

Hawai'i Scholars for Education and Social Justice

Research Brief #1

October 8, 2018

The Underfunding of Hawai'i's Public Schools and Proposed Supplemental Funding from Property Taxes

Hawai'i's public schools are chronically underfunded, and funding affects the quality of children's education. Hawai'i voters have a rare opportunity on November 6 to approve a constitutional amendment that will provide additional state funds for public education.

The amendment will provide funding for education by taxing investment properties, including homes in which the owners do not live and commercial properties. Unlike other states, Hawai'i has one statewide school district. Educational funding from property taxes would be used to enrich all schools, not just the communities from which the taxes are collected.

Ethnic diversity is a strength of our population. But, the chronic underfunding of our public education system chips away at the strength of our diversity by creating a system of economic disparities. Since 2008, there has been a 33% increase in the numbers of students from lowincome families in the public schools.² Native Hawaiians, Filipino Americans, and other ethnic minority groups constitute over 70% of the 180,000 public school students. Down the educational pipeline, these students continue to be underrepresented at the University of Hawai'i at Mānoa.³ Public education affects everyone, but is particularly important to our State's most vulnerable children. As citizens, it is our collective kuleana (responsibility) to care for each other, which includes addressing these educational disparities.

See the proposed amendment:

https://www.capitol.hawaii.gov/session2018/bills/SB2922_HD1_.htm

There are misleading claims and inaccurate assumptions about Hawai'i's educational problems and proposed solutions.

The Hawai'i Scholars for Education and Social Justice (HSESJ) felt compelled to provide some of the facts about the current situation.

We produced this research brief that uses research in education and other relevant fields to show how underfunding affects public education and how funding from this amendment can improve education and the lives of Hawai'i residents. In doing so, we clarify misconceptions by presenting the facts about educational funding in Hawai'i.

Misconception #1: The Hawai'i State Department of Education (DOE) is adequately funded.

Facts:

- Hawai'i ranks among the lowest
 of states in percentage of state and
 local expenditures supporting
 K-12 education (15.9%), compared
 to the U.S. average of 21.7%.⁴
- As the cost of living in Hawai'i increased, the percentage of expenditures for public education remained the same.

 The percentage expended for public education in Hawai'i per capita was the same in 2011-2012, as was in 1998-1999.
- When adjusted for cost-of-living,
 Hawaii's teachers are the lowest paid in
 the nation,⁶ and Hawai'i is ranked as the
 worst state to be a teacher.⁷ This has led
 to a chronic teacher shortage. According
 to the U.S. Department of Education, the
 number of teachers who quit their job and

left Hawai'i increased by 84 percent from 2010 to 2018.8 For the 2017-18 school year, the DOE hired 524 unqualified "emergency hires" to fill teacher vacancies.9

Hawai'i ranks 42 of all states for per-pupil spending, when taking cost-of-living into consideration. ¹⁰ The most recent study on the extent of underfunding of the public schools found that the DOE would need an additional \$278 million a year in order to provide an "adequate" education to its students. ¹¹ Parents report that underfunding has resulted in not enough or dilapidated facilities; outdated textbooks; cancellation of classes in art, music, technology and PE; and inadequate support for multilingual learners and those with disabilities. ^{12,13} Most teachers use their own money to purchase supplies for their classrooms. ¹⁴

Hawaii's teachers are the lowest paid in the nation, when considering the cost-of-living. ¹⁵ Teachers in Hawai'i make 19% less than other residents with bachelor's degrees in the State. ¹⁶ Research suggests that when salaries are low, teachers leave for higher paying professions, ¹⁷ and student performance worsens. ¹⁸

In Hawai'i, only 2% of 4-year-olds attends a state-funded preschool, compared to the national average of 32%. ¹⁹ Hawai'i ranks 42

of all states for access to public Pre-K and is the state with the highest percentage of a married couple's income needed for full-time preschool. ²⁰ Due to lack of funds, Pre-K education is offered at only 24 of the 170 elementary schools. Over \$139 million is needed over the next 10 years to operate public Pre-K classrooms to reach the State's goal of serving 36% of 4-year-olds. ²¹ An additional \$456 million is needed to build appropriate facilities for those classrooms.

Misconception #2: More funding will not lead to improved education.

