

Special Issue

Vascularized Composite Tissue Engineering (VCE): An Emerging Field in Regenerative Transplantation

Message from the Guest Editors

The future of reconstructive transplantation will rely on regenerative medicine to address and overpass current issues and limitations in the field. Since the first successful hand transplant, the refinement of surgical techniques has led to various over types of vascularized composite tissue allotransplantation (VCA), such as face, abdominal wall, or uterus. However, the offer remains limited by the need for lifelong immunosuppression for a non-vital procedure. The transformation of transplantable body parts, through cell therapy or biofabrication with tissue engineering, represent a true hope: we called the related approach “Vascularized Composite tissue Engineering” (VCE). To be successful, VCE will require a strong association with current VCA knowledge, as well as a very transversal multidisciplinary work, such as tissue engineering, stem cell biology, organ perfusion, and tissue banking, as non-exhaustive examples. Presently, VCE is still a translational research niche; thus, we hope that this Special Issue will trigger a dramatic and successful expansion of the research field.

Guest Editors

Dr. Jérôme Duisit

1. Centre Hospitalier Universitaire (CHU) de Rennes, Rennes, France
2. Reconstructive and Plastic Surgery Department, Hôpitaux IRIS Sud, Brussels, Belgium

Prof. Dr. Nicolas Bertheuil

Centre Hospitalier Universitaire de Rennes, Rennes, France

Prof. Dr. Patrik Lassus

Head of the Department, Helsinki University Central Hospital, Helsinki, Finland

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

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