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EDUCATION

University of Pennsylvania, Department of Bioengineering, Philadelphia, PA
Ph.D. in Bioengineering, Defended December 1994, Conferred May 1995.
Concentration in biomechanics.
Dissertation title: "Ultrasound Propagation through the Calcaneus: Dependence on 'Bone Quality' and Prediction by Biot's Theory"
Advisor: John L. Williams, Ph.D.
Committee Chair: Solomon Pollack, Ph.D.

University of Pennsylvania, Department of Bioengineering, Philadelphia, PA
M.S.E. in Bioengineering, May 1992.

The Johns Hopkins University, Departments of Biomedical Engineering and Mechanical Engineering, Baltimore, MD
B.S. in Biomedical Engineering and Engineering Mechanics with Departmental Honors, May 1990. Minor in French.
Undergraduate Research Advisor: William Hunter, Ph.D.
Senior Design Project: A Pneumatic Device to Rotate Patients in Bed

HONORS AND AWARDS

Robert M. Nerem Education and Mentorship Medal, American Society for Mechanical Engineers, 2022
Selected to serve on National Academy of Medicine Commission on a Global Roadmap for Healthy Longevity, 2019 – 2022
Theo C. Pilkington Outstanding Educator Award, Biomedical Engineering Division, American Society for Engineering Education, 2019
Elected Fellow, Biomedical Engineering Society (BMES), 2018
Elected Fellow, American Institute of Medical & Biological Engineering (AIMBE), 2018
SAE Faculty Advisor Award, 2016 (National-level Award)
Executive Leadership in Academic Technology & Engineering (ELATE) Fellow, 2015 - 2016
Excellence in Teaching Award, College of Engineering, Wayne State University, 2012
Outstanding Faculty Service Award, College of Engineering, Wayne State University, 2011, 2012
Elected Fellow, American Society of Mechanical Engineering (ASME), 2011
Ralph H. Isbrandt Automotive Safety Engineering Award, for "Biomechanical Investigation of Thoracolumbar Spine Fractures in Indianapolis-type Racing Car Drivers during Frontal Impacts," T. Troxel, J. Melvin, P. Begeman, M. Grimm, Society of Automotive Engineers (SAE), 2006.
Award for Research Excellence, Society for Maternal Fetal Medicine, for "Effect of Clinician Applied Maneuvers on Fetal Brachial Plexus Strain During Shoulder Dystocia," B. Gonik, R. Costello, N. Zhang, and M. Grimm, February 2004.
Whitaker Foundation Academic Leadership Fellow, June 2003
Award for Research Excellence, Society for Maternal Fetal Medicine, for "Defining Forces Associated with Shoulder Dystocia: Use of a Dynamic Computer Model (MADYMO)," B. Gonik, N. Zhang, and M. Grimm, January 2002.
NSF Visiting Professorship for Women Award, 1994 - 1997
NIH Training Grant, University of Pennsylvania, Department of Orthopaedic Surgery, 1990-1994
Tau Beta Pi, Inducted 1989
Dept of Biomedical Engineering Undergraduate Research Award, The Johns Hopkins University, 1990
NIH Summer Research Fellowship, The Johns Hopkins University, Dept of Biomedical Engineering, 1989
Beneficial Hodson Scholar, The Johns Hopkins University, 1986-1990
Iacocca Scholar, 1986-1990
National Merit Scholar, 1986-1987

RESEARCH EXPERIENCE

Computational Reproductive Biomechanics Laboratory, Michigan State University, E. Lansing, MI
Wielenga Creative Engineering Endowed Professor, 2019 to 2024

Conducted research on the effect of forces of labor and delivery on the neonate. Collaborating with experimental researchers across the US. (On leave from MSU 2022 to 2024)

Wielenga Creative Engineering Research Program, Michigan State University, E. Lansing, MI
Wielenga Creative Engineering Endowed Professor, 2019 to 2023