Facts:

- Funding matters in education. There is clear evidence that quality education is expensive and there are few low-cost alternatives to well-funded schools.²²
- raises student achievement and performance, increases high school graduation rates, and leads to higher income as adults.²³ Students who attend public schools in better funded districts are more likely to go to college.²⁴ Increased funding has the greatest positive effect on student outcomes when it is used to raise teachers' salaries, reduce class sizes, or lengthen the school year.²⁵
- Increased funding in Hawai'i could allow the DOE to expand promising practices such as Early College, in which students enroll in college-level courses taught on their high school campuses²⁶ and increased access to Pre-K programs in public schools.

Better funding can improve the public schools and make a difference in children's learning and educational experiences. Contrary to perceptions that educational funding in Hawai'i is used for "middle management," 93% of the DOE budget is used for direct school support, including teacher salaries. ²⁷

Higher teacher salaries attract more qualified teachers and keep teachers from leaving their jobs. ^{28,29} Improved teacher retention strengthens student-teacher relationships, thereby improving student learning and achievement. ³⁰ Higher spending for public schools leads to lower student-to-teacher ratios and smaller class sizes. ³¹ School districts with higher teacher salaries have higher student test scores in reading and mathematics ³² and tend to produce higher student graduation rates. ^{33,34}

Increased funding can also provide needed instructional materials. With limited access to resources, teachers from underperforming schools often use outdated or otherwise inadequate instructional materials, equipment, and supplies. ³⁵

Better funding can also provide high quality teacher professional development, which is related to children's growth and achievement, particularly for students from low income and multilingual backgrounds. 36 Good professional development increases teachers' capacity for effective teaching and leads to decentralization of decision-making about resources such that principals and teachers decide how to best leverage resources for school improvement. 37 Such practices foster teacher engagement in professional learning activities and collaboration between educators that leads to effective and student-centered instruction. 38 This, in turn, affects student achievement and performance. 39

There are promising practices in the DOE that if expanded could lead to greater learning and achievement. Since its start in 2012 at Waipahu High School, Early College has increased annually in the number of students served, classes taught, and participating schools. 40 In 2018, 18 Early College students graduated with UH Associate of Arts degrees before graduating from high school. In 2017, the DOE requested \$9 million to expand the program to every high school in the State, but received only \$2 million for two years (2017-2019) from the State legislature.

Greater funding can also increase access to publicly supported Pre-K programs. There is strong evidence that quality early childhood education is related to positive outcomes, including increased cognitive skills, better transition to kindergarten and greater learning and engagement in school. 41 Children who participate in high quality early childhood education, particularly those from lower income families, are more likely to graduate from high school and college. 42 There are intergenerational effects on individuals that also affect their children's education and earning potentials. ⁴³ The economic returns are greatest when the investment is made before children are 5-years-old. 44

Misconception #3: Higher property taxes will adversely affect Hawai'i's economy and local people's lifestyles.

Facts:

- Hawai'i has a very high percentage of out-of-state property owners, many of whom leave their places vacant for most of the year. Statewide, those from out-of-state own over 70% of commercial related properties, (e.g., beach house rentals, office buildings, storefronts) and close to 11% of residential properties. 45 Scholars explain that this is partly due to low property taxes. 46,47
- Housing in Hawai'i is very expensive.
 Hawai'i has highest cost of median monthly rent and the third highest median cost for mortgages in the U.S.⁴⁸ An analysis by the Department of Business, Economic Development and Tourism⁴⁹ concluded

- that higher state taxes on investment property would discourage out-of-state buyers from leaving their properties vacant. This would lead to lower home prices and a greater inventory of homes for local families' purchases and rentals.
- In all other states, where the school system is funded by property taxes, higher property taxes are related to higher quality schools and better education for residents in those communities. Similarly, if Hawai'i were to use property taxes to increase funding for the State's public school system, all residents would benefit from improved schools and education.

Misconception #4: Public school funding only affects parents with children in the public schools.

Facts:

- Hawai'i's employers and consumers depend on an educated workforce. By 2020, most jobs in Hawai'i will require education beyond a high school degree.⁵¹
- Public schools are places where students from diverse cultural and economic backgrounds can interact with and learn from each other, increasing understanding

- and harmony across such groups.⁵² In Hawai'i, people who could afford private education, but chose public schools for their children, often viewed this as a benefit of their public school choice.⁵³
- Better-funded public education is related to lower poverty. For every additional dollar spent on public schools, there is a \$2 return investment at the individual level, resulting in a person's
- 6% lower likelihood of living in poverty.⁵⁴ Lower poverty in Hawai'i will benefit everyone in the community by decreasing homelessness and other social problems.⁵⁵
- Increased funding and quality of public schools could encourage parents who currently send their children to private schools to switch to public schools, thereby reducing their financial burden.

