

LETTER OF RECOMMENDATION REQUEST

ALLOPATHIC (MD) AND OSTEOPATHIC (DO) APPLICATIONS



KATELYN MARIKO UPDYKE

care, and the business side of medicine. I have a strengthened interest in pathology and direct patient interaction from working with him.

Aside from my interest in the medical field, I am not a robot and I do have other hobbies and a life! One hobby I value the most is acting. I have only studied theatre arts in the past, but I would love to attempt screen acting in the future. Here are some other random hobbies of mine:

- Gymnastics and tennis.
- Reading. I've finished *Never Let Me Go* and *Norwegian Wood* recently, and I'm a loyal Harry Potter fan (not so much *The Twilight Saga*, vampires should not sparkle).
- Avid car singing.
- Zombies, i.e. *The Walking Dead* (TV series), *Zombieland* (film).
- Thanksgiving dinner.

I'm also sincerely close to my family, especially my parents. Because of this bond, I'd like to aim for admission in a California medical school.

Thank you for your time. I greatly appreciate your support in my pursuit towards medicine!

Happy wishes ☺,

Katelyn M. Updyke

KATELYN MARIKO UPDYKE
XXXX Scholarship, Irvine, CA 92612
Email: kupdyke@uci.edu

EDUCATION:

University of California, Irvine (2007-2011)

Bachelor of Science, Chemistry – *Cum Laude*

Bachelor of Science, Biological Sciences – *Cum Laude*

Cumulative GPA: 3.746 Bio. Sci. GPA: 3.701 Chem. GPA: 3.830

WORK EXPERIENCE:

General Chemistry Tutor (Sep. 2008-Dec. 2009)

Learning and Academic Resource Center (LARC)

Division of Undergraduate Education, University of California, Irvine

Duties: Taught multiple tutoring sessions of up to 10 students per class. Attended the corresponding lectures, prepared worksheets and exam reviews. My job was to teach students proper study habits and motivate them to be successful in their courses at UCI.

Undergraduate Student Research Assistant (Jan. 2009-Jun. 2010)

The Casali Lab

Institute for Immunology, University of California, Irvine

Principle Investigator: Paolo Casali, M.D.

Projects: My goal was to study the role of 14-3-3 proteins in class switch DNA recombinations of antibodies.

Duties: Dissected research specimen to extract and stimulate splenocytes. Participated in post-doctoral research experiments by breeding mice of specific genotypes, running polymerase chain reaction (PCR) and gel electrophoresis to confirm genotypes, as well as performing and analyzing SDS-PAGE and Western Blot.

Laboratory Assistant (Sep. 2010-Dec. 2010)

Organic Chemistry Stockroom

Department of Chemistry, University of California, Irvine

Manager: Lukas Holt

Duties: Maintained inventory, organization and cleanliness of the stockroom and undergraduate organic chemistry laboratories. Prepared chemicals, unknown solutions or mixtures, and assisted with experiment complications. Responded to any laboratory emergencies or student injuries.

Assistant Researcher (Sep 2010-Present)

UCI Aerosol Photochemistry Group

AirUCI Research Institute, University of California, Irvine

Principle Investigator: Prof. Sergey Nizkordov

Project: Reactions of secondary organic aerosols with reduced nitrogen compounds to generate light-absorbing brown carbon that can affect climate.

Duties: Generate secondary organic aerosols using a flow tube reactor or photochemical smog chamber. Chemically age and analyze secondary organic aerosols by UV-VIS spectrometry and high-resolution mass spectroscopy (HR-MS). I am responsible for chemical lab inventory, as well as stocking and ordering lab supplies. I am required to present recent research papers from related groups, literature reviews or my current progress reports at certain group meetings. I have also participated in relevant conferences and contributed to research publications.

EXTRACURRICULAR ACTIVITIES:

Department Tutoring (2009-2010)

General Chemistry Tutor

Description: Prepared weekly worksheets and taught midterm and final reviews to help prepare students for their examinations. Held weekly office hours for students to come for one-on-one tutoring sessions.