Developed programs and conducted pedagogical research to support student success in engineering education. Also supported research into the creative aspects of engineering design science. (On leave from MSU 2022 to 2024)

Bioengineering Center, Wayne State University, Detroit, MI
Associate Professor, 2002 to 2018
Assistant Professor, 1997 to 2002
Visiting Assistant Professor, 1994 to 1997

Conducted research on the effects of age-related changes in cortical and trabecular bone on the occurrence of both atraumatic and automotive impact induced vertebral fractures. Includes finite element analysis, mechanical testing, acoustic microscopy, and impact testing. Developed ultrasound techniques for the assessment of soft tissue properties. Developed models to assess forces during shoulder dystocia. Supervised team of graduate students.

Department of Orthopaedic Surgery, School of Medicine, Wayne State University, Detroit, MI
Director of Orthopaedic Biomechanics, 1995 to 2007
Adjunct Faculty Member, 1995 to 2020

Supervised research of orthopaedic surgery residents and graduate students in the area of orthopaedic biomechanics, including shoulder kinematics, implant assessment, and occupant comfort studies. Collaborating with attending physicians conducting biomechanics research.

McKay Laboratory of Orthopaedic Surgery Research, University of Pennsylvania, Philadelphia, PA
Research Associate, 1990 to 1994

Conducted research on the mechanical and structural properties of trabecular bone and the use of non-invasive techniques to assess these properties. Included mechanical testing, image analysis, specimen preparation, ultrasound testing, and collaboration with researchers in radiology.

Cardiac Mechanics Laboratory, The Johns Hopkins University, Baltimore, MD
Research Assistant, 1988 to 1990

Conducted research on the deformation of sarcomeres in the beating canine heart using an implanted marker technique. Included mechanical deformation analysis, computer analysis using ASYST, use of fluoroscopy, and assistance in surgery.

TEACHING AND ADMINISTRATIVE EXPERIENCE

College of Nanotechnology, Science, and Engineering, University at Albany (SUNY), Albany, NY
Dean and Professor of Engineering, 2022 to Present

Oversee all missions of the College, including research, education, and connection with the broader community. (Formerly known as College of Engineering and Applied Sciences, until August 2023)

Department of Mechanical Engineering, Michigan State University, E. Lansing, MI
Wielenga Creative Engineering Endowed Professor, 2019 to 2022

Taught courses in biomechanics and mechanical engineering. Overseeing graduate student research in biomechanics and design. Developing strategies to improve student success in engineering studies. Secondary appointment in Department of Biomedical Engineering.

Civil, Mechanical, and Manufacturing Innovation Division (CMMI), National Science Foundation, Alexandria, VA

Program Director, Biomechanics & Mechanobiology Program, 2018 to 2019

Overseeing funding program related to biomechanics, including supervision of grant review panels and discussions with potential and current grantees. Advancing partnerships within NSF and with other governmental agencies to support the research and scientific community.

Chemical, Biological, Environmental and Transport Division (CBET), National Science Foundation, Arlington, VA

Program Director, Engineering of Biomedical Systems Program and Disability & Rehabilitation Engineering Program, 2016 to 2018

Overseeing funding programs related to biomedical engineering, including supervision of grant review panels and discussions with potential and current grantees. Developing partnerships within NSF and with other governmental agencies to support the research and scientific community.

Office of the Provost, Wayne State University, Detroit, MI

Special Advisor on Transfer Programs to the Associate President for Educational Outreach, 2015 to 2016

Interim Director, Transfer Student Success Center, 2013 to 2014

Responsible for developing new University Center whose mission is to support transfer students from initial consideration of Wayne State through graduation, including development of transfer programs, academic advising, peer mentoring, and communication.

Work with University, schools/colleges, and departments on development and implementation of curricular programs to support transfer students.

