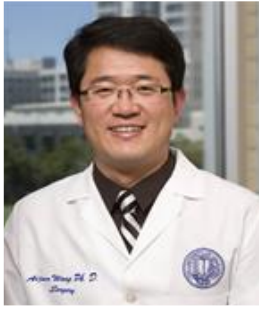


## Aijun Wang, Ph.D.

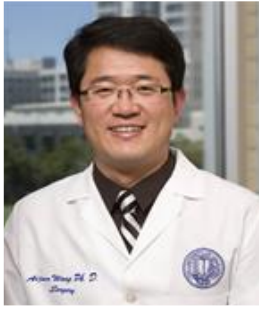
<b>Clinical Interests</b>	Dr. Wang's research interest is to develop novel technologies that combine stem cell engineering and biomaterial engineering to promote tissue regeneration. One line of research is the study of stem cell contribution to vascular disease development (atherosclerosis etc) and wound healing process (foreign body reaction and scar formation). Another line of research is the combination of stem cell engineering (stem cell identification, directed differentiation and delivery mechanisms) and biomaterial technology (nanomaterials, surface modification, biomolecule immobilization and drug delivery) for tissue regeneration.
<b>Title</b>	Assistant Professor Co-Director, Surgical Bioengineering Laboratory
<b>Specialty</b>	<a href="#">Surgery - General</a>
<b>Department</b>	Surgery
<b>Division</b>	General Surgery
<b>Center/Program Affiliation</b>	<a href="#">Stem Cell Research Program</a>
<b>Address/Phone</b>	Research II, 4625 2nd Ave. Sacramento, CA 95817
<b>Languages</b>	Chinese (Mandarin)
<b>Education</b>	Ph.D., Tsinghua University, Beijing, 2007 B.S., Shandong Medical University, Jinan, China, 2000 M.S., Shandong University, Jinan, 2003
<b>Fellowships</b>	California Institute for Regenerative Medicine (CIRM) / UC Berkeley, Berkeley, CA, 2010-12 UC Berkeley, Berkeley, CA, 2008-10
<b>Professional Memberships</b>	American Heart Association Biomedical Engineering Society International Society for Stem Cell Research Materials Research Society
<b>Honors and Awards</b>	Deloitte QB3 Award for Innovation, 2012 Winner, Berkeley Venture Lab Competition, 2011 Tsinghua - Hengshanliangci Excellent Thesis Award, 2010



## Aijun Wang, Ph.D.

### Select Recent Publications

- Aijun Wang, Zhenyu Tang, Xian Li, Yisu Jiang, Danielle A. Tsou, Song Li. Derivation of Smooth Muscle Cells with Neural Crest Origin from Human Induced Pluripotent Stem Cells. *Cells Tissues Organs*. 2012;195:5-14.
- Benjamin Lee, Hojeong Jeon, Aijun Wang, Zhiqiang Yan, Jian Yu, Costas Grigoropoulos, Song Li. Femtosecond Laser Ablation Enhances Cell Infiltration into Three-Dimensional Electrospun Scaffolds. *Acta Biomaterialia*. 2012 Jul;8(7):2648-58.
- Jian Yu\*, Aijun Wang\*, Zhenyu Tang, Yiqian Zhu, Jeffrey Henry, Fengping Huang, Song Li. The effect of stromal cell-derived factor-1a/heparin coating of biodegradable vascular grafts on the recruitment of both endothelial and smooth muscle progenitor cells for accelerated regeneration. *Biomaterials*. 2012 Nov; 33(32):8062-74. \*Contributed equally.
- Timothy Downing\*, Aijun Wang\*, Zhiqiang Yan, Yvette Nout, Andy Lee, Michael S. Beattie, Jacqueline C. Bresnahan, Diana L. Farmer, Song Li. Drug-eluting microfibrinous patches for the local delivery of rolipram in spinal cord repair. *J of Controlled Release*. 2012 May 23; 161(3):910-917.. \*Contributed equally.
- Zhenyu Tang\*, Aijun Wang\*, Zhiqiang Yan, Bo Liu, Julia Chu, Jill Helms, Song Li. Differentiation of Multipotent Vascular Stem Cells Contributes to Vascular Diseases. *Nature Communications*. 2012 Jun 6; 3:875. \*Contributed equally.
- Xian Li, Julia S. Chu, Aijun Wang, Yiqian Zhu, Wai Keung Chu, Li Yang, Song Li. Uniaxial Mechanical Strain Modulates the Differentiation of Neural Crest Stem Cells into Smooth Muscle Lineage on Micropatterned Surfaces. *PLoS ONE*. 2011, 6(10): e26029.
- Yujun Wei, Kai Gong, Zhenghuan Zheng, Aijun Wang, Qiang Ao, Yandao Gong, Xiufang Zhang. Chitosan/silk Fibroin-based Tissue-engineered Graft Seeded with Adipose-derived Stem Cells Enhances Nerve Regeneration in a Rat Model. *Journal of Materials Science: Materials in Medicine*. 2011, 22(8):1947-64.
- Payam Saadai, Yvette Nout, Jose Encinas, Aijun Wang, Timothy Downing, Michael S. Beattie, Jacqueline C. Bresnahan, Song Li, Diana L. Farmer. Prenatal Repair of Myelomeningocele with Aligned Nanofibrous Scaffolds - A Pilot Study in Sheep. *J of Pediatric Surgery*. 2011,46:2279-83.
- Jennifer S. Park, Anchi D. Tsou, Rokhaya Diop, Zhenyu Tang, Aijun Wang, Song Li. The Effect of Matrix Stiffness on the Differentiation of Mesenchymal Stem Cells in Response to TGF-B. *Biomaterials*. 2011, 32(16):3921-30.
- Aijun Wang, Zhenyu Tang, In-Hyun Park, Yiqian Zhu, Shyam Patel, George Q. Daley, Song Li. Induced Pluripotent Stem Cells for Neural Tissue Engineering. *Biomaterials*. 2011, 32(22):5023-32.



Aijun Wang, Ph.D.

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