

President David Lassner Written Direct Testimony

I am David Lassner and I am the President of the University of Hawai‘i System (“**University**”). I have worked for the University of Hawai‘i System since 1977 and I earned a PhD from the University of Hawai‘i at Mānoa in 1998. Before becoming interim president in 2013, I worked for many years in information technology, culminating in service as the University’s first vice president for information technology and chief information officer. During those 36 years I worked with many of our most creative faculty, staff and students at all of our campuses and education centers on six islands. When I was asked if I was willing to be considered as interim president it was with the understanding that I would not apply for the permanent position, which I had no intention to do. I had a great job as VP for IT and CIO and I only expected to serve for up to a year during the presidential search. While I did not apply to be president, in 2014 I was asked if I would be willing to accept the nominations that had been submitted for me to be considered. The reason that I agreed to be considered and that I ultimately accepted the position is that I believe the University of Hawai‘i is so important to the State of Hawai‘i. I do not believe there is any institution in the State that is more important to our collective future than the University of Hawai‘i System. Our work is absolutely essential to Hawai‘i as we educate students on every island, conduct research and scholarship that addresses the challenges and opportunities facing Hawai‘i and the world, support the creation of great jobs, and engage with the communities we serve throughout the State. Our work is critical on every island and in every community in terms of teaching, research, and community engagement.

A Commitment to Public Education

A primary mission of any public institution of higher education is to increase and improve the educational and human capital of the state it serves. For the University of Hawai‘i, this means educating more students, improving workforce participation, and increasing the

success of our graduates in their communities. This has been the University's mission from its inception. In 1862, the U.S. Government required that each state or territory establish a public university to provide higher education to its citizens. These Land Grant Universities were created to help better train the workforce and to grow new careers by focusing on instruction in practical subjects (such as engineering) and agriculture. The University of Hawai'i, established in 1907 as the College of Agriculture and Mechanic Arts, is our Land Grant University, committed to serving the needs of the state through instruction and research to help create a strong future. We do that through educational programs on our 10 accredited campuses, through distance education at our University Centers, through regional research and extension stations on all islands, and by collaborating with universities and organizations elsewhere that are working to solve problems similar to what we face here in Hawai'i.

While my own professional focus is on higher education, Hawai'i has a long tradition of recognizing the importance of the full spectrum of public education. The public education system in Hawai'i was established in 1841 and when Hawai'i was admitted as a State in 1959, Section 5(f) of the Admissions Act specifically listed the support of public educational institutions as one of the five enumerated purposes for the use of Hawai'i's public lands. The continuing commitment to public education, including higher education, continued to be strongly evident as Hawai'i adopted and has amended its constitution. The Hawai'i Constitution, Article X, Section 5 states that, "The University of Hawaii is hereby established as the state university and constituted a body corporate. It shall have title to all the real and personal property now or hereafter set aside or conveyed to it, which shall be held in public trust for its purposes, to be administered and disposed of as provided by law."

The University takes that responsibility and legal mandate very seriously. Underlying all that the University does is our primary mission to provide environments in which faculty, staff

and students can discover, examine critically, and preserve and transmit the knowledge, wisdom, and values that will help ensure the survival of present and future generations and improve their quality of life. In carrying out that mission, it is the basic purpose of the University to afford all qualified people of Hawai‘i an equal opportunity for quality education at both undergraduate and graduate levels.

The University of Hawai‘i: Education, Innovation and Inspiration

The University of Hawai‘i System is the only public higher education provider for the people of Hawai‘i and is committed to providing affordable access to higher education to residents of all islands. The education, training, research, and service provided by the University are key to improvement in the social, economic, and environmental well-being of current and future Hawai‘i generations. A bachelor’s degree is now associated with substantially higher lifetime earnings, as much as \$1 million, with smaller but appreciable economic benefits for associate’s degrees. College graduates are likely to pay more taxes to support their communities, are more likely to vote and to volunteer, are less likely to be incarcerated, be homeless or draw on social services, are less likely to smoke and are healthier, and their children are in turn more likely to attend college. A Georgetown study found that by 2020 approximately 70% of the jobs in Hawai‘i will require some type of postsecondary instruction. Much of the growth in high-quality living-wage jobs is in fields that require science, technology, engineering, and mathematical (STEM) education. Hawai‘i’s future will be inextricably tied to the ability of the University to provide quality STEM education throughout the State.

