Position Specification

**Chair, Department of Oral & Craniofacial Biology**

Margaret and Cy Welcher Professor in Dental Research
University of Rochester Medical Center’s Eastman Institute for Oral Health

**Reporting Relationship**

Reports Directly to:
Director, Eastman Institute for Oral Health
Vice Dean for Oral Health, School of Medicine and Dentistry
Vice President, University of Rochester Medical Center

Works Closely with:
Vice Dean for Research, School of Medicine and Dentistry
Associate Vice President for Health Sciences Research
Chair and Professor, Department of Microbiology and Immunology

**Brief Overview**

**University of Rochester (UR)**

As Rochester’s largest employer, the University of Rochester is one of the country’s top-tier research universities. The university grants undergraduate and graduate degrees, including doctoral and professional degrees. The University of Rochester enrolls approximately 5,600 undergraduates and 4,600 graduate students. Committed to equity, diversity and inclusion, it is comprised of the University of Rochester Medical Center, Eastman School of Music, School of Arts, Sciences and Engineering, Laboratory for Laser Energetics, Warner Graduate School, Memorial Art Gallery, and the Simon Business School.

Vision – The University of Rochester will continue to frame and solve the greatest challenges of the future. We are a community in which all who work, teach, create, and provide care are welcome and respected, and where all can pursue and achieve their highest objectives for themselves, their communities, and the world. Steeped in Rochester’s rich history of social justice and entrepreneurial spirit, we will always be an inclusive, equitable, sustainable, and responsive organization at every level.

**University of Rochester Medical Center (URMC)**

One of the nation’s top academic medical centers, the University of Rochester Medical Center forms the centerpiece of the University’s health research, teaching, patient care, and community outreach missions.

The entire URMC clinical enterprise includes Strong Memorial Hospital, Wilmot Cancer Institute, School of Medicine & Dentistry, Eastman Institute for Oral Health, School of Nursing, Golisano Children’s Hospital, Thompson Health, 225+ Outpatient Clinics, Home Care, UR Medical Faculty Group, Highlands at Brighton & Pittsford, Highland Hospital, Jones Memorial, Noyes Health, and St. James Hospital.

The University’s health care delivery network is anchored by Strong Memorial Hospital— an 886-bed, University-owned teaching hospital boasting programs consistently recognized nationally and regionally. [1,364 licensed beds; 74,068 inpatient discharges; 241,875 ED visits; 103,533 urgent care visits; 49,775 ambulatory surgeries; 3,259,934 outpatient encounters]
For the last 100+ years, EIOH continues to be internationally recognized for its post-doctoral education, clinical care, community service, and research. Its vibrant oral biology basic, clinical and translational research is currently ranked 7th (and consistently ranks in the top 10) in NIH/NIDCR rankings. EIOH also features comprehensive clinical services in all dental specialties with a strong community orientation.

With more than 190,000 annual patient visits, EIOH has a high profile in the Rochester community reflecting the scale of the clinical enterprise and the central role of providing subspecialty consultative services, particularly to patients with complex medical issues and underserved populations.

In addition to the Master’s in Dental Science (see Department of Oral and Craniofacial Biology section), EIOH provides post-doctoral-level training. Current programs include Advanced Education in General Dentistry, General Practice Residency, Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry, Periodontology, Prosthodontics, Dental Public Health and Orofacial Pain.

The main goals of EIOH’s research program include boosting its national reputation as a research institution, enhancing clinical and translational research, improved integration of basic with translational and clinical research efforts, and improving the overall quality and number of research-intensive faculty.

The School of Medicine and Dentistry trains future physicians and scientists through three main educational programs: Undergraduate Medical Education (medical students), Graduate Medical Education (medical residents and fellows) and Graduate Education (research graduate and doctorate degrees). The Undergraduate Medical Education program has an enrollment of over 400 medical and MD-PhD students. There are approximately 800 trainees in Graduate Medical Education (residency and fellowship) programs. The Graduate Education program has almost 500 students training for a MS or PhD degree in the sciences, and well over 100 postdoctoral scientific appointees.

In cooperation with the Dispensary, a master of science program with a major in dental science was established as part of the School of Medicine and Dentistry some 20 years later. Shortly afterwards the Department of Dentistry and Dental Research was created.

In the 1960’s the Dispensary added a separate wing dedicated to dental research, where Dr. Michael Buonocore developed the acid etching technique that truly revolutionized dentistry. He was just one of many scientific and academic leaders and innovators that were trained in Rochester.

After years of collaborations, the Dispensary, (now Eastman Dental) and the University of Rochester made it official through a merger in 1997, becoming formal partners in oral healthcare, graduate education and research. The Eastman Department of Dentistry and the Center for Oral Biology were founded a year later.