College of Engineering, Wayne State University, Detroit, MI

Associate Dean for Academic Affairs, 2005 to 2010

Interim Associate Dean for Academic Affairs, 2003 to 2005

Responsible for academic programs and student academic oversight, including accreditation and program development

Department of Biomedical Engineering, Wayne State University, Detroit, MI

Student Success Coordinator, 2015 to 2016

Assessment Coordinator, 2014 to 2015

Undergraduate Program Chair, 2010 to 2014

Associate Chair, 2002 to 2003

Associate Professor, 2002 to 2018

Coordinated establishment of Department of Biomedical Engineering in October, 2002, including curriculum enhancement

Oversaw development of undergraduate curriculum for implementation in 2010, including ABET accreditation

Continued teaching courses in biomechanics, biomaterials, and physiology

Department of Mechanical Engineering, Wayne State University, Detroit, MI

Associate Chair, Graduate Program in Biomedical Engineering, 1998 to 2002

Assistant Professor, 1997 to 2002

Visiting Assistant Professor, 1994 to 1997

Oversaw development of curriculum for new Graduate Program in Biomedical Engineering at both M.S. and Ph.D. level.

Developed and taught graduate courses in Introductory Biomaterials, Advanced Topics in Biomaterials, Experimental Methods in Biomaterials, Musculoskeletal Biomechanics, Tissue Biomechanics

Taught sections on Muscular, Cardiovascular, and Respiratory systems of Engineering Physiology course (graduate level).

Taught courses in Orthopaedic Biomechanics and Spine Biomechanics to Orthopaedic Surgery residents at Hutzel and Grace Hospitals, Detroit, in preparation for the AAOS In-Service Examination.

Department of Bioengineering, University of Pennsylvania, Philadelphia, PA

Teaching Assistant, 1991

Served as TA for undergraduate course in Biomaterials. Included developing and presenting two lectures as well as writing and correcting exam and homework problems.

PROFESSIONAL AFFILIATIONS

American Institute for Biological & Medical Engineering – Fellow (Elected Fellow, 2018; Chair, Academic Council, 2020-2022; Member of Diversity Committee, 2019 to present)

American Society of Mechanical Engineers - Fellow (Elected Fellow, 2011; Member, 1993 to present; Bioengineering Division Chair, 2012-2013; Past Chair, 2013-2014; Secretary, 2011-2012; Secretary Elect, 2010-2011; Student Affairs Representative, Bioengineering Division Executive Committee, 2006-2010; Chair, Bioengineering Division Membership Development Committee, 2003-2006; Member Bioengineering Technical Committees – Solids and Education; Student Paper Competition Chair, 2006 Summer Bioengineering Conference; 2014 World Congress of Biomechanics Conference Co-Chair, ASME; Lissner Medal Committee – Member 2014-2018, Chair 2018-2021; Grood Medal Committee – Chair, 2022-2025)

American Society for Engineering Education (1998 to present; Vice-Chair, Career Development and Awards, 2004 – 2005, 2005 - 2006; Vice-Chair, Curriculum Development, Bioengineering Division, 2003 – 2004; Member, Board of Directors - Bioengineering Division, 2000 – 2003, 2006-2009)

Biomedical Engineering Society – Fellow (Elected Fellow, 2018; Member, 1986 to present; Fellow Selection Committee 2020 – 2024; (ABET) Accreditation Activities Committee, Chair 2023-2025, EAC Commissioner 2015-2019, Quality Assurance Coordinator 2013-2016, Member-at-Large 2011-2013; Member, Finance Committee, 2007-2010; President, Student Chapter, The Johns Hopkins University, 1989-1990)

Society of Automotive Engineers (1995 to 2019)

UNIVERSITY SERVICE

University at Albany

Co-Chair, Climate Research Taskforce, State University of New York, 2025 – Present
Search Committee Co-Chair, Dean of SPH/SSW, 2024
Search Committee Co-Chair, Director of Institute on Artificial Intelligence, 2024
Steering Committee, CNSE-UAlbany Reunification, 2023

