

NEWSLETTER I.

NanoTi Project—Development of a titanium dental implant with superior antibacterial properties

July, 2014

NanoTi Project launch

The broad aim of NanoTi is to provide dental implantology, a technology that helps to achieve optimal osseointegration as well as to prevent infection related complications. While biocompatibility is being improved on implant surfaces, these surfaces are still prone to bacterial attachment both during healing as well as many years after a successful implant surgery.

Circumstances of the project

How is it started:

Q: When did the project start?

A: The project's implementation has been launched on 01/02/2014,

Q: Which countries are involved?

A: The consortium members are from France, Germany, Hungary and Lithuania. Detailed introduction of the partners will be a part of the further Newsletter issues.

Project website

Further public information will be available soon on the official website of the project: www.nanoti.eu

Members of the consortium:



Funding

The two year initiative has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration



The need

Every year, approximately 15 million of tooth replacement devices are implanted worth together 3.5 billion Euros. During the last decade, the incidence of dental implant-associated infections has dramatically increased from 5%-8% to 10%-25%.

Infections are triggered by multiple bacterial colonies that form a bio-film on the surface of implants which is almost impossible to eradicate by current practices involving antibiotics and surgical debridement.

The first 6 months of NanoTI

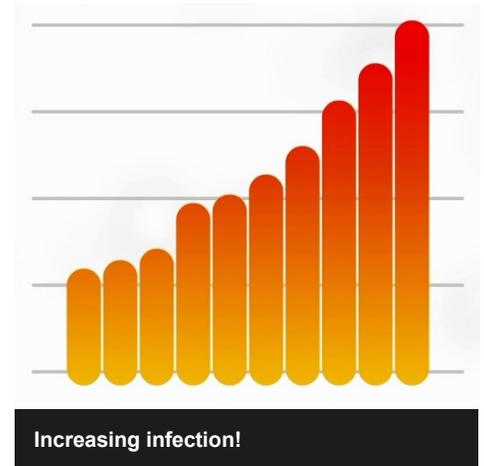
From the beginning of the project, both technical and non-technical tasks' implementation have been started. The first significant event was the kick-off meeting held in Budapest, Hungary between 12-13 March, 2014, where partners agreed with the technical objectives, the work plan and the milestones. There were two additional meetings held by M3 and M6 also in Budapest, Hungary, to overview the early progress of the implementation. Majority of the partners have attended these meetings achieving very effective communication— and workflow between the partners.

Achievements earned

During the first half year of the project, the team fulfilled the first two work packages, finalizing the system specification and the development of the planned equipment. In addition, 3 further work packages have been started in the meantime focusing on the elaboration of the prototype's hardware, software and the soul of the machine: the treatment process.

Communication to the wider public

Besides of the technical development, the consortium members individually have toned the dissemination of the main achievements step by step, continuously during the lifetime of the project. Thanks to our highly qualified partners, we could open serious channels to reach the public suitable for our project. On the first hand, a flyer has been elaborated to give a brief overview of the project for everyone who has interest in our activity. On the second hand, the partners started to take participation in different events like conferences, visitors' days, exhibitions, etc.



Introduction of NanoTI SMEs:



PROTiP
M E D I C A L

Dr. Nihal Engin VRANA is Protip's Director of Fundamental Research. Sponsored by a Marie Curie ESR fellowship, he obtained his PhD in 2009 at Dublin City University. His major research interests are titanium implants, tissue engineering, cell encapsulation and cell-biomaterials interactions.

Dr. VRANA published 26 articles, 4 book chapters, holds 2 European patents and has received various awards including Parlar Foundation Thesis of the Year (2006), ESB Translational Research award (2011) and 2nd Aegean R&D Patent competition 1st place award (2012).



Dr. Nihal Engin Vrana

Where will be NanoTI in the future?

If you became interested, or just simply want to know more about the NanoTI project, it's partners and achievements, you shouldn't miss the following events, where we have been invited, or where we plan to disseminate the outcomes of our activities!

The list of the planned events where we will take part:

- British Science Week 08/09/2014
- French-German-Polish Symposium of Architected Biomaterials, Medical and Tissue Engineering 04/12/2014
- 4th TERMIS 08-11/09/2015
- Symposium of International Congress of Oral Implantologists 14-16/08/2015
- International Osteology Symposium 21-23/04/2016
- ITI Congress 28-30/04/2016
- International Dental Show and Implant Expo 25-26/11/2016

Coordination

Just like in every successful team, there is a leader of the consortium in NanoTI project too. Besides the fulfillment of research and technical development activities, ATEKNEA is responsible for the smooth coordination of the project. The company has a long and very successful history in the coordination of similar projects in the Seventh Framework Programme. The aim in NanoTI is the same: to provide quality work, to finetune the project process, to communicate and to solve both usual and unusual situations to ensure the best possible outcome for all of the stakeholders involved in the project.



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Contact Us

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