

## Strategic Plan, 2011-2015

Meeting Public Health Challenges  
of Nutrition and Aging





Opening up the boundaries among individual labs, enhancing collaboration within our facility, with our colleagues at Tufts, across the nation and globally, and focusing on the most significant public health needs are the best ways we can be effective going forward.

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## Message from the Director

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This document represents the first strategic planning exercise of significant scope in the 30-year history of the Jean Mayer United States Department of Agriculture Human Nutrition Research Center on Aging at Tufts University (HNRCA). Some may ask, why initiate a five year Strategic Plan now? The answer is simple: The HNRCA has been a global leader in nutrition and aging research, and we want to strengthen that position and direction while adapting to new challenges. The best way to do this is to understand the most pressing public health needs related to nutrition and aging, to identify priorities among these, and to develop strategies to address them.

Today's scientific research environment demands that we closely examine current and future directions and opportunities, strengths, and shortcomings. We have an obligation to the American public, who ultimately funds much of our work, and to the global community which views us as a research leader, to ensure that we are focusing on the greatest health needs while conducting and communicating our work to deliver maximum results.

We undertook a vigorous fact-finding process in which we asked leaders in the fields of nutrition and aging, and stakeholders in government and at Tufts University, to identify the most pressing public health concerns of our day related to nutrition and aging. Some of what we heard during our investigations surprised us, some not. But out of this fact-finding emerged clear themes and priorities which shape this Strategic Plan.

This Strategic Plan represents a departure from the way the HNRCA has operated in the past.

Opening up the boundaries among individual labs, enhancing collaboration within our facility, with our colleagues at Tufts, across the nation and globally, and focusing on the most significant public health needs are the best ways we can be effective going forward. Targeted communications, training and advocacy efforts designed to broadly share our findings will enhance that effectiveness.

I want to thank the many members of the HNRCA who took part in this planning effort, and those within Tufts University, the USDA's Agricultural Research Service (ARS), the federal government, industry and the scientific community who contributed their thoughts and recommendations to this Strategic Plan. All played a vital role in helping us determine our priorities for the next five years.

Because the world of science is forever changing, and we cannot easily envision what developments and breakthroughs are around the corner, we intend this Strategic Plan to be a "living document" that will keep pace with new information and evolve over the course of its life. We will provide regular updates and progress reports to the Plan on our Website, [www.hnrca.tufts.edu](http://www.hnrca.tufts.edu).

I am excited about the opportunities for the HNRCA to achieve our vision through the priorities and strategies set forth in this plan.

A handwritten signature in black ink that reads "Simin Meydani". The signature is fluid and cursive.

**Simin Nikbin Meydani, D.V.M., Ph.D.**

Director, Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University

Professor of Nutrition and Immunology  
Friedman School of Nutrition Science and Policy,  
and Sackler Graduate School at Tufts University

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# Strategic Plan Executive Summary

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As the global population ages and the costs of healthcare for elderly rise, prevention has been identified as a key to a healthy, vibrant society in the 21st century. The mission of the HNRCA is to investigate the role nutrition plays in healthy aging and prevention of age-related disease. That mission was the guiding principle behind this *Strategic Plan, 2011-2015: Meeting Public Health Challenges of Nutrition and Aging*.

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This plan is the result of an intensive, inclusive year-long investigative and decision-making effort designed to identify the greatest public health needs related to nutrition and aging and, from these, determine the scientific priorities for the HNRCA. The investigation benefited from the input of more than fifty stakeholders from the HNRCA, Tufts University, the USDA-ARS, the United States government and the nutrition and aging fields.

Among the key outcomes of this plan, five cross-cutting strategic commitments which will influence all scientific research in the HNRCA were identified:

- Focus on the impact of nutrition on aging;
- Address aging as both a multigenerational process and as a population;
- Impact national and global public health needs;
- Address the effects of health disparities in the elderly; and
- Significantly increase collaboration.

With these commitments as guiding principles, the HNRCA identified seven scientific priorities around which research and investigations will focus in the next five years, and which tie directly to significant existing public health needs.

