

CURRICULUM VITAE
SMITH COLLEGE FORMAT

1. NAME: Borjana Mikic, Ph.D.

2. WORK:
 - Ford Hall 150
 - Smith College
 - Northampton, MA 01063

 - Tel: 413-585-7007
 - FAX: 413-585-7001
 - Email: bmikic@smith.edu

3. DEGREES:

Ph.D.	1996	Stanford University	Mechanical Engineering
M.S.	1993	Stanford University	Mechanical Engineering
B.S.	1991	Stanford University	Mechanical Engineering

4. APPOINTMENTS, AWARDS AND HONORS:
 - 2022 – present Faculty co-director, Collaborative Innovation Concentration, Smith College
 - 2018 – 2021 Associate Dean for Integrative Learning, Smith College
 - 2015 – 2018 Faculty Director of the Design Thinking Initiative, Smith College
 - 2010 – present Rosemary Bradford Hewlett '40 Professor of Engineering, Smith College
 - 2010 - 2013 Director, Picker Engineering Program, Smith College
 - 2009 – 2010 Inaugural Director, Sherrerd Center for Teaching & Learning, Smith College
 - 2007 – 2008 Division Chair, Liberal Education Division, American Society for Engineering Education
 - 2007 – 2008 Chair, Faculty Council, Smith College
 - 2007 Sherrerd Teaching Award, Smith College
 - 2003 Best Paper Nomination, American Society for Engineering Education Annual Conference
 - 2003 Orthopaedic Research Society Traveling Fellow
 - 2001 Sigma Xi Honors, Full Member
 - 2001 Adviser to A. Chhabra, Sultzer Residency Research Award for Growth Factor Research presented at the American Academy of Orthopaedic Surgeons
 - 2001 Adviser to A. Chhabra, Ranawat Residency Research Award for Molecular Biology Research presented at the Eastern Orthopaedic Association Annual Meeting
 - 2001 Adviser to A. Chhabra, The Basil M. Boyd, M.D. Memorial Resident Research Award, presented at the Oscar Miller Day Symposium on Foot & Ankle in Sports Activities
 - 2000 Adviser to T. Johnson, First Prize, University of Virginia School of Engineering Research and Design Competition for undergraduate senior thesis
 - 2000 Adviser to A. Isenstein, Finalist, University of Virginia School of Engineering Research and Design Competition for undergraduate senior thesis
 - 1995-1996 American Association of University Women
Selected Professions Fellowship
 - 1992 National Science Foundation Graduate Fellowship
(awarded but declined)
 - 1992-1995 DOD NDSEG Fellowship in Science and Engineering
 - 1991 Henry Ford II Scholar in Engineering, Stanford University
(highest GPA in graduating class, School of Engineering)

1991 Frederick E. Terman Award in Engineering
Stanford University
1991 Dean's Award for Academic Achievement
Stanford University
1991 Tau Beta Pi Engineering Honors
1990 Phi Beta Kappa Honors

5. EMPLOYMENT HISTORY:

08/18 – 06/21 **Smith College, Northampton, MA**
Associate Dean for Integrative Learning

07/10 – present **Smith College, Northampton, MA**
Rosemary Bradford Hewlett '40 Professor

07/10 – 06/13 Director, Picker Engineering Program

07/04 – 06/10 **Smith College, Northampton, MA**
Associate Professor with tenure, Picker Engineering Program

01/01 – 06/04 **Smith College, Northampton, MA**
Associate Professor, Picker Engineering Program

09/98 – 12/00 **University of Virginia, Charlottesville, VA**
Assistant Professor
Department of Orthopaedic Surgery, School of Medicine
Director, Orthopaedic Biomechanics Lab
Department of Orthopaedic Surgery, School of Medicine
Assistant Professor
Dept. of Biomedical Engineering, School of Engineering

01/97 – 08/98 **M.E. Mueller Institute for Biomechanics, Bern, Switzerland**
Postdoctoral Researcher
Tissue Biomechanics & Structural Biology Division

09/96 – 12/96 **Stanford University, Stanford California**
Acting Assistant Professor, Biomechanical Engineering Division
Dept. of Mechanical Engineering

6. GRANTS:

General Programmatic Support for The Design Thinking Initiative
06/2021
Sara Little Turnbull Foundation
Total Costs: \$20,000 (co-awardee with Emily Norton)

General Programmatic Support for The Design Thinking Initiative
06/2020
Sara Little Turnbull Foundation
Total Costs: \$15,000 (co-awardee with Emily Norton)

Scholarship Support for Design Immersion Students
07/2019
Sara Little Turnbull Foundation
Total Costs: \$200,000 (co-awardee with Emily Norton)

Design Thinking and the Liberal Arts (AALAC workshop)
06/15 – 05/16
American Association of Liberal Arts Colleges (AALAC)
Total Costs: \$19,550 (co-leader: funds went to host institution: Pomona College)

Pilot University Innovation Fellows Leadership Circle

07/15 – 06/18

Betsy Brady '68

Total Costs: \$50,000 (role: co-principal investigator with M. Mahdavi)

Design Thinking and Innovation Pilot Initiative

01/15 – 12/18 (extended to 06/20)

Branta Foundation

Total Costs: \$2.5M (role: co-principal investigator with K. Rowe)

Using Narrative in a Digital Learning Environment to Engage Children and Teens in Engineering.

09/01/12 – 08/31/17

NSF Full Scale Development (Collaborative Grant)

Total Costs: \$2,999,874 (role: senior personnel)

Undergraduate Research Fellowships in Musculoskeletal Bioengineering

01/01/10 – 12/31/10

Dr. Scholl Foundation

Total Costs: \$10,000 (role: principal investigator)

Higher Ed 2.0: Transforming STEM Undergraduate Education

09/01/07 – 08/31/10

NSF CCLI Phase 2: Expansion Grant

Total Costs: \$68,238 (role: subcontract/co-investigator on grant to UVA)

GDF Modulation of Tendon Maintenance and Repair

06/01/04 – 05/31/10 (including no cost extension)

NIH NIAMS 1R01 – AR049745 01A1

Total Direct Costs: \$990,000 (\$1,209,219 total costs) (role: principal investigator)

Orthopaedic Research Society Traveling Fellowship Award

1/01/03 – 12/31/03

Orthopaedic Research Society

Total Costs: \$7,500

Leadership Skills and Community-Building Program for Junior Women Faculty in Engineering

1/1/01 – 8/31/03

Engineering Information Foundation

Total Amount: \$57,600 (Co-P.I. with Dr. Naomi Chesler and Dr. Peg Boyle Single)

GDF-5 Modulation of Fracture Repair

7/1/01 – 8/31/02

Orthopaedic Research & Education Foundation

Total Direct Costs: \$15,000 (co-investigator; orthopaedic resident research supervisor)

Mechanical Modulation of Cartilage During Embryonic Development

7/1/00 – 6/30/01

Orthopaedic Research & Education Foundation

Total Direct Costs: \$15,000 (co-investigator; orthopaedic resident research supervisor)

GDF Regulation of Endochondral Bone Growth

9/1/00 – 8/31/03

NIH R03 AR47097

Total Direct Costs: \$150,000 (role: principal investigator)

