

ORS PSRS 5th International Spine Research Symposium - Disclosure Index

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Todd J Albert, MD

1 – Royalties: Yes Zimmer Biomet; DePuy Synthes Spine; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Nuvasive Inc.; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes ASIP- Ownership Interest; Augmedics -Ownership Interest; Biomerix-Ownership Interest; BIOMET (Now ZIMMER BIOMET)- Ownership Interest; Bonovo Orthopedics, Inc. - Ownership Interest; Crosstrees Medical - Ownership Interest; CytoDyn Inc. - Ownership Interest; Gentis -Ownership Interest; Innovative Surgical Designs, Inc. -Ownership Interest; InVivo Therapeutics -Ownership Interest; Invuity - Ownership Interest; Morphogenesis -Ownership Interest; Paradigm Spine, LLC - Ownership Interest; Physician Recommended Nutraceuticals- Ownership Interest; PMIG - Ownership Interest; Pulse Equity - Ownership Interest; Spinicity- Ownership Interest; Strathspey Crown -Ownership Interest; Surg.IO LLC - Ownership Interest; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes Zimmer Biomet; DePuy Synthes Spine; 7b - Royalties, Financial/Material Support from Publisher: Yes Elsevier Inc; JP Medical Publishers; Springer; Thieme Medical Publishers;8 - Serve on Editorial or Governing Board: Yes Scoliosis Research Society (SRS); United Health Group 9 - Serve on Board of Directors/Committee: No

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Harshtih Alluri, B.Sc

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Birsen Altinay

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes My sister works for the company "Zur Rose Suisse AG". (pharmaceutical distributor/medical wholesaler); 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes My sister owns stock of Zur Rose Group AG.; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material

Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 -
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Rajakumar Anbazhagan

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Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material
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Beth G Ashinsky, B.A.

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Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or
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Jeannie Bailey, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Hinge Health;
Bioniks, LLC; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Bioniks, LLC; 5 - Research or Institutional
Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties,
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Ga I Ban

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Liudmila Bardonova

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes DPS, icotec, Silony; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No AOSpine 9 - Serve on Board of Directors/Committee: Yes AOSpine

Abbie L Binch, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Edward D Bonnevie, PhD

1 – Royalties: No ; 2 - Speakers Bureau: Yes Honorarium for Fidia USA; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Consultant for OrthoGenRx; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Robert Bowles, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Elizabeth W Bradley, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No Dr. Bradley receives salary support from Medtronic.; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Dr. Bradley receives salary support from Medtronic for an unrelated project.; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Dr. Bradley serves on the Editorial Board of JBMR and JBMR Plus. 9 - Serve on Board of Directors/Committee: No

Kaitlyn Broz

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Jacob M. Buchowski, MD, MS

1 – Royalties: Yes Myself - Globus and K2M; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes Myself - Globus and K2M; 7b - Royalties, Financial/Material Support from Publisher: Yes Myself - KWW;8 - Serve on Editorial or Governing Board: Yes Myself - Spine Deformity 9 - Serve on Board of Directors/Committee: Yes Myself - AAOS: Board of Speciality Societies, Council on Research and Quality; ABJS: Social Media Task Force and Ad Hoc Committee on Membership; Federation of Spine Associations President; SRS: Ethics and Professionalism Committee and Development Committee

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Integra Life Sciences; Johnson and Johnson; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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Peikai Chen

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Youhai Chen

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Kenneth M C Cheung, MD

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Sing Yian Chew

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Satish Chitneni, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes AbbVie; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes SM Radiology Journal 9 - Serve on Board of Directors/Committee: No

Sade W Clayton

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Johann Clouet

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Megan Co

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes Employee of Stryker; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Company stock from employment at Stryker; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material

Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

James L Cook, DVM, PhD

1 – Royalties: Yes Arthrex, Inc: IP royalties; Musculoskeletal Transplant Foundation: IP royalties; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Artelon: Paid consultant; Arthrex, Inc: Paid consultant; Schwartz Biomedical: Paid consultant; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Arthrex, Inc: Research Support; ConforMIS: Research support; DePuy, A Johnson & Johnson Company: Research support; Eli Lilly: Research support; Merial: Research support; Musculoskeletal Transplant Foundation: Research support; Zimmer-Biomet: Research supp; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes Arthrex, Inc: IP royalties; Musculoskeletal Transplant Foundation: IP royalties; 7b - Royalties, Financial/Material Support from Publisher: Yes Thieme: Publishing royalties, financial or material support;8 - Serve on Editorial or Governing Board: Yes Journal of Knee Surgery: Editorial or governing board 9 - Serve on Board of Directors/Committee: Yes Musculoskeletal Transplant Foundation: Board or committee member

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

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Christian D'Andrea

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1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Cyrille Decante

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Manuel Delgado Caceres

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Danielle N D'Erminio

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes My father is a Senior District Business Manager for Takeda Pharmaceuticals; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Theodor Di Pauli von Treuheim, BEng

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Tyler J DiStefano, B.Eng.

