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EDUCATION & TRAINING

2005 – Present	HARVARD UNIVERSITY <i>Postdoctoral Fellow, School of Engineering and Applied Sciences</i> Advisor: Assoc. Prof. Kevin Kit Parker	Cambridge, MA
2004 – 2005	UNIVERSITY OF FLORIDA <i>Postdoctoral Research Assoc, Department of Chemical Engineering</i> Advisors: Prof. Rich Dickinson and Prof. Dan Purich	Gainesville, FL
May 2004	UNIVERSITY OF FLORIDA <i>Doctor of Philosophy in Biomedical Engineering,</i> Advisors: Prof. Anthony Brennan and Dr. Winfred Phillips	Gainesville, FL
August 2002	UNIVERSITY OF FLORIDA <i>Master of Science in Biomedical Engineering</i> Advisor: Prof. Anthony Brennan	Gainesville, FL
May 1999	CORNELL UNIVERSITY <i>Bachelor of Science in Materials Science and Engineering, Option in Bioengineering</i>	Ithaca, NY

WORK & RESEARCH EXPERIENCE

2008 – Present	SCHOOL OF ENGINEERING AND APPLIED SCIENCES, HARVARD UNIVERSITY <i>Research Associate, Acting Director of the Disease Biophysics Group</i> <ul style="list-style-type: none">• Regeneration of cardiac muscle for <i>in vitro</i> drug discovery/screening and <i>in vivo</i> repair (Muscular Thin Films)• Extracellular matrix protein based materials (Protein nanoFabrics)• Stem and progenitor cell engineering for differentiation and morphogenesis• Advisor: Prof. Kevin Kit Parker	Cambridge, MA
2005 - 2008	SCHOOL OF ENGINEERING AND APPLIED SCIENCES, HARVARD UNIVERSITY <i>Postdoctoral Fellow</i> <ul style="list-style-type: none">• 2-dimensional and 3-dimensional tissue engineering of muscle• Neural and vascular <i>in vitro</i> models of traumatic brain injury• Stem cells in tissue engineering; differentiation and scaffold design strategies for myogenesis• <i>De novo</i> regeneration of extracellular matrices• <i>In vitro</i> disease models of cardiomyopathy for drug discovery• Multi-scale mechanics in biological systems• Advisor: Prof. Kevin Kit Parker	Cambridge, MA
2004 - 2005	DEPT. OF CHEMICAL ENGINEERING, UNIVERSITY OF FLORIDA <i>Postdoctoral Research Associate</i> <ul style="list-style-type: none">• Design and implementation of a laser particle tracking system to study actin based motility for biosensor applications• Quantification of force generation by actin end-tracking motors for shuttling nano-particles• Advisors: Prof. Rich Dickinson and Prof. Dan Purich	Gainesville, FL

- 1997 - 1998 **ABIOMED, INC.** Danvers, MA
Engineering Co-op
Design and manufacture of internal and extracorporeal ventricular assist devices.
- Assisted in development of microtextured polyurethane membranes used as blood contacting surfaces in artificial hearts
 - Designed and fabricated (i) a prototype textured Dacron velour VAD for proof-of-concept, (ii) test equipment for pneumatic valve from a Pediatric VAD and (iii) a hydraulically-actuated articulated arm for dip-casting of textured membrane mandrels in polyurethane

TEACHING EXPERIENCE

- 2006 **SCHOOL OF ENGINEERING AND APPLIED SCIENCES, HARVARD UNIVERSITY** Cambridge, MA
 Cellular Engineering (ES 122/222)
Head Teaching Fellow
- Instructor for laboratory class on cellular engineering techniques covering cell culture, microengineered cell environments, *in vitro* testing, immunofluorescent imaging, image processing, statistical analysis and interpretation of results.
 - Coordinated two teaching fellows assisting the class and maintained an entire BSL-1 biolab for the duration of the course.
 - Administered review sessions and developed exam questions.
 - Instructor: Prof. K. Kit Parker
- 2002 - 2004 **DEPT. OF MATERIALS SCIENCE AND ENGINEERING, UNIVERSITY OF FLORIDA** Gainesville, FL
 Polymer Processing (EMA 4666C)
Teaching Assistant
- Instructor for laboratory class in polymer processing techniques such as melt extrusion, blow molding and tensile testing.
 - Graded laboratory notebooks and laboratory reports
 - Instructor: Prof. Anthony Brennan