GDF-5 Modulation of Tendon Healing

9/1/98 - 8/31/01

NIH R03 AR45828

Total Direct Costs: \$149,790 (role: principal investigator)

7. PUBLICATIONS: [UNDERGRADUATE CO-AUTHORS ARE INDICATED IN **BOLD**]

¹PRIMARY AUTHOR (RESPONSIBLE FOR MAJORITY OF WRITING AND/OR EDITING); ²CORRESPONDING AUTHOR; ³SENIOR AUTHOR (PROVIDED MAJORITY OF FUNDING & RESEARCH GUIDANCE); ⁴CO-AUTHOR, EQUAL CONTRIBUTIONS BY ALL

REFEREED ARTICLES:

- Mikic, B (2020) The Design Thinking Initiative at Smith College. Chapter 9 in *Redesigning Liberal Education: Innovative Design for a 21st Century Undergraduate Education*. R. Pope-Ruark, P. Motley, W Moner, Editors. Johns Hopkins University Press, p 124-137.
- ^{1,2,3}Mikic B, Howe S, Stables F, Middlebrook J, Hauser A, Aiken C, Bertone-Johnson R, Mendelowitz E (2016) Design Thinking and the Liberal Arts: a cross-campus initiative at Smith College. *International Journal of Engineering Education* Vol. 32, No. 3(B), 1522-29.
- ^{1,2,3}Mikic B, Rudnitsky A (2016) An emergent approach to design thinking and collaborative team composition: using the OpenIDEO framework and principles of Knowledge Building Pedagogy to re-design an introduction to engineering course. *International Journal of Engineering Education* Vol. 32, No. 3(B), 1514-21.
- ^{1,2,3}Mikic, B, Rudnitsky, A, **Desai A, Dewald A** (2015) Using a computer-supported collaborative learning environment (CCLE) to support Knowledge Building pedagogy in an undergraduate Strength of Materials course. Proceedings of the 2015 American Society for Engineering Education Annual Conference and Exposition, Seattle, WA
- ⁴Orange A, Heinecke W, Berger E, Krousgill C, Mikic B, Quinn D (2012) An evaluation of HigherEd 2.0 technologies in undergraduate mechanical engineering courses. *Advances in Engineering Education*, 3(1).
- ⁴Traver, C, Klein RD, Mikic B, Aker A, Epstein AW (2011) Fostering innovation through the integration of engineering and liberal education. Proceedings of the 2011 American Society for Engineering Education Annual Conference and Exposition, Vancouver, BC, June.
- ⁴Ellis GW, Rudnitsky AN, Moriarity MA, Mikic B (2011) Applying Knowledge Building in an Engineering Class: a pilot study. *International Journal of Engineering Education*. 27(5) 1-13.
- ^{1,2,3}Mikic B, **Amadei E**, Rossmeier K, Bierwert L (2010). Sex matters in the establishment of murine tendon composition and material properties during growth. *Journal of Orthopaedic Research*. 28(5): 631-8.
- ^{1,2,3}Mikic B, Rossmeier K, Bierwert L (2009). Sexual dimorphism in the effect of GDF6 deficiency on murine tendon. *J Orthop Res* 27(12): 1603-11.
- ^{1,2,3}Mikic B, Rossmeier K, Bierwert L (2009). Identification of a tendon phenotype in GDF6 deficient mice. *Anatomical Record* 292(3): 396-400.
- ^{1,2,3}Mikic B, Ferreria MP, Battaglia TC, Hunziker EB (2008). Accelerated hypertrophic chondrocyte kinetics in GDF7 deficient murine tibial growth plates. *Journal of Orthopaedic Research* 26(7): 986-90.
- ^{1,2,3}Mikic B, **Entwistle R**, Bierwert L (2008) The effect of GDF-7 deficiency on tail tendon phenotype in mice. *Journal of Orthopaedic Research* 26(6):834-839.
- ^{1,2,3}Mikic B, **Zhang M, Webster E**, Rossmeier K (2007) The effect of Y2 receptor deletion on whole bone structural behavior in mice. *Anatomical Record* 291:14-18.
- ^{1,2,3}Mikic B, Voss S (2006) Engineering for Everyone: charging students with the task of designing creative solutions to the problem of technology literacy. Proceedings of the 2006 American Society for Engineering Education Annual Conference and Exposition, Chicago, IL, June 18-21.
- Maloul A, Rossmeier K**, ^{1,2,3}Mikic B, **Pogue V**, Battaglia T (2006) Geometric and material contributions to whole bone structural behavior in GDF-7 deficient mice. *Connective Tissue Research* 47(3): 157-62.
- ^{1,2,3}Mikic B, Bierwert L, **Tsou D** (2006) Achilles tendon characterization in GDF-7 deficient mice. *Journal of Orthopaedic Research* 24: 831-841.
- Mikic B (2004): Multiple effects of GDF-5 deficiency on skeletal tissues: implications for therapeutic bioengineering. *Annals of Biomedical Engineering* 32(3): 466 – 476.
- ^{1,2,3}Mikic B, **Isenstein AL**, Chhabra AB (2004) Mechanical modulation of cartilage structure and function during embryogenesis in the chick. *Annals of Biomedical Engineering* 32(1): 18-25.

- ^{1,2,3}Mikic B, Clark RT, Battaglia TC, Gaschen V, Hunziker EB (2004) Altered hypertrophic chondrocyte kinetics in GDF-5 deficient murine tibial growth plates. *J Orthopaedic Res* 22(3): 552 - 556.
- Ellis GW, ⁴Mikic B, Rudnitsky AN (2003) Getting the 'big picture' in engineering: using narratives and conceptual maps. Proceedings of the 2003 American Society for Engineering Education Annual Conference and Exposition, Nashville, TN, June 22-25. (nominated for best paper award).
- ^{1,2}Mikic B, Callahan K, Grasso D (2003) Getting playful about science and engineering education. *INSIGHT* 3:5-25.
- Chesler N, Single BP, ⁴Mikic B (2003) On belay: peer-mentoring and adventure education for women faculty in engineering. *J Engineering Education* 92(3): 257-262.
- Battaglia T, Clark RT, Chhabra A, Gaschen V, Hunziker EB, ³Mikic B (2003) Ultrastructural determinants of murine Achilles tendon strength during healing. *Connective Tissue Research* 44(5): 218-224.
- Battaglia TC, **Tsou D, Taylor EA**, ³Mikic B (2003) Ash content modulation of torsionally derived effective material properties in cortical mouse bone. *J of Biomechanical Engineering* 125(5):615-619..
- Chhabra A, **Tsou D**, Clark RT, Gaschen V, Hunziker EB, ^{1,2,3}Mikic B (2003) GDF-5 deficiency in mice delays Achilles tendon healing. *J. Orthop. Res.* 21: 826-835.
- ^{1,2}Mikic B & Grasso D (2002) Socially-Relevant Design: the TOYtech project at Smith College. *Journal of Engineering Education.* 91(3): 319-326.
- ^{1,2,3}Mikic B, Battaglia TC, **Taylor EA**, Clark RT (2002) The effect of GDF-5 deficiency on femoral composition and mechanical behavior in mice. *Bone.* 30(5): 733-737.
- van der Meulen MCH, Jepsen KJ, ⁴Mikic B (2001) Understanding Bone Strength: Size isn't everything. *Bone* 29(2):101-104.
- Clark RT, **Johnson TL**, Schalet BJ, Davis L, Gaschen V, Hunziker EB, Oldberg A, ^{1,2,3}Mikic B (2001) GDF-5 deficiency in mice leads to disruption of tail tendon form and function. *Connective Tissue Research* 42(3):175-186
- ^{1,2,3}Mikic B, Schalet BJ, Clark RT, Gaschen V, Hunziker EB (2001) GDF5 deficiency in mice alters the ultrastructure, mechanical properties, and composition of the Achilles tendon. *J Orthop Res* 19(3): 365-371.
- ^{1,2,3}Mikic B, **Johnson TL**, Chhabra AB, Schalet B, Wong M, Hunziker EB (2000) Differential effects of embryonic immobilization on the development of fibrocartilaginous skeletal elements. *J Rehabilitation R&D* 37: 127-133.
- ^{1,2}Mikic B, Wong M, Chiquet M, Hunziker EB (2000). Mechanical modulation of tenascin-C and collagen XII expression during synovial joint formation. *J Orthop Res.* 18: 406-415.
- Carter DR, ¹Mikic B, Padian K (1998) Epigenetic mechanical factors in the evolution of long bone epiphyses. *Zool J Linn Soc*, 123: 163-178.
- ^{1,2}Mikic B, van der Meulen MCH, Kingsley DM, Carter DR (1996) Mechanical and geometric changes in the growing femora of BMP-5 deficient mice. *Bone:* 18: 601-607.
- ^{1,2}Mikic B, van der Meulen MCH, Kingsley DM, Carter DR (1995) Long bone geometry and structural strength in adult BMP-5 deficient mice. *Bone:* 16: 445-454.
- ^{1,2}Mikic B and Carter DR (1994) Bone strain gage data and theoretical models of functional adaptation. *J Biomech* 28: 465-469.

