

The Carlson School
Medical Industry Leadership Programs
Shaping the future of the medical industry

CARLSON
SCHOOL OF MANAGEMENT
UNIVERSITY OF MINNESOTA



Driving innovation through education and research

Dedicated to the advancement of cutting-edge education and research, the Medical Industry Leadership Institute prepares MBA students for challenging careers with today's top medical industry firms. With a holistic perspective on the entire medical industry—from insurance, medical devices, pharmaceuticals, and biotechnology to the delivery of care—the institute focuses on today's most critical issues.

As part of the internationally renowned Carlson School, the institute has built a responsive infrastructure to

support faculty and students who conduct research in partnership with top firms and departments, research centers, and institutes within the University of Minnesota and beyond. The institute also works with industry partners to recruit highly qualified students from around the world. Through courses, experiential learning opportunities, and professional networks, students work with business leaders and distinguished faculty to develop new medical product and service innovations.

Located in Minnesota, which maintains one of the nation's largest concentrations of health care and medical device firms, the institute seeks to build on the University of Minnesota's 50-year partnership with the medical industry. In addition, the organization creates executive education programs that put professionals in touch with the latest industry trends.



**The Medical Industry Leadership
Institute National Industry Council**

Mayo Clinic
McKesson
McKinsey & Company
Medtronic
Merck
Pfizer
UnitedHealth Group



“Through in-depth case studies, analyses of real-world examples, and guest speakers, the Medical Industry Leadership program helped expand my view of the medical industry and gave me a passport to see and learn from many different corners of the world. The program also guided me toward a career with a premier consulting firm that partners with the country’s top hospitals, academic medical centers, and physician group practices to address the never-ending challenges the medical industry will face in the coming years.”

Jacqueline Leff, '07 MBA
Consultant, Kurt Salmon Associates

“Medical care affects everyone and continues to garner attention as an industry that must continue to transform itself to improve access, quality, usability, and affordability. The Medical Industry Leadership Institute prepares students for careers in this field by providing an understanding of the breadth and depth of the industry, from history through current trends. Certainly, we will all benefit from fresh, forward-thinking minds entering this field to challenge the status quo and initiate change.”

Anita Messal
Chief Operating Officer, OptumHealth Care Solutions, UnitedHealth Group

Learn more

Contact us for more information about Medical Industry Leadership Institute programs.

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The medical industry specialization

Along with a solid foundation in the entire business enterprise, the Carlson School's highly ranked, fully accredited Full-Time and Part-Time MBA programs provide a rigorous, forward-thinking curriculum informed by the latest research. Few graduate business programs focused on the medical industry offer students the training, knowledge, and experience needed to meet the future challenges and business opportunities of this growing market.

The Medical Industry Leadership Institute works with the Carlson School and the University of



Minnesota to offer a wide range of courses and professional activities that help students develop functional expertise in an established business discipline, such as finance, marketing, or strategy. Through innovative courses, including Anatomy and Physiology for Managers, the program also provides a comprehensive overview of the scientific, biological, and technological foundations of the medical industry. In addition, students gain valuable experience through supervised, hands-on learning opportunities with leading industry organizations and consulting and investment banking firms.

To learn more about the Carlson MBA, visit carlsonschool.umn.edu/carlsonmba.



Recent recruiting companies

Each year, the medical industry welcomes more than 100 Carlson MBA graduates. Recently, more than 25 percent of employment and internship positions have been with pharmaceutical, medical device, insurance, consulting, investment banking, and health care delivery organizations.