ACADEMIC HONORS & AWARDS

- Nov. 2007 **BEST POSTER AWARD – MATERIALS RESEARCH SOCIETY**
 “Engineering Contractility of Myocardial Sheets”
 MRS Fall Meeting, Boston, MA, November 27-30, 2007
- July 2007 **COMPETITIVELY SELECTED AS A PARTICIPANT IN THE 57TH MEETING OF NOBEL LAUREATES**
 Lindau, Lake Constance, Germany, July 1-6, 2007
- Nov. 2006 **MATERIALS RESEARCH SOCIETY AWARD – 2ND PRIZE IN SCIENTIFIC FILM FESTIVAL**
 "Muscular Thin Films: Biohybrid Materials for Soft Robotics"
 MRS Fall Meeting, Boston, MA, November 27-30, 2006
- March 2004 **POSTER AWARD - GRAND PRIZE IN CHARACTERIZATION**
 7th Annual Joint Meeting of the Florida Chapter of the AVS and the Florida Microscopy Society,
 March 7-9, 2004
- July 2003 **TUITION AND TRAVEL AWARD (AMERICAN CHEMICAL SOCIETY)**
 Physical Chemistry on the Nanometer Scale Summer School, Washington State University,
 Pullman, WA, July 27 - August 4, 2003
- Sept. 2002 **COSTELLO AWARD FOR ACHIEVEMENT IN BIOMEDICAL ENGINEERING**
 Department of Biomedical Engineering, University of Florida
- March 2002 **POSTER AWARD – 2ND PRIZE IN MICROSCOPY FOR BIOLOGICAL SCIENCES**
 5th Annual Joint Meeting of the Florida Chapter of the AVS and the Florida Microscopy Society,
 March 11-14, 2002

February 2002 **POSTER AWARD – BEST POSTER AT CONFERENCE**
2nd World Congress of Adhesion and Related Phenomenon (WCARP-II) and 25th Adhesion Society meeting, February 10-14, 2002

PROFESSIONAL SERVICE & ACTIVITIES

MEMBERSHIPS

Materials Research Society, American Chemical Society, Society for Biomaterials, Biophysical Society

REVIEWER

Biophysical Journal
Journal of Biomechanical Engineering

PATENTS

1. "Surface Topography for Non-toxic Bioadhesion Control," Anthony B. Brennan, Ronald H. Baney, Michelle L. Carman, Thomas G. Estes, Adam W. Feinberg, Leslie H. Wilson and James F. Schumacher, US Patent No. 7,143,709, December 5, 2006.

FILED PATENT APPLICATIONS

1. "Engineered Cell Growth On Polymeric Films And Biotechnological Applications Thereof," Kevin Kit Parker, Adam W. Feinberg, Sergey Shevkopyas, Alex Feigel and George M. Whitesides, US Patent Office, PCT Patent Application filed February 5, 2007.
2. "Surface Topographies for Non-toxic Bioadhesion Control," Anthony B. Brennan, Ronald H. Baney, Michelle L. Carman, Thomas G. Estes, Adam W. Feinberg, Leslie H. Wilson and James F. Schumacher, US Patent Application No. 20070227428, October 4, 2007.
3. "Biopolymer Structures," Kevin Kit Parker and Adam W. Feinberg, US Patent Office, PCT Patent Application filed October 10, 2007.
4. "Boundary Conditions For the Alignment of Cells and Tissues," Kevin Kit Parker, Adam W. Feinberg, Po-Ling Kuo and Chinlin Guo, US Patent Office, PCT Patent Application filed September 26, 2008.
5. "High Throughput Assays for Determining Muscle Function and Devices for Use Therein," Kevin Kit Parker, Adam W. Feinberg, Anna Grossberg, Patrick Alford, and Crystal Riplinger, US Provisional Application filed May 1, 2009.
6. "Method for Generating Functionalized Soft Substrates and Micropatterning Cells Thereon," Po-Ling Kuo, Adam W. Feinberg, and Kevin Kit Parker, US Patent Office, PCT Patent Application filed May 22, 2009.
7. "Construction of Functional Anisotropic Muscle Tissue from Muscle Progenitor Cells," Kevin Kit Parker, Adam W. Feinberg, Kenneth R. Chien, Peter van der Meer, Ibrahim Domian, PCT Patent Application filed October, 2009.