Conclusion

By creating this research briefing paper, HSESJ presents the facts related to the underfunding of public education in Hawai'i and its effects on children, teachers, and community members. We point to the ways that increased funding can create a more productive learning environment for students, particularly those from low-income and ethnic minority communities, who make up the majority of our public schools. We underscore that increased funding for the Hawai'i Department of Education is needed to improve the education and lives of our children, and that increasing educational funding by taxing investment properties can benefit our State as a whole.

Notes

1 Baker, B. D. (2016). Does money matter in education? (2 nd ed.) Retrieved from the Albert Shanker Institute website: http://www. shankerinstitute.org/resource/does-moneymatter-second-edition 2 Department of Education (2017). Enrollment of students with special needs. Hawaii Department of Education Data Book. Retrieved Hawai'i Department of Education website: http://arch.k12.hi.us/PDFs/state/databook/2017/20 17AppendixCDataTables.pdf 3 University of Hawai'i (2018). Campus diversity. Retrieved from the University of Hawai'i website: https://manoa.hawaii.edu/campus-life/ diversity/ 4 Department of Education (n.d.). The Budget FY 2019. Retrieved from the Hawai'i Department of Education website: http://www.hawaiipublicschools.org/DOE%20 Forms/budget/Budget1sheet.pdf 5 Okamura, J. (2017). Unequal opportunity: Ethnic inequality in public education in Hawai'i. Honolulu, HI: Hawai':i State Teachers Association. Retrieved from: https://drive.google.com/file/ d/0B0JQ2SWs8fGfaGdVMUE1SUl1Wm8/view 6 Turner, C. (2018, March 16). The fight over teacher salaries: A look at the numbers. National Public Radio. 7 Bernardo, R. (2017, September 25). 2017's best and worst states for teachers. WalletHub. Retrieved from WalletHub website: https:// wallethub.com/edu/best-and-worst-states-for-

teachers/7159/ 8 Essoyan, S. (2018, June 22). Number of Hawaii teachers quitting and leaving the state increasing dramatically. Star Advertiser. Retrieved from Star Advertiser website: http://www.staradvertiser.com/2018/06/22/hawaiinews/more-hawaii-teachers-give-up-onparadise/ 9 Lee, S. (2018a, July 5). Our own' pipeline of new teachers. Honolulu Civil Beat. Retrieved from the Honolulu Civil Beat website: https://www.civilbeat.org/2018/07/how-hawaii-is-trying-to-grow-our-own-pipeline-of-new-teachers/10 EdBuild (2015). Power in Numbers—Cost Adjusted Revenue. Retrieved from EdBuild website: http://viz.edbuild.org/maps/2016/cola/states/

11 Martin, D. (2005, January 26). Study urges \$278 boost in school funds. Honolulu Star Bulletin, p. A1.

12 Parents for Public Schools of Hawaiʻi (2016). 1000 Family Voices: Summary report 2014-2016. Honolulu, HI: Parents for Public Schools of Hawaiʻi.

13 Steinberg, J. (2001, October 12). In Hawai'i, public schools feel a long way from paradise. New York Times. Retrieved from: https://www.nytimes.com/2001/10/12/us/in-hawaii-public-schools-feel-a-long-way-from-paradise.html 14 National Center for Educational Statistics (2018). Public school teacher spending on school supplies. Retrieved from the National Center for Education Statistics website:

https://nces.ed.gov/datapoints/2018097.asp 15 Turner, C. (2018, March 16). 16 Allegretto, S., & Samp; Mischel, L. (2018, September). The teacher pay penalty: Trends in the teacher wage and compensation gaps through 2017. Report of the Economic Policy Institute. Retrieved from: https://www.epi.org/publication/teacher-pay-gap-2018/17 OECD. (2014). Indicator D3: How much are teachers paid? Education at a glance. OECD indicators. Retrieved from: http://dx.doi.org/10.1787/888933119815
18 Britton, J., & Samp; Propper, C. (2016). Teacher

18 Britton, J., & Samp; Propper, C. (2016). Teacher pay and school productivity: Exploiting wage regulation. Journal of Public Economics, 133, 75—89.