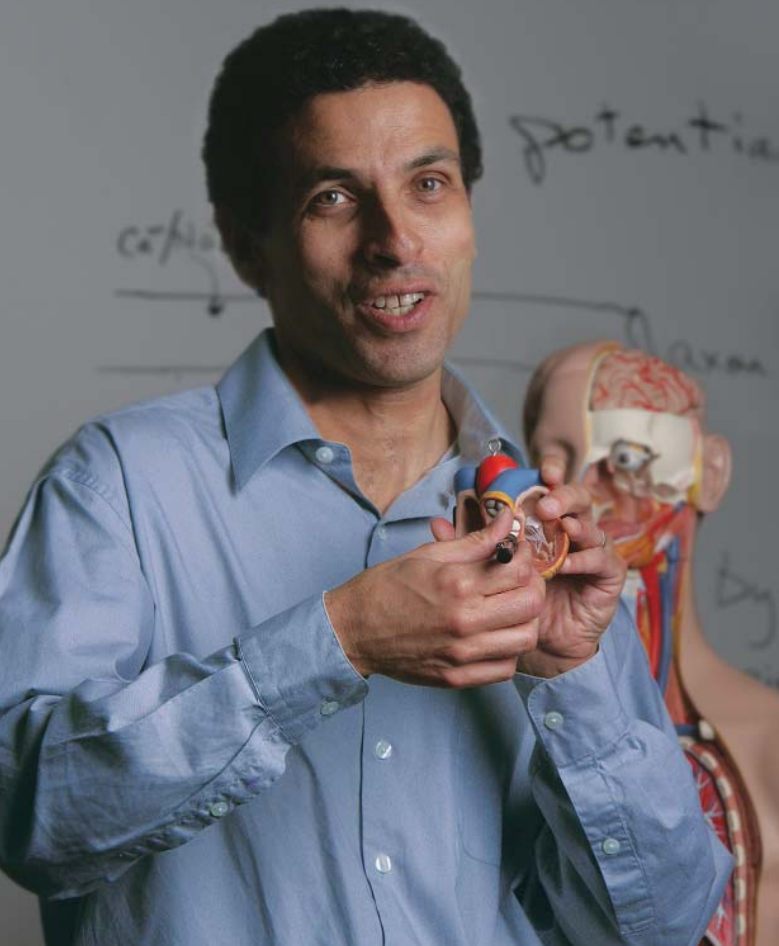
3M
American Medical Systems
Bayer
Bear Stearns
Boston Scientific
Deloitte Consulting

Johnson & Johnson
Kurt Salmon Associates
Mayo Clinic
Medtronic
Procter & Gamble
St. Jude Medical
UnitedHealth Group

“As a business school with a top-tier research faculty and a medical industry environment of national—if not global—brands, the Carlson School’s development of a medical industry curriculum to complement traditional business training is a natural venture. One of our innovations is a course on medical technology evaluation, where students conceive projects with the consensus of business leaders from United-Health Group, Medtronic, and the Mayo Clinic—a holistic representation of the industry. Course projects have focused on market opportunities and challenges, including medical tourism, retail clinics, obesity, implantable neurological devices, and health savings accounts.”

Stephen Parente

*Associate Professor of Finance; Director,
Medical Industry Leadership Institute*



“Teaching the inaugural Anatomy and Physiology for Managers course was tremendously gratifying. I was pleased to see the level of engagement from the students, none of whom were clinically trained and most of whom had no science background. Everyone came to a great basic level of understanding and fluency with clinical terminology and basic anatomy and physiology. Watching them present clinical material was particularly satisfying. As a medical director, I’d be happy to deal with any of them in a clinical-business setting.”

Jeff Hertzberg, MD, MS

*President, Medformatics Inc.; Adjunct Assistant
Professor, University of Minnesota Medical
School, Division of Health Informatics*

Supporting cutting-edge research

The Medical Industry Leadership Institute has built a responsive infrastructure to support faculty and students as they conduct timely, rigorous research in partnership with top firms as well as departments, research centers, and institutes within the University of Minnesota and beyond.

In addition to receiving significant externally funded research revenues

from government, industry, and foundations, Carlson School faculty regularly publish medical industry-related articles in the nation's premier peer-reviewed journals on topics ranging from pharmaceutical pricing to consumer-directed health plans, medical decision making under uncertainty, neuroeconomics, RFID (radio frequency identification) applications, and lean practices in health care organizations.

In 2007, the institute launched a small grant program to fund faculty research focused on the medical industry. Endorsed by leading medical industry firms, grants are awarded through a competitive review process and available only to inter-collegiate research teams, which helps foster a collaborative community of researchers across the University.

"The small grant from the Medical Industry Leadership Institute has allowed me to advance my research and examine how we can improve chronic disease care using data mining and personalization technologies. By collaborating with both industry and University of Minnesota researchers, we can examine physician practices and treatment techniques for patients with type 2 diabetes so they can receive optimal care."

