



Stuart Goodman, MD, PhD

The Robert L. and Mary Ellenburg Professor in Surgery

Orthopaedic Surgery

 NIH Biosketch available Online

CLINICAL OFFICES

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ACADEMIC CONTACT INFORMATION

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Bio

BIO

Brief Biography: Stuart B. Goodman MD MSc PhD FRCSC FACS FBSE

Stuart B. Goodman is the Robert L. and Mary Ellenburg Professor of Surgery, and Professor with Tenure in the Department of Orthopaedic Surgery at Stanford University. He has a courtesy appointment in the Department of Bioengineering, and is a Fellow of the Institute of Chemistry, Engineering and Medicine for Human Health (ChEM-H) at Stanford University. He was Chief of Orthopaedic Surgery at Stanford University from 1994-2002. Dr. Goodman received his BSc, MD and MSc (Institute of Medical Science) from the University of Toronto, and his PhD in Orthopedic Medical Science from Lund University in Sweden. He is a Fellow of the Royal College of Surgeons (Canada), the American Academy of Orthopaedic Surgeons and the American College of Surgeons. Dr. Goodman's clinical practice concentrates on adult reconstructive surgery. His clinical research interests center on the outcome of surgery for arthritis including primary and revision total joint replacement, juvenile arthritis, and osteonecrosis of the hip and knee. His basic science interests center on biocompatibility of orthopaedic implants, inflammation, and musculoskeletal tissue regeneration and repair. Dr. Goodman is a member of numerous academic organizations including the AAOS Biological Implants Committee (Chairman), and is a former member of the AAOS Biomedical Engineering Committee. He is a member of the Hip Society, Knee Society and AAHKS, a consultant to the Orthopaedic and Rehabilitation Devices Advisory Panel of the FDA, and former vice-chairman of the Musculoskeletal Tissue Engineering study section at NIH. Dr. Goodman is on the editorial board of the Journal of Orthopaedic Research (Associate Editor), Clinical Orthopaedics (Deputy Editor-Hip Society Liaison), Biomaterials (Associate Editor), Journal of Arthroplasty, Journal of Biomedical Materials Research, and other journals, and is a manuscript reviewer for over 20 journals in the fields of orthopaedic surgery, arthritis, bioengineering and biomaterials. Dr. Goodman has published over 400 peer-reviewed manuscripts in medical and bioengineering journals. Dr. Goodman and co-workers have received awards for their research from the Society for Biomaterials, Orthopaedic Research Society, the American Orthopaedic Association, Western Orthopaedic Association, and the Association of Bone and Joint Surgeons. Dr. Goodman was awarded the Clemson Award for Basic Research from the Society For Biomaterials in May 2000. He was the President of the Society For Biomaterials (2001-2) and served on the Board of Directors of the Orthopaedic Research Society. Dr. Goodman served as Co-Chair for the 1995, 2000 and 2007 NIH/AAOS-sponsored workshops on Implant Wear. Dr. Goodman was recognized as a Fellow, Biomaterials Science and Engineering (FBSE) by the International Union of Societies, Biomaterials Science and Engineering in May 2004, a Fellow of the Japanese Society of the Promotion of Science in 2011, and a Fellow of the American Institute of Medical and Biological Engineers in 2012.

Dr. Goodman serves as a consultant for several companies including Biomimetica, Accelalox, Integra and Wright Medical Technology.

CLINICAL FOCUS

- Adult Reconstruction- Lower Extremity
- Orthopaedic Surgery
- Osteonecrosis - hip and knee
- primary and revision hip and knee replacement

ACADEMIC APPOINTMENTS

- Professor, Orthopaedic Surgery
- Member, Bio-X
- Faculty Fellow, Stanford ChEM-H

ADMINISTRATIVE APPOINTMENTS

- Fellow, Institute for Chemistry, Engineering and Medicine for Human Health (ChEM-H), Stanford University, (2014- present)
- Professor (by courtesy), Department of Bioengineering, Stanford University, (2011- present)
- Fellowship Director, Orthopaedic Adult Reconstruction, Stanford University, (2008- present)
- Affiliated Faculty – Department of Bioengineering, Stanford University, (2007- present)
- Robert and Mary Ellenburg Professor of Surgery, Stanford University, (2006- present)
- Affiliated Faculty – Stanford Center on Longevity, Stanford University, (2005- present)
- Professor, Orthopaedic Surgery, Stanford University, (2002- present)
- Associated Faculty - Biomechanical Engineering Program, Mechanical Engineering Department, Stanford University, (1990- present)

PROFESSIONAL EDUCATION

- Internship: Toronto General Hospital Postgraduate Education (1979) Canada
- Residency: University of Toronto (1984) Canada
- Board Certification: Orthopaedic Surgery, American Board of Orthopaedic Surgery (1987)
- Fellowship: Sunnybrook Medical Center (1985) Canada
- Fellowship: Wellesley Hospital (1985) Canada
- Medical Education: University of Toronto (1978) Canada

LINKS

- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

As an academic orthopaedic surgeon, my interests center on adult reconstructive surgery including total joint replacement, osteotomies and the fixation of fractures. Both clinical and basic science investigations are ongoing.

My specific research interests include the following:

1. the biological aspects of the interface between orthopaedic implants/biomaterials and bone
2. total joint replacement: prosthesis design, biomechanics, biomaterials, mechanisms of failure, imaging etc

3. tissue engineering and mesenchymal tissue differentiation

4. arthritis: etiology, diagnosis, imaging, treatment, outcomes

CLINICAL TRIALS

- Use of PET/MR Imaging in Chronic Pain, Recruiting

Teaching

STANFORD ADVISEES

Med Scholar Project Advisor

Karthik Nathan

Postdoctoral Faculty Sponsor

Yusuke Kohno, Chi-Wen Lo, Masahiro Maruyama, Monica Romero Lopez, Takeshi Utsunomiya

Postdoctoral Research Mentor

Yusuke Kohno, Chi-Wen Lo, Masahiro Maruyama, Monica Romero Lopez, Takeshi Utsunomiya

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Adult Reconstruction (Fellowship Program)
- Bioengineering (Phd Program)

Publications

PUBLICATIONS

- **Bone Regeneration by Controlled Release of BMP-2: A Rabbit Spinal Fusion Chamber Molecular Study.** *Tissue engineering. Part A*
Hu, T., Naidu, M., Yang, Z., Lam, W. M., Ramruttun, K. A., Ren, X. F., Ng, F., Wang, M., Liu, L., Tan, K. C., Kwok, K. T., Goodman, S. B., Goh, et al
2019
- **Hematopoietic PBX-interacting protein mediates cartilage degeneration during the pathogenesis of osteoarthritis.** *Nature communications*
Ji, Q., Xu, X., Kang, L., Xu, Y., Xiao, J., Goodman, S. B., Zhu, X., Li, W., Liu, J., Gao, X., Yan, Z., Zheng, Y., Wang, et al
2019; 10 (1): 313
- **Preconditioned or IL4-Secreting Mesenchymal Stem Cells Enhanced Osteogenesis at Different Stages.** *Tissue engineering. Part A*
Lin, T., Kohno, Y., Huang, J., Romero-Lopez, M., Maruyama, M., Ueno, M., Pajarinen, J., Nathan, K., Yao, Z., Yang, F., Wu, J., Goodman, S. B.
2019
- **2-step stem cell therapy improves bone regeneration compared to concentrated bone marrow therapy.** *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*
Bolte, J., Vater, C., Culla, A. C., Ahlfeld, T., Nowotny, J., Kasten, P., Disch, A. C., Goodman, S. B., Gelinsky, M., Stiehler, M., Zwingenberger, S.
2019
- **Statin use is associated with less postoperative cardiac arrhythmia after total hip arthroplasty.** *Hip international : the journal of clinical and experimental research on hip pathology and therapy*
Chen, M. J., Bala, A., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Aaronson, A. J., Amanatullah, D. F.
2018: 1120700018816091
- **Trained murine mesenchymal stem cells have anti-inflammatory effect on macrophages, but defective regulation on T-cell proliferation.** *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*
Lin, T., Pajarinen, J., Kohno, Y., Huang, J., Maruyama, M., Romero-Lopez, M., Nathan, K., Yao, Z., Goodman, S. B.
2018: fj201801845R

- **Erratum to: Can a Conical Implant Successfully Address Complex Anatomy in Primary THA? Radiographs and Hip Scores at Early Followup.** *Clinical orthopaedics and related research*
Zhang, G., Goodman, S. B., Maloney, W. J., Huddleston, J. I.
2018; 476 (12): 2458
- **Suboptimal patellofemoral alignment is associated with poor clinical outcome scores after primary total knee arthroplasty.** *Archives of orthopaedic and trauma surgery*
Narkbunnam, R., Electricwala, A. J., Huddleston, J. I., Maloney, W. J., Goodman, S. B., Amanatullah, D. F.
2018
- **Strategies for Weight Reduction Prior to Total Joint Arthroplasty.** *The Journal of bone and joint surgery. American volume*
Chen, M. J., Bhowmick, S., Beseler, L., Schneider, K. L., Kahan, S. I., Morton, J. M., Goodman, S. B., Amanatullah, D. F.
2018; 100 (21): 1888–96
- **Etiologic Classification Criteria of ARCO on Femoral Head Osteonecrosis Part 2: Alcohol-Associated Osteonecrosis.** *The Journal of arthroplasty*
Yoon, B., Jones, L. C., Chen, C., Cheng, E. Y., Cui, Q., Drescher, W., Fukushima, W., Gangji, V., Goodman, S. B., Ha, Y., Hernigou, P., Hungerford, M., Iorio, et al
2018
- **Etiologic Classification Criteria of ARCO on Femoral Head Osteonecrosis Part 1: Glucocorticoid-Associated Osteonecrosis.** *The Journal of arthroplasty*
Yoon, B., Jones, L. C., Chen, C., Cheng, E. Y., Cui, Q., Drescher, W., Fukushima, W., Gangji, V., Goodman, S. B., Ha, Y., Hernigou, P., Hungerford, M., Iorio, et al
2018
- **Identification of the Human Skeletal Stem Cell.** *Cell*
Chan, C. K., Gulati, G. S., Sinha, R., Tompkins, J. V., Lopez, M., Carter, A. C., Ransom, R. C., Reinisch, A., Wearda, T., Murphy, M., Brewer, R. E., Koepke, L. S., Marecic, et al
2018; 175 (1): 43
- **The effects of a functionally-graded scaffold and bone marrow-derived mononuclear cells on steroid-induced femoral head osteonecrosis.** *Biomaterials*
Maruyama, M., Nabeshima, A., Pan, C., Behn, A. W., Thio, T., Lin, T., Pajarinen, J., Kawai, T., Takagi, M., Goodman, S. B., Yang, Y. P.
2018; 187: 39–46
- **Tracking Cell Transplants in Femoral Osteonecrosis with Magnetic Resonance Imaging: A Proof of Concept Study in Patients.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
Theruvath, A. J., Nejadnik, H., Muehe, A. M., Gassert, F., Lacayo, N. J., Goodman, S. B., Daldrup-Link, H. E.
2018
- **A Tissue Engineering Approach for Treating Early Osteonecrosis of the Femoral Head** *REGENERATIVE ENGINEERING AND TRANSLATIONAL MEDICINE*
Goodman, S. B.
2018; 4 (3): 162–66
- **Surgery Before Subspecialty Referral for Periprosthetic Knee Infection Reduces the Likelihood of Infection Control.** *Clinical orthopaedics and related research*
Song, S. Y., Goodman, S. B., Suh, G., Finlay, A. K., Huddleston, J. I., Maloney, W. J., Amanatullah, D. F.
2018
- **NFkappaB sensing IL-4 secreting mesenchymal stem cells mitigate the proinflammatory response of macrophages exposed to polyethylene wear particles.** *Journal of biomedical materials research. Part A*
Lin, T., Kohno, Y., Huang, J., Romero-Lopez, M., Pajarinen, J., Maruyama, M., Nathan, K., Yao, Z., Goodman, S. B.
2018
- **Transplanted interleukin-4--secreting mesenchymal stromal cells show extended survival and increased bone mineral density in the murine femur.** *Cytotherapy*
Lin, T., Pajarinen, J., Kohno, Y., Maruyama, M., Romero-Lopez, M., Huang, J., Nathan, K., Khan, T. N., Yao, Z., Goodman, S. B.
2018
- **Systematic characterization of 3D-printed PCL/beta-TCP scaffolds for biomedical devices and bone tissue engineering: Influence of composition and porosity** *JOURNAL OF MATERIALS RESEARCH*
Bruyas, A., Lou, F., Stahl, A. M., Gardner, M., Maloney, W., Goodman, S., Yang, Y.

2018; 33 (14): 1948–59

- **Low inpatient variability of histomorphological findings in periprosthetic tissues from revised metal/ceramic on polyethylene joint arthroplasties** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Vaculova, J., Gallo, J., Hurnik, P., Motyka, O., Goodman, S. B., Dvorackova, J.
2018; 106 (5): 2008–18
- **Early-stage osteonecrosis of the femoral head: where are we and where are we going in year 2018?** *INTERNATIONAL ORTHOPAEDICS*
Larson, E., Jones, L. C., Goodman, S. B., Koo, K., Cui, Q.
2018; 42 (7): 1723–28
- **Effect of Computer Navigation on Complication Rates Following Unicompartmental Knee Arthroplasty.** *The Journal of arthroplasty*
Chona, D., Bala, A., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Amanatullah, D. F.
2018
- **Cryptotanshinone Protects Cartilage against Developing Osteoarthritis through the miR-106a-5p/GLIS3 Axis** *MOLECULAR THERAPY-NUCLEIC ACIDS*
Ji, Q., Qi, D., Xu, X., Xu, Y., Goodman, S. B., Kang, L., Song, Q., Fan, Z., Maloney, W. J., Wang, Y.
2018; 11: 170–79
- **Protocol-Driven Revision for Stiffness After Total Knee Arthroplasty Improves Motion and Clinical Outcomes.** *The Journal of arthroplasty*
Hug, K. T., Amanatullah, D. F., Huddleston, J. I., Maloney, W. J., Goodman, S. B.
2018
- **miR-223-3p Inhibits Human Osteosarcoma Metastasis and Progression by Directly Targeting CDH6** *MOLECULAR THERAPY*
Ji, Q., Xu, X., Song, Q., Xu, Y., Tai, Y., Goodman, S. B., Bi, W., Xu, M., Jiao, S., Maloney, W. J., Wang, Y.
2018; 26 (5): 1299–1312
- **Are New Technologies Being Introduced and Adopted Appropriately in Orthopedic Practice?** *ORTHOPEDECS*
Goodman, S. B.
2018; 41 (3): 126–27
- **Obesity Is Independently Associated With Early Aseptic Loosening in Primary Total Hip Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Goodnough, L. H., Finlay, A. K., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Amanatullah, D. F.
2018; 33 (3): 882–86
- **Customized, degradable, functionally graded scaffold for potential treatment of early stage osteonecrosis of the femoral head** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Kawai, T., Shanjani, Y., Fazeli, S., Behn, A. W., Okuzu, Y., Goodman, S. B., Yang, Y. P.
2018; 36 (3): 1002–11
- **The biological basis for concentrated iliac crest aspirate to enhance core decompression in the treatment of osteonecrosis.** *International orthopaedics*
Goodman, S. B.
2018
- **Editorial Comment: 2017 Hip Society Proceedings** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2018; 476 (2): 214–15
- **Particle disease really does exist An evidence based rebuttal to Dr. Mjoberg's opinion letter** *ACTA ORTHOPAEDICA*
Pajarinen, J., Gallo, J., Takagi, M., Goodman, S. B.
2018; 89 (1): 133–36
- **Mesenchymal stem cell-macrophage crosstalk and bone healing.** *Biomaterials*
Pajarinen, J., Lin, T., Gibon, E., Kohno, Y., Maruyama, M., Nathan, K., Lu, L., Yao, Z., Goodman, S. B.
2018
- **Implant-Associated Bacterial Biofilm and Quorum Sensing in Periprosthetic Joint Infections.** *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*
Mooney, J. A., Pridgen, E. M., Manasherob, R., Suh, G., Blackwell, H. E., Barron, A. E., Bollyky, P. L., Goodman, S. B., Amanatullah, D. F.
2018

- **Outcome of 4 Surgical Treatments for Wear and Osteolysis of Cementless Acetabular Components (vol 32, pg 2799, 2017)** *JOURNAL OF ARTHROPLASTY*
Narkbunnam, R., Amanatullah, D. F., Electricwala, A. J., Huddleston, J. I., Maloney, W. J., Goodman, S. B.
2018; 33 (1): 308
- **Metal-on-metal total hip arthroplasty is not associated with cardiac disease** *BONE & JOINT JOURNAL*
Goodnough, L. H., Bala, A., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Amanatullah, D. F.
2018; 100B (1): 28–32
- **Production of GFP and Luciferase-Expressing Reporter Macrophages for In Vivo Bioluminescence Imaging.** *Methods in molecular biology (Clifton, N.J.)*
Pajarinen, J., Lin, T., Goodman, S. B.
2018; 1790: 99–111
- **Perioperative Pain Management for Total Knee Arthroplasty: Need More Focus on the Forest and Less on the Trees.** *Anesthesiology*
Webb, C. A., Madison, S., Goodman, S. B., Mariano, E. R., Horn, J. L.
2018; 128 (2): 420–21
- **Preconditioning of murine mesenchymal stem cells synergistically enhanced immunomodulation and osteogenesis** *STEM CELL RESEARCH & THERAPY*
Lin, T., Pajarinen, J., Nabeshima, A., Lu, L., Nathan, K., Jamsen, E., Yao, Z., Goodman, S. B.
2017; 8
- **Tissue-Invasive T Cells in Rheumatoid Arthritis**
Weyand, C. M., Shen, Y., Li, Y., Matteson, E. L., Goodman, S., Goronzy, J.
WILEY.2017
- **Patient Satisfaction After Total Knee Arthroplasty A Realistic or Imaginary Goal?** *ORTHOPEDIC CLINICS OF NORTH AMERICA*
Gibon, E., Goodman, M. J., Goodman, S. B.
2017; 48 (4): 421–+
- **Response to Letter to the Editor on "Weight Gain After Primary Total Knee Arthroplasty is Associated With Accelerated Time to Revision for Aseptic Loosening"** *JOURNAL OF ARTHROPLASTY*
Lim, C. T., Goodman, S. B., Huddleston, J. I., Harris, A. S., Bhowmick, S., Maloney, W. J., Amanatullah, D. F.
2017; 32 (10): 3258
- **An evidence-based guide to the treatment of osteonecrosis of the femoral head** *BONE & JOINT JOURNAL*
Chughtai, M., Piuze, N. S., Khlopas, A., Jones, L. C., Goodman, S. B., Mont, M. A.
2017; 99B (10): 1267–79
- **miR-216a inhibits osteosarcoma cell proliferation, invasion and metastasis by targeting CDK14** *CELL DEATH & DISEASE*
Ji, Q., Xu, X., Li, L., Goodman, S. B., Bi, W., Xu, M., Xu, Y., Fan, Z., Maloney, W. J., Ye, Q., Wang, Y.
2017; 8: e3103
- **Inflammation, ageing, and bone regeneration** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Gibon, E., Lu, L. Y., Nathan, K., Goodman, S. B.
2017; 10: 28–35
- **Inflammation and its resolution and the musculoskeletal system** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Gallo, J., Raska, M., Kriegova, E., Goodman, S. B.
2017; 10: 52–67
- **Inflammation and the musculoskeletal system** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Goodman, S. B., Qin, L.
2017; 10: A1–A2
- **Danger of frustrated sensors: Role of Toll-like receptors and NOD-like receptors in aseptic and septic inflammations around total hip replacements** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Takagi, M., Takakubo, Y., Pajarinen, J., Naganuma, Y., Oki, H., Maruyama, M., Goodman, S. B.
2017; 10: 68–85
- **Continuous Femoral Nerve Catheters Decrease Opioid-Related Side Effects and Increase Home Disposition Rates Among Geriatric Hip Fracture Patients.** *Journal of orthopaedic trauma*