19 Lee, S. (2017, September 13). Preschool in Hawaii: Expensive and 'Ridiculously hard to find.' Honolulu Civil Beat. Retrieved from: https:// www.civilbeat.org/2017/09/preschool-inhawaii-expensive-and-ridiculously-hard-to-find/ 20 Child Care Aware (2018). 2018 State Child Care Facts in the State of Hawaii. Retrieved from: https://cdn2.hubspot.net/hubfs/3957809/ State%20Fact%20Sheets/Hawaii_Facts.pdf 21 Moriguchi, L. (2018, September). Toward universal access to pre-K: 10 year vision. Presentation to the HE'E Coalition. Honolulu, HI. 22 Baker (2016). 23 Jackson, C. K., Johnson, R., & Dersico, C. (2015). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. The Quarterly Journal of Economics, 131(1), 157—218. 24 Baker, B. D. (2014). Evaluating the recession's impact on state school finance systems. Education Policy Analysis Archives, 22(91). http:// dx.doi.org/10.14507/epaa.v22n91.2014 25 Jackson et al. (2015). 26 Lee, S. (2018b, August 6). Why college now starts in high school for so many Hawaii kids. Honolulu Civil Beat. Retrieved from: https://www. civilbeat.org/2018/08/why-college-nowstarts-in-high-school-for-so-many-hawaii-kids/ 27 Department of Education (n.d.). 28 Clotfelter, C., Glennie, E., Ladd, H., & Damp; Vigdor, J. (2008). Would higher salaries keep teachers in high-poverty schools? Evidence from a policy intervention in North Carolina. Journal of Public Economics, 92(5-6), 1352—1370. 29 Fullbeck, E. S. (2014). Teacher mobility and financial incentives. A descriptive analysis of Denver's ProComp. Educational Evaluation and Policy Analysis, 36(1), 67—82. 30 Hendricks, M. D. (2015, December). An empirical analysis of teacher salaries and labor market outcomes in Oklahoma. Paper presented at the Oklahoma Economic Outlook Conference. Oklahoma City: OK. 31 Jackson et al. (2015).

32 Flanagan, A., & Samp; Grissmer, D. W. (2006). Effect of teacher pay on student performance: Findings from Illinois. Retrieved from https://www.rand.org/content/dam/rand/pubs/working_papers/2006/RAND_WR378.pdf 33 Hendricks, M. D. (2014). Does it pay to pay teachers more? Evidence from Texas. Journal of Public Economics, 109, 50—63. 34 Jackson, C. K., Wigger, C., & Samp; Xiong, H. (2018). Do school spending matters? Evidence from the Great Recession. Institute for Policy Research.

35 Malen, B., & Samp; Rice, J. K. (2004). A framework for assessing the impact of education reforms in school capacity: Insights from studies of high-stakes accountability initiatives. Educational Policy, 18(5), 631—660.

36 Krumpe, K. P. (2012). Linking resource allocation to student achievement: A study of Title 1 and Title 1 stimulus utilization. (Doctoral dissertation, Loyola Marymount University). Retrieved from:

https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1214&context=etd 37 Thoonen, E. E. J., Sleegers, P. J. C., Oort, F. J., & Peetsma, T. T. D. (2012). Building school-wide capacity for improvement: The role of leadership, school organizational conditions, and teacher factors. School Effectiveness and School Improvement, 23, 441—460.

38 Thoonen et al. (2012).

39 Krumpe (2012).

40 Lee (2018b).

41 Phillips, D., Lipsey, M., Dodge, K., Haskins, R., Bassok, D., Burchinal, M., Duncan, G., Dynarski, M., Magnuson, K., & Dynarski, M., Duncan, G., & Dynarski, M., Magnuson, K., & Dynarski, M., Magnuson, M., & Dynarski, M., & Dy

