

Carver College of Medicine

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Associate Dean, Medical Education and Professional Programs

David P. Asprey

Associate Dean, Research

Robert C. Piper

Assistant Deans

James Y. Choi, Gregory C. Nelson, Tyler Schwiesow

Undergraduate majors: medical laboratory science (BS); nuclear medical technology (BS); radiation sciences (BS)

Undergraduate certificates: EMT paramedic program; radiation sciences (breast imaging, cardiac interventional radiography, computed tomography, magnetic resonance imaging, vascular interventional radiography)

Professional degrees: MCA; MCN; MD; MM; MPA

Graduate degrees: MA; MME; MS; DPT; PhD

Website: <https://medicine.uiowa.edu/>

Courses

- Carver College of Medicine Courses
- EMT-Paramedic Program Courses
- Orthoptics Teaching Program Course

Most Carver College of Medicine courses are offered by the college's departments and programs. They are listed and described in the corresponding General Catalog sections. The college also offers the following nondepartmental courses.

Carver College of Medicine Courses

MED:0006 Summer Health Professions Education Program 0 s.h.

Summer Health Professions Education Program (SHPEP) for students interested in health professional careers. Requirements: Summer Health Professions Education Program enrollment.

MED:1100 Introduction to Health Care Professions 3 s.h.

Introduction to current U.S. health care system and changes that are likely in the near future; information about distinct health care professions grouped by discipline (e.g., nursing, pharmacy, public health), and less traditional career pathways in health care fields; how health care professionals across disciplines coordinate to deliver better health care; instruction by prominent health care faculty at the University of Iowa; for students considering a career in the health care field.

MED:3740 End-of-Life Care for Adults and Families 3 s.h.

End-of-life issues in care of adults, older adults, and their families. Same as ASP:3740, NURS:3740.

MED:5416 Foundations in Healthcare Ethics 3 s.h.

Major ethical traditions, ideas, and frameworks that have shaped contemporary approaches to healthcare ethics in morally pluralistic Western cultures; four prominent frameworks in healthcare ethics include virtue based, principle based, circumstance based, and consequence based that emphasize four aspects of ethical decision-making—agent, action, context, and outcome.

MED:8001 Medical Elective arr.

MED:8003 Clinical Clerkships arr.

MED:8005 Medical Student Research Fellowships 0 s.h.

MED:8010 Introduction to Medical Education at Iowa 0 s.h.

Introduction to first-year fall courses; advanced concepts in anatomy, biochemistry, cell biology, and clinical reasoning skills; for MD students.

MED:8021 Community Health Outreach I 0-1 s.h.

Presentations and practical experience working with agencies that provide health care and wellness promotion to communities; substance abuse; child, adolescent, and adult health; aging; interpersonal violence; homelessness.

