CURRICULUM VITAE

Edward S. Njoo

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Education

Stanford University *Stanford, California*

Ph.D. Chemistry, *(in progress),*
Research emphasis in organic chemistry

Loyola Marymount University *Los Angeles, California*

B.S. Biochemistry, 2017

American Chemical Society (ACS) Certification; Major GPA: 3.91, *Magna cum laude*

University Honors Program: A highly selective and rigorous cohort of students selected for academic merit and leadership.

Trustee Scholar, LMU Board of Trustees: awarded the most prestigious merit academic *full-ride* scholarship that covers a full tuition and room & board

Mission San Jose High School *Fremont, California*

Valedictorian, 4.25 weighted GPA

Publications

1. Jimenez, Ana Gabriela; Shaina Alves, Jeremiah Dallmer, ***Edward Njoo***, Selina Roa, and W. Wesley Dowd. "Acclimation to elevated emersion temperature has no effect on susceptibility to acute, heat-induced lipid peroxidation in an intertidal mussel (*Mytilus californianus*)." *Marine Biology* 163, no. 3 (2016): 1-10.
2. McCallum, J., **Njoo, E.,** & Moffet, D. A. "Identification of Novel IAPP Amyloid Inhibitors from a Targeted Synthetic Compound Library." *Manuscript in progress*, (2018).
3. **Njoo, E.** & Pabbisetty, L. "UV-VIS Spectrophotometry of Ink Pigments Separated by Paper Chromatography: An Inquiry-Based Laboratory Experiment for High School Laboratory Instruction." *Submitted for publication, 2018.*
4. **Njoo, E.,** Pabbisetty, L., Chen, A., & Chen, A. "Dairy Discoveries: Using Centrifugation of Milk to Teach Composition and Physical & Chemical Properties." *Science Scope* (2018), *ASAP*.
5. **Njoo, E.,** Narain, S., Pabbisetty, L., & Agrawal, M. "Emerging Connections: Resourceful and Effective Ways of Bridging Afterschool S.T.E.M. Programs and the Community." *NSTA Connected Science Learning* (2018), ASAP.
6. **Njoo, Edward**. "Colligative Properties of Dimethyl Sulfoxide (DMSO) as an Alternative for High School and Undergraduate Laboratory Instruction." *In Review, The Chemical Educator* (2017).
7. Palato, L., Pilcher, S., Oakes, A., Lamba, A., Torres, J., Ledesma, L.I., Munoz, C., **Njoo, E.**, Rinauro, D., Menefee, K., Tun, A., Jauregui, B., Shapiro, S., Nossiff, O., Nguyen, V., Nogaj, L.A., & Moffet, D.A. "IAPP Aggregation Propensities from Diabetic and Nondiabetic Organisms" *In Review*, *ACS Biochemistry.* (2018).

Conference Proceedings

8. Moffet, D., **Njoo, E**., Rinauro, D., Pilcher, S., Palato, L., Johnstone, B., ... & Tun, A. (2017, April). Determining amyloidogenicity of Islet Amyloid Polypeptide (IAPP) across mammalian species. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 253). 1155 16TH ST, NW, WASHINGTON, DC 20036 USA: AMER CHEMICAL SOC.

Thesis work (undergraduate):

1. Njoo, Edward. "Identification of Novel IAPP Amyloid Inhibitors from a Targeted Synthetic Compound Library." Undergraduate thesis. University Honors Program and Frank R. Seaver College of Science and Engineering. *Loyola Marymount University Digital Commons, May 2017.*

Standardized Test Scores

- SAT I Reasoning: 2290/2400
- SAT II Subject Tests
  - Chemistry: 800
  - Mathematics 2: 800
  - US History: 790
  - Biology M (molecular): 780
- Advanced Placement (AP)
  - AP Chemistry: 5
  - AP Biology: 5
  - AP Calculus BC: 5
  - AP US History: 5
  - AP Psychology: 5

GRE General Exam

Category	Verbal	Quantitative	Analytical
Raw Score	168/170	170/170	5.5/6.0
Percentile	98th percentile	97th percentile	98th percentile

GRE Chemistry Subject Test

Raw Score: 850
89th percentile

Affiliations & Professional Membership

American Chemical Society (ACS)
American Physics Society (APS)
American Scientific Affiliation (ASA)
American Society of Biochemistry and Molecular Biology (ASBMB)
National Science Teacher Association (NSTA)
American Association of Chemistry Teachers (AACT)
Evangelical Theological Society (ETS-JETS)

