

## Keith H. K. Wong

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### EDUCATION

- 2006-present Boston University  
Ph.D., Biomedical Engineering (2012 expected)  
Advisor: Prof. Joe Tien
- 2003-2006 The University of Hong Kong  
B.Eng., Mechanical Engineering, *1st Class Honors* (ranked 1st in class)  
Final Year Project: A study of blood flow in constricted vessels using computational fluid dynamics

### POSITIONS HELD

- 2007-present Boston University, Department of Biomedical Engineering  
Graduate Research Assistant with Prof. Joe Tien
- 2006 The University of Hong Kong  
Undergraduate Research Assistant with Prof. K.W. Chow (Mechanical Engineering) and Prof. Stephen Cheng (Surgery)

### AWARDS AND HONORS

- 2006 Martin Prize  
2006 Chiap Hua Cheng's Foundation Scholarship  
2006 Chinese Manufacturers' Association and Donors Scholarship  
2006 Ma Tze Sau Prize in Mechanical Engineering  
2006 The Hong Kong Electric Co. Ltd. Energy Systems Prize  
2004, 2006 Fong's Scholarship in Mechanical Engineering  
2003-2006 Chou Exhibition in Engineering  
2003-2006 Dean's Honors List

### COURSES TAUGHT

BE436 Fundamentals of Fluid Mechanics (Graduate Teaching Fellow in Fall 2007)

### PUBLICATIONS

5. Leung, A.D., **Wong, K.H.K.** & Tien, J., Plasma expanders stabilize human microvessels in microfluidic scaffolds. *J. Biomed. Mater. Res. A*, in press.
4. **Wong, K.H.K.**, Chan, J.M., Kamm, R.D. & Tien, J., Microfluidic models of vascular functions. *Annu. Rev. Biomed. Eng.*, in press.

3. Tien, J., **Wong, K.H.K.** & Truslow, J.G., Vascularization of microfluidic hydrogels. in *Microfluidic Cell Culture Systems* (eds. Bettinger, C.J., Borenstein, J.T. & Tao, S.L.), in press (Elsevier).
2. Price, G.M., **Wong, K.H.K.**, Truslow, J.G., Leung, A.D., Acharya, C. & Tien, J., Effect of mechanical factors on the function of engineered human blood microvessels in microfluidic collagen gels. *Biomaterials* **2010**, 31, 6182-6189.
1. **Wong, K.H.K.**, Truslow, J.G. & Tien, J., The role of cyclic AMP in normalizing the function of engineered human blood microvessels in microfluidic collagen gels. *Biomaterials* **2010**, 31, 4706-4714.

### INVITED SEMINARS

1. "The role of cyclic AMP in normalizing the function of engineered human blood microvessels in microfluidic collagen gels."  
Medical Engineering Program, The University of Hong Kong (Hong Kong; 2010)

### CONFERENCE PRESENTATIONS

6. "Drainage of vascularized microfluidic fibrin scaffolds." [poster]  
Biomedical Engineering Society Annual Meeting (Hartford, Connecticut; 2011)
5. "Cyclic AMP normalizes the physiology of engineered human blood microvessels in microfluidic collagen gels." [poster]  
Biomedical Engineering Society Annual Meeting (Austin, Texas; 2010)
4. "Cyclic AMP normalizes the physiology of engineered human blood microvessels in microfluidic collagen gels." [poster]  
Gordon Research Conference on Signal Transduction by Engineered Extracellular Matrices (University of New England, Biddeford, ME; 2010)
3. "Cyclic AMP normalizes the function of engineered human microvessels in microfluidic collagen gels." [talk]  
6th Annual BME Symposium in Quantitative Biology and Physiology (Boston University, Boston, MA; 2010)
2. "Cyclic AMP enhances microvascular functions and lifespan of engineered blood microvessels." [poster]  
Biomedical Engineering Society Annual Fall Meeting (Pittsburgh, Pennsylvania; 2009)
1. "Studies of blood flow through a stenosis via computational fluid dynamics." [talk]  
10th Annual Conference of the Hong Kong Society of Theoretical and Applied Mechanics (The Hong Kong Polytechnic University, Hong Kong; 2006)

### PROFESSIONAL MEMBERSHIPS

Member, Biomedical Engineering Society (2008-present)  
 Member, Hong Kong Society of Theoretical and Applied Mechanics (2006-present)  
 Member, Institution of Mechanical Engineers (2003-2006)