- MED:8022 Community Health Outreach II** 1-2 s.h.
Presentations, patient-based learning groups, readings, and practical experience working with agencies that provide health care and wellness promotion to communities; substance abuse; child, adolescent, and adult health; aging; interpersonal violence; homelessness.
- MED:8023 Community Health Outreach III** 1-2 s.h.
Presentations, patient-based learning groups, readings, and practical experience working with agencies that provide health care and wellness promotion to communities; substance abuse; child, adolescent, and adult health; aging; interpersonal violence; homelessness.
- MED:8028 Introduction to U.S. Health Care System** 1 s.h.
Structure, function, and finance of U.S. health care system; access, cost, quality, finance mechanisms, reform process.
- MED:8029 Disruptive Forces in Medicine** 1 s.h.
Exploration of the pathogenesis of COVID-19 and its impact on medicine at University of Iowa Health Care; students gain perspective and knowledge about the virus, its impact on medical practice, and future consequences; mechanisms of COVID-19 pathogenesis; racial and social inequities highlighted by the pandemic; insight into clinical challenges (i.e., telemedicine); best practices for patient education and clinician safety in different fields. Requirements: MD enrollment.
- MED:8031 Reproductive and Gynecological Health Seminar** 1 s.h.
Education on reproductive and gynecological health topics, service opportunities, and mentorship. Requirements: MD standing.
- MED:8033 Clinical Skills for Responding to Sexual Violence** 1 s.h.
Training that focuses specifically on epidemiology, screening, clinical presentation, initial evaluation, and medical management of sexual violence and interpersonal violence victimization; opportunity to apply preclinical and/or concurrent coursework to true-to-reality, clinically relevant, and medically complex health problems with sexual violence as the underlying cause; development of communication and clinical skills necessary to address sexual and interpersonal violence in a clinical setting. Requirements: MD standing or physician assistant standing or enrollment in degree-seeking graduate or health professional program.
- MED:8070 The Examined Life: Writing and Medicine** 1 s.h.
Literature, essays, poetry; discussion of participants' writing; students prepare portfolios of their own writing.
- MED:8071 Career Life Planning** 1 s.h.
Students' individual interests, values, and decision-making processes important in selecting a specialty, engaging in the match process, and integrating oneself into the medical profession; personal career development, culture and climate in which physicians work and learn.
- MED:8073 Biomedical Innovation** 1 s.h.
Introduction to all phases of medical device/technology development; development of knowledge of entire medical innovation process through didactic sessions, faculty, interactions, and interdisciplinary collaboration; interdisciplinary approach; research and development of a novel medical device, therapy, or model of care. Requirements: MD enrollment.
- MED:8074 Research Skills Seminar** 1 s.h.
Seminar series designed to bridge gap from undergraduate and medical student experiences to research during residency and beyond; topics include identification of projects and mentors, leadership, collaboration, translation, evidence-based medicine, project development, statistical analysis, presentation, publication, and career progression.
- MED:8076 Bioethics and Humanities Seminar** 1 s.h.
Broad range of topics in bioethics and medical humanities, including philosophical principles, clinical ethics, research ethics, medical professionalism, narrative ethics, and historical and cultural aspects of medicine. Requirements: enrollment in Carver College of Medicine humanities distinction track.
- MED:8077 Personal-Professional Compass** 1 s.h.
Provides help for medical students to understand, articulate, and integrate personal and professional values and goals while making their way through medical school; promote student growth as humanistic professionals through written reflections on personal experience, readings from medicine and the humanities, and discussions with peers and mentors; preparation to write an authentic and compelling personal statement for residency applications. Requirements: MD enrollment.
- MED:8081 Global Health Issues I** 1 s.h.
Core issues in the current field of global health, including history of global health, health and development, social determinants of health, measuring health and disease, disparities in the American health care system, poverty and health, gender issues and reproductive health, child health, immigrant and migrant health issues, and introduction of major players in global health. Requirements: MD enrollment.
- MED:8082 Global Health Issues II** 1 s.h.
Core issues in the current field of global health, including health care as a human right, why the Third World is the Third World, communicable disease issues, outbreaks and pandemics, noncommunicable issues, malnutrition and obesity, cultural context of health care, violence as a health issue, and emergency response and transition to development. Prerequisites: MED:8081. Requirements: MD enrollment.
- MED:8083 Global Cross-Cultural Elective** arr.
Cross-cultural medical program with focus on health care problems of a domestic or international community; individually arranged.
- MED:8084 Global Health Seminar** 1 s.h.
Presentations by faculty members, university special guests, and alumni on their current work in global medicine/global health; implementation of global health concepts. Requirements: MD enrollment.
- MED:8121 Clinical and Professional Skills I** 3 s.h.
Introduction to concepts of clinical reasoning, communication, physical examination, and evidence-based clinical practice; principles of biomedical ethics; early clinical interactions and placement of classroom experiences into context of patient care through the Early Clinical Experiences (ECE) program; interaction with students from other health sciences colleges to explore the interprofessional approach to caring for patients. Requirements: MD enrollment.

