

skin and hair bioscience!

State-of-the-art technology and expertise for all your pre-clinical, mechanistic, and clinical needs in dermatology research.

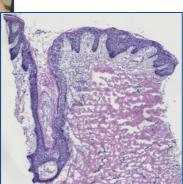
- Preclinical Research
- Clinical Research
- Innovative Technologies Program
- Education



#### **NEW INDICATION**

# NEW MODEL Hidradenitis suppurativa





"We combine our unique expertise, our project design creativity, and our passion to advance our clients' success in delivering novel and gamechanging skin and hair research solutions"

> Founder & CEO: Prof. Dr. Ralf Paus

#### **Monasterium Laboratory**

Skin & Hair Research Solutions GmbH

Mendelstr. 17, 48149 Münster, Germany Phone: +49 (0) 251 93264-458 Fax: +49 (0) 251 93264-457

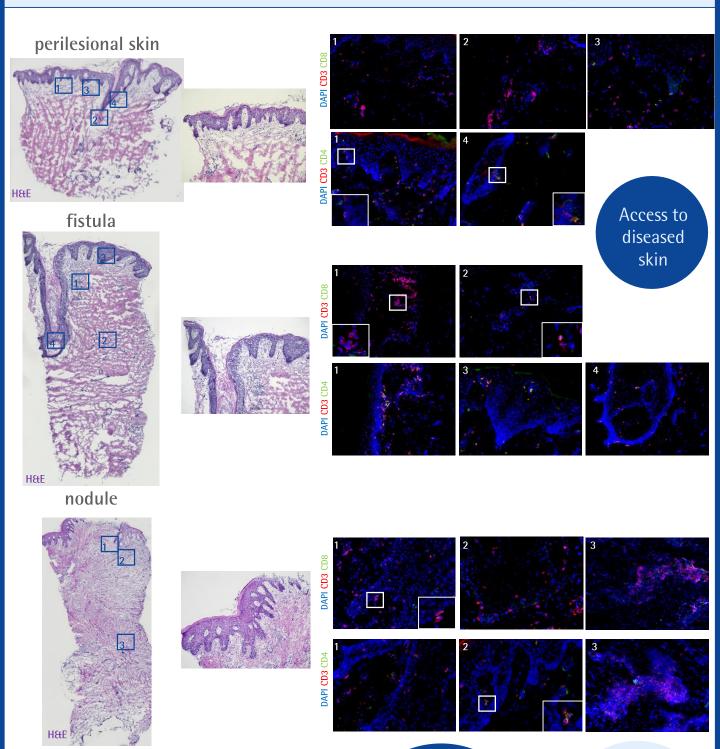
Founder & CEO: Prof. Dr. Ralf Paus

#### For enquiries, please contact:

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#### Identitification and Characterization of a Target



### Additional techniques available to characterize a target:

- Multiplex immunostainings,
- Multiplex in situ hybridization or bulk RNAseq or in situ transcriptomics,
- Single cell isolation and FACS analysis,
- Single cell isolation (also in situ) and scRNAseq,
- Proteomic, and microbiome analysis, ...

Validate your target of interest in vitro and ex vivo using our customized models and individualized project designs.

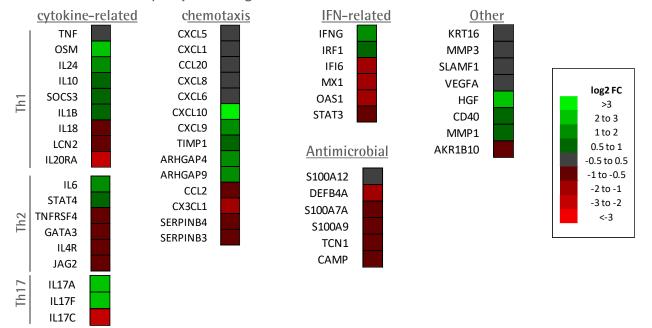
Functional studies in vitro using primary epidermal keratinocytes, hair follicle outer root sheath keratinocytes, or PBMCs

Induction of disease phenotype in vitro and ex vivo in human scalp skin

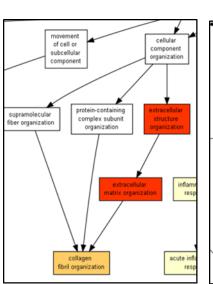
### NEW EX VIVO MODEL: Peri-lesional and Lesional skin organ culture

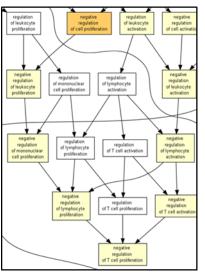
#### Transcriptome analysis of fistula: adalimumab treated vs. vehicle

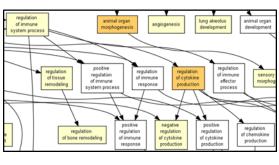
#### Selected differentially expressed genes



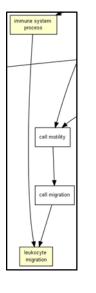
#### Selected enriched pathways



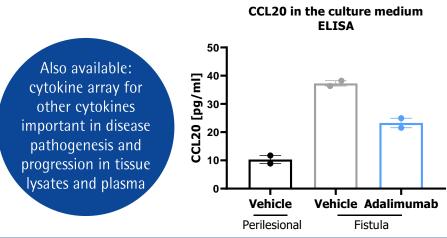




- collagen fibril organization
- lymphocyte regulation
- cytokine/chemokine production
  - leukocyte migration



### Release of cytokines into the culture medium



### WHY US?

Our vision is
to provide our clients and
partners with the highest
quality research in investigative
dermatology and trichology –
from basic science to
translational applied and contract
research of high relevance for
clinical applications.

Great network of dermatologists and plastic surgeons collecting samples from healthy and diseased skin



World-class scientific leadership & international team Clinicallyrelevant ex vivo and in vivo models

> Strong academic background & publication record

#### What we can do for our clients:

- Conceptualize & build proof-of-concept studies
- Carry out full service portfolio for pre-clinical skin & hair research (in vitro, and ex vivo assays, and humanized mouse models)
- Provide access to human healthy & diseased skin and hair specimen
- Develop novel cutting edge methodologies and techniques
- Develop tailor-made & customized assays
- Identify, characterize, or validate novel targets and therapeutics for skin & hair disorders
- Discover mechanistic action stories, biomarkers & predictors of response
- Investigate side effects in the skin or hair follicle
- Conduct investigator initiated skin & hair clinical trials
- Prepare comprehensive project reports & manuscript drafts

Innovation is our passion: Innovative Technology Program

Exceptional state-of-the art research technology

## Investigative dermatology:

Acne Vulgaris, Atopic Dermatitis, Psoriasis, Alopecia Areata, Androgenic Alopecia, Hidradenitis Suppurativa, Vitiligo, Chronic Itch, Prurigo Nodularis, etc. We are supported by world-wide recognized experts in dermatology:
Alfredo Rossi, Amos Gilhar,
Désmond J. Tobin, Erwin
Tschachler, Falk G. Bechara,
Francisco Jimenez, Kristian
Reich, Mauro Picardo, Thomas
Luger, Tiago R. Matos,
and many more!

Global client list & testimonials

Biobank:
Full access to skin
& hair samples
(patients &
healthy subjects)