



OHSU Bob and Charlee Moore Institute for Nutrition & Wellness

2021-2022 ANNUAL REPORT

Directors message



As we emerged from the pandemic this past year, we became excited to discover the new normal for the Institute. We were able to hold events in-person once again, and the energy renewed us all after

two years of isolation. Our Nutrition in Pregnancy Conference in Washington D.C, allowed us to bring national experts together to address the barriers we face as a nation in providing for individuals who are pregnant. We came to realize that strategies for addressing this issue are still needed. Thus, we are looking forward to another conference that will bring new strategies that hold promise. The International DOHaD Conference and the DOHaD Summer Course allowed us to pass on some of our expertise at OHSU to the next generation of DOHaD scientists. Closer to home, our Nutrition Oregon Campaign has continued to grow, and recent grants will allow us to bring on additional hubs in the coming year.

It has been my privilege to work with a highly talented team in the Moore Institute over the past decade. I have deep admiration for each of its members. I am pleased to know that as the team goes through a personnel transition, it will grow even stronger. Lisa Rhuman, who worked with me for some 30 years and was director

of operations, has just retired. She was an amazing leader. Our good fortune led us to the talented **Mandy Burns** who has recently taken her place. I am proud to announce that **Leslie Myatt, Ph.D., FRCOG**, our current Deputy Director, will take over as Director as of January 1, 2023 as I curtail my role and transition toward retirement. Dr. Myatt comes with strong leadership experience. He is a widely admired international expert on the human placenta and he came to OHSU to oversee perinatal research in the Department of Obstetrics and Gynecology. He is also the leader of the Global Pregnancy Collaboration which is now under the Moore Institute umbrella. His expertise on how maternal nutrients travel from mother to baby is unparalleled and a perfect fit for the mission of the Moore Institute. He will take on a thriving Moore Institute that is dedicated to improving the health of Oregonians and beyond, for this generation and the next. I am excited to see the ever-growing influence of the Moore Institute on a national level. I have every confidence in the team that will take it to the next level.

Kent Thornburg, Ph.D.

M. Lowell Edwards Endowed Chair, Professor of Cardiovascular Medicine
Director, Bob and Charlee Moore Institute for Nutrition & Wellness
Director, Center for Developmental Health, OHSU Knight Cardiovascular Institute
Interim Director, OHSU Knight Cardiovascular Institute



Mandy Burns,
Director of
Operations



Les Myatt, Ph.D.,
Deputy Director



News at the Moore Institute



Nutrition Oregon Campaign

The Moore Institute serves as the backbone of the Nutrition Oregon Campaign (NOC), a statewide network of connected communities with a vision of ending chronic disease in Oregon. The NOC currently has three active hubs and two areas of developing collaboration.

Current hubs

The Klamath County Hub is developing a DOHaD-focused nutrition curriculum. It will be used to train doulas, Community Health Workers, early childhood home visitors, WIC staff, and other providers who work with pregnancy and young children. The Ontario Hub is developing an expanded food systems partnership and community food center, and in Yamhill County, the Hub has multiple groups working toward their goal of cultural and nutritional food security.

Other areas of collaboration

Over the past year, the Moore Institute hosted a professional book club in Douglas County discussing David Barker’s “Nutrition in the Womb” book. This led to discussions of developing a fourth NOC hub, which we are very excited about.

In Columbia and Clatsop Counties, where we are collaborating to include nutrition in their work around resiliency and trauma informed care, Dr. Thornburg presented on the links between DOHaD and adverse childhood experiences (ACEs).

New Mamava Pods support breastfeeding

OHSU has six new lactation suites available to staff, patients and visitors. Breastmilk is the recommended food for babies but unfortunately women face many obstacles. Providing a private and convenient space to breastfeed is key to supporting women and their babies. The pods were made possible through the leadership of Diane Stadler, Ph.D., associate director for the Moore Institute, with funding for one pod donated by Bob Moore through the Moore Institute.



Communications and outreach

We strive to make the science of DOHaD understandable for a variety of audiences, and to share concepts and stories through several platforms in order to reach as many people as possible. Highlights from this year include:

- Continuing our focus on how the social determinants of health intersect with the developmental origins to cause biological harm.
- Expanding our collection of ‘research briefs.’ These articles break down scientific studies into common language, explain the implications of the findings, and provide key take-aways for our audiences.
- Publishing our quarterly Moore Report newsletter, where we share our articles, briefs, and grant and educational opportunities with over 3,000 friends, colleagues and supporters.
- Keeping a social media presence to promote events, amplify our messages about nutrition, share newly published blog articles, and highlight the work of our colleagues.
- Spotlighting the work people and organizations are doing in their communities to improve access to nutrition and advance DOHaD science through our blog, *Better the Future*.
- Publishing news about the Nutrition Oregon Campaign through a monthly e-newsletter, which provides a centralized information-sharing platform for hubs statewide.



