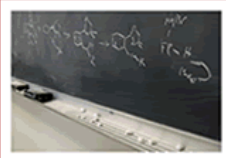# University of Wisconsin-Madison
Computation and Informatics in Biology and Medicine

NIH National Institute of Dental and Craniofacial Research

NIDCR Supported Oral Health Informatics Postdoctoral Fellowship

WHAT IS DENTAL INFORMATICS ?

Dental informatics is a sub-discipline of biomedical informatics which focuses on the application of computer and information science to improve dental practice, research, education and management.

ORAL HEALTH INFORMATICS POSTDOCTORAL FELLOWSHIP PROGRAM

During the last forty years, Oral Health Informatics has developed into a research discipline of significant scale and scope. The **University of Wisconsin – Madison** and **Marshfield Clinic** are currently recruiting trainees for its **NIDCR/NLM**-funded (5T15LM007359). Postdoctoral training program in oral health informatics. Information about the oral health informatics postdoctoral programs and application materials can be obtained from the CIBM Training Program by contacting:

Dr. Louise Pape, PhD, Program Coordinator | lpape@wisc.edu | 608-265-7935 | **http://www.cibm.wisc.edu/**   General inquiries about the Institute for Oral and Systemic Health (IOSH) at Marshfield Clinic can be directed to Ms. Dixie Schroeder, IOSH Manager | schroeder.dixie@mcrf.mfldclin.edu | 715-221-7266.

REQUIRED QUALIFICATION

Candidates should possess a PhD in Dental/Oral Health Informatics, Biomedical Informatics, Computer Science, Information Technology, Bioinformatics, Computational Biology, or related field, or an DMD, DDS, MD with demonstrated strength in biomedical informatics prior to beginning their CIBM training program.

All supported trainees must be permanent residents or U.S. citizens.

Key Postdoctoral Fellowship Tracks

- Translational Oral Health Informatics
- Human Computer Interaction in Dentistry
- Dental Bioinformatics and Computing
- Clinical Research Informatics Applied to:
  - Oral Systemic Research
  - Dental and Craniofacial Research

Marshfield Clinic

Training Opportunities in Core Oral Health Informatics Research Areas

The National Institute for Dental and Craniofacial Research funded Oral Health Informatics postdoctoral fellowship program will be based primarily out of the Marshfield Clinic site where Dr. Amit Acharya has established one of the very few and unique Institutes for Oral and Systemic Health in the country. The core research areas offered through program are highly responsive to the designated priorities of the NIDCR and Healthy People 2020. While an individual's scientific interest will play a major role in determining specific research activities, postdoctoral fellows will have opportunities to contribute to the following core research areas:

Translational Oral Health Informatics: Decision support and knowledge management, Clinical ontology development, Information modeling, Integrated electronic health record architecture, Dental informatics standards development, Dental health information exchange, Patient portals and Personal health records.

Human Computer Interaction in Dentistry: Design of novel clinical information systems in dentistry, Usability evaluation of electronic dental records, Non-touch modalities of interacting with dental information systems.

Dental Bioinformatics and Computing: Examining the links between oral health and systemic health using electronic dental and health records, host genetic variation and oral microbiome characterization. Marshfield Clinic's Oral/Dental Biobank subjects have consented to broad use of their electronic medical and dental records in research and have donated DNA, plasma, serum and oral microbiome samples.

Clinical Research Informatics: Informatics Infrastructure for Dental Practice Based Research Network,Informatics Support for the Oral and Systemic Health Research, Dental i2b2 and SHRINE project, Virtual Dental Data Warehouse Design and Implementation.

Visit at the following link, to find out more: http://www.marshfieldresearch.org/iosh

Dr. Acharya with his Oral Health Informatics Research Team at Marshfield Clinic

Key Resources at Marshfield Clinic

- Integrated Medical-Dental EHR
- Enterprise Clinical and Research Data Warehouse
- Cutting-edge Human Computer/ Usability Lab with Eye-tracking technology
- Analytics and Biostatistics Support
- Dental Biobank: OSRP

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