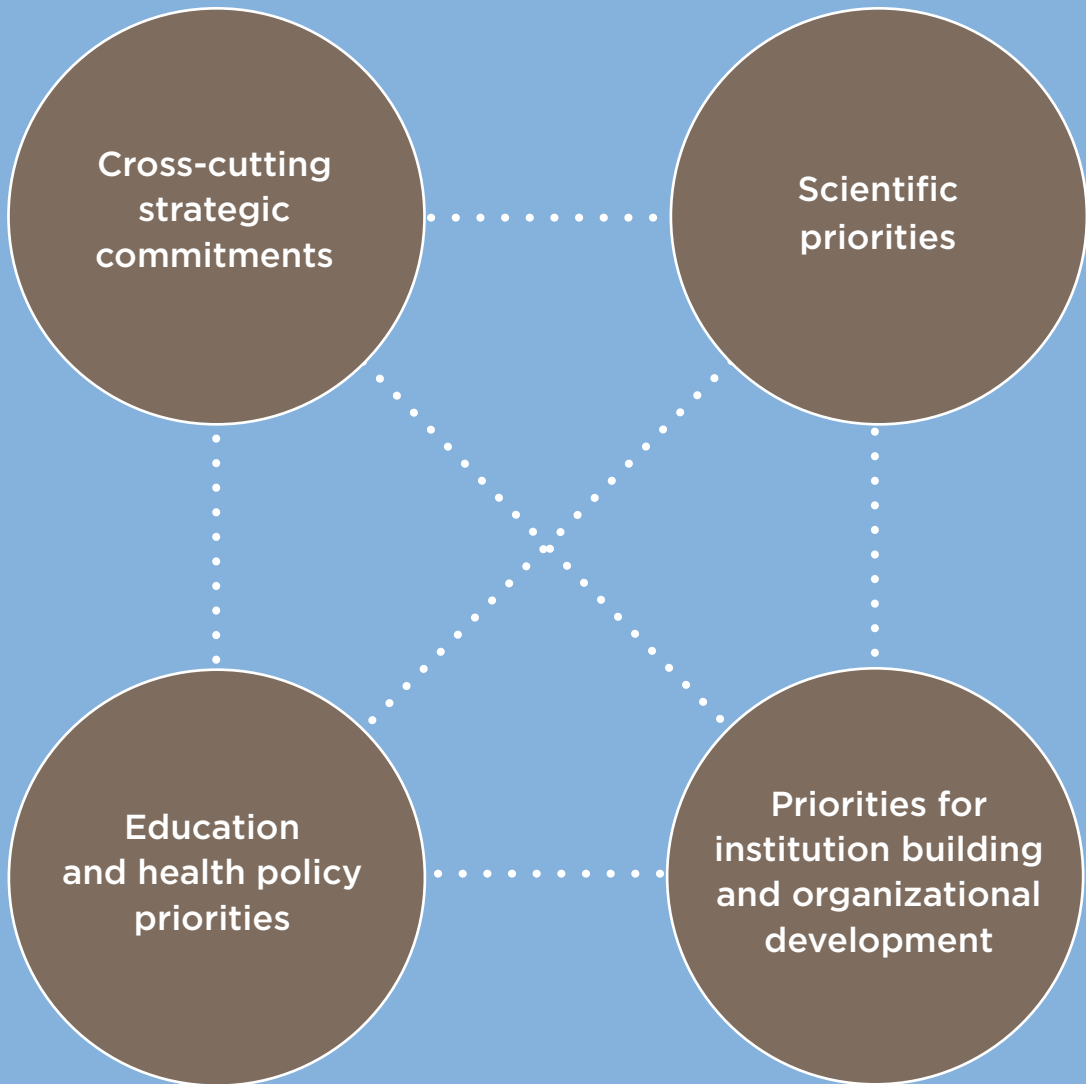
- Nutrition and Neuroscience
- Nutrition and Functional Genomics

- Obesity and Aging
- Nutrition and Chronic Diseases of Aging, with a focus on Cancer and Cardiovascular Disease
- Inflammation, Immunity, Infectious Disease and Aging
- Musculo-Skeletal Defects Leading to Decline in Function in the Elderly
- Micronutrients and Healthy Aging

The strategic planning interviews and data gathering also revealed the need and opportunity to prioritize outreach, training and advocacy, so the HNRCA has made a commitment to use its research learnings to educate the public, healthcare providers, policy makers, industry, and current and next generation scientists in related fields.

Finally, the Strategic Planning process identified five priorities for institution building and organizational development:

- Attract, develop, and retain top talent
- Enhance/revitalize the HNRCA's brand and name recognition
- Invest in selected areas of technology/technical resources
- Modernize the physical facilities
- Secure financial resources to support the HNRCA future work



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# HNRCA: Research with Impact

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The Jean Mayer United States Department of Agriculture (USDA) Human Nutrition Research Center on Aging at Tufts University is the largest research center in the world devoted to studying the role of nutrition in the prevention of age-related chronic and infectious diseases.

Named for Jean Mayer, former President of Tufts University and global nutrition leader, the HNRCA is one of only six human nutrition research centers in the United States supported by the Agricultural Research Service (ARS), the intramural research branch of the USDA. Located on the Tufts health sciences campus, the HNRCA is uniquely positioned to contribute to both human nutrition

and aging research and the life sciences leadership of the University.

## Structure and Organization

The HNRCA's 270 researchers, trainees and staff, support the efforts of 20 research laboratories, each investigating the impact of multiple facets of nutrition on specific health outcomes. The HNRCA's laboratories are directed by leaders in the nutrition and health fields. The HNRCA also has nine Core Units, six scientific and three non-scientific, which provide technical and administrative support to the research laboratories.

### Research Laboratories

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Antioxidant	Nutritional Epidemiology
Body Composition	Nutritional Immunology
Bone Metabolism	Neuroscience
Carotenoids and Health	Nutrition and Neurocognition
Cardiovascular Nutrition	Nutrition and Vision
Energy Metabolism	Obesity Metabolism
Lipid Metabolism	Vascular Biology
Nutrition and Cancer Biology	Vitamins and Carcinogenesis
Nutrition, Exercise, Physiology and Sarcopenia	Vitamin K
Nutritional and Genomics	Vitamin Metabolism

### Core Units

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Biostatistics	Nutrition Evaluation
Comparative Biology	Administration
Dietary Assessment	Scientific Computing
Mass Spectrometry	Physical Plant/Facilities
Metabolic Research	



## Research Expertise

The HNRCA's diverse and expansive research expertise enhances its ability to study complex health outcomes in various areas. To investigate complex conditions, scientists pursue an array of research methods including cellular and molecular studies, animal studies, human metabolic studies, and epidemiological research.

Using different research models allows investigators to study nutrition's impact on diseases from the cellular level to the population level in order to contribute to dietary recommendations and health policies. The HNRCA's translational capacity, in combination with its breadth of expertise, allows for collaborative and cross-disciplinary approaches to addressing complex health problems.

HNRCA research has added to preventative nutrition and physical activity solutions for health problems such as

- obesity,
- sarcopenia,
- coronary artery disease,
- cancer,
- infection, and
- neurocognitive impairment.

Pioneering work by HNRCA scientists has advanced the understanding of nutrient bioavailability and nutrient requirements. This research has influenced public health by providing the foundation for establishing nutrition and physical activity policy and guidance such as the Recommended Dietary Allowances and the Dietary Guidelines for Americans.



