

# RegMedExpo

## Community

## Newsletter

Issue 1 - 2023

### RegMedExpo Community

Welcome to the 1st edition of the RegMedEXPO Community newsletter, linked to the RegMedEXPO platform. This is a regenerative medicine community platform developed and managed by Cambridge Nanomaterials Technology Ltd (CNT Ltd), and its Brussels based sister company CNT Innovation, with the aim to support commercialisation of new technologies related to nanomaterials in biomedical applications with the focus on regenerative medicine.

The RegMedEXPO Community gives its members, the opportunity to learn about progress in the development of technologies advances of nanomaterials use in biomedical applications, through annual workshops and newsletters. It also provides a platform to exchange experience and discuss issues in biomedical applications and regenerative medicine, between technology developers in industry and researchers in academia and other stakeholders, including regulatory bodies and investors. You could become part of an exclusive virtual community, and increase your visibility and business growth opportunities by joining the key market players and vibrant industrial decisionmakers, technology developers and investors. This is an area to showcase your organisation, products and services on your dedicated virtual EXPO booth. If you are interested in becoming a community member and exhibiting at the RegMedEXPO please send an email to: [info@cnt-ltd.co.uk](mailto:info@cnt-ltd.co.uk)



[www.regmedexpo.net](http://www.regmedexpo.net)  
[info@cnt-ltd.co.uk](mailto:info@cnt-ltd.co.uk)

## RegMedEXPO & Workshop

The RegMedEXPO & Workshop are meetings held in order to support commercialisation of new technologies related to technologies related to nanomaterials in biomedical applications with the focus on regenerative medicine. These events are being organised yearly, in person and/or online. Community workshop could be organised as individual events, or integrated into a larger

conference event. The majority of attendees to these events come from industry. For more information on past events, visit the Workshops page.

The RegMedEXPO & Workshop has been developed during the H2020 Project n-TRACK. Following the end of the project in 2021, the RegMedEXPO & Workshop Community has been open to the partners outside the n-TRACK project.



Community Workshop: 1<sup>st</sup> n-Track Open Day Workshop 2019  
Trinity Hall College  
Cambridge - UK

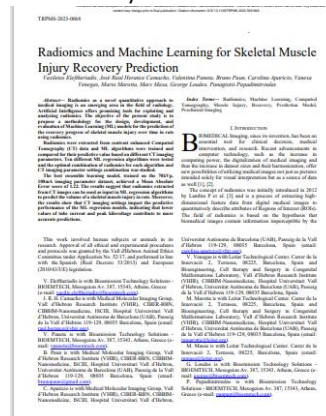
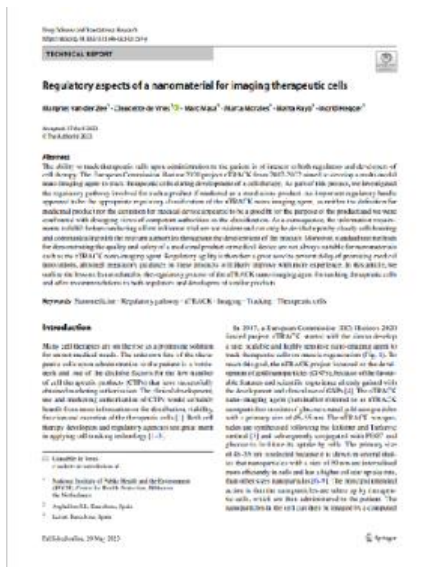
## News from the community

### New publications

Since the end of the EU funded project, n-TRACK (Multimodal nanoparticles for structural and functional tracking of stem cell therapy on muscle regeneration), former project partners:

Leitat, BIOEMTECH, VHIR, RIVM & Asphalion S.L, have published, couple of different articles related to their work on the project. The articles published are:

- **Regulatory aspects of a nanomaterial for imaging therapeutic cells** (Margriet van der Zee, Claudette de Vries, Marc Masa, Marta Morales, Marta Rayo & Ingrid Hegger), was published in the [Springer Link](#) website.
- **Radiomics and Machine Learning for Skeletal Muscle Injury Recovery Prediction** (Vasileios Eleftheriadis, José Raul Herance Camacho; Valentina Paneta; Bruno Paun; Carolina Aparicio; Vanesa Venegas; Mario Marotta; Marc Masa; & George Loudos), was published at the [IEEE Xplore](#). This paper is related with the AI techniques applied in the very end of the project for skeletal muscle regeneration prediction in rats (BIOEMTECH).



You can find these articles at the **RegMedExpo** website, under **Publications** (Project tab), following [this link](#). These publications are also available at the **Leitat** virtual desk, following [this link](#), or B at **BIOEMTECH** virtual desk at [this link](#).

## Community virtual desks updates & news

### Leitat News

LEITAT is a Technological Centre specialized in production technologies, developing R&D activities in the areas of materials sciences, environment, biotechnologies and renewable energies with deep knowledge and experience in technological transfers to several industrial sectors. LEITAT takes part each year in many projects financed by the regional and national governments, and in other co-funded by the European Commission, and develops private R&D projects funded by industrial partners.