PUBLICATIONS

1. A. L. Gibson, L. H. Wilson, A. W. Feinberg, W. R. Wilkerson, C. A. Seegert, R. H. Baney and A. B. Brennan, "Characterization of Chemically and Topographically Modified Siloxane Elastomer for Controlled Cell Growth," *MRS Proceedings*, 771, GG1.4, 2001.
2. A. W. Feinberg, C. A. Seegert, A. L. Gibson and A. B. Brennan, "Engineering Micrometer and Nanometer Scale Features in Polydimethylsiloxane Elastomers for Controlled Cell Function," *MRS Proceedings*, 771, GG1.8, 2001.
3. M. E. Callow, A. R. Jennings, A. B. Brennan, C. A. Seegert, A. Gibson, L. H. Wilson, A. W. Feinberg, R. H. Baney and J. A. Callow, "Microtopographic Cues for Settlement of Zoospores of the Green Fouling Alga *Enteromorpha*," *Biofouling*, 2002 Vol. 18(3), pp 237-45.
4. A. W. Feinberg, A. L. Gibson, W. R. Wilkerson, C. A. Seegert, L. H. Wilson, L. C. Zhao, R. H. Baney, J. A. Callow, M. E. Callow and A. B. Brennan, "Investigating the Energetics of Bioadhesion on Microengineered Siloxane Elastomers: Characterizing the Topography, Mechanical Properties, and Surface Energy and