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Srikanth N. Divi

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Denitsa Docheva, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes President of the European ORS

George R Dodge, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Volt Medical; Cytosorbents, Flexion; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes DowDupont, Celgene, Biomarin; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Matrix Biology; Journal of Experimental Orthopaedics; OA & Cartilage Open 9 - Serve on Board of Directors/Committee: No

Huiming Dong, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Hicham Drissi, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes I am a handling editor for Bone 9 - Serve on Board of Directors/Committee: No

Jie Du

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Garrett Easson

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Rayan Fairag

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Niloofar Farhang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Bailey Fearing, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Russell J Fernandes, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Aaron J Fields, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes consultant for Relievent MedSystems (unrelated to study); 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Morena Francesca Fiordalisi

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Ayesha Firdous

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Dale E Fournier

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Maxim Freidin

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Filipa A Freire

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Marion Fusellier

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Zulma Gazit

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Büşra Gunay

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chethana P Gallage Dona

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Daniel Gallego-Perez

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Jennifer Gansau

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Rahul Gawri, MD, Ph.D

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Yannik Gehlen

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Morgan B Giers, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Raquel M Goncalves

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Adam P Goode, DPT, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Sibylle Grad, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Jerome Guicheux

1 – Royalties: Yes calcium phosphate cement-Biomatlante; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Graftys SA; 5 - Research or Institutional Support: Yes Expansciences, Biobank, HTL; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes SFBTM, OARSI

Sarah E Gullbrand, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Sonja Häckel

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Mohamed Habib

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Lisbet Agneta Haglund, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Unrestricted research gift from PolyMed Inc for research unrelated to this abstract; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Boris Halgand

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chao Han

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Misung Han

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Robert Hartman, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes One-time payment for IP licensed to Elizur, a PA-based durable medical equipment company.; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Fabian Heizmann

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Paula A Hernandez, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Natalia Higueta-Castro

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Nanofiber Solutions; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Wolfgang Hitzl

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

David W Holdsworth

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: Yes ADEISS, London; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Nilsson Holguin, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Connective Tissue Research - Associate Editor 9 - Serve on Board of Directors/Committee: Yes ASBMR - Subcommittee for Diversity

Warren W Hom

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Robert C Hoy, BS, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Judith Hoyland, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Alice H Huang, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes Jessica Huang-Gordon, Illumina; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Ryan Cinalli, Attune; Jessica Huang-Gordon, Illumina; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Scientific Reports 9 - Serve on Board of Directors/Committee: Yes Womens Leadership Forum

Chun-Yuh Huang, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Clark T Hung, PhD

1 – Royalties: Yes from Allosource and in the future from MTF; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: Yes receive cartilage and synovium grafts from MTF; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes see responses to previous queries; 7b - Royalties, Financial/Material Support from Publisher: Yes honorarium from Journal of Orthopedic Research as deputy editor;8 - Serve on Editorial or Governing Board: Yes Editor for Orthopedic Research & Reviews, Deputy Editor for JOR 9 - Serve on Board of Directors/Committee: No

James C Iatridis, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes JOR, JOR Spine 9 - Serve on Board of Directors/Committee: Yes ORS, ISSLS

Svenja Illien-Junger, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Era Jain, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Amir Jamaludin

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Seon Ho Jang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Hardel Jean-Baptiste

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Zhirui Jiang, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Gabriel T Johnson

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Journal of Bone and Mineral Research 9 - Serve on Board of Directors/Committee: Yes Orthopedic Research Society

Kieran Joyce

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

James D Kang, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Own stock in Cardiorobotics (non-orthopaedic), ALung (non-orthopaedic) and OnPoint Surgical (Augmented Reality applications company); 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes Deputy Editor for Spine section of JOR;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes Currently a Director of ABOS

James D Kang, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Cardiorobotics, ALung, OnPoint (own stock, non any current research); 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes ABOS (Director)

Agnieszka Karol, DVM

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Hagar Kenawy

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Geoffrey J Kerr

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Anas Khanshour

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Mark Kim

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or

Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Katharina Kinslechner

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Arunark Kolipaka

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Siemens Healthcare and funds handled by the university; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Rebecca Kritschil, BS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Tori Kroon, BS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

David Kubosch

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Alon Lai, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Gernot M Lang, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or

Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Damien Laudier, BS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Catherine M Le Visage

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Andy J Lee

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Joon Lee

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Juliana Lee

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Naomi N Lee, DVM

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Seunghwan Lee

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Frapin Leslie

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Julie Lesoeur

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Victor Y Leung, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: Yes Novus Life Sciences; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes JOR Spine; Journal of Orthopaedic Surgery; Annals of Orthopedics & Rheumatology 9 - Serve on Board of Directors/Committee: No

Xudong Joshua Li, MD, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Young Investigator Editorial Board of the journal "Regenerative Engineering and Translational Medicine 9 - Serve on Board of Directors/Committee: No

Li Li

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Zhen Li, Prof. Dr. Ph.D.