Michigan State University

Chair, College of Engineering Strategic Planning Committee, 2022
Chair, Biomedical Engineering Faculty Search Committee, 2022
Mechanical Engineering Advisory Committee, 2021 – 2023
Mechanical Engineering Undergraduate Program Committee, (consultant – 2021-2022)
Biomedical Engineering DEI Working Group, 2022
Biomedical Engineering, Curriculum Committee (2022; consultant – 2021)
Chair, College of Engineering Working Group on Remote Active Learning, 2020
Engineering Undergraduate Studies Committee, 2020-2021
Community Engagement Scholarship Award Selection Committee, 2020-2021
Student Transitions Faculty Learning Community – Working Group of the Spartan Transitions Project, 2019-2020

Wayne State University

Steering Committee, Higher Learning Commission Reaffirmation of Accreditation, 2015-2017
Special Advisor on Transfer Programs, Office of Educ Outreach, Provost's Office, 2015-2016
Student Success Coordinator, Department of Biomedical Engineering, 2015-2016
Assessment Coordinator, Department of Biomedical Engineering, 2014-2015
Interim Director, Transfer Student Success Center, Office of Educ Outreach, Provost's Office, 2013-2015
Undergraduate Program Chair, Department of Biomedical Engineering, 2010-2014
Strategic Recruitment & Yield Committee, 2013-2015

Associate Dean for Academic Affairs, College of Engineering, 2005-2010
Interim Associate Dean for Academic Affairs, College of Engineering, 2003-2005
Advisory Board, Center for Chicano-Borica Studies, 2007-2010
Steering Committee, Center for Translational Science Award, 2006-2012
Learning Community Assessment Committee, 2006-2011
NCA Accreditation Steering Committee, 2005-2006
Banner Users Group – Student Services, 2004-2010
Transfer Task Force, 2004-2010
International Recruiting Committee, 2004-2010
Formula SAE Faculty Advisor, 2003 - Present
Ex Officio Representative, Graduate Council, 2003-2010
Honors Council, University Honors Program, 2003-2010
Advisory Board, Metropolitan Programs, 2003-2010
Grading Task Force, 2004-2006
University FERPA Committee, 2004-2006
Orthopaedic Research Committee, 1995-2006
Search Committee, Director of Undergraduate Admissions, 2009
Search Committee, Assistant Vice President for Undergraduate Programs, 2005
Search Committee, Orientation Chair, 2003
Reviewer, Women and Minority Faculty Summer Research Grants, 2000-2005, 2007
Associate Chair, Department of Biomedical Engineering, 2002–2003
BME Representative, Faculty Assembly Executive Committee, 2001-2003
Coordinator, Research Experiences for Undergraduates Program, Department of Mechanical Engineering, 1995-2003
Chair, Business Operations Committee, College of Engineering, 2002
Associate Chair, Graduate Program in Biomedical Engineering, 1998-2002
Budget Committee, Department of Mechanical Engineering, 1999-2001
Michigan Life Science Research Corridor, Bioengineering Task Force, State Representative, 1999-2000
Wayne State University (MLSRC) Bioengineering Task Force, 1999–2000
College of Engineering Blue Ribbon Recruitment Committee, 1997-1999
Faculty Advisor, Society of Women Engineers, 1997-1999
Coordinator, Program Development Committee, Biomedical Engineering Graduate Program, 1996-1998
Undergraduate Curriculum Committee, Department of Mechanical Engineering, 1994-1998
Mechanical Engineering Representative, Engineering Student Faculty Board, 1997-1998
College of Engineering Web Page Committee, 1997
Bioengineering Seminar Coordinator, 1994-1997
Curriculum Committee, Bioengineering Graduate Program, 1995
Faculty Secretary, Department of Mechanical Engineering, 1994-1995

University of Pennsylvania

Graduate Student Associations Council, 1991-1994 (President, 1992-1993; Newsletter Editor, 1991-1992)
University HIV/AIDS Task Force Policy Committee, 1992-1993
University Student Health Insurance Review Team, 1992-1994
University of Pennsylvania Trustees' Academic Policy Committee, 1993-1994
University Council, 1992-1993
Graduate Council of Faculties, 1992-1994
Graduate and Professional Student Assembly, 1992-1994