NON-REFEREED ARTICLES:

- Rudnitsky A, Ellis G, Mikic B (in press) Knowledge Building and Higher Education, to be published in Leading Student Achievement: Networks for Learning (LSA), Volume 3.
- Chesler N, ⁴Mikic B, Boyle Single P (2002) Peer-Mentoring in the Engineering Academy: A Workshop for Young Women Faculty. *SWE Magazine*, April/May 2002: 18 - 22.
- ¹Mikic B and Carter DR (1993) Clinical rehabilitation and skeletal developmental mechanics. *EUROREHAB (J Exp and Clin Rehab, Phys Med, and Bioclim)* 1: 7-17.

8. CONCERTS, PERFORMANCES, AND EXHIBITIONS

N/A

9. SCHOLARLY LECTURES AND OTHER PROFESSIONAL PRESENTATIONS

INVITED:

- Mikic B (2017) Lessons learned in starting a up a campus wide initiative in Design Thinking. Invited talk to the faculty at the University of New Hampshire, October, 2017.
- Mikic B, **Amadei E**, Rossmeier K, Bierwert L (2008) The Effect of Animal Sex on Murine Tendon Composition and mechanics during growth. *Gordon Research Conference on Musculoskeletal Biology & Bioengineering*. July, 2008.
- Mikic B (2006) GDF Modulation of Tendon Maintenance and Repair. *Gordon Research Conference on Musculoskeletal Biology & Bioengineering*. July, 2006.
- Mikic B (2003) *In ovo* investigations of embryonic immobilization in the chick. Invited workshop presentation, *Orthopaedic Research Society*, February 2, 2003.
- Mikic B (2002) The role of Growth/Differentiation Factors in tendon maintenance and repair. *Gordon Research Conference on Musculoskeletal Biology & Bioengineering*. July 2002.
- Mikic B (2002) Tendon Characterization in GDF-5 Deficient Mice. *Invited seminar to Genetics Institute*, Cambridge, MA. February 1, 2002.
- Mikic B (2002) Whole Bone Mechanical Testing Overview. Invited talk for workshop entitled “Functional Phenotype Assessment: evaluating bone size, strength, and density in mice” at the *Orthopaedic Research Society*; February, 2002.
- Carter DR and Mikic B (1996) The mechanobiology of fracture healing and its relationship to skeletal development and evolution. *Keynote address, International Society for Fracture Repair, Ottawa*.

PEER-REVIEWED:

- Mikic B, Bacal, J, Ly, Minh (2023) Designing Your Path at Smith College: results of a five-semester pilot project. *AAC&U Annual Meeting*, San Francisco, CA (January, 2023).
- Lyster M, Mikic B (2022) Engage, Critique, Transform: designing a social innovation pathway within a women’s liberal arts college. *International Social Innovation Research Conference*, Halifax, Nova Scotia.
- Mikic B, Orwin L, Patterson L, Kolvoord R (2016) Engineering and the Liberal Arts. *AAC&U Annual Meeting*, Washington DC, January 20-23, 2016 (panel presentation).
- Mikic B, Hicks R (2016) Design Thinking and the Liberal Arts: possibilities for programs and spaces. *Society for College and University Planners (SCUP) 2016 North Atlantic Regional Conference*, March 2016 (New York, NY).
- Mikic B, Howe S, Stables F, Middlebrook J, Hauser A, Aiken C, Bertone-Johnson R, Mendelowitz E (2015) Design Thinking and the Liberal Arts: a cross-campus initiative at Smith College. *Harvey Mudd Design Symposium*, May 2015.
- Mikic B, Rudnitsky A (2015) An emergent approach to design thinking and collaborative team composition: using the OpenIDEO framework and principles of Knowledge Building Pedagogy to re-design an introduction to engineering course. *Harvey Mudd Design Symposium*, May 2015.
- Rudnitsky A, Ellis G, Mikic B (2014) Taking a Knowledge Building Approach to Undergraduate Education. *Knowledge Building International Annual Meeting*. Quebec City. Quebec.
- Mikic B, Guswa A (2014) Engineering meaning: how Smith engineers embrace a liberal education. Presentation as part of a panel on the role of liberal education in increasing participation of women in STEM-C fields. *Union College Symposium on Engineering and Liberal Education*. Union College, Schenectady, NY.
- Mikic B, **Connizzo B, McGrath MC, Shea J**, Bierwert L (2011) The effect of myostatin deficiency on murine tendon material behavior. *Trans ORS:36*.
- Mikic B, Rossmeier K, **Earl-Royal E**, Bierwert L (2010) Sexual dimorphism in the effect of GDF6 deficiency on murine cortical bone. *ORS: 35*.
- Mikic B, **Amadei E**, Rossmeier K, Bierwert L (2009) Sex differences in murine tendon depend on anatomical location: is mechanical loading environment a factor? *Trans ORS 34*.
- Mikic B, Rossmeier K, Bierwert L (2009) Animal sex modulates the effect of GDF6 deficiency on murine tendons. *Trans ORS 34*.
- Mikic B, Bierwert L, **Tsou D** (2007) Sex-based differences in tendon biology, structure, and function. *Trans ORS 32*.

