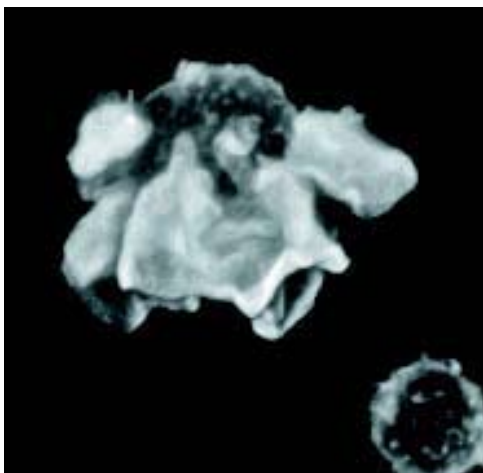


KEYWORDS

- » Dendritic Cells
- » Hyaluronic Acid
- » CD44
- » Human CD90
- » Melanoma



CONTACT

Prof. Dr. Jan C. Simon
Professur für Dermatologie
Medizinische Fakultät

Klinik für Dermatologie, Venerologie
und Allergologie
Philipp-Rosenthal-Str. 23–25
04103 Leipzig
Fon +49-(0)341-97 18600
Fax +49-(0)341-97 18609
jan.simon@medizin.uni-leipzig.de
www.uni-leipzig.de/~derma

MAIN TOPICS OF RESEARCH AT THE DEPARTMENT OF DERMATOLOGY, VENEROLOGY AND ALLERGY OF THE LEIPZIG UNIVERSITY

The working group of Prof. Dr. Jan C. Simon focuses its research on:

(i) Processes relevant for maturation of dendritic cells with the gain to improve the specific presentation of therapeutically important antigens by *in vitro* generated dendritic cells. Our group investigates the process of DC maturation and in part the role of HYALURONIC ACID (HA) and small fragments of HA during DC activation and the participating receptors on DC.

(ii) Investigation of the extracellular glucosaminoglycan HYALURONIC ACID, its metabolism by skin cells and the role of this molecule during tumourigenesis and fibrosis. Our group is interested in the regulating network of HA metabolism and the possibilities to influence fibrosis and tumour growth by changing HA synthesis or degradation.

(iii) Investigation of the physiological role of the inducible cell adhesion molecule Thy-1 (CD90) for cell-cell-interaction during inflammation, metastasis and mobilisation of immunocompetent cells. Our research is focused on the development of CD90-based function blocking agents as well as on the functional investigation of the role of huCD90 on human dermal fibroblasts, where it is expressed constitutively.

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