The Johns Hopkins University

Undergraduate Representative to Department of Biomedical Engineering Faculty, 1985-1986
Dean's Committee, GWC Whiting School of Engineering, 1985-1986

PROFESSIONAL SERVICE

Member, National Academy of Medicine Commission on a Global Roadmap for Healthy Longevity, 2019 – 2023.
Board of Delegates, ABET, 2020 – Present
Commissioner, Engineering Accreditation Commission, ABET, 2015 – 2020
Co-Chair, Whitehouse Task Force on Technology for Aging, 2016 - 2019
Member, Crash Safety Advisory Board, Kettering University, Flint, Michigan, 2006 - 2010
Member, External Advisory Board, FORTE Program, University of Wisconsin-Milwaukee, 2008 - 2012
Program Evaluator, North Central Association Higher Learning Commission, 2006 - 2008
Review Panel Member
- Department of Defense
- National Science Foundation
- National Institutes of Health

Associate Editor, Journal of Translational Engineering in Health and Medicine, 2019 – 2022
Associate Editor, ASME Open Journal, 2021 - Present
Guest Editor, Journal of Biomechanical Engineering (Education Issue), 2019
Editorial Reviewer
- Advances in Engineering Education
- American Journal of Obstetrics and Gynecology
- Annals of Biomedical Engineering
- Biomechanics and Modeling in Mechanobiology
- Biomedical Engineering Education
- Bone
- British Journal of Obstetrics and Gynecology
- Current Opinion in Biomedical Engineering
- Frontiers Bioengineering
- Interface Focus
- International Journal of Crashworthiness
- Journal of Applied Biomechanics
- Journal of Biomechanics
- Journal of Biomechanical Engineering
- Journal of Orthopaedic Trauma
- Journal of Translational Engineering in Health & Medicine
- National Academy of Engineering
- PLOS-ONE
- Society for Automotive Engineers

PUBLICATIONS

<u>Refereed Publications</u> (2650 citations)

Wright, S.J., and Grimm, M.J., "Understanding Patterns of Neonatal Brachial Plexus Palsy Using a 3D Finite Element Model,". *IntechOpen*. 2025, (In press) (https://doi.org/10.5772/intechopen.1010022)

Grimm, M.J., Ghaemi, R.V., and Mays, E., "IDEAL Creative Biomechanics Project and the Impact on Students' Engagement (Phase III)," ASEE, 14 pages, 2024 (https://peer.asee.org/47543).

Wright, S.A., Grimm, M.J., "Investigating the Effect of Anatomical Variations in the Response of the Neonatal Brachial Plexus to Applied Force: Use of a Two-Dimensional Finite Element Model, *PLoS ONE,* 19(5):e0303511, 2024, (https://doi.org/10.1371/journal.pone.0303511).

Tao, R., Grimm, M.J., "Simulation of Uterus Active Contraction and Fetus Deliver in LS-DYNA" *Journal of Biomechanical Engineering,* 2024, (https://doi.org/10.1115/1.4065341). Epub ahead of print.

Tao, R., Grimm, M.J., "Simulation of the Childbirth Process in LS-DYNA," *Journal of Biomechanical Engineering,* 2024, (https://doi.org/10.1115/1.4064594). Epub ahead of print.

Iaconianni, J.A., Balasubramanian, S., Grimm, M.J., Gonik, B., and Singh, A., "Studying the Effects of Shoulder Dystocia and Neonate-Focused Delivery Maneuvers on Brachial Plexus Strain: A Computational Study," *Journal of Biomechical Engineering,*146(2):021009, 2024 (https://doi.org/10.1115/1.4064313).

Scott, J., D'Archangelo, M., Olness, B., Grimm, M., and Bush, T., "An Assessment of Current Barriers to Accessibility in Public Transportation Pick Up/Drop Off Zones and How Solutions may be Applied to Autonomous Vehicles," *SAE Technical Paper 2023-01-0713*, 2023, (https://doi.org/10.4271/2023-01-0713).

