

To: Theresa Curtis, Chair

Math - Science Subschool Personnel Committee

From: Brice Smith, Chair

Physics Department

Date: March 1, 2019

RE: Reappointment Recommendation for Dr. Eric Edlund

Due to the commencement of the experimental machine on which Dr. Edlund conducts his research in Germany, he was granted a one semester delay in beginning his work here at SUNY Cortland. As such it was decided, upon consultation with Dean Mattingly, that Dr. Edlund would delay his first review until now in order to give him a greater track record upon which to be evaluated. As such, in my role as interim chair of the Department I am writing to *Highly Recommend* Dr. Edlund for reappointment to the Physics Department faculty. My recommendation is based on Dr. Edlund's portfolio and is explained below in accordance with the polices and procedures outlined in the College Handbook and our Departmental Personnel Policies. Dr. Edlund's first year at SUNY Cortland has shown him to be a thoughtful teacher willing to take feedback from colleagues as well as students and to seek out ways to improve his effectiveness in the classroom. In addition, Dr. Edlund has actively sought out ways to serve the Department and College and has continued his strong record of scholarship including taking one of our undergraduates to conduct research with him in Germany over his first summer.

Mastery of Subject Matter

Dr. Edlund is a highly qualified professor holding a B.S. degree in physics and mathematics from the California State University, Chico and a PhD in physics from the Massachusetts Institute of Technology. He is an expert in the field of plasma physics as demonstrated by his Postdoctoral work at the Princeton Plasma Physics Laboratory and his continued collaboration at the Max Planck Institute for Plasma Physics in Germany.

Finally, Dr. Edlund has presented a number of professional talks and has published a total of twenty peer-reviewed journal articles to date as well as three additional papers in non-peer reviewed journals and one technical report for internal use at the MIT Plasma Science and Fusion Center.

Effectiveness in Teaching

Dr. Edlund has taught a variety of courses from introductory level courses for majors to specialized courses for upper-level undergraduates. He has taught both lecture and laboratory courses and has shown himself to be a promising teacher with an ability to reach students in a variety of classroom and laboratory settings. In his first year he taught our important introductory sequence for majors. I have since had a number of his students in my upper-level courses and his students have been well prepared with a strong content knowledge. His introduction of additional demonstrations and mini-labs

into our third semester course (which does not have a laboratory component) has been of particular note as has his substantial work moving our introductory labs in 201 and 202 away from their former highly prescriptive script format into a more inquiry based approach.

While some of Dr. Edlund's CTE scores have been lower than the Department would like to see long-term, this is understandable in his first semester and his student feedback did generally show meaningful improvements in his second semester. In addition to taking the feedback from students seriously and making adjustments to his courses in the Fall, Dr. Edlund has also sought out other avenues to reflect on and improve his teaching. These efforts have included peer observations by faculty both inside and outside the Department as well as attending classes taught by more senior instructors in the Department. As noted in the Personnel Committee's letter I attended multiple classes taught by Dr. Edlund. The absence of a letter was due to time constraints on my part and is in no way a reflection on his teaching. I found him to be highly effective in the lecture and able to adapt when, for example, the demonstration he prepared did not work as intended. While I did not provide a letter, Dr. Edlund and I did meet to talk about my observations and about my feedback on his strengths and areas for improvement.

Finally, Dr. Edlund faced a very serious and difficult challenge in the Fall semester when the majority of his class was found to have cheated to one extent or another on class assignments including the mid-semester exam. This created a complex challenge in dealing with the course and needs to be considered in light of the student feedback from this class. To his credit, Dr. Edlund sought out advice on more than one occasion from the other faculty in the Department and this became an opportunity not only for him to improve his strategies for dealing with this kind of situation and how to hopefully prevent it but also for the Department as a whole to help our students better understand issues of academic integrity.

As such, I feel that Dr. Armstead's performance in the classroom is deserving of reappointment.

Scholarly Ability

As noted above, Dr. Edlund has presented a number of academic talks and has, to date, published twenty peer-reviewed articles in important journals such as Physical Review Letters. Dr. Edlund has also published three additional papers in non-peer reviewed journals and one technical report for internal use at the MIT Plasma Science and Fusion Center. Of note, Dr. Edlund was the lead author on eight of the peer-reviewed publications.

Dr. Edlund has also shown a continuing interest in involving undergraduate students into his research program. In addition to working with students during this academic year, he also brought one of our majors to Germany to work with him at the Max Planck Institute for Plasma Physics over the summer. Given his relatively short time at SUNY Cortland this record is impressive and I look forward to seeing him continue with this meaningful mentorship of undergraduate researchers.

Looking forward, Dr. Edlund has developed a clear vision for his research program and

how he will carry it out including opportunities for applying for external funding. Of note, he has authored two successful grants while at MIT totaling nearly \$2 million. Given his track record and his plans for the future, I feel that Dr. Edlund's portfolio of scholarly work very strongly supports my recommendation for reappointment. I look forward to seeing his vision continue to be implemented in the coming terms.

Effectiveness of University Service

Dr. Edlund has provided meaningful levels of service to the department and to the campus community as a whole. Areas of service that Dr. Armstead has provided to the physics department and the College include serving on the Department's personnel and scholarship committees, volunteering with Physics Club, advising a group of 10 majors and serving on the Department's search committee for a new tenure track faculty member. In terms of service to the college he sits on the Education Policy Committee and the search committee for the Dowd Gallery Director. and was awarded the 2018 SUNY Cortland M.O.V.E. award for excellence in campus engagement. Finally, when I was out on medical leave last semester, Dr. Edlund volunteered to take on one of my classes as an interim replacement. His teaching was well received by the students in this course.

Overall, Dr. Edlund's service is, in my view, more than sufficient for reappointment. Going forward, I would encourage him to continue seeking out opportunities for leadership in School or College-wide committees.

Conclusion

In summary, I find that Dr. Edlund has been effective in his time at Cortland and has a strong desire and proven ability to continue to improve as a teacher going forward. Dr. Edlund is a dedicated teacher as well as a respected scholar with substantial promise to contribute to our Department and to the College. As such, I *Highly Recommend* that he be granted a reappointment to the faculty at SUNY Cortland.

Sincerely,

Brice Smith

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Associate Professor of Physics and Chair of the Physics Department