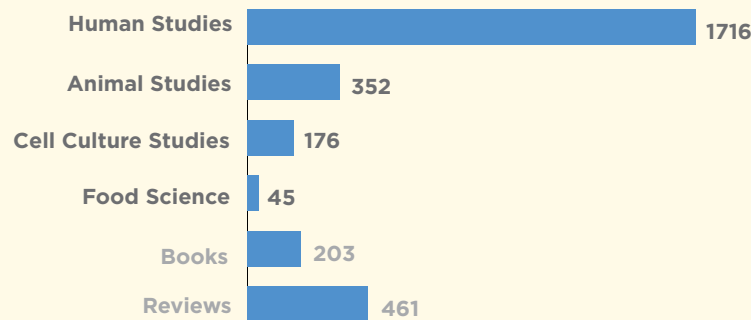
## Publications

The HNRCA is dedicated to communicating its significant findings to the scientific community and the public. In July of 2009, *Times Higher Education* ranked Tufts as the agricultural sciences institution with the greatest global impact based on papers published and citations, which is largely attributable to HNRCA research. HNRCA findings have been cited in papers and articles published in *American Journal of Clinical Nutrition*, *Cancer*, *JAMA*, *Journal of the American Geriatric Society*, *Journal of Biological Chemistry*, *Journal of Nutrition*, *Lancet*, *Nature*, *New England Journal of Medicine*, and many other prominent peer-reviewed journals. In fact, HNRCA scientists produced almost 3,000 scientific

journal publications between 2000 and April 2010, adding up to one new article every business day.

HNRCA research findings are regularly quoted in the popular press as well. Between July 2009 and June 2010, the HNRCA was cited almost 2,000 times by national and global media outlets including *Associated Press*, *The Today Show*, *The New York Times*, *Agence France Press*, *The Los Angeles Times*, *The Boston Globe*, *El Pais (Spain)*, *Time Magazine online*, *The Washington Post*, *The Wall Street Journal*, *USA Today*, *Good Morning America Weekend* and *National Public Radio*. These publications and press outlets are essential to educating constituents and the general public on the importance of nutrition for healthy aging.

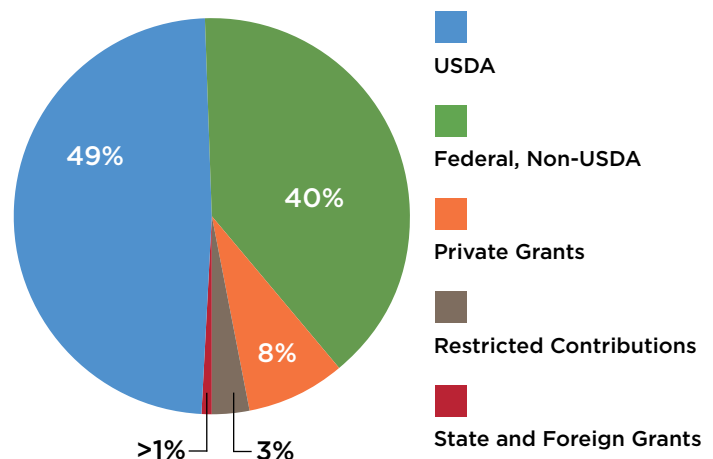
### HNRCA Publications 2000 - April 2010



## Financial Support

Funding for the HNRCA's annual budget comes from several sources including the USDA, the National Institutes of Health (NIH), private corporations and foundations, non-profit organizations, restricted contributions, and state and foreign entities. Grant funding is imperative to supporting the research of the HNRCA as well as providing resources to continuously develop its technologies, training, talent and facilities.

### 2009 Revenue



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## Vision for the Future of the HNRCA

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The priorities in this Strategic Plan provide the focus to achieve a vision for the future where the HNRCA will be:

- Globally recognized as the premier institution investigating the impact of nutrition on aging and health, as the go-to organization for members of the public, policy makers, the scientific community, and public health professionals seeking information and advice about the effects of nutrition on aging and age-related disease;
- A research center with deep wells of expertise and influence in a complementary range of priority areas, drawing on broad expertise in basic and clinical sciences of nutrition, aging and health and the application of this knowledge to practice and policy;
- A model of scientific collaboration among researchers inside and outside the HNRCA, and a leader within Tufts University in developing a culture of multi-disciplinary and cross-campus partnerships;
- An employer of choice, known for its vital and significant mission supported by the U.S. Department of Agriculture, challenging work, impact on real world needs, talented and collaborative colleagues who take pride in the HNRCA, and for playing a key role, with multiple points of connection, in a great university;
- Sought after by graduate and post graduate students, who are attracted by the HNRCA's top reputation, the recognized experts on its staff, the collegiality they experience, and the ability to get involved in significant research in any number of labs; and
- An organization with growing depth and diversity of funding sources to support its work.



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## Strategic Plan Cross-Cutting Commitments

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The HNRCA, in conducting its work in the priority areas of the Strategic Plan over the next five years, has identified themes which will influence and be reflected in all areas of scientific research. These themes represent commitments that will contribute to achieving our vision.

- The HNRCA's work will be focused on the impact of Nutrition on Aging and Health. The human population is experiencing a dramatic increase in the number of elderly worldwide, due to socioeconomic improvements, and advances in science and technology, medicine and nutrition.
- Aging research at the HNRCA will be addressed both in terms of a multi-generational and lifelong process and as a defined population of the elderly.
- The HNRCA will work to have a beneficial impact on national and global public health needs. In doing so, research can and will be made available and communicated in order to have broader impact and influence in the United States and abroad.
- The HNRCA will significantly increase and enhance collaboration among researchers within the HNRCA, across Tufts and beyond. Collaboration is a key theme recommended by many HNRCA stakeholders because multidisciplinary approaches are essential to address the most important and complex public health challenges.
- The HNRCA will aim to moderate the effects of health disparities in the elderly — when possible, addressing disparities in the health, healthcare and nutrition in America and globally.



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## Strategic Science and Research Priorities

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# #1: Nutrition and Neuroscience

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The impact of nutrition on the brain in the aging process is the HNRCA's number one scientific and research priority for 2011-2015. As the population ages, the relationship of mental and physical capacities of older persons impacts the ability to remain independent and maintain a high quality of life and health.

