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Dear Committee,

I am writing this letter in support of the Oceangoing Research Vessel Program. I am an Assistant Professor of Geophysics in the Department of Earth Sciences, University of Oregon; am a resident of Eugene (Senate district 4, House district 8), and am an ORVP awardee. This has been an invaluable resource for research, for Oregon state university student engagement, and to support my career as an early career researcher at a public institution.

With co-I Dr. Jennifer Fehrenbacher, I lead a 4 day cruise on the R/V Oceanus in August 2021 to collect shallow sediment cores for the dual purpose of understanding Cascadia's earthquake record to better constrain seismic hazard in the Pacific Northwest, as well as for learning more about past marine heatwaves and how these may affect our future marine ecosystem. Oceangoing research requires significant startup cost on the part of investigators, including multi-year National Science Foundation (NSF) proposals, often resulting in >2-3 years between proposal submission and expedition. Frequently small datasets are required as a feasibility study to even warrant granting such NSF proposals. These smaller studies and datasets yield important scientific results in and of themselves. The ORVP program gives Oregon researchers (including myself) the opportunity to conduct such timely studies, which is a huge boon to addressing important scientific questions related to our marine ecosystem, fisheries, and regional natural hazards and resilience.

As an example, our cruise resulted in a dataset that will be important in better understanding what magnitude of earthquakes have occurred in Cascadia in the geologic past, critical input to improving estimates of seismic hazard (and in turn mitigating risk from such devastating events). This same dataset provided sediment samples that can be used to study the past history of species of plankton that lived in the water column, some of which are more likely to exist during marine heatwaves; this dataset is an important contribution in understanding whether marine heatwaves have existed in the past few thousand years, or if they are a unique result of climate change today. Marine heatwaves are catastrophic to marine ecosystems and fishery sustainability.

In addition to performing research that benefits our state, the ship time awarded under ORVP presents a unique opportunity to give seagoing experience to undergraduate and graduate students studying and working at Oregon public institutions. Our R/V Oceanus cruise trained 7 undergraduate students, 2 graduate students and 1 postdoctoral scholar, giving them a hands-on research and educational experience

that they could link to their course studies, and support their development in pursuit of their careers. At least 3 of the undergraduate students have since pursued graduate studies in the field of oceanography. This is a rare educational experience only available to us because of the program and because of OSU's maintenance of a UNOLS vessel.

Beyond educating Oregon students, the ORVP has been beneficial in recruiting excellent graduate students and high-profile faculty to our public institutions; it is an opportunity not available in many other states, and is key for oceangoing scientists. It is an important resource for accomplishing societally-relevant, regional scientific research, as well as providing a unique educational opportunity to students in our state.

Sincerely,

A handwritten signature in black ink, appearing to read 'V. Sahakian', with a stylized flourish at the end.

Valerie J. Sahakian, Ph.D.