



Special Issue Reprint

## **3D Innovations in Personalized Surgery**

www.mdpi.com/books/reprint/6647

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ISBN 978-3-0365-6484-5 (Hardback) ISBN 978-3-0365-6483-8 (PDF)

Current practice involves the use of 3D surgical planning and patient-specific solutions in multiple surgical areas of expertise. Patient-specific solutions have been endorsed for several years in numerous publications due to their associated benefits around accuracy, safety, and predictability of surgical outcome. The basis of 3D surgical planning is the use of high-quality medical images (e.g., CT, MRI, or PET-scans). The translation from 3D digital planning toward surgical applications was developed hand in hand with a rise in 3D printing applications of multiple biocompatible materials. These technical aspects of medical care require engineers' or technical physicians' expertise for optimal safe and effective implementation in daily clinical routines.

The aim and scope of this Special Issue is high-tech solutions in personalized surgery, based on 3D technology and, more specifically, bone-related surgery. Full-papers or highly innovative technical notes or (systematic) reviews that relate to innovative personalized surgery are invited. This can include optimization of imaging for 3D VSP, optimization of 3D VSP workflow and its translation toward the surgical procedure, or optimization of personalized implants or devices in relation to bone surgery.



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