- Mikic B, Rossmeier K, Bierwert L (2007) Altered tendon phenotype in GDF-6 (BMP-13) deficient tendon. *Trans ORS 32*.
- Mikic B, Rossmeier K, Bierwert L (2007) Achilles tendon healing in GDF-7 (BMP-12) knockout mice. *Trans ORS 32*.
- Mikic B (2006) Knowledge of self: the starting point for framing undergraduate engineering curricula. Proceedings of the 2006 American Society for Engineering Education Annual Conference and Exposition, Chicago, IL, June 18-21.
- Mikic B, **Zhang M** (2006) Y2 receptor modulation of murine cortical bone. *Trans ORS 31* (short talk).
- Mikic B, **Rossmeier K**, Battaglia T (2005) GDF-7 deficiency in mice results in structurally weaker femora. *Trans ORS 30* (poster presentation)
- Mikic B, **Tsou D**, Battaglia T, Gaschen V, Hunziker EB (2005) GDF-7 deletion affects murine Achilles tendon composition. *Trans ORS 30* (poster presentation)
- Mikic B, Ferreira MP, Gaschen V, Hunziker EB (2004) GDF-7 deficient mice exhibit accelerated proximal tibial growth rates. *Trans ORS 29* (poster presentation).
- Mikic B, Clark RT, Gaschen V, Hunziker EB (2003) Altered hypertrophic chondrocyte kinetics in GDF-5 deficient murine growth plates. *Trans ORS 28* (poster presentation).
- Battaglia T, Clark R, **Johnson T**, Gaschen V, Hunziker EB, Mikic B (2002) GDF-5 deficiency alters stress-relaxation properties in mouse skin. *Trans ORS 27*: (poster presentation).
- Battaglia T, Clark R, Chhabra A, Gaschen V, Hunziker EB, Mikic B (2002). Ultrastructural determinants of Achilles tendon strength during healing. *Trans ORS 27*: (poster presentation).
- Chesler N, Mikic B, Boyle Single P (2002) Peer-Mentoring for Untenured Women Faculty: A Leadership Skills and Community-Building Workshop. American Society for Engineering Education Annual Conference and Exposition, Montreal, Canada, June 15-19.
- Chhabra AB, **Isenstein AL**, Mikic B (2001) Mechanical modulation of cartilage during embryogenesis. *Trans ORS 26*: 8 (podium presentation).
- Battaglia T, Clark RT, Fisher MA, Settle S, Kingsley DM, Mikic B (2001) Altered biomechanical properties in GDF-7 deficient mouse femora *Trans ORS 26*: 512 (poster presentation).
- Mikic B, Clark RT, **Kim E**, Fisher MA, (2001) GDF-5 deficiency in mice results in altered long bone mechanics. *Trans ORS 26*: 112 (podium presentation).
- Chhabra A, Dacus R, Mikic B (2001) GDF-5 deficiency in mice delays Achilles tendon healing, *Trans ORS 26*: 243 (podium presentation).
- Mikic B, **Johnson T**, Hunziker EB (2000) Differential effects of embryonic immobilization on the development of fibrocartilaginous skeletal elements. *Trans ORS 25*: 969 (poster).
- Mikic B, Clark R, Gaschen V, Settle S, Kingsley D, Hunziker EB (2000) Altered collagen ultrastructure in GDF-7 deficient tendon. *Trans ORS 25*: 806 (poster).
- Mikic B, Schalet B, Clark R, Gaschen V, Hunziker EB (2000) GDF-5 deficiency in mice is associated with altered tendon properties. *Trans. ORS 25*: 20 (podium).
- Mikic B, Wong M, Chiquet M, Hunziker EB (1999). Immobilization is associated with altered tenascin-C and collagen XII expression patterns during avian synovial joint formation. *Trans ORS 24*: 174 (podium presentation).
- Mikic B, Wong M, Hunziker EB (1999) Differential effects of embryonic immobilization on cartilage proteoglycan and collagen content. *Trans ORS 24*: 733 (poster presentation).
- Mikic B, van der Meulen MCH, Kingsley DM, Carter DR (1995) Biomechanical characteristics of long bones in BMP-5 deficient mice. *Trans ORS 20*: 154 (podium presentation).
- Carter DR, Mikic B, Horner JR (1995) Growth plate differences between mammals and dinosaurs are related to both genotypic and mechanical factors. *Soc Vert Pal*: Nov 1995 (podium presentation).
- Mikic B, van der Meulen MCH, Kingsley DM, Carter DR (1994) Deletion of the BMP-5 gene in mice results in altered adult long bone morphology. *J Morph 220*(2): 372 (podium presentation).
- Mikic B and Carter DR (1994) Analysis of bone strain gage data recorded during locomotion. *Can Soc Biomech Proc*: 108-109 (podium presentation).
- Nauenberg T, Bouxsein ML, Mikic B, Carter DR (1993). Using clinical data to improve computational bone remodeling theory. *Trans ORS 18*: 123 (podium presentation).

OTHER:

- Mikic B (2015) What the #\$\$ is Design Thinking? *Liberal Arts Luncheon, Smith College.*
- Mikic B (2014) Group Work: why bother? *Teaching Arts Luncheon, Smith College* with Al Rudnitsky, Patty DiBartolo, and Lauren Duncan.
- Mikic B (2013) Structure and Function in Skeletal Tissues: lessons from Mighty Mouse and his lesser known cousins. *Smith College Chaired Professor Lecture.*
- Mikic B (2011) In praise of disequilibrium: embracing the mess. Keynote address, *Mt. Holyoke College Sigma Xi banquet.*
- Mikic B (2009) Understanding structure and function in tendons and ligaments: does sex matter? *Engineering Forum, Smith College.*
- Mikic B (2004) Integrative Approaches to Studying Structure/Function Relationships in Skeletal Tissues. *Department of Mechanical Engineering, Union College.*
- Mikic B (2004) Integrative Approaches to Studying Structure/Function Relationships in Skeletal Tissues. *Department of Bioengineering, Rennsaler Polytechnic Institute.*
- Entwistle R**, Gaschen V, Hunziker EB, Mikic B (2002) Do collagen ultrastructural properties vary along the length of the Achilles tendon? *Gordon Research Conference on Musculoskeletal Biology and Bioengineering, July 28 – August 2, 2002*; poster presentation.
- Mikic B (2002) Applications of Psychological Type: are Smith engineers different from other female engineering students in the U.S.? *Smith College Liberal Arts Lunch Presentation.*
- Mikic B (2002) Of Mice and Men. *Smith College, Sigma Xi Lunch Presentation.*
- Mikic B (2001) Disorders of Collagen Biosynthesis and Structure. *Guest Lecture, BIO320: Colloquium in Molecular Medicine, 10/22/01.*
- Mikic B (2000) Skeletal Function and Form. *Invited Seminar, Department of Mechanical Engineering, University of Virginia.*
- Mikic B (1999) A Possible Role for GDFs in Tendon and Ligament. *Invited Presentation, Virginia Conference on Technology and Medicine, University of Virginia.*
- Mikic B (1999) Growth and Differentiation Factors in Tendon Maintenance. *Invited Presentation, Virginia Orthopaedic Alumni Meeting, University of Virginia.*
- Mikic B (1998) Role of Mechanical Loading in Joint Development. *Invited Seminar, Department of Biomedical Engineering, University of Virginia.*
- Mikic B (1998) Effect of Embryonic Immobilization on Collagen XII and Tenascin Expression During Synovial Joint Formation. *Invited Seminar, Cell-Matrix Group, University of Virginia School of Medicine.*