Pruitt, B.L., Chesler, N.C., Seltzer, R.*, Eniola-Adefeso,* O., Margulies, S.S., Salazar Campo, M., Simon, S.I., Grimm, M.J., Mandell, S., Alleyne, A., West, J.L., and Desai, T.A., "Insights from an AIMBE Workshop: Diversifying Paths to Academic Leadership," *Biomed Eng Education,* 2023 (https://doi.org/10.1007/s43683-023-00105-7).

Grimm, M.J., "How to Build Your Mentoring Tree – Insight Gained from a 36 Year Career in Biomedical Engineering," *J Biomech Engg,* 145(8):084701, 2023 (https://doi.org/10.1115/1.4056554).

Ye, C., Li, W., Li, Z., Maguluri, G., Grimble, J., Bonatt, J., Miske, J., Iftimia, N., Lin, S., Grimm, M., "Smart Steering Sleeve (S3): A Non-Intrusive and Integrative Sensing Platform for Driver Physiological Monitoring," *Sensors*, 22(19):7296, 2022 (https://doi.org/10.3390/s22197296).

Chen, S., Routzong, M.R., Abramowitch, S.D., and Grimm, M.J., "A Computational Procedure to Derive the Curve of Carus for Childbirth Computational Modeling," *Journal of Biomechanical Engineering*, 145(1):011002, 2023 (https://doi.org/10.1115/1.4055108).

Grimm, M., Averill, R., Roccabianca, S., and Recktenwald, G., "The Differing Impact of a New Assessment Framework on Student Success – The Effect of Socioeconomic Factors," ASEE, 9 pages, 2022 (https://peer.asee.org/41628).

Billiar, K., Gaver, D.P., Barbee, J., Singh, A., DesJardins, J.D., Pruitt, B., Tranquillo, J., Gaudette, G., Winkelstein, B., Makowski, L., Amos, J.R., Saterbak, A., LeDoux, J., Helmke, B., Grimm, M., Benkeser, P., Dourte Segan, L., Pfiseter, B., Meaney, D., Arinzeh, T., Margulies, S., Learning Environments and Evidence-Based Practices in Bioengineering and Biomedical Engineering," *Biomedical Engineering Education*, 2022 (https://doi.org/10.1007/s43683-021-00062-z).

Mays, E., Troutman, V.A., Grimm, G.W.J., Pollack, E.R., and Grimm, M.J., "Work-in-Progress: Creative Biomechanics Project using an Interactive Digital Experience as an Alternative Laboratory (IDEAL) – Phase 2," ASEE, 3 pages, 2021 (https://peer.asee.org/38134).

Pollack, E.R., Sarrafian, G., and Grimm, M.J., "What do Mechanical Engineers Do? A Content Analysis of Mechanical Engineering Job Descriptions," ASEE, 16 pages, 2021 (https://peer.asee.org/38040).

Troutman, V.A., and Grimm, M.J., "Interactive Digital Experience as an Alternative Laboratory (IDEAL): Creative Investigation of Forensic Biomechanics," *Journal of Applied Biomechanics*, Online ahead of Print, 2021 (DOI: 10.1123/jab.2020-0171).

Grimm, M.J., "Forces Involved with Labor and Delivery – A Biomechanical Perspective," *Annals of Biomedical Engineering*, 49:1819-1835, 2021 (Invited) (DOI: 10.1007/s10439-020-02718-3).

Chen, S. and Grimm, M.J., "Childbirth Computational Models: Characteristics and Applications," *Journal of Biomechanical Engineering*, 143(5):050801, 2021 (DOI: 10.1115/1.4049226).

Grimm, M.J., "Design as a Feature of BME Education – Satisfying ABET and Preparing Students to Address Clinical Needs," *Journal of Biomechanical Engineering,* 142(11):110802, 2020 (DOI: 10.1115/1.4047219).

