



1-2 February 2010
KORANET PARTNERING EVENT

Research for life-long health

Regina BRUNAUER
Institute for Biomedical Aging Research

Aging of human bone-derived
mesenchymal stem cells: cellular and
and molecular cues



RESEARCH CENTRE

Research Centre Project Idea Expertise Partner Contact

Institute for biomedical aging research (IBA)

Human biogerontology – cellular aging

Departments

Immunology: T cell aging

Endocrinology: Transdifferentiation of prostate stroma

Molecular Cell Biology: Endothelial cell senescence

Cell Metabolism and Differentiation Research:

Adipose tissue aging and caloric restriction

Extracellular Matrix Research:

Mesenchymal stem cells: Do stem cells age - or is it their niche that grows them old?

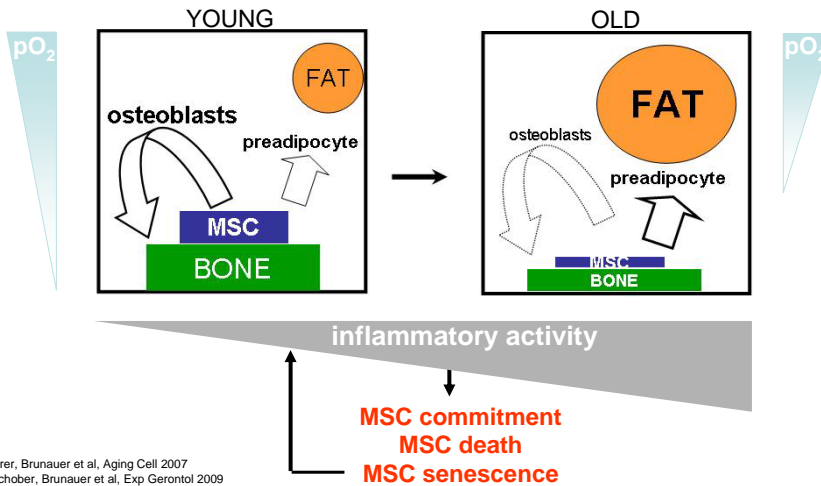




PROJECT IDEA

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MSC – backup for bone and modulator of the immune response



EXPERTISE

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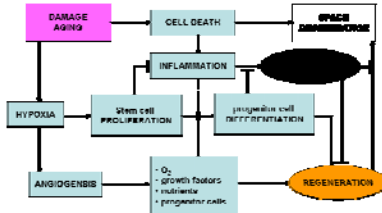
- **International keyplayer in aging research:** First institute in Europe dealing with aging research; member of several projects of the 6th and 7th European Framework Programmes: Proteom-Age, Mim-Age, Era-Age, Why-We-Age, Future-Age, Vascu-Bone....
- **Focus on basic research regarding human aging:** Human biopsy material available through close collaborations with University Clinics and the Medical University of Innsbruck
- **Further goal: translational research:** drug screening (Molecular Cell Biology), vaccines for elderly (Immunology), tissue engineering by implants (Extracellular Matrix Research)





PARTNER SOUGHT

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Systems Biology of Stem Cells

Bio-informaticians, Bio-mathematicians



WP 1/2/3

engineering, implementation, in vitro testing & modeling



WP 4

in vivo testing, imaging & evaluation

in vivo features
- external energy supply
- activation by external circuit
- biocompatible - biofunctional surface
- sensor for implant bone contact / osseointegration
- sensor for micromotion

Regenerative Medicine and Tissue Engineering

Experts on biomaterials, smart implants



CONTACT DETAILS

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