42 Reynolds, A. J., Ou, S. R., & Dr, Temple, J. A. (2018). A multicomponent, preschool to third grade preventive intervention and educational attainment at 35 years of age. JAMA Pediatrics, 172(3), 247—256. 43 Heckman, J. J., & Samp; Raut, L. K. (2014) Intergenerational long-term effects of preschoolstructural estimates from a discrete dynamic programming model. Journal of Econometrics, 191, 164—175. 44 Heckman, J. J. (2011). The economics of inequality: the value of early childhood education. American Educator. Retrieved from https://files. eric.ed.gov/fulltext/EJ920516.pdf 45 Department of Business, Economic Development and Tourism (2017). An analysis of real property tax in Hawaii. Retrieved from: http://files.hawaii.gov/dbedt/annuals/2017/ property_tax_report_oct_2017.pdf 46 Bai, C., Li, Q., & Duyang, M. (2014). Property taxes and home prices: A tale of two cities. Journal of Econometrics, 180(1), 1-15. 47 Liao, W. C., Zhao, D., Lim, L. P., & Dr, Wong, G. K. M. (2015). Foreign liquidity to real estate market: Ripple effect and housing price dynamics. Urban Studies, 52(1), 138-158. 48 Hurley, T. (2018, September 19). Struggling to keep up. Honolulu Star Advertiser, pp. A1, A6. 49 Department of Business, Economic Development and Tourism (2017). 50 Mackenzie, J. (2006). Public school funding and performance. Newark, DE: University of Delaware. Retrieved from http://www1.udel.edu/ johnmack/research/school_funding.pdf 51 Carnevale, A. P., Smith, N., & Strohl, J. (2013). Recovery: Job growth and education requirements through 2020. Georgetown University Center on Education and the Workforce. Retrieved from: https://cew.georgetown.edu/wpcontent/uploads/2014/11/Recovery2020.FR_. Web_.pdf

52 Tharp, R. G., Estrada, P., Dalton, S. S., & Samp; Yamauchi, L. A. (2000). Teaching transformed: Achieving excellence, fairness, inclusion, and harmony. Boulder, CO: Westview.
53 Bayer, A. S. (2009). Going against the grain: When professionals in Hawai'i choose public schools instead of private schools. Honolulu, HI: University of Hawai'i Press.
54 Jackson et al. (2015).
55 Shinn, M., Gibbons-Benton, J., & Samp; Brown, S. R. (2015). Poverty, homelessness, and family break-up. Child Welfare, 94, 105—122.

This briefing paper was prepared by Kay Fukuda, Jonathan Okamura, Colleen Rost-Banik, Lois Yamauchi, and Klavdija Zorec.

Hawai'i Scholars for Education and Social Justice (HSESJ) is a volunteer group of researchers in Hawai'i who conducts, reviews, and disseminates research related to education and social justice in Hawai'i. Our goal is to use research to promote dialogue and create an informed consciousness about public education in our State. We partner with educators, educational groups, and non-profit organizations. If you are interested in learning more or becoming involved, please email Infohsesj@gmail.com.

Our educational researchers are available for comment and discussion on topics raised in this research brief.

Signatories

The following scholars and researchers endorse this statement. Institutions are listed for identification purposes only.

Patricio N. Abinales, University of Hawaiʻi, Mānoa Anna Ah Sam,

University of Hawai'i, Mānoa

Cameron Mahealani Ahia. University of Hawai'i, Mānoa Leonard Y. Andaya, University of Hawai'i, Mānoa Ibrahim G. Aoude, University of Hawai'i, Mānoa Nezia Azmi, University of Hawai'i, Mānoa Robert Bachini, University of Hawai'i, Mānoa Omar Bird, University of Hawai'i, Mānoa Rhonda Black, University of Hawai'i, Mānoa Lawrence W. Boyd, University of Hawai'i, West O'ahu Kim Brennan, University of Hawai'i, Mānoa Ellen-Rae Cachola, University of Hawai'i, Mānoa Ethan Caldwell, University of Hawai'i, Mānoa Michael Cawdery, Leeward Community College Nicholas Chagnon, University of Hawai'i, Mānoa E. Brook Chapman de Sousa, University of Hawai'i, Mānoa Brian S. Chung, University of Hawai'i, Mānoa Kim Corbin, University of Hawai'i, Mānoa Keith G. Cross, Jr., University of Hawai'i, Mānoa Elise Dela Cruz-Talbert,

