Leslie W. Chan

3720 15th Ave NE | Foege Bldg Rm N523C | Box 355061 | Seattle, WA 98195
lwchan@u.washington.edu | 678-549-6023

EDUCATION

2010-present **University of Washington**, Seattle, WA
Department of Bioengineering, PhD Candidate
Thesis Advisor: Professor Suzie Pun
3.71/4.00

2006-2009 **Georgia Institute of Technology**, Atlanta, GA
Bachelor of Science in Biomedical Engineering
Highest Honor, Class Valedictorian
3.86/4.00

RESEARCH EXPERIENCE

2010-present **Graduate Research Assistant**, University of Washington, Seattle, WA
Laboratory of Professor Suzie Pun
Department of Bioengineering

Engineered synthetic polymer materials for *in situ* crosslinking of fibrin matrices in blood clots to accelerate clotting kinetics and clot stiffness for hemostatic applications.

2007-2009 **Undergraduate Research Assistant**, Georgia Institute of Technology, Atlanta, GA
Laboratory of Professor Ravi Bellamkonda
Department of Biomedical Engineering

Developed multifunctional liposomal carriers containing CT/MRI contrast agent and doxorubicin for simultaneous interrogation of tumor vascular permeability and tumor reduction.

May-July 2009 **UROP Research Intern**, RWTH Aachen University (Aachen, Germany) and Forschungszentrum Jülich (Jülich, Germany)
Laboratory of Professor Paul Kögerler
Department of Inorganic Chemistry

Synthesis and characterization of iron-based polyoxometallate (POM) contrast agents.

PUBLICATIONS

1. **L. W. Chan**, N. J. White, S. H. Pun, Synthetic Strategies for Engineering Intravenous Hemostats, *Bioconjug. Chem.* Under review**.** (2015).

2. **L. W. Chan**, X. Wang, H. Wei, L. D. Pozzo, N. J. White, S. H. Pun, A Synthetic Fibrin-Crosslinking Polymer for Modulating Clot Properties and Inducing Hemostasis, *Sci. Transl. Med.* Accepted**.** (2015).

3. H. Wei, L. R. Volpatti, D. L. Sellers, D. O. Maris, I. W. Andrews, A. S. Hemphill, **L. W. Chan**, D. S. H. Chu, P. J. Horner, S. H. Pun, Dual Responsive, Stabilized Nanoparticles for Efficient In Vivo Plasmid Delivery, *Angew. Chemie* **52**, 5377–5381 (2013).

4. **L. W. Chan**, Y. Wang, L. Y. Lin, M. P. Upton, J. H. Hwang, S. H. Pun, Synthesis and Characterization of Anti-EGFR Fluorescent Nanoparticles for Optical Molecular Imaging, *Bioconjug. Chem.* **24**, 167–175 (2012).

5. C. K. Wang, **L. W. Chan**, R. N. Johnson, D. S. H. Chu, J. Shi, J. G. Schellinger, A. Lieber, S. H. Pun, The Transduction of Coxsackie and Adenovirus Receptor-negative cells and protection against neutralizing antibodies by HPMA-co-oligolysine copolymer-coated adenovirus, *Biomaterials* **32**, 9536–9545 (2012).

6. E. Karathanasis, C. M. Geigerman, C.A. Parkos, **L. Chan**, R.V. Bellamkonda, D.L. Jaye, Selective Targeting of Nanocarriers to Neutrophils and Monocytes, *Ann. Biomed. Eng.* **37**, 1984–1992 (2009).

7. E. Karathanasis, **L. Chan**, L. Karumbaiah, K. McNeeley, C. J. D'Orsi, A. V. Annapragada, I. Sechopoulos, R. V. Bellamkonda, Tumor vascular permeability to a nanoprobe correlates to tumor-specific expression levels of angiogenic markers, *PLoS One* **4**, e5843 (2009).

8. E. Karathanasis, **L. Chan**, S. R. Balusu, C. J. D'Orsi, A. V Annapragada, I. Sechopoulos, R. V Bellamkonda, Multifunctional nanocarriers for mammographic quantification of tumor dosing and prognosis of breast cancer therapy., *Biomaterials* **29**, 4815–22 (2008).

PRESENTATIONS

1. **Chan LW**, Wang X, Wei H, Pozzo L, White NJ, Pun SH. Intravenously-administered polymers for modulating clot properties and inducing hemostasis. Society for Biomaterials Annual Meeting, Charlotte, NC. April 2015. Oral presentation.