Global data on the costs of dementia and age-related dementing illness suggest that cognitive decline in the elderly presents an immense cost burden to caretakers and governments. A 2010 international report projected the global cost of dementia to be more than 1% of the world's GDP in 2010.<sup>1</sup> According to the Alzheimer's Association, the disease affected 5.1 million Americans over age 65 in 2010. Significantly, the costs to care for seniors with Alzheimer's disease are expected to increase five-fold between 2010 and 2050,

from \$172 billion to \$1.08 trillion per year.<sup>2</sup>

Increasing the HNRCA's focus and investment in this strategic area provides the greatest opportunity for positive change and growth. There exists significant opportunity to apply learnings at the cellular level through to population and clinical studies more effectively and efficiently.

Developing nutrition and neuroscience research capabilities into a significant strength will increase collaborative opportunities within Tufts, as this aligns with the University's strategic focus on neuroscience.<sup>3</sup>

This strategic priority has potential for increasing funding; the National Institutes of Health (NIH) funding for Neurosciences is estimated to trend upwards in 2010 and 2011.<sup>4</sup>

### Strategies to achieve success:

1. Invest in new talent and resources.
2. Reorganize and make more efficient use of resources to conduct translational investigations through one unified research structure specific to nutrition and neuroscience.
3. Develop cross-campus collaboration with Tufts science and research community.

## 5.1 million

Estimated number of Americans over age 65 affected by Alzheimer's disease



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## Strategic Science and Research Priorities

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# #2: Nutrition and Functional Genomics

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The HNRCA will continue to invest resources in and strongly support Nutrition and Functional Genomics (genomics, epigenetics, proteomics), an area of existing HNRCA scientific strength. This strategic priority is seen as essential for the study of age-associated diseases and for understanding the life-long aging process as it focuses on understanding individual health from the starting point of a person's genome sequence, to food intake, to the end point of health.<sup>5</sup>

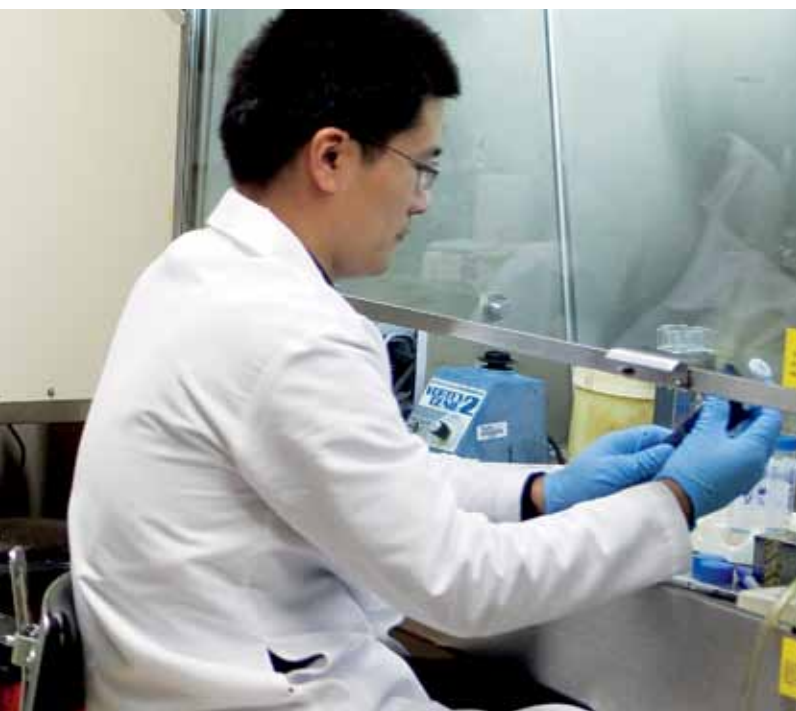
Nearly half (49%) of those interviewed for this Strategic Plan identified genomics as an important public health opportunity related to nutrition and aging. There is the

potential for all HNRCA labs to benefit from expansion of this area and interaction with its experts. Increasing strength in genetics and genomics is also a priority for Tufts University, and the USDA,<sup>6</sup> and it is seen as a cross-cutting platform for the University.<sup>7</sup>

The HNRCA is prioritizing Nutrition and Functional Genomics because there is immense future potential for growth in translational research and appeal to funding sources, with NIH funding for genetics research increasing more than any other area since 2007.<sup>8</sup>

### Strategies to achieve success:

1. Secure new resources for equipment and supplementary skills.
2. Increase cross-HNRCA and cross-campus collaborations.



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## Strategic Science and Research Priorities

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### #3: Obesity and Aging

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Obesity is the number one public health need identified in our stakeholder interviews, with 58% of HNRCA stakeholders identifying it as an urgent public health need and an area to make a significant contribution. At the federal level, the USDA strategic plan 2010-2015 cites obesity as a major risk factor associated with chronic disease later in life. Obesity funding is an area of growth in the NIH budget, as well.

It is estimated that the prevalence of obesity in adults aged 60 and older will increase from 32.0% in 2000 to 37.4% in 2010 and the number of obese adults aged 60 and older will increase from 14.6 to 20.9 million. Increase in obesity rates are attributed to sedentary lifestyles, dietary changes, and age-associated alterations in the metabolic rate. The elderly currently account for more than

one-third of all healthcare spending, and changes in the longevity and number of elderly persons in the United States are expected to further increase expenditures.<sup>9</sup>

At the HNRCA, obesity research is an existing strength that we will build on. We have depth and breadth of scientific leadership in the field, with eleven labs conducting research related to obesity. This strategic priority seeks to build on the successes of current groups of researchers within the HNRCA and increase synergies across existing research efforts to create a greater translational capacity in the field.

Potential for cross-campus translational research and collaboration in obesity is vast, as we look for ways to connect findings from molecular biology to the whole population.