University of Hawai'i, West O'ahu

Megan J. Dabrowski,	Jade Higa,	Nicole Lewis,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Marcus Daniel,	Craig Howes,	Hannah Liebreich,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Monisha Das Gupta,	Matt Ito,	Min Liu,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Diana Sofia Delgado Cornejo,	Rodney C. Jubilado,	Leslie Lopez,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Hilo	University of Hawaiʻi, West Oʻahu
D. Brent Edwards Jr.,	Jeff Judd,	Charmaine Mangram,
University of Hawaiʻi, Mānoa	Leeward Community College	University of Hawaiʻi, Mānoa
Kathy E. Ferguson,	Walter Kahumoku III,	Mari Matsuda,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, West Oʻahu	University of Hawaiʻi, Mānoa
Anna Feuerstein,	Kathleen Kane,	Kieko Matteson,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Cynthia Franklin,	Julie Kaomea,	Yuriria McCloskey,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Charlotte Frambaugh-Kritzer,	Alyssa Kapaona,	Alexander Means,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Stephanie Frank,	Noel J. Kent,	Laurel Mei-Singh,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Kathleen French,	Bryan Kim,	Manulani Aluli Meyer,
Windward Community College	University of Hawaiʻi, Mānoa	University of Hawaiʻi, West Oʻahu
Dale Fryxell,	Harrison Kim,	Krystalynn McAngus,
Chaminade University	University of Hawaiʻi, Mānoa	University of Hawaiʻi, West Oʻahu
Kay Fukuda,	Janet Kim,	Paul B. McKimmy,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Noelani Goodyear-Ka'ōpua,	Vina Lanzona,	Raymond Miner,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Vernadette Gonzalez,	Charles R. Lawrence III,	Camaron Miyamoto,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Kawehi Goto,	David Leake,	Katharine Moffat,
University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa	University of Hawaiʻi, Mānoa
Sue P. Haglund, University of Hawaiʻi, Mānoa	Winona K. Lee, University of Hawaiʻi, Mānoa	Noreen K. Mokuau

Jeffrey Moniz,

University of Hawai'i, West O'ahu

Nathan Murata,

University of Hawai'i, Mānoa

Larson Ng,

University of Hawai'i, Mānoa

Amy Nishimura,

University of Hawai'i, West O'ahu

Georganne Nordstrom,

University of Hawai'i, Mānoa

Jonathon Y. Okamura,

University of Hawai'i, Mānoa

Leslie Okoji,

University of Hawai'i, Mānoa

Tara J. Plachowski,

University of Hawai'i, Mānoa

Christine A. Quemuel,

University of Hawai'i, Mānoa

Kavita Rao,

University of Hawai'i, Mānoa

Richard Rath,

University of Hawai'i, Mānoa

Katherine Ratliffe,

University of Hawai'i, Mānoa

Nathalie Rita.

University of Hawai'i, Mānoa

John P. Rosa,

University of Hawai'i, Mānoa

Colleen Rost-Banik,

University of Minnesota

(conducting research in Hawai'i)

Anjoli Roy,

Punahou School

Amy Ruhaak,

University of Hawai'i, Mānoa

Demiliza Saramosing,

University of Minnesota

(conducting research in Hawai'i)

S. Shankar,

University of Hawai'i, Mānoa

LaJoya Shelly,

University of Hawai'i, Mānoa

Maya Soetoro,

University of Hawai'i, Mānoa

Nevzat Soguk,

University of Hawai'i, Mānoa

Beiwen Sun,

University of Hawai'i, Mānoa

Krisna Suryanata,

University of Hawai'i, Mānoa

Kara Suzuka,

University of Hawai'i, Mānoa

Kazufumi Taira,

University of Hawai'i, Mānoa

Katherine A. Tibbetts,

Lili'uokalani Trust

Victoria Timmerman,

University of Hawai'i, Mānoa

Tracy Trevorrow,

Chaminade University

Linda Venenciano,

University of Hawai'i, Mānoa

Valerie Wayne,

University of Hawai'i, Mānoa

Mariska Weijerman,

University of Hawai'i, Mānoa

Julia Wieting,

University of Hawai'i, Mānoa

Ivor Williams,

NOAA

Alanna Yamasaki,

University of Hawai'i, Mānoa

Aiko Yamashiro,

University of Hawai'i, Mānoa

Lois A. Yamauchi,

University of Hawai'i, Mānoa

Waynele Yu,

University of Hawai'i, Mānoa

Klavdija Zorec, University of

Hawai'i, Mānoa