

## *Kate Yu Jung Lee*

### **Education**

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2005-Present	<b>Georgia Institute of Technology</b> <i>Ph.D. Biomedical Engineering</i>	Atlanta, GA
2000-2004	<b>The University of Texas at Austin</b> <i>B.S. Chemical Engineering with Honors</i>	Austin, TX

### **Research Experience**

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05/2006-Current	<b>Georgia Institute of Technology</b>  <i>Thesis Advisor: Dr. Shuming Nie</i> Title: Multifunctional Nanoparticles for Drug Delivery and Multiplexed Raman Tags for Cancer Detection	Atlanta, GA
08/2005-05/2006	<b>Georgia Institute of Technology</b>  <i>Rotation I: Dr. Julia Babensee</i> Title: Mechanisms of Immune Responses Towards Antigens from Tissue Engineered Devices  <i>Rotation II: Dr. Robert Taylor</i> Title: Immunohistochemistry Study on Role of Renin Receptors in Angiotensin II Production	Atlanta, GA
08/2003-12/2003	<b>The University of Texas at Austin</b>  <i>Undergraduate Research Assistant</i> <i>Advisor: Dr. Nicholas Peppas</i>  Performed study on oral drug delivery for chemotherapy Preparation of microparticles for bleomycin delivery Analyzed the effectiveness of bleomycin-loaded microparticles with animal cells	Austin, TX

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05/2003-07/2003

**Georgia Institute of Technology**

Atlanta, GA

*Research Experience for Undergraduates Program*  
*Advisors: Dr. Peter Ludovice/Dr. Mark Prausnitz*

Performed a study on transdermal drug delivery using electroporation and Magainin peptide  
Analyzed the flux through hairless rat skin using fluorescently-tagged molecule and spectrofluorimeter  
Modeled peptide using CERIUS2 and HyperChem

06/2002-05/2003

**The University of Texas at Austin**

Austin, TX

*Undergraduate Research Assistant*  
*Advisor: Dr. Christine Schmidt*

Performed study on regeneration of nerves and blood vessels using acellular nerve graft and biomaterial (hyaluronic acid hydrogel)  
Prepared and analyzed rat sciatic nerve sections using various immunohistochemistry-staining methods

## **Working Experience**

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08/2006-05/2007

**Teaching Assistant, Georgia Institute of Technology**

Assist professor in preparation for lectures and hold recitation sessions for Biotransport course (BMED 3300)

01/2005-08/2005

**Accenture, Business and Technology Consulting**  
**Core Analyst, Government Practice**

*Accenture eDemocracy Services, Election Management Software (EMS) Product for Colorado, Wyoming, and Wisconsin*

- Performed product testing in functional areas of software
- Documented issues with the script and prepared test scripts
- Played a critical role in testing 17 of the 53 test scripts and assisted in passing 1,009 product requirements

*Security and Network Protection Software Product for Oregon State*

- Conducted product testing for validation of encrypted security network software
- Administered employee training to a class of 30 state workers on software usage

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- Interacted with clients to ensure correct execution and distribution of product

08/2004-12/2004

**Grader, The University of Texas at Austin, Chemical Engineering**

Graded homework for Chemical Reactor Analysis and Design class of 72 students  
Held office hours to assist students with homework

## Awards

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2005-2009 President's Fellowship, Georgia Institute of Technology  
2004 Texas Instruments Diversity Scholarship  
2004 ConocoPhillips Scholarship  
2003 Leaton T. Oliver Endowed Scholarship  
2002 Undergraduate Research Fellowship, The University of Texas at Austin

## Publication

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Hudson, T.W., S. Zawko, C. Deister, S. Lundy, C.Y. Hu, **K. Lee**, C.E. Schmidt (2004). Optimized acellular nerve graft is immunologically tolerated and supports regeneration. *Tissue Engineering*. 10(11/12): 1641-1651.

## Leadership

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Secretary (2003) & Treasurer (2004), Omega Chi Epsilon Chemical Engineering Honor Society  
Student Engineering Council Representative, Tau Beta Pi Honor Society  
Team Leader, LeaderShape-Texas Institute Program  
Member, American Institute of Chemical Engineers  
Member, Society of Women Engineers

## Skills

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Experienced in immunohistochemistry staining  
Experienced with Microsoft Windows and Microsoft Office  
Familiar with AutoCAD, Solidworks, Simulink, and Matlab  
Fluent in Korean and some knowledge in written Chinese