

Vaiva Jariene

Application of ex vivo co-culture systems for studying molecular Drug Effectiveness on hidradenitis suppurativa

Short Bio	I am a resident doctor, working at Lithuanian University of Health Sciences (LUHS) Kaunas Clinics, Department of Skin and Venereal Diseases and pursuing my career in dermatovenereology.
Home Institution	Lithuanian University of Health Sciences Hospital Kaunas Clinics
Host Institution	Städtisches Klinikum Dessau, Departments of Dermatology, Venereology, Allergology and Immunology
Project description	<p>Hidradenitis suppurativa (HS) is a severe, rare and of high unmet clinical need chronic inflammatory disease that manifests with a skin and systemic neutrophilia and has an association with rheumatoid arthritis, spondyloarthritis, Crohn's disease, and/ or psoriasis. It manifests with painful, deeply localized, inflammatory skin lesions that occur in apocrine gland-rich areas of the skin, most commonly in the axillae and the inguinal and anogenital regions. Epidemiological studies have reported a prevalence of the disease in Europe of 1%. The central pathogenic event in HS is believed to be the occlusion of the upper parts of the hair follicle leading to a perifollicular lympho-histiocytic inflammation. However, the exact HS pathogenesis still needs further research.</p> <p>The research laboratory, led by ERN-Skin project partner Professor Zouboulis, has implemented a unique HS ex vivo model based on a co-culture model of explant skin in direct contact with immortalized SZ95 sebocytes (3D-Seboskin model) [G.Nikolakis et al, Experimental Dermatology; 2015]. This model resulted in overall improved structural integrity of the epidermis, higher percentage of proliferating basal epidermal cells and reduced apoptosis of differentiating keratinocytes after 6 days. The main goal of the planned ERN-RD Research Mobility Fellowship would be to learn the novel methodology of culturing HS skin samples in the 3D-Seboskin model.</p>
Personal statement	To start with I have always desired to gain more international experience during my professional carrier. I would like to say that from the very beginning of my residency I was very keen on learning more about rare skin diseases not only working with the patients but also by participating in multidisciplinary team meetings and broadening my knowledge in research works. I think that pursuing myself into research would make me with a deeper understanding in every patient's case. As a result of my active participation and individual initiative, I started working as a physician assistant in the Department of Dermatology in the Hospital of Lithuanian University of Health Sciences Kaunas Clinics. Nowadays I consult Hidradenitis Suppurativa patients

and due to that I have good enough of knowledge in that field
and I could be a good part of my perspective team.