

Newsletter

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About us

BioBone is an initial training network with the objective of preparing young researchers to fill the demand in the strategic area of bioceramics for bone repair.

BioBone will provide a multidisciplinary training that will combine advanced tools and knowledge with academic and industrial experience.

The Project is in its 2nd year – researchers keep developing their plans, skills and network-related activities (e.g. secondments in partner institutions).

Our Focus

Continuous advances in the treatment of bone disease leads to a strong demand for new solutions and for professionals able to develop them.

The unique properties of ceramic materials grant them a crucial role in the field of bone repair.

Ceramics are making inroads in industrial applications such as dental or orthopedic implants. However, much work is still needed.

“One never notices what has been done; one can only see what remains to be done.”

-Marie Curie

News

Oral Presentations

Preethi Balasubramanian: CIMTEC 2014 – 6th Forum on New Materials, Montecatini Terme, Italy.

Poster Presentations

Valentina Miguez Pacheco: Poster presentation in the DGG – ACerS GOMD 2014 conference in Aachen, Germany

Elena Littmann: poster presentation during the “2014 eCM XV: Cartilage & Disc: Repair and Regeneration conference” Davos, Switzerland.

Publications

Valentina Miguez Pacheco: Book chapter – “Biodegradable and bioactive polymer/inorganic phase nanocomposites for bone tissue engineering (BTE)”, Woodhead Publishing

Preethi Balasubramanian: Accepted book chapter – “Assessing degradation behaviour of bioceramic scaffolds”, Characterisation and design of tissue scaffolds: Woodhead Publishing.

Upcoming events

- **ESB 2014:** Liverpool, UK from 31st Aug to 3rd Sept 2014.
- **CIEC14:** Stuttgart, Germany from 8th to 10th Sept 2014.
- **E-MRS:** Warsaw, Poland from 16th to 19th Sept 2014
- **5th BioBone workshop:** Mons, Belgium from 20th-21st Oct 2014.
- **Communications and writing skills BioBone workshop:** London, UK from 19th to 21st November 2014.

Meet the researchers at FAU Erlangen



Valentina Miguez Pacheco

Valentina graduated from Imperial College London (UK) in Biomedical Engineering and went on to complete a Master's degree in Tissue Engineering and Biomaterials at University College London (UK).

Her research work is focused on incorporating surface functionalities on silicate-based bioactive glass scaffolds for bone regeneration applications.

Preethi Balasubramanian

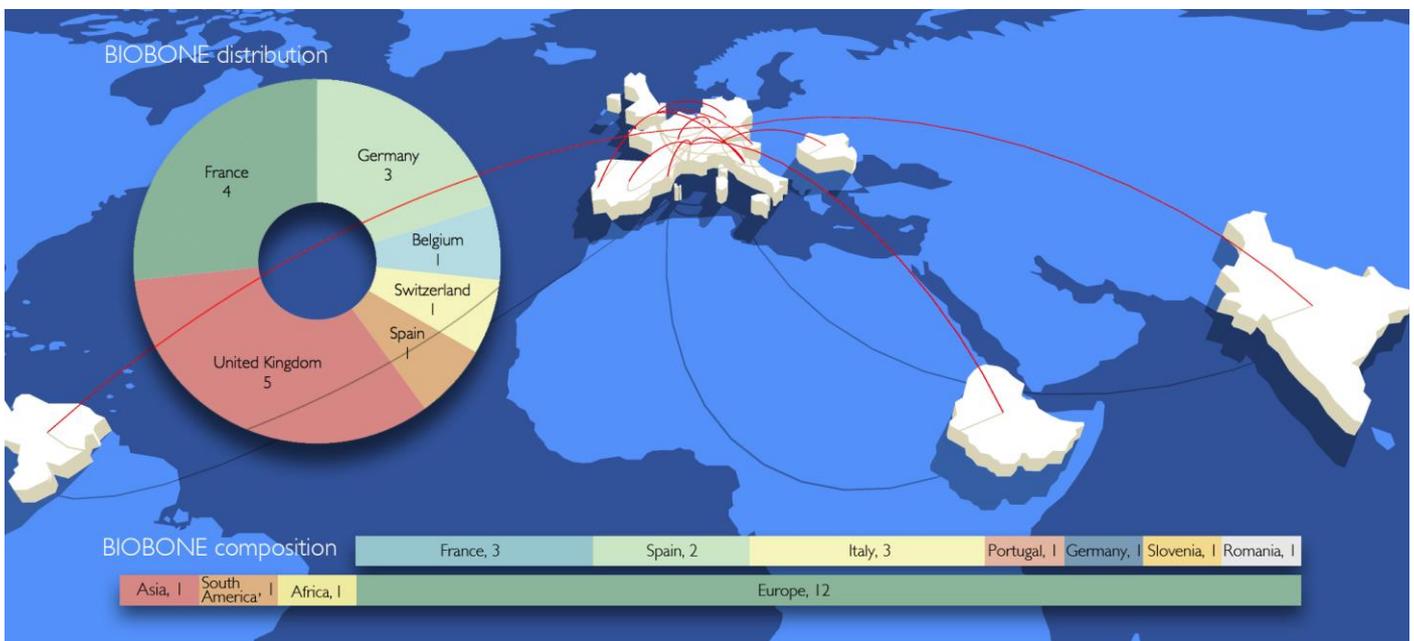
Preethi got her Bachelor's degree in Materials Science & Engineering from College of Engineering Guindy, Anna University, India and her master's degree in Mechanical Engineering with specialization in "Electrospinning of natural proteins for cardiac tissue engineering" from National University of Singapore, Singapore.