Events

We began holding in-person events and learning opportunities this year. We prefer the in-person experience of connecting with others, although the virtual platform did allow us to engage more easily with people in other parts of the country and the world. Here are the highlights from 2022:

Oregon Nutrition Day: *Nutrition Now for a Healthier Future*

This year, we heard from an inspiring group of leaders presenting on nutrition during pregnancy and breast-feeding, the pre-conception period as a golden opportunity, barriers to food equity for undocumented immigrants in Oregon, the first five years of the Nutrition Oregon Campaign, and how to impact policy to improve health.

Our two keynote speakers were:

- Tessa Roseboom, Ph.D., Moore Institute Senior International Fellow and professor of early development and health at the University of Amsterdam, the Netherlands, speaking on “Building Human Potential from the Very Beginning.”
- Priya Fielding-Singh, sociologist, ethnographer, assistant professor of family and consumer studies at the University of Utah and author of *How the Other Half Eats: The Untold Story of Food and Inequality in America*.

Nutrition in Pregnancy conference: Creating a blueprint for healthy mothers and children

Once again, we brought together experts across multiple disciplines to spur conversations on the current research for the unique needs of women before and during pregnancy and lactation. We focused our attention this year on community needs, current education, programs and policies. Based on conversations highlighting why and how nutrition impacts the lifelong health of mothers and children, the Moore Institute submitted testimony to the White House Conference on Hunger, Nutrition & Health. Our statement centered on:

- the need to focus on nutrition before pregnancy and during the First 1,000 Days, from conception to age two; and
- the need for more nutrition education for current and future health care providers.

We were pleased to see the strategic plan that emerged from the White House briefly mentioned nutrition during pregnancy and highlighted the need to increase nutrition education for health care providers. It also highlighted the need for prevention and not just individual-level lifestyle changes and increased health care access to treatment programs.

Consensus paper published

The consensus report that came out of our 2019 Nutrition in Pregnancy conference, “The importance of nutrition in pregnancy and lactation: lifelong consequences”, was published in the *American Journal of Obstetrics and Gynecology* 2022; 226(5):607-632.



DOHaD Summer Course: Innovations to Address Gaps in Knowledge

The Moore Institute is dedicated to ensuring the next generation of scientists and health care providers have a robust understanding of the role development plays in long-term health. In August, we teamed up with the OHSU Center for Developmental Health to host the second annual DOHaD summer course for graduate students, post-docs, health care trainees and early-career scientists. The three-day, in-person event drew 20 participants from all over the U.S., and highlighted gaps in knowledge and new methods for investigation. We were so pleased to have Moore Institute Senior International Fellow, Tessa Roseboom, Ph.D., as our keynote speaker this year.



DOHaD World Congress

The Moore Institute was a sponsor at this year's DOHaD World Congress, held in Vancouver, British Columbia. The theme for the 2022 Congress was Social and Environmental Disruptions in DOHaD: Successful Interventions for a Healthy Future. Moore Institute Director, Kent Thornburg, Ph.D., moderated a panel discussion titled Placental Development and Life-Long Consequences. We also hosted a booth where we shared information about our work and had the opportunity to network with many young DOHaD scientists.

Speaking events

Moore Institute leaders are acknowledged experts in their field and are asked to speak at community meetings, as well as at national and global scientific conferences. This year we resumed some in-person events, while others remained virtual. Here are some highlights:

- **Director Kent Thornburg, Ph.D.** spoke to audiences both virtually and in-person this year. He gave talks on nutrition and toxic trauma before birth and during childhood, placental development and life-long consequences, reversing the American chronic disease epidemic, the epigenetic roots of cardiovascular disease, and more.
- Deputy Director **Leslie Myatt, Ph.D., FRCOG.**, continued sharing his expertise on the placenta. He presented DOHaD-related findings at conferences in Florida, Colorado, New Zealand, England and Oregon. The topics he presented were on placental adaptation to maternal metabolic disease, the prediction, prevention and treatment of preeclampsia, and inequities in adverse pregnancy outcomes, among others.
- Associate Director **Diane Stadler, Ph.D., R.D.**, remained engaged in tackling food insecurity among college students. Student surveys revealed that 1 in 4 health professional students face food insecurity. Building on a grassroots grocery box program for food-insecure students that was started in 2019, the initiative grew into an on-campus food pantry called the OHSU Food Resource Center – a welcoming, on-campus resource dedicated to nourishing the next generation of healers, caregivers and innovators. This year, they are expanding the initiative to campuses beyond the OHSU hill, including rural campuses where students don't always have easy access to a grocery store.
- Alaska Native Health and Wellness Research Center Director **Burt Boyer, Ph.D.**, and Clinical Research Director **Scarlett Hopkins, R.N., M.A.**, presented on their areas of expertise, including engaging respectfully with Yup'ik Alaska Native people in research, the challenges and opportunities for DOHaD research in Indigenous populations, the impacts of enculturation, community-based nutrition research, and more.