The research at the University of Rochester’s Center for Oral Biology and Eastman Institute for Oral Health continued to build its reputation of excellence through several multi-million dollar grants, attracting internationally recognized and influential scientists working on critical topics in oral biology.

The journey continues with this next chapter, beginning with the newly established Department of Oral and Craniofacial Biology, succeeding the Center for Oral Biology. Here, George Eastman’s original vision is crowned with EIOH’s role as a unified, global leader in clinical care, education and research, enhancing its vital and integral part of the university, the world, and the oral health field.

Recognizing that future research advances will come from studies at the interface of traditional disciplines, the DOCB faculty conducts basic and applied research and are among several interdisciplinary research teams. These teams integrate and blend aspects of biochemistry, developmental biology, genetics, immunology, microbiology, physiology, pharmacology, dentistry, medicine, dermatology, and structural biology to explore important problems of craniofacial, dental and oral biology.

Department of Oral & Craniofacial Biology (previously Center for Oral Biology)

Background

The renowned oral biology research at the University of Rochester all began in 1920, when George Eastman and John D. Rockefeller, Jr. donated $9 million to establish the UR’s School of Medicine and Dentistry. But, plans for the dental component in cooperation with the Rochester Dental Dispensary (established by George Eastman in 1917) were abandoned. Instead, the UR Dental Fellows Program was developed in 1928, with the Rockefeller Foundation provided funding to support dental research and training.
In collaboration with several URMC and SMD departments, the EIOH/DOCB oral biology research programs encompass a wide variety of areas including oral infectious diseases, dental caries, salivary diagnosis and therapy, craniofacial development, orofacial and chronic pain, periodontal diagnosis and therapy, implants, materials, lasers, nerve injury and pain modulation, practice based research, and community-based disease prevention, including the role of behavior and stress in children’s tooth decay and the role of yeast in infants who have a high risk for severe early childhood caries. Additionally, a University-wide grant supports using innovative technology to discover preventative treatments for salivary gland radiation damage typical for head and neck cancer patients.

The quality of this research has been exemplified by extensive support from federal and industrial sources.

Over the past 25+ years, the Department of Oral and Craniofacial Biology’s training programs have been highly successful in recruiting, training and retaining oral science researchers.

Through the Training Program in Oral Sciences (TPOS), the focus is to recruit PhDs, and baccalaureate degree-holders pursuing a PhD, to the field of Oral Science. Comprised of an R90 research component for internationally trained DDS/PhD dual-degree holders, the components of TPOS are integrated through the Graduate Program, and the educational resources of the University’s Clinical and Translational Sciences Institute.

Supporting an NIDCR goal to ensure a highly qualified workforce is available to address the nation’s basic and clinical biomedical and behavioral or social sciences research agenda, the TPOS program successfully delivers a multidisciplinary approach with proficiency in research design, state-of-the-art technologies and use of analytical/bio statistical techniques. Trainees are inculcated with the ability to think critically about research, facilitating their growth into independent scientists with the overarching goal to interact professionally with the scientific community and to pursue careers in health-related sciences.

To date, more than 90 pre-docs and post-docs have published widely, and most are working in science-related positions.

The focus of doctoral study in the Department of Oral and Craniofacial Biology is to supplement a program of study in a basic science with additional proficiency in an area of oral science. All students must be accepted as PhD candidates by the appropriate UR department or program.

Eastman Institute for Oral Health offers programs of study and research leading to the degree of Master of Science. The master’s degree programs are intended for applicants who have received a doctorate in dentistry and have previous clinical training, those in advanced education programs or in a dental clinical specialty, or junior faculty with clinical responsibilities.

The DOCB occupies 22,000 square feet of space on the ground floor of the Kornberg Medical Research Building. It is also equipped with state-of-the-art instruments, making it an ideal place for students and post-doctoral fellows to gain the most current scientific training.

Research at URMC

The UR School of Medicine & Dentistry research funding ranks in the top one-quarter of U.S. medical centers, while the School of Nursing ranks 12th highest in funding, and EIOH ranks 7th in NIDCR funding. Most basic science and clinical research is undertaken in the School through its full-time faculty. Approximately 1,600 full- and part-time faculty are employed by SMD.

SMD’s residency and fellowship programs serve as an important physician pipeline for URMC and across the Western New York region. The SMD biomedical graduate program utilizes a research and educational cluster approach, which allows students to train in research methods beyond traditional departmental and disciplinary boundaries.