10. OTHER PROFESSIONAL ACTIVITIES

PROPOSAL REVIEW:

- American Association of University Women grant review panel (winter, 2022)
- NIH – MOSS A 01 Special Emphasis Panel (06/09)
- NIH - ZRG1 MOSS-L (03) Special Emphasis Panel (06/08)
- NIH – SBSR Ad hoc Study Session Reviewer (02/06; 02/08)
- NSF Director’s Award for Distinguished Teaching Scholars Review Panel (01/03)
- NIH – SBIR Orthopaedics Special Emphasis Grant Review Panel ZRG1-SS5
(Dates: 07/99; 12/99; 3/00; 11/00; 03/01; 11/01; 03/02; 04/02; 11/02)
- South Carolina Commission on Higher Education (2000)
- NSF Integrative Biology Division (2000)

REVIEWER:

- Annals of Biomedical Engineering
- Bone
- Clinics in Orthopaedics & Related Research
- CRC Press, book prospectus reviewer (2007)
- International Journal of Engineering Education
- Journal of Anatomy

Journal of Biomechanics
Journal of Biomechanical Engineering
Journal of Bone and Mineral Research
Journal of Engineering Education
Journal of Experimental Biology
Journal of Histochemistry and Cytochemistry
Journal of Orthopaedic Research
Orthopaedic Research Society (Annual Meeting Abstract Reviews)
Osteoarthritis and Cartilage
Regenerative Medicine

SESSION MODERATOR/WORKSHOP CHAIR:

Mikic B and Lozano F (2016) Design Thinking and the Liberal Arts *AALAC sponsored workshop at Pomona College*, March 2016 (co-organizers and facilitators)
Mikic B (2008) Session Moderator for “The Future of Liberal Education for Engineers, *ASEE*, June 23.
Mikic B (2007) Session Moderator for “Bone Adaptation II”, *Orthopaedic Research Society*, February 13, 2007
Mikic B (2006) Session Moderator for “Questions of Identity”, *ASEE*, June 20.
Mikic B (2006) Session Moderator for “Integrating Humanities & Social Sciences into Engineering I”, *ASEE*, June 19.
Mikic B (2006) Session Moderator for Distinguished Lecture, Lewis Duncan, President of Rollins College, “The Unleashed Human Mind: liberating education for the 21st century”, *ASEE*, June 20.
Mikic B (2003) Workshop organizer. Mechanobiologic Influences on Musculoskeletal Development. *Orthopaedic Research Society*, February 2, 2003.
“Cartilage Mechanobiology I”, session moderator, Orthopaedic Research Society Annual Meeting, 2003.
Mikic B & Pfatteicher S (2002) Panel co-organizers and co-moderators: Institutional Perspectives on the Integration of Engineering and the Liberal Arts. *ASEE*, June 18, 2002.
Mikic B & Williams R (2002). Co-moderators, “Establishing Best Practices for Liberal Education as a Component of Engineering Education: organizational models, curricular approaches, and the issues of adaptability.” Liberal Studies and the Integrated Engineering Education of ABET 2000. University of Virginia, Charlottesville, VA. April 4-6, 2002.
“Liberal Education and Professional Development”, session moderator, Liberal Education Division of the American Society for Engineering Education, 2001 Annual Meeting.
“Tissue Engineering II”, session moderator, Orthopaedic Research Society Meeting, 2001

ONLINE COURSES TO ADVANCE SCHOLARSHIP

Qualitative Research: Conversational Interviewing (Susan Silbey, MIT) edX 2021
Qualitative Research: Analyzing Data (Susan Silbey, MIT) edX 2022
Unethical Decision Making in Organizations (Palazzo & Hoffrage, University of Lausanne, Switzerland) Coursera 2022

11. PROFESSIONAL MEMBERSHIPS

American Society for Engineering Education (ASEE)
American Society of Mechanical Engineers (ASME)
Orthopaedic Research Society (ORS)
Sigma Xi

12. SERVICE ACTIVITIES

INVITED PRESENTATIONS REPRESENTING SMITH COLLEGE:[UNDERGRADUATE CO-PRESENTERS ARE INDICATED IN **BOLD**]

- Mikic B (2018) Designing Smith's Future. Three-hour human centered design workshop with Trustees, Faculty, and Staff, Smith College November Board of Trustees retreat.
- Mikic B, Harrington M, Bradbury N (2018) Faculty Development Panel, "Honest Reflections on Strategies for Success", Smith College.
- Mikic B, DiBartolo P, Baker C (2017) Panel response to Smith College Class of '77 "life wisdom" survey. Reunion Weekend, May 2017.
- Mikic B and Kabayadondo Z (2015) Design Thinking: empathy in action. *Smith in the City* presentation/workshop, November, 2015.
- Mikic B and DiBartolo P (2015) Educating Women in Science: the last frontier. *Smith College Reunion Weekend Presentation*.
- Mikic B (2014) The Smith Design for Learning: designing with intention. *Smith Club of Boston* talk. May, 2014.
- Mikic B (2013) The Smith Design for Learning: designing with intention. *Advancement event at PepsiCo headquarters, Rye, NY with President Christ, hosted by Trustee Neelum Amin*.
- Mikic B (2010) Reflective Learning in Engineering Education. Invited speaker. *Olin College 2010 Initiative for Innovation in Engineering Education Summer Workshop for Faculty: Meeting the needs of the 21st century – designing for student engagement*.
- Mikic, B (2008) Evolving Perspectives of Integrating Engineering and the Liberal Arts. *Invited Panel Presenter, Union College Symposium on Engineering and Liberal Education*.
- Mikic B (2007) Navigating the crossroads: questions of identity. *Invited Seminar, ME 311: Women's Perspectives in Engineering: Pioneers, Stanford University Department of Mechanical Engineering*.
- Mikic B, **Zheng J, Pratt K, Amatya R** (2002) The TOYtech Project at Smith College: Year 2. *3rd Annual Virtual Development Center Conference, Institute for Women and Technology, Palo Alto, CA 4/18 – 4/21/02*.
- Mikic B (2001) Starting Something New: engineering at an all women's liberal arts college. *Invited Seminar, ME 311: Women's Perspectives in Engineering: Pioneers, Stanford University Department of Mechanical Engineering*.
- Mikic B, **Radford N, Stepp C, Rossmeier K, Taylor E, Taugher M, Strom S, Jaffray S**. The TOYtech Project at Smith College. *2nd Annual Virtual Development Center Conference, Institute for Women and Technology, Palo Alto, CA 4/26 – 4/28/01*.
- Mikic B. (2001) Introductory remarks for Astronaut Bonnie Dunbar, Smith College Summit on Engineering Education.

