



## **The REMEDIC project as an integrated approach to the development of advanced-therapy medicinal products (ATMPs) and continuous education in tissue engineering and regenerative medicine**

Athina Bakopoulou<sup>1</sup>, Eleni Aggelidou<sup>2</sup>, Theofanis Vavilis<sup>2</sup>, Maria Chnaraki<sup>2</sup>, Petros Koidis<sup>1</sup>, and Aristeidis Kritis<sup>2</sup>

1 Dep. of Fixed Prosthesis & Implant Prosthodontics School of Dentistry, 2 Lab of Physiology Dep. of Physiology and Pharmacology School of Medicine, Aristotle University of Thessaloniki GR-54124, Thessaloniki, Greece

**Background:** Regenerative medicine transfers the latest advances from a variety of disciplines in basic research to the medical practice, aiming to engineer or regenerate cells, tissues and organs that restore normal functions in the humans. Advanced-therapy medicinal products (ATMPs) are the end result of regenerative medicine based on gene therapy, somatic-cell therapy or tissue engineering. They offer groundbreaking new opportunities for the treatment of disease and injury. Educational institutions are presented with a challenge to provide a framework able to train health care professional to the cutting edge technologies involved and the diverse approaches to ATMPs production.

**Objectives:** The introduction of health care professionals, basic scientists and students to the methods and disciplines of tissue engineering and their applications in regenerative medicine.

**Methods:** Use of the **Good Manufacturing Practice-GMP** facilities and the infrastructure provided by the REMEDIC project as a tool for medical education and lifelong learning in the developing fields of Regenerative Medicine and Dentistry.

**Results:** Continuing education in regenerative medicine technology including (stem) cell and tissue culture, use of bioreactors in tissue engineering, fluorescent microscopy and imaging, flow cytometry and GMP compliance.

**Conclusions:** REMEDIC project can be used as a cutting-edge tool for harnessing the emerging therapeutic possibilities offered in the field of tissue engineering and Regenerative Medicine/Dentistry offering a wide dissemination of knowledge and training on its disciplines.