- Arsoy, D., Gardner, M. J., Amanatullah, D. F., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Bishop, J. A.
2017; 31 (6): e186-e189
- **The effect of desflurane versus propofol anesthesia on postoperative delirium in elderly obese patients undergoing total knee replacement: A randomized, controlled, double-blinded clinical trial.** *Journal of clinical anesthesia*
Tanaka, P., Goodman, S., Sommer, B. R., Maloney, W., Huddleston, J., Lemmens, H. J.
2017; 39: 17-22
 - **Venous Thromboembolism Prophylaxis After TKA: Aspirin, Warfarin, Enoxaparin, or Factor Xa Inhibitors?** *Clinical orthopaedics and related research*
Bala, A., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Amanatullah, D. F.
2017
 - **CCL2/CCR2, but not CCL5/CCR5, mediates monocyte recruitment, inflammation and cartilage destruction in osteoarthritis** *ANNALS OF THE RHEUMATIC DISEASES*
Raghu, H., Lepus, C. M., Wang, Q., Wong, H. H., Lingampalli, N., Oliviero, F., Punzi, L., Giori, N. J., Goodman, S. B., Chu, C. R., Sokolove, J. B., Robinson, W. H.
2017; 76 (5)
 - **A Randomized Trial of Perioperative Gabapentin to Promote Pain Resolution and Opioid Cessation in a Mixed Surgical Cohort**
Hah, J., Mackey, S., Efron, B., Mccue, R., Goodman, S., Curtin, C., Carroll, I.
LIPPINCOTT WILLIAMS & WILKINS.2017: 813-17
 - **Cortical Strut Allograft Support of Modular Femoral Junctions During Revision Total Hip Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Lim, C. T., Amanatullah, D. F., Huddleston, J. I., Hwang, K. L., Maloney, W. J., Goodman, S. B.
2017; 32 (5): 1586-1592
 - **Use of Cortical Strut Allograft After Extended Trochanteric Osteotomy in Revision Total Hip Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Lim, C. T., Amanatullah, D. F., Huddleston, J. I., Hwang, K. L., Maloney, W. J., Goodman, S. B.
2017; 32 (5): 1599-1605
 - **Radiographic scoring system for the evaluation of stability of cementless acetabular components in the presence of osteolysis** *BONE & JOINT JOURNAL*
Narkbunnam, R., Amanatullah, D. F., Electricwala, A. J., Huddleston, J. I., Maloney, W. J., Goodman, S. B.
2017; 99-B (5): 601-606
 - **Outcome of 4 Surgical Treatments for Wear and Osteolysis of Cementless Acetabular Components.** *journal of arthroplasty*
Narkbunnam, R., Amanatullah, D. F., Electriwala, A. J., Huddleston, J. I., Maloney, W. J., Goodman, S. B.
2017
 - **Mesenchymal stem cells in the aseptic loosening of total joint replacements.** *Journal of biomedical materials research. Part A*
Pajarinen, J., Lin, T., Nabeshima, A., Jämsen, E., Lu, L., Nathan, K., Yao, Z., Goodman, S. B.
2017; 105 (4): 1195-1207
 - **Mesenchymal stem cells homing to improve bone healing** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Lin, W., Xu, L., Zwingerberger, S., Gibon, E., Goodman, S. B., Li, G.
2017; 9: 19-27
 - **Total hip arthroplasty using a monobloc cementless femoral stem for patients with childhood Perthes' disease** *BONE & JOINT JOURNAL*
Lee, K. H., Jo, W., Ha, Y. C., Lee, Y. K., Goodman, S. B., Koo, K. H.
2017; 99B (4): 440-444
 - **Total hip arthroplasty using a monobloc cementless femoral stem for patients with childhood Perthes' disease.** *bone & joint journal*
Lee, K. H., Jo, W., Ha, Y. C., Lee, Y. K., Goodman, S. B., Koo, K. H.
2017; 99-B (4): 440-444
 - **Revision Hip Arthroplasty Using a Modular, Cementless Femoral Stem: Intermediate-Term Follow-Up** *JOURNAL OF ARTHROPLASTY*
Sivananthan, S., Lim, C., Narkbunnam, R., Sox-Harris, A., Huddleston, J. I., Goodman, S. B.
2017; 32 (4): 1245-1249
 - **Pro-inflammatory M1 macrophages promote osteogenesis by mesenchymal stem cells via the COX-2-prostaglandin E2 pathway.** *Journal of orthopaedic research*
Lu, L. Y., Loi, F., Nathan, K., Lin, T., Pajarinen, J., Gibon, E., Nabeshima, A., Cordova, L., Jämsen, E., Yao, Z., Goodman, S. B.

2017

- **The Direct Anterior Approach is Associated With Early Revision Total Hip Arthroplasty.** *journal of arthroplasty*
Eto, S., Hwang, K., Huddleston, J. I., Amanatullah, D. F., Maloney, W. J., Goodman, S. B.
2017; 32 (3): 1001-1005
- **Weight Gain After Primary Total Knee Arthroplasty Is Associated With Accelerated Time to Revision for Aseptic Loosening.** *journal of arthroplasty*
Lim, C. T., Goodman, S. B., Huddleston, J. I., Harris, A. H., Bhowmick, S., Maloney, W. J., Amanatullah, D. F.
2017
- **Correlations between macrophage polarizing cytokines, inflammatory mediators, osteoclast activity, and toll-like receptors in tissues around aseptically loosened hip implants** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Jamsen, E., Kouri, V., Ainola, M., Goodman, S. B., Nordstrom, D. C., Eklund, K. K., Pajarinen, J.
2017; 105 (2): 454-463
- **Editorial Comment: 2016 Hip Society Proceedings** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2017; 475 (2): 334-35
- **Response to Letter to the Editor on 'Tibiofemoral Dislocation After Total Knee Arthroplasty'** *JOURNAL OF ARTHROPLASTY*
Jethanandani, R. G., Maloney, W. J., Huddleston, J. I., Goodman, S. B., Amanatullah, D. F.
2017; 32 (2): 700-700
- **Mutant CCL2 protein coating mitigates wear particle-induced bone loss in a murine continuous polyethylene infusion model** *BIOMATERIALS*
Nabeshima, A., Pajarinen, J., Lin, T., Jiang, X., Gibon, E., Cordova, L. A., Loi, F., Lu, L., Jamsen, E., Egashira, K., Yang, F., Yao, Z., Goodman, et al
2017; 117: 1-9
- **Decreased osteogenesis in mesenchymal stem cells derived from the aged mouse is associated with enhanced NF- κ B activity.** *Journal of orthopaedic research*
Lin, T., Gibon, E., Loi, F., Pajarinen, J., Córdoba, L. A., Nabeshima, A., Lu, L., Yao, Z., Goodman, S. B.
2017; 35 (2): 281-288
- **NF- κ B as a Therapeutic Target in Inflammatory-Associated Bone Diseases.** *Advances in protein chemistry and structural biology*
Lin, T., Pajarinen, J., Lu, L., Nabeshima, A., Cordova, L. A., Yao, Z., Goodman, S. B.
2017; 107: 117-154
- **Smoking is associated with earlier time to revision of total knee arthroplasty.** *The Knee*
Lim, C. T., Goodman, S. B., Huddleston, J. I., Harris, A. H., Bhowmick, S., Maloney, W. J., Amanatullah, D. F.
2017
- **Reconstruction of Disrupted Extensor Mechanism After Total Knee Arthroplasty.** *The Journal of arthroplasty*
Lim, C. T., Amanatullah, D. F., Huddleston, J. I., Harris, A. H., Hwang, K. L., Maloney, W. J., Goodman, S. B.
2017
- **Femoral Nerve Catheters Improve Home Disposition and Pain in Hip Fracture Patients Treated With Total Hip Arthroplasty.** *The Journal of arthroplasty*
Arsoy, D., Huddleston, J. I., Amanatullah, D. F., Giori, N. J., Maloney, W. J., Goodman, S. B.
2017
- **Implants for Joint Replacement of the Hip and Knee** *MATERIALS AND DEVICES FOR BONE DISORDERS*
Gallo, J., Gibon, E., Goodman, S. B., Bose, S., Bandyopadhyay, A.
2017: 119-96
- **Effect of Perioperative Gabapentin on Postoperative Pain Resolution and Opioid Cessation in a Mixed Surgical Cohort: A Randomized Clinical Trial.** *JAMA surgery*
Hah, J., Mackey, S. C., Schmidt, P., McCue, R., Humphreys, K., Trafton, J., Efron, B., Clay, D., Sharifzadeh, Y., Ruchelli, G., Goodman, S., Huddleston, J., Maloney, et al
2017
- **100% Clean and renewable wind, water, and sunlight all-sector energy roadmaps for 139 countries of the world** *JOULE*
Jacobson, M. Z., Delucchi, M. A., Bauer, Z. A., Goodman, S. C., Chapman, W. E., Cameron, M. A., et al
2017; 1 (1): 108-121

- **Murine Model of Progressive Orthopaedic Wear Particle Induced Chronic Inflammation and Osteolysis.** *Tissue engineering. Part C, Methods*
Pajarinen, J., Nabeshima, A., Lin, T. H., Sato, T., Gibon, E., Jämsen, E., Lu, L., Nathan, K., Yao, Z., Goodman, S. B.
2017
- **CCL2, CCL5 and IGF-1 Participate in The Immunomodulation of Osteogenesis during M1/M2 Transition In Vitro.** *Journal of biomedical materials research. Part A*
Córdova, L. A., Loi, F., Lin, T. H., Gibon, E., Pajarinen, J., Nabeshima, A., Lu, L., Yao, Z., Goodman, S. B.
2017
- **Orthopaedic Wear Particle-induced Bone Loss and Exogenous Macrophage Infiltration is mitigated by Local Infusion of NF- κ B Decoy Oligodeoxynucleotide.** *Journal of biomedical materials research. Part A*
Lin, T., Pajarinen, J., Nabeshima, A., Córdova, L. A., Loi, F., Gibon, E., Lu, L., Nathan, K., Jämsen, E., Yao, Z., Goodman, S. B.
2017
- **Establishment of NF- κ B sensing and interleukin-4 secreting mesenchymal stromal cells as an "on-demand" drug delivery system to modulate inflammation.** *Cytotherapy*
Lin, T., Pajarinen, J., Nabeshima, A., Lu, L., Nathan, K., Yao, Z., Goodman, S. B.
2017
- **Elevated Body Mass Index Is Associated With Early Total Knee Revision for Infection** *JOURNAL OF ARTHROPLASTY*
Electricwala, A. J., Jethanandani, R. G., Narkbunnam, R., Huddleston, J. I., Maloney, W. J., Goodman, S. B., Amanatullah, D. F.
2017; 32 (1): 252-255
- **Cortical Strut Allograft Support of Modular Femoral Junctions During Revision Total Hip Arthroplasty.** *journal of arthroplasty*
Lim, C. T., Amanatullah, D. F., Huddleston, J. I., Hwang, K. L., Maloney, W. J., Goodman, S. B.
2016
- **Use of Cortical Strut Allograft After Extended Trochanteric Osteotomy in Revision Total Hip Arthroplasty.** *journal of arthroplasty*
Lim, C. T., Amanatullah, D. F., Huddleston, J. I., Hwang, K. L., Maloney, W. J., Goodman, S. B.
2016
- **CCL2/CCR2, but not CCL5/CCR5, mediates monocyte recruitment, inflammation and cartilage destruction in osteoarthritis.** *Annals of the rheumatic diseases*
Raghu, H., Lepus, C. M., Wang, Q., Wong, H. H., Lingampalli, N., Oliviero, F., Punzi, L., Giori, N. J., Goodman, S. B., Chu, C. R., Sokolove, J. B., Robinson, W. H.
2016
- **Revision Hip Arthroplasty Using a Modular, Cementless Femoral Stem: Intermediate-Term Follow-Up.** *journal of arthroplasty*
Sivananthan, S., Lim, C., Narkbunnam, R., Sox-Harris, A., Huddleston, J. I., Goodman, S. B.
2016
- **Iron oxide nanoparticles inhibit tumour growth by inducing pro-inflammatory macrophage polarization in tumour tissues.** *Nature nanotechnology*
Zanganeh, S., Hutter, G., Spittler, R., Lenkov, O., Mahmoudi, M., Shaw, A., Pajarinen, J. S., Nejadnik, H., Goodman, S., Moseley, M., Coussens, L. M., Daldrup-Link, H. E.
2016; 11 (11): 986-994
- **Deficient Activity of the Nuclease MRE11A Induces T Cell Aging and Promotes Arthritogenic Effector Functions in Patients with Rheumatoid Arthritis.** *Immunity*
Li, Y., Shen, Y., Hohensinner, P., Ju, J., Wen, Z., Goodman, S. B., Zhang, H., Goronzy, J. J., Weyand, C. M.
2016; 45 (4): 903-916
- **Tibiofemoral Dislocation After Total Knee Arthroplasty.** *journal of arthroplasty*
Jethanandani, R. G., Maloney, W. J., Huddleston, J. I., Goodman, S. B., Amanatullah, D. F.
2016; 31 (10): 2282-2285
- **Correlations between macrophage polarizing cytokines, inflammatory mediators, osteoclast activity, and toll-like receptors in tissues around aseptically loosened hip implants.** *Journal of biomedical materials research. Part A*
Jämsen, E., Kouri, V., Ainola, M., Goodman, S. B., Nordström, D. C., Eklund, K. K., Pajarinen, J.
2016

- **The effect of local IL-4 delivery or CCL2 blockade on implant fixation and bone structural properties in a mouse model of wear particle induced osteolysis.** *Journal of biomedical materials research. Part A*
Sato, T., Pajarinen, J., Behn, A., Jiang, X., Lin, T., Loi, F., Yao, Z., Egashira, K., Yang, F., Goodman, S. B.
2016; 104 (9): 2255-2262
- **Emperor's new clothes: Is particle disease really infected particle disease?** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Wasko, M. K., Goodman, S. B.
2016; 34 (9): 1497-1504
- **Obesity is Associated With Early Total Hip Revision for Aseptic Loosening** *JOURNAL OF ARTHROPLASTY*
Electricwala, A. J., Narkbunnam, R., Huddleston, J. I., Maloney, W. J., Goodman, S. B., Amanatullah, D. F.
2016; 31 (9): S217-S220
- **The effect of SDF-1 on low dose BMP-2 mediated bone regeneration by release from heparinized mineralized collagen type I matrix scaffolds in a murine critical size bone defect model** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Zwingenberger, S., Langanke, R., Vater, C., Lee, G., Niederlohmman, E., Sensenschmidt, M., Jacobi, A., Bernhardt, R., Muders, M., Rammelt, S., Knaack, S., Gelinsky, M., Guenther, et al
2016; 104 (9): 2126-2134
- **Obesity is Associated With Early Total Hip Revision for Aseptic Loosening.** *journal of arthroplasty*
Electricwala, A. J., Narkbunnam, R., Huddleston, J. I., Maloney, W. J., Goodman, S. B., Amanatullah, D. F.
2016; 31 (9): 217-220
- **The effect of SDF-1a on low dose BMP-2 mediated bone regeneration by release from heparinized mineralized collagen type I matrix scaffolds in a murine critical size bone defect model.** *Journal of biomedical materials research. Part A*
Zwingenberger, S., Langanke, R., Vater, C., Lee, G., Niederlohmman, E., Sensenschmidt, M., Jacobi, A., Bernhardt, R., Muders, M., Rammelt, S., Knaack, S., Gelinsky, M., Günther, et al
2016; 104 (9): 2126-2134
- **NF- κ B decoy oligodeoxynucleotide mitigates wear particle-associated bone loss in the murine continuous infusion model.** *Acta biomaterialia*
Lin, T., Pajarinen, J., Sato, T., Loi, F., Fan, C., Córdova, L. A., Nabeshima, A., Gibon, E., Zhang, R., Yao, Z., Goodman, S. B.
2016; 41: 273-281
- **Cytokines as a predictor of clinical response following hip arthroscopy: minimum 2-year follow-up.** *Journal of hip preservation surgery*
Shapiro, L. M., Safran, M. R., Maloney, W. J., Goodman, S. B., Huddleston, J. I., Bellino, M. J., Scuderi, G. J., Abrams, G. D.
2016; 3 (3): 229-235
- **The biological response to orthopaedic implants for joint replacement: Part I: Metals.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Gibon, E., Amanatullah, D. F., Loi, F., Pajarinen, J., Nabeshima, A., Yao, Z., Hamadouche, M., Goodman, S. B.
2016
- **Aging Affects Bone Marrow Macrophage Polarization: Relevance to Bone Healing.** *Regenerative engineering and translational medicine*
Gibon, E., Loi, F., Córdova, L. A., Pajarinen, J., Lin, T., Lu, L., Nabeshima, A., Yao, Z., Goodman, S. B.
2016; 2 (2): 98-104
- **The Biologic Response to Bearing Materials.** *Orthopaedic knowledge online*
Gibon, E., Goodman, S. B.
2016; 14 (6)
- **INTRODUCTION OF NEW TECHNOLOGIES IN ORTHOPAEDIC SURGERY** *JBJS REVIEWS*
Goodman, S. B., Mihalko, W. M., Anderson, P. A., Sale, K., Bozic, K. J.
2016; 4 (5)
- **Inflammation, fracture and bone repair.** *Bone*
Loi, F., Córdova, L. A., Pajarinen, J., Lin, T., Yao, Z., Goodman, S. B.
2016; 86: 119-130
- **The biological response to orthopedic implants for joint replacement. II: Polyethylene, ceramics, PMMA, and the foreign body reaction.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Gibon, E., Córdova, L. A., Lu, L., Lin, T., Yao, Z., Hamadouche, M., Goodman, S. B.

2016

- **Multifunctional coatings to simultaneously promote osseointegration and prevent infection of orthopaedic implants.** *Biomaterials*
Raphel, J., Holodniy, M., Goodman, S. B., Heilshorn, S. C.
2016; 84: 301-314
- **Aging, inflammation, stem cells, and bone healing** *STEM CELL RESEARCH & THERAPY*
Gibon, E., Lu, L., Goodman, S. B.
2016; 7
- **Engineered protein coatings to improve the osseointegration of dental and orthopaedic implants.** *Biomaterials*
Raphel, J., Karlsson, J., Galli, S., Wennerberg, A., Lindsay, C., Haugh, M. G., Pajarinen, J., Goodman, S. B., Jimbo, R., Andersson, M., Heilshorn, S. C.
2016; 83: 269-282
- **Removal of Well-Fixed Cementless Acetabular Components in Revision Total Hip Arthroplasty.** *Orthopedics*
Adelani, M. A., Goodman, S. B., Maloney, W. J., Huddleston, J. I.
2016; 39 (2): e280-4
- **Lipoteichoic acid modulates inflammatory response in macrophages after phagocytosis of titanium particles through Toll-like receptor 2 cascade and inflammasomes** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Naganuma, Y., Takakubo, Y., Hirayama, T., Tamaki, Y., Pajarinen, J., Sasaki, K., Goodman, S. B., Takagi, M.
2016; 104 (2): 435-444
- **Editorial Comment: 2015 Hip Society Proceedings** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2016; 474 (2): 319-20
- **Can a Conical Implant Successfully Address Complex Anatomy in Primary THA? Radiographs and Hip Scores at Early Followup** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Zhang, Q., Goodman, S. B., Maloney, W. J., Huddleston, J. I.
2016; 474 (2): 459-464
- **Is There a Benefit to Modularity in 'Simpler' Femoral Revisions?** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Huddleston, J. I., Tetreault, M. W., Yu, M., Bedair, H., Hansen, V. J., Choi, H., Goodman, S. B., Sporer, S. M., Della Valle, C. J.
2016; 474 (2): 415-420
- **The effects of immunomodulation by macrophage subsets on osteogenesis in vitro** *STEM CELL RESEARCH & THERAPY*
Loi, F., Cordova, L. A., Zhang, R., Pajarinen, J., Lin, T., Goodman, S. B., Yao, Z.
2016; 7
- **Treatment of Periprosthetic Knee Infection With a Two-stage Protocol Using Static Spacers** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Lichstein, P., Su, S., Hedlund, H., Suh, G., Maloney, W. J., Goodman, S. B., Huddleston, J. I.
2016; 474 (1): 120-125
- **Hip arthroplasty for treatment of advanced osteonecrosis: comprehensive review of implant options, outcomes and complications** *ORTHOPEDIC RESEARCH AND REVIEWS*
Waewsawangwong, W., Ruchiwit, P., Huddleston, J. I., Goodman, S. B.
2016; 8: 13-29
- **Comprehensive Operative Note Templates for Primary and Revision Total Hip and Knee Arthroplasty.** *The open orthopaedics journal*
Electricwala, A. J., Amanatullah, D. F., Narkbunnam, R. I., Huddleston, J. I., Maloney, W. J., Goodman, S. B.
2016; 10: 725-731
- **Aging, inflammation, stem cells, and bone healing.** *Stem cell research & therapy*
Gibon, E., Lu, L., Goodman, S. B.
2016; 7 (1): 44-?
- **The effects of immunomodulation by macrophage subsets on osteogenesis in vitro.** *Stem cell research & therapy*
Loi, F., Córdoba, L. A., Zhang, R., Pajarinen, J., Lin, T., Goodman, S. B., Yao, Z.
2016; 7 (1): 15-?