2. **Chan LW**, Hwang JH, Grady WM, Pun, SH. Identification of a family of peptides for binding high grade dysplasia in Barrett's esophagus using in vitro phage display. Bioinspired Materials Gordon Conference, Newry, ME. June 2014. Poster presentation.

3. **Chan LW**, Hwang JH, Grady WM, Pun, SH. Identification of a family of peptides for binding high grade dysplasia in Barrett's esophagus using in vitro phage display. BMES Annual Fall Meeting, Seattle, WA. October 2013. Poster presentation.

4. **Chan LW**, Wang Y-N, Lin LY, Upton MP, Hwang JH, Pun SH. Anti-EGFR fluorescent nanoparticles for targeted optical imaging of esophageal cancer. BMES Annual Fall Meeting, Atlanta, GA. October 2012. Oral presentation.

5. **Chan LW**, Hwang JH, Lin L, Pun SH. Fluorescent nanoprobe for early detection of esophageal cancer. BMES Annual Fall Meeting, Hartford, CT. October 2011. Poster presentation.

6. **Chan LW**, Botar B, Koegerler P. Synthesis and characterization of iron-based polyoxometallate (POM) contrast agents. UROP International Colloquium. RWTH Aachen University, Aachen, Germany. 31 July 2009. Poster presentation.

7. Karathanasis E, **Chan LW**, Balusu S, Annapragada A, Sechopoulos I, Bellamkkonda RV. Novel multifunctional nanocarriers for imaging and therapy enable live monitoring of chemotherapy in a rat breast tumor. AIChE Annual Meeting, Philadelphia, PA. November 2008. Oral presentation.

8. Karathanasis E, **Chan LW**, Balusu S, Annapragada A, Sechopoulos I, Bellamkkonda RV. Novel multifunctional nanocarriers for imaging and therapy enable live monitoring of chemotherapy in a rat breast tumor. BMES Annual Fall Meeting, St. Louis, MO. October 2008. Poster presentation.

9. **Chan LW**, Balusu S, Chan A, Karathanasis E, Bellamkonda RV. Nanoscale imaging probes for personalized medicine. Georgia Tech Undergraduate Research Spring Symposium. 3 April 2008. Oral presentation.

PROFESSIONAL QUALIFICATIONS

Laboratory skills	Phage display, flow cytometry, solid phase peptide synthesis, polymer synthesis, cell culture, histology/immunohistochemistry, animal work (rats and mice), microscopy (epifluorescence, confocal, transmission electron, scanning electron), cone-and-plate rheometry, clotting assays (TEG, ROTEM)
Software	Graphpad, Metamorph
Foreign languages	Fluent in English and Cantonese; understanding of some Mandarin and German

TEACHING EXPERIENCE

July 2013-present	**Undergraduate mentor**, University of Washington, Seattle, WA Mentoring an undergraduate bioengineering student in the lab.
August-December 2013	**Teaching assistant**, University of Washington, Seattle, WA BIOEN 215 Introduction to Bioengineering Problem Solving Responsible for giving one lecture a week, holding office hours, and grading homework and final global health projects.
2010-2011	**Tutor**, Jackson Park Youth Tutoring Program, Seattle, WA Tutored elementary students from underprivileged households in math and reading.

HONORS AND AWARDS

2013-2015	Bioengineering Cardiovascular Training Grant Fellowship (T32)
2012-2013	Nanotechnology and Physical Science in Cancer Research Fellowship (T32)
2010, 2011, 2012	NSF Honorable Mention
2009	Georgia Tech Undergraduate Research Scholars (URS) Award
2008, 2009	President's Undergraduate Research Award (PURA)
2008	Michael Birnbaum Scholarship Award sponsored by Medtronics
2008	Georgia Tech Undergraduate Research Spring Symposium *First Place Oral Presentation for the College of Engineering*
2006	Gwinnett GT Alumni Association Scholarship

OUTREACH ACTIVITIES

October 2012 -March 2013	**Time to Invent** (part of UW Women's Initiative) Completed engineering activities with elementary school girls.
2011, 2012	**Engineering Discovery Days** Gave talks to the general public on bioengineering research.
2010, 2011	**UW Math Academy** Gave talks on research and complete mini-labs with high school students to encourage learning math and science in underrepresented minorities.
2011	**Lunch & Learn** Organized graduate student lunches with UW BIOE faculty to facilitate communication between graduate students and faculty on career-related topics.