

Jeongmin Hwang

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Education	University of Delaware Doctor of Philosophy, Biomedical Engineering	08/2017-
	University of Utah Master of Science, Bioengineering Thesis Advisor: Dr. S. Michael Yu GPA: 3.6/4.0	08/2015- 12/2016
	University of Utah/ Southern Utah University Bachelor of Science, Chemistry GPA: 3.8/4.0	01/2009- 05/2013
Teaching Experience	Teaching Assistant University of Utah Department of chemistry Advanced organic chemistry Lab. Advanced inorganic chemistry Lab. General Chemistry II Lab.	08/2013- 04/2014
Research Experience	Graduate Research Assistant University of Delaware Advisors: Dr. Kristi Kiick Department of Materials Science and Engineering, Dr. Millicent Sullivan Department of chemical and biomolecular engineering. • Extracellular matrix triggered gene delivery for chronic wound healing	11/2017-
	Biosurgery R&D Intern Ethicon, Inc. Supervisor: Dr. Allen Wang • Investigation of Hemostatic materials.	06/2017- 08/2017
	Research Associate 3Helix Inc. Supervisor & CEO: Dr. Yang Li	01/2017- 05/2017
	Technician Intern 3Helix Inc. Supervisor & CEO: Dr. Yang Li • Application of collagen hybridizing peptides as biomarker for denatured collagen into different types of disease tissue models.	05/2015- 12/2016
	Graduate Research Assistant University of Utah Advisor: Dr. S. Michael Yu Department of bioengineering • Develop collagen hybridizing peptides to prevent self-trimerization and improve binding affinity to denatured	06/2014- 12/2016

- collagen.
 : Solid phase synthesis of (GlyProFlp)_n library
 : Antiparallel beta sheet assembly of collagen hybridizing peptides
- Molecular assessment of collagen denaturation in decellularized tissues using a collagen hybridizing peptide
 - Functionalization of decellularized lung to improve vasculature
 - Supervised undergraduate students (Cameron Leiser, Thomas Luo, Anh Pham, David Ho, Courtney Rice, Danielle Pompa) for their senior project.

Graduate student for rotating Lab | University of Utah 03/2014-04/2014
 Advisor: Amy M. Barrios | Department of medicinal chemistry
 • Probing substrate specificity of protein tyrosine phosphatases

Undergraduate Researcher | University of Utah 09/2012-04/2013
 Advisor: Thomas Richmond | Department of chemistry
 • Activation of carbon-fluorine bonds using perfluorodecaline with cobaltocene.

Publications

- **Hwang J**, San BH, Turner NJ, White LJ, Faulk DM, Badylak SF, Li Y, Yu SM, Molecular Assessment of Collagen Denaturation in Decellularized Tissue using Collagen Hybridizing Peptide, *Acta Biomaterialia*, 2017
- **Hwang J**, Huang Y, Burwell TJ, Peterson NC, Connor J, Weiss SJ, Yu SM, Li Y, *In situ* Imaging of Tissue Remodeling with Collagen Hybridizing Peptides, *ACS Nano*, 2017
- San BH, **Hwang J**, Sampath S, Li Y, Yu SM, Self-assembled water-soluble nanofibers displaying collagen hybridizing peptides, *JACS*, 2017

Conference Presentations

- **Hwang J**, San BH, Turner NJ, White LJ, Faulk DM, Badylak SF, Li Y, Yu SM, Molecular Assessment of Collagen Denaturation in Decellularized Tissue using Collagen Hybridizing Peptide, Poster presentation: Convergence Technology Symposium at UKC; Dallas, Texas 08/2016

Laboratory Skills

Chemistry | Solution/Solid phase peptide synthesis, Synthesis of organic and organometallic molecules, Bioconjugation reaction, Immunohistochemistry
CD, FT-IR, GC, HPLC, MALDI-TOF, NMR, TLC, UV spectroscopy, Wet-column chromatography

Biology | ELISA, Molecular detection, Tissue imaging
Light/confocal Microscopy, Multi-photon Microscopy

Awards & Honors	Mack Thomas Rozelle Scholarship Department of chemistry University of Utah	04/2012
	2017 Biomedical Engineering Chair's Fellowship Department of Biomedical Engineering University of Delaware	08/2017
Professional Membership	• Golden Key	09/2009-
	• Korean-American Scientists and Engineers Association : Committee member in Utah chapter	02/2014- 05/2017
Volunteer Experience	The 17th Daegu OPEN International Wheelchair Tennis Tournament Interpreter for Thai and British athletes	06/2013
	The 16th Daegu-cup International Wheelchair Basketball Tournament Translation of mayor's cover letter from Korean to English	07/2013
	Dr. Michael Yu's lab in Bioengineering department in University of Utah Research Assistant	06/2014- 07/2015