- MED:8122 Medicine and Society I** 3 s.h.
Delivery of individual disease prevention/health promotion services; introduction to social determinants of health; influence and impact of culture and community on health care; community resources; application of health and risk assessment to individual patients and self. Requirements: MD enrollment.
- MED:8123 Foundations of Cellular Life** 5 s.h.
Genetics, embryology, molecular biology, biochemistry, cell biology and histology; molecular events required for cellular life; how cells grow and interact to form basic tissues of human body; necessary framework to explore six mechanisms of health and disease. Requirements: MD enrollment.
- MED:8124 Mechanisms of Health and Disease I** 8 s.h.
Normal and healthy processes within and among mechanisms of oxygenation, metabolism, and genetics/development; first in a series on multisystem mechanisms of health and disease. Requirements: MD enrollment.
- MED:8131 Clinical and Professional Skills II** 4 s.h.
Interpersonal skills, lifelong learning, interviewing skills, physical examination skills, ethical issues in patient care, and basic approach to patients in terms of prevention, treatment, and follow-up care. Second in a sequence during preclinical semesters of medical school and continuing as an integrated strand throughout curriculum. Requirements: MD enrollment.
- MED:8132 Medicine and Society II** 4 s.h.
Knowledge and skills related to health promotion and disease prevention from a medicine and society perspective, including impact of behavior, environment, culture, and socioeconomic; identification of major public health problems associated with mechanisms of health and disease. Second in a sequence during preclinical semesters of medical school and continuing as an integrated strand throughout curriculum. Requirements: MD enrollment.
- MED:8133 Mechanisms of Health and Disease II** 7 s.h.
Normal and healthy processes within and among mechanisms of Immunology/Inflammation, locomotion/integument, and neuropsychiatry; second in a series on mechanisms of health and disease. Requirements: MD enrollment.
- MED:8134 Mechanisms of Health and Disease III** 11 s.h.
Abnormalities or disruptions leading to disease within and among mechanisms of oxygenation, metabolism, and genetics/development; third in a series on multisystem mechanisms of health and disease. Requirements: MD enrollment.
- MED:8199 First-Year Special Study** arr.
First-year special study. Requirements: MD enrollment.
- MED:8221 Clinical and Professional Skills III** 4 s.h.
Advanced clinical reasoning skills through focused patient encounters and interactions with special patient populations; emphasis on integration and use of concepts for cost conscious, patient-centered, interdisciplinary care. Requirements: MD enrollment.
- MED:8222 Medicine and Society III** 4 s.h.
Health services organization and delivery; emphasis on community dimensions of medical practice and patient safety. Requirements: MD enrollment.
- MED:8223 Mechanisms of Health and Disease IV** 10 s.h.
Abnormalities or disruptions leading to disease within and among mechanisms of immunology/inflammation, locomotion/integument, and neuropsychiatry; fourth in a series on multisystem mechanisms of health and disease. Requirements: MD enrollment.
- MED:8224 Mechanisms of Health and Disease Keystone** 7 s.h.
Transition between classroom instruction in mechanisms of health and disease and clinical practice; foundational information from mechanisms of health and disease sequence approached from perspective of what is commonly encountered in clinics; application of information to making diagnostic and management decisions of common important clinical problems. Requirements: MD enrollment.
- MED:8299 Second-Year Special Study** arr.
Second-year special study. Requirements: MD enrollment.
- MED:8320 Transition to Clerkships** 1-2 s.h.
Two weeks of skills training prior to start of core clinical clerkships. Requirements: MD or MPA enrollment.
- MED:8401 Medicine, Literature, and Writing** arr.
Insights, freedom, joy, responsibilities, and challenges of a life in medicine; reading, discussion, individual creative writing.
- MED:8403 Teaching Skills for Medical Students** 4 s.h.
Practical teaching techniques; opportunity for students to develop teaching skills before they become medical residents.
- MED:8404 Advanced Teaching Skills for Medical Students** 2 s.h.
Opportunity to expand knowledge and experience in medical education; investigation of medical education in students' specialty of interest through literature research and interaction with faculty; primary focus is to design and successfully complete a faculty approved project. Prerequisites: MED:8403. Requirements: fourth-year MD enrollment.
- MED:8405 Leadership for Future Physicians** 2 s.h.
Formal training in multiple aspects of leadership; offers future leaders in health science specialties an earlier opportunity to consider leadership abilities and perspectives; for fourth-year medical, physician assistant, nursing, pharmacy, public health, and dental students. Requirements: health science enrollment.
- MED:8410 Quality Improvement and Patient Safety** 2 s.h.
Students work with faculty and staff involved in quality improvement and patient safety (QI/PS) at University of Iowa Health Care; readings, didactic sessions, and hands-on activities to advance knowledge and practice of QI/PS in health care; activities include review of ongoing QI/PS projects at UI Health Care, application of QI/PS methodologies to project development and analysis, individual and team-based simulations, interdisciplinary collaboration and communication, participating in conferences related to QI/PS, and reflecting on these experiences with peers.
- MED:8411 Foundational Science and Drug Therapy** 2 s.h.
Advanced medical students partner with advanced pharmacy students and work together to devise evidence-based treatments for patients suffering from common illnesses; foundational science concepts from each student's respective discipline—including mechanisms of health and disease and principles of pharmacokinetics and pharmacodynamics—are used to design and explain proposed treatments; two weeks, case-based.
- MED:8412 Improvisation: A Life Skill** 4 s.h.
Drawing from interpersonal communication techniques, experiences that help students communicate more empathically with their patients, patients' families, and other health care team members in order to create a safe and trusting exchange.

