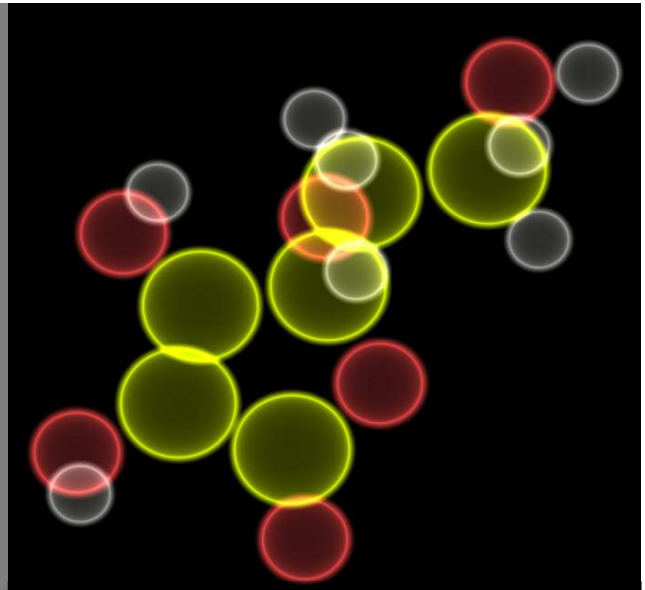


Linus Pauling Institute

Discovering How to Live Longer and Feel Better



INTRODUCTION

The Linus Pauling Institute was co-founded in 1973 by Linus Pauling, Ph.D., the only individual ever to win two unshared Nobel Prizes (Chemistry, 1954; Peace, 1962). More than 45 years ago, Dr. Pauling concluded that vitamins and other essential nutrients play a significant role in enhancing human health and preventing chronic diseases, not just deficiency diseases – a field he termed “orthomolecular medicine.” He founded his own institute to carry out research in this field that he believed would be of great importance to public health. In 1996, the Institute moved from Palo Alto, CA, to the campus of Oregon State University, Dr. Pauling's undergraduate alma mater, where it now operates as one of the University's research centers and institutes reporting to the Vice President for Research.

In 1997, Dr. Balz Frei was recruited to OSU to become director and endowed chair of the Institute. Over the next 17 years, the Institute grew to 15 tenure-track or tenured faculty performing research into the role that vitamins and essential minerals (micronutrients) and chemicals from plants (phytochemicals) play in human health, aging and chronic disease. In 2011, the Institute moved into the new Linus Pauling Science Center, a state-of-the-art research and teaching facility and working memorial to Linus Pauling. This milestone in the Institute's history was followed two years later by the successful completion of the University's \$1 billion comprehensive campaign and the refreshing of its strategic plan.

To move the Linus Pauling Institute successfully into its next phase, fully establish its distinctive leadership in human health research, maintain alignment of its strategies with those of the University and develop fundraising priorities for OSU's next capital campaign, LPI launched a strategic planning process in 2013. This collaborative process has built on LPI's strengths and engaged its stakeholders around a compelling vision and prioritized strategic activities aimed at distinction and impact. LPI's vision, “Discovering How to Live Longer and Feel Better,” is at the core of LPI's passion to advance “healthspan” – lifelong optimal health – not just lifespan.

VISION AND MISSION

Vision

Discovering How to Live Longer and Feel Better

Mission

The mission of the Linus Pauling Institute is to promote optimal health through cutting-edge nutrition research and trusted public outreach. To accomplish this, we will:

- Discover basic mechanisms underlying the biology of aging and the causes of metabolic and age-related diseases
- Develop effective strategies to extend healthspan by compressing morbidity and reducing mortality from metabolic and age-related diseases through diet, micronutrients, and phytochemicals
- Promote the principles of healthy living and healthy aging in the public arena, thereby empowering people everywhere to add years of health and vitality to their lives

ADVANCING HEALTHSPAN, NOT JUST LIFESPAN, IS OUR PASSION!

LPI STRATEGIC PLAN GOALS and INITIATIVES

The Linus Pauling Institute seeks to differentiate its research discoveries and expand its impact in such human health issues as aging, cardiovascular and metabolic diseases and cancer through research into the role of vitamins, nutritionally-essential minerals and other dietary factors in these conditions. At the same time, we will harness our activities around our signature area of “advancing human healthspan” through expanded efforts to promote optimal health and quality of life and intensified activities to educate the public about the role of diet, dietary supplements and lifestyle so that they can “live longer and feel better.”

Goal 1: Establish LPI’s leadership in advancing human healthspan through cutting-edge nutrition research

1. Appoint an Associate Director for Research from LPI’s tenured faculty with a strong vision and the responsibility to guide LPI faculty research into diet and dietary factors in aging and metabolic and age-related diseases
2. Successfully pursue large, multi-investigator program project grants from NIH
 - a. Develop incentives and infrastructure to promote and support multi-investigator grants
 - b. Publish a landmark paper to position “advancing human healthspan” as a publicly and peer-recognized concept synonymous with LPI
 - i. Align with communications, marketing and branding activities

3. Increase LPI's research capacity and capabilities
 - a. Recruit a new director for LPI's Cancer Prevention and Intervention Program with recognized leadership in cancer research and healthspan expertise at the crossroads of diet, aging and immune function
 - b. Integrate LPI's core laboratories and expand their capabilities to develop unique screening models and tools for the identification of dietary factors that advance healthspan; conduct high-end analytical analysis for metabolomics and other "omics" research; and provide cutting-edge molecular biology, epigenetics and imaging tools.
 - i. Engage external users to drive revenue
 - c. Recruit new research staff in priority areas and offer LPI affiliate status to OSU faculty whose research interests are aligned with LPI's mission, complement existing expertise in the Institute and contribute to multi-investigator, interdisciplinary grant proposals
 - d. Provide fellowships for pre-doctoral trainees to help attract the best and brightest students to OSU and LPI
4. Carry out studies in humans through new partnerships within OSU and external organizations
 - a. Partner with OSU's Research Office as a convener and facilitator of human research and to strengthen the University's translational research infrastructure
 - b. Build collaborative partnerships for translational research within OSU's Division of Health Sciences and externally with medical schools and community organizations
 - c. Develop new means of data collection for community-based research
 - d. Help further define, develop and promote a new paradigm for evidence-based nutrition that can be used by policy makers for dietary intake recommendations

Goal 2: Diversify and increase funding for LPI research and outreach

1. Aggressively diversify and increase funding from new sources and entrepreneurial ventures
 - a. Expand industry collaborations to bring LPI research to market
 - i. Partner with OSU's Advantage Partnerships program to develop industry collaborations and an Institute "industry pitch" that includes a marketing strategy and selected branded areas targeted for industry promotion
 - ii. Leverage the OSU Advantage Accelerator's market analysis and business development expertise
 - iii. Develop differentiation through patents, management of intellectual property, licensing and other means in close partnership with OSU's Office of Commercialization and Corporate Development (Advantage Impact)
 - iv. Strengthen the business plans for core laboratories to implement fee-based extramural projects
 - b. Increase philanthropic support through the OSU Foundation
 - i. Recruit a new Director of Development
 - ii. Position LPI optimally for OSU's next comprehensive campaign
 - iii. Develop a partnership with the Knight Cancer Institute and OHSU to benefit from matching funds from the Knight Cancer Challenge
2. Develop and submit to NIH the multi-investigator program project grant proposals identified in the planning process and vigorously pursue other grant opportunities in priority areas from federal and state agencies and private foundations
3. Generate new revenue from public education programs and collaborations
 - a. Develop a business plan to monetize the Micronutrient Information Center website
 - b. Explore social media tools, such as crowd funding, for discrete and timely opportunities and to raise LPI's public profile

Goal 3: Communicate LPI's distinct and differentiated message and raise the visibility of the LPI "brand"

1. Create and implement a comprehensive communications and marketing plan
 - a. Hire a Communications Manager or Associate Director for Communication with strong vision, expertise and responsibility for developing, implementing and managing LPI's strategic communications and marketing plan
 - b. Apply the latest communications tools to expand interaction and deepen engagement with multiple LPI constituencies
 - c. Provide a centralized portfolio of communications services and resources to support LPI research units and public outreach and education programs
2. Realize the full potential of the Micronutrient Information Center (MIC) to enhance use and access by health professionals and the general public and strengthen the LPI brand
 - a. Redesign the MIC website
 - b. Create a comprehensive Health and Disease Index
 - c. Expand public engagement and two-way relationships
 - i. Conduct a user survey
 - ii. Collect data for community-based research
 - iii. Personalize outreach
 - d. Educate health professionals about the science of nutrition and the role of diet and supplements in health and disease
 - i. Facilitate their use of LPI recommendations and research results in their practices

Goal 4: Improve public health through community engagement and collaborations with established organizations

1. Translate and implement discoveries in nutrition research and LPI's recommendations among educators, school children and their families
 - a. Develop new outreach and education programs with schools and community organizations
 - b. Increase joint efforts with OSU Extension and other OSU-based outreach programs
 - c. Expand collaborations with community health agencies
2. Validate and disseminate distinctive outreach programs developed by the Healthy Youth Program
 - a. Perform community-based research together with LPI and OSU faculty and publish results in peer-reviewed journals
 - b. Create a portfolio of educational materials, including manuals and curricula, for use by health agencies, educators and community organizations

Goal 5: Secure LPI's sustainability and financial viability

1. Develop an LPI business function
 - a. Hire a Financial Advisor to develop budgets, metrics and performance indicators
 - b. Review financial models and determine appropriate mechanisms for reducing funding risks and diversifying resources dedicated to LPI's strategic objectives
 - c. Develop a diverse revenue strategy for LPI that includes defined resource goals for all areas, i.e., grant funding, industry investment, philanthropy and others
 - d. Map a five-year budget progression to fund the Strategic Plan priorities, including people, equipment and programs

2. Create the optimal infrastructure to support successful implementation of the Strategic Plan
 - a. Focus initially on Year 1 and Year 2 priorities
 - b. Use the Operations Task Force report and implementation team activities to develop phased implementation over 5 and 10 years

PRIORITY ACTIVITIES for the NEXT TWO YEARS

While the Strategic Plan Goals and Initiatives will be implemented over five years, the following priority activities will be our focus in the first two years. They consist of “early wins,” timely major opportunities and foundational actions that must occur for the rest of the plan to be successful.

- **Expand and invest in programs that strengthen LPI’s leadership in advancing human healthspan through cutting-edge nutrition research.** These activities include the establishment of a new core laboratory to develop unique screening models and tools for the identification of dietary factors that advance healthspan and the development and publication of a comprehensive review article on “advancing human healthspan.” In addition, we will put together a competitive recruitment package for a new director of LPI’s Cancer Prevention and Intervention Program with recognized leadership in cancer research and healthspan expertise. These activities will create the platform for expanding our healthspan research and its influence through other means as the Strategic Plan is implemented.
- **Diversify revenue and relationships to increase LPI’s impact on human health and secure LPI financially.** Such priority initiatives will occur in three ways. First, we will hire a Financial Advisor to develop budgets, metrics and performance indicators and determine a sustainable financial model to reduce funding risks and diversify resources dedicated to our strategic objectives. Second, we will rigorously pursue large multi-investigator program project grants from NIH. Third, we will aggressively grow private support for LPI from individual donors, philanthropic entities and major initiatives, such as the Knight Cancer Challenge, and from commercialization and entrepreneurial ventures with industry through the Advantage programs of OSU’s Research Office.
- **Build a more visible presence for LPI and its signature brand.** These activities will include the development of a comprehensive communications and marketing program to raise LPI’s profile and advance understanding, support and esteem of LPI in academic, scientific and public arenas and the development of a state-of-the-art website to improve access to and use of our singular asset, the Micronutrient Information Center. We will also develop a business plan to monetize the MIC.

NEXT STEPS and IMPLEMENTATION

Following the approval of this Strategic Plan, a five-year implementation plan will translate strategic goals and initiatives into actions that are prioritized, resourced, tracked and measured. The many opportunities afforded by the plan include engaging the University, industry and the broader community around our signature area of advancing human healthspan and the next phase of contributions to be developed at LPI. Assisting the Director, implementation teams will create detailed action steps, establish accountability and specify timelines. Outcomes from the efforts of Years 1 and 2 will influence Years 3-5. Progress will be reviewed annually and reforecast or realigned accordingly to ensure relevance and contemporary strategic direction for LPI. Such annual plan assessments will provide the basis for future multi-year planning.