- Their Effect on Cell Contact Guidance,” in **Synthesis and Properties of Silicones and Silicone-Modified Materials**. Eds. Clarson, Fitzgerald, Owen, Smith and V. Dyke, ACS. 2003, 838: pp 196-211.
5. L. H. Wilson, J. F. Schumacher, M. L. Carman, A. L. Gibson, A. W. Feinberg, M. E. Callow, J. A. Finlay, J. A. Callow and A. B. Brennan, “Antifouling Potential of Lubricious, Micro-engineered, PDMS Elastomers against Zoospores of the Green Fouling Alga *Ulva* (Enteromorpha),” **Biofouling**, 2004 Vol. 20 (1): pp 53 – 63.
 6. M. L. Carman, T. G. Estes, A. W. Feinberg, J. F. Schumacher, W. Wilkerson, L. H. Wilson, M. E. Callow, J. A. Callow and A. B. Brennan, “Engineered antifouling microtopographies – correlating wettability with cell attachment,” **Biofouling**, Vol. 22 (1) 2006: pp 11 – 21.
 7. J. F. Schumacher, M. L. Carman, T. G. Estes, A. W. Feinberg, L. H. Wilson, M. E. Callow, J. A. Callow, J. A. Finlay and A. B. Brennan, “Engineered antifouling microtopographies – effect of feature size, geometry, and roughness on settlement of zoospores of the green alga *Ulva*,” **Biofouling**, 2007 Vol. 23 (1): pp 1 – 8.
 8. A. W. Feinberg, A. Feigel, S. S. Shevkopylas, S. P. Sheehy, G. M. Whitesides and K. K. Parker, “Muscular Thin Films for Building Actuators and Powering Devices,” **Science** 7 September 2007: Vol. 317, no. 5843, pp 1366 – 1370.
 9. A. W. Feinberg, W. Wilkerson, C. A. Seegert, A. L. Gibson, L. H. Wilson and A. B. Brennan, “Systematic Variation of Microtopography, Surface Chemistry and Elastic Modulus and the State Dependent Effect on Endothelial Cell Alignment,” **Journal of Biomedical Materials Research: Part A**, 86A (2), 2008, pp 522-534.
 10. N. A. Geisse, A. W. Feinberg, P. Kuo, S. P. Sheehy, M. Bray and K. K. Parker, “Micropatterning Approaches for Cardiac Biology,” in **Micro and Nanoengineering of the Cell Microenvironment: Applications and Technologies**. Eds. Khademhosseini, Borenstein, Takayama and Tomer, Artech House Publishers. 2008, pp 341 – 360.
 11. A. W. Feinberg, J. F. Schumacher and A. B. Brennan, “Engineering High-Density Endothelial Cell Monolayers on Soft Substrates,” **Acta Biomaterialia**, Vol. 5 (6), 2009, pp 2013 – 2024.
 12. I. J. Domian, M. Chiravuri, P. van der Meer, A. W. Feinberg, X. Shi, Y. Shao, S. M. Wu, K. K. Parker, K. R. Chien, “Generation of Functional Ventricular Heart Muscle from Mouse Ventricular Progenitor Cells,” **Science** 16 October 2009: Vol. 326, no. 5951, 2009, pp 426 - 429.
 13. A. W. Feinberg and K. K. Parker, “Protein nanoFabrics Engineered by Surface-Initiated Fibrillogenesis,” (Submitted, 2009).
 14. A. W. Feinberg, P. W. Alford, S. P. Sheehy and K. K. Parker, “Quantitative Contractility Assays Using Muscular Thin Films,” (Submitted, 2009).
 15. A. W. Feinberg, C. R. Ripplinger, P. W. Alford, S. P. Sheehy, A. Werdich and K. K. Parker, “Extracellular Boundary Conditions Drive Functional Maturation of Engineered Cardiac Muscle,” (*In Preparation*).
 16. A. W. Feinberg, P. van der Meer, C. R. Ripplinger, I. J. Domian, K. R. Chien and K. K. Parker, “Regenerating Functional Myocardium from Embryonic Stem Cell Derived Cardiac Progenitors” (*In Preparation*).

PRESENTATIONS (ORAL AND POSTER)

1. “Role of Silicone Elastomer Surface Properties on Enteromorpha Fouling.” C.A. Seegert, L.C. Zhao, W.R. Wilkerson, A.W. Feinberg, A.B. Brennan, Office of Naval Research Fouling Release Coatings Program Review, Alexandria, VA, 5, August 2000.
2. “Forces Between Selectins and Their Sialyl Lewis X Counter-Receptor,” LC Zhao, BD Hauser, AW Feinberg, WR Wilkerson, CK Ozaki, AB Brennan, American Heart Association 221 Scientific Sessions, New Orleans, LA, November 2000.
3. “Designed structures for directed biofilm formation,” C. A. Seegert, L. C. Zhao, W. R. Wilkerson, A. W. Feinberg, A. B. Brennan, First International Symposium on Polymers in the Marine Environment, Poly Millennium 2000, Waikoloa, HI, December 2000.
4. “Bioadhesion Studies on Microtextured Siloxane Elastomers,” WR Wilkerson, CA Seegert, AW Feinberg, LC Zhao, JA Callow, ME Callow, AB Brennan, American Chemical Society 221st Meeting, San Diego, CA, April 1-5, 2001
5. “Characterization of Chemically and Topographically Modified Siloxane Elastomer,” AW Feinberg, C Seegert, WR Wilkerson, A Gibson, L Wilson, R Baney, AB Brennan, American Chemical Society 221st Meeting, San Diego, CA April 1-5, 2001

