

University of Connecticut School of Dental Medicine

Research Environment Statement

The University of Connecticut School of Dental Medicine (UConn SDM) is a research-intensive dental school located in Farmington, CT. The SDM is an integral part of the UConn Health campus, which also includes the medical school, graduate school in biomedical sciences, and John Dempsey Hospital. Major research strengths at the UConn SDM include behavioral sciences, biomedical engineering, and skeletal development and regeneration. Additional active research areas include periodontal disease, oral microbiome, oral-systemic connections, temporomandibular joint disease, tooth movement, dental implants, diagnostic imaging, and oral side-effects of cancer therapies. For the last few years, the UConn SDM has ranked in the top 10 US dental schools based on direct research funding from the NIH. In FY2021, the UConn SDM received \$13.4 M in total new grant funding and 17 patent applications were filed by SDM faculty. The SDM offers research training opportunities at many levels including a DMD/PhD program, DMD/Masters programs, Masters degree programs for dental residents, postdoctoral research training opportunities, and a robust summer research program for dental students. A centralized SDM Research Office led by the Associate Dean for Research is dedicated to providing high-quality pre- and post-award support to the SDM research community as well as managing other aspects of the SDM research program.

Researchers at the UConn SDM have access to a wide range of research resources through the School, UConn Health campus, and the larger UConn campus at Storrs. The SDM has over 10,000 sq. ft. of recently renovated open lab modular grade A lab space, that promotes collaboration and sharing of resources. There is a Dental Clinical Research Center, which provides clinical space and support that is solely dedicated for the conduct of dental clinical research. There is also a modern animal care facility on campus, which is accredited by AAALAC International. SDM researchers have access to a large number of subsidized Core Facilities at the UConn Health campus and at the UConn Storrs campus. At the UConn Health campus alone, these include a General Clinical Research Center, Cell and Genome Engineering Core, Electron Microscopy Facility, Light Microscopy Facility, Fluorescence Imaging Core, MicroCT Imaging Facility, Flow Cytometry Facility, High Performance Computing Facility, Laser Capture Microdissection Core, Molecular Core Facility, Center for Mouse Genome Modification, NMR Facility, Research Histology Core, Research Tissue Repository Core, and Single Cell Biology Core. For details about individual core facilities, please see [Core Facilities | School of Medicine \(uconn.edu\)](#). For a comprehensive listing of all UConn Core Facilities, please visit [Resources | COR²E \(uconn.edu\)](#). SDM researchers have access to statistical support through the UConn Statistical Core. The University has also made significant investments in Technology Commercialization Services which helps researchers to patent and commercialize their inventions.

In addition, UConn SDM researchers benefit greatly from being part of a research-intensive academic health center that brings in over \$100M in research funding each year. The large number of researchers in various biomedical fields offers tremendous opportunities for multidisciplinary collaborations. The presence of the graduate program in biomedical sciences with 7 areas of concentration on our campus allows for our faculty to be immersed in a truly comprehensive research and academic environment. Additional opportunities for collaboration are also available through the various schools at the UConn Storrs campus.