- **Local delivery of mutant CCL2 protein-reduced orthopaedic implant wear particle-induced osteolysis and inflammation in vivo.** *Journal of orthopaedic research*
Jiang, X., Sato, T., Yao, Z., Keeney, M., Pajarinen, J., Lin, T., Loi, F., Egashira, K., Goodman, S., Yang, F.
2016; 34 (1): 58-64
- **Pain Duration and Resolution following Surgery: An Inception Cohort Study** *PAIN MEDICINE*
Carroll, I. R., Hah, J. M., Barelka, P. L., Wang, C. K., Wang, B. M., Gillespie, M. J., McCue, R., Younger, J. W., Trafton, J., Humphreys, K., Goodman, S. B., Dirbas, F. M., Mackey, et al
2015; 16 (12): 2386-2396
- **Pain Duration and Resolution following Surgery: An Inception Cohort Study.** *Pain medicine*
Carroll, I. R., Hah, J. M., Barelka, P. L., Wang, C. K., Wang, B. M., Gillespie, M. J., McCue, R., Younger, J. W., Trafton, J., Humphreys, K., Goodman, S. B., Dirbas, F. M., Mackey, et al
2015; 16 (12): 2386-2396
- **NF-B decoy oligodeoxynucleotide inhibits wear particle-induced inflammation in a murine calvarial model** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Sato, T., Pajarinen, J., Lin, T., Tamaki, Y., Loi, F., Egashira, K., Yao, Z., Goodman, S. B.
2015; 103 (12): 3872-3878
- **Establishment of Green Fluorescent Protein and Firefly Luciferase Expressing Mouse Primary Macrophages for In Vivo Bioluminescence Imaging** *PLOS ONE*
Pajarinen, J., Lin, T., Sato, T., Loi, F., Yao, Z., Kontinen, Y. T., Goodman, S. B.
2015; 10 (11)
- **Treatment of Secondary Osteonecrosis of the Knee With Local Debridement and Osteoprogenitor Cell Grafting** *JOURNAL OF ARTHROPLASTY*
Goodman, S. B., Hwang, K. L.
2015; 30 (11): 1892-1896
- **Musculoskeletal regeneration research network: A global initiative** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Chan, K., Rolf, C. G., Qin, L., Fellaender-Tsai, L., Castelein, R. M., Saris, D. F., Malda, J., Richards, G., Goodman, S. B., Tuan, R. S., Maloney, W., Lidgren, L., Hopkins, et al
2015; 3 (4): 160-65
- **Modulation of mouse macrophage polarization in vitro using IL-4 delivery by osmotic pumps.** *Journal of biomedical materials research. Part A*
Pajarinen, J., Tamaki, Y., Antonios, J. K., Lin, T., Sato, T., Yao, Z., Takagi, M., Kontinen, Y. T., Goodman, S. B.
2015; 103 (4): 1339-1345
- **Yrjö tapio kontinen 1952-2014.** *Acta orthopaedica*
Pajarinen, J., Nordström, D., Nordström, D., Petterson, T., Ainola, M., Gómez-Barrena, E., Takagi, M., Goodman, S. B.
2015; 86 (2): 145-146
- **Interaction Between Osteoarthritic Chondrocytes and Adipose-Derived Stem Cells Is Dependent on Cell Distribution in Three-Dimension and Transforming Growth Factor-β3 Induction.** *Tissue engineering. Part A*
Lai, J. H., Rogan, H., Kajiyama, G., Goodman, S. B., Smith, R. L., Maloney, W., Yang, F.
2015; 21 (5-6): 992-1002
- **A Rare Case of Pseudotumor Formation following Total Knee Arthroplasty.** *Malaysian orthopaedic journal*
Sivananthan, S., Pirapat, R., Goodman, S. B.
2015; 9 (1): 44-46
- **Implant Survival and Patient-Reported Outcomes After Total Hip Arthroplasty in Young Patients With Juvenile Idiopathic Arthritis** *JOURNAL OF ARTHROPLASTY*
Swarup, I., Lee, Y., Christoph, E. I., Mandl, L. A., Goodman, S. M., Figgie, M. P.
2015; 30 (3): 398-402
- **NF-2B Decoy Oligodeoxynucleotide Enhanced Osteogenesis in Mesenchymal Stem Cells Exposed to Polyethylene Particle.** *Tissue engineering. Part A*
Lin, T., Sato, T., Barcay, K. R., Waters, H., Loi, F., Zhang, R., Pajarinen, J., Egashira, K., Yao, Z., Goodman, S. B.
2015; 21 (5-6): 875-883
- **Collagen VI Enhances Cartilage Tissue Generation by Stimulating Chondrocyte Proliferation.** *Tissue engineering. Part A*

- Smeriglio, P., Dhulipala, L., Lai, J. H., Goodman, S. B., Drago, J. L., Smith, R. L., Maloney, W. J., Yang, F., Bhutani, N.
2015; 21 (3-4): 840-849
- **Editorial Comment: 2014 Hip Society Proceedings** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2015; 473 (2): 430-31
 - **Comparative potential of juvenile and adult human articular chondrocytes for cartilage tissue formation in three-dimensional biomimetic hydrogels.** *Tissue engineering. Part A*
Smeriglio, P., Lai, J. H., Dhulipala, L., Behn, A. W., Goodman, S. B., Smith, R. L., Maloney, W. J., Yang, F., Bhutani, N.
2015; 21 (1-2): 147-155
 - **Biomaterial Hypersensitivity: Is It Real? Supportive Evidence and Approach Considerations for Metal Allergic Patients following Total Knee Arthroplasty** *BIOMED RESEARCH INTERNATIONAL*
Mitchelson, A. J., Wilson, C. J., Mihalko, W. M., Grupp, T. M., Manning, B. T., Dennis, D. A., Goodman, S. B., Tzeng, T. H., Vasdev, S., Saleh, K. J.
2015: 137287
 - **The Use of Porous Tantalum for Reconstructing Bone Loss in Orthopedic Surgery** *ADVANCES IN METALLIC BIOMATERIALS: TISSUES, MATERIALS AND BIOLOGICAL REACTIONS*
Patil, N., Goodman, S. B., Niinomi, M., Narushima, T., Nakai, M.
2015; 3: 223-43
 - **Identification of periprosthetic joint infection after total hip arthroplasty** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
Lee, K., Goodman, S. B.
2015; 3 (1): 21-25
 - **Factors Associated with Opioid Use in a Cohort of Patients Presenting for Surgery.** *Pain research and treatment*
Hah, J. M., Sharifzadeh, Y., Wang, B. M., Gillespie, M. J., Goodman, S. B., Mackey, S. C., Carroll, I. R.
2015; 2015: 829696-?
 - **Nanocoating for biomolecule delivery using layer-by-layer self-assembly** *JOURNAL OF MATERIALS CHEMISTRY B*
Keeney, M., Jiang, X. Y., Yamane, M., Lee, M., Goodman, S., Yang, F.
2015; 3 (45): 8757-8770
 - **Establishment of Green Fluorescent Protein and Firefly Luciferase Expressing Mouse Primary Macrophages for In Vivo Bioluminescence Imaging.** *PLoS one*
Pajarinen, J., Lin, T., Sato, T., Loi, F., Yao, Z., Kontinen, Y. T., Goodman, S. B.
2015; 10 (11)
 - **Exposure of polyethylene particles induces interferon- γ expression in a natural killer T lymphocyte and dendritic cell coculture system in vitro: a preliminary study.** *Journal of biomedical materials research. Part A*
Lin, T., Kao, S., Sato, T., Pajarinen, J., Zhang, R., Loi, F., Goodman, S. B., Yao, Z.
2015; 103 (1): 71-75
 - **Exposure of polyethylene particles induces interferon-gamma expression in a natural killer T lymphocyte and dendritic cell coculture system in vitro: A preliminary study** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Lin, T., Kao, S., Sato, T., Pajarinen, J., Zhang, R., Loi, F., Goodman, S. B., Yao, Z.
2015; 103 (1): 71-75
 - **What is the Trouble With Trunnions?** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Esposito, C. I., Wright, T. M., Goodman, S. B., Berry, D. J.
2014; 472 (12): 3652-3658
 - **Editorial Comment: ABJS Carl T. Brighton Workshop on Implant Wear and Tribocorrosion of Total Joint Replacements** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Wright, T. M.
2014; 472 (12): 3650-51
 - **Total knee arthroplasty in patients with ipsilateral fused hip: a technical note.** *Clinics in orthopedic surgery*
Goodman, S. B., Huddleston, J. I., Hur, D., Song, S. J.
2014; 6 (4): 476-479

- **Clinical recovery from surgery correlates with single-cell immune signatures** *SCIENCE TRANSLATIONAL MEDICINE*
Gaudilliere, B., Fragiadakis, G. K., Bruggner, R. V., Nicolau, M., Finck, R., Tingle, M., Silva, J., Ganio, E. A., Yeh, C. G., Maloney, W. J., Huddleston, J. I., Goodman, S. B., Davis, et al
2014; 6 (255)
- **Clinical recovery from surgery correlates with single-cell immune signatures.** *Science translational medicine*
Gaudillière, B., Fragiadakis, G. K., Bruggner, R. V., Nicolau, M., Finck, R., Tingle, M., Silva, J., Ganio, E. A., Yeh, C. G., Maloney, W. J., Huddleston, J. I., Goodman, S. B., Davis, et al
2014; 6 (255): 255ra131-?
- **Characterization of Macrophage Polarizing Cytokines in the Aseptic Loosening of Total Hip Replacements** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Jamsen, E., Kouri, V., Olkkonen, J., Coer, A., Goodman, S. B., Kontinen, Y. T., Pajarinen, J.
2014; 32 (9): 1241-1246
- **Characterization of macrophage polarizing cytokines in the aseptic loosening of total hip replacements.** *Journal of orthopaedic research*
Jämsen, E., Kouri, V., Olkkonen, J., Cör, A., Goodman, S. B., Kontinen, Y. T., Pajarinen, J.
2014; 32 (9): 1241-1246
- **Toll-like receptors-2 and 4 are overexpressed in an experimental model of particle-induced osteolysis** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Valladares, R. D., Nich, C., Zwingenberger, S., Li, C., Swank, K. R., Gibon, E., Rao, A. J., Yao, Z., Goodman, S. B.
2014; 102 (9): 3004-3011
- **Mutant monocyte chemoattractant protein 1 protein attenuates migration of and inflammatory cytokine release by macrophages exposed to orthopedic implant wear particles.** *Journal of biomedical materials research. Part A*
Yao, Z., Keeney, M., Lin, T., Pajarinen, J., Barcay, K., Waters, H., Egashira, K., Yang, F., Goodman, S.
2014; 102 (9): 3291-3297
- **Suppression of wear-particle-induced pro-inflammatory cytokine and chemokine production in macrophages via NF- κ B decoy oligodeoxynucleotide: A preliminary report.** *Acta biomaterialia*
Lin, T., Yao, Z., Sato, T., Keeney, M., Li, C., Pajarinen, J., Yang, F., Egashira, K., Goodman, S. B.
2014; 10 (8): 3747-3755
- **Current Modes of Failure in TKA: Infection, Instability, and Stiffness Predominate.** *Clinical orthopaedics and related research*
Le, D. H., Goodman, S. B., Maloney, W. J., Huddleston, J. I.
2014; 472 (7): 2197-2200
- **Polyethylene wear and osteolysis is associated with high revision rate of a small sized porous coated THA in patients with hip dysplasia.** *journal of arthroplasty*
Murray, P. J., Hwang, K. L., Imrie, S. N., Huddleston, J. I., Goodman, S. B.
2014; 29 (7): 1373-1377
- **Self-Loathing Aspects of Depression Reduce Postoperative Opioid Cessation Rate** *PAIN MEDICINE*
Hah, J. M., Mackey, S., Barelka, P. L., Wang, C. K., Wang, B. M., Gillespie, M. J., McCue, R., Younger, J. W., Trafton, J., Humphreys, K., Goodman, S. B., Dirbas, F. M., Schmidt, et al
2014; 15 (6): 954-964
- **Self-loathing aspects of depression reduce postoperative opioid cessation rate.** *Pain medicine*
Hah, J. M., Mackey, S., Barelka, P. L., Wang, C. K., Wang, B. M., Gillespie, M. J., McCue, R., Younger, J. W., Trafton, J., Humphreys, K., Goodman, S. B., Dirbas, F. M., Schmidt, et al
2014; 15 (6): 954-964
- **Contributions of human tissue analysis to understanding the mechanisms of loosening and osteolysis in total hip replacement** *ACTA BIOMATERIALIA*
Gallo, J., Vaculova, J., Goodman, S. B., Kontinen, Y. T., Thyssen, J. P.
2014; 10 (6): 2354-2366
- **Outcome of Porous Tantalum Acetabular Components for Paprosky Type 3 and 4 Acetabular Defects** *JOURNAL OF ARTHROPLASTY*
Batuyong, E. D., Brock, H. S., Thiruvengadam, N., Maloney, W. J., Goodman, S. B., Huddleston, J. I.
2014; 29 (6): 1318-1322

- **Novel biological strategies for treatment of wear particle-induced periprosthetic osteolysis of orthopaedic implants for joint replacement.** *Journal of the Royal Society, Interface / the Royal Society*
Goodman, S. B., Gibon, E., Pajarinen, J., Lin, T., Keeney, M., Ren, P., Nich, C., Yao, Z., Egashira, K., Yang, F., KONTTINEN, Y. T.
2014; 11 (93): 20130962-?
- **Fibronectin-aggrecan complex as a marker for cartilage degradation in non-arthritis hips.** *Knee surgery, sports traumatology, arthroscopy : official journal of the ESSKA*
Abrams, G. D., Safran, M. R., Shapiro, L. M., Maloney, W. J., Goodman, S. B., Huddleston, J. I., Bellino, M. J., Scuderi, G. J.
2014; 22 (4): 768-773
- **Enhancement of BMP-2 Induced Bone Regeneration by SDF-1 α Mediated Stem Cell Recruitment.** *Tissue engineering. Part A*
Zwingenberger, S., Yao, Z., Jacobi, A., Vater, C., Valladares, R. D., Li, C., Nich, C., Rao, A. J., Christman, J. E., Antonios, J. K., Gibon, E., Schambach, A., Maetzig, et al
2014; 20 (3-4): 810-818
- **Editorial Comment: Symposium: 2013 Hip Society Proceedings** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2014; 472 (2): 415-16
- **Causes of instability after total knee arthroplasty.** *journal of arthroplasty*
Song, S. J., Detch, R. C., Maloney, W. J., Goodman, S. B., Huddleston, J. I.
2014; 29 (2): 360-364
- **High Complication Rate in Revision Total Hip Arthroplasty in Juvenile Idiopathic Arthritis** *Open Scientific Meeting of the Hip-Society in Conjunction with the Annual Meeting of the American-Academy-of-Orthopaedic-Surgeons (AAOS)*
Goodman, S. B., Hwang, K., Imrie, S.
SPRINGER.2014: 637-44
- **Innate immunity sensors participating in pathophysiology of joint diseases: a brief overview.** *Journal of long-term effects of medical implants*
Gallo, J., Raska, M., Konttinen, Y. T., Nich, C., Goodman, S. B.
2014; 24 (4): 297-317
- **Suppression of NF- κ B signaling mitigates polyethylene wear particle-induced inflammatory response.** *Inflammation and cell signaling*
Lin, T., Goodman, S. B.
2014; 1 (4)
- **Case report: Pseudotumor associated with corrosion of a femoral component with a modular neck and a ceramic-on-polyethylene bearing.** *Journal of long-term effects of medical implants*
Messana, J., Adelani, M., Goodman, S. B.
2014; 24 (1): 1-5
- **Chronic inflammation in biomaterial-induced periprosthetic osteolysis: NF- κ B as a therapeutic target.** *Acta biomaterialia*
Lin, T., Tamaki, Y., Pajarinen, J., Waters, H. A., Woo, D. K., Yao, Z., Goodman, S. B.
2014; 10 (1): 1-10
- **Joint replacement surgery and the innate immune system.** *Journal of long-term effects of medical implants*
Goodman, S. B., Konttinen, Y. T., Takagi, M.
2014; 24 (4): 253-257
- **Interaction of materials and biology in total joint replacement - successes, challenges and future directions** *JOURNAL OF MATERIALS CHEMISTRY B*
Pajarinen, J., Lin, T., Sato, T., Yao, Z., Goodman, S. B.
2014; 2 (41): 7094-7108
- **Chronic inflammation in biomaterial-induced periprosthetic osteolysis: NF- κ B as a therapeutic target.** *Acta biomaterialia*
Lin, T., Tamaki, Y., Pajarinen, J., Waters, H. A., Woo, D. K., Yao, Z., Goodman, S. B.
2014; 10 (1): 1-10
- **Novel biological strategies for treatment of wear particle-induced periprosthetic osteolysis of orthopaedic implants for joint replacement.** *Journal of the Royal Society, Interface / the Royal Society*
Goodman, S. B., Gibon, E., Pajarinen, J., Lin, T., Keeney, M., Ren, P., Nich, C., Yao, Z., Egashira, K., Yang, F., KONTTINEN, Y. T.

2014; 11 (93): 20130962-?