SMD’s biomedical research programs form the centerpiece of the university’s overall research portfolio (Neuroscience/Neuroscience, Cancer, Allergic Disease, Musculoskeletal Diseases, Oral Biology, Health & Wellness, Aging, Cardiovascular Diseases, Environmental Medicine, Drug Targets, Vision Restoration, Lung Biology, HIV/AIDS, Stem Cell Biology). While SMD has breadth and depth of expertise in a myriad of disciplines, it has prioritized growth in five major research centers of excellence: Neuroscience, Musculoskeletal, RNA Biology, Cancer and Immunology and Infectious Disease. Sustaining a vibrant biomedical research portfolio is vital for numerous reasons: 1) drives the discovery of cures and therapies to make our society healthier, 2) helps us attract and recruit top specialists and subspecialists to care for our community and 3) contributes to the overall economic vitality of our community. Continuously generating strong margins in our patient care mission is critical to maintaining financial support for our academic missions, particularly research.
Clinical and Translational Science Institute (CTSI)
The University of Rochester Clinical and Translational Science Institute was one of the first 12 institutions to be funded by the Clinical and Translational Science Award Program at the National Institutes of Health. Since its inception in 2006, the CTSI has been continually funded by the CTSA program, which is now administered by the National Center for Advancing Translational Sciences. The Institute offers resources, services, and education to help researchers collaborate, engage the community, and work more efficiently. In its first 10 years, the CTSI provided pilot funding and training that helped researchers and students secure approximately $58 million in additional external funding to advance their studies.

Empire Discovery Institute (EDI)
The University of Rochester, University of Buffalo, and Roswell Park Cancer Institute are partnering with private venture firms and pharmaceutical/biotech companies to pool resources and intellectual property in the field of drug discovery and development. A $1.65 million state grant funded the development of a business plan and necessary affiliation agreements that will form the core of a $35 million state funding application which, together with incremental contributions from pharma and venture firms, will fund the first five years of EDI’s operation. The upstate EDI would create critical mass, economies of scale, resources and expertise to foster early-stage drug discovery, increase technology revenue, and develop innovative products that improve human health. The goal is to lower the cost, speed the process, and improve the success rate associated with drug development. This approach drives economic growth by generating technologies that can be transferred to new and existing pharmaceutical companies in the Finger Lakes and Western New York regions and more revenue for the region’s universities to reinvest in their research enterprises.

Additional Core Facilities
The Genomics Core Facility acquired an Illumina Nova Seq sequencer, with the capacity of sequencing thousands of human genomes per year. The Nova Seq enabled the Medical Center to enter into a scientific and translational partnership with the biomedical data company Indivumed. The equipment signals a new era for genomics at the University, as it will aid in advancing personalized medicine and discovery of novel therapies to improve cancer outcomes. It also allows UR investigators to perform whole genome sequencing for a fraction of the previous cost.

The bioinformatics team supports the data analysis needs of an expanding user base. Our support of Shared Resource Laboratories (SRL’s), submitting 11 NIH Shared Instrumentation Grant (six were awarded, three pending review = $2.8 million for new equipment), URMC established the Respiratory Pathogens Research Center, supported in its initial year by a $4.7 million award from the federal government, with potential further funding for seven years.

Recently, a new advanced multiphoton microscope was acquired, providing capabilities for intravital imaging and optogenetics applications, and becoming a key resource for an existing NIH program project grant. In addition, an NIH instrumentation SIG grant.

Research Related Educational Programs
SMD Graduate Education and Postdoctoral Affairs
The School of Medicine and Dentistry has 26 graduate degree programs and eight certificate programs. We accept about 70 PhD students a year. There are 12 Biomedical Sciences PhD programs, three Health Sciences PhD programs and 11 Masters programs. View a full list of graduate programs.

As one of the nation’s leading universities, the University of Rochester School of Medicine and Dentistry fosters close working relationships between graduate students and faculty who are at the forefront of their fields. Rochester remains one of the smallest and most collegiate among top research universities.

Outstanding Trainee Experience
Program benefits include minimum stipend and salary, performance evaluation requirements and a formal parental leave policy. Our popular Center for Professional Development provides support with career planning, fellowships and grants, professional skills development, and scientific writing fundamentals and publication.

Partnerships between SMD, Simon Business School and the Hajim School of Engineering and Applied Sciences provide qualified students the ability to speak the languages of both business and biomedical science.
Trainee Overview
PhD Applicant Pool (2013-20)
From 2013 to 2020, SMD had 5,279 PhD applicants from 1,707 undergraduate schools.

PhD Graduates' Career Outlook
An analysis of SMD PhD exit survey data from 2014 to January 2018 found that upon graduation 59% of SMD PhD graduates had signed a contract or made a definite commitment to postdoc or other work and six percent were in the process of negotiating with one or more organizations. Twelve percent were continuing their studies in another degree program (e.g. MD, DDS, JD, MBA, etc.). First-Job-Out data suggests that within a few months of graduating, 96-98% of SMD PhD graduates have settled on employment or pursuing further education or training.

