgery by the American Board of Surgery |
| 1997 | Recertified for Added Qualification in Surgical Critical Care by the American Board of Surgery |
| 1997 | Completed 11th Annual Comprehensive Update and Board Review of Critical Care Medicine, 4 ½ day course, Washington DC. Course Directors: Dr. Joseph E. Parrillo and Dr. Henry Masur |
| 1999 | Completed Laparoscopic Solid Organ Surgery, 2 day course at Ethicon Endo-Surgery Institute, Cincinnati, Ohio |
| 1999 | Completed 13th Annual Comprehensive Update and Board Review of Critical Care Medicine, 4 ½ day course, Washington DC. Course Directors: Dr. Joseph E. Parrillo and Dr. Henry Masur |
| 2000 | Completed Laparoscopic Antireflux Surgery, 1 day course at Ethicon Endo-Surgery Institute, Cincinnnati, Ohio |

2001 Completed 15th Annual Comprehensive Update and Board Review of Critical Care Medicine, 4 ½ day course, Washington DC.
Course Directors: Dr. Joseph E. Parrillo and Dr. Henry Masur

2001 Completed Advanced Laparoscopic Colon Procedures, 1 day course at Ethicon Endo-Surgey Institute, Cincinnati, Ohio

2003 Completed 17th Annual Comprehensive Update and Board Review of Critical Care Medicine, 4-1/2 day course, Washington, DC
Course Directors: Dr. Joseph E. Parrillo and Dr. Henry Masur

2003 Completed Advanced Laparoscopic Colorectal Procedures (Hand Assisted Laparoscopic Surgery), 1 day course at Ethicon Endo-Surgey Institute, Cincinnati, Ohio

2005 Completed 19th Annual Comprehensive Update and Board Review of Critical Care Medicine, 4-1/2 day course, Washington DC

2007 Completed Minimally Invasive Techniques in Colorectal Surgery, 1 day course at Ethicon Endo-Surgery Institute, Cincinnati, Ohio

**PROFESSIONAL EXPERIENCE:**

1967-1974 Line Officer, United States Navy

Assignments:

1. Student, U.S. Naval Officer Candidate School, Newport, R.I. (1967)
2. Student, U.S. Naval School of Mine Warfare Charleston, S.C. (1967)
3. First Lieutenant and Supply Officer, USS Constant (MSO 427) in Vietnam (1968-1969)
4. Student, U.S. Naval Underwater Sound School, Key West, Fla. (1969)
5. Oceanographic Watch Officer and Maintenance Control Officer, Naval Facility, Adak, Alaska (1970-1971)
6. Student, U.S. Naval School of Diving and Salvage, Washington, D.C. Completed Naval Salvage Officer Course. (1971)
7. Diving and Salvage Officer, Harbor Clearance Unit Two, Little Creek, Va. (1971- 1974)

1979-1980 Research Associate, State University of New York at Buffalo School of Medicine, Department of Physiology, Hyperbaric Research Laboratory

1979-1983 Medical Officer, responsible for the hyperbaric chambers, altitude chamber, and human centrifuge, S.U.N.Y. at Buffalo School of Medicine, Dept of Physiology, Environmental Laboratories

1980-1983 Research Assistant Professor of Physiology, S.U.N.Y. at Buffalo School of Medicine, Department of Physiology, Hyperbaric Research Laboratory

1980-1981 Emergency Room Physician, Bertrand Chaffee Hospital, Springville, N.Y.

1981 Consultant in hyperbaric medicine to the Philipp Holzmann Company, Frankfurt, Germany

1981-1983 Federal Aviation Administration Aviation Medical Examiner

1982-1987 Norwegian Directorate of Health Offshore Division approval to practice hyperbaric medicine and issue certificates of medical fitness to dive in the Norwegian sector of the North Sea

1987 Director, Intensive Care Units, Millard Fillmore Hospitals, Buffalo, N.Y.

1987-1988 Research Instructor, State University of New York at Buffalo, School of Medicine, Department of Physiology

1988-present Private Practice in General Surgery

1989-present Research Assistant Professor of Physiology, State University of New York at Buffalo

1995-present Clinical Assistant Professor of Neurosurgery, State University of New York at Buffalo

2003-present Clinical Assistant Professor of Surgery, State University of New York at Buffalo

**SCIENTIFIC PAPERS AND BOOKS:**

Hickey, D.D. and C.E.G. Lundgren. Lessons from Breath-hold Diving. Proceedings of the Twenty-Fifth Undersea Medical Society Workshop "The Unconscious Diver: Respiratory Control and Other Contributing Factors", UMS Publication Number 52WS(RC) 1-25-82, Undersea Medical Society, Inc., Bethesda, MD. September, 1980.

Clementz, L., D.D. Hickey, and B.S. Laraway. An Inexpensive Dial Calipers for Precise Measurement of Analogue Data an Strip Chart Recorders. Journal of Medical Engineering and Technology 6(5):201-203. Sept/Oct 1982.