- **Total Knee Arthroplasty in Patients With Juvenile Idiopathic Arthritis** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Heyse, T. J., Ries, M. D., Bellemans, J., Goodman, S. B., Scott, R. D., Wright, T. M., Lipman, J. D., Schwarzkopf, R., Figgie, M. P.
2014; 472 (1): 147-154
- **Innate Immune Reactions in Septic and Aseptic Osteolysis around Hip Implants.** *Journal of long-term effects of medical implants*
Pajarinen, J., Jamsen, E., Kontinen, Y. T., Goodman, S. B.
2014; 24 (4): 283-296
- **Role of macrophages in the biological reaction to wear debris from joint replacements.** *Journal of long-term effects of medical implants*
Nich, C., Goodman, S. B.
2014; 24 (4): 259-265
- **Macrophage polarization and activation in response to implant debris: influence by "particle disease" and "ion disease".** *Journal of long-term effects of medical implants*
Kontinen, Y. T., Pajarinen, J., Takakubo, Y., Gallo, J., Nich, C., Takagi, M., Goodman, S. B.
2014; 24 (4): 267-281
- **Mutant MCP-1 protein delivery from layer-by-layer coatings on orthopedic implants to modulate inflammatory response.** *Biomaterials*
Keeney, M., Waters, H., Barcay, K., Jiang, X., Yao, Z., Pajarinen, J., Egashira, K., Goodman, S. B., Yang, F.
2013; 34 (38): 10287-10295
- **Macrophage polarization in response to wear particles in vitro** *CELLULAR & MOLECULAR IMMUNOLOGY*
Antonios, J. K., Yao, Z., Li, C., Rao, A. J., Goodman, S. B.
2013; 10 (6): 471-482
- **Macrophages-Key cells in the response to wear debris from joint replacements.** *Journal of biomedical materials research. Part A*
Nich, C., Takakubo, Y., Pajarinen, J., Ainola, M., Salem, A., Sillat, T., Rao, A. J., Raska, M., Tamaki, Y., Takagi, M., Kontinen, Y. T., Goodman, S. B., Gallo, et al
2013; 101 (10): 3033-3045
- **Macrophages-Key cells in the response to wear debris from joint replacements** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Nich, C., Takakubo, Y., Pajarinen, J., Ainola, M., Salem, A., Sillat, T., Rao, A. J., Raska, M., Tamaki, Y., Takagi, M., Kontinen, Y. T., Goodman, S. B., Gallo, et al
2013; 101 (10): 3033-3045
- **Cause for concern: pseudotumors in patients with hip resurfacing: commentary on an article by R. Bisschop, MD et al.: "High prevalence of pseudotumors in patients with a Birmingham Hip Resurfacing prosthesis: a prospective cohort study of one hundred and twenty-nine patients".** *The Journal of bone and joint surgery. American volume*
Goodman, S. B.
2013; 95 (17): e1271-2
- **Osteolysis around total knee arthroplasty: A review of pathogenetic mechanisms** *ACTA BIOMATERIALIA*
Gallo, J., Goodman, S. B., KONTTINEN, Y. T., Wimmer, M. A., Holinka, M.
2013; 9 (9): 8046-8058
- **Development of Poly(β -amino ester)-Based Biodegradable Nanoparticles for Nonviral Delivery of Minicircle DNA.** *ACS nano*
Keeney, M., Ong, S., Padilla, A., Yao, Z., Goodman, S., Wu, J. C., Yang, F.
2013; 7 (8): 7241-7250
- **Stem cell attraction via SDF-1 α expressing fat tissue grafts.** *Journal of biomedical materials research. Part A*
Zwingenberger, S., Yao, Z., Jacobi, A., Vater, C., D Valladares, R., Li, C., Nich, C., Rao, A. J., Christman, J. E., Antonios, J. K., Gibon, E., Schambach, A., Mätzig, et al
2013; 101 (7): 2067-2074
- **Direct subcutaneous injection of polyethylene particles over the murine calvaria results in dramatic osteolysis** *INTERNATIONAL ORTHOPAEDICS*
Rao, A. J., Zwingenberger, S., Valladares, R., Li, C., Smith, R. L., Goodman, S. B., Nich, C.
2013; 37 (7): 1393-1398
- **Stem cell attraction via SDF-1 expressing fat tissue grafts** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*

- Zwingenberger, S., Yao, Z., Jacobi, A., Vater, C., Valladares, R. D., Li, C., Nich, C., Rao, A. J., Christman, J. E., Antonios, J. K., Gibon, E., Schambach, A., Maetzig, et al
2013; 101A (7): 2067-2074
- **Local effect of IL-4 delivery on polyethylene particle induced osteolysis in the murine calvarium** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Rao, A. J., Nich, C., Dhulipala, L. S., Gibon, E., Valladares, R., Zwingenberger, S., Smith, R. L., Goodman, S. B.
2013; 101A (7): 1925-1934
 - **Direct subcutaneous injection of polyethylene particles over the murine calvaria results in dramatic osteolysis.** *International orthopaedics*
Rao, A. J., Zwingenberger, S., Valladares, R., Li, C., Lane Smith, R., Goodman, S. B., Nich, C.
2013; 37 (7): 1393-1398
 - **Local effect of IL-4 delivery on polyethylene particle induced osteolysis in the murine calvarium.** *Journal of biomedical materials research. Part A*
Rao, A. J., Nich, C., Dhulipala, L. S., Gibon, E., Valladares, R., Zwingenberger, S., Smith, R. L., Goodman, S. B.
2013; 101 (7): 1926-1934
 - **Regional variation in T1? and T2 times in osteoarthritic human menisci: correlation with mechanical properties and matrix composition.** *Osteoarthritis and cartilage*
Son, M., Goodman, S. B., Chen, W., Hargreaves, B. A., Gold, G. E., Levenston, M. E.
2013; 21 (6): 796-805
 - **Lower Extremity Arthroplasty in Patients With Inflammatory Arthritis: Preoperative and Perioperative Management** *JOURNAL OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS*
Goodman, S. M., Figgie, M.
2013; 21 (6): 355-363
 - **Establishment of a femoral critical-size bone defect model in immunodeficient mice** *JOURNAL OF SURGICAL RESEARCH*
Zwingenberger, S., Niederlohmman, E., Vater, C., Rammelt, S., Matthys, R., Bernhardt, R., Valladares, R. D., Goodman, S. B., Stiehler, M.
2013; 181 (1): E7-E14
 - **The future of biologic coatings for orthopaedic implants** *BIOMATERIALS*
Goodman, S. B., Yao, Z., Keeney, M., Yang, F.
2013; 34 (13): 3174-3183
 - **Cell-based therapies for regenerating bone** *MINERVA ORTOPEDECA E TRAUMATOLOGICA*
Goodman, S. B.
2013; 64 (2): 107-113
 - **Particle disease: Biologic mechanisms of periprosthetic osteolysis in total hip arthroplasty** *INNATE IMMUNITY*
Gallo, J., Goodman, S. B., Kontinen, Y. T., Raska, M.
2013; 19 (2): 213-224
 - **Papers Presented at the Annual Meetings of The Hip Society 2012: Editorial Comment** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2013; 471 (2): 375-376
 - **Role of direct estrogen receptor signaling in wear particle-induced osteolysis** *BIOMATERIALS*
Nich, C., Rao, A. J., Valladares, R. D., Li, C., Christman, J. E., Antonios, J. K., Yao, Z., Zwingenberger, S., Petite, H., Hamadouche, M., Goodman, S. B.
2013; 34 (3): 641-650
 - **The Cycle of Comorbidities Potential Risks With Delayed Joint Replacement** *ORTHOPAEDIC NURSING*
Camillo, P., Thompson, P., Goodman, S. B., Jiang, Y.
2013; 32 (1): 6-13
 - **The basic science of periprosthetic osteolysis.** *Instructional course lectures*
Goodman, S. B., Gibon, E., Yao, Z.
2013; 62: 201-206
 - **Effects of sclerostin antibody on healing of a non-critical size femoral bone defect** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Jawad, M. U., Fritton, K. E., Ma, T., Ren, P., Goodman, S. B., Ke, H. Z., Babij, P., Genovese, M. C.

2013; 31 (1): 155-163

- **CORR Insights: Do Patients Lose Weight After Joint Arthroplasty Surgery? A Systematic Review** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2013; 471 (1): 299-300
- **Exogenous MC3T3 Preosteoblasts Migrate Systemically and Mitigate the Adverse Effects of Wear Particles** *TISSUE ENGINEERING PART A*
Fritton, K., Ren, P., Gibon, E., Rao, A. J., Ma, T., Biswal, S., Gambhir, S. S., Goodman, S. B.
2012; 18 (23-24): 2559-2567
- **MI TKA: a risk factor for early revision surgery.** *The journal of knee surgery*
Mayle, R. E., Graw, B. P., Huddleston, H. G., Woolson, S. T., Goodman, S. B., Huddleston, J. I.
2012; 25 (5): 423-427
- **MI TKA: A Risk Factor for Early Revision Surgery** *JOURNAL OF KNEE SURGERY*
Mayle, R. E., Graw, B. P., Huddleston, H. G., Woolson, S. T., Goodman, S. B., Huddleston, J. I.
2012; 25 (5): 423-427
- **A Pilot Cohort Study of the Determinants of Longitudinal Opioid Use After Surgery** *ANESTHESIA AND ANALGESIA*
Carroll, I., Barelka, P., Wang, C. K., Wang, B. M., Gillespie, M. J., McCue, R., Younger, J. W., Trafton, J., Humphreys, K., Goodman, S. B., Dirbas, F., Whyte, R. I., Donington, et al
2012; 115 (3): 694-702
- **Advanced Age and Comorbidity Increase the Risk for Adverse Events After Revision Total Hip Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Koenig, K., Huddleston, J. I., Huddleston, H., Maloney, W. J., Goodman, S. B.
2012; 27 (7): 1402-1407
- **Revision joint replacement, wear particles, and macrophage polarization** *ACTA BIOMATERIALIA*
Rao, A. J., Gibon, E., Ma, T., Yao, Z., Smith, R. L., Goodman, S. B.
2012; 8 (7): 2815-2823
- **Effect of a CCR1 receptor antagonist on systemic trafficking of MSCs and polyethylene particle-associated bone loss** *BIOMATERIALS*
Gibon, E., Yao, Z., Rao, A. J., Zwigenberger, S., Batke, B., Valladares, R., Smith, R. L., Biswal, S., Gambhir, S. S., Goodman, S. B.
2012; 33 (14): 3632-3638
- **Macrophage polarization: An opportunity for improved outcomes in and regenerative medicine** *BIOMATERIALS*
Brown, B. N., Ratner, B. D., Goodman, S. B., Amar, S., Badylak, S. F.
2012; 33 (15): 3792-3802
- **MC3T3-E1 Osteoprogenitor Cells Systemically Migrate to a Bone Defect and Enhance Bone Healing** *TISSUE ENGINEERING PART A*
Gibon, E., Batke, B., Jawad, M. U., Fritton, K., Rao, A., Yao, Z., Biswal, S., Gambhir, S. S., Goodman, S. B.
2012; 18 (9-10): 968-973
- **American Academy of Orthopaedic Surgeons clinical practice guideline on: preventing venous thromboembolic disease in patients undergoing elective hip and knee arthroplasty.** *journal of bone and joint surgery. American volume*
Jacobs, J. J., Mont, M. A., Bozic, K. J., Della Valle, C. J., Goodman, S. B., Lewis, C. G., Yates, A. C., Boggio, L. N., Watters, W. C., Turkelson, C. M., Wies, J. L., Sluka, P., Hitchcock, et al
2012; 94 (8): 746-747
- **Selective inhibition of the MCP-1-CCR2 ligand-receptor axis decreases systemic trafficking of macrophages in the presence of UHMWPE particles** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Gibon, E., Ma, T., Ren, P., Fritton, K., Biswal, S., Yao, Z., Smith, L., Goodman, S. B.
2012; 30 (4): 547-553
- **Cancellous Impaction Bone Grafting of Acetabular Defects in Complex Primary and Revision Total Hip Arthroplasty** *ORTHOPEDICS*
Patil, N., Hwang, K., Goodman, S. B.
2012; 35 (3): E306-E312
- **Context and Consequences of Delaying Hip Replacement Surgery: A Case Study** *JNP-JOURNAL FOR NURSE PRACTITIONERS*
Camillo, P., Goodman, S. B., Thompson, P., Imrie, S. N.

2012; 8 (3): 212-?

- **Papers Presented at the Annual Meetings of the Hip Society 2011** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2012; 470 (2): 327-328
- **Unexpected failure of highly cross-linked polyethylene acetabular liner.** *journal of arthroplasty*
Waewsawangwong, W., Goodman, S. B.
2012; 27 (2): 323 e1-4
- **Recommendations and Considerations for the Use of Biologics in Orthopedic Surgery** *BIODRUGS*
Zwingenberger, S., Nich, C., Valladares, R. D., Yao, Z., Stiehler, M., Goodman, S. B.
2012; 26 (4): 245-256
- **Advantages and disadvantages of ceramic on ceramic total hip arthroplasty: A review** *BIOMEDICAL PAPERS-OLOMOUC*
Gallo, J., Goodman, S. B., Lostak, J., Janout, M.
2012; 156 (3): 204-212
- **Successful closed reduction of a dislocated constrained total hip arthroplasty: a case report and literature review.** *The open orthopaedics journal*
Sonohata, M., Waewsawangwong, W., Goodman, S. B.
2012; 6: 211-214
- **Prospective, Randomized Study Between Insall-Burstein II and NexGen Legacy with a Minimum 9-Year Follow-Up** *JOURNAL OF ARTHROPLASTY*
Oh, K., Goodman, S. B., Yang, J.
2011; 26 (8): 1232-1238
- **Outcome of Primary Total Hip Arthroplasty in Charnley Class C Patients with Juvenile Idiopathic Arthritis A Case Series** *JOURNAL OF ARTHROPLASTY*
De Ranieri, A., Wagner, N., Imrie, S. N., Hwang, K. L., Goodman, S. B.
2011; 26 (8): 1182-1188
- **Preventing Venous Thromboembolic Disease in Patients Undergoing Elective Hip and Knee Arthroplasty** *JOURNAL OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS*
Mont, M. A., Jacobs, J. J., Boggio, L. N., Bozic, K. J., Della Valle, C. J., Goodman, S. B., Lewis, C. G., Yates, A. J., Watters, W. C., Turkelson, C. M., Wies, J. L., Donnelly, P., Patel, et al
2011; 19 (12): 768-776
- **Identification of a central role for complement in osteoarthritis** *NATURE MEDICINE*
Wang, Q., Rozelle, A. L., Lepus, C. M., Scanzello, C. R., Song, J. J., Larsen, D. M., Crish, J. F., Bebek, G., Ritter, S. Y., Lindstrom, T. M., Hwang, I., Wong, H. H., Punzi, et al
2011; 17 (12): 1674-U196
- **Molecular profile of osteoprogenitor cells seeded on allograft bone** *JOURNAL OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE*
Smith, K. E., Huang, Z., Ma, T., Irani, A., Smith, R. L., Goodman, S. B.
2011; 5 (9): 704-711
- **Plasma carboxypeptidase B downregulates inflammatory responses in autoimmune arthritis** *JOURNAL OF CLINICAL INVESTIGATION*
Song, J. J., Hwang, I., Cho, K. H., Garcia, M. A., Kim, A. J., Wang, T. H., Lindstrom, T. M., Lee, A. T., Nishimura, T., Zhao, L., Morser, J., Nesheim, M., Goodman, et al
2011; 121 (9): 3517-3527
- **Role of the Toll-like receptor pathway in the recognition of orthopedic implant wear-debris particles** *BIOMATERIALS*
Pearl, J. I., Ma, T., Irani, A. R., Huang, Z., Robinson, W. H., Smith, R. L., Goodman, S. B.
2011; 32 (24): 5535-5542
- **Toll-Like Receptors and Their Adaptors are Regulated in Macrophages after Phagocytosis of Lipopolysaccharide-Coated Titanium Particles** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Hirayama, T., Tamaki, Y., Takakubo, Y., Iwazaki, K., Sasaki, K., Ogino, T., Goodman, S. B., Kontinen, Y. T., Takagi, M.
2011; 29 (7): 984-992
- **New MR Imaging Methods for Metallic Implants in the Knee: Artifact Correction and Clinical Impact** *JOURNAL OF MAGNETIC RESONANCE IMAGING*

- Chen, C. A., Chen, W., Goodman, S. B., Hargreaves, B. A., Koch, K. M., Lu, W., Brau, A. C., Draper, C. E., Delp, S. L., Gold, G. E.
2011; 33 (5): 1121-1127
- **Anesthesia and Rheumatoid Arthritis** *REVISTA BRASILEIRA DE ANESTESIOLOGIA*
Vieira, E. M., Goodman, S., Tanaka, P. P.
2011; 61 (3): 367-375
 - **Expression of Toll-like Receptors and Their Signaling Pathways in Rheumatoid Synovitis** *JOURNAL OF RHEUMATOLOGY*
Tamaki, Y., Takakubo, Y., Hirayama, T., Konttinen, Y. T., Goodman, S. B., Yamakawa, M., Takagi, M.
2011; 38 (5): 810-820
 - **Effects of Intermittent Hydrostatic Pressure and BMP-2 on Osteoarthritic Human Chondrocyte Metabolism In Vitro** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Smith, R. L., Lindsey, D. P., Dhulipala, L., Harris, A. H., Goodman, S. B., Maloney, W. J.
2011; 29 (3): 361-368
 - **Papers Presented at the Hip Society Meetings 2010 Editorial Comment** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B.
2011; 469 (2): 317-318
 - **Noninvasive Monitoring of Placenta-Specific Transgene Expression by Bioluminescence Imaging** *PLOS ONE*
Fan, X., Ren, P., Dhal, S., Bejerano, G., Goodman, S. B., Druzin, M. L., Gambhir, S. S., Nayak, N. R.
2011; 6 (1)
 - **Stem cell homing in musculoskeletal injury** *BIOMATERIALS*
Fong, E. L., Chan, C. K., Goodman, S. B.
2011; 32 (2): 395-409
 - **Continuous Infusion of UHMWPE Particles Induces Increased Bone Macrophages and Osteolysis** *Annual Scientific Meeting of the Knee-Society*
Ren, P., Irani, A., Huang, Z., Ma, T., Biswal, S., Goodman, S. B.
SPRINGER.2011: 113-22
 - **Use and Cost-Effectiveness of Intraoperative Acid-Fast Bacilli and Fungal Cultures in Assessing Infection of Joint Arthroplasties** *JOURNAL OF ARTHROPLASTY*
Wadey, V. M., Huddleston, J. I., Goodman, S. B., Schurman, D. J., Maloney, W. J., Baron, E. J.
2010; 25 (8): 1231-1234
 - **Synovial Tissue-Infiltrating Natural Killer Cells in Osteoarthritis and Periprosthetic Inflammation** *ARTHRITIS AND RHEUMATISM*
Huss, R. S., Huddleston, J. I., Goodman, S. B., Butcher, E. C., Zabel, B. A.
2010; 62 (12): 3799-3805
 - **Bilateral knee arthrodesis in a patient with common variable immunodeficiency.** *journal of arthroplasty*
Irani, A. R., Graw, B. P., Goodman, S. B.
2010; 25 (7): 1169 e13-6
 - **Effects of orthopedic polymer particles on chemotaxis of macrophages and mesenchymal stem cells.** *Journal of biomedical materials research. Part A*
Huang, Z., Ma, T., Ren, P., Smith, R. L., Goodman, S. B.
2010; 94 (4): 1264-1269
 - **Effects of orthopedic polymer particles on chemotaxis of macrophages and mesenchymal stem cells** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Huang, Z., Ma, T., Ren, P., Smith, R. L., Goodman, S. B.
2010; 94A (4): 1264-1269
 - **Allograft alternatives: bone substitutes and beyond.** *Orthopedics*
Goodman, S. B.
2010; 33 (9): 661-?
 - **Surveillance of systemic trafficking of macrophages induced by UHMWPE particles in nude mice by noninvasive imaging** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Ren, P., Huang, Z., Ma, T., Biswal, S., Smith, R. L., Goodman, S. B.

