

Special Issue

Total Joint Arthroplasty: Technical Developments and Applications, 2nd Edition

Message from the Guest Editor

Advances in molecular biology, implant design, biomaterials, and intraoperative technology have transformed partial and total joint arthroplasty of the hip, knee, and shoulder in the last several decades. Previously common modes of failure, including premature wear, instability, loosening, and component malposition, have been dramatically reduced as translation has been made from the laboratory bench and software models to clinical practice. As progress accelerates in the realm of orthopedic bioengineering, our specialty should remain at the forefront of these emerging trends and to readily integrate them into clinical practice. We encourage the submission of original basic, translational, and clinical research and review articles on the following topics related to total joint arthroplasty of the hip, knee, and shoulder:

- Robotic and technology-assisted joint replacement;
- Periprosthetic joint infection—prevention, diagnosis, and therapeutics;
- Virtual and augmented reality platforms;
- Preoperative planning and templating;
- Biomaterials and implant design;
- Tribology and implant survivorship modeling;
- Tissue engineering.

Guest Editor

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Message from the Editor-in-Chief

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Editor-in-Chief

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