



INDIANA
UNIVERSITY
SCHOOL OF
DENTISTRY

First Friday
Dean's Update to the IUSD Co

SPECIAL EDITION

**Big Data & Dentistry:
Precision Oral Care**

The November issue of *JADA* highlights dentistry's opportunities and challenges in the ever emerging Big Data environment.

Michael Glick, *JADA* editor, talks about how Big Data is debated and rapidly becoming an essential tool in the care of dental patients. Basically, in health care, big data is the use of data that are too big and too cumbersome for individual health care providers to process with existing tools and technologies. Genetic testing is a commonly used tool to evaluate various attributes to improve population health through the application of precision medicine and therapies. Glick observes that soon we may have an oral microbiome that will denote a state of health or disease and provide genomic, proteomic, transcriptomic, and metabolomic data to be used in pharmacogenomics, as well as for precision oral health care.

On the IUPUI campus, IUSD is participating in an IU Grand Challenge proposal with IU Medicine to advance precision medicine in Indiana (*see related article*). This technique has incredible implications for the way we educate oral health personnel for the 21st century.

To access the *JADA* article:
[http://jada.ada.org/article/S0002-8177\(15\)00938-1/abstract](http://jada.ada.org/article/S0002-8177(15)00938-1/abstract)

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It took patience! It took persistence! It took your generous assistance!

And together, we persevered! Because of you, in the summer of 2016, we will break ground on a new, magnificent, state-of-the-art clinical building at the IU School of Dentistry. Hooray!!! This significant event in the history of IUSD will enable us to grow and prosper as we advance the Vision and Mission of IUSD to make *Indiana University School of Dentistry one of the best dental schools of the 21st century*. **Thank you for your support!**



New Building Schematic Plans Approved

I am very pleased to share that this afternoon the IU Board of Trustees has just approved the above schematic design to move forward for construction in 2016. We will have more plans to show shortly, but I can describe in general the details of this exciting project. The exterior will blend with the existing old architecture then transform to a new dynamic eastern facing façade, which will exude the confidence of a contemporary oral healthcare facility for the 21st century. Some building components include:

- The selected site is to the east of the existing buildings
- It is a three-story building with a penthouse for mechanical items
- More than 125 dental operatories, with modifications based on functional need
- Creation of a courtyard area between the new and old structures
- Corridors to link existing and new buildings
- A covered patient drop off/pickup area
- Enhanced waiting/reception areas

FULFILLING *the* PROMISE

IU Grand Challenge...Precision Medicine

Precision Medicine Initiative (PMI) – IU Medicine is collaborating with schools of Dentistry, Nursing, and Public Health at IUPUI and the IU-Bloomington departments of Chemistry, Computer Science and Informatics, and Sociology to develop Precision Medicine – the science and practice of medicine through a more precise definition of the molecular, behavioral, and environmental factors that contribute to an individual’s health and disease. Precision Medicine is expected to transform biomedical research, health care innovations and the delivery of health interventions in the future. The PMI proposal has three major pillars — genomic medicine, cell-based therapies, and chemical biology — along with three cross-cutting initiatives that include informatics and computational sciences, new educational and degree programs, and a comprehensively-characterized Precision Medicine Cohort. When fully implemented, the PMI will deliver access to precision medicine advances to nearly two million patients across Indiana and hire more than 50 new research faculty in precision medicine. It will create strategic partnerships with Eli Lilly, Roche Diagnostics, and Cook Medical. Through its innovative education and degree programs, IU also will be creating the scientific workforce of the future for Indiana and beyond. Dentistry will be transformed.

Dr. Joe Heidelman – IUSD New Oral Surgery and Hospital Dentistry Chair

I am very pleased to announce the appointment of Dr. Joseph Heidelman as interim chair of Oral Surgery & Hospital Dentistry, effective Dec. 1, 2015. Dr. Heidelman is highly regarded locally and statewide for his leadership, professionalism, and teaching. His longstanding commitment to IU academic oral surgery and his strong example of philanthropy will serve the dental school extremely well in the near term as we strengthen several aspects of the oral surgery department. He brings a wealth of experience in comprehensive clinical care and trauma management, which is of tremendous benefit to the patients we serve.

Free Tickets Available for IUSD-Jaguars Basketball Tomorrow

Tomorrow (Saturday, December 5) is the IUSD group outing to watch IUPUI men’s basketball team take on the Miami Redhawks! Join us for fun, food, and festivities as we celebrate our new building’s design approval with a Jaguars’ win! As of press time a few tickets were still available. Contact Terry Wilson (tw1@iu.edu) to find out more.

Upcoming IUSD Events

- Saturday, December 5 – IUSD-Jaguars Basketball Group Outing
- Wednesday, December 16 – IUSD Holiday Breakfast – Student Lounge 7:30 – 9:30 am
- Friday, December 18 – Last day of clinics
- Tuesday, January 5 - IUSD Spring Faculty Orientation & Calibration Appreciation Day

IUSD First Friday Social

The First Friday socials continue in 2016. Come join us in the student lounge as we begin the new year on January 8, 2016!

Thanks to each of you for your dedication to and support of the Vision and Mission’s of IUSD. I’ll be back next month with another edition of *First Friday...Dean’s Update*. Wishing everyone a healthy, joyful holiday season.



-John

Check out all the current IU Dentistry news on our website: www.dentistry.iu.edu or on our Facebook page: www.facebook.com/IUDentistry