



Northeastern University
Bouvé College of Health Sciences

Bouvé College

A Focus on Human Health

From Cells
to Society,
Catalyzing
Innovation

At Bouvé College of Health Science, we strive to empower individuals and their communities with the tools needed to work alongside clinicians and practitioners to prevent, treat, and manage current and future health challenges.

Bouvé College is...

Mission Driven.

As a leader in health science research and academics, we are guided by a mission to accelerate the discovery, teaching, and implementation of breakthroughs that enable a proactive, human-centered health approach. Since 1900, average life expectancy has doubled – a tribute to the incredible science, research, and medicine that has enabled curing and managing a broad range of disease.

Healthspan: An integrative, proactive approach to health that considers a person's biology, lifestyle, and environmental factors in order to prolong and enhance quality of life.

But longer lifespan also means more potential for sickness – in fact, for most us, 20 percent of our lives is spent unhealthy*.

Our goal is to advance health and quality of life for everyone across their lifespan to improve their **Healthspan**: the number of years lived in good health. Healthspan transforms the way we look at public health from campus to community, from cells to society, individual homes to community settings, and from local engagement to global impact.

State of the art research, real-world applications

At Bouvé our novel approach challenges traditional methods that dominate today's healthcare system and its reactive response to illness, treatment,

sickness, and disease. By focusing on healthspan, we can understand the intersection of human biology, technology, data, and personalized patient care to better understand the person as a whole, not just as a condition or case. The result is improved quality of life despite risk factors, disease, and disability.

Collaboration, innovation, and prevention

Interdisciplinary learning and collaboration are fundamental aspects of the Northeastern ecosystem and essential to our success at Bouvé. Our clinicians, engineers, entrepreneurs, and scientists address global health problems by identifying and implementing solutions that span demographics, industries, and regions.

For example, professor and physicist Alessandro Vespignani's complex computational modeling helps health officials predict seasonal virus outbreaks. Now, his tools are critical to forecasting and preventing outbreaks globally.

In another venture, professor of psychology and physical therapy Charles Hillman partnered with video game developers from the College for Arts, Media, and Design to learn how exercise can improve cognitive function. In another, professor and movement neuroscientist Eugene Tunik used virtual reality to develop rehabilitation tools for stroke victims.

We are utilizing data in unexpected applications with extraordinary benefits.

For example, using wearable technology that captures biological feedback, assistant professor Matthew Goodwin has developed a sensor that detects when individuals with Autism are prone to aggression and outbursts to alert caregivers and minimizing emotional distress. As early as birth, a focus on prevention and meaningful interventions can have a massive impact. Consider assistant professor Emily Zimmerman's research into improving nursing patterns of infants born prematurely, leading to better nutrition and development.

Innovative digital technologies and the rise of personalized medicine are driving a rapid disruption to the healthcare industry. This changes the way practitioners deliver care and individuals manage and understand their health.

Now, it's more relevant than ever, as growing health challenges highlight the disparities, inequalities, social injustice, and racism that exacerbate many of the public health crises affecting our society today.

A focus on individuals & society

Healthspan empowers individuals to take charge of their own health, leading to a better quality of life and less strain on the healthcare system.

Self-determination has the power to impact communities and individuals more than public health campaigns or other media.

The future of medicine

In aligning research, education, programming, and practical knowledge into healthspan thinking, Bouvé College enables the health workforce to deliver more human-centric care. That means equitable, accessible, affordable treatment and, ultimately, more years of active life.

*HHS.GOV

Keeping People Healthier LONGER

Bouvé College of Health Science is at the intersection of healthcare and healthspan. Committed to improving the lives of communities everywhere through a tech-enabled, data-informed, human-centered approach, Bouvé is synonymous with Healthspan – a longer, healthier life.

Healthspan at Bouvé is...

An integrative, proactive approach to health that considers a person's biology, lifestyle, and environmental factors in order to **prolong and enhance** quality of life.

OUTCOMES

QUALITY

Lifespan has increased meaning greater potential for sickness – the longer you live a healthy life, the longer you'll have a high quality of life free from illness.

COST

Staying healthier longer can reduce medical costs. Adoption of technology, understanding risks, and managing yourself and community.