The University has taken concerted steps to meet this demand and develop a sustainable platform upon which to build STEM programs that enable Hawai‘i citizens to participate in and lead research and innovation. Adequately preparing Hawai‘i citizens for a future very different than the past or present cannot just happen within the years a student is enrolled in the

University. College and career readiness needs to begin much earlier than freshman year. That is one reason the University collaborates through the Hawai‘i P-20 Partnerships for Education, its statewide partnership with the Executive Office on Early Learning and the Hawai‘i State Department of Education, to strengthen the education pipeline from early education through K12 and higher education so that all students can achieve college, career and community success including through STEM education.

The University of Hawai‘i, like public institutions of higher education around the country, also supports the economic development of the communities we serve. The current economy of Hawaii is highly dependent on tourism and on military spending. These are mature economic sectors unlikely to drive future growth. And as we have experienced in the last decade, and most profoundly in 2008 with the Great Recession, these sectors can be volatile. The creation of a third economic sector based on research and innovation has been identified as a community priority by the private sector, government and academia. As the largest research enterprise in the state, the University of Hawai‘i is absolutely essential to the success of this economic diversification. And we are committed to contributing to the development of high-quality living-wage jobs in this new sector and to educating our residents to fill them.

The Hawaii Innovation Initiative

In response to this need, the University has developed the Hawai‘i Innovation Initiative with our partners in business and government. The goal is to create more high-quality jobs and diversify Hawai‘i’s economy by leading the development of a \$1 billion research and innovation sector that addresses the challenges and opportunities faced by Hawai‘i and the world. The University, in partnership with the business community and government, plans to develop innovation clusters that link fundamental scientific discovery with applied research and economic development. The University has outlined concrete measures to help us gauge our

progress including the level of extramural funding; the number of invention disclosures, patents, licenses and start-companies and jobs created; and the number of STEM degrees and certificates awarded.

This initiative is also providing University of Hawai‘i students with the opportunity to be exposed to the entrepreneurial and innovation skills necessary to be successful in all fields. The University is moving to educate students to not just be prepared to compete for better jobs, but also to create jobs through their own initiative, innovation and entrepreneurialism. This initiative links together increases research activity and funding with a related increase in workforce development and training as part of the University’s key role in helping to boost the state’s economy and the success of our graduates, their families and their communities.

The Hawai‘i Innovation Initiative has already identified several STEM fields in which the University can begin to focus as we develop new clusters in partnership with the private sector and government. These include ocean and climate-related sciences, health science and wellness, data intensive sciences and engineering, agriculture and sustainability sciences including energy, and astronomy.

The Importance of Astronomy

The State of Hawaii has one of the largest astronomy sectors in the United States. There are multiple University of Hawai‘i units with astronomy-related academic programs and degrees in astronomy. And in its 2014 study the University of Hawai‘i Economic Research Organization (“**UHERO**”) estimated the economic impact of this sector, including its \$20m in extramural funding to the University, at \$167.86 million statewide with \$91.48 million of that impact and more than 800 jobs on Hawai‘i Island.

The University is working to ensure that Hawai‘i residents are qualified to work at all levels within the astronomy field. The University of Hawai‘i has one of the largest graduate

programs for astronomy in the country and is striving to solidify a position in the top ten programs nationwide. The University also realizes that in order for Hawai‘i residents to take advantage of the quality of education we provide at the graduate level, we need to strengthen programs at the undergraduate level engage more deeply with K12 students. The University of Hawai‘i at Hilo leads the nation in the number of undergraduate astronomy degrees award per year and we recently created a BA program in astronomy and a BS program in astrophysics at our UH Mānoa campus. Because of our arrangements with the observatories on Mauna Kea, we are able to provide viewing time on world-class telescopes to our undergraduate astronomy students, which very few programs anywhere are able to do. We believe that our undergraduate programs can produce students who will be competitive candidates to any graduate program or employment opportunity in Hawai‘i or elsewhere in the world. A key to the success of our world-class undergraduate and graduate programs is state of the art facilities and research opportunities, which leverage our unique access to the remarkable astronomical resources on Mauna Kea.

