LETTER OF RECOMMENDATION REQUEST
ALLOPATHIC (MD) AND OSTEOPATHIC (DO) APPLICATIONS

KATELYN MARIKO UPDYKE
January 4, 2012

Dear Prof. Sergey Nizkorodov,

I’d like to thank you for writing a support letter that will be added to my medical school application for June 2012. I will be applying to both medical and osteopathic schools across the United States and select Caribbean schools.

To refresh your memory, I’ve taken the following courses with you:

- Chemistry 5  Grade:  A+
- Chemistry 151  Grade:  A-
- Chemistry 153  Grade:  A
- Chemistry 180  Grade:  A

In the past, I have worked in two different research laboratories and have years of experience tutoring chemistry. Although I enjoy both tutoring and research, I’ve decided to pursue a career as a physician because I have a stronger interest in the science of medicine and I really enjoy patient interaction. It is difficult to describe on paper the gratifying experience of working with patients, but I can confidently say that I am willing to dedicate the rest of my life to the field of medicine. There were various roads, some bumpier than others, that have led me to where I am today, but the most significant experiences were those with Global Medical Training (GMT) and shadowing the physician, Dr. Kurohara, MD.

My experiences with GMT and Dr. Wil Johnson, MD (Founder of GMT) have been incredible and life changing to say the least. I’ve traveled to Panama twice in the past to participate in medical missions located in underprivileged villages. It was a sad realization to find that the people I cared for in Chitré and Penonomé were impoverished and overwhelmingly uneducated pertaining to their own health. Majority of the families who came to our medical and dental clinics walked astonishing distances (up to three hours) for medical attention because they could not afford visits with other local physicians. Additionally, when I spoke to the patients, they often did not understand the severity of their illnesses, or the importance of treating curable medical conditions. I was also able to learn about many common diseases also prevalent in the states, and several less common skin infections. Overall, I value the importance of health education and research in order to better our quality of life. After my first trip to Panama in the summer of 2008, I decided to jump start Global Medical Training on campus at UCI and spent the remaining three years of undergrad as a GMT student leader.

Not only is it difficult to find a physician who allows students to shadow at their medical office, but also one who gladly mentors along a student’s pre-medical journey. In addition to GMT, I also volunteered locally at Simi Valley Free Clinic and at Alamo Hills private medical offices with Dr. Kurohara, MD. I chose to shadow Dr. Kurohara to experience the diversity of community and private medicine. I am a strong believer in quality over quantity, and I feel that I have benefitted greatly from the days I have shadowed Dr. Kurohara than certain other volunteer experiences. He dedicated time to educate me on types of disease, careful diagnosis, patient-
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
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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  
Principal 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:


**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”