



## Newsletter

### Outline

- Our focus
- News
- Meet a researcher
- BioBone at a glance
- Secondments
- Workshops

## About us

BioBone is an initial training network (ITN) European project preparing young researchers to fill the demand in the strategic area of bioceramics for bone repair.

The project provides a multidisciplinary training that combines advanced tools and knowledge with academic and industrial experience.

BioBone is in its third year and all researchers have done secondments in partner institutions. Six multidisciplinary workshops took place so far.

## Our Focus

Bring bioceramics research a step forward by developing all key competences required for this field, such as biomaterial processing and surface, mechanical and biological characterisation.

*We must not forget that when radium was discovered no one knew that it would prove useful in hospitals. The work was one of pure science. And this is a proof that scientific work must not be considered from the point of view of the direct usefulness of it. It must be done for itself, for the beauty of science, and then there is always the chance that a scientific discovery may become like the radium a benefit for humanity.*

- Marie Curie, May 1921.

## News

▲ Two PhD students from Imperial College London, Elena Littmann and Claudio Ferraro were selected to participate to the "SET for Britain" - a poster competition in the House of Parliament in London organised by the Parliamentary and Scientific Committee (<http://www.setforbritain.org.uk/index.asp>).

▲ Claudio Ferraro won a picture competition organised by the journal "Materials Today". His picture will be on the cover of a coming issue of the journal.

## Upcoming events

- Workshop Barcelona Spain 23-24 April 2015
- 27<sup>th</sup> European Conference on Biomaterials (ESB) Krakow Poland, 30 August - 3 September
- 4<sup>th</sup> TERMIS World Congress Boston USA 8-11 September 2015
- BioBone Summer School Santiago de Compostela Spain 21-24 September 2015

# Meet a researcher



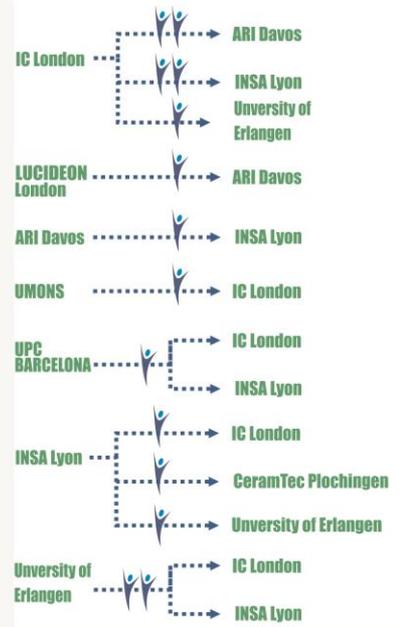
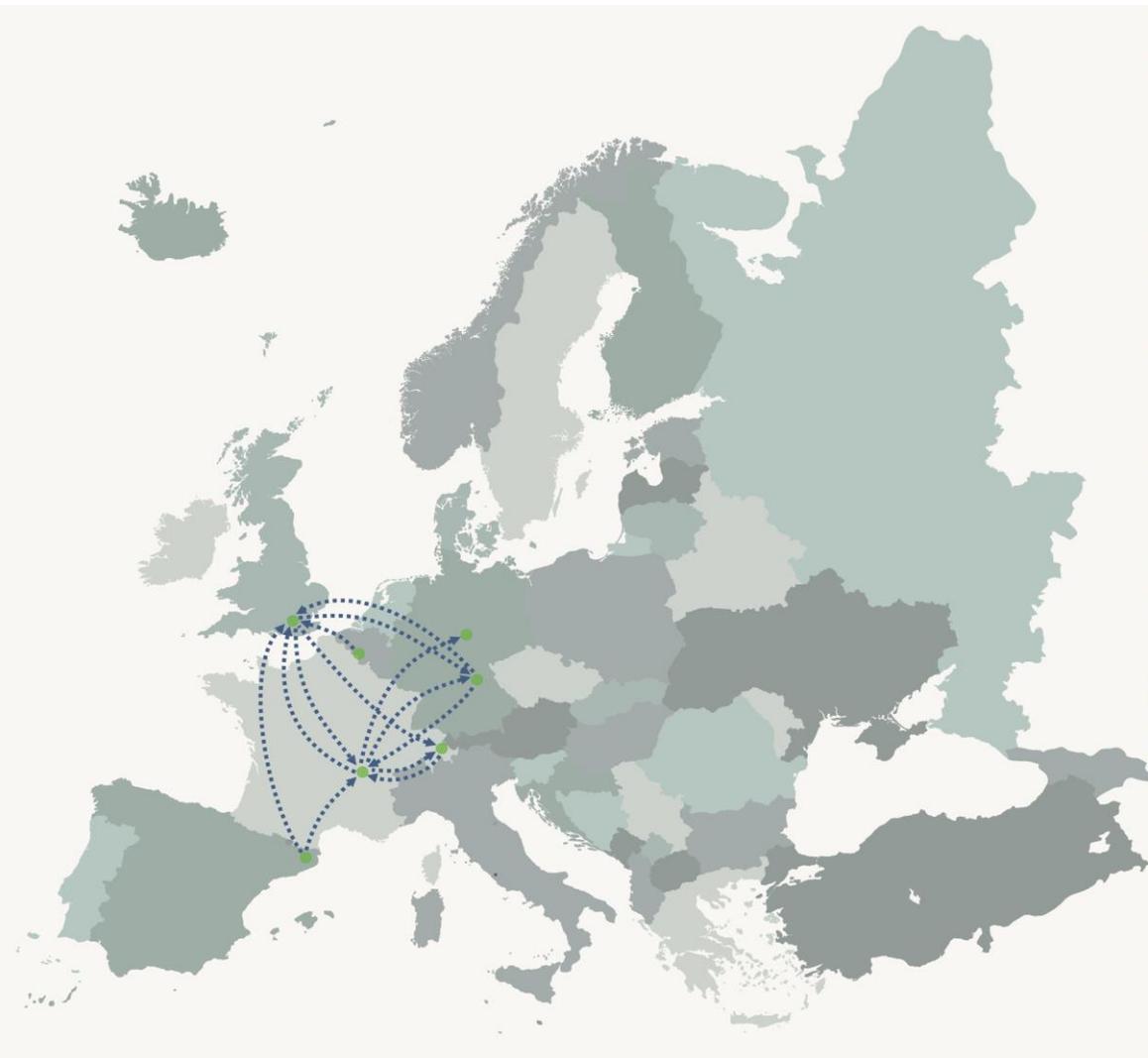
## Ana-Maria Stanciuc