This is not just about jobs. Astronomy is one of the most compelling disciplines attracting students to other sciences and STEM fields. The wonders of astronomical discoveries provide a gateway to science and knowledge for generations of curious youngsters and open the path to fundamental questions: Where do we come from? How was the Universe formed and what is it made of? Is there life elsewhere in the universe? One of the most fascinating new chapters of discovery concerns the detection and detailed study of planets around other stars. These exoplanet systems can give us valuable information about the creation of our solar system and the potential fate of the Earth. And this is also a quest to find other planets that may be able to sustain life in the habitable zones around their host stars, perhaps inspiring future generations of voyagers who may be able to send probes or space ships to the closest habitable planets.

Stewardship of Mauna Kea

The University's stewardship of Mauna Kea has continued to evolve and improve from the 1998 audit to the 2000 Master Plan to today. The August 2014 Follow Up Audit of the Management of Mauna Kea and the Mauna Kea Science Reserve highlights the progress made by the University in its stewardship of the UH Management Lands on Mauna Kea, and the University has continued to make improvements since then. The University has shifted stewardship responsibility from the Institute for Astronomy at UH Mānoa to the University of Hawai'i at Hilo and established the community-based Mauna Kea Management Board and the Kahu Kū Mauna council of Native Hawaiian advisors. The University is committed to continuing engagement and active listening with the community. One area that the 2014 Follow Up Audit found lacking is being addressed, as a draft of the proposed rules authorized by Act 132 (2009 Legislature) has now been released and distributed for review by the University to the State, OHA and the general public for consultation and/or comment.

The University has already implemented various measures that have been recommended to us and will continue to actively participate in the ongoing dialogue on the stewardship of Mauna Kea. For example, the University has formally and legally bound itself to the commitment that this is the last area on the mountain where a telescope project will be completed or sought. The University submitted a letter to Chairperson Case, dated November 17, 2015, that stated unequivocally that the Thirty Meter Telescope project site is the last new area on the mountain where a telescope project will be contemplated or sought. The letter stated that it constituted a legally binding commitment and that it may be regarded as a condition of the University's lease and of any future lease renewal or extension. In addition, the University remains committed to implementing the decommissioning plan for the Mauna Kea observatories

as outlined in the sub-plan of the CMP. The University has and will continue to follow the decommissioning process requirements to ensure full compliance with environmental, historic preservation, cultural, health, and other substantive and permitting requirements as described in the decommissioning plan.

The University humbly accepts its stewardship role as conferring dual responsibilities of protecting and honoring Mauna Kea while supporting the responsible use of this special place in support of public education. We understand the challenges these goals can present and we continually seek to operate with them in balance, rejecting the narrative that these goals are mutually exclusive.

The Thirty Meter Telescope (TMT)

Apart from advances in science and discovery that the TMT project will enable, the University notes the contributions to education, scholarships and STEM support that TMT will provide for Hawai'i Island schools and the job training and opportunities for University students and graduates. TMT will work with the University of Hawai'i at Hilo, Hawai'i Community College, and the Department of Education to create and sustain a Workforce Pipeline Program that will develop a highly qualified pool of local workers who will be considered for hiring into most job classes at all salary levels. Special emphasis will be given to those programs aimed at preparing local residents for science, engineering, and technical positions commanding higher wages.

TMT has demonstrated its ability and willingness to support public education. In 2014, TMT launched the THINK Fund to support scholarships and mini-grants, educational programs, college awards, and educational programs specific to Hawaiian culture. TMT has assigned administration of its THINK Fund to two independent Hawaii non-profits - the Hawaii Community Foundation and the Pauahi Foundation.

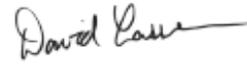
The TMT project will be a cornerstone of the next generation of astronomy in Hawai‘i. In addition to the contributions TMT will make to science and human knowledge it will provide substantial resources for public education and improved stewardship of Mauna Kea.

Conclusion

The University is very aware of the important role it plays in the State of Hawai‘i and it views that role with great humility and respect. We have the responsibility to advance human knowledge and the educational, social and economic landscape of the State. And we are also a steward of significant natural resources. We balance these responsibilities on almost a daily basis throughout the islands as we serve Hawai‘i as the sole provider of public higher education in the State.

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DATED: Honolulu, Hawai'i, October 11, 2016.

A handwritten signature in cursive script, appearing to read "David Lassner", written in black ink.

David Lassner
President, University of Hawai'i
System