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Thursday, October 31st, 2024 @12PM

In-Person in UCD Charles Seminar Room (& Online)

ZOOM ID & PASSWORD - 686 5915 8545 & 859172



Creating devices to administer macromolecules via the Buccal Epithelium: *The EU BUCCAL-PEP consortium*

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BIO: David Brayden is a Full Professor of Advanced Drug Delivery at the School of Veterinary Medicine, (UCD) and Senior Fellow of the UCD Conway Institute. He is a pharmacologist and has spent 10 years as a senior scientist at Elan Pharmaceuticals (1991-2001). He is the author or co-author of more than 200 research publications and patents mainly in the areas of oral peptide delivery, epithelial drug transport, and nanomedicine formulation. He is currently a co-lead Principal Investigator in the Science Foundation Ireland Centre for Medical Devices (CURAM, 2021-) and is the Coordinator of the EU Horizon Consortium, BUCCAL-PEP (2023-2026). He was elected as a Fellow of the Controlled Release Society (2012) and the American Association of Pharmaceutical Scientists (2017), and he was elected as a member of the Royal Irish Academy (2024). David was appointed by the Minister of Health as a member of the National Research Ethics Committee (Clinical Trials, CT) in 2021, and as a Chairperson of CT-D in 2024. He is the Chief Editor of *Frontiers in Drug Delivery* (2021-).

Abstract: Buccal and sub-lingual epithelia have been used for decades as administration site for small molecules in the form of tablets, lozenges, and dissolvable films. They achieve blood levels quickly and avoid the liver first pass effect, a major advantage over oral administration. The BUCCAL-PEP EU consortium addresses a new question as to whether we can now administer peptides via these oro-mucosal routes? The multiple areas involved include patch and film synthesis, permeation enhancers, peptide selection, use of large animal models, and patient involvement.