Pollack, E.R., Recktenwald, G., and Grimm, M.J., "Effects of Note Formatting on Student Learning – Implications For Accessibility And Diverse Minds," *ASEE,* 10 pages, 2020 (DOI: 10.18260/1-2--34509, https://peer.asee.org/34509).

Recktenwald, G., Grimm, M.J., Averill, R., and Roccabianca, S., "Effects of a New Assessment Model on Female Engineering Student Performance," *ASEE*, 9 pages, 2020 (DOI: 10.18260/1-2--34507, https://peer.asee.org/34507).

King, A.I., and Grimm, M.J., "Herbert R. Lissner – The Father of Impact Biomechanics," *Journal of Biomechanical Engineering*, 142(3):030801-1-6, 2020 (DOI: 10.1115/1.4046299).

Grimm, M.J., "Engineering and Women's Health – A Slow Start but Gaining Momentum," *Interface Focus* (special issue on Engineering and Women's Health), 9(4) 20090017, 2019 (DOI: 10.1098/rsfs.2019.0017).

Rose, L.F., Wolf, E.J., Brindle, T., Cernich, A., Dean, W.K., Dearth, C.L., Grimm, M., Kusiak, A., Nitkin, R., Potter, K., Randolph, B.J., Wang F., and Yamaguchi, D., "The Convergence of Regenerative Medicine and Rehabilitation: Federal Perspectives," *Nature Regenerative Medicine*, 3:19 (pages 1-7), 2018 (DOI: 10.1038/s41536-018-0056-1).

Grimm, M.J., "Maternal Endogenous Forces and Shoulder Dystocia," *Clinical Obstetrics and Gynecology*, 59(4):820-829, 2016 (Invited) (DOI: 10.1097/GRF.0000000000000230).

Gherman, R.B., Chauhan, S.P., Clark, S.L., Gonik, B., Grimm, M.J., Grobman, W.A., Ouzounian, J.G., Yang, L.J., Goldsmith, J.P., Senikas, V., Breeden, J.T., Burkman, R.T., Chescheir, N.C., Hill, W.C., Hornyak, J.E., Houtrow, A., Michaud, L.J., Nelson, V.S., Rouse, D.J., Scott, J.R., Stubblefield, E.T., Strunk, A.L., Klagholz, J.C., and Lumalcuri, J., "Executive Summary: Neonatal Brachial Plexus Palsy," *Obstetrics and Gynecology*, 123(4):902-904, 2014 (DOI: 10.1097/01.AOG.0000445582.43112.9a)

Ahadi, G., Welch, C., Grimm, M., Fisher, D., Zadicario, E., Ernstrom, K., Voie, A., and Hoelscher, T., "Transcranial Sonothrombolysis Using High Intensity Focused Ultrasound: Impact of Increasing Output Power on Clot Weight Loss and Clot Fragmentation" *Journal of Therapeutic Ultrasound,* 1:22, 2013, (DOI: 10.1186/2050-5736-1-22)

Gonik, B., and Grimm, M.J., "Response to 'Analysis of Shoulder Dystocia Maneuvers Using a Computer Model'," American Journal of Obstetrics and Gynecology, 204(6):e14-e15, 2011, (DOI: 10.1016/j.ajog.2010.12.031)

Grimm, M.J., Costello, R., and Gonik, B., "Effect of Clinician-Applied Maneuvers on Brachial Plexus Stretch during a Shoulder Dystocia Event: Assessment through Computer Modeling," American Journal of Obstetrics and Gynecology, 203(4):339.e1-5, 2010 (DOI: 10.1016/j.ajog.2010.05.002).

Amenson, T.T., Begeman, P.C., Melvin, J.W., and Grimm, M.J., "Development of the MADYMO Race Car Driver Model for Frontal Impact Simulation and Thoracolumbar Spine Injury Prediction in Indianapolis-type Racing Car Drivers," SAE Paper 2008-01-2975, 2008 Motorsports Engineering Conference, December, 2008 (DOI: 10.4271/2008-01-2975).