Her research within the BIOBONE project focuses on the development of new bioactive glass-based scaffolds and to functionalize their surface to enhance bone formation.



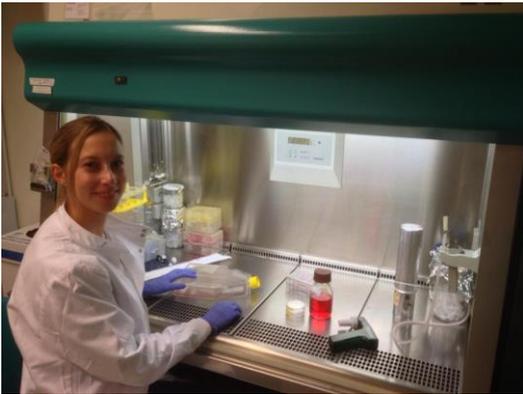
BioBone at a glance

Where are we from and where are we now?



Second row of secondments

Being the BioBone project in its 2nd year, a good number of members have already tried out the secondment experience. To check how this is perceived we have asked to some of the participants their experience –



Elena Littmann

ESR at Imperial College London

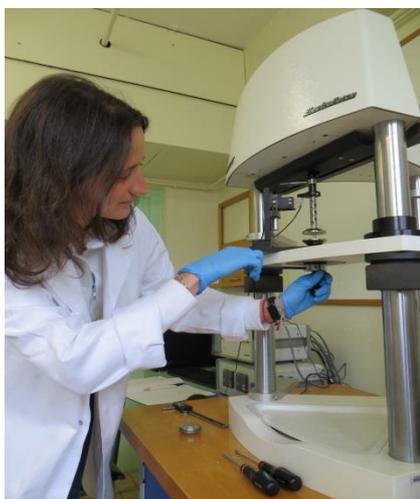
During my 6 months secondment in Davos I was investigating the influence of bioactive glass ionic dissolution products on hMSCs. My stay at the AO Foundation Davos was a very positive experience. Discussing my project with the experts at AO has had a lasting impact on my experiments and enabled me to learn new techniques that I am now routinely using for my research. Outside the scientific work I enjoyed very much getting to know everyone at AO and taking advantage of the sports activities Davos has to offer.

Preethi Balasubramanian

ESR at FAU Erlangen

I went to INSA de Lyon for my secondment and the experience was quite nice. I could use different facilities such as high temperature XRD and environmental SEM which are relevant to my project. Apart from the scientific side, I liked the working environment and also tried my hand at French cuisine and the language. Our fellow Biobone members at the institute were really helpful and kind.

What I recommend? Do it as soon as possible and also, plan ahead!



Francesca Tallia

ESR at Imperial College London

I went for 5 weeks at INSA Lyon. The main focus was to be trained on DMA (Dynamic Mechanical Analysis) equipment and to run some preliminary analyses on my hybrid materials in order to check the feasibility of the test and to plan future secondments. Even if it was a very short stay, I really enjoyed the experience. I had the opportunity to learn more on mechanical characterisations and to see how things work in a different lab. Beside the scientific work, I didn't miss the chance to be a tourist in France, visiting Lyon and the surrounding areas. As already suggested by others, I recommend to check the availability of the equipment and to plan the experiments in advance because time flies!!!

Workshops

Davos : The fourth BioBone workshop took place on Davos, Switzerland, from 28th to 30th April 2014. BioBone members had the opportunity to attend highly relevant lectures based on ongoing research on cell-material interaction, hands-on experience with orthopaedic surgery equipment, laboratory tours and the first three ESRs (Marcel Boix, Valentina Miguez Pacheco and Elena Littmann) gave oral presentations on their research work, whilst the rest had rapid fire sessions.

We also had wonderful Swiss fondue and a great experience of the mountains!



Mons (upcoming) : The fifth BioBone workshop will take place in Mons, Belgium on the 20th and 21st of October 2014.