HNN 2.0 HEALTH-NCP-NET

Innovation Norway

The Research Council of Norway

BROKERAGE FOR HEALTH
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Better health and care

Regenerative Medecine in Orthopaedics

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HEALTH-NCP-NET 2.0 project is funded by the European Commission

Expertises of the B2OA

- **Skills and expertise**
- ***In vivo***
  - Small and large animal models for bone substitute
    - Ectopic, critical-sized defects, physical exercise, diabetes
  - Small and large animal models for ligament substitute
  - X-rays Imaging (CT-Scan), in vivo bioluminescence, Histology, Synchrotron radiation tools imaging.
- ***In vitro***
  - Mesenchymal Stem cell culture/Hypoxia/ cell and molecular tools
  - Stem cell therapy for bone and intervertebral disc
- **Past experience in EU-funded projects (if any)**
  - *JOIN(ed)T Marie Curie ITN*
  - *PROPOSAL QLRT 2000-00487*

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Innovative Training Network

Regenerative Medicine for treating bone related complications of type II Diabetes.

The objectives of the DIABONE project are:

- To better understand the impact of T2DM on the inflammatory, angiogenic and osteogenic components during the process of bone repair.
- To identify novel biomarkers reflecting high risk of impaired bone healing in T2DM.
- To tailor pharmacological and/or stem cell based treatments for the repair of bone defects.

Partners with the following expertises are searched for:

- Proteomics, Transcriptomics,
- Omics approaches to cell signalling and metabolomics
- Expertise in angiogenesis in diabetes
- Expertise in inflammation in diabetes
- Animal models of Type II diabetes

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SC1-BHC-07-2019:

Regenerative medicine: from new insights to new applications

Mesenchymal stem cell delivery scaffolds for improving their survival and functions pertaining to tissue repair upon impantation.

The objectives of the project is:

- To develop niches/scaffolds, biomaterials/hydrogels that support the survival of MSCs post-implantation and their functions pertaining to tissue repair.
- At this stage of the project, we envision applications for the repair of large bone defects, osteonecrosis, intervertebral disc degeneration and soft-tissue repair/reconstruction..

Partners with the following expertises are searched for:

- Manufacturers of human clinical grade MSCs.
- Protein (and more specifically enzyme) delivery.
- Hydrogel fabrication,
- Mathematical modeling of molecular diffusion and energy metabolism,
- Experimental *in vivo* models used in fat grafting research for volume augmentation in soft tissue reconstruction.

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Contact details

Thank you!

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