#### Strategies to achieve success:

1. Establish an HNRCA Obesity and Aging Research Cluster
2. Promote increased HNRCA, USDA and cross-Tufts collaborations
3. Increase the efficient use of resources within and across HNRCA labs
4. Assess need for new talent, supplementary expertise, and resources

The Research Cluster model will allow the HNRCA to significantly increase collaboration among existing labs in order to address today's complicated health challenges. Clusters will be working groups tasked with developing multi-disciplinary approaches, creating program projects, and making other contributions beneficial to the Strategic Priority.

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## Strategic Science and Research Priorities

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# #4: Nutrition and Chronic Diseases of Aging, with focus on Cancer and Cardiovascular Disease

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It is widely accepted that cardiovascular disease and cancer are threats to the vitality and health of the elderly. According to the American Cancer Society, 1,529,560 new cancer cases and 569,490 deaths from cancer were projected to occur in the United States in 2010.<sup>10</sup> Cardiovascular diseases (CVD) accounted for more than one-third of all deaths in the United States in 2006.<sup>11</sup>

The HNRCA already has considerable strengths in research on chronic diseases of the aging. In 2010, five labs conducted cancer research and four labs investigated cardiovascular disease. Chronic diseases among the elderly are a significant public health priority and the HNRCA is committed to creating synergies among the labs

to further build strengths and align with Tufts University and ARS priorities and capabilities. Three HNRCA labs are part of the Tufts Cancer Center program project, a major scientific thrust of the University.

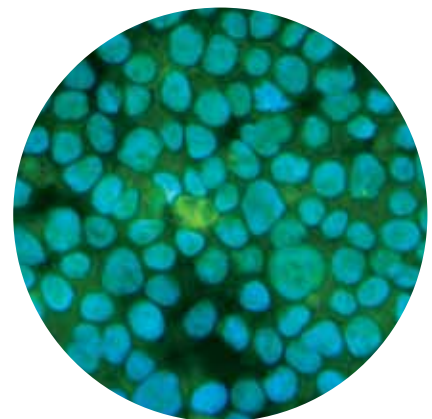
Due to the significant public health needs associated with cancer and CVD, the potential to attract new sources of funding to address this priority through multi-lab program projects is significant. The funding pool for cancer research is growing. Between 2000 and 2010 the budget of the National Cancer Institute grew from \$3.3 billion to \$5.1 billion. In the same time period, the National Heart Lung and Blood Institute funding budget grew from \$2 billion to \$3.1 billion.<sup>12</sup>

### Strategies to achieve success:

1. Create HNRCA Research Clusters in Cancer and Cardiovascular Disease
2. Increase the efficient use of resources within and across labs
3. Increase cross-campus collaborations with Tufts Schools and Centers
4. Consider adding clinical science talent, through hiring or collaboration

**\$5.1 billion**

The 2010 budget of the National Cancer Institute



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## Strategic Science and Research Priorities

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# #5: Inflammation, Immunity, Infectious Disease and Aging

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Infectious and inflammatory diseases are among the leading causes of morbidity and mortality among older adults. Infections are the fourth leading cause of death in the United States after cancer, heart disease and stroke.<sup>13</sup> Nutrition has been identified as a low-cost strategy to reduce the incidence of, and morbidity and mortality from, infections.

This strategic priority builds on current research and increases synergies across existing strengths. The HNRCA is one of the leaders in nutrition, immunity and inflammation research, and as many as fourteen labs are examining aspects of this priority area through investigations. The HNRCA will seek to maintain this strength through collaboration, and maximize its ability to nurture and support other research programs. Tufts University has strength in infectious disease research at its Medical and

Veterinary Schools, which can serve as collaboration points for this HNRCA strategic priority.

Additionally, this priority is cross-cutting with other scientific and research priorities. There are important translational elements between the mechanisms of inflammation and its connections to diseases of aging, musculoskeletal decline, obesity, and cognition.

In terms of funding, the National Institute of Allergy and Infectious Diseases budget has grown from \$1.8 billion to \$4.5 billion between 2000 and 2010,<sup>14</sup> so this is an important area for attracting new funding. Industry and philanthropic institutions such as the Gates Foundation and the Robert Wood Johnson Foundation see inflammation, immunity and infectious disease as a funding priority.

### Strategies to achieve success:

1. Create an HNRCA Nutrition and Inflammation, Immunity and Infectious Disease Research Cluster
2. Leverage and collaborate with Tufts' strengths in infectious diseases toward creation of program projects and training grants
3. Maintain existing programs and strengths



## Strategic Science and Research Priorities

# #6: Nutrition and Musculo-Skeletal Defects Leading to Decline in Function in the Elderly

As a public health priority, muscular and skeletal decline in the elderly, known as sarcopenia and osteoporosis, have significant economic consequences for the healthcare payment system. This decline is a primary cause of frailty and falls. One in three adults 65 and older falls each year. Of those who fall, 20% to 30% suffer moderate to severe injuries that make it hard for them to get around or live independently and increase their chances of early death.<sup>15</sup>

In 2000, the total direct cost of all fall injuries for people 65 and older exceeded \$19 billion.<sup>16</sup> The financial toll for older adult falls is expected to increase as the population ages, and may reach

\$54.9 billion by 2020 (adjusted to 2007 dollars).<sup>17</sup>

In addressing this public health need, this strategic priority builds on, and increases synergies among, current strengths of HNRCA researchers. Significant potential for funding in the musculoskeletal tissue research area exists.

