Wächter and Vestweber et al.:

Unravelling host-pathogen interactions by biofilm infected human wound models

Supplementary Data

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1 Supplementary figures

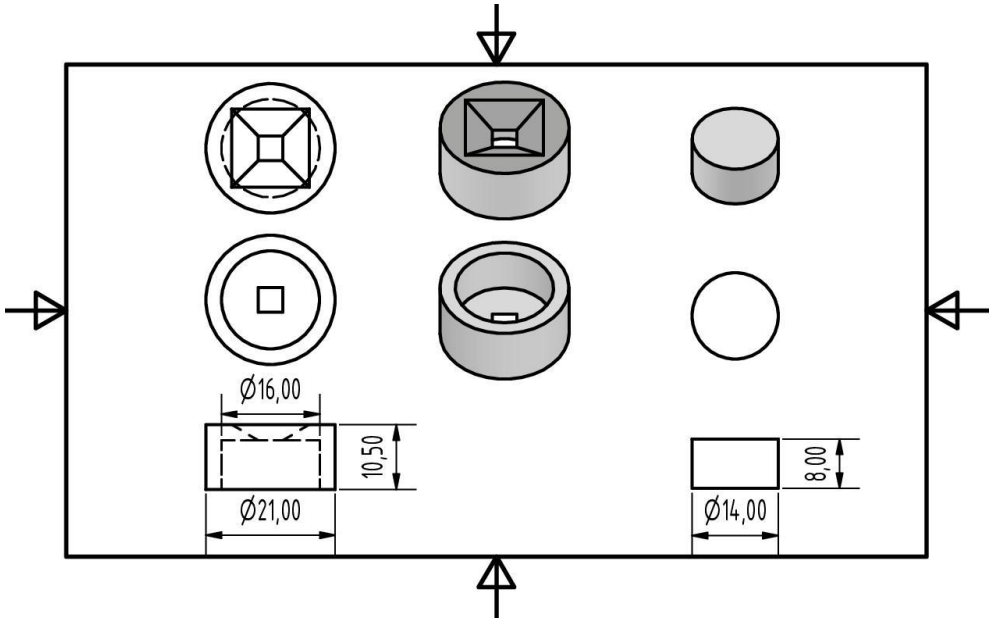

Figure S1. 3D-printed device to ensure reproducible wounding
The model was designed with Autodesk Inventor (Autodesk GmbH, Germany) and further processed for printing using a slicing software (Prusa Slicer, Prusa a.s., Czech Republic). Subsequently, the wounding device was printed from polylactic acid with a 3D printer (i3 MK3S+, Prusa Research a.s., Czech Republic).

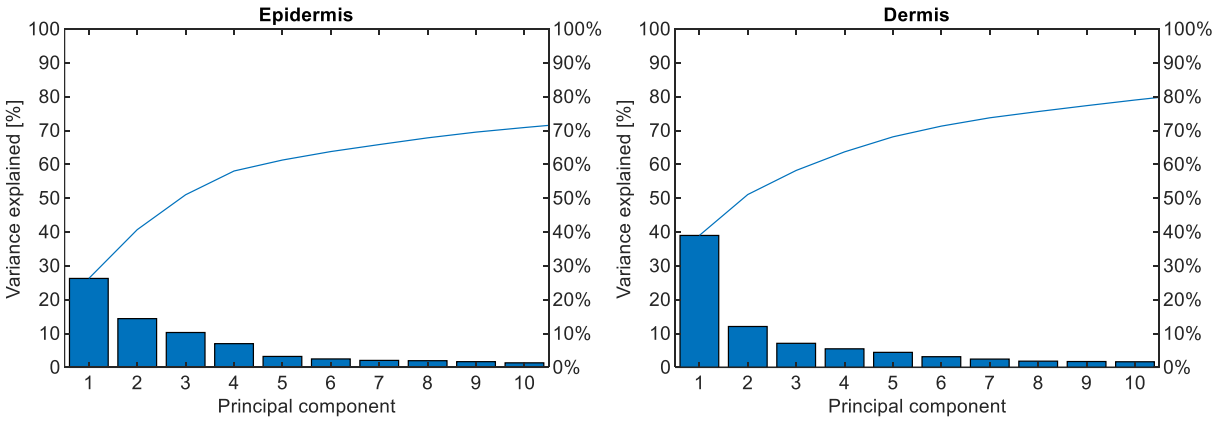

Figure S2. Pareto plots of the percent variability explained by each principal component revealed by the principal component analysis of the epidermal and the dermal spectra.

2 Supplementary tables

Table S1. Raman bands in spectra of human derived skin models assigned to their vibrational mode and the corresponding biological entities [1–5]

Raman shift [cm^{-1}]	**Vibrational mode**	**Assignment**
856	C-C stretching of protein backbone	Collagen (proline and hydroxyproline)
883	C-C stretching of Pro/Hypro ring	
923	C-C stretching of Pro/Hypro ring	
944	C-C stretching of protein backbone	
1008	C-C stretch aromatic ring	Phenylalanine
1035	C-C stretch (skeletal)	
1066	C-C stretch (skeletal)	Trans acyl chain, lipids
1095	PO_2^- stretch	Nucleic acids
1134	CC stretch (skeletal)	Trans acyl chain
1171	C-C stretch	
1246	CH_2 deformation, C-N stretch	Amide III
1300	CH_2 deformation (twist)	Trans acyl chain
1340	CH_2 deformation (scissoring)	
1444	CH_2 deformation (scissoring)	Cholesterol, fatty acids
1650	C=O stretch	Amide I
2850	CH_2 symmetric stretch	Predominantly lipids
2882	CH_2 asymmetric stretch	
2933	CH_3 symmetric stretch	
2958	CH_3 asymmetric stretch	Predominantly proteins

3 References

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