Paul Johnson

Curtis L. Carlson Chair in Decision Sciences, Department of Information and Decision Sciences, Carlson School of Management

Advancing executive education

For more than 35 years, Carlson Executive Education has been partnering with the business community to provide high quality educational programs for current and future leaders. Through Executive Education, the Carlson School's world-class faculty put

corporate executives, scientists, and physicians in touch with the latest business strategies, medical industry trends, research, and technical applications.

Currently, the institute is collaborating with Carlson School experts to develop new medical industry educational opportunities for custom programs and international markets. The institute also hosts an annual executive conference for industry leaders on advancing innovations in health care information technology.

"St. Jude Medical recently initiated a customized leadership development program with the Carlson School of Management. We look forward to a long and productive relationship."

Larry Voeller

Senior Director, Talent Management, St. Jude Medical

Learn through experience

Carlson School Enterprises

Carlson School Enterprises give Full-Time MBA students opportunities to apply classroom theories in real-world business situations. Offered as an elective to a select group of second-year students, Enterprise participants work with business leaders and academics to provide venture capital, brand and marketing management, funds management, and consulting services. Each year, approximately 40 percent of Enterprise projects are related to the medical industry. carlsonschool.umn.edu/enterprises

Medical Technology Evaluation and Market Research

Open to both Part-Time and Full-Time MBA students, this course provides the hands-on experience and analytical skills needed to critically evaluate new medical technologies and deliver new products to the market. Through experiential learning opportunities commissioned by leaders at UnitedHealth Group, the Mayo Clinic, and Medtronic, students gain a solid understanding of the evaluation process, medical technology financing, and the role government and regulatory agencies play in the development and use of medical technologies.

New Product Design and Business Development

Since 1994, the Carlson School has co-sponsored a course in product development that involves project experience with outside clients, including 3M, Medtronic, St. Jude, and Tennant. Throughout the year, student teams work with faculty from across the University of Minnesota, entrepreneurs, venture capitalists, and technology experts to develop a product and create a business plan for its introduction into the marketplace. As the final deliverable, students develop a working prototype and comprehensive business plan. In 2006, 66 percent of the products developed were related to the medical industry.

The Juran Center

The Joseph M. Juran Center for Leadership in Quality serves as a resource for research, discovery, and scholarship in the field of quality. Housed at the Carlson School, the center offers fellowships, educational programs, and internships to MBA students

who are interested in gaining hands-on experience implementing Six Sigma, an advanced process management methodology that uses data, statistical analysis, and problem solving techniques to measure and improve operational performance, practices, and systems. Since 2000, more than 50 percent of Six Sigma internships have been with medical and health care organizations. carlsonschool.umn.edu/juran

Anatomy and Physiology for Managers

To manage complex medical initiatives and work successfully with interdisciplinary teams of clinicians and scientists, today's non-clinician health care leaders need to develop a working knowledge of clinical language. Along with a basic overview of medical vocabulary, this course—which is unique to business schools—examines the fundamental physiology of major body systems and the process of medical technology innovation. It also provides a template for studying current clinical practices and an inventory of market opportunities.

Live Capstone Case

As the final event in the Full-Time MBA core semester, the live capstone case provides an integrative experience where students consider significant business issues from wide-ranging perspectives, including the medical industry. The live aspect of the case involves close interaction with business managers and occurs in two forms. First, during the case analysis, students engage in a questions-and-answers session with key managers. Second, core faculty select teams from the class to present case analyses and recommendations to a panel of senior executives from the business involved in the case.

Student Organization

The institute sponsors a student group that develops and promotes a sustainable network of professionals—both internally and externally—associated with all aspects of the medical industry. The group also brings together the talents of Part-Time and Full-Time MBA students who have a passion for the industry. Along with a speaker series, activities will include networking and other student-led events.

**MBA medical industry
electives**

Healthcare Marketplace
Anatomy & Physiology for Managers
Information Technology in Healthcare

Pharmaceutical Industry
Medical Device Industry
Medical Technology Evaluation & Market Research