LEITAT was project coordinator of the H2020 Project n-TRACK (2017-2021), and since the end of the project has collaborated with other partners in the publication of two papers: Regulatory aspects of a nanomaterial for imaging therapeutic cells; Radiomics and Machine Learning for Skeletal Muscle Injury Recovery Prediction (see information above). These publications are available at the **Leitat** virtual desk, following [this link](#).





[www.leitat.org/en/](http://www.leitat.org/en/)

To visit LeitAt virtual EXPO booth, click the picture, or follow the link below:

<https://regmedexpo.net/leitAt/>



## BIOEMTECH News

BIOEMTECH is a fast-growing Greek SME in the field of biomedical engineering, providing solutions both in terms of instrumentation and services, in preclinical research. The company designs and develops desktop in vivo molecular imaging systems and provides full preclinical CRO services for the evaluation of nanoparticles and other novel compounds. In addition, BIOEMTECH offers unique expertise in terms of advanced simulations at multiscale level, Artificial Intelligence algorithms, and exploitation of realistic computational models. BIOEMTECH Laboratories provide preclinical services that cover a wide range of studies, from an in vitro level, to radiochemistry, animal hosting, toxicology, and multi-modal in vivo imaging using SPECT, PET, CT, and Optical preclinical imaging systems. The company was founded in 2013 and up to now participated in 9 H2020, 4 ERANET (European), and 3 NSRF (national) research projects, as well as 2 COST Actions. BIOEMTECH is a multidisciplinary team of young scientists with a strong background in biomedical engineering, radiochemistry, biology, nanomedicine, medical physics, and bioinformatics. There is a big network of collaborators as the company officially

participates in ETPN, EARA, and OpenGATE networks.

BIOEMTECH were partners of the H2020 Project n-TRACK (2017-2021). They collaborated with other n-TRACK partners in the preparation of the paper: Radiomics and Machine Learning for Skeletal Muscle Injury Recovery Prediction (see more details above). This paper is related with the AI techniques BIOEMTECH applied in the very end of the project for skeletal muscle regeneration prediction in rats. This publication, among others, are available from their virtual desk at [this link](#). BIOEMTECH officially launched a Software department working in the field of Monte Carlo simulations and Artificial Intelligence techniques for medical applications.

### Monte Carlo Simulations



Nuclear Medical Imaging, Dosimetry, DNA simulations

### Artificial Intelligence



Machine Learning, Prediction models, Deep Learning, Explainable AI

### Anthropomorphic & Animal Models



3D Voxalized phantoms, Customized models

### Medical Image Processing



Segmentation, Reconstruction, Radiomics, Quantification



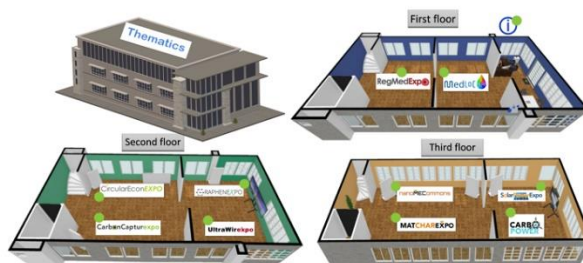
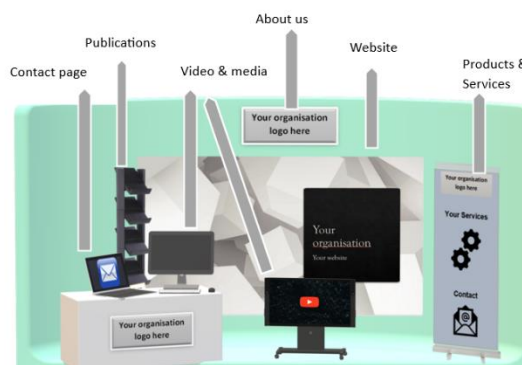
To visit BIOEMTECH virtual EXPO booth, click the picture, or follow the link below:

<https://regmedexpo.net/BIOEMTECH>



## Join the community!

Membership to the RegMedEXPO Community will give you the opportunity to have a unique virtual booth, designed according to your particular needs. Your exhibition booth will be part of our virtual exhibition space, which has hundreds visits per year from the RegMedEXPO community. This virtual area will be also available to be accessed through our dedicated umbrella platform of EXPO websites, receiving thousands of visits per year at: [www.nanomatexpo.net](http://www.nanomatexpo.net),



NanoMatEXPO Platform  
[www.nanomatexpo.net](http://www.nanomatexpo.net)

You would be invited to participate, present and exhibit at our unique style industry dominated workshops, dedicated to assisting commercialisation of new technologies and network with technology development and commercialisation leaders.

You will receive support from our library of information, with innovative technology solutions, market and patenting trends, and partnership opportunities.

We would use our annual newsletter, to support and promote your organisation.

**If you are interested in receiving more information, please send us an email to:**  
[info@cnt-ltd.co.uk](mailto:info@cnt-ltd.co.uk)