

## DEPARTMENT OF THE AIR FORCE

THE DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING USAF ACADEMY, COLORADO



17 October 2013

## MEMORANDUM FOR OXFORD D. PHIL. PROGRAM SELECTION COMMITTEE

FROM: Col(s) Anne L. Clark (HQ USAFA/DFEC, Ph: 719-333-6916)

SUBJECT: Letter of Recommendation for Captain Ryan Silva

- 1. I am proud to nominate Captain Ryan Silva for graduate studies in Engineering Science at the University of Oxford. Captain Silva is an award-winning professor in the Department of Electrical and Computer Engineering with a USAFA-level presence that goes well beyond the classroom. Ryan is a superstar educator and exceptional officer with an incredible passion that permeates everything he does.
- 2. Ryan is hands-down my top junior faculty member. He has been our department's #1 student-rated instructor since he first stepped into the classroom, has won numerous teaching awards, including the department's 2013 Outstanding Academy Educator, and gained national recognition as the 2013 "Most Promising Engineer Master's Degree" at the annual Hispanic Engineer National Achievement Awards Conference. He was promoted to Assistant Professor at the earliest possible time, and has been a course director in courses ranging from Engineering 101 to foundational engineering courses for upperclassmen. Also of note, his senior capstone design team has drawn accolades from multiple sources. Last year, he led a multi-disciplinary team of 10 students on a grant-commissioned research project to create a low-cost, software-based occupational therapy device for patients recovering from strokes. Ryan's leadership pushed his team to amazing results as they developed a device that is 99% cheaper than its closest commercial competitor. Furthermore, they have 3 patents pending for this revolutionary technology.
- 3. Ryan is also a noted leader outside the department. He has resurrected the Academy's marathon team over the past 3 years making it a role model organization at the Academy. Ryan's leadership was on full display in April where his thorough preparation and quick actions ensured that all members of the team where accounted for and transported to safety following the terrorist attack at the Boston Marathon. When Student Academic Affairs needed a faculty member to connect with the entire freshman class to inspire them to give their all in the classroom and to motivate them to strive, they invited Ryan and he did a fantastic job! He truly is the epitome of a role model with the courage to talk about his experience as a struggling student and challenge students with his motto of "if I can do it, anyone can."
- 4. While Ryan's past and current achievements are impressive, his future is even brighter. His potential for success is outstanding, and I already plan to send him for a PhD so that I can have him back as a senior faculty member. Ryan is destined to be a top leader in academia where he will influence thousands of students per year. I easily see him as a future department head or dean. In addition, he is already on the front lines of cyber warfare and will be a leader in this emerging field. He has been selected to perform research at the National Security Agency and his high evaluations indicate he is likely to be a cyber squadron commander and top national advisor in cyber warfare. Ryan has my highest recommendation to represent us doing world-class research at Oxford University!

ANNE L. CLARK, Lt Col, USAF, PhD, P.E. Head, Department of Electrical and Computer Engineering