- MED:8413 Oaths and Ethics** 4 s.h.
History and purpose of medical oaths; medical oaths compared with professional codes; content of medical oaths in terms of ethical principles and virtues; review of ethical values communicated in ethics-related seminars at University of Iowa Health Care; students write a medical oath that crystallizes their own most important professional commitments.
- MED:8414 Health Policy Advocacy Des Moines** 4 s.h.
Health policy advocacy experience in Des Moines while Iowa Legislature is in session; students choose an area of interest in health policy advocacy and work with senior legislators, policy advisors, state health department representatives, or advocates of various professional organizations involved in advocacy efforts for health policy; students receive prior approval regarding which health policy issue they want to work on and which individual or professional organization they plan to work with during their onsite experience. Requirements: MD enrollment.
- MED:8415 Financial Management for Rising Interns** 2 s.h.
Foundational concepts of personal financial management; topics include personal budgeting, educational loan management, investing, risk management and mitigation, medical practice investment, taxation, and additional relevant areas of interest for rising resident physicians. Requirements: MD enrollment.
- MED:8416 Foundations in Healthcare Ethics** 3 s.h.
Major ethical traditions, ideas, and frameworks that have shaped contemporary approaches to healthcare ethics in morally pluralistic Western cultures; four prominent frameworks in healthcare ethics include virtue based, principle based, circumstance based, and consequence based that emphasize four aspects of ethical decision-making—agent, action, context, and outcome.
- MED:8423 Teaching Skills for Teaching Distinction Students** 4 s.h.
Practical teaching techniques; opportunity for students to develop teaching skills before they become medical residents. Requirements: MD enrollment. Recommendations: enrollment in the teaching distinction track.
- MED:8470 Self-Directed Learning in Advanced Clinical Topics** 0 s.h.
Online learning modules on advanced clinical topics; for students in MD program.
- MED:8480 Global Health Clerkship** arr.
Cross-cultural medical program at an international site; focus on health care problems of a specific community; individual educational objectives set in advance.
- MED:8490 Humanities Individually Arranged Elective** arr.
Independent study experience; humanities-focused project developed in consultation with a mentor; flexible structure for exploring the intersection of the humanities and medicine through self-chosen topics.
- MED:8499 Individually Arranged Medicine Elective** arr.
Individually arranged elective through the Office of Student Affairs and Curriculum.
- MED:9701 Instructional Design and Technology** 3 s.h.
Skills and techniques necessary for analysis, design, development, implementation, and evaluation of effective instruction.
- MED:9702 Clinical Teaching in Medical Education** 3 s.h.
Principles and methods for teaching individuals and small groups in outpatient and inpatient settings. Prerequisites: MED:9701 or PSQF:6205. Recommendations: educational psychology course.
- MED:9703 Educational Research and Evaluation** 3 s.h.
Research design and program evaluation; approaches relevant to medical education.
- MED:9711 Teaching Methods in Medical Education** 3 s.h.
Principles and methods for teaching in large and small classrooms. Recommendations: educational psychology course.
- MED:9712 Introduction to Educational Measurement in Medical Education** 3 s.h.
Classical test theory; overview of medical education assessment methods; practical information for designing and critiquing assessments.
- MED:9713 Assessment in Medical Education** 3 s.h.
Medical education assessment methods; research methods and literature that support current practices; research project. Prerequisites: MED:9712.
- MED:9714 Current Issues in Medical Education** 3 s.h.
Selected issues, policies, and research.
- MED:9720 Portfolio Project** 3 s.h.
Production of individual student portfolios used to integrate knowledge across courses; capstone activity.
- MED:9721 Study in Faculty Development** 3 s.h.
Academic credit for approved project or other assigned activities for students in the Teaching Scholars program.
- MED:9722 Independent Study** arr.
- MED:9724 Leadership in Medicine** 3 s.h.
Introduction to basic leadership and management theories pertaining to a health care setting; focus on the history of leadership development, various components of leadership, and how these components can be used to be a successful leader/administrator. Requirements: Master in Medical Education degree program enrollment.
- MED:9725 Simulation in Medical Education** 3 s.h.
Appropriate use of various types of simulation in medical education; how to design, deliver, and debrief a simulation activity; literature supporting use of simulation in medical education. Requirements: Master in Medical Education degree program enrollment.
- MED:9726 Curriculum Development in Medical Education** 3 s.h.
Curriculum development using knowledge and experience gained from MED:9701 and MED:9711; identify an area/topic for creation of curriculum; conduct a needs assessment to identify topics and/or components of curriculum; create a plan with curriculum goals, learning objectives, and methods for evaluation; develop preliminary planning and aspects of implementation and evaluation phases of the model.
- MED:9727 Teaching and Assessing Communication Skills in Medical Education** 3 s.h.
Explores broad issues related to both teaching and assessing clinician-patient communication skills in medical education; review literature on best practices in clinician-patient communication and on teaching and/or assessing skills among medical learners; explore observation and feedback as key technique in addressing communication skills through observation of peers and learners; video recording of interactions with patients.