Hickey, D.D., C.E.G. Lundgren and A.J. Pasche. Influence of Exercise on Maximal Voluntary Ventilation and Forced Expiratory Flow at Depth. Undersea Biomed. Res. 10(3):241- 254. Sept. 1983.

Hickey, D.D., D.C. Marky and R.J. Smith. Gas Inertia and Ventilatory Measurements Under Pressure: Methodological Considerations. Undersea Biomed. Res. 10(4):273-279. Dec. 1983.

Hickey, D.D. and C.E.G. Lundgren. "Breathhold Diving". Chapter by invitation in Physician`s Guide to Diving Medicine, pp. 206-221. C.W. Shilling, Ed. Plenum Press, NY. 1984.

Hajduczok, Z., D.D. Hickey and C.E.G. Lundgren. Cardiac Output Adjustment to Sudden Immersion Determined by Impedance Cardiography. IN: Bachrach AJ and Matzen MM, eds., Underwater Physiology VIII: Proceedings of the 8th Symposium on Underwater Physiology. Bethesda, Maryland: Undersea Medical Society, 1984:295-300.

Hickey, D.D., C.E.G. Lundgren, and A.J. Pasche. Enhancement of Maximal Voluntary Ventilation and Expiratory Flow at Depth. IN: Bachrach AJ and Matzen MM, eds. Underwater Physiology VIII: Proceedings of the 8th Symposium on Underwater Physiology. Bethesda, Maryland: Undersea Medical Society, 1984:475-480.

Lundgren, C.E.G., D.D. Hickey and W.T. Norfleet. Physiological Design Specifications for Underwater Breathing Apparatus. Final Report to Naval Coastal Systems Center, Panama City, Florida. 1984. Basic Order Agreement No. NC0612-83-G-0072, Delivery Order No. 0003, Subcontract No. 1-E-21-G03.

Hickey, D.D. Outline of Medical Standards for Divers. Undersea Biomed. Res. 11(4):407-432. Dec. 1984.

Hickey, D.D. and J. Zaharkin. Low Frequency Response Characteristics of Three Grass Model 7 Polygraphs. J. Appl. Physiol. 58(3):1026- 1030. Mar. 1985.

Ferrigno, M., D.D. Hickey, M.H. Liner and C.E.G. Lundgren. Cardiac Performance in humans during breath holding. J. Appl. Physiol. 1986. 60(6), 1871-1877.

Hickey, D.D. A Simple Device for the Direct Measurement of Mean Arterial Pressure and for Calibration of Arterial Pressure Transducers. J. Med. Eng. and Tech. 1986. 10(4), 188-192.

Mollendorf, J.C., D.K. Moscaritolo and D.D. Hickey. Transient pressure response of the gaseous contents of a thin-walled, spherical pressure vessel to externally varying pressure. Paper presented at 23rd Annual Meeting of the Society of Engineering Science, State University of New York at Buffalo, 26 August 1986.

Hickey, D.D. A Simple, Inexpensive Device for Aspiration Biopsy. Surgery, Gynecology & Obstetrics 1987. 164(2), 173-4.

Ferrigno, M., D.D. Hickey, M.H. Liner and C.E.G. Lundgren. Simulated Breath-hold Diving to 20 Meters: Cardiac Performance in Humans. J. Appl. Physiol. 1987. 62(6), 2160-2167

Hickey, D.D., C.E.G. Lundgren, W. Norfleet and A.J. Pasche. Respiratory function in the upright working diver at 6.8 ATA (190 fsw). Undersea Biomed. Res. 1987. 14(3), 241-262.

Norfleet, W.T., D.D. Hickey, C.E.G. Lundgren. A Comparison of Respiratory Function in Divers Breathing with a Mouthpiece or a Full Face Mask. Undersea Biomed. Res. 1987. 14(6), 503-526.

Hickey, D.D. Correspondence: A Simple Device for the Direct Measurement of Mean Arterial Pressure and for Calibration of Arterial Pressure Monitors. J. Med. Eng. and Tech. 1987. 11(4), 199-201.

**SCIENTIFIC ABSTRACTS:**

Hickey, D.D., C.E.G. Lundgren, and A. Pasche. Respiratory Function in Erect Subjects Performing Exercise at Depth. Abstract. Undersea Biomed. Res. Suppl.to 8(1):49. March, 1981.

Hickey, D.D., C.E.G. Lundgren, D.R. Pendergast, and H.T. Swanson. High Oxygen Pressures Retard Oxygen Consumption On-response to Arm Exercise. Abstract. Undersea Biomed. Res. Suppl.to 9(1):37. March 1982.

Hickey, D.D., D.C. Marky, and R.J. Smith. Gas Inertia May Bias Ventilatory Measurements Under Pressure. Abstract. Undersea Biomed. Res. Suppl. to 9(1):34. March 1982.

Hickey, D.D., C.E.G. Lundgren, W.T. Norfleet and A.J. Pasche. Respiratory Function in the Upright Working Diver at 6.8 ATA (190 FSW). Abstract. Undersea Biomed. Res. Suppl. to 12(1):25. March 1985.