Global Medical Training at UCI (2008-2011)

Founder and President

Description: Provided opportunity for students to volunteer in underprivileged Central American countries and gain a medical, dental, and cultural experience. Fundraised to donate medication and dental supplies for clinics, sponsor patients, and purchase toys for children in orphanages in Central America. Planned meetings, volunteer opportunities, workshops held by local pharmacists, dentists and UCI medical students for members to participate in order to prepare for our semi-annual medical and dental missions.

Phi Delta Epsilon (2008-2010)

Active member

Description: International medical fraternity for undergraduate students who strive to become physicians with life-long commitment to the fraternity's principles of philanthropy, deity and education.

OUTREACH ACTIVITIES:

Global Medical Training (Sep. 2008, Apr. 2009)

Volunteered in 7-9 day medical and dental missions for underserved villages in Panama

Simi Valley Free Clinic (Jul. 2008)

Prepared patient examination rooms, took patients vitals, and shadowed physicians

Irvine Urgent Care (Jun. 2009)

Organized patients' charts, prepped and cleaned examination rooms, and contacted patients for follow-ups

Alamo Hills Medical Group (2010-2011)

Periodically shadowed Dr. Jonathan Kurohara for 5-8 hour days

School on Wheels (2010-Present)

Chemistry tutor for homeless children

AWARDS AND RECOGNITIONS:

Dean's Honor List, 2007-2011

Received for the quarters with GPA of 3.5 or higher

College Reading and Learning Association, 2009

Advanced Certified Tutor

Undergraduate Research Opportunities Program, 2010

Undergraduate Research Grant/Fellowship Award

Phi Beta Kappa, 2011

Top 10% of Physical Sciences graduating class, shows intellectual integrity, and tolerance of other views

Phi Lambda Upsilon, 2011

Top 20% of the Physical Sciences graduation class

The American Institute of Chemists Foundation, 2011

Award for outstanding senior majoring in chemistry, demonstrating ability, leadership and professional promise

Committee on Research, 2012

Awarded funding for new research proposal

PUBLICATIONS:

K.M. Updyke, T.B. Nguyen, and S.A. Nizkorodov, "Formation of Brown Carbon via Reactions of Gaseous Ammonia with Secondary Organic Aerosols from Biogenic and Anthropogenic Precursors," Submitted to *Env. Sci. and Tech.* (2012)

T.B. Nguyen, P.B. Lee, **K.M. Updyke**, D.L. Bones, J. Laskins, A. Laskin and S.A. Nizkorodov, "Formation of Nitrogen- and Sulfur-Containing Light Absorbing Compounds Accelerated by Evaporation of Water from Secondary Organic Aerosols," *J. Geophys. Res.* **117** (2012) D01207.

POSTER PRESENTATIONS:

Kinetics and Photochemical Processes in the Atmosphere – Mar. 2011, *UCI*

K.M. Updyke, T.B. Nguyen, and S.A. Nizkorodov

“Chemical aging of atmospheric secondary organic aerosols by N-containing compounds”

International Water Association – Jul. 2011, *Costa Mesa, CA*

K.M. Updyke, T.B. Nguyen, and S.A. Nizkorodov

“Chemical aging of atmospheric secondary organic aerosols by N-containing compounds leading to colored organic matter”

International Water Association – Jul. 2011, *Costa Mesa, CA*

T.B. Nguyen, P.B. Lee, K.M. Updyke, and S.A. Nizkorodov

“Chromophoric products formed from the simulated cloud processing of plant-derived organic material”

PLATFORM PRESENTATIONS:

Undergraduate Research Opportunities Program Symposium – May 2011, *UCI*

K.M. Updyke, T.B. Nguyen, and S.A. Nizkorodov

“Chemical aging of various organic aerosols with nitrogen containing compounds”