COLLEGE COMMITTEES:

- Search Committee for Provost and Dean of the Faculty (2023-24)
- Advisory Board, Interdisciplinary Making Concentration (2023-26)
- Search Committee, Prototyping Studio Manager, Design Thinking Initiative (2021)
- Search Committee, Assistant Director, Wurtele Center for Leadership (2021)
- Lewis Global Studies Center Steering Committee (1/2021 – 6/2021)
- Search Committee, Associate Dean of the College: Advising & Mentoring (2021)
- COVID-19 Incident Response Team (2020-2021)
- Committee on Mission and Priorities (2018-2021)
- Search Committee Chair, Director of Fellowships & Postgraduate Scholarships (2020)
- Search Committee Chair, Fellowships Specialist (2020)
- First Year Experience Working Group (2019-20)
- Study Group on Re-imagining the Curriculum (2019-20)
- President's Innovation Grants Selection Committee (2018-19)
- Non-degree Programs Advisory Group (2018-present)
- Assessment subcommittee, Committee on Academic Priorities (2018-2019)
- Search Committee Chair, Director, Wurtele Center for Leadership (2018-19)
- Search Committee Chair, Director, The Design Thinking Initiative (2018)

Search Committee Chair, Prototyping Studio Coordinator, The Design Thinking Initiative (2018)
Advisory Board, Wurtele Leadership Center (2017 – 2018)
Advisory Board, The Design Thinking Initiative (2014 – 2018)
Science Strategic Planning Committee (summer, 2014)
Board of Counselors (2014-present)
Sherrerd Teaching Prize Committee (2014-2015)
Neilson Library Renovation Programming Committee (2014-15)
Tenure and Promotion (2011 – 2013; 2014-15; 16-17)
Chaired Professor Committee (2013-14; 2023-24)
Science Planning (2010-2013)
Advisory Board, Sherrerd Center for Teaching and Learning (2010-2015; 2018-2022-24)
Ford Hall Users Group Committee (2010-2013)
Ad hoc committee on teaching evaluations (2009-10)
Committee of Faculty Compensation and Development (CFCD) 09/09 – 05/10
Inaugural Director, Center for Teaching and Learning (07/09 – 06/10)
Summer Study Group on Art & Science Recommendations & the Smith Curriculum (2009)
Client Committee, Arts & Science Working Group, Admissions Marketing (2007-08)
Working Group to develop a Teaching and Learning Center, 2008
Advising Task Force, 2007-2008
Chair of Faculty Council, 2007-2008
Faculty Council, 2005-2008 [2005-06: CFCD; 2006-07: CMP]
Director's search committee, Picker Engineering Program, 2004-2005.
Architect selection committee, Engineering Building, Smith College, 2002-2003.
Ad hoc committee to select Master Planner Architect for new Science & Engineering Complex, Smith College, Summer 2001.
Planning Committee for Designing the Future: A Summit on Engineering Education. Smith College, March 30-31, 2001.

DEPARTMENTAL COMMITTEES:

Chair, Honors and Awards Committee (2022-present)
Personnel Committee, tenure track faculty member, Exercise & Sports Studies (2022-present)
Member, tenure track faculty search committee (2023-24)
Member, Brodsky Engineering Entrepreneurship Committee (2017-present)
All Departmental Reappointment, Tenure & Promotion Committees (2004 - present)
Tenure track faculty search committee, Exercise and Sports Studies (2018-19)
Chair, Engineering Entrepreneurship Committee (2016 – 2018)
Member, ABET curricular approvals committee (2016 – 2018)
Member, Faculty Search Committee (2014-15)
Commencement and Reunion Committee (2008-2018)
Member, Faculty Search Committee (2011-2012)
Engineering Alumnae Newsletter, co-editor (2010)
Admissions Liaison for Engineering (2010-2013)
Reappointment, tenure & promotion committee member for all EGR faculty (2004-present)
Faculty Liaison, Society for Women Engineers student chapter, 2007-8
Director of Departmental Honors (2007-08; 2022-present)
Chair, Departmental Mission and Priorities Committee (2006-2007)
Member, Faculty Matters Committee (2006-?)
Member, Long-term curriculum planning committee (2006-?)
Search Committee Member for Laboratory Instructor, Engineering, Smith College, Spring 2003.
Science Planning Representative from Engineering, Smith College, Spring 2003.
Head, ABET Accreditation Committee, Picker Engineering Program, Smith College, 2001 – 2003; member (2016-17)
Head, Media Acquisitions, Picker Engineering Program, Smith College, Spring Semester 2000-01.
Director, Faculty Research Conference Committee, Department of Orthopaedic Surgery, University of Virginia, School of Medicine, 1999-2000.

Curriculum Committee member, Department of Orthopaedic Surgery, University of Virginia, School of Medicine, 1998-2000.

OTHER:

Panelist, Approaching College Service Strategically (2023)
Integrative Learning presentation for Development Staff (2020)
Designing Your Life workshop for Development Staff (2019)
January 2018 T&P faculty workshop, Former Tenure and Promotion Committee member representative.
Faculty Adviser to Smith College Leadership Circle of University Innovation Fellows (UIF)
2018-19 Fellows: Beth Yigzaw, Emma Sui, Isabelle Hodge, Asmita Gautam, Lucy Kneissler, Haven Sandoval
2017-18 Fellows: Lisa Feiden, Van Nguyen, Haven Sandoval, Lucy Kneissler, Nybria Acklin
2016-17 Fellows: Amanda Lavond, Mandira Marambe, Yi Wang, Lingxuan Li
Co-facilitator of May Faculty Development Workshop (with S. Audley) Exploring the ABC's of Inclusive Course Design, Smith College.
May 2016 T&P faculty workshop, Former Tenure and Promotion Committee member representative.
Co-facilitator of May Faculty Development Workshop (with Z. Kabayadondo) (2016) A Deep Dive into Design Thinking, Smith College.
Co-facilitator and co-organizer (via The Design Thinking Initiative with Sherrerd Center for Teaching and Learning) of January 2016 "Making for Understanding" faculty development workshop
Co-facilitator and co-organizer (via The Design Thinking Initiative with Sherrerd Center for Teaching and Learning) of December 2015 screening and discussion of "Most Likely to Succeed"
Presentation to Smith College Development Office "Boot Camp" on The Design Thinking Initiative, January 2016.
Member and Chair of search committee, Design Thinking Initiative Search for prototyping coordinator (2016)
Member and Chair of search committee, Design Thinking Initiative Search for administrative assistant (2015, 2016)
Member and Chair of search committee, Design Thinking Initiative Search for Co-Director (2015)
Faculty Panelist, "The Rewards of Risk," Smith College Alumnae Association Events in Seattle, San Francisco, and Los Angeles, March, 2015.
Organizer, Design Thinking Teaching Circle, Smith College (2010-present)
Advisory Board Member, NSF TUES Grant (PI: Jonathan Stolk, Olin College) on intrinsic motivation, 2013-present.
Tenure and Promotion Dossier Review (Olin College (2X), UNC Chapel Hill, Union College, University of Hartford)
External Reviewer, Deerfield Academy Science Program, 2014
Campaign Ambassador, 2012-2014
Executive Leadership in Academic Technology and Engineering (ELATE) program at DREXEL, Advisory Board Member, 2011-13
Learning Community Adviser, 2014-15
Smith College new faculty seminar, co-leader, 2011-2012
Facilitator, Olin College Summer Institute for Innovation in Engineering Education, June 2011-2013.
Member, Planning Committee, 2011 Union College Symposium on Integrating Engineering and Liberal Education, Schenectady, NY
Honored Guest, Olin College President's Council, Needham, MA (2010 - 2013)
Member, Board of Trustees, The Commonwealth School, Boston, MA (2011-14)
Co-facilitator, book discussion on *What the Best College Teachers Do*, Smith College (May, 2010)
Workshop leader on *Learner Centered Syllabus Design*, Smith College (January, 2010)
Invited Site Reviewer for Union College HHMI Grant to establish Biomedical Engineering (2009)