2010; 94A (3): 706-711

- **Minimal Incision Surgery as a Risk Factor for Early Failure of Total Hip Arthroplasty** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Graw, B. P., Woolson, S. T., Huddleston, H. G., Goodman, S. B., Huddleston, J. I.
2010; 468 (9): 2372-2376
- **Modulating osteogenesis of mesenchymal stem cells by modifying growth factor availability** *CYTOKINE*
Huang, Z., Ren, P., Ma, T., Smith, R. L., Goodman, S. B.
2010; 51 (3): 305-310
- **Surveillance of systemic trafficking of macrophages induced by UHMWPE particles in nude mice by noninvasive imaging.** *Journal of biomedical materials research. Part A*
Ren, P., Huang, Z., Ma, T., Biswal, S., Smith, R. L., Goodman, S. B.
2010; 94 (3): 706-711
- **OP-1 (BMP-7) stimulates osteoprogenitor cell differentiation in the presence of polymethylmethacrylate particles.** *Journal of biomedical materials research. Part A*
Kann, S., Chiu, R., Ma, T., Goodman, S. B.
2010; 94 (2): 485-488
- **OP-1 (BMP-7) stimulates osteoprogenitor cell differentiation in the presence of polymethylmethacrylate particles** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Kann, S., Chiu, R., Ma, T., Goodman, S. B.
2010; 94A (2): 485-488
- **Effects of Tensile Strain and Fluid Flow on Osteoarthritic Human Chondrocyte Metabolism In Vitro** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Mawatari, T., Lindsey, D. P., Harris, A. H., Goodman, S. B., Maloney, W. J., Smith, R. L.
2010; 28 (7): 907-913
- **Polymethylmethacrylate particle exposure causes changes in p38 MAPK and TGF-beta signaling in differentiating MC3T3-E1 cells** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Ma, G. K., Chiu, R., Huang, Z., Pearl, J., Ma, T., Smith, R. L., Goodman, S. B.
2010; 94A (1): 234-240
- **The relationship of polyethylene wear to particle size, distribution, and number: A possible factor explaining the risk of osteolysis after hip arthroplasty.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Gallo, J., Slouf, M., Goodman, S. B.
2010; 94 (1): 171-177
- **The relationship of polyethylene wear to particle size, distribution, and number: A possible factor explaining the risk of osteolysis after hip arthroplasty** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Gallo, J., Slouf, M., Goodman, S. B.
2010; 94B (1): 171-177
- **Polymethylmethacrylate particle exposure causes changes in p38 MAPK and TGF-beta signaling in differentiating MC3T3-E1 cells.** *Journal of biomedical materials research. Part A*
Ma, G. K., Chiu, R., Huang, Z., Pearl, J., Ma, T., Smith, R. L., Goodman, S. B.
2010; 94 (1): 234-240
- **Cellular chemotaxis induced by wear particles from joint replacements** *BIOMATERIALS*
Goodman, S. B., Ma, T.
2010; 31 (19): 5045-5050
- **Aseptic versus septic revision total knee arthroplasty: Patient satisfaction, outcome and quality of life improvement** *KNEE*
Patil, N., Lee, K., Huddleston, J. I., Harris, A. H., Goodman, S. B.
2010; 17 (3): 200-203
- **Patellar Management in Revision Total Knee Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Patil, N., Lee, K., Huddleston, J. I., Harris, A. H., Goodman, S. B.
2010; 25 (4): 589-593

- **Polymethylmethacrylate Particles Impair Osteoprogenitor Viability and Expression of Osteogenic Transcription Factors Runx2, Osterix, and Dlx5** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Chiu, R., Smith, K. E., Ma, G. K., Ma, T., Smith, R. L., Goodman, S. B.
2010; 28 (5): 571-577
- **Titanium particles modulate expression of Toll-like receptor proteins** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Pajarinen, J., Mackiewicz, Z., Pollanen, R., Takagi, M., Epstein, N. J., Ma, T., Goodman, S. B., Konttinen, Y. T.
2010; 92A (4): 1528-1537
- **Titanium particles modulate expression of Toll-like receptor proteins.** *Journal of biomedical materials research. Part A*
Pajarinen, J., Mackiewicz, Z., Pöllänen, R., Takagi, M., Epstein, N. J., Ma, T., Goodman, S. B., Konttinen, Y. T.
2010; 92 (4): 1528-1537
- **Treatment of irradiated poststernotomy sternal nonunion with autologous stem cell-impregnated bone matrix and sternal plating** *JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY*
Timek, T. A., Goodman, S. B., Whyte, R. I.
2010; 139 (3): 788-789
- **Biocompatibility of poly(ethylene glycol)/poly(acrylic acid) interpenetrating polymer network hydrogel particles in RAW 264.7 macrophage and MG-63 osteoblast cell lines.** *Journal of biomedical materials research. Part A*
Yim, E. S., Zhao, B., Myung, D., Kourtis, L. C., Frank, C. W., Carter, D., Smith, R. L., Goodman, S. B.
2009; 91 (3): 894-902
- **Biocompatibility of poly(ethylene glycol)/poly(acrylic acid) interpenetrating polymer network hydrogel particles in RAW 264.7 macrophage and MG-63 osteoblast cell lines** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Yim, E. S., Zhao, B., Myung, D., Kourtis, L. C., Frank, C. W., Carter, D., Smith, R. L., Goodman, S. B.
2009; 91A (3): 894-902
- **Thrombin-Activatable Carboxypeptidase B Cleavage of Osteopontin Regulates Neutrophil Survival and Synovocyte Binding in Rheumatoid Arthritis** *ARTHRITIS AND RHEUMATISM*
Sharif, S. A., Du, X., Myles, T., Song, J. J., Price, E., Lee, D. M., Goodman, S. B., Nagashima, M., Morser, J., Robinson, W. H., Leung, L. L.
2009; 60 (10): 2902-2912
- **Retroperitoneal hematoma: an unusual cause of pain after total hip arthroplasty.** *journal of arthroplasty*
Pouliot, M. A., Lee, K. B., Goodman, S. B.
2009; 24 (7): 1144 e9-12
- **Third-degree heart block associated with bupivacaine infusion following total knee arthroplasty. A case report.** *journal of bone and joint surgery. American volume*
Hay, D. C., Mayle, R. E., Goodman, S. B.
2009; 91 (9): 2238-2240
- **Third-Degree Heart Block Associated with Bupivacaine Infusion Following Total Knee Arthroplasty A Case Report** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Hay, D. C., Mayle, R. E., Goodman, S. B.
2009; 91A (9): 2238-2240
- **Biocompatibility of total joint replacements: A review.** *Journal of biomedical materials research. Part A*
Goodman, S. B., Gómez Barrena, E., Takagi, M., Konttinen, Y. T.
2009; 90 (2): 603-618
- **Biocompatibility of total joint replacements: A review** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Goodman, S. B., Barrena, E. G., Takagi, M., Konttinen, Y. T.
2009; 90A (2): 603-618
- **Analysis of Bone Mineral Density and Bone Turnover in the Presence of Polymethylmethacrylate Particles** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Zilber, S., Lee, S. W., Smith, R. L., Biswal, S., Goodman, S. B.
2009; 90B (1): 362-367

- **Analysis of bone mineral density and bone turnover in the presence of polymethylmethacrylate particles.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Zilber, S., Lee, S. W., Smith, R. L., Biswal, S., Goodman, S. B.
2009; 90 (1): 362-367
- **Cementless Femoral Prostheses Cost More to Implant than Cemented Femoral Prostheses** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Unnanuntana, A., Dimitroulias, A., Bolognesi, M. P., Hwang, K. L., Goodman, S. B., Marcus, R. E.
2009; 467 (6): 1546-1551
- **Efficacy of a p38 mitogen activated protein kinase inhibitor in mitigating an established inflammatory reaction to polyethylene particles in vivo.** *Journal of biomedical materials research. Part A*
Ma, T., Ren, P., Larsen, D. M., Suenaga, E., Zilber, S., Genovese, M., Smith, R. L., Goodman, S. B.
2009; 89 (1): 117-123
- **Porous Tantalum in Hip and Knee Reconstructive Surgery** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Patil, N., Lee, K., Goodman, S. B.
2009; 89B (1): 242-251
- **Ultrahigh molecular weight polyethylene wear debris inhibits osteoprogenitor proliferation and differentiation in vitro** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Chiu, R., Ma, T., Smith, R. L., Goodman, S. B.
2009; 89A (1): 242-247
- **Cell Therapy for Bone Regeneration--Bench to Bedside** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Lee, K., Chan, C. K., Patil, N., Goodman, S. B.
2009; 89B (1): 252-263
- **Efficacy of a p38 mitogen activated protein kinase inhibitor in mitigating an established inflammatory reaction to polyethylene particles in vivo** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Ma, T., Ren, P., Larsen, D. M., Suenaga, E., Zilber, S., Genovese, M., Smith, R. L., Goodman, S. B.
2009; 89A (1): 117-123
- **Porous tantalum in hip and knee reconstructive surgery.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Patil, N., Lee, K., Goodman, S. B.
2009; 89 (1): 242-251
- **Cell therapy for bone regeneration--bench to bedside.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Lee, K., Chan, C. K., Patil, N., Goodman, S. B.
2009; 89 (1): 252-263
- **Ultrahigh molecular weight polyethylene wear debris inhibits osteoprogenitor proliferation and differentiation in vitro.** *Journal of biomedical materials research. Part A*
Chiu, R., Ma, T., Smith, R. L., Goodman, S. B.
2009; 89 (1): 242-247
- **Increased Expression of Toll-like Receptors in Aseptic Loose Periprosthetic Tissues and Septic Synovial Membranes Around Total Hip Implants** *JOURNAL OF RHEUMATOLOGY*
Tamaki, Y., Takakubo, Y., Goto, K., Hirayama, T., Sasaki, K., Kontinen, Y. T., Goodman, S. B., Takagi, M.
2009; 36 (3): 598-608
- **Stem Cell-Mediated Accelerated Bone Healing Observed with in Vivo Molecular and Small Animal Imaging Technologies in a Model of Skeletal Injury** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Lee, S., Padmanabhan, P., Ray, P., Gambhir, S. S., Doyle, T., Contag, C., Goodman, S. B., Biswal, S.
2009; 27 (3): 295-302
- **The Accuracy of Preoperative Templating in Cementless Total Hip Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Unnanuntana, A., Wagner, D., Goodman, S. B.
2009; 24 (2): 180-186
- **Outcome and Complications of Constrained Acetabular Components** *ORTHOPEDICS*
Yang, C., Goodman, S. B.

- 2009; 32 (2): 115-123
- **Cell Therapy for Secondary Osteonecrosis of the Femoral Condyles Using the Collect DBM System A Preliminary Report** *JOURNAL OF ARTHROPLASTY*
Lee, K., Goodman, S. B.
2009; 24 (1): 43-48
 - **In Vivo Murine Model of Continuous Intramedullary Infusion of Particles-A Preliminary Study** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Ma, T., Ortiz, S. G., Huang, Z., Ren, P., Smith, R. L., Goodman, S. B.
2009; 88B (1): 250-253
 - **In vivo murine model of continuous intramedullary infusion of particles--a preliminary study.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Ma, T., Ortiz, S. G., Huang, Z., Ren, P., Smith, R. L., Goodman, S. B.
2009; 88 (1): 250-253
 - **Systemic trafficking of macrophages induced by bone cement particles in nude mice** *BIOMATERIALS*
Ren, P., Lee, S., Biswal, S., Goodman, S. B.
2008; 29 (36): 4760-4765
 - **New Bone Formation by Murine Osteoprogenitor Cells Cultured on Corticocancellous Allograft Bone** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Nelson, E. R., Huang, Z., Ma, T., Lindsey, D., Jacobs, C., Smith, R. L., Goodman, S. B.
2008; 26 (12): 1660-1664
 - **Effect of Nanofiber-Coated Surfaces on the Proliferation and Differentiation of Osteoprogenitors In Vitro** *TISSUE ENGINEERING PART A*
Huang, Z., Daniels, R. H., Enzerink, R., Hardev, V., Sahi, V., Goodman, S. B.
2008; 14 (11): 1853-1859
 - **Continuous Intramedullary Polymer Particle Infusion Using a Murine Femoral Explant Model** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Ortiz, S. G., Ma, T., Regula, D., Smith, R. L., Goodman, S. B.
2008; 87B (2): 440-446
 - **Continuous intramedullary polymer particle infusion using a murine femoral explant model.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Ortiz, S. G., Ma, T., Regula, D., Smith, R. L., Goodman, S. B.
2008; 87 (2): 440-446
 - **Averaging different alignment axes improves femoral rotational alignment in computer-navigated total knee arthroplasty.** *journal of bone and joint surgery. American volume*
Siston, R. A., Cromie, M. J., Gold, G. E., Goodman, S. B., Delp, S. L., Maloney, W. J., Giori, N. J.
2008; 90 (10): 2098-2104
 - **Averaging Different Alignment Axes Improves Femoral Rotational Alignment in Computer-Navigated Total Knee Arthroplasty** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Siston, R. A., Cromie, M. J., Gold, G. E., Goodman, S. B., Delp, S. L., Maloney, W. J., Giori, N. J.
2008; 90A (10): 2098-2104
 - **Conversion total hip replacement after malunited intertrochanteric fracture: a technical note.** *American journal of orthopedics (Belle Mead, N.J.)*
Unnanuntana, A., Goodman, S. B.
2008; 37 (10): 506-509
 - **An in vivo murine model of continuous intramedullary infusion of polyethylene particles** *BIOMATERIALS*
Ma, T., Huang, Z., Ren, P., McCally, R., Lindsey, D., Smith, R. L., Goodman, S. B.
2008; 29 (27): 3738-3742
 - **Controlled release of growth factors on allograft bone in vitro** *5th Musculoskeletal Transplant Foundation Symposium*
Huang, Z., Ryu, W., Ren, P., Fasching, R., Goodman, S. B.
SPRINGER.2008: 1905-11
 - **Polymethylmethacrylate particles inhibit osteoblastic differentiation of MC3T3-E1 osteoprogenitor cells** *JOURNAL OF ORTHOPAEDIC RESEARCH*

- Chiu, R., Ma, T., Smith, R. L., Goodman, S. B.
2008; 26 (7): 932-936
- **Current state and future of joint replacements in the hip and knee** *EXPERT REVIEW OF MEDICAL DEVICES*
Lee, K., Goodman, S. B.
2008; 5 (3): 383-393
 - **Quantitation of bone area in undecalcified frozen sections with fluorescent microscopy** *JOURNAL OF HISTOTECHNOLOGY*
Ren, P., Ma, T., Huang, Z., Smith, R. L., Goodman, S. B.
2008; 31 (1): 15-17
 - **Histomorphometric analysis of the intramedullary bone response to titanium particles in wild-type and IL-1R1 knock-out mice: a preliminary study.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Bragg, B., Epstein, N. J., Ma, T., Goodman, S., Smith, R. L.
2008; 84 (2): 559-570
 - **Histomorphometric Analysis of the intramedullary bone response to titanium particles in wild-type and IL-1R1 knowk-out mice: A preliminary study** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Bragg, B., Epstein, N., Ma, T., Goodman, S., Smith, R. L.
2008; 84B (2): 559-570
 - **Validation and quantification of an in vitro model of continuous infusion of submicron-sized particles** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Ortiz, S. G., Ma, T., Epstein, N. J., Smith, R. L., Goodman, S. B.
2008; 84B (2): 328-333
 - **Early outcome of a modular femoral component in revision total hip arthroplasty** *JOURNAL OF ARTHROPLASTY*
Kang, M. N., Huddleston, J. I., Hwang, K., Imrie, S., Goodman, S. B.
2008; 23 (2): 220-225
 - **Validation and quantification of an in vitro model of continuous infusion of submicron-sized particles.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Ortiz, S. G., Ma, T., Epstein, N. J., Smith, R. L., Goodman, S. B.
2008; 84 (2): 328-333
 - **2007 AAOS/NIH osteolysis and implant wear: Biological, biomedical engineering, and surgical principles - Introduction** *JOURNAL OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS*
Gilmour, C. M., Ransford, E. L., Goetz, L., Smith, D., Goodman, S. B., Wright, T.
2008; 16: X-XI
 - **Wear particles and osteolysis** *ORTHOPAEDIC BONE CEMENTS*
Patil, N., Goodman, S. B., Deb, S.
2008: 140-64
 - **What is the outcome of treatment for osteolysis?** *AAOS/NIH Osteolysis and Implant Wear: Biological, Biomedical Engineering, and Surgical Principles*
Maloney, W., Rosenberg, A.
AMER ACAD ORTHOPAEDIC SURGEONS.2008: S26-S32
 - **What are the local and systemic biologic reactions and mediators to wear debris, and what host factors determine or modulate the biologic response to wear particles?**
Tuan, R. S., Lee, F., Kontinen, Y. T., Wilkinson, J., Smith, R., Implant Wear Symposium 2007 Biolog
AMER ACAD ORTHOPAEDIC SURGEONS.2008: S42-S48
 - **How have alternative bearings (such as metal-on-metal, highly cross-linked polyethylene, and ceramic-on-ceramic) affected the prevention and treatment of osteolysis?** *AAOS/NIH Osteolysis and Implant Wear: Biological, Biomedical Engineering, and Surgical Principles*
Callaghan, J. J., Cuckler, J. M., Huddleston, J. I., Galante, J. O.
AMER ACAD ORTHOPAEDIC SURGEONS.2008: S33-S38
 - **Failure mechanisms in joint replacement** *JOINT REPLACEMENT TECHNOLOGY*
Burke, M., Goodman, S., Revell, P. A.
2008: 264-85

- **Mouse femoral intramedullary injection model: Technique and microCT scan validation** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Zilber, S., Epstein, N., Lee, S., Larsen, M., Ma, T., Smith, R. L., Biswal, S., Goodman, S. B.
2008; 84B (1): 286-290
- **Seppo Santavirta: The life and work of an orthopaedic surgeon and scientist. A tribute from his friends** *JOURNAL OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS*
Kontinen, Y. T., Goodman, S. B., Wright, T.
2008; 16: XII-XV
- **Mouse femoral intramedullary injection model: technique and microCT scan validation.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Zilber, S., Epstein, N. J., Lee, S., Larsen, M., Ma, T., Smith, R. L., Biswal, S., Goodman, S. B.
2008; 84 (1): 286-290
- **Biology summary** *JOURNAL OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS*
Goodman, S. B., Goldberg, V., O'Keefe, R.
2008; 16: S76-S78
- **Biodegradable micro-osmotic pump for long-term and controlled release of basic fibroblast growth factor** *JOURNAL OF CONTROLLED RELEASE*
Ryu, W., Huang, Z., Prinz, F. B., Goodman, S. B., Fasching, R.
2007; 124 (1-2): 98-105
- **Wear particles, periprosthetic osteolysis and the immune system** *BIOMATERIALS*
Goodman, S. B.
2007; 28 (34): 5044-5048
- **Coronal plane stability before and after total knee arthroplasty** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Siston, R. A., Goodman, S. B., Delp, S. L., Giori, N. J.
2007: 43-49
- **The sequential expression profiles of growth factors from osteoprogenitors to osteoblasts In vitro** *TISSUE ENGINEERING*
Huang, Z., Nelson, E. R., Smith, R. L., Goodman, S. B.
2007; 13 (9): 2311-2320
- **Modulation of allograft incorporation by growth factors over a prolonged continuous infusion of duration in vivo** *BONE*
Ma, T., Gutnick, J., Salazar, B., Larsen, M. D., Suenaga, E., Zilber, S., Huang, Z., Huddleston, J., Smith, R. L., Goodman, S.
2007; 41 (3): 386-392
- **Deltoid flap combined with fascia lata autograft for rotator cuff defects: a histologic study** *KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY*
McAdams, T. R., Knudsen, K. R., Yalamanchi, N., Chang, J., Goodman, S. B.
2007; 15 (9): 1144-1149
- **The effects of medications on bone** *JOURNAL OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS*
Goodman, S. B., Jiranek, W., Petrow, E., Yasko, A. W.
2007; 15 (8): 450-460
- **Multimodal analgesia for orthopedic procedures** *ANESTHESIA AND ANALGESIA*
Goodman, S. B.
2007; 105 (1): 19-20
- **Utility of judet oblique x-rays in preoperative assessment of acetabular periprosthetic osteolysis: a preliminary study.** *American journal of orthopedics (Belle Mead, N.J.)*
Thomas, A., Epstein, N. J., Stevens, K., Goodman, S. B.
2007; 36 (7): E107-10
- **Dissociation of the femoral head and trunion after constrained conversion total hip arthroplasty for poliomyelitis** *JOURNAL OF ARTHROPLASTY*
Spinnickie, A., Goodman, S. B.
2007; 22 (4): 634-637