6. "Engineered Surfaces for Directed Cell Function: Physical, Chemical and Topographical Modification and Endothelial Cell Response," AB Brennan, AW Feinberg, A Gibson, C Seegert, CK Ozaki, W Wilkerson, L Wilson and LC Zhao, NIH BECON, Bethesda, MD, July 2001
7. "Engineering Micrometer and Nanometer Scale Features in Polydimethylsiloxane Elastomers for Controlled Cell Function," AW Feinberg, CA Seegert, AL Gibson and AB Brennan, MRS 2001 Fall Meeting, Boston, MA, November 26-30, 2001.
8. "Characterization of Chemically and Topographically Modified Siloxane Elastomer for Controlled Cell Growth" AL Gibson, LH Wilson, AW Feinberg, WR Wilkerson, CA Seegert, RH Baney and AB Brennan, MRS 2001 Fall Meeting, Boston, MA, November 26-30, 2001.
9. "Quantifying Inter-Cellular Forces in Bioadhesion: Examination of Sialyl Lewis X and Selectin Interactions with Atomic Force Microscopy," AW Feinberg, LC Zhao and AB Brennan, 25th Annual Meeting of the Adhesion Society, Orlando, FL, February 10-14, 2002.
10. "Toward Hierarchical Tissue Engineering: Chemistry and Topography as Competing Factors in an Endothelial System," CA Seegert, AW Feinberg, AL Gibson, LH Wilson, WR Wilkerson, RH Baney and AB Brennan, 25th Annual Meeting of the Adhesion Society, Orlando, FL, February 10-14, 2002.
11. "Nanoforce Measurements of Chemotactic Specificity on Biopolymers," Adam W. Feinberg, Amy L. Gibson, Leslie H. Wilson, Lee C. Zhao, and Anthony B. Brennan, Society for Biomaterials, April 2002.
12. "AFM Nanolithography of Nanometer and Micron Scale Hierarchical Topographies in Polymers for Tissue Engineering Applications," AW Feinberg, CA Seegert, AL Gibson, AB Brennan, Fifth Annual Joint Meeting of the Florida Chapter of the AVS and the Florida Society for Microscopy, March 11-14, 2002.
13. "Effect of Argon Plasma Treatment on PDMS Elastomer Investigated by AFM," A.W. Feinberg, T.G. Estes and A.B. Brennan, The 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003
14. "Direct measurement of receptor-ligand binding on the surface of living cells," Adam W. Feinberg and Anthony B. Brennan, The 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003
15. "Mapping and Quantifying Proteins on the Surface of Living Cells," A.W. Feinberg and A.B. Brennan, Graduate Student Forum, University of Florida, April 1, 2003.
16. "AFM Quantification of Receptor-Ligand Interactions on the Surface of Living Cells," A.W. Feinberg and A.B. Brennan, Society for Biomaterials, Reno, NV, April 30 – May 4, 2003
17. "Application of AFM to Engineering the Structure and Quantifying the Properties of the Biointerface," A.W. Feinberg and A. B. Brennan, Physical Chemistry on the Nanometer Scale Summer School, Washington State University, Pullman, WA, August 1, 2003.
18. "Simultaneous AFM Quantification of Topographical, Mechanical and Biochemical Properties on Live Cells," A.W. Feinberg and A.B. Brennan, Biomedical Engineering Society Meeting, Nashville, TN, October 2003.
19. "Morphology, Cytoskeletal Structure and Mechanical Properties of Vascular Endothelial Cells Cultured On Microengineered Surfaces," A.W. Feinberg, J. F. Schumacher and A. B. Brennan, 7th Annual Joint Meeting of the Florida Chapter of the AVS and the Florida Microscopy Society, March 7-9, 2004. (INVITED)
20. "Fluorescent Imaging of Endothelial Cells On Microengineered Surfaces," A.W. Feinberg, J. F. Schumacher and A. B. Brennan, 7th Annual Joint Meeting of the Florida Chapter of the AVS and the Florida Microscopy Society, March 7-9, 2004.
21. "Focal Contact Adhesions To Engineered Surfaces And The Affect On Cell Morphology, Mechanical Properties And Membrane Receptors," A.W. Feinberg, J.F. Schumacher and A.B. Brennan, The 227th ACS National Meeting, Anaheim, CA, March 28 – April 1, 2004.
22. "Bioadhesion To Microengineered Siloxane Elastomers," A.B. Brennan, M.L. Carman, T.G. Estes, A.W. Feinberg, J.F. Schumacher and L.H. Wilson, The 227th ACS National Meeting, Anaheim, CA, March 28 – April 1, 2004.
23. "Control Of *Ulva* Zoospore Settlement On Silicone Substrates Via Microtopographic Cues," L.H. Wilson, M.L Carman, A.W. Feinberg, J.F. Schumacher, M.E. Callow and A.B. Brennan, The 227th ACS National Meeting, Anaheim, CA, March 28 – April 1, 2004.
24. "Modeling Wetting Of Engineered Topographies On Silicone Elastomers For Predicting Bioadhesion," M.L. Carman, J.F. Schumacher, A.W. Feinberg and A.B. Brennan, The 227th ACS National Meeting, Anaheim, CA, March 28 – April 1, 2004.
25. "Settlement And Release Of *Balanus* And *Ulva* As A Function Of PDMS Elastomer Surface Energy," T.G. Estes, A.W. Feinberg, M.E. Callow, G. Swain and A.B. Brennan, The 227th ACS National Meeting, Anaheim, CA, March 28 – April 1, 2004.
26. "Comparison of the Morphology and Mechanical Properties of Vascular Endothelial Cells Cultured on Microengineered Surfaces and from Fresh Artery," A.W. Feinberg, J.F. Schumacher and A.B. Brennan, 7th World Biomaterials Congress, Sydney, Australia, May 17 – 21, 2004.