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

David J Lillyman

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Tiffany Y Lim

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Johnfredy Loaiza, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Rose Long, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Stephane Madec

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Neil R Malhotra, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Sai A Mandalapu

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Matthew Mannarino

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Dessislava Z Markova, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Samantha Marshall

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

John T Martin, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes I am a paid consultant for DiscGenics, Inc. in Salt Lake City, UT.; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Robert L Mauck, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes JOR Spine editorial stipend (I am a co-Editor-in-Chief);8 - Serve on Editorial or Governing Board: Yes JOR Spine co-Editor-in-Chief 9 - Serve on Board of Directors/Committee: No

Emily McDonnell

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Kyle Meadows

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Magali Millecamps

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Shuichi Mizuno, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Elise Feng-i Morgan, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Spouse is founder/advisor/board member to several private early stage start-up companies; 3c - Unpaid Consultant: Yes Spouse is founder/advisor/board member to several private early stage start-up companies; 4 - Stock or Stock Options: Yes Several private early stage start-up company investments.; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Associate Editor of Journal of Biomechanics 9 - Serve on Board of Directors/Committee: No

Grace E Mosley, BS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Victoria Mroz

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Archana B Murali

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Philip Nasser, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes ABBV, JNJ, PFE, ABT, BMY, MRK, PG. All holdings are less than 500 shares of each stock.; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Devorah Natelson

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or

Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Harrah Newman

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Priya Nyayapati

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Grace Divine O'Connell, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Journal of Biomechanical Engineering, PLOS one 9 - Serve on Board of Directors/Committee: Yes Spine Section Secretary

Conor W O'Neill, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Relevant, Nocimed; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

David S Owen

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Abhay Pandit, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Gecko Biomedical; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes From 31 Medtech companies; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes Editorial boards- Biomaterials;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Christopher J Panebianco

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or

Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

John M. Parant, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chandreshkumar Patel

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Marianna Peroglio

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Logan M Piening

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Robert Pinelli

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Marta L Pinto

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Vikrant Piprode, Ph.D.

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Deepani W Poramba-Liyanage

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Steven Presciutti, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chaiyapruk Pundee

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Devina Purmessur, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Diana Quinonez

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Annie Reza

1 – Royalties: No ; 2 - Speakers Bureau: No Present on Stryker products to medical doctors visiting the Stryker campus; 3a - Paid Employee: Yes I am a paid employee of Stryker; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Stryker stock; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Stephen M Richardson, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes Treasurer for the UK Tissue and Cell Engineering

Society (TCES). Committee member for Tissue Engineering and Regenerative Medicine International Society (TERMIS) and Programme Chair/lead organiser of the TERMIS EU 2020 conference.

Makarand Risbud, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes Royalty from Springer for editing book "The Intervertebral Disc"; 8 - Serve on Editorial or Governing Board: Yes Matrix Biology Connective Tissue Research; 9 - Serve on Board of Directors/Committee: No

Bryan D Rynearson, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ; 8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Aleksandra Sadowska

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ; 8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Daisuke Sakai, MD, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes TUNZ Pharma, Stryker Japan; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: Yes Nippon Zoki Pharmaceutical Ltd.; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes Nippon Zoki Pharmaceutical Ltd.; 7b - Royalties, Financial/Material Support from Publisher: No ; 8 - Serve on Editorial or Governing Board: Yes JOR-Spine, Journal of Orthopedic Surgery 9 - Serve on Board of Directors/Committee: Yes JOA, JSSR

Ana I Salazar Puerta

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ; 8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Radka Saldova

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ; 8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Dino Samartzis, DSc

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or

Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes BMC Scoliosis and Spinal Disorders, Elsevier publishing: Publishing royalties,;8 - Serve on Editorial or Governing Board: Yes Global Spine Journal ; 9 - Serve on Board of Directors/Committee: Yes AOSpine, ISSLS, Scoliosis and Spinal Disorders, Spine, The Spine Journal, Journal of Orthopaedic Surgery, Southern Medical Journal, etc.

