The developments in reparative medicine, also known as regenerative medicine or tissue engineering, give rise to various ethical and legislative problems to European society. Regenerative medicine could provide new ways of restoring normal organ functions and even engineering and growing tissue substitutes for replacement of damaged or diseased human organs. However, the moral issues with using early embryos for research provoke a heating discussion in the media and among national and international organizations and institutions.

At the same time, a well defined necessity for optimized teaching / training system in the field exists at an EU level. The Professional qualification of the medical specialists lacks innovative knowledge in different aspects of reparative medicine and its current legal status. The newest developments in information technology need also be introduced into the educational field.

These advances can provide better health opportunities for the society. Due to the fact that social awareness and innovative thinking of the professionals are required, an increasing demand for improvement of education has been observed in the area lately.

The “Innovative e-Learning in Reparative Medicine (NOVAe-MED)” project was born due to the recent developments in reparative medicine and the needs for a more modern education they impose. The project builds an Innovative e-Learning programme in the field of reparative medicine. It improves the competence and skills of the professionals working in the sectors of healthcare, biotechnology and biomedicine. The programme also aims at improving the knowledge of the specialists working in the field of stem cells therapy and keeping them in touch with the recent developments in biomedicine.

The training methodology of the NOVAe-MED programme combines the computer- and information technology-based approach with other models of learning such as specific learning pathways, learning groups and virtual study circles, as well as novel ODL-based methods. New relevant topics are introduced by recently developed technologies and applications in the field. All these teaching methods are flexible and efficient for re-introducing the project results into new sectors.

The learning model also merges e-learning and traditional educational methods.
This combination has been proven to be the most successful one – being user-friendly and technologically adaptable. The e-learning methods are focused on educational resources outside the classroom, together with the traditional methods of collecting information, instructions and advice in the context of healthcare and reparative medicine.

Another tendency observed here is that NOVAe-MED’s modern learning methods ensure the bridge between industry and education through borrowing style and content from business in order to improve e-learning. The learning environment intends to be flexible enough to include the job-linked content and improve the integration of scientific, research and study approaches. Thus, NOVAe-MED’s trainees acquire skills and competence necessary for a certain job position.

Users of the NOVAe-MED learning programme are colleges, universities, public and private training bodies in public health; formal and non-formal training bodies. NOVAe-MED aims at young graduates; undergraduates from colleges and universities, young specialists – biologists, biotechnologists, physicians, health care managers, GP professionals.

NOVAe-MED’s Contribution

The NOVAe-MED project contributes to solving the existing problems in the field of reparative medicine, acquainting the target audience with the most recent innovative trends and the current legal status of this branch of the medicine. These innovations influence the whole process of modernization of VET education by creating novel approaches and trends in the fast-developing sectors of reparative medicine and biotechnology.

The project results are planned to be integrated into the national vocational training system with the additional use of valorisation activities. The number and the influence of the participants in the project expand beyond the project partnership by building a network of associated partners interested in applying the project results into practice. These measures are based on a survey on the market demands on prospects for commercialization of project deliverables.

The needs analysis in the field outlines a major need for promotion of innovation in the European VET training system in respect to the reparative medicine and the R & D investment. The European universities participating in the NOVAe-MED project contribute through exchanging scientific and technical information, teaching/training materials, testing and assessment of the methods of valorisation, testing and assessment of the project results. Research centers contribute through introduction of innovative VET practices based on R & D, and prediction of spin off results.

NOVAe-MED Partnership

The project partnership is built on a sectoral approach by partners from Bulgaria, Italy, Spain and Turkey. The structural scheme of the project is arranged in compliance with the Leonardo da Vinci II requirements including universities, a research center, SMEs and a Consortium. The Infrastructure and competence of each partner organization determine the interdisciplinary character of the project. Their professional expertise and experience contribute to the fulfillment of the project specific tasks, which are subordinated to the project’s management plan and governed by the project coordinator and the management consortium.

The functioning of the NOVAe-MED project partnership is facilitated by a previous collaboration within the Leonardo da Vinci and the Socrates programmes, between the Sofia University and Consortium TUCEP, which applies and upgrades some of the best practices in the field.

Partners
- Medical Center ‘Polymed’ (Bulgaria)
- ‘SYCO-PHARMA’ Ltd. (Bulgaria)
- Sofia University “St. Kliment Ohridski”, Scientific Research Department (NIS)
- Research and Development Center ‘Biointech’
- Andalusian Stem Cell Bank (Andalusia)
- TUCEP Consortium (Italy)
- Akdeniz University (Turkey)