Ana-Maria got her Bachelor in Experimental Biology and a Master degree in Biotechnologies at the University of Bucharest, Romania.

During her PhD at ARI, she focuses on developing an improved *in vitro* model to assess osseointegration. Her work focuses on the evaluation of the mineralization potential of surface-modified bioinert ceramics. In close collaboration with Ceramtec and UPC, she studies surface modifications such as micro-roughness, combined micro- and nano-roughness, laser patterned microroughness or gradient nano-roughness. Ana-Maria also enjoyed the visit of Elena, Gil and Martin during their secondment at ARI.

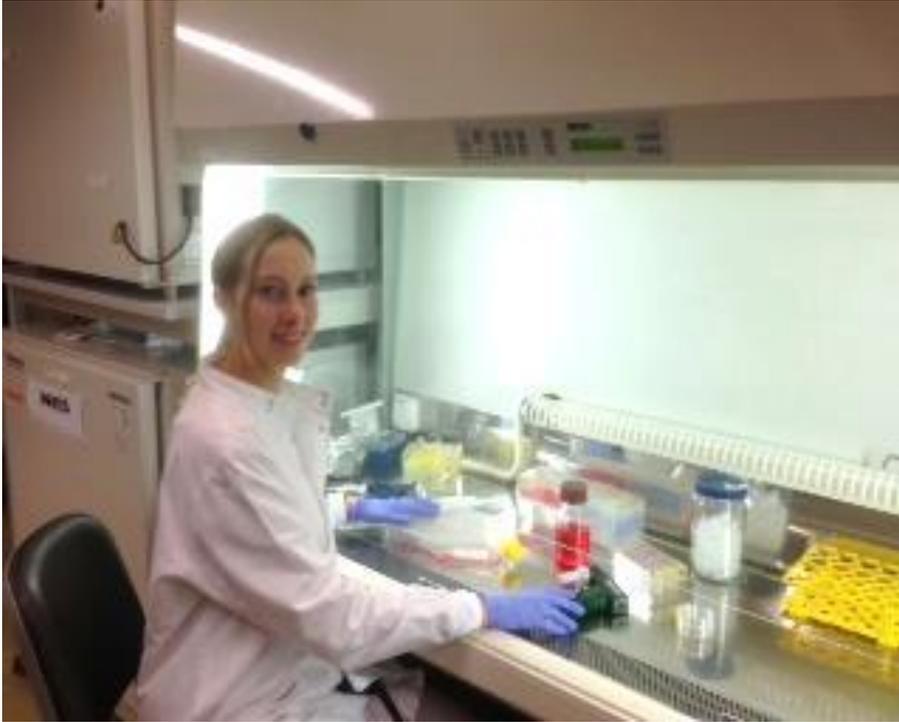
# BioBone at a glance

Mobility map: from where to where the ESR moved on their secondment



## Third row of secondments

Being in the third year of the project and of the PhD formation all of the ESR started or even completed their secondment period. In order to have a picture of their experience and how the secondment contributed to their professional and personal formation we asked some members to offer their impression concerning the secondment experience.



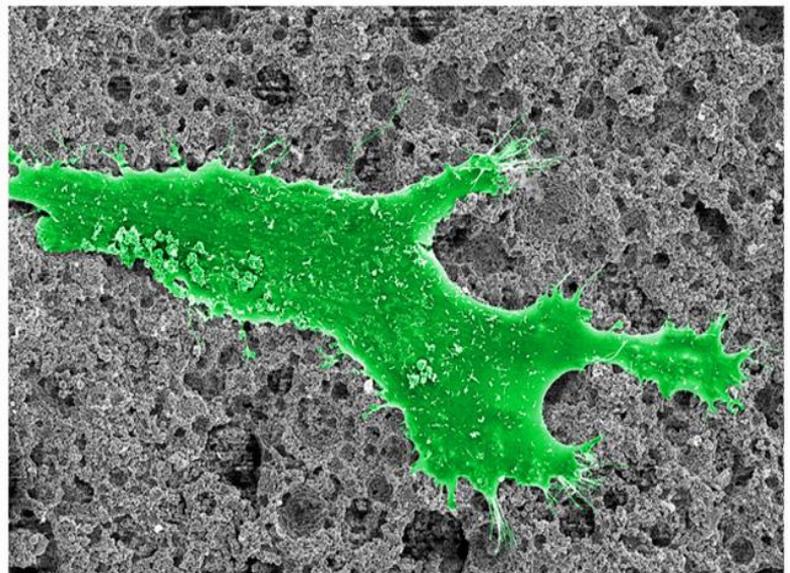
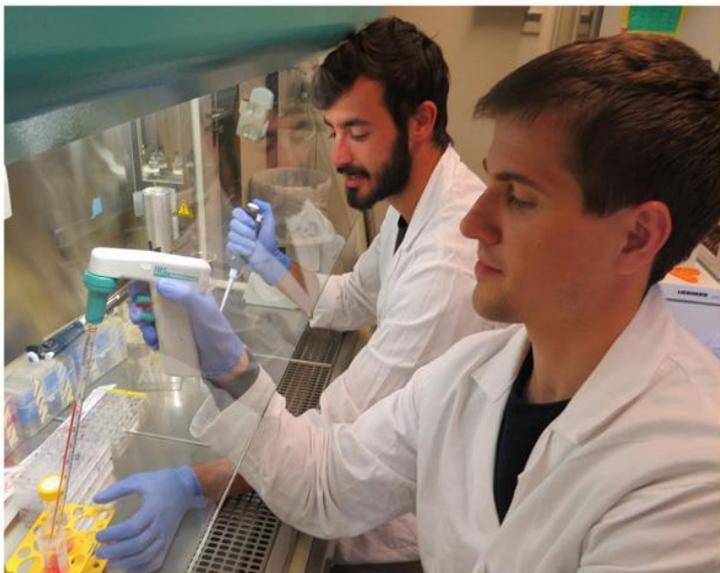
### Elena Littmann