Shani Samuel

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Thomas P Schaer, VMD

1 – Royalties: No RegelTec; Accuitive Technologies; Parvizi Surgical Innovation; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes RegelTec; Accuitive Technologies; Parvizi Surgical Innovation; 3c - Unpaid Consultant: Yes Allevi, Renexxion, Alcyon,; 4 - Stock or Stock Options: Yes RegelTec; Accuitive Technologies; Parvizi Surgical Innovation; 5 - Research or Institutional Support: Yes DePuySynthes, Flexion Therapeutics, Camber Spine,; 6 - Financial or Material Support from Pharmaceutical or Company: Yes DePuySynthes; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No DePuySynthes; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Jordy Schol

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Rosa Serra, Ph.D.

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Ward Shalash

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No Cerus Corporation; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Jennifer O Shmukler

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Frances S Shofer

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Lara Ionescu Silverman, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes DiscGenics, Inc ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes DiscGenics, Inc. ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Stephen R Sloan, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Harvey E Smith, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Merck, Johnson and Johnson; 5 - Research or Institutional Support: Yes Research, Johnson and Johnson; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes NASS, ABOS

Lachlan Smith, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Madeline P Smith

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Sophie Sourice

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Gwendolyn Sowa, MD, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes GE- spouse; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes JOR, PM&R 9 - Serve on Board of Directors/Committee: Yes AAP

Julie E Speer, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Aaron Stoker, PhD, MS

1 – Royalties: Yes Arthrex, Musculoskeletal Transplant Foundation; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Laura S Stone, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Yi Sun

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Miyako Suzuki

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Yoshiki Takeoka

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Vivian Tam, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Wai Kit Tam

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Nina Tang, BS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Simon Y Tang, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Alison Thompson

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes Becton Dickinson; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Zuozhen Tian

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Brooke Tornifoglio, MSc

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Olivia M Torre, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Father - Immunomedics; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Marianna Tryfonidou

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Nicolas Vedrenne, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Andrea J Vernengo, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Kathleen F Vincent, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Sohrab Virk, MD, MBA

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Flavia Vitale

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Nam Viet Vo, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Annelinde AC Voordijk

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No I'm a technician at the University of Utrecht. We do arthritis research; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Rebecca A Wachs, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Remy E Walk

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Benjamin A Walter, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chao Wang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Dong Wang, MD, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Linshanshan Wang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Minghui Wang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Takayuki Warita

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes TUNZ pharma; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: Yes TUNZ pharma; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Benjamin Werbner

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Benjamin R Wesorick

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Jennifer J Westendorf, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: Yes Thermo BCT; 3c - Unpaid Consultant: Yes Gordian Biotech; 4 - Stock or Stock Options: Yes UBX, MNKD; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes Springer Nature royalties for textbook, J. Bone and Mineral Research honorarium;8 - Serve on Editorial or Governing Board: Yes J. Bone and Mineral Research 9 - Serve on Board of Directors/Committee: Yes IFMRS

Jacob Weston

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Frankie E Wignall, BSc, MRes

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Frances Williams, MBBS, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Beth Winkelstein, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes SJM Abbott ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: Yes CRC press ;8 - Serve on Editorial or Governing Board: Yes Editor Journal of Biomechanical Engineering; Associate Editor Spine ; 9 - Serve on Board of Directors/Committee: Yes BMES Board

Carol A Wise, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Spine Deformity 9 - Serve on Board of Directors/Committee: No

Yuanqiao Wu, MS

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: Yes Spine Deformity 9 - Serve on Board of Directors/Committee: No

Tracy Xu

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Sangwook Tim Yoon, MD, PhD

1 – Royalties: Yes Stryker Escalate Laminoplasty Plate, Meditech Talos Cages; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: Yes Meditech, Medyssey, B&E Fund; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Lukas Zebala

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Leo Zeef

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Stephan Zeiter, DVM, PhD, Dipl. ECLAM

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: Yes ORS preclinical model secgtion, European college of laboratory animal medicine

Lawrence Zeldin

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Changli Zhang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chenghao Zhang

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Jun-Ming Zhang, MD, MSc

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Yeja Zhang, MD, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Lan Zhao, PhD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Chaoming Zhou, MD

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

George K Zhou

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: No ; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No

Mona Zolfaghar

1 – Royalties: No ; 2 - Speakers Bureau: No ; 3a - Paid Employee: Yes Pharmaceutical and Biomaterial; 3b - Paid Consultant: No ; 3c - Unpaid Consultant: No ; 4 - Stock or Stock Options: No ; 5 - Research or Institutional Support: No ; 6 - Financial or Material Support from Pharmaceutical or Company: No ; 7a - Royalties, Financial/Material Support from Pharmaceutical or Company: No ; 7b - Royalties, Financial/Material Support from Publisher: No ;8 - Serve on Editorial or Governing Board: No 9 - Serve on Board of Directors/Committee: No