COMBIO

Commercialization of Biomaterials

www.tekes.fi/ohjelmat/combio

- Time span 2003-2007
- Total budget 26 M€
- Senior technology advisor: Mika Sievi-Korte, Tekes

- Programme manager: Heikki Laurila, Frux Advisors Oy

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Purpose of the Tekes-project 40274/03:

To develope, manufacture and study properties of porous, load bearing, biodegradable and bioactive materials for a variety of clinical applications (”Biowaffle”)

Participants

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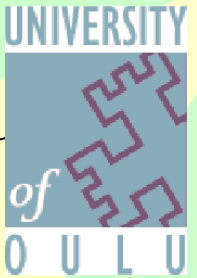

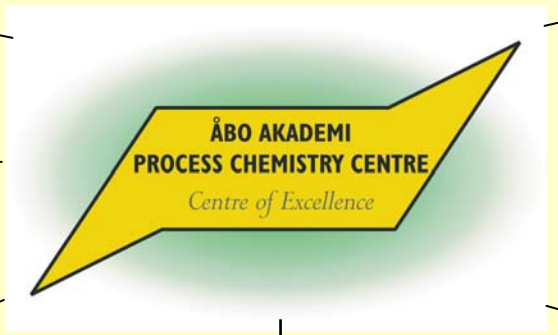

VivoXID Ltd

NOVEL BIOMATERIALS FOR THE BENEFIT OF BOTH DOCTOR AND PATIENT

Biological Bone Substitutes

Biowaffle

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ÅBO AKADEMI
PROCESS CHEMISTRY CENTRE
Centre of Excellence

Expertise in manufacturing and properties of bioactive glasses from a variety of clinical applications

Professor Mikko Hupa, PI of the project

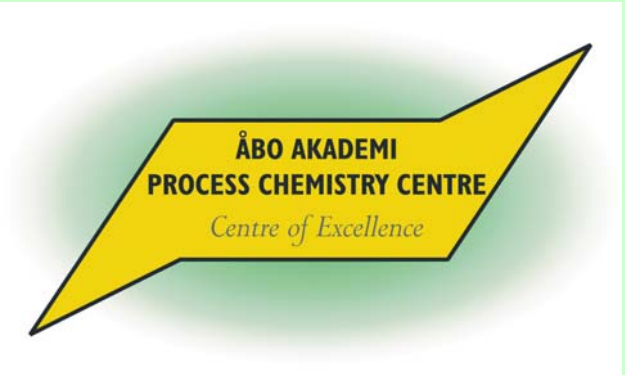
Docent Heimo Ylänen, project coordinator

Dr.Sc. (Chem.Eng) Leena Hupa, glass technology expert

Hanna Arstila, PhD student

Jaana Paananen, technical assistant

Biowaffle



Areas of responsibility:

- Development of bioactive glass compositions optimal for fiber drawning
- Chemical and physical studies of the bioactive glass fibers
- In association with TUT, manufacturing of a fabric made of bioactive glass fibers

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Biowaffle

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TAMPERE UNIVERSITY OF TECHNOLOGY
Institute of Biomaterials

The Institute of Biomaterials is one of the leading European research institutes in materials technology of bioabsorbable polymers, composites and implants for surgical and tissue engineering applications.

Academy Professor Pertti Törmälä,

PI of the TUT group

Professor Minna Kellomäki, Polymeric Materials

Professor Nuredin Assammakhi,

Surgery

Mikko Tukiainen, PhD student

Sanna Kakkonen, technical assistant

Biowaffle

TAMPERE UNIVERSITY OF TECHNOLOGY
Institute of Biomaterials

Areas of responsibility:

- Developement of optimal resorbable polymers for fiber spinning
- Studies of the mechanical properties of polymer and bioactive glass fibers
- In association with ÅA, manufacturing of the porous polymer/bioactive glass fiber composite

Biowaffle

UNIVERSITY OF TURKU

Department of Surgery

Professor Hannu Aro, PI of the UoT group

Jessica Yrjans, PhD student

Biowaffle

UNIVERSITY OF TURKU

Department of Surgery

Areas of responsibility:

- *In vitro* studies of the bioactive glass fabric using cell cultures
- Preclinical and clinical studies of the orthopaedic applications of the bioactive glass fabric
- Preclinical and clinical studies of the orthopaedic applications of the porous polymer/bioactive glass fiber composite

Biowaffle

Docent Outi Kaarela, PI of the UoO group

Department of Surgery

Division of Plastic Surgery

Professor Timo Waris, Surgery

Biowaffle

Department of Surgery

Division of Plastic Surgery

<u>Areas of responsibility</u>:

- *In vitro* studies of the the porous polymer/bioactive glass fiber composite using stem cells
- *In vivo* studies of the porous polymer/bioactive glass fiber composite
- Preclinical and clinical studies of the cranio-facial applications of the porous polymer/bioactive glass fiber fabric

Biowaffle

Companies:

- **Vivoxid Ltd, Turku** — **www.vivoxid.fi**
- **Linvatec Biomaterials Ltd., Tampere** — **www.linvatec.com**
- **Bioretec Ltd Tampere** — **risto-antti.penttila@jippii.fi**
- **Biological Bone Substitutes, Oulu** — **pekka.jalovaara@oulu.fi**