Hickey, D.D., C.E.G. Lundgren and W.T. Norfleet. Face Mask vs. Mouthpiece Breathing - Respiratory Function at 6.8 ATA (190 FSW). Abstract. Undersea Biomed. Res. Suppl. to 12(1):26. March 1985.

Ferrigno, M., D.D. Hickey, M.H. Liner and C.E.G. Lundgren. Systolic Time Intervals During Breath-hold Diving. Abstract. Undersea Biomed. Res. Suppl. to 12(1):27. March 1985.

Plonka, A.J., D.D. Hickey, J.S. Williams, K.L. Francis, M. Adelman and J.J. Schentag. Concentrations of biochemical markers in bowel ischemia: Is hepatic clearance an important factor? Abstract in: Nobin, A., Ed. Abstracts First World Congress of Hepato-Pancreatico-Biliary Surgery, p 182. Lund, Sweden, 1986.

Plonka, A.J., D.D. Hickey, D.E. Nix, J.S. Williams, K.L. Francis, and J.J. Schentag. Effect of portocaval shunt on the clearance of bacterial endotoxins following acute bowel ischemia. Abstract in: Nobin, A., Ed. Abstracts First World Congress of Hepato-Pancreatico-Biliary Surgery, p 230. Lund, Sweden, 1986.

Hickey, D.D., I. Tyssebotn, G. Bergoe, D.E. Warkander, C.M. Buyea and C.E.G. Lundgren. Minimally invasive method for measuring left atrial pressure. Abstract. Critical Care Med. Suppl. to 29(12):164/ S38. December 2001.

Lundgren, C.E.G., T. Taraldsøy, T. Edstrom, I. Tyssebotn and D.D. Hickey. Mean left atrial pressure measured noninvasively in simulated microgravity. Abstract. 5th International Head-Out Water Symposium: Research Simulations to Model Microgravity. Houston, Texas. October 8-9, 2002.

**NONSCIENTIFIC PUBLICATIONS:**

Hickey, D.D. Real Hot Seaman. U.S. Naval Institute Proceedings 107(8):101. August 1981.

Hickey, D.D. Aerial Shooting with an Air Rifle. Rifle Magazine 16(3):34-35, 46-48, May-June 1984.

Hickey, D.D. A Portable, Inexpensive Target Stand. Rifle Magazine 16(6):29, Nov-Dec 1984.

**PATENTS:**

1. Push-pull Exercise Device, U.S. Patent No. 4,239,212. 1980.
2. Push-Pull Exercise Device, U.S. Patent No. 4,865,317. 1989.
3. Method and Apparatus for Measuring Blood Pressure. U.S. Patent No. 5,048,532. 1991.
4. Method and Apparatus for The Measurement of Atrial Pressure. U.S. Patent No. 5,181,517. 1993.
5. Combination Esophageal Catheter for The Measurement of Atrial Pressure. U.S. Patent No. 5,263,485. 1993.
6. Combination Esophageal Catheter for the Measurement of Atrial Pressure. U.S. Patent No. 5,398,692. 1995.

7. Method of Determining a Mean Pressure from a Source within a Body. U.S. Patent No. 5,551,439. 1996.
8. Method for Positioning Esophageal Catheter for Determining Pressures Associated with the Left Atrium. U.S. Patent No. 5,570,671. 1996.
9. Method and Apparatus Utilizing Heart Sounds for Determining Pressure Associated with the Left Atrium. U.S. Patent No. 5,697,375. 1997.
10. Method and Apparatus Utilizing Heart Sounds for Determining Pressures Associated with the Left Atrium. U.S. Patent No. 5,921,935. 1999.
11. Method and Apparatus for Noninvasive Determination of Cardiac Performance Parameters. U.S. Patent No. 6,120,442. 2000.
12. Method and Apparatus for Noninvasive Determination of Cardiac Performance Parameters. U.S. Patent No. 6,238,349. 2001.
13. Method and Apparatus for More Precisely Determined Mean Left Atrial Pressure. U.S. Patent No. 6,432,059. 2002.

**PROFESSIONAL SOCIETIES:**

2004-present Alpha Omega Alpha Honor Medical Society

**AWARDS:**

1990 C.P. Chandra Award for Outstanding Teacher, State University of NY at Buffalo, Department of Surgery.

1991 Inventor of the Year Award by the Technical Societies Council and the Niagara Frontier Patent Lawyers Association.

2004 Second Place in Life Sciences, Inventor of the Year Award, Niagara Frontier Intellectual Property Law Association and Technical Societies Council of the Niagara Frontier.

2003 Listed in Consumers' Guide to Top Doctors.

2004 C.P. Chandra Award for Outstanding Teacher, State University of NY at Buffalo, Department of Surgery.

2006 C.P. Chandra Award for Outstanding Teacher, State University of NY at Buffalo, Department of Surgery.