- **Effects of a p38 MAP kinase inhibitor on bone ingrowth and tissue differentiation in rabbit chambers.** *Journal of biomedical materials research. Part A*
Goodman, S. B., Ma, T., Spanogle, J., Chiu, R., Miyanishi, K., Oh, K., Plouhar, P., Wadsworth, S., Smith, R. L.
2007; 81 (2): 310-316
- **Effects of a p38 MAP kinase inhibitor on bone ingrowth and tissue differentiation in rabbit chambers** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Goodman, S. B., Ma, T., Spanogle, J., Chiu, R., Miyanishi, K., Oh, K., Plouhar, P., Wadsworth, S., Smith, R. L.
2007; 81A (2): 310-316
- **Kinetics of polymethylmethacrylate particle-induced inhibition of osteoprogenitor differentiation and proliferation** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Chiu, R., Ma, T., Smith, R. L., Goodman, S. B.
2007; 25 (4): 450-457
- **Surgical navigation for total knee arthroplasty: A perspective** *JOURNAL OF BIOMECHANICS*
Siston, R. A., Giori, N. J., Goodman, S. B., Delp, S. L.
2007; 40 (4): 728-735
- **Effects of local infusion of OP-1 on particle-induced and NSAID-induced inhibition of bone ingrowth in vivo.** *Journal of biomedical materials research. Part A*
Ma, T., Nelson, E. R., Mawatari, T., Oh, K. J., Larsen, D. M., Smith, R. L., Goodman, S. B.
2006; 79 (3): 740-746
- **Effects of local infusion of OP-1 on particle-induced and NSAID-induced inhibition of bone ingrowth in vivo** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Ma, T., Nelson, E. R., Mawatari, T., Oh, K. J., Larsen, D. M., Smith, R. L., Goodman, S. B.
2006; 79A (3): 740-746
- **Effects of orthopaedic wear particles on osteoprogenitor cells** *BIOMATERIALS*
Goodman, S. B., Ma, T., Chiu, R., Ramachandran, R., Smith, R. L.
2006; 27 (36): 6096-6101
- **The high variability of tibial rotational alignment in total knee arthroplasty** *Open Scientific Meeting of the Knee-Society*
Siston, R. A., Goodman, S. B., Patel, J. J., Delp, S. L., Giori, N. J.
SPRINGER.2006: 65-69
- **Selective tyrosine kinase inhibition by imatinib mesylate for the treatment of autoimmune arthritis** *JOURNAL OF CLINICAL INVESTIGATION*
Paniagua, R. T., Sharpe, O., Ho, P. P., Chan, S. M., Chang, A., Higgins, J. P., Tomooka, B. H., Thomas, F. M., Song, J. J., Goodman, S. B., Lee, D. M., Genovese, M. C., Utz, et al
2006; 116 (10): 2633-2642
- **Gene regulation ex vivo within a wrap-around tendon** *TISSUE ENGINEERING*
Li, K. W., Lindsey, D. P., Wagner, D. R., Giori, N. J., Schurman, D. J., Goodman, S. B., Smith, R. L., Carter, D. R., Beaupre, G. S.
2006; 12 (9): 2611-2618
- **Intraoperative passive kinematics of osteoarthritic knees before and after total knee arthroplasty** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Siston, R. A., Giori, N. J., Goodman, S. B., Delp, S. L.
2006; 24 (8): 1607-1614
- **Dose- and time-dependent effects of cyclic hydrostatic pressure on transforming growth factor-beta 3-induced chondrogenesis by adult human mesenchymal stem cells in vitro** *TISSUE ENGINEERING*
Miyayoshi, K., Trindade, M. C., Lindsey, D. P., Beaupre, G. S., Carter, D. R., Goodman, S. B., Schurman, D. J., Smith, R. L.
2006; 12 (8): 2253-2262
- **Comparison of VEGF-producing cells in periprosthetic osteolysis** *BIOMATERIALS*
Spanogle, J. P., Miyayoshi, K., Ma, T., Epstein, N. J., Smith, R. L., Goodman, S. B.
2006; 27 (21): 3882-3887
- **Polymethylmethacrylate particles inhibit osteoblastic differentiation of bone marrow osteoprogenitor cells.** *Journal of biomedical materials research. Part A*
Chiu, R., Ma, T., Smith, R. L., Goodman, S. B.

2006; 77 (4): 850-856

- **Polymethylmethacrylate particles inhibit osteoblastic differentiation of bone marrow osteoprogenitor cells** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Chiu, R., Ma, T., Smith, R. L., Goodman, S. B.
2006; 77A (4): 850-856
- **Total hip arthroplasty using the miniature anatomic medullary locking stem** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Oh, K., Imrie, S., Hwang, K., Ramachandran, R., Shegog, M., Goodman, S. B.
2006: 85-91
- **The effects of titanium and polymethylmethacrylate particles on osteoblast phenotypic stability** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Ramachandran, R., Goodman, S. B., Smith, R. L.
2006; 77A (3): 512-517
- **The effects of titanium and polymethylmethacrylate particles on osteoblast phenotypic stability.** *Journal of biomedical materials research. Part A*
Ramachandran, R., Goodman, S. B., Smith, R. L.
2006; 77 (3): 512-517
- **Effects of hydrostatic pressure and transforming growth factor-beta 3 on adult human mesenchymal stem cell chondrogenesis in vitro** *TISSUE ENGINEERING*
Miyashita, K., Trindade, M. C., Lindsey, D. P., Beaupre, G. S., Carter, D. R., Goodman, S. B., Schurman, D. J., Smith, R. L.
2006; 12 (6): 1419-1428
- **Revision total hip arthroplasty in juvenile chronic arthritis - 17 revisions in 11 patients followed for 4-12 years** *ACTA ORTHOPAEDICA*
Goodman, S. B., Oh, K., Imrie, S., Hwang, K., Shegog, M.
2006; 77 (2): 242-250
- **The variability of femoral rotational alignment in total knee arthroplasty.** *journal of bone and joint surgery. American volume*
Siston, R. A., Patel, J. J., Goodman, S. B., Delp, S. L., Giori, N. J.
2005; 87 (10): 2276-2280
- **The variability of femoral rotational alignment in total knee arthroplasty** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Siston, R. A., Patel, J. J., Goodman, S. B., Delp, S. L., Giori, N. J.
2005; 87A (10): 2276-2280
- **Evaluation of methods that locate the center of the ankle for computer-assisted total knee arthroplasty** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Siston, R. A., Daub, A. C., Giori, N. J., Goodman, S. B., Delp, S. L.
2005: 129-135
- **Rebuilding the skeleton - The intraoperative use of trabecular metal in revision total hip arthroplasty** *4th Annual Spring Meeting on Current Concept in Joint Replacement*
Gross, A. E., Goodman, S. B.
CHURCHILL LIVINGSTONE INC MEDICAL PUBLISHERS.2005: 91-93
- **UHMWPE wear debris upregulates mononuclear cell proinflammatory gene expression in a novel murine model of intramedullary particle disease** *ACTA ORTHOPAEDICA*
Epstein, N. J., Bragg, W. E., Ma, T., Spanogle, J., Smith, R. L., Goodman, S. B.
2005; 76 (3): 412-420
- **Interleukin-1 modulates periprosthetic tissue formation in an intramedullary model of particle-induced inflammation** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Epstein, N. J., Warme, B. A., Spanogle, J., Ma, T., Bragg, B., Smith, R. L., Goodman, S. B.
2005; 23 (3): 501-510
- **Cemented total knee arthroplasty in patients with juvenile rheumatoid arthritis** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Thomas, A., Rojer, D., Imrie, S., Goodman, S. B.
2005: 140-146

- **Temporal effects of a COX-2-selective NSAID on bone ingrowth.** *Journal of biomedical materials research. Part A*
Goodman, S. B., Ma, T., Mitsunaga, L., Miyanishi, K., Genovese, M. C., Smith, R. L.
2005; 72 (3): 279-287
- **Temporal effects of a COX-2-selective NSAID on bone ingrowth** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Goodman, S. B., Ma, T., Mitsunaga, L., Miyanishi, K., Genovese, M. C., Smith, R. L.
2005; 72A (3): 279-287
- **Wear particulate and osteolysis** *40th Anniversary Symposium on Acrylic Bone Cement*
Goodman, S.
W B SAUNDERS CO-ELSEVIER INC.2005: 41-?
- **Pharmacologic modulation of periprosthetic osteolysis** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Trindade, M., Ma, T., Genovese, M., Smith, R. L.
2005: 39-45
- **Total hip replacement: A successful interaction of biology, mechanics, and materials science** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
SANTAVIRTA, S., Goodman, S. B.
2005: 2-2
- **Total knee replacement in juvenile rheumatoid arthritis** *ORTHOPEDICS*
Rojer, D. E., Goodman, S. B.
2005; 28 (1): 39-45
- **The current role of structural grafts and cages in revision arthroplasty of the hip** *Hip-Society 2004 Meeting*
Gross, A. E., Goodman, S.
SPRINGER.2004: 193-200
- **Modified sliding trochanteric osteotomy in revision total hip arthroplasty** *JOURNAL OF ARTHROPLASTY*
Goodman, S., Pressman, A., Saastamoinen, H., Gross, A.
2004; 19 (8): 1039-1041
- **Proinflammatory mediator expression in a novel murine model of titanium-particle-induced intramedullary inflammation.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Warme, B. A., Epstein, N. J., Trindade, M. C., Miyanishi, K., Ma, T., Saket, R. R., Regula, D., Goodman, S. B., Smith, R. L.
2004; 71 (2): 360-366
- **Proinflammatory mediator expression in a novel murine model of titanium-particle-induced intramedullary inflammation** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Warme, B. A., Epstein, N. J., Trindade, M. C., Miyanishi, K., Ma, T., Saket, R. R., Regula, D., Goodman, S. B., Smith, R. L.
2004; 71B (2): 360-366
- **The role of cages and rings: When all else fails** *ORTHOPEDICS*
Gross, A. E., Goodman, S.
2004; 27 (9): 969-970
- **Intermittent hydrostatic pressure inhibits matrix metalloproteinase and pro-inflammatory mediator release from human osteoarthritic chondrocytes in vitro** *OSTEOARTHRITIS AND CARTILAGE*
Trindade, M. C., Shida, J., Ikenoue, T., Lee, M. S., Lin, E. Y., Yaszay, B., Yerby, S., Goodman, S. B., Schurman, D. J., Smith, R. L.
2004; 12 (9): 729-735
- **The role of implant alignment on stability and particles on periprosthetic osteolysis - A rabbit model of implant failure** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
Fornasier, V. L., Goodman, S. B., Protzner, K., Kamel, M., Song, Y., Shojaci, A.
2004; 70B (2): 179-186
- **The role of implant alignment on stability and particles on periprosthetic osteolysis--A rabbit model of implant failure.** *Journal of biomedical materials research. Part B, Applied biomaterials*
Fornasier, V. L., Goodman, S. B., Protzner, K., Kamel, M., Song, Y., Shojaci, A.
2004; 70 (2): 179-186

- **A conical-collared intramedullary stem can improve stress transfer and limit micromotion** *CLINICAL BIOMECHANICS*
Mandell, J. A., Carter, D. R., Goodman, S. B., Schurman, D. J., Beupre, G. S.
2004; 19 (7): 695-703
- **Chronic coccidioidomycosis infection of the knee: a case report.** *American journal of orthopedics (Belle Mead, N.J.)*
Werle, J., Goodman, S.
2004; 33 (8): 409-411
- **Complications of ilioischial reconstruction rings in revision total hip arthroplasty** *JOURNAL OF ARTHROPLASTY*
Goodman, S., Saastamoinen, H., Shasha, N., Gross, A.
2004; 19 (4): 436-446
- **Human interleukin-1-induced murine osteoclastogenesis is dependent on RANKL, but independent of TNF-alpha** *CYTOKINE*
Ma, T., Miyanishi, K., Suen, A., Epstein, N. J., Tomita, T., Smith, R. L., Goodman, S. B.
2004; 26 (3): 138-144
- **Effects of interleukin-10 on titanium particle-induced macrophage transcription factor activation and cytokine expression in vitro.** *Journal of biomedical materials research. Part A*
Wong, N., Trindade, M. C., Patel, R., Yaszay, B., Goodman, S. B., Smith, R. L.
2004; 69 (1): 40-46
- **Effects of interleukin-10 on titanium particle-induced macrophage transcription factor activation and cytokine expression in vitro** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Wong, N., Trindade, M. C., Patel, R., Yaszay, B., Goodman, S. B., Smith, R. L.
2004; 69A (1): 40-46
- **Tenocyte response to cyclical strain and transforming growth factor beta is dependent upon age and site of origin** *BIORHEOLOGY*
Goodman, S. A., May, S. A., Heinegard, D., Smith, R. K.
2004; 41 (5): 613-628
- **Interleukin 1 receptor antagonist inhibits localized bone formation in vivo** *JOURNAL OF RHEUMATOLOGY*
Ma, T., Miyanishi, K., Trindade, M. C., Genovese, M., Regula, D., Smith, R. L., Goodman, S. B.
2003; 30 (12): 2547-2552
- **Efficacy of intraoperative blood collection and reinfusion in revision total hip arthroplasty.** *journal of bone and joint surgery. American volume*
Zarin, J., Grosvenor, D., Schurman, D., Goodman, S.
2003; 85-A (11): 2147-2151
- **Efficacy of intraoperative blood collection and reinfusion in revision total hip arthroplasty** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Zarin, J., Grosvenor, D., Schurman, D., Goodman, S.
2003; 85A (11): 2147-2151
- **COX-2 selective inhibitors and bone** *INTERNATIONAL JOURNAL OF IMMUNOPATHOLOGY AND PHARMACOLOGY*
Goodman, S. B., Ma, T., Genovese, M., Smith, R. L.
2003; 16 (3): 201-205
- **Expression of nitric oxide, peroxynitrite, and apoptosis in loose total hip replacements** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Puskas, B. L., Menke, N. E., Huie, P., Song, Y., Ecklund, K., Trindade, M. C., Smith, R. L., Goodman, S. B.
2003; 66A (3): 541-549
- **Economics of one-stage versus two-stage bilateral total knee arthroplasties** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Macario, A., Schilling, P., Rubio, R., Goodman, S.
2003; 149-156
- **Expression of nitric oxide, peroxynitrite, and apoptosis in loose total hip replacements.** *Journal of biomedical materials research. Part A*
Puskas, B. L., Menke, N. E., Huie, P., Song, Y., Ecklund, K., Trindade, M. C., Smith, R. L., Goodman, S. B.
2003; 66 (3): 541-549
- **Periprosthetic osteolysis: Induction of vascular endothelial growth factor from human monocyte/macrophages by orthopedic biomaterial particles** *49th Annual Meeting of the Orthopaedic-Research-Society*

- Miyaniishi, K., Trindade, M. C., Ma, T., Goodman, S. B., Schurman, D. J., Smith, R. L.
AMER SOC BONE & MINERAL RES.2003: 1573-83
- **Regulation of nitric oxide and bcl-2 expression by shear stress in human osteoarthritic Chondrocytes in vitro** *JOURNAL OF CELLULAR BIOCHEMISTRY*
Lee, M. S., Trindade, M. C., Ikenoue, T., Goodman, S. B., Schurman, D. J., Smith, R. L.
2003; 90 (1): 80-86
 - **What questions do patients undergoing lower extremity joint replacement surgery have?** *BMC HEALTH SERVICES RESEARCH*
Macario, A., Schilling, P., Rubio, R., Bhalla, A., Goodman, S.
2003; 3
 - **Local infusion of FGF-2 enhances bone ingrowth in rabbit chambers in the presence of polyethylene particles.** *Journal of biomedical materials research. Part A*
Goodman, S. B., Song, Y., Yoo, J. Y., Fox, N., Trindade, M. C., Kajiyama, G., Ma, T., Regula, D., Brown, J., Smith, R. L.
2003; 65 (4): 454-461
 - **Local infusion of FGF-2 enhances bone ingrowth in rabbit chambers in the presence of polyethylene particles** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Goodman, S. B., Song, Y., Yoo, J. Y., Fox, N., Trindade, M. C., KAJIYAMA, G., Ma, T., Regula, D., Brown, J., Smith, R. L.
2003; 65A (4): 454-461
 - **Delayed-onset Mycobacterium tuberculosis infection with staphylococcal superinfection after total knee replacement.** *American journal of orthopedics (Belle Mead, N.J.)*
Al-Shaikh, R., Goodman, S. B.
2003; 32 (6): 302-305
 - **Human serum opsonization of orthopedic biomaterial particles: protein-binding and monocyte/macrophage activation in vitro.** *Journal of biomedical materials research. Part A*
Sun, D., Trindade, M. C., Nakashima, Y., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L.
2003; 65 (2): 290-298
 - **Human serum opsonization of orthopedic biomaterial particles: Protein-binding and monocyte/macrophage activation in vitro** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Sun, D. H., Trindade, M. C., Nakashima, Y., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L.
2003; 65A (2): 290-298
 - **Modulation of bone ingrowth and tissue differentiation by local infusion of interleukin-10 in the presence of ultra-high molecular weight polyethylene (UHMWPE) wear particles.** *Journal of biomedical materials research. Part A*
Goodman, S., Trindade, M., Ma, T., Lee, M., Wang, N., Ikenoue, T., Matsuura, I., Miyaniishi, K., Fox, N., Regula, D., Genovese, M., Klein, J., Bloch, et al
2003; 65 (1): 43-50
 - **Modulation of bone ingrowth and tissue differentiation by local infusion of interleukin-10 in the presence of ultra-high molecular weight polyethylene (UHMWPE) wear particles** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Goodman, S., Trindade, M., Ma, T., Lee, M., Wang, N., Ikenoue, T., Matsuura, I., Miyaniishi, K., Fox, N., Regula, D., Genovese, M., Klein, J., Bloch, et al
2003; 65A (1): 43-50
 - **The role of the TH1 and TH2 immune responses in loosening and osteolysis of cemented total hip replacements** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A*
Arora, A., Song, Y., Chun, L., Huie, P., Trindade, M., Smith, R. L., Goodman, S.
2003; 64A (4): 693-697
 - **The role of the TH1 and TH2 immune responses in loosening and osteolysis of cemented total hip replacements.** *Journal of biomedical materials research. Part A*
Arora, A., Song, Y., Chun, L., Huie, P., Trindade, M., Smith, R. L., Goodman, S.
2003; 64 (4): 693-697
 - **Intermittent hydrostatic pressure inhibits shear stress-induced nitric oxide release in human osteoarthritic chondrocytes in vitro** *JOURNAL OF RHEUMATOLOGY*
Lee, M. S., Trindade, M. C., Ikenoue, T., Schurman, D. J., Goodman, S. B., Smith, R. L.
2003; 30 (2): 326-328

