



CENTER FOR DERMAL RESEARCH SEMINAR SERIES REMOTE

The Center for Dermal Research Welcomes

Dr. Jayant Joshi and Abe Janis
Hollister Incorporated

“Innovations in Skin Friendly Adhesives: Utilizing Ex Vivo and 3D Models of Peristomal Skin Damage towards Developing Novel Ostomy Adhesives”

Monday, December 4, 2023 at 5:30pm EST Remote



Dr. Jayant Joshi leads the R&D efforts for new skin formulation technology development at Hollister Incorporated. As a Principal Scientist, he oversees formulation development, external university collaborations and claims development activities for novel and currently marketed products. Prior to Hollister Inc, Dr. Joshi worked in R&D at GSK Consumer Healthcare where he worked in novel drug delivery formulation development platforms and cross category innovation functions. With a PhD in Materials Science and Engineering from Rutgers State University, NJ and a career spanning 17 years of R&D in wound care, over-the-counter products and ostomy care, he has authored several peer reviewed publications and recent patents.



Abe Janis has worked in industry R&D for over twenty-five years. Abe joined Hollister Incorporated as the scientific subject matter expert for advanced wound care in 2013, and in 2018 he transitioned to his current role of Principal Scientist in Ostomy Technology Development. Abe founded and currently directs Hollister’s Futurism Strategic Foresight and Academic Innovation Ecosystem programs. Abe has extensive experience in biomedical and medical device R&D, preclinical models, and clinical research. He is an active strategic and technical mentor in Chicago’s healthcare start-up community and is a Visiting Assistant

Professor at Rush University in Chicago.

Abstract: Ostomy surgery is often the only effective treatment for diseases affecting normal digestive or urinary function. The resulting stoma, or opening in the abdomen is affixed with a Class I waste collection device (ostomy pouch) that is secured to the surrounding skin with a hydrocolloid adhesive. Repeated removal of adhesives and exposure to stool and urine from the stoma are the primary causes of peristomal skin damage, which in turn can lead to complications and reduced quality of life.

In this talk, we will present the key risk factors leading to peristomal skin complications (PSCs). *Ex vivo* and 3D skin modeling work conducted to model tissue injury related to PSCs will be discussed. The effects of repeated tape-stripping and the damage caused to skin by a mixture of digestive enzymes and characterized with the help of H&E staining, Transepidermal Water loss (TEWL) and quantification of biomarkers will be presented.



CONFERENCE LINK is available on our website:
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under the Events menu or send an email to: cdr_frontdesk@dls.rutgers.edu