Invited Mentor, Meet the Mentors Luncheon for junior researchers, 2009 Annual Meeting of the Orthopaedic Research Society.
Division Chair, Liberal Education Division, American Society for Engineering Education, 2007-2008.
Invited member, Program Committee, Navigating the Tenure Track workshop, Virginia Commonwealth University, 2007.
Invited Attendee, Women's Leadership Dinner, 2007 Annual Meeting of the Orthopaedic Research Society.
Invited Mentor, Meet the Mentors Luncheon for junior researchers, 2007 Annual Meeting of the Orthopaedic Research Society.
Division Chair Elect, Liberal Education Division, American Society for Engineering Education, 2006-2007.
Invited Mentor, Meet the Mentors Luncheon for junior researchers, 2006 Annual Meeting of the Orthopaedic Research Society.
Program Chair, Liberal Education Division, American Society for Engineering Education, 2005-2006.
Program Chair Elect, Liberal Education Division, American Society for Engineering Education, 2004-2005.
Leadership Skills and Community Building Workshop for Junior Women Faculty in Engineering. Co-organizer. Northampton, MA August 9-10, 2003.
Invited Profile, National Academy of Engineering (NAE) "Engineering Girl" Gallery of Women Engineers. <<http://www.engineergirl.org>>
Leadership Skills and Community Building Workshop for Junior Women Faculty in Engineering. Co-organizer. Vergennes, VT August 2-4, 2002.
Invited participant, NSF-sponsored workshop on Integration of Engineering and the Liberal Arts, University of Virginia, 4/4 – 4/7/02.
Leadership Skills and Community Building Workshop for Junior Women Faculty in Engineering. Co-organizer. Newry, ME August 8-12, 2001.
Smith College Leadership Team project coordinator for TOYtech project, Institute for Women and Technology, Virtual Development Center (2001 – 2003).
Organizer and Facilitator of Picker Engineering Program "Engineering Scholars Round Table" discussion series (Spring Semester, 2000-01).
National Engineer's Week Introduce a Girl to Engineering Day, Smith College (2001).
Common Reading Experience Discussion Leader, University of Virginia (1999)
Resident Academic Coordinator, Branner Hall, Stanford University (1989-1990)
Expanding Your Horizons Workshop for K-12 girls interested in engineering, San Jose State University, San Jose, CA (1995, 1996)

STUDENT RESEARCH SUPERVISION:

Smith College Undergraduate Research Supervision:

Bailey Butterworth '24 9/23-523 Special Studies: Right-Sized Mechanical Recycling Feasibility for Polyester Waste Textiles.

Leticia Viera da Silva '24 and Olivia de Traglia '24: 9/22 – 5/23 Special Studies: PET Filament Machine (presented at 2023 Collaborations)

Haven Sandoval '20 09/18 – 05/19: Special Studies on University Innovation Fellows project "Belonging Through Art"

Haven Sandoval '20 and Emma Sui '18 09/18 – 05/19: Special Studies on University Innovation Fellows redesign of first year orientation.

Susannah Davis '18 09/17-05/18: Special Studies (co-adviser) in Arts & Technology capstone project: designing for the stage two ways.

Haven Sandoval '20 and Van Nguyen '18 09/17 – 05/18: Special Studies on University Innovation Fellows redesign of first year orientation.

Jessica Innis '17 09/16 – 05/17: Special Studies on University Innovation Fellows implementation of a student d.squad.

- Claire Adams '16 & Geneva Strauss-Wise '16, Fall 2015 Special Studies, *The Flash Pod: Designing and Building a Mobile Pop-Up Space for Smithies* (presented at 2016 Collaborations)
- Zoe Zandbergen '18, Spring 2016 Special Studies, *Ramshackle! A collaborative building game* (presented at 2016 Collaborations)
- Cindy Li '17, Spring 2016 Special Studies on Rapid Prototyping with Makey Makey.
- Diandra Dillon '20, 09/15 – 6/17. AEMES research on The Design Thinking Initiative.
- Kelsey Hammond '20, 09/15 – 6/16. STRIDE research on The Design Thinking Initiative.
- Cindy Li '17, 05/15 – 07/15. SURF research on Prototyping for collaborative spaces for co-creation.
- Claire Adams '16, 05/15 – 07/15. SURF research on Prototyping for collaborative spaces for co-creation.
- Cecely Ogren '16, 05/15 – 07/15. SURF research on Prototyping for collaborative spaces for co-creation.
- Ziqiu Zhang '18, 05/15 – 07/15. SURF research on Prototyping for collaborative spaces for co-creation.
- Anjali Desai, '18, 09/14 – present. AEMES Scholar. Analyzing Knowledge Building Discourse.
- Annick Dewald, '18, 09/14 – 05/15. STRIDE Scholar. Analyzing Knowledge Building Discourse.
- Janika Parson, '13, 09/10 – 12/10. AEMES Scholar. Sex based differences in murine knee laxity.
- Mary McGrath, '13, 06/10 – 06/11. Potential adverse effects of myostatin inhibition on tendon.
- Jayna Shea, '12, 06/10 – 06/11. Potential adverse effects of myostatin inhibition on tendon.
- Brianne Connizzo '10, 09/09 – 05/10. Potential adverse effects of myostatin inhibition on tendon.
- Sarah Barstow, '13, 09/09 – 05/11. AEMES Scholar. Ultrastructural characterization of GDF6 deficient tendon.
- Lindsey Duran, '13, 09/09 – 05/11. AEMES Scholar. Effect of GDF6 deficiency on cortical bone composition.
- Shiliu Wang '13, 09/09 – 0/11. STRIDE Scholar. Sex-based differences in cell density with age.
- Lucha Rodriguez-Gonzalez '11, 09/07 – 08/08. AEMES scholar/mentee.
- LizAnn Amadei '10, 09/07 – 05/08. Research on sex-based differences in murine tail tendon mechanics.
- Alison Cloutier '08, 09/07 – 05/08. Research on the role of multiple gestational cycles on murine tendon composition and mechanics.
- Geraldine Richards '10, 09/06 – 05/08. Minority mentor program mentee.
- Vanessa Pogue '10 (Georgia Institute of Technology), 06/06 – 08/06. Research on gender modulation of tendon and ligament properties.
- Jillian Bauer '10 06/06 – 08/06. Research on gender modulation of tendon and ligament properties.
- Kati Thiel '07 06/06 – 05/07. Research on gender modulation of knee laxity in mice.
- Emily Earl-Royal, '09 09/05 – 05/06. STRIDE research in mechanical modulation of bone formation.
- Andrea Fiumifreddo '06 09/05 – 05/06. Independent study on mechanical modulation of bone formation.
- Eidan Webster, '05 01/05 – 05/05. Research on the role of the Y2 receptor in bone.
- Asmaa Maloul, '07 06/04 – 08/04; 09/06 – 05/06. Research on the role of GDF-7 in bone. Work resulted in one publication. Also researched role of gender on tendon properties.
- Estefania Alvarez '06 06/04 – 08/04. Research on the role of GDF-7 in skin viscoelasticity.