- **Meehanoregulation of human articular chondrocyte aggrecan and type II collagen expression by intermittent hydrostatic pressure in vitro** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Ikenoue, T., Trindade, M. C., Lee, M. S., Lin, E. Y., Schurman, D. J., Goodman, S. B., Smith, R. L.
2003; 21 (1): 110-116
- **Protective effects of intermittent hydrostatic pressure on osteoarthritic chondrocytes activated by bacterial endotoxin in vitro** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Lee, M. S., Ikenoue, T., Trindade, M. C., Wong, N., Goodman, S. B., Schurman, D. J., Smith, R. L.
2003; 21 (1): 117-122
- **COX-2 selective NSAID decreases bone ingrowth in vivo** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Goodman, S., Ma, T., Trindade, M., Ikenoue, T., Matsuura, I., Wong, N., Fox, N., Genovese, M., Regula, D., Smith, R. L.
2002; 20 (6): 1164-1169
- **Positive cytokine production in failed metal-on-metal total hip replacements** *ACTA ORTHOPAEDICA SCANDINAVICA*
Campbell, P. A., Wang, M., Amstutz, H. C., Goodman, S. B.
2002; 73 (5): 506-512
- **Screw migration from total knee prostheses requiring subsequent surgery** *JOURNAL OF ARTHROPLASTY*
Shah, S. N., Schurman, D. J., Goodman, S. B.
2002; 17 (7): 951-954
- **Factors influencing changes in articular cartilage following hemiarthroplasty in sheep** *JOURNAL OF ORTHOPAEDIC RESEARCH*
van der Meulen, M. C., Beaupre, G. S., Smith, R. L., Giddings, V. L., Allen, W. A., Athanasiou, K. A., Zhu, C. F., Mandell, J. A., Song, Y., Poser, R. D., Goodman, S. B.
2002; 20 (4): 669-675
- **Effects of shear stress on nitric oxide and matrix protein gene expression in human osteoarthritic chondrocytes in vitro** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Lee, M. S., Trindade, M. C., Ikenoue, T., Schurman, D. J., Goodman, S. B., Smith, R. L.
2002; 20 (3): 556-561
- **Mechanical evaluation of a carbonated apatite cement in the fixation of unstable intertrochanteric fractures** *ACTA ORTHOPAEDICA SCANDINAVICA*
Yetkinler, D. N., Goodman, S. B., Reindel, E. S., Carter, D., Poser, R. D., Constantz, B. R.
2002; 73 (2): 157-164
- **Revision total knee arthroplasty using large distal femoral augments for severe metaphyseal bone deficiency: A preliminary study** *ORTHOPEDICS*
Werle, J. R., Goodman, S. B., Imrie, S. N.
2002; 25 (3): 325-327
- **Polyethylene liner dissociation in Harris-Galante acetabular components - A report of 7 cases** *JOURNAL OF ARTHROPLASTY*
Werle, J., Goodman, S., Schurman, D., Lannin, J.
2002; 17 (1): 78-81
- **Measurement of perioperative flexion-extension mechanics of the knee joint** *JOURNAL OF ARTHROPLASTY*
Giori, N. J., Giori, K. L., Woolson, S. T., Goodman, S. B., Lannin, J. V., Schurman, D. J.
2001; 16 (7): 877-881
- **Fibroblast expression of C-C chemokines in response to orthopaedic biomaterial particle challenge in vitro** *JOURNAL OF ORTHOPAEDIC RESEARCH*
Yaszay, B., Trindade, M. C., Lind, M., Goodman, S. B., Smith, R. L.
2001; 19 (5): 970-976
- **Interleukin-10 inhibits polymethylmethacrylate particle induced interleukin-6 and tumor necrosis factor-alpha release by human monocyte/macrophages in vitro** *BIOMATERIALS*
Trindade, M. C., Lind, M., Nakashima, Y., Sun, D. H., Goodman, S. B., Schurman, D. J., Smith, R. L.
2001; 22 (15): 2067-2073
- **Chronic antigen-specific immune-system activation may potentially be involved in the loosening of cemented acetabular components** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Farber, A., Chin, R., Song, Y., Huie, P., Goodman, S.

2001; 55 (3): 433-441

- **Preoperative duplex ultrasonography evaluation for deep venous thrombosis in revision hip arthroplasty patients** *ORTHOPEDICS*
Wallace, B., Jeffrey, R. B., Goodman, S. B.
2001; 24 (6): 577-579
- **Effect of osteogenic protein 1/collagen composite combined with impacted allograft around hydroxyapatite-coated titanium alloy implants is moderate** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Lind, M., Overgaard, S., Jensen, T. B., Song, Y., Goodman, S. B., Bunger, C., Soballe, K.
2001; 55 (1): 89-95
- **Relationship between specific adverse life events and psychiatric disorders** *JOURNAL OF ABNORMAL CHILD PSYCHOLOGY*
Tiet, Q. Q., Bird, H. R., Hoven, C. W., Moore, R., Wu, P., Wicks, J., Jensen, P. S., Goodman, S., Cohen, P.
2001; 29 (2): 153-164
- **In vitro reaction to orthopaedic biomaterials by macrophages and lymphocytes isolated from patients undergoing revision surgery** *BIOMATERIALS*
Trindade, M. C., Lind, M., Sun, D., Schurman, D. J., Goodman, S. B., Smith, R. L.
2001; 22 (3): 253-259
- **CCR7 expression and memory T cell diversity in humans** *JOURNAL OF IMMUNOLOGY*
Campbell, J. J., Murphy, K. E., Kunkel, E. J., Brightling, C. E., Soler, D., Shen, Z. M., Boisvert, J., Greenberg, H. B., Vierra, M. A., Goodman, S. B., Genovese, M. C., Wardlaw, A. J., BUTCHER, et al
2001; 166 (2): 877-884
- **Sliding trochanteric osteotomy preserves favorable abductor biomechanics in revision total hip arthroplasty** *JOURNAL OF ARTHROPLASTY*
Romero, A. C., Imrie, S., Goodman, S. B.
2001; 16 (1): 55-64
- **Effects of local infusion of TGF beta on bone ingrowth in rabbit chambers** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Goodman, S., Song, Y., Chun, L., Aspenberg, P., Plouhar, P., Glancy, T., Regula, D., Smith, R. L.
2000; 53 (5): 475-479
- **G-protein activity requirement for polymethylmethacrylate and titanium particle-induced fibroblast interleukin-6 and monocyte chemoattractant protein-1 release in vitro** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Trindade, M. C., Schurman, D. J., Maloney, W. J., Goodman, S. B., Smith, R. L.
2000; 51 (3): 360-368
- **Lymphocyte CC chemokine receptor 9 and epithelial thymus-expressed chemokine (TECK) expression distinguish the small intestinal immune compartment: Epithelial expression of tissue-specific chemokines as an organizing principle in regional immunity** *JOURNAL OF EXPERIMENTAL MEDICINE*
Kunkel, E. J., Campbell, J. J., Haraldsen, G., Pan, J. L., Boisvert, J., Roberts, A. I., Ebert, E. C., Vierra, M. A., Goodman, S. B., Genovese, M. C., Wardlaw, A. J., Greenberg, H. B., Parker, et al
2000; 192 (5): 761-767
- **Induction of interleukin-6 release in human osteoblast-like cells exposed to titanium particles in vitro** *CALCIFIED TISSUE INTERNATIONAL*
Shida, J., Trindade, M. C., Goodman, S. B., Schurman, D. J., Smith, R. L.
2000; 67 (2): 151-155
- **Use of COX-2 specific inhibitors in operative and nonoperative management of patients with arthritis** *ORTHOPEDICS*
Goodman, S. B.
2000; 23 (7): S765-S768
- **Efficacy of postoperative blood salvage following total hip arthroplasty in patients with and without deposited autologous units** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Grosvenor, D., GOYAL, V., Goodman, S.
2000; 82A (7): 951-954
- **Monocyte migration inhibitory factor synthesis and gene expression in particle-activated macrophages** *CYTOKINE*
Lind, M., Trindade, M. C., Schurman, D. J., Goodman, S. B., Smith, R. L.
2000; 12 (7): 909-913

- **Efficacy of postoperative blood salvage following total hip arthroplasty in patients with and without deposited autologous units.** *journal of bone and joint surgery. American volume*
Grosvenor, D., GOYAL, V., Goodman, S.
2000; 82-A (7): 951-954
- **Osteogenic protein 1 device stimulates bone healing to hydroxyapatite-coated and titanium implants** *JOURNAL OF ARTHROPLASTY*
Lind, M., Overgaard, S., Song, Y., Goodman, S. B., Bunger, C., Soballe, K.
2000; 15 (3): 339-346
- **Time-dependent effects of intermittent hydrostatic pressure on articular chondrocyte type II collagen and aggrecan mRNA expression** *JOURNAL OF REHABILITATION RESEARCH AND DEVELOPMENT*
Smith, R. L., Lin, J., Trindade, M. C., Shida, J., KAJIYAMA, G., Vu, T., Hoffman, A. R., van der Meulen, M. C., Goodman, S. B., Schurman, D. J., Carter, D. R.
2000; 37 (2): 153-161
- **The effect of a silane coupling agent on the bond strength of bone cement and cobalt-chrome alloy** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Yerby, S. A., Paal, A. F., Young, P. M., Beaupre, G. S., Ohashi, K. L., Goodman, S.
2000; 49 (1): 127-133
- **Effects of shear stress on articular chondrocyte metabolism** *1st International Symposium on Mechanobiology - Cartilage and Chondrocyte*
Smith, R. L., Trindade, M. C., Ikenoue, T., Mohtai, M., Das, P., Carter, D. R., Goodman, S. B., Schurman, D. J.
IOS PRESS.2000: 95-107
- **Outcome of total hip arthroplasty in small-proportioned patients** *JOURNAL OF ARTHROPLASTY*
Rahimtoola, Z. O., Finger, S., Imrie, S., Goodman, S. B.
2000; 15 (1): 27-34
- **The characterization of macrophages and osteoclasts in tissues harvested from revised total hip prostheses** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Chun, L., Yoon, J., Song, Y., Huie, P., Regula, D., Goodman, S.
1999; 48 (6): 899-903
- **Symptomatic multifocal osteonecrosis - A multicenter study** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Mont, M. A., Jones, L. C., LaPorte, D. M., Aaron, R. K., Christie, M. J., Glueck, C. J., Goodman, S. B., Haas, S., Healy, W. L., Heck, D. A., Holt, P. A., Hungerford, D. S., Iorio, et al
1999: 312-326
- **Interleukin-4 inhibits granulocyte-macrophage colony-stimulating factor, interleukin-6, and tumor necrosis factor-alpha expression by human monocytes in response to polymethylmethacrylate particle challenge in vitro** *44th Annual Meeting of the Orthopaedic-Research-Society*
Trindade, M. C., Nakashima, Y., Lind, M., Sun, D. H., Goodman, S. B., Maloney, W. J., Schurman, D. J., Smith, R. L.
JOHN WILEY & SONS INC.1999: 797-802
- **Effects of TGF beta on bone ingrowth in the presence of polyethylene particles** *JOURNAL OF BONE AND JOINT SURGERY-BRITISH VOLUME*
Goodman, S. B., Song, Y., Chun, L., Regula, D., Aspenberg, P.
1999; 81B (6): 1069-1075
- **Effects of TGFbeta on bone ingrowth in the presence of polyethylene particles.** *journal of bone and joint surgery. British volume*
Goodman, S. B., Song, Y., Chun, L., Regula, D., Aspenberg, P.
1999; 81 (6): 1069-1075
- **Interferon-gamma exacerbates polymethylmethacrylate particle-induced interleukin-6 release by human monocyte/macrophages in vitro** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Trindade, M. C., Lind, M., Goodman, S. B., Maloney, W. J., Schurman, D. J., Smith, R. L.
1999; 47 (1): 1-7
- **Proinflammatory mediator release in response to particle challenge: Studies using the bone harvest chamber** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Trindade, M. C., Song, Y., Aspenberg, P., Smith, R. L., Goodman, S. B.
1999; 48 (4): 434-439
- **Chemotaxis and activation of particle-challenged human monocytes in response to monocyte migration inhibitory factor and C-C chemokines** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*

- Lind, M., Trindade, M. C., Nakashima, Y., Schurman, D. J., Goodman, S. B., Smith, R. L.
1999; 48 (3): 246-250
- **Signaling pathways for tumor necrosis factor-alpha and interleukin-6 expression in human macrophages exposed to titanium-alloy particulate debris in vitro.** *journal of bone and joint surgery. American volume*
Nakashima, Y., Sun, D. H., Trindade, M. C., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L.
1999; 81 (5): 603-615
 - **Signaling pathways for tumor necrosis factor-alpha and interleukin-6 expression in human macrophages exposed to titanium-alloy particulate debris in vitro** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Nakashima, Y., Sun, D. H., Trindade, M. C., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L.
1999; 81A (5): 603-615
 - **Induction of macrophage C-C chemokine expression by titanium alloy and bone cement particles.** *journal of bone and joint surgery. British volume*
Nakashima, Y., Sun, D. H., Trindade, M. C., Chun, L. E., Song, Y., Goodman, S. B., Schurman, D. J., Maloney, W. J., Smith, R. L.
1999; 81 (1): 155-162
 - **Induction of macrophage C-C chemokine expression by titanium alloy and bone cement particles** *JOURNAL OF BONE AND JOINT SURGERY-BRITISH VOLUME*
Nakashima, Y., Sun, D. H., Trindade, M. C., Chun, L. E., Song, Y., Goodman, S. B., Schurman, D. J., Maloney, W. J., Smith, R. L.
1999; 81B (1): 155-162
 - **Expression of inflammatory mediators by human macrophages in response to particulate debris in vitro** *28th Annual Meeting of the Japanese-Society-for- Replacement-Arthroplasty*
Nakashima, Y., Sun, D. H., Trindade, M., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L., Ushijima, M., Iwamoto, Y.
SPRINGER-VERLAG TOKYO.1999: 65-75
 - **Osseointegration of total hip arthroplasties: Studies in humans and animals** *JOURNAL OF LONG-TERM EFFECTS OF MEDICAL IMPLANTS*
Song, Y., Beaupre, G., Goodman, S. B.
1999; 9 (1-2): 77-112
 - **Effects of particulate debris on macrophage-dependent fibroblast stimulation in coculture.** *journal of bone and joint surgery. British volume*
Lind, M., Trindade, M. C., Yaszay, B., Goodman, S. B., Smith, R. L.
1998; 80 (5): 924-930
 - **Effects of particulate debris on macrophage-dependent fibroblast stimulation in coculture** *JOURNAL OF BONE AND JOINT SURGERY-BRITISH VOLUME*
Lind, M., Trindade, M. C., Yaszay, B., Goodman, S. B., Smith, R. L.
1998; 80B (5): 924-930
 - **Prediction of postoperative knee flexion in Insall-Burstein II total knee arthroplasty** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Schurman, D. J., Matityahu, A., Goodman, S. B., Maloney, W., Woolson, S., Shi, H., Bloch, D. A.
1998: 175-184
 - **Induction of matrix metalloproteinase expression in human macrophages by orthopaedic particulate debris in vitro.** *journal of bone and joint surgery. British volume*
Nakashima, Y., Sun, D. H., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L.
1998; 80 (4): 694-700
 - **Induction of matrix metalloproteinase expression in human macrophages by orthopaedic particulate debris in vitro** *JOURNAL OF BONE AND JOINT SURGERY-BRITISH VOLUME*
Nakashima, Y., Sun, D. H., Maloney, W. J., Goodman, S. B., Schurman, D. J., Smith, R. L.
1998; 80B (4): 694-700
 - **In vitro, in vivo, and tissue retrieval studies on particulate debris** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Lind, M., Song, Y., Smith, R. L.
1998: 25-34
 - **Effects of polyethylene particles on tissue surrounding knee arthroplasties in rabbits** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Sacomen, D., Smith, R. L., Song, Y., Fornasier, V., Goodman, S. B.
1998; 43 (2): 123-130

- **Inducible nitric oxide synthase messenger RNA levels in hip periprosthetic tissue: A preliminary study** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Pearson, M. L., Goodman, S. B., Huie, P., Sibley, R. K.
1998; 40 (3): 419-424
- **Complex primary and revision total knee arthroplasty using the condylar constrained prosthesis - An average 5-year follow-up** *JOURNAL OF ARTHROPLASTY*
Hartford, J. M., Goodman, S. B., Schurman, D. J., Knoblick, G.
1998; 13 (4): 380-387
- **The use of femoral intramedullary nailing as an interim or salvage technique during complicated total hip replacement** *JOURNAL OF ARTHROPLASTY*
Hartford, J. M., Goodman, S. B.
1998; 13 (4): 467-472
- **The effect of a perioperative clinical pathway for knee replacement surgery on hospital costs** *ANESTHESIA AND ANALGESIA*
Macario, A., Horne, M., Goodman, S., Vitez, T., Dexter, F., Heinen, R., Brown, B.
1998; 86 (5): 978-984
- **Cellular profile and cytokine production at prosthetic interfaces - Study of tissues retrieved from revised hip and knee replacements** *JOURNAL OF BONE AND JOINT SURGERY-BRITISH VOLUME*
Goodman, S. B., Huie, P., Song, Y., Schurman, D., Maloney, W., Woolson, S., Sibley, R.
1998; 80B (3): 531-539
- **Cellular profile and cytokine production at prosthetic interfaces. Study of tissues retrieved from revised hip and knee replacements.** *journal of bone and joint surgery. British volume*
Goodman, S. B., Huie, P., Song, Y., Schurman, D., Maloney, W., Woolson, S., Sibley, R.
1998; 80 (3): 531-539
- **Total hip arthroplasty in juvenile chronic arthritis - A consecutive series** *JOURNAL OF ARTHROPLASTY*
Haber, D., Goodman, S. B.
1998; 13 (3): 259-265
- **Norian SRS cement augmentation in hip fracture treatment - Laboratory and initial clinical results** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Bauer, T. W., Carter, D., Casteleyn, P. P., Goldstein, S. A., Kyle, R. F., Larsson, S., Stankewich, C. J., Swiontkowski, M. F., Tencer, A. F., Yetkinler, D. N., Poser, R. D.
1998: 42-50
- **Preoperative duplex ultrasonography evaluation for deep vein thrombosis in hip and knee arthroplasty patients.** *American journal of orthopedics (Belle Mead, N.J.)*
Hartford, J. M., JEFFREYS, B., Goodman, S. B.
1998; 27 (2): 123-127
- **Composite hip prosthesis design .2. Simulation** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Yildiz, H., Chang, F. K., Goodman, S.
1998; 39 (1): 102-119
- **Materials in total joint replacement** *CURRENT ORTHOPAEDICS*
SANTAVIRTA, S., KONTTINEN, Y. T., Lappalainen, R., Anttila, A., Goodman, S. B., Lind, M., Smith, L., Takagi, M., Gomez-Barrena, E., Nordsletten, L., Xu, J. W.
1998; 12 (1): 51-57
- **Histological, chemical, and crystallographic analysis of four calcium phosphate cements in different rabbit osseous sites** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Constantz, B. R., Barr, B. M., Ison, I. C., Fulmer, M. T., Baker, J., McKinney, L. A., Goodman, S. B., Gunasekaran, S., Delaney, D. C., Ross, J., Poser, R. D.
1998; 43 (4): 451-461
- **Knee arthroplasty in rheumatoid arthritis - A report from the Swedish Knee Arthroplasty Register on 4,381 primary operations 1985-1995** *ACTA ORTHOPAEDICA SCANDINAVICA*
Robertsson, O., Knutson, K., Lewold, S., Goodman, S., Lidgren, L.
1997; 68 (6): 545-553

