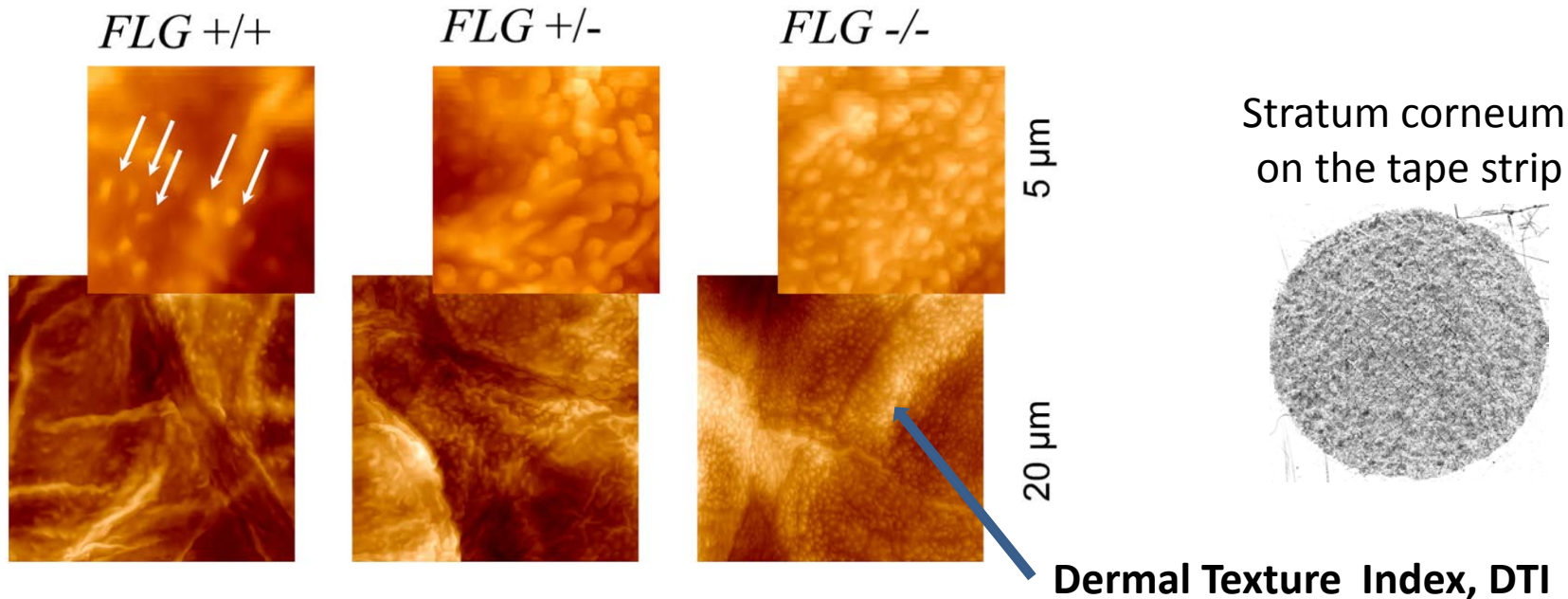


COST Action TD1206

WG1: AETIOLOGY AND SUSCEPTIBILITY

THE EFFECT OF DERMAL EXPOSURE TO ENVIRONMENTAL STRESSORS ON SKIN BARRIER AND IMMUNE RESPONSE

Natural Moisturizing factors & Dermal Topographic Index as biomarkers for skin barrier damage



AD/Flg risk factors for CD → influence of contact allergens and irritants on NMF and DTI?



ACD (previously positive patch to Ni, Cr, MCI/MI or PPD)

University of Zagreb, Croatia

(Suzana Ljubojevic Hadzavdic)

AMC, University of Amsterdam

(S. Koppes)

University of Osnabrueck

SerendIP, Germany



ICD (HAc, n-propanol, SLS, NaOH)

University of Lubeck (Irena Angelova-

Fischer)

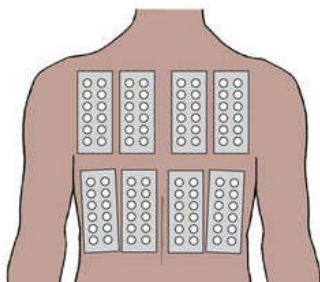
AMC, University of Amsterdam

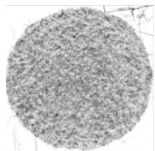
(Maryam Soltanipoor)

University of Copenhagen

University of Zagreb, Croatia

SerendIP, Germany





DTI: AFM

Δ DTI (Object counts)