Alaska Native
Health and Wellness
Research Center

Kent Thornburg, Ph.D.,
Lauryl Torkelson, RN, M.B.A.,
Scarlett Hopkins, RN, M.A.,
Amy Valent, D.O. and Bert Boyer,
Ph.D. in Bethel, Alaska.



The Alaska Native Health and Wellness Research Center is a major center within the Moore Institute. It conducts a broad range of medical and scientific research, explicitly for the health and well-being of present and future generations of Alaska Native people.

Some highlights from 2022:

- After two and a half years of COVID lockdown, researchers began traveling to rural SW Alaska this fall. Center director Bert Boyer, Ph.D., and clinical research director, Scarlett Hopkins, RN, M.A., met with the Yup'ik Planning Group to discuss current and proposed projects.
 - Data collection has resumed for their social epigenetics project.
 - Moore Institute Director Kent Thornburg, Ph.D. and Moore Institute faculty scholar, Amy Valent, D.O. recently traveled to Alaska with Boyer and Hopkins to train Ob/Gyn nurses on placental physiology and sampling. They also discussed participant recruitment strategies for a Murdock pregnancy study. The Murdock study will evaluate the association between maternal diet and stress and changes in the mother's placenta, and offspring heart development. This study will provide information that can be used to inform health decision made by local Yup'ik communities.
 - Proposed projects include a research partnership with local store owners to stock healthier, affordable foods and make them available to community members.
- In the planning stages for next year: Researchers submitted a proposal for an intervention with Yup'ik adults related to reducing risk for heart disease.

Looking ahead

Nutrition Education for Health Care Providers

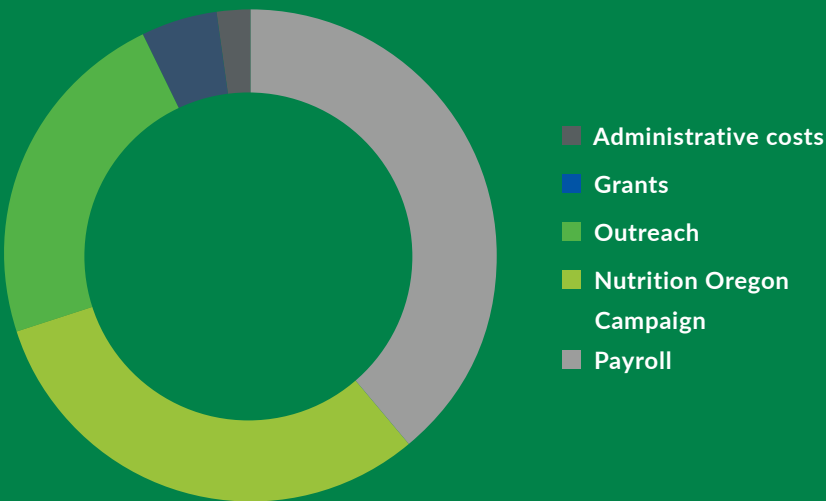
The Moore Institute has been dedicated to increasing nutrition education for all health care provider students. We've worked with the OHSU School of Medicine to include it in the curriculum, and supported interdisciplinary nutrition and cooking electives. It was the also focus of a panel at our Nutrition in Pregnancy Conference this year. Following the White House Conference on Hunger, Nutrition & Health it emerged as a recurring theme. Moore Institute Associate Director Diane Stadler, Ph.D., R.D., is leading the charge to ensure OHSU and the Moore Institute can serve as a national leader in increasing nutrition education for students.

Improving Childhood Nutrition and Health

The Moore Institute supported Susanne Purnell, M.D., a physician at The Children's Clinic, with a grant submission that was awarded by the WHH Foundation, titled "Improving childhood nutrition and health in primary care pediatrics." The proposal is to create a sustainable clinical model in primary care settings that addresses weight-related complications of children and adolescents, in order to reduce the risk for metabolic disease later in life.

Financial overview

Moore Institute Expenses – FY22



About us

The OHSU Bob and Charlee Moore Institute aims to reduce the prevalence of chronic diseases across the lifespan in current and future generations by promoting healthy, nutrient-rich diets based on wholesome foods during pregnancy and lactation, and in infancy and early childhood.

The scientific cornerstone of the Moore Institute is the Developmental Origins of Health and Disease, a discipline in which OHSU has been internationally recognized for decades. DOHaD illustrates the important relationships between maternal diet, fetal health and adult onset disease.

Read about our mission and find us online at www.ohsu.edu/mooreinstitute.

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Thank you

Thank you for your continued support of the Moore Institute. Our successes are a collaborative effort and could not be achieved without the support of our funders, collaborators and supporters. We appreciate individual donors who help us improve the health of Oregonians.



OHSU is an equal opportunity, affirmative action institution.