MED:9728 Educational Research and Evaluation in Practice 3 s.h.

Mentored research on a topic of interest in health professions education, including obtaining Institutional Review Board (IRB) approval, developing or refining data collection instruments, conducting primary data collection, assisting with statistical or qualitative data analysis and interpretation, and preparing scholarly submissions such as manuscripts and conference abstracts. Recommendations: MED:9703.

Hospital Certificate Programs of Study

The following courses are conducted by University of Iowa Health Care staff.

EMT-Paramedic Program Courses

EMTP:3101 Emergency Medical Technician - Paramedic I 0 s.h.

Preparation for role of entry-level paramedic: comprehension, application, and evaluation of the clinical role; demonstration of technical proficiency in all required skills; demonstration of personal behaviors consistent with professional and employer expectations. Requirements: certification as an emergency medical technician-basic.

EMTP:3102 Emergency Medical Technician - Paramedic II 0 s.h.

Preparation for role of entry-level paramedic: comprehension, application, and evaluation of the clinical role; demonstration of technical proficiency in all required skills; demonstration of personal behaviors consistent with professional and employer expectations. Requirements: admission to emergency medical technician paramedic program.

EMTP:3103 Emergency Medical Technician - Paramedic III 0 s.h.

Preparation for role of entry-level paramedic: comprehension, application, and evaluation of the clinical role; demonstration of technical proficiency in all required skills; demonstration of personal behaviors consistent with professional and employer expectations. Requirements: admission to emergency medical technology paramedic program.

Orthoptics Teaching Program Course

OTP:4902 Orthoptics Program 0 s.h.

Clinical science of binocular vision, ocular motility, and related eye disorders; practical, theoretical training in the Department of Ophthalmology and Visual Sciences two-year program; written, oral and practical national board examinations required at completion. Requirements: bachelor's degree with specific class recommendations.