27. "Development of a Microfluidic Device for Separating Circulating Endothelial Cells from Blood," A.W. Feinberg, J.F. Schumacher, M.S. Segal and A.B. Brennan, 7th World Biomaterials Congress, Sydney, Australia, May 17 – 21, 2004.
28. "Micro-Engineered Coatings for Antifouling and Biofouling Release of Marine Micro-Organisms," A.W. Feinberg, M.L. Carman, T.G. Estes, J.F. Schumacher, L.H. Wilson, J.A. Finlay, J.A. Callow, M.E. Callow, and A.B. Brennan, 7th World Biomaterials Congress, Sydney, Australia, May 17 – 21, 2004.
29. "Endothelial Cell Taxis Directed by Microengineered Topographies: The Effect of Curved Steps and Cliffs," A.W. Feinberg, J.F. Schumacher and A.B. Brennan, Society for Biomaterials, Memphis, TN, April 27 – 30, 2005.
30. "Directionally Guided Actin-Based Particle Motility *In Vitro*," K. A. Interliggi, A. W. Feinberg, W. Zeile, S. Hens, G. McGuire, D. L. Purich and R. B. Dickinson, American Institute of Chemical Engineers Annual Meeting, Cincinnati, OH, October 30 – November 4, 2005.
31. "Muscular Thin Films: Cardiomyocyte/PDMS Bio-Composites With Emergent Functionality," A.W. Feinberg, A. Feigel, S. Shevkopyas, S. Sheehy, G.M. Whitesides And K. Parker, Biomedical Engineering Society 2006 Annual Meeting, October 11-14, 2006, Chicago, IL.
32. "Engineered Self-Assembly of Cardiomyocytes into 3-Dimensional Muscular Thin Film Bio-composites," A.W. Feinberg, A. Feigel, S. Shevkopyas, S. Sheehy, G.M. Whitesides And K. Parker, Materials Research Society 2006 Fall Meeting, November 27-30, 2006, Boston, MA.
33. "An In Vitro Model of Cellular Injury in Traumatic Brain Injury," B.E. Dabiri, E.H. Weiss, A.W. Feinberg and K.K. Parker, Neurotrauma Society National Meeting 2007, July 30 to August 1, Kansas City, MO.
34. "Microstructured Multi-Component Protein Scaffolds for Cardiac Tissue Engineering," A.W. Feinberg, S.P. Sheehy and K.K. Parker, Biomedical Engineering Society National Meeting 2007, September 26-29, Hollywood, CA.
35. "In Vitro Contractility Assay Correlates Sarcomere Alignment With Systolic Stress In 2D Myocardium," A.W. Feinberg, S.P. Sheehy and K.K. Parker, Biomedical Engineering Society National Meeting 2007, September 26-29, Hollywood, CA.
36. "An In Vitro Model of Integrin Mediated Neural Injury," B. E. Dabiri, E. H. Weiss, A. W. Feinberg and K. K. Parker, Biomedical Engineering Society National Meeting 2007, September 26-29, Hollywood, CA.
37. "Muscular Thin Films for Building Actuators and Powering Devices," A.W. Feinberg, NSEC Research Exchange Seminars, Harvard University, October 31, 2007, Cambridge, MA. (Invited Talk)