- **Stability of open-book pelvic fractures using a new biomechanical model of single-limb stance** *JOURNAL OF ORTHOPAEDIC TRAUMA*
MacAvoy, M. C., McClellan, R. T., Goodman, S. B., Chien, C. R., Allen, W. A., van der Meulen, M. C.
1997; 11 (8): 590-593
- **Design of the femoral component for cementless hip replacement: the surgeon's perspective.** *American journal of orthopedics (Belle Mead, N.J.)*
Kelsey, D., Goodman, S. B.
1997; 26 (6): 407-412
- **Loosening and osteolysis of cemented joint arthroplasties - A biologic spectrum** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Huie, P., Song, Y., Lee, K., Doshi, A., Rushdieh, B., Woolson, S., Maloney, W., Schurman, D., Sibley, R.
1997: 149-163
- **The fibrous tissue interface surrounding well-fixed, revised, cementless acetabular components for hip replacement** *Symposium on Modularity of Orthopedic Implants*
Goodman, S. B., Huie, P., Song, Y., OConnor, M., Woolson, S. T., Maloney, W. J., Schurman, D. J., Sibley, R.
AMERICAN SOCIETY TESTING AND MATERIALS.1997: 21-32
- **Composite implant for bone replacement** *JOURNAL OF COMPOSITE MATERIALS*
Kelsey, D. J., Springer, G. S., Goodman, S. B.
1997; 31 (16): 1593-1632
- **Polyethylene and titanium alloy particles reduce bone formation - Dose-dependence in bone harvest chamber experiments in rabbits** *ACTA ORTHOPAEDICA SCANDINAVICA*
Goodman, S., Aspenberg, P., Song, Y., Regula, D., Lidgren, L.
1996; 67 (6): 599-605
- **Tourniquet release: Systemic and metabolic effects** *ACTA ANAESTHESIOLOGICA SCANDINAVICA*
Townsend, H. S., Goodman, S. B., Schurman, D. J., Hackel, A., BROCKUTNE, J. G.
1996; 40 (10): 1234-1237
- **Early outcome of total hip arthroplasty using the direct lateral vs the posterior surgical approach** *ORTHOPEDICS*
BARBER, T. C., ROGER, D. J., Goodman, S. B., Schurman, D. J.
1996; 19 (10): 873-875
- **Histomorphological reaction of bone to different concentrations of phagocytosable particles of high-density polyethylene and Ti-6Al-4V alloy in vivo** *BIOMATERIALS*
Goodman, S. B., Davidson, J. A., Song, Y., Martial, N., Fornasier, V. L.
1996; 17 (20): 1943-1947
- **Different effects of phagocytosable particles during bone formation versus remodeling** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Goodman, S., Aspenberg, P., Song, Y., Regula, D., Lidgren, L.
1996; 33 (3): 153-158
- **Heterogeneity in cellular and cytokine profiles from multiple samples of tissue surrounding revised hip prostheses** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Goodman, S. B., Knoblich, G., OConnor, M., Song, Y., Huie, P., Sibley, R.
1996; 31 (3): 421-428
- **Effect of size, concentration, surface area, and volume of polymethylmethacrylate particles on human macrophages in vitro** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Gonzalez, O., Smith, R. L., Goodman, S. B.
1996; 30 (4): 463-473
- **Benign response to particles of diamond and SiC: Bone chamber studies of new joint replacement coating materials in rabbits** *BIOMATERIALS*
Aspenberg, P., Anttila, A., KONTTINEN, Y. T., Lappalainen, R., Goodman, S. B., Nordsletten, L., SANTAVIRTA, S.
1996; 17 (8): 807-812
- **Biomechanical comparison of posterior internal fixation techniques for unstable pelvic fractures** *JOURNAL OF ORTHOPAEDIC TRAUMA*
Comstock, C. P., VANDERMEULEN, M. C., Goodman, S. B.
1996; 10 (8): 517-522

- **Influence of callus deformation time - Bone chamber study in rabbits** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Aspenberg, P., Goodman, S. B., Wang, J. S.
1996: 253-261
- **Does the immune system play a role in loosening and osteolysis of total joint replacements?** *JOURNAL OF LONG-TERM EFFECTS OF MEDICAL IMPLANTS*
Goodman, S. B.
1996; 6 (2): 91-101
- **Oxford meniscal bearing knee versus the Marmor knee in unicompartmental arthroplasty for arthrosis - A Swedish multicenter survival study** *JOURNAL OF ARTHROPLASTY*
Lewold, S., Goodman, S., Knutson, K., Robertsson, O., Lidgren, L.
1995; 10 (6): 722-731
- **INTERMITTENT MICROMOTION AND POLYETHYLENE PARTICLES INHIBIT BONE INGROWTH INTO TITANIUM CHAMBERS IN RABBITS** *JOURNAL OF APPLIED BIOMATERIALS*
Goodman, S., Aspenberg, P., Song, Y., Regula, D., Lidgren, L.
1995; 6 (3): 161-165
- **Tissue ingrowth and differentiation in the bone-harvest chamber in the presence of cobalt-chromium-alloy and high-density-polyethylene particles.** *journal of bone and joint surgery. American volume*
Goodman, S., Aspenberg, P., Song, Y., Knoblich, G., Huie, P., Regula, D., Lidgren, L.
1995; 77 (7): 1025-1035
- **TISSUE INGROWTH AND DIFFERENTIATION IN THE BONE-HARVEST CHAMBER IN THE PRESENCE OF COBALT-CHROMIUM-ALLOY AND HIGH-DENSITY-POLYETHYLENE PARTICLES** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Goodman, S., Aspenberg, P., Song, Y., Knoblich, G., Huie, P., Regula, D., Lidgren, L.
1995; 77A (7): 1025-1035
- **EFFECTS OF PARTICULATE HIGH-DENSITY POLYETHYLENE AND TITANIUM-ALLOY ON TISSUE INGROWTH INTO BONE HARVEST CHAMBER IN RABBITS** *JOURNAL OF APPLIED BIOMATERIALS*
Goodman, S., Aspenberg, P., Song, Y., Doshi, A., Regula, D., Lidgren, L.
1995; 6 (1): 27-33
- **A clinical and radiographic study of the "safe area" using the direct lateral approach for total hip arthroplasty.** *journal of arthroplasty*
Comstock, C., Imrie, S., Goodman, S. B.
1994; 9 (5): 527-531
- **CESSATION OF STRAIN FACILITATES BONE-FORMATION IN THE MICROMOTION CHAMBER IMPLANTED IN THE RABBIT TIBIA** *BIOMATERIALS*
Goodman, S. B., Song, Y., Doshi, A., Aspenberg, P.
1994; 15 (11): 889-893
- **BONE FORMATION IN THE PRESENCE OF PHAGOCYTOSABLE HYDROXYAPATITE PARTICLES** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Wang, J. S., Goodman, S., Aspenberg, P.
1994: 272-279
- **EFFECTS OF INTERMITTENT MICROMOTION VERSUS POLYMER PARTICLES ON TISSUE INGROWTH - EXPERIMENT USING A MICROMOTION CHAMBER IMPLANTED IN RABBITS** *JOURNAL OF APPLIED BIOMATERIALS*
Goodman, S., Aspenberg, P., Song, Y., Regula, D., Doshi, A., Lidgren, L.
1994; 5 (2): 117-123
- **AN IN-VITRO STUDY OF FEMORAL INTRAMEDULLARY PRESSURES DURING HIP-REPLACEMENT USING MODERN CEMENT TECHNIQUE** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Song, Y., Goodman, S. B., Jaffe, R. A.
1994: 297-304
- **SEGMENTAL WALL-MOTION ABNORMALITIES IN PATIENTS UNDERGOING TOTAL HIP-REPLACEMENT - CORRELATIONS WITH INTRAOPERATIVE EVENTS** *ANESTHESIA AND ANALGESIA*
PROPST, J. W., Siegel, L. C., Schnittger, I., FOPPIANO, L., Goodman, S. B., BROCKUTNE, J. G.

- 1993; 77 (4): 743-749
- **Lysosomal enzyme production at the interface surrounding loose and well-fixed cemented tibial hemiarthroplasties in the rabbit knee.** *Journal of investigative surgery*
Goodman, S. B., Kang, T., Smith, R. L.
1993; 6 (5): 413-418
 - **HISTOLOGICAL REACTION TO TITANIUM-ALLOY AND HYDROXYAPATITE PARTICLES IN THE RABBIT TIBIA** *BIOMATERIALS*
Goodman, S. B., Davidson, J. A., Fornasier, V. L.
1993; 14 (10): 723-728
 - **THE EFFECTS OF BONE-CEMENT POWDER ON HUMAN ADHERENT MONOCYTES MACROPHAGES IN-VITRO** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Davis, R. G., Goodman, S. B., Smith, R. L., Lerman, J. A., Williams, R. J.
1993; 27 (8): 1039-1046
 - **EFFECTS OF MECHANICAL STIMULATION ON THE DIFFERENTIATION OF HARD TISSUES** *BIOMATERIALS*
Goodman, S., Aspenberg, P.
1993; 14 (8): 563-569
 - **RADIOLOGICAL AND HISTOLOGICAL STUDY OF ASEPTIC LOOSENING USING A CEMENTED TIBIAL HEMIARTHROPLASTY IN THE RABBIT KNEE** *BIOMATERIALS*
Goodman, S. B., Magee, F. P., Fornasier, V. L.
1993; 14 (7): 522-528
 - **Bone accretion around polymethylmethacrylate and polyethylene implanted in the rabbit tibia.** *Contemporary orthopaedics*
Goodman, S. B., Fornasier, V. L., Lee, J.
1993; 26 (3): 292-297
 - **Late rupture of the posterior cruciate ligament after total knee replacement.** *The Iowa orthopaedic journal*
MONTGOMERY, R. L., Goodman, S. B., CSONGRADI, J.
1993; 13: 167-170
 - **PROSTAGLANDIN-E2 PRODUCTION BY THE MEMBRANE SURROUNDING LOOSE AND FIXATED CEMENTED TIBIAL HEMIARTHROPLASTIES IN THE RABBIT KNEE** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., CHIN, R. C., Magee, F. P.
1992: 283-287
 - **PROXIMAL FIBULAR STRESS-FRACTURE IN AN AEROBIC DANCER - A CASE-REPORT** *AMERICAN JOURNAL OF SPORTS MEDICINE*
Strudwick, W. J., Goodman, S. B.
1992; 20 (4): 481-482
 - **Preoperative templating for the equalization of leg lengths in total hip arthroplasty.** *Contemporary orthopaedics*
Goodman, S. B., HUENE, D. S., Imrie, S.
1992; 24 (6): 703-710
 - **POLYETHYLENE WEAR IN KNEE ARTHROPLASTY - A REVIEW** *ACTA ORTHOPAEDICA SCANDINAVICA*
Goodman, S., Lidgren, L.
1992; 63 (3): 358-364
 - **COMPUTERIZED TOMOGRAPHIC EVALUATION OF ACETABULAR ANATOMY** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
OSULLIVAN, G. S., Goodman, S. B., Jones, H. H.
1992: 175-181
 - **INTERMITTENT MICROMOTION INHIBITS BONE INGROWTH - TITANIUM IMPLANTS IN RABBITS** *ACTA ORTHOPAEDICA SCANDINAVICA*
Aspenberg, P., Goodman, S., TOKSVIGLARSEN, S., Ryd, L., Albrektsson, T.
1992; 63 (2): 141-145
 - **A biomechanical study of two methods of internal fixation of unstable fractures of the femoral neck. A preliminary study.** *Journal of orthopaedic trauma*
Goodman, S. B., Davidson, J. A., Locke, L., Novotny, S., Jones, H., CSONGRADI, J. J.
1992; 6 (1): 66-72

- **EFFECT OF AMPLITUDE OF MICROMOTION ON BONE INGROWTH INTO TITANIUM CHAMBERS IMPLANTED IN THE RABBIT TIBIA** *BIOMATERIALS*
Goodman, S., Aspenberg, P.
1992; 13 (13): 944-948
- **SUPPRESSION OF PROSTAGLANDIN-E2 SYNTHESIS IN THE MEMBRANE SURROUNDING PARTICULATE POLYMETHYLMETHACRYLATE IN THE RABBIT TIBIA** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., CHIN, R. C., Chiou, S. S., Lee, J. S.
1991: 300-304
- **MODULATION OF THE MEMBRANE SURROUNDING PARTICULATE CEMENT AND POLYETHYLENE IN THE RABBIT TIBIA** *1990 CONF ON BIOINTERACTIONS (BIOINTERACTIONS 90)*
Goodman, S. B., Lee, J. S., CHIN, R. C., Chiou, S. S.
ELSEVIER SCI LTD.1991: 194-96
- **QUANTITATIVE COMPARISON OF THE HISTOLOGICAL EFFECTS OF PARTICULATE POLYMETHYLMETHACRYLATE VERSUS POLYETHYLENE IN THE RABBIT TIBIA** *ARCHIVES OF ORTHOPAEDIC AND TRAUMA SURGERY*
Goodman, S. B., Fornasier, V. L., Kei, J.
1991; 110 (3): 123-126
- **Mechanical overload of a single compartment induces early degenerative changes in the rabbit knee: a preliminary study.** *Journal of investigative surgery*
Goodman, S. B., Lee, J., Smith, R. L., Csongradi, J. C., Fornasier, V. L.
1991; 4 (2): 161-170
- **THE EFFECTS OF BULK VERSUS PARTICULATE TITANIUM AND COBALT CHROME ALLOY IMPLANTED INTO THE RABBIT TIBIA** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Goodman, S. B., Fornasier, V. L., Lee, J., Kei, J.
1990; 24 (11): 1539-1549
- **PROSTAGLANDIN-E2 LEVELS IN THE MEMBRANE SURROUNDING BULK AND PARTICULATE POLYMETHYLMETHACRYLATE IN THE RABBIT TIBIA - A PRELIMINARY-STUDY** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., CHIN, R. C.
1990: 305-309
- **Comparison of radiographic parameters for analysis of normal and dysplastic hips in the adult.** *Contemporary orthopaedics*
Goodman, S. B.
1990; 20 (5): 505-511
- **THE HISTOLOGICAL EFFECTS OF THE IMPLANTATION OF DIFFERENT SIZES OF POLYETHYLENE PARTICLES IN THE RABBIT TIBIA** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH*
Goodman, S. B., Fornasier, V. L., Lee, J., Kei, J.
1990; 24 (4): 517-524
- **BENIGN VERSUS PATHOLOGICAL COMPRESSION FRACTURES OF VERTEBRAL BODIES - ASSESSMENT WITH CONVENTIONAL SPIN-ECHO, CHEMICAL-SHIFT, AND STIR MR IMAGING** *RADIOLOGY*
Baker, L. L., Goodman, S. B., Perkash, I., Lane, B., Enzmann, D. R.
1990; 174 (2): 495-502
- **Compartment syndrome after intramedullary nailing of the tibia.** *journal of bone and joint surgery. American volume*
TISCHENKO, G. J., Goodman, S. B.
1990; 72 (1): 41-44
- **COMPARTMENT SYNDROME AFTER INTRAMEDULLARY NAILING OF THE TIBIA** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
TISCHENKO, G. J., Goodman, S. B.
1990; 72A (1): 41-44
- **The histology of a failed shelf procedure.** *Orthopaedic review*
SMITH, J. T., Goodman, S. B., Fornasier, V. L.
1989; 18 (10): 1069-1072

- **Postoperative blood salvage using the Cell Saver after total joint arthroplasty.** *journal of bone and joint surgery. American volume*
SEMKIW, L. B., Schurman, D. J., Goodman, S. B., Woolson, S. T.
1989; 71 (6): 823-827
- **POSTOPERATIVE BLOOD SALVAGE USING THE CELL SAVER AFTER TOTAL JOINT ARTHROPLASTY** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
SEMKIW, L. B., Schurman, D. J., Goodman, S. B., Woolson, S. T.
1989; 71A (6): 823-827
- **A CLINICAL PATHOLOGIC BIOCHEMICAL-STUDY OF THE MEMBRANE SURROUNDING LOOSENED AND NONLOOSENED TOTAL HIP ARTHROPLASTIES** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., CHIN, R. C., Chiou, S. S., Schurman, D. J., Woolson, S. T., MASADA, M. P.
1989: 182-187
- **SUPRACONDYLAR FRACTURE OF THE FEMUR AFTER GUEPAR TOTAL KNEE ARTHROPLASTY - A NEW TREATMENT METHOD** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
ROSCOE, M. W., Goodman, S. B., Schatzker, J.
1989: 221-223
- **THE ACETABULAR TEARDROP AND ITS RELEVANCE TO ACETABULAR MIGRATION** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Adler, S. J., Fyhrie, D. P., Schurman, D. J.
1988: 199-204
- **THE EFFECTS OF BULK VERSUS PARTICULATE POLYMETHYLMETHACRYLATE ON BONE** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Fornasier, V. L., Kei, J.
1988: 255-262
- **The effects of bulk versus particulate ultra-high-molecular-weight polyethylene on bone.** *journal of arthroplasty*
Goodman, S. B., Fornasier, V. L., Kei, J.
1988; 3: S41-6
- **Outcome of infected total hip arthroplasty. An inclusive, consecutive series.** *journal of arthroplasty*
Goodman, S. B., Schurman, D. J.
1988; 3 (2): 97-102
- **INTERMEDIATE RESULTS OF A STRAIGHT STEM PROSTHESIS IN PRIMARY TOTAL HIP-ARTHROPLASTY** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Goodman, S. B., Schatzker, J.
1987: 111-122
- **HIP MOTION CHANGES IN HEMOPHILIA** *JOURNAL OF PEDIATRIC ORTHOPAEDICS*
Goodman, S., Gamble, J. G., Dilley, M.
1987; 7 (6): 664-666
- **Revision hip surgery using the straight-stem Muller prosthesis.** *journal of arthroplasty*
Goodman, S. B., Schatzker, J.
1987; 2 (2): 83-88
- **Acetabular lucent lines and mechanical stress in total hip arthroplasty.** *journal of arthroplasty*
Goodman, S. B., Carter, D. R.
1987; 2 (3): 219-224
- **INTERNAL-FIXATION OF FEMORAL-NECK FRACTURES - A PROSPECTIVE-STUDY** *CANADIAN JOURNAL OF SURGERY*
Goodman, S. B., Schatzker, J.
1986; 29 (5): 351-356
- **FRACTURE OF A POLYETHYLENE ACETABULAR CUP - A CASE-REPORT** *CANADIAN JOURNAL OF SURGERY*
Heller, M., Schatzker, J., Goodman, S. B.
1986; 29 (1): 48-49

- **A study of implant failure in the Wagner resurfacing arthroplasty.** *journal of bone and joint surgery. American volume*
Bell, R. S., Schatzker, J., Fornasier, V. L., Goodman, S. B.
1985; 67 (8): 1165-1175
- **THE EFFECT OF POLYMETHYLMETHACRYLATE ON BONE - AN EXPERIMENTAL-STUDY** *ARCHIVES OF ORTHOPAEDIC AND TRAUMA SURGERY*
Goodman, S. B., Schatzker, J., SUMNERSMITH, G., Fornasier, V. L., GOFTEN, N., Hunt, C.
1985; 104 (3): 150-154
- **OLLIERS DISEASE WITH MULTIPLE SARCOMATOUS TRANSFORMATIONS** *HUMAN PATHOLOGY*
Goodman, S. B., Bell, R. S., Fornasier, V. L., DEDEMETER, D., Bateman, J. E.
1984; 15 (1): 91-93
- **SUPERVOLTAGE RADIOTHERAPY IN THE TREATMENT OF DIFFICULT GIANT-CELL TUMORS OF BONE** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Bell, R. S., Harwood, A. R., Goodman, S. B., Fornasier, V. L.
1983: 208-216
- **CASE REPORT-246 - OSTEOLYSIS OF THE ILIUM ASSOCIATED WITH A LOOSE ACETABULAR CUP FOLLOWING TOTAL HIP-ARTHROPLASTY, SECONDARY TO FOREIGN-BODY REACTION TO POLYETHYLENE AND METHYL-METHACRYLATE** *SKELETAL RADIOLOGY*
Bell, R. S., HAERI, G. B., Goodman, S. B., Fornasier, V. L.
1983; 10 (3): 201-204
- **COCCYGEAL GLOMUS TUMORS - A CASE OF MISTAKEN IDENTITY** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Bell, R. S., Goodman, S. B., Fornasier, V. L.
1982; 64 (4): 595-597