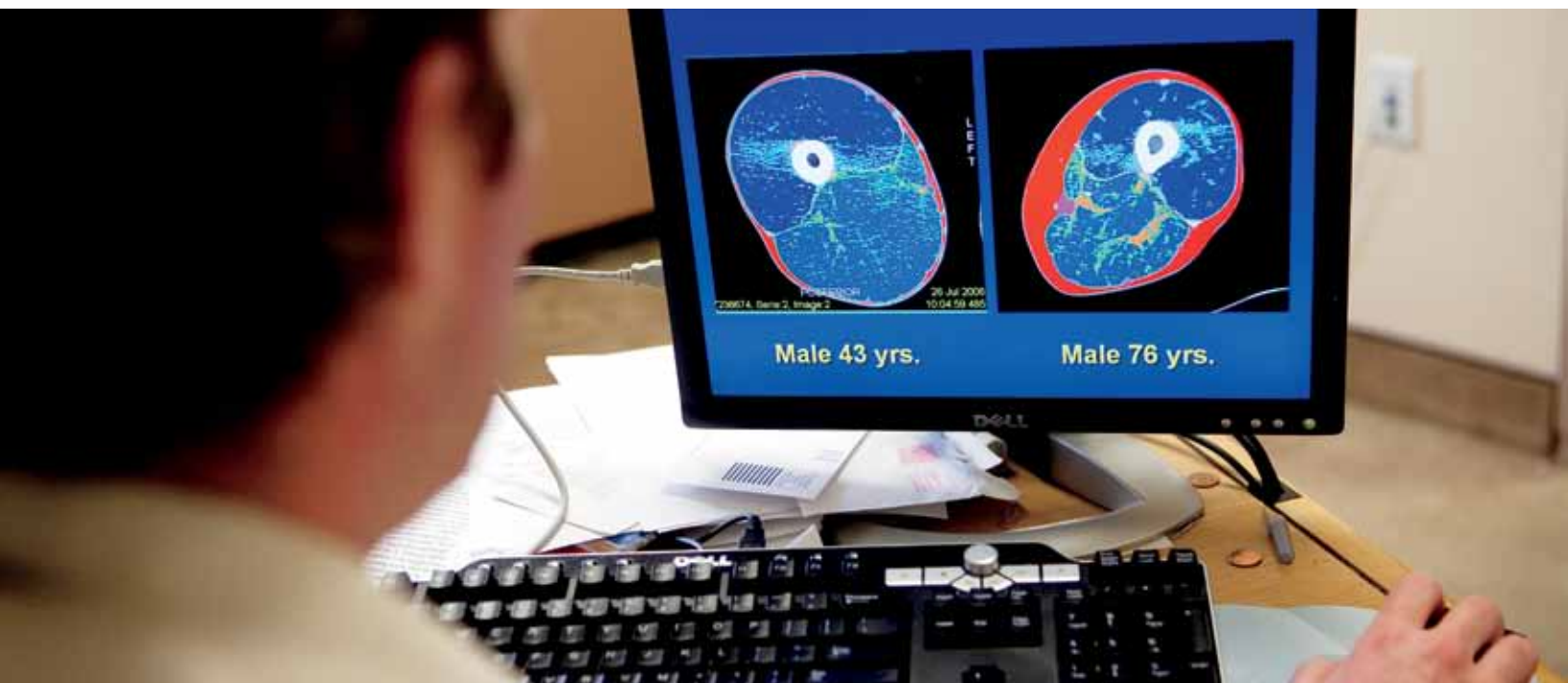
The HNRCA will identify the potential for translational research in order to build community outreach and education efforts in this priority area. More clinical collaborations within Tufts and elsewhere will also be emphasized.

### Strategies to achieve success:

1. Increase synergy across HNRCA labs
2. Consider adding talent in geriatrics through hiring and/or collaboration
3. Maintain existing programs and strengths

## \$19 billion

The annual direct cost of all fall injuries for people 65 and older



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## Strategic Science and Research Priorities

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# #7: Micronutrients and Healthy Aging

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This priority builds on current groups of HNRCA researchers and increases synergies across existing strengths. With nine niche micronutrient-related labs, there is significant opportunity for collaboration both within and outside the HNRCA.

Micronutrient research was identified by nearly one third of stakeholders interviewed for the Strategic Plan as a public health need, with government stakeholders particularly supportive because

of the important role the HNRCA research plays in determining Dietary Reference Intakes for micronutrients. This then supports our ability to educate the public and policy makers about our work.

### Strategies to achieve success:

1. Create greater impact and effectiveness through consolidation, increasing efficient use of resources, and through collaborations within and across HNRCA labs
2. Explore collaboration with ARS strengths in plant genomics and Tufts strengths in global nutrition in order to address global micronutrient deficiencies



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## Strategic Priorities in Outreach, Training and Advocacy

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During the extensive strategic planning investigations and interviews, many stakeholders and thought leaders advised that the HNRCA should enhance and increase its educational outreach and contributions to developing health policy related to aging and nutrition. As such, the following priorities were established:

1. The HNRCA will share research learnings to educate the public, researchers, healthcare providers, policy makers, and industry scientists.
2. The HNRCA will prioritize training to develop current and next generation researchers in nutrition and aging.
3. HNRCA leaders and scientists will increasingly engage in national and global health policy dialogue.



“Part of the HNRCA’s role with the USDA is communicating with the public, stakeholders, and customers the impact of its work on the American population. Nutrition is an area that everyone wants to hear about and the public is very interested. I advise that you don’t fail to take the communication role.”

— Caird Rexroad, Ph.D., Associate Administrator, Agricultural Research Service

“The role of the HNRCA is also to enhance scholarly activity, with the goal to have greater impact of HNRCA’s research globally.”