- Mimi Zhang, '05 09/03 – 05/05. Research on the role of the Y2 receptor in bone structure and function. Resulted in one conference presentation.
- Natalia Grob '06 09/02 – 09/03. STRIDE research on genotyping using PCR.
- Rebecca Hufford '06 09/02 – 05/04. STRIDE research on mouse tendon testing.
- Rachel Entwistle '05, 06/02 – 09/02; 06/04 - present Research on regional variations in ultrastructural characteristics of tendon. Work resulted in one poster at a Gordon Research Conference, July 2002. Currently researching role of GDF-7 in tendon viscoelastic properties.
- Kerri A. Rossmeyer '04, 06/02 – 05/04. Research on the role of GDF-7 in bone. Work resulted in one publication.
- Cheruba Prabakar '04, 02/02 – 05/02. Research on characterization of bone mineral crystal size in GDF-5 deficient mice using X-ray powder diffraction techniques.
- Danielle (An-Chi) Tsou '04, 06/01 – 05/04. Research on ultrastructural characteristics of intact skin and healing tendon in GDF-5 deficient mice and on the effect of variations in bone mineral content on long bone material behavior. Work resulted in co-authorship of two publications. Also researched the effects of GDF-7 deficiency on tendon structure and function, resulting in one co-authored publication.
- Emerson A. Taylor '04, 06/01 – 09/01. Research on characterization of geometric properties in long bones of GDF-5 deficient mice. Work resulted in co-authorship of two publications.
- Bachelor of Science Degree, Senior Thesis supervision*
- Brianne Connizzo [S.B. Engineering Science, Smith College]. "The effect of myostatin deficiency on Achilles tendon structural and material behavior in mice." 2010
- Alison Cloutier [S.B. Engineering Science, Smith College]. "The effect of multiple gestational cycles on tendon material and structural behavior in mice." 2008
- Kathryn Thiel [S.B. Engineering Science, Smith College]. "Sex-based differences in the knee laxity of C57/Bl6 mice over time." 2007
- Asmaa Maloul [S.B. Engineering Science, Smith College]. "Sex-Based Differences in Achilles Tendon Structural and Material Behavior in C57/B16 Mice" 2007
- Mimi Zhang [S.B. Engineering Science, Smith College]. "Cortical Bone Structural and Material Behavior in Y2 Receptor Deficient Mice," Highest Honors, 2005.
- Kerri Rossmeyer [S.B., Engineering Science, Smith College]. "GDF-7 Modulation of Murine Cortical Bone," Highest Honors, 2004. Work resulted in one publication.
- Danielle An-Chi Tsou [S.B., Engineering Science, Smith College]. "GDF-7 Modulation of Tendon Structure and Function," Highest Honors, 2004. Work resulted in one publication.
- Kim, Eun [B.S., Chemical Engineering, University of Virginia], "Effects of GDF-5 deficiency on long bone structural behavior," Bachelor's Thesis, 2001.
- Zelley, Geoff [B.S., Chemical Engineering, University of Virginia], "The measurement of motility in chick embryos using a Hall Effect transducer," Bachelor's Thesis, 2001.
- Isenstein, Arin [B.S., Engineering Science, University of Virginia], "Investigation of the effects of mechanical loading history on developing cartilage," Bachelor's Thesis, 2000. Finalist, School of Engineering Student Research and Design Competition, May 2000. Work resulted in one publication.
- Johnson, Tiffany [B.S., Chemical Engineering, University of Virginia], "The effects of GDF-5 and GDF-7 deficiency on the viscoelastic properties of mouse tail tendons," Bachelor's Thesis, 2000. First Prize, School of Engineering Research and Design Competition, May, 2000. Work resulted in two publications.
- Masters of Science*
- Battaglia, Todd M.D. [M.S. Surgery, University of Virginia], "GDF modulation of form and function in murine skin and bone," Master's Thesis, 2005. Work resulted in four publications.

Clark, Randall [M.S., Biomedical Engineering, University of Virginia], “The role of Growth and Differentiation Factors in tendon form and function,” Master’s Thesis, 2000. Work resulted in six publications.

Medical Students & Residents Supervised During Research Rotations

Chhabra, Anikar M.D., “Achilles tendon repair in the absence of GDF-5.” Work resulted in two publications.

Work resulted in the following honors and awards:

- (1) 2001 The Basil M. Boyd, M.D. Memorial Resident Research Award, presented at the Oscar Miller Day Symposium on Foot & Ankle in Sports Activities
- (2) 2001 Ranawat Residency Research Award for Molecular Biology Research presented at the Eastern Orthopaedic Association Annual Meeting
- (3) 2001 Sultzzer Residency Research Award for Growth Factor Research presented at the American Academy of Orthopaedic Surgeons

Chhabra, Abhinav Bobby, M.D. (University of Virginia, Orthopaedic Resident)

Dacus, Rashard (University of Virginia School of Medicine '01)

Davis, Lonnie (University of Virginia School of Medicine '00)

Purcell, Derek (University of Virginia School of Medicine'00)

Wang, Wei-chuan (Glen) (University of Virginia School of Medicine '02)

FORMAL STUDY TO IMPROVE TEACHING ABILITIES:

2023 Faculty Perspectives on Diversity & Pedagogy, Smith College (January, 2023)

2022 International Transformational Learning Conference (virtual)

2022 Governance of Emerging Technologies Conference, Arizona State University

2020 Remote Teaching Instructional Technology Workshops

2019 Visual Facilitation Workshop (The Grove)

2017 Beverly Tatum Inclusive Teaching Practices Presidential Seminar and Discussion

Digital Storytelling Workshop. Smith College, May 2015

2012-2015 Davis Education Foundation Knowledge Building Faculty Fellow

2010 - 2015 Member of Smith College Teaching & Learning Seminar “Veteran’s Group”

Olin College, Workshop on Curricular Change, July, 2009

2009-10 Teaching & Learning Seminar Fellow, Smith College

First Year Seminar Workshop, May 2009

Kahn Institute Workshop on the Learning Sciences, January 2009

First Year Seminar Development Stipend, July 2008

Faculty Development Workshop on Improving Advising, May 2008

Faculty Development Seminar Series on Pedagogy, Fall, 2006-2007

Summer Institute in Materials Science & Material Culture, MIT, 6/9 – 6/20/02.

ABET accreditation workshop, Detroit, MI (2001)

NSF Foundation Coalition Freshman Engineering Workshop, U of W, Madison (2001)

NSF Best Assessment Processes Workshop, Rose Hulman Institute of Technology (2001)

NSF Engineering Education SUCCEED coalition workshop, Clemson, SC (2001)

West Point Workshop on Interdisciplinary Math Curriculum Development (2001)

Autumn Teaching Workshop, University of Virginia (1999)

NSF Engineering Education Scholar (1995)