

Enamel Symposium

Special Enamel Symposium

December 16th 2021 at **11:00 am** ET (U.S.A.)

Establishing The First Principles of Amelogenesis

11:00 AM: Welcome remarks and by Rodrigo Lacruz and Elia Beniash

Session 1: Amelogenesis models: Over the last year or so, the virtual enamel seminar series featured several talks proposing various models of amelogenesis. We think it would be interesting to see these models in a single session back-to-back. Each presenter will have 10 minutes to describe their model of amelogenesis before the floor is open for a Q & A session.

Speakers:

11:05-11:15. Dr. James Simmer (Univ. Michigan): *“The Ameloblast Basement Membrane is the Control Center for Enamel Appositional Growth”*

11:15-11:25. Dr. Janet Oldak (Univ. Southern California): *“Enamel Mineralization Mediated by Protein-Mineral, Protein-Protein and Protein-Cell Interactions”*

11:25-11:35. Dr. Elia Beniash (Univ. Pittsburg): *“Cooperative Interactions Between Self-Assembling Protein Matrix and Forming Mineral at the Onset of Enamel Mineralization”*

11:35-11:45. Dr. Stefan Habelitz (UCSF): *“Mechanisms of mammalian enamel mineralization based on amelogenin nanoribbons”*

11:45-11:55. Dr. Tom Diekwisch (Texas A&M): *“Amelogenesis: Transformation of a Protein-Mineral Matrix into Tooth Enamel”*

11:55-12:35 PM. Discussion: The session will be moderated by:

Dr. Malcolm Snead (Univ. Southern California)

Dr. Megan Pugach (Forsyth Institute)

Dr. Wendy Shaw (Pacific Northwest National Lab)

----- Break: 12:35-12:45 PM-----

Enamel Symposium

Session 2: Enamel Maturation: Many of the previous virtual seminar series on enamel addressed concepts and models that are primarily concerned with events taking place during the secretory stage of amelogenesis. The maturation stage has not featured nearly as prominently, so we thought we should elaborate on this. The goal of this session is to promote an understanding of important events during maturation. Each presenter has 20 minutes to describe key findings during maturation.

Speakers:

12:45-13:00 PM: Introduction by **Dr. Marc McKee** (McGill Univ)

13:00-13:20 PM: **Dr. Jan Hu** (Univ. Michigan): *“Enamel Maturation: Insights from Human Genetics”*.

13:20-13:40 PM. **Dr. Michael Paine** (USC): *“Ion Transport Functions in Maturation Stage Ameloblasts”*

13:40-14:00 PM: Discussion. The session will be moderated by:

Dr. Marc McKee (McGill Univ)

Dr. Catherine Chaussain (Paris Univ)

----- Break: 14:00-14:15-----

Session 3 NIH/NIDCR Funding Opportunities:

14:15-14:45 PM. Dr. Jason Wan

Director, Mineralized Tissue Physiology Program
National Institute of Dental and Craniofacial Research

Dr. Wan will introduce the different funding mechanisms available to dentists and enamel researchers at all academic levels.

14:45- End of symposium & Closing remarks

ZOOM LINK FOR THE SYMPOSIUM:

<https://nyu.zoom.us/j/99713430545?pwd=QWh3QU8yUkJGeTVnZjB4KzBwdUZNdz09>

Passcode: ENAMEL21