— Lawrence Bacow, President, Tufts University

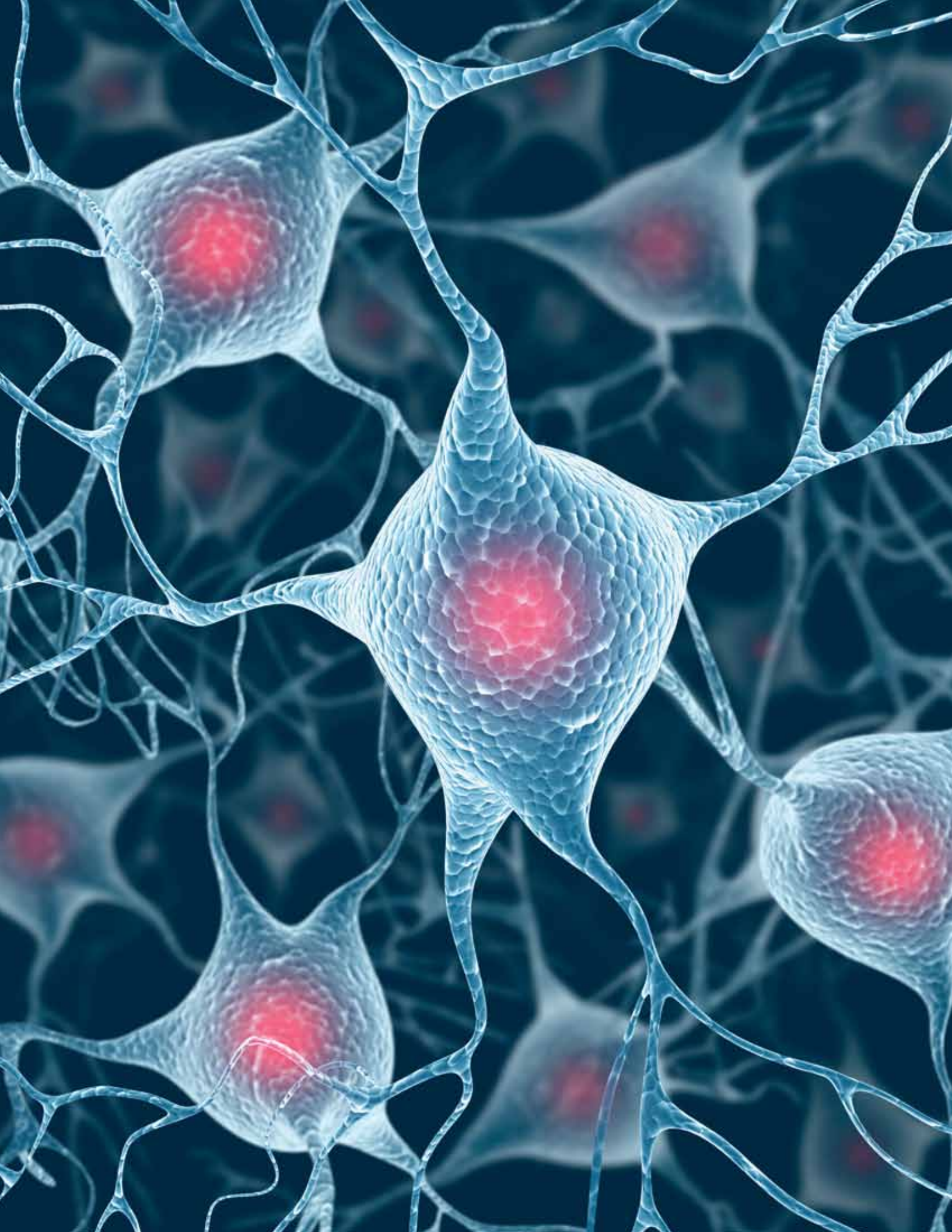
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# Strategic Priorities in Institution Building and Organizational Development

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A strong and sustainably effective organization to support HNRCA work is vital. Five priorities for ensuring needed capability and capacity through the strategic timeframe and beyond were identified.

1. Attract, develop, and retain top talent through:
  - a. Competitive compensation
  - b. Professional and career development
  - c. Supportive work environment and management practices
2. Enhance and revitalize the HNRCA's brand and name recognition, and build a communications capability to better reach target audiences; build strong stakeholder relationships; and develop pathways for dissemination of educational materials and learnings from HNRCA research.
3. Invest in selected areas of technology and technical resources to support Science and Research Priorities.
4. Modernize the physical facility in the heart of Boston.
5. Secure the necessary financial resources to support the HNRCA's future work by:
  - a. Expanding and diversifying the HNRCA's external funding
  - b. Seeking internal efficiencies to optimize use of funding
  - c. Making additional resources available for scientific research through financial agreements with key stakeholders



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## The Way Forward

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We are optimistic about the many ways in which we will enhance the HNRCA's impact on significant public health problems through the direction set in this Strategic Plan. We will expand and strengthen HNRCA research, broaden our outreach and contribution to public health policy, and build organizational capabilities needed to sustain our work.

Implementing this Strategic Plan over the coming years is the number one priority of HNRCA leadership and will receive all the focus and attention this entails.

As we publish this plan in the fall of 2010, we recognize that much about science has to do with exploring the unknown and that no scientific discovery is the final answer. The same can be said about this strategic plan; its conclusions should not be considered the final word. Therefore, we will treat this plan as a living document, one that will receive regular monitoring, annual review, stakeholder reporting on progress, and course corrections and enhancements where needed.

Americans aged 65 or older in 2000 (12%)



Americans aged 65 or older in 2030 (20%, projected)





## APPENDIX I: Strategic Planning Methodology

The purpose of the HNRCA's first ever strategic planning effort was to set goals, objectives and ideals for the next five years; ensure success in continuing growth and legacy as a world-renowned institution; take advantage of new opportunities while operating efficiently; and meet responsibilities to stakeholders and supporters. As a result, the plan was designed around four guiding principles:

1. Every organization should have a **reason for existence** outside of itself; for public and non-profit organizations, there is a social contract to **serve the public** which supports their efforts
2. Strategic planning should be **leadership-driven**
3. Strategic planning is best done with **wide and deep participation**, from inside and outside the organization
4. Strategic planning should be a **structured project** of finite duration, and planned, organized, resourced, and managed accordingly

### Reason for Existence — Serve the Public

To best serve the public and address critical public health concerns, the strategic planning project underwent an information gathering phase in order to understand the conditions, needs, and demands of the external environment. This included identifying public health challenges and opportunities, trends in the fields of nutrition and aging, advances in research methodologies, and expectations for the HNRCA's focus and contribution on the part of stakeholders, collaborators, and supporters. As a publicly supported institution, the HNRCA has a responsibility to conduct work that best serves society. The strategic planning effort's information gathering efforts brought these needs and expectations into the forefront of the HNRCA's planning for its future. As a result, leadership identified priorities for core work in scientific research, education, and outreach which are directly aligned with public health needs and opportunities.