Yeni, Y.N., Shaffer, R.R., Baker, K.C., Dong, X.N., Grimm, M.J., Les, C.M., and Fyhrie, D.P., "The Effect of Yield Damage on the Viscoelastic Properties of Cortical Bone Tissue as Measured by Dynamic Mechanical Analysis," Journal of Biomedical Materials Research, 82(3):530-537, 2007 (DOI: 10.1002/jbm.a.31169)

Grimm, M.J., "An Engineering Bridge Program: Improving the Success Rate of Under-Prepared Students in Engineering." *ASEE*, AC2007-1503, 12.206.1-12.206.12, 2007 (DOI: 10.18260/1-2--2317, https://peer.asee.org/2317).

Troxel, T.B., Melvin, J.W., Begeman, P.C., and Grimm, M.J., "Biomechanical Investigation of Thoracolumbar Spine Fractures in Indianapolis-type Racing Car Drivers during Frontal Impacts," SAE Paper 06MSEC-18, 2006 Motorsports Engineering Conference, December, 2006 (DOI: 10.4271/2006-01-3633).

Lippert, S.A., and Grimm, M.J., "High Frequency Mechanical Properties of Brain Tissue," Biorheology, 41(6):681-691, 2004 (https://content.iospress.com/articles/biorheology/bir345).

Gonik, B., and Grimm, M., "Response to 'Computer Modeling of Shoulder Dystocia," American Journal of Obstetrics and Gynecology, 190(6):1805, 2004 (DOI: 10.1016/j.ajog.2004.01.088).

Gonik, B., Zhang, N., Grimm, M.J., "Prediction of Brachial Plexus Stretching During Shoulder Dystocia Using a Computer Simulation Model," American Journal of Obstetrics and Gynecology, 189(4):1168-1172, 2003 (DOI: 10.1067/s0002-9378(03)00578-7).

Markel, D.C., Critchfield, J., Chaffin, A., Wooley, P.H., and Grimm, M.J., "Cement Pressurization after Provisional Repair of Femoral Cortical Defects," American Journal of Orthopedics, 32(5):229-233, 2003.

Gonik, B., Zhang, N., Grimm, M.J., "Defining Forces Associated with Shoulder Dystocia: Use of a Mathematical Dynamics Computer Model (MADYMO)," American Journal of Obstetrics and Gynecology, 188(4):1068-1072, 2003 (DOI: 10.1067/mob.2003.250).

Lippert, S.A., Rang, E.M., and Grimm, M.J. "The 'Wave-In-A-Tube' Method for Estimation of Mechanical Properties of Viscoelastic Materials Using Ultrasound," Journal of Materials Testing, 31(1):73-75, 2003.

Markel, D., Hora, N., and Grimm, M.J., "Initial Press-Fit Stability of Porous Coated Acetabular Cups," International Orthopaedics, 26(2):72-75, 2002.

Cao, K., Grimm, M.J, and Yang, K.H., "Load Sharing within the Human Lumbar Vertebral Body Using Finite Element Method," Spine, 26:E253-E260, 2001 (DOI: 10.1097/00007632-200106150-00011).

Gonik, B., and Grimm, M.J., "Response to 'A Problematic Model to Predict Intrauterine Forces During Shoulder Dystocia'," American Journal of Obstetrics and Gynecology, 184(3):516-517, 2001 (DOI:10.1067/mob.2001.110533).

Baltzer, A.W., Lattermann, C., Whalen ,.JD., Wooley, P., Weiss, K., Grimm, M., Ghivizzani, S.C., Robbins, P.D., Evans, C.H., "Genetic Enhancement of Fracture Repair: Healing of an Experimental Segmental Defect by Adenoviral Transfer of the BMP-2 Gene," Gene Therapy 7(9):734-9, 2000 (DOI: 10.1038/sj.gt.3301166).

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