Awards and Recognition

American Chemical Society Undergraduate Distinction Award in ***Inorganic Chemistry*** (2017)
American Chemical Society Undergraduate Distinction Award in ***Physical Chemistry*** (2017)
Michael P. Geis Service Award in Chemistry and Biochemistry (2017)
Diagnostic of Undergraduate Chemistry Knowledge Award (2017)
Loyola Marymount University Valedictorian Top 7 Finalist (2017)
Presidential Citation Award, Loyola Marymount University (2017)
Acts 17 Scholarship Recipient, Biola University (2017)
American Chemical Society High School Student of the Year (2014)
ACS LMU Department of Chemistry and Biochemistry General Chemistry Award (2015)
AP Scholar with Honors (2014)
MVP, Mission San Jose High School Men's Varsity Cross Country (2013)
Coach's Award, Mission San Jose High School Varsity Track and Field (2014)

Instrumental Training and Analytical Qualifications

- Nuclear Magnetic Resonance Spectroscopy (NMR) – ^{13}C, ^{19}F, ^{15}N, ^{11}B, and ^{1}H
- Infrared Spectroscopy (IR)
- UV-Vis spectrophotometry
- Mass spectrometry (MS)
- Gas chromatography (GC)
- Thin Layer Chromatography (TLC)
- Fluorescence Spectroscopy
- Enzyme-Linked Immunosorbent Assay (ELISA)
- Atomic Force Microscopy (AFM)
- Ion exchange chromatography
- Gel electrophoresis & SDS-PAGE
- Size exclusion chromatography
- Circular Dichroism Spectroscopy (CD)
- Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)
- High Performance Liquid Chromatography (HPLC)
- Liquid Chromatography/Tandem Mass Spec. (LC-MS)
- Site-directed gene mutagenesis

Certifications

CPR and General First Aid, Adult — **American Red Cross**
High School Science Laboratory Safety — **Flinn Scientific, Inc.**

Work Experience and Positions Held:

2018 - present **Graduate Teaching Assistant, Organic Chemistry**
Taught two sections of organic chemistry laboratory in conjunction with holding office hours for the corresponding lecture section. Responsibilities include teaching, grading problem sets, grading exams
Stanford University Department of Chemistry
Stanford, CA

2014 - 2018 **Science Department Chair, Leadership Board**
Fremont S.T.E.M. Academy (Edumax, Inc.)
Fremont, CA

2014 - 2017 **Undergraduate Researcher**
Marine Ecophysiology Lab Researcher, *Lipid peroxidation in response to thermal stress in Mytilus californianus*
Loyola Marymount University Biochemistry Lab Researcher, *The role of metal cations in islet amyloid polypeptide aggregation.*
Inhibition of Amyloid Formation by Polyhydroxylated Phenolic Esters

2015 - present **S.T.E.M. Director & Lead Science Instructor, Board of Directors**
Olive Children Foundation, Fremont, CA

2016 - present **General Chemistry Laboratory Teaching Assistant**
Frank R. Seaver College of Science and Engineering
Loyola Marymount University Department of Chemistry and Biochemistry

2016 - present **Organic Chemistry Teaching Assistant**
Frank R. Seaver College of Science and Engineering
Loyola Marymount University Department of Chemistry and Biochemistry

2016 - present **Organic & General Chemistry Certified Tutor**
Academic Resource Center
Loyola Marymount University

2015-present **American Chemistry Society Chapter, Executive Board**
American Chemical Society, Loyola Marymount University Chapter
President, 2016-2017
Board Liaison, 2015-2016

June-August 2012 **Cardiothoracic Surgery Intern**
SSSEC Cardiothoracic Surgery Intern, Stanford University, Stanford, CA

Relevant Coursework

- General Chemistry
- Organic Chemistry
- Analytical Chemistry
- General Biology
- Cell Function
- Genetics
- Immunology
- Inorganic Chemistry
- Environmental Chemistry
- Physics: Mechanics
- Physics: Electricity and Magnetism
- Biochemistry
- Physical Chemistry
- Differential Equations
- Modern Spectroscopy
- Advanced Organic Chemistry
- Advanced Biochemistry
- Multivariable Calculus
- Linear Algebra
- Chemistry Teaching
- Physical Organic Chemistry