Master of Science in Dental Sciences
The Master of Science in Dental Sciences (offered in two tracks - Clinical and Translational Sciences and Infectious Diseases) train dental clinicians to think critically, enabling them to readily apply research skills and knowledge to improve health outcomes for patients and to pursue research activities and academic careers.

Chair, Department of Oral & Craniofacial Biology Key Responsibilities

Administrative
Provide vision for the continuing development of a high quality, innovative oral health related research and education enterprise and have an integral role in shaping the future of the Department of Oral and Craniofacial Biology.

The Chair is accountable for the development and implementation of strategies and policies; will plan, lead, organize and direct the research, and business affairs of the Department, as well as represent the Department to the medical center, the university and external organizations.

Education
Set the tone for revitalizing and supporting graduate and post graduate education in the DOCB, EIOH, and URMC. Support the development of a PhD track in Oral Biology. Assure that faculty maintains a high standard of education and a commitment to excellence and innovation, while mentoring junior faculty.

Research
Serve as a leader in guiding the direction for DOCB's research priorities and the recruitment process for new members of the Department. With an understanding of translational research and the importance of collaborative clinical initiatives, the DOCB Chair will develop and clearly communicate a vision for the Department, and establish strategic goals to maintain contemporary, relevant and innovative programs.

The DOCB Chair will work closely with EIOH and URMC leadership and faculty to grow the program, ensure that cross disciplinary productive collaboration is evidenced and strengthened in support of thematic centers of excellence in basic and translational research.

Set the tone within the Department for fostering a culture of trust, collaboration, transparency and inclusiveness and for promoting the highest quality of research and training activity.

Professional Qualifications
A national reputation as an outstanding investigator/educator in oral health; a proven track record as an effective leader in a complex, highly competitive setting.

Demonstrated accomplishment as leadership team member of an academic medical center or school of dentistry. Significant accomplishments in independent research that would support a faculty appointment with an academic rank at the professor level. Ideal candidate is currently funded, and has track record of extramural funding, ideally from NIH and/or NSF.

Demonstrated success in creating, executing and monitoring strategic plans to achieve established goals. Demonstrated success in leading a research enterprise with the ability to effectively identify opportunities for advancement/improvement and recommend/advocate for specific actions.

Strong interpersonal skills and the ability to build and sustain effective working relationships with professionals in a wide variety of disciplines.

Have the highest of ethical standards; possess strong personal and professional integrity and be a team player.

Be a fair person, committed to equity, inclusion, compassion, accountability, respect and excellence.

Education and Experience
The successful candidate is a highly regarded investigator in a field related to oral health. A doctor of dental surgery (D.D.S.), doctor of dental medicine (D.M.D.), medical doctor (M.D.) or a doctor of philosophy (Ph.D.) degree is required.

Compensation
The successful candidate will receive an attractive and competitive compensation package together with an excellent benefits package.
About Rochester

In a 2017 ranking from U.S. News and World Report, Rochester, NY was touted as one of the best places to live in America, based on job market, value, quality of life, desirability and net migration.

"Rochester, New York's third-largest metropolitan area, is a unique blend of history and innovation, with old and new juxtaposed at every turn. Many of the homes and commercial buildings in downtown Rochester are original, dating back a century or more, while others are undergoing renovations to become modern lofts and workspaces. Former home to pioneers and independent thinkers like Susan B. Anthony and Frederick Douglass, Rochester has worked hard to preserve and honor its landmarks."

Visit Rochester

Simply put, Rochester is a delightfully small "big city," with many of the benefits and few of the disadvantages of an urban center. It boasts more money managers per capita than any American metropolis except New York City. It offers some of the most appealing and affordable housing in the country—not to mention an extensive and highly regarded parks system, major universities, and five nationally ranked high schools.

Born as a mill town on the Genesee River, boosted to boomtown status with the opening of the Erie Canal, and brought to the pinnacle of modernity and innovation by its entrepreneurial patriarch George Eastman, Rochester provides a richness and diversity of life that's hard to find outside of the country's largest cities. Its lively "knowledge economy" draws its strength from Rochester's technology-driven enterprises, growing telecommunications, "biotech" and IT sector.

The University of Rochester is an Equal Opportunity Employer (AA/EOE/ADA) and has a strong commitment to diversity; it actively encourages applications from groups underrepresented in higher education. The search committee is especially interested in candidates who, through their research, teaching, and/or service, will contribute to the diversity and excellence of the academic community.