38. "Muscular Thin Films: Towards Myocardial Regeneration and Drug Screening Platforms," A.W. Feinberg, A. Forsyth, E. Weiss, S. P. Sheehy and K. K. Parker, CIMIT Innovation Congress 2007, November 13-14, 2007, Boston, MA.
39. "Building Tissue Engineering Scaffolds Directly from Extracellular Matrix Proteins with Microscale Spatial Control," A.W. Feinberg, S.P. Sheehy and K.K. Parker, Materials Research Society 2007 Fall Meeting, November 26-30, 2007, Boston, MA.
40. "Engineering Contractility of Myocardial Sheets," A.W. Feinberg, W.J. Adams, M.A. Bray, S.P. Sheehy and K.K. Parker, Materials Research Society 2007 Fall Meeting, November 26-30, 2007, Boston, MA.
41. "Finite Deformation of a Biotic-Abiotic Thin Film in a Fluid," W. Adams, A.W. Feinberg and K.K. Parker, Materials Research Society 2007 Fall Meeting, November 26-30, 2007, Boston, MA.
42. "Protein μ Fabrics and μ Threads for Tissue Engineering Applications," A.W. Feinberg, February 4, 2008, Eidgenössische Technische Hochschule (ETH) Zürich, Zurich, Switzerland. (Invited Talk)
43. "Engineered Boundary Conditions Direct Cardiac Myogenesis and Contractility," A. W. Feinberg, S.P. Sheehy and K.K. Parker, Union of the Swiss Societies for Experimental Biology- Biology Meets Engineering 2008, February 6, 2008, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland. (Invited Talk)
44. "Engineering Myocardium in 3D: Towards Regeneration and In Vitro Disease Models," A.W. Feinberg, February 8, 2008, University of Bern, Bern, Switzerland. (Invited Talk)
45. "Engineering Cardiac Myogenesis and Contractility," A.W. Feinberg, April 28, 2008, Columbia University, New York, NY. (Invited Talk)
46. "Sarcomere Alignment Dictates Contractile Force in Engineered Myocardium," A.W. Feinberg, S.P. Sheehy and K.K. Parker, Biomedical Engineering Society National Meeting 2008, October 2-4, St Louis, MO.
47. "Microscale Heterogeneities Enhance Sarcomere Alignment and Contractile Force in Engineered Myocardium," A.W. Feinberg, C.M. Ripplinger, S.P. Sheehy and K.K. Parker, Materials Research Society Fall Meeting, December 1-5, 2008, Boston, MA.
48. "Engineering Cardiac Contractility from the Sarcomere to Tissue-Scale," A.W. Feinberg, P.W. Alford, C.M. Ripplinger, W.J. Adams, S.P. Sheehy and K.K. Parker, Biophysical Society Annual Meeting, March 1-4, 2009, Boston, MA.

49. "Engineering the Contractility of Cardiac Muscle from the Sub-Cellular to Tissue Scale," A.W. Feinberg, *Generation and Repair of Myocardial Tissue*, 6th International Ascona Workshop on Cardiomyocyte Biology, April 16-30, 2009, Monte Verita, Ascona, Switzerland. (Invited Talk)