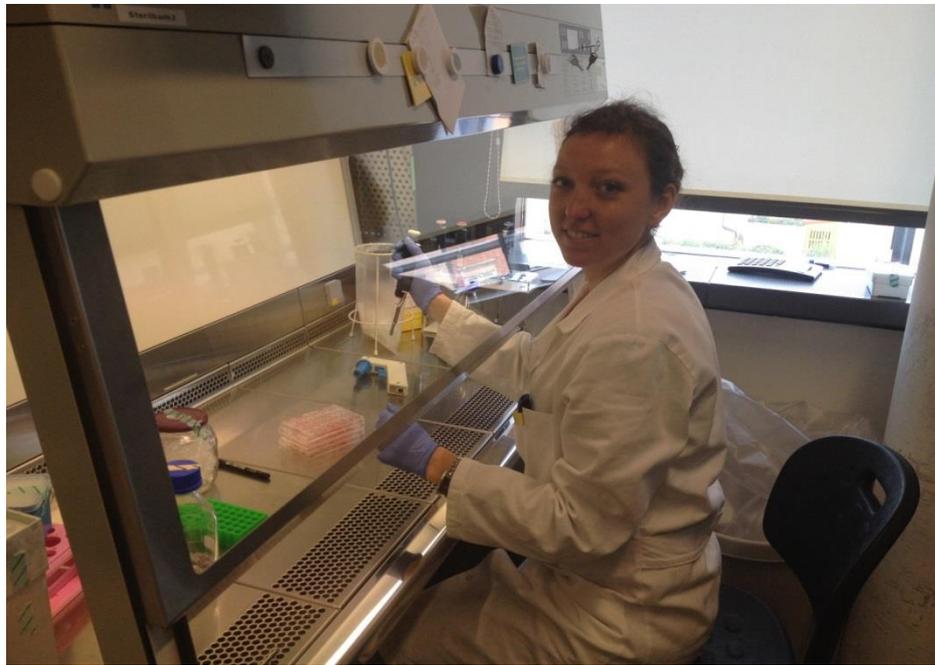
“My secondment at AO Foundation has had a lasting impact on my research and thus my thesis. I continue working on both projects I started at AO and I use the techniques I’ve learned during my secondment on a regular basis. Overall, my time at AO has been a great experience that certainly positively affected my PhD.

In terms of career development, I think the secondment is a very valuable experience. The secondment offers not only the opportunity to broaden your network but also to get an insight into how different laboratories “work”. For me it was particularly interesting to see how AO Foundation as an independent research organisation was structured and run.

With respect to my project, the techniques I learned at AO (especially hMSC pellet culture and histology) have profoundly influenced my project and continue to be part of my research at Imperial. Coming from a Materials Department, I especially benefitted from the broad knowledge of (stem) cell biology at AO.”

**Gil Machado** performed an *in vitro* study on differentiation of human mesenchymal stem cells towards an osteoblastic phenotype on different at AO Research Institute Davos (Switzerland). He also helped Martin Stefanic during his short-term secondment (two weeks).





**Marta Gallo** will finish end of February the secondment at University of Erlangen-Nuremberg (Germany).

" In terms of results the secondment was not fundamental, it could be considered more as an "addition", an "appendix". On the other hand it was really useful in terms of experience (scientific and personal), since I had the chance to make some experimental activities that were totally new for me. I think that this last aspect plus the fact that during those months I tried how life is in another country are added values of the secondment which could be useful for my future career."



**Carlos Caravaca** is trying the industry flavour, during a 6 months secondment at Ceramtec GmbH, in Plochingen Germany.

"I came to CeramTec for 6 months, starting the second week of January 2015. So far the experience is being pretty interesting. A new environment with completely new rules is both challenging and frightening. The environment is friendly but it very much encourages you to learn German language as soon as possible and use it regularly. This difficults inter-personal relationships at the beginning.

Regarding the scientific level, I am definitely learning new things as the objectives of this secondment requires me to do so. My tasks here involve the wettability assessment of their products, and I required a week of short secondment in Mons in the department of Marcel, and under the supervision of Prof. de Conninck. It helped me identifying the actual problems, learning to use the tools needed for a correct measurement and solving possible problems I might encounter. Professionally, it is a great opportunity to learn the insights of work dynamics inside a strong company like CeramTec, and I am sure the experience will be beneficial not only for the company but also for my career."

## Workshops

Last workshop was organised by Imperial College of London '**Communication skills and scientific writing**' in November. This meeting focused on soft skills training, area that ESR will need to develop for further career development in any direction academic or industry.