ACD Study

ICD Study

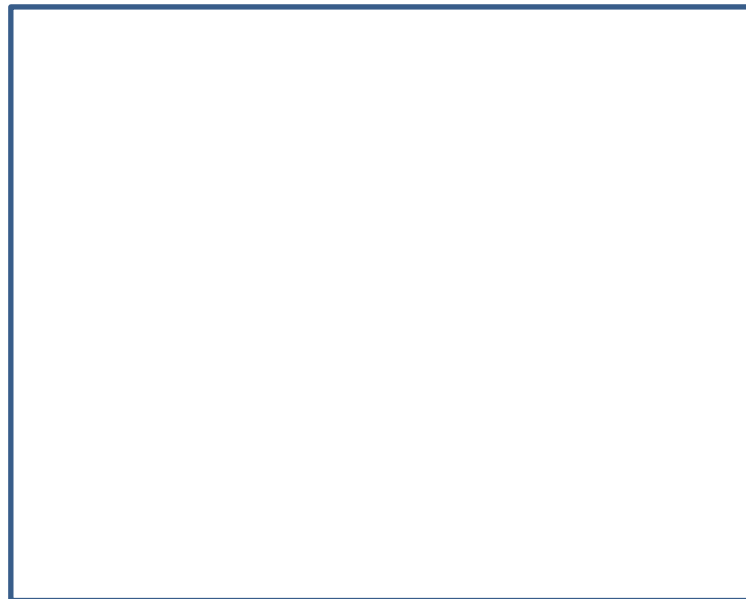
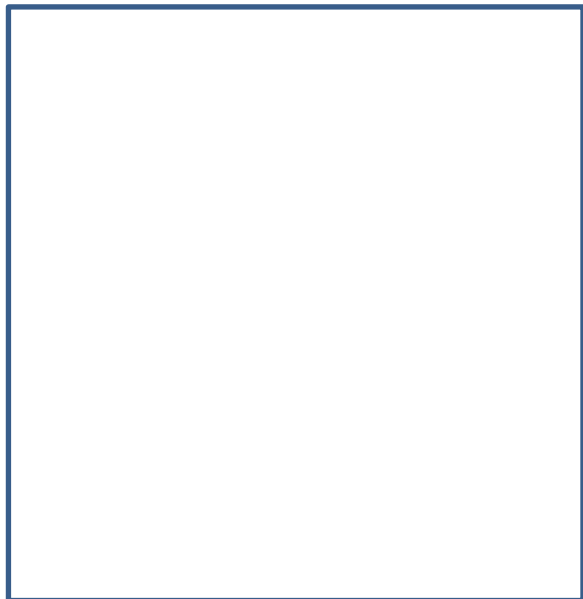


NMF: HPLC

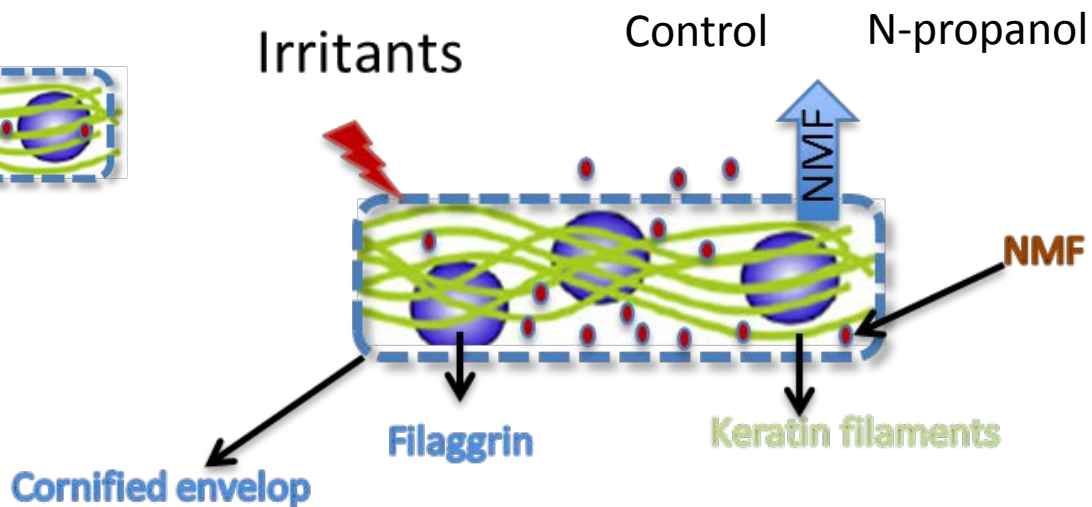
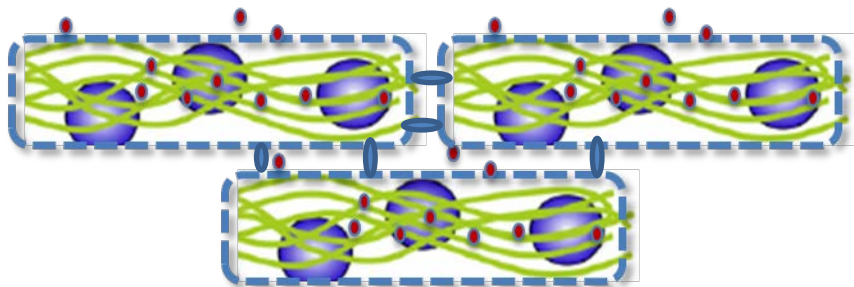
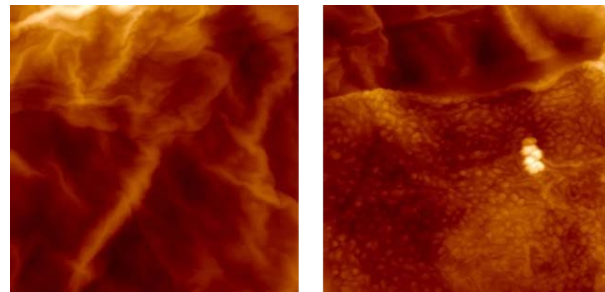
ACD Study

ICD Study

Δ NMF



Changes in surface topography and NMF: mechanisms?



NMF & DTI seem to be promising biomarkers of skin barrier damage

Mechanism is not clear yet but it is likely that reduced hydration rather than inflammation itself drives the changes

ACD: Koppes et al. Contact Dermatitis

ICD: Maryam Soltanipoor: poster