### Leadership-Driven

Dr. Simin Nikbin Meydani, the HNRCA's Director, decided to undertake a strategic planning effort only weeks after being appointed to the leadership role, launching the initiative in October 2009. Dr. Meydani engaged in the most important elements and activities of the planning effort such as making final choices about key questions and considerations, identifying sources to interview, carrying out selected interviews, leading strategic deliberations, and making final decisions about cross-cutting strategic commitments and priorities.

Dr. Meydani appointed HNRCA Associate Director, Dr. Sarah Booth, as Strategic Planning Project Manager. Dr. Booth ran the project on a day-to-day basis, directed resources assigned to the project, and partnered with the external strategic planning consultant brought in to assist the effort. She also served as strategic partner in deliberations and decision-making.

The HNRCA Joint Advisory Council, composed of scientists and leaders, provided essential guidance. Significant support was provided by Chris Drew, Consultant to Organizations; Tinabeth Burton, Coverpoint Communications; Regina Corrao, Director of Organizational Development and Training at Tufts University; and Meghan Faherty and Tristan Mangindin, administrative assistants at the HNRCA.

## Wide and Deep Participation

The HNRCA's strategic planning effort was designed to draw on and consult with a wide range of people, both within and outside of the research facility. As a first step, HNRCA scientists and staff, stakeholders from Tufts University, federal and state agencies, and other HNRCs were asked to help identify what information was needed to develop the strategic plan. From this basis, HNRCA scientists and staff conducted interviews with over 50 people inside Tufts, from government agencies, other universities and research institutions, industry groups and corporations, and relevant interest groups. In addition, HNRCA working groups were formed to focus on specialized areas, including technology and technical resources, finances and other assets, industry and foundation relationships, and publications.

Of particular importance was the engagement of primary stakeholders and partners, both within Tufts University and the USDA's Agricultural Research Service. Explicitly soliciting their input and advice, and testing with them emerging conclusions, were crucial to the process, both in building the foundation for the plan's priorities and in generating support needed for successful implementation of key strategies.

## Structured Project

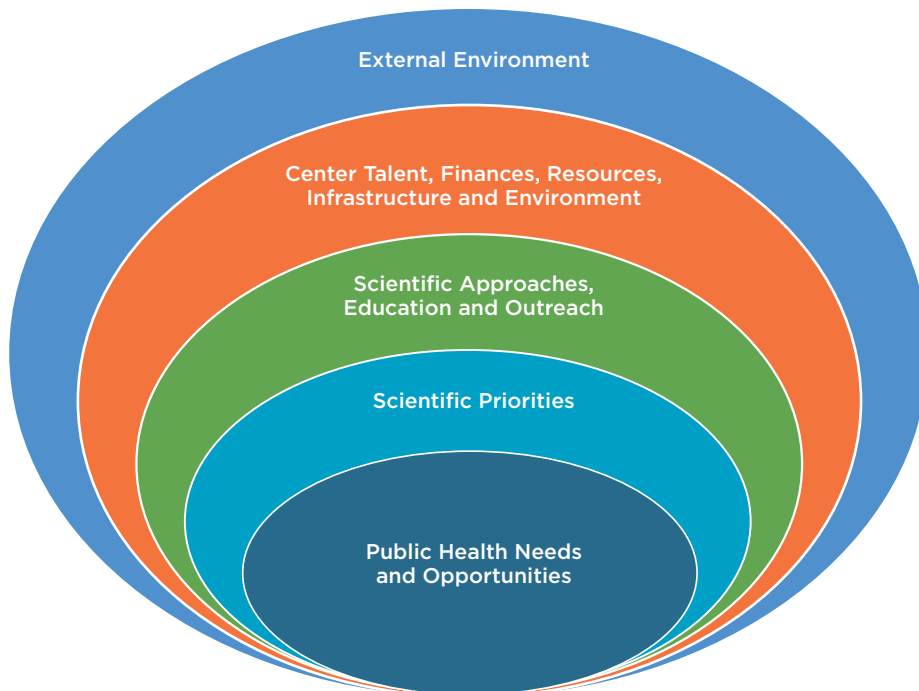
The HNRCA's strategic planning effort was a finite-termed project, guided by an overall plan that included a substantive roadmap and sequenced phases of activity. This was necessary to provide clarity, order, and forward visibility.

### *Substantive Roadmap*

The intention with the planning effort was to address a wide range of topics including external needs and expectations, the priorities for the HNRCA's work over the next several years, organizational requirements to support this work, and relationships with outside stakeholders and partners. The planning also included an assessment of the HNRCA's Strengths, Weaknesses and the major Opportunities and Barriers or Threats in its future.

### *Phases of Activity*

The planning project consisted of four distinct phases: I — Identify Strategic Questions and Considerations; II — Gather Information from Internal and External Sources; III — Analyze Findings, Draw Conclusions, and Make Decisions; IV — Communicate Decisions and Plan Implementation.



## APPENDIX II: Strategic Plan Interview Participants

### Tufts University and Tufts Medical Center

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Richard M. Dupee, MD, FACP, AGSF Chief, Geriatrics Service Tufts Medical Center	Brian Lee Vice President for University Advancement	Henry H. Wortis, MD Chair, Pathology Department Sackler School of Graduate Biomedical Sciences
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## APPENDIX II: Strategic Plan Interview Participants (continued)

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## Notes

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