THE INTERSECTION OF HEALTH AND HUMAN SCIENCES

Today, Tomorrow, & Our Future Opportunities
ABSTRACT

This white paper explores the evolving intersection of the human sciences and health sciences, highlighting the growing opportunities for collaboration to enhance our understanding of human health and vitality across diverse contexts. It begins by introducing the newly re-branded Board on Health and Human Sciences (BHHS) within the Association of Public and Land-grant Universities (APLU) and discusses significant policy initiatives and frameworks that emphasize how health is influenced by where and how we “live, learn, work, play, worship, and age.”

We provide a brief history of the human sciences, tracing its evolution from Home Economics and detailing contributions to understanding human health in the modern world. This historical perspective underscores the increasing partnerships between health and human sciences over the past several decades. The paper then projects into the future, addressing how these disciplines can collaboratively advance our understanding and impact on pressing, complex, and emerging human opportunities and challenges.

The report concludes with a call to action to support BHHS and its mission to foster interdisciplinary collaboration and innovation within the health and human sciences, ultimately aiming to improve global health outcomes and societal wellbeing.
THE APLU BOARD ON HEALTH AND HUMAN SCIENCES

has long supported and led advocacy efforts related to its associated disciplines. To explicitly acknowledge the focal human health thread throughout the Human Sciences disciplines, the Board on Human Sciences voted in 2022 to rename itself to the Board on Health and Human Sciences (BHHS). This change recognizes emerging trends in the field and the significance of health as central and critical to the Human Sciences. BHHS also launched a new strategic plan that will advance the Health and Human Sciences by efforts to:

1. Support rising leaders within health and human sciences disciplines.
2. Increase the visibility and valuation of the health and human sciences within potential and current member institutions and with national partners.
3. Advocate for inclusion of health and human sciences in federal funding and legislation and achieve enhanced funding.
4. Create networking and learning opportunities for members.
5. Celebrate the valuable work happening within the human sciences.
6. Provide a forum for sharing best practices to advance the field.

The success of these efforts relies on a strong and engaged BHHS membership and robust partnerships across the many stakeholders involved in promoting the health and wellbeing of individuals, families, and communities. Success also hinges on increasing recognition of the growing collaborative opportunities between the health and human sciences and efforts to include the health sciences in the agenda and composition of the BHHS.

Explicitly uniting Health and Human Sciences will position the BHHS to lead and be a valuable partner with interdisciplinary scientific teams that will advance our health, education, and economic vitality. We seek engagement with Health and Human Sciences leaders who recognize the value of collaboration across these disciplines and aim to cultivate these opportunities within the context of a national agenda inclusive of the six priorities of the BHHS. To learn more and get engaged, please visit the BHHS page at www.aplu.org/bhhs, or contact us at bhhs@aplu.org.
INTRODUCTION

THE HUMAN SCIENCES continue to make exciting contributions to human health and wellbeing. An array of disciplines from healthcare to business, education, and STEM fields are increasingly recognizing that developmental and community contexts interact with daily human behaviors and choices to define most of our health outcomes. The Human Sciences have always collaborated with colleagues from an array of disciplines, community members, and families to advance holistic and systems-oriented frameworks accounting for the range of factors that lead to healthy people and environments. Recent policy initiatives such as the Federal Plan for equitable long-term recovery and resilience and its tie to frameworks like the Vital Conditions for Health and Well-Being, Healthy People 2030, and Extension’s Health Equity and Well-being Framework plainly assert that the developmental and systemic approaches to holistic wellbeing are essential to accomplish the goals of these federal initiatives. In this white paper, we offer a brief review of the history of Human Sciences, the state of the field today, and how it is evolving for tomorrow into a new focus on the intersections of Health and Human Sciences.

For over 150 years, Human Sciences has been engaged in basic and translational sciences to improve the wellbeing of individuals, families, and communities. These disciplines engage where people live, learn and work (lifespan development, early childhood education, housing and construction management, food safety, nutrition, financial management, consumer economics, product development and design), along with where people play (kinesiology, recreation sciences, consumer economics), and age (gerontology as part of lifespan human development, financial planning, consumer economics, housing, and universal design). Originally grounded in the domestic sciences and housed in Colleges of Home Economics within public and land-grant universities, these disciplines have rapidly evolved to become housed in variations of Colleges of Human Sciences.

Translational research through teaching and extension has always been at the heart of federal legislative policies and at the forefront for Human Sciences. The passing of the Morrill Act of 1862 established land-grant institutions of higher education in each state that focused on teaching practical application of the sciences. Additional federal legislation led to the continued evolution of the Human Sciences in the Smith-Lever Act of 1914, which established the Cooperative Extension Service associated with each land-grant institution. These acts created federal funds to inform citizens about current developments in agriculture, home economics, public policy/government, leadership, 4-H, economic development, and coastal issues.

Human Sciences professionals take an interdisciplinary approach and integrate the best thinking from various disciplines to address and solve important complex individual, family, community, and societal challenges. Since its inception, Human Sciences have provided evidence-based solutions to improving human health and addressing illness through a focus on healthy food and nutrition, fitness, interpersonal relationships, systems that support children, youth, and families as well as innovations in the hospitality, fashion, and retail sectors.
TODAY, THE HUMAN SCIENCES serve as the nexus for continued growth in health, technology, human-centered commerce, and education. The Human Sciences forge relationships with other human-centric disciplines that include, but are not limited to, agriculture, allied health, business, counseling, education, kinesiology, medicine, nursing, psychology, public health, social work, and sociology.

In some cases, scientists and applied professionals work in teams on these important issues facilitated by formal academic structures (such as the inclusion of nutrition, food science, food systems, and the health, education, and wellbeing of rural communities in Colleges of Agriculture; or the inclusion of programs like counseling, education, nursing, or social work in Colleges of Human Sciences). In other cases, they work through strategic partnerships, applying their expertise to promote healthy and well-functioning families and communities as necessary aspects of a healthy society, through work that ranges from bench science to clinical and translational work directly with individuals, families, and communities.

While keeping true to its disciplinary and interdisciplinary roots, the Human Sciences continue to engage new partners to generate solutions to complex human challenges that other disciplines have struggled to understand and solve alone. Interdisciplinary successes such as advances in early childhood education that have lifelong implications and promote thriving into old age, extending the health and lifespan of older adults, and innovations that can enhance the sustainability of our planet through the engagement of food and agriculture, textiles, retail, hospitality, and virtually any sector that bears on human production and consumption.
For example, consider sustainability. Producers and consumers continue to transact in ways that lead to unsustainable consumption of our planetary resources, contribute to climate change disrupting communities and ecosystems, and are widely believed to be unsustainable. Human needs, preferences, and behavior influence the capacity of our food system to sustain a growing global population. These same forces affect our changing global climate, which in turn, affects the capacity of our food system to thrive and survive. As the power of humanity expands across physical and virtual contexts, we will increasingly influence the health and economic vitality of humanity and the planet. The Human Sciences and its disciplinary partners aim to understand and act upon these potentially disastrous trends to yield a more sustainable human ecosystem.

The landscape of Colleges of Human Sciences across the nation shows that the field is organically changing, with an increasing number of colleges rebranding to “Health and Human Sciences” and expanded engagement and impact in the health domain. Noteworthy contributions of the Health and Human Sciences include understanding and acting upon the social determinants of health, especially on preventable chronic diseases that have emerged in industrial and post-industrial nations over the past century. People increasingly lead sedentary lifestyles and experience chronic stress and trauma, rising rates of obesity, diabetes, and cardiovascular diseases, and behavioral health conditions such as anxiety, depression, and suicide, which are increasing exponentially for children and adolescents. These health challenges disproportionately affect underserved and marginalized communities, and they emerge from a complex interplay of health, educational, and economic disadvantages experienced across generations.

The Health and Human Sciences bring together knowledge from across disciplines to advance the frontier of global health and wellness at the individual-, community-, and societal-level.
THE FUTURE OF THE HEALTH AND HUMAN SCIENCES AS AN INTERDISCIPLINARY PARTNER

Many scientific fields are increasingly organized into interdisciplinary scientific teams housed within cross-discipline units and settings. This presents opportunities in the Health and Human Sciences to further cultivate interdisciplinary and translational research agendas from the lab and extending into health professions, industry, educational, household, and community settings. Some of the most notable opportunities include:

- Extending health care innovations into the household to prevent and treat disease and improve health. Health care will increasingly occur in the household and innovations in disciplines within Health and Human Sciences will help bridge the divide between the health care provider and their patients living in a diversity of community contexts. This especially applies to those people with limited access to care who tend to be disproportionately located in impoverished urban, marginalized, and rural communities. Academic units devoted to urban studies and Colleges of Agriculture focused on rural communities will be likely partners in this work.

- Massive and ever-growing integrated datasets, innovations in analytics, machine learning, artificial intelligence, and technology will provide opportunities for the Health and Human Sciences to further understand and act upon human behavior, interpersonal relationships, and their contexts with profound statistical power, resolution, and precision.

- Increasing partnerships with data science experts will enhance capacity to understand and have a positive impact at the individual, family, and community levels.\(^\text{12}\)

- Addressing health disparities and enhancing health through changes to daily human behavior and interactions occurring at all levels.\(^\text{13}\) They will also contribute to precise and effective efforts to prevent human trauma and disease and maximize human health in ways that are increasingly attuned to a diversity of contexts and cultures.

- Advancing the human interests of consumers while preserving and promoting the economy and the environment. Continued population growth and accelerations in the efficiency of industry to bring compelling new products into the marketplace will bring continued expansion in human commerce and consumption that outpaces the capacity of humans, communities, nations, ecosystems, and the planet to buffer the negative effects.\(^\text{14}\)

- Continue to enhance understanding of how humans develop across the lifespan, with innovations in the earlier and later phases of life in areas such as nutrition and physical activity. This will enhance interventions to reduce mortality and maximize human potential.
REFERENCES

2. RAND Health Care (2021). Building the Evidence Base for Social Determinants of Health Interventions. Prepared for the Office of the Assistant Secretary for Planning and Evaluation (ASPE) at the U.S. Department of Health & Human Services