Curriculum Vitae

Huan Wang
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EDUCATION

University of Colorado, Boulder CO **2006 August—2012 Nov**
Ph.D., Department of Molecular, Cellular and Developmental Biology,
Cumulative GPA: 3.9/4.0

Zhejiang University, Hang Zhou ZJ **2002 September—2006 July**
Bachelor of Science, Department of Biotechnology
Cumulative GPA: 3.7/4.0

Chinese University of Hong Kong, Shatin HK **2004 September—2005 July**
Exchange student, Department of Biology
Cumulative GPA: 3.5/4.0

RESEARCH EXPERIENCE

Postdoctoral Research Assistant, University of Colorado at Boulder **2013 April— now**
Advisor: Dr. Kristi S. Anseth
Project: Design and mechanisms of poly(ethylene glycol) based hydrogels as culturing scaffolds for induced pluripotent stem cells.

Graduate Research Assistant, University of Colorado at Boulder **2007 May—2013 April**
Advisors: Dr. Kristi S. Anseth and Dr. Leslie A. Leinwand.
Ph.D. Thesis: Signaling from matrix elasticity and TGF-β1 to cells of the cardiac valve

Undergraduate Research Volunteer, Zhejiang University
2003 June—2004June, 2005 August—2006 Feburary
Advisors: Dr. Bingyang Ding and Dr. Xiaofeng Jin.
Project: Phylogenetic analysis and protective measures proposed for an endangered plant species, *Platycrater arguta* var. *sinensis*

Undergraduate Research Volunteer, Chinese University of Hong Kong **2004 December —2005 May**
Advisor: Dr. Wei Ge.
Project: Functional assays of Activin Receptor TypeIb in goldfish

PUBLICATIONS:

Wang H, Tibbitt MW, Langer SJ, Leinwand LA and Anseth KS. Hydrogels preserve inactivated fibroblast phenotype of valvular interstitial cells through an elasticity-regulated PI3K/AKT pathway. *Proceedings of the National Academy of Sciences USA,* in press (2013).

Wang H, Haeger SM, Kloxin AK, Leinwand LA and Anseth KS. Redirecting valvular myofibroblasts into dormant fibroblasts through light-mediated reduction in substrate modulus. *PLoS ONE* 7(7):e39969 (2012)

Wang H, Sridhar B, Leinwand LA, Anseth KS. Characterization of Cell Subpopulations Expressing Progenitor Cell Markers in Porcine Cardiac Valves. *PLoS ONE* 8(7): e69667. doi:10.1371/journal.pone.0069667 (2013)

Wang H, Leinwand LA and Anseth KS. Up-regulation of OB-cadherin by TGF-β1 inhibits α-smooth muscle actin expression in cardiac valve myofibroblasts, *Arteriosclerosis, Thrombosis, and Vascular Biology, in revision* (2013).

Chapnick DA, Bunker E, **Wang H**, Jacobson J, Gunther EJ, Kee E, Ahn N, Anseth KS and Liu X. Mechanosensing in TGF-β induced Collective Cell Migration through TACE Mediated TGF-α Ligand Shedding. *Cell*, in review.

POSTERS AND PRESENTATIONS

Wang H, Tibbitt MW, Langer SJ, Leinwand LA and Anseth KS. "Hydrogels preserve inactivated fibroblast phenotype of valvular interstitial cells through an elasticity-regulated PI3K/AKT pathway", HHMI Scientific Meeting, September 2013, Janelia Farm Research Campus**,** Ashburn, VA USA (Poster)

Wang H, Leinwand LA and Anseth KS, "Lowering Substrate Stiffness *in situ* through Photodegradable Hydrogels Promotes Quiescence of Cardiac Valvular Fibroblast", 9th World Biomaterial Congress, June 2012, Chengdu, China (Podium Presentation).

Wang H, Leinwand LA and Anseth KS, "Global Effects of TGF-β1 on Porcine Valvular Interstitial Cells (VICs)", 4th Biennial Heart Valve Biology and Tissue Engineering Meeting, March 2010, Hilton Head Island, SC USA (Podium Presentation).

Wang H, Leinwand LA and Anseth KS, "OB-Cadherin, A Novel Cell Surface Marker for Valvular Myofibroblasts", 5th Biennial Meeting of the Society for Heart Valve Disease (SHVD), June 2009, Berlin, Germany (Podium Presentation).

PROFESSIONAL SKILLS:

Cell Culture: mammalian primary cells and cell line culture, fluorescence activated cell sorting, transient transfection and stable lentiviral-mediated infection, retrovirus production and infection,
Molecular Techniques: molecular cloning, real-time PCR, luciferase reporter assays, protein expression, western blot, immunofluorescence,
Animal Work: mouse stain maintenance and breeding, subcutaneous implantation of biomaterials in mice, basic dissection of mice.
Data Analysis: microarray analysis, gene ontology analysis, pathway analysis, python language.
Chemistry: peptide synthesis, poly(ethylene glycol) monomer synthesis, hydrogel manufacture for cell culture
Microscopy: Bright field, epifluorescence and confocal fluorescence microscopy.

AWARDS

Fellowship for exchange student to the Chinese University of Hong Kong, 2004—2005. This fellowship was awarded to 2 persons in the Collage of Life Sciences in Zhejiang University.
First-class Fellowship for Excellent Student awarded by Zhejiang University for two consecutive years, 2002—2004. This honor is awarded annually to the students ranked top 3% in the department.
Excellent Student Cadre Honor awarded by Zhejiang University, 2002—2003.
One-star Volunteer Prize awarded by College of Life Sciences, 2002—2003. I was awarded for being volunteer interpreter at the Natural Museum of Zhejiang Province.
National Grade 10 Certificate on playing Pipa(Lute) awarded by Chinese Music Association, 2001. The national certificate on Pipa ranges from Grade 1 to 10, with 10 as the highest level.

TEACHING EXPERIENCE

Teaching Assistant, Introduction to Molecular and Cellular Biology Lab	2006 Fall semester
Teaching Assistant, Genetics Lab	2007 Spring semester

REFERENCES:

Kristi Anseth
Distinguished Professor and HHMI Investigator
University of Colorado
Dept. of Chemical and Biological Engineering, Howard Huges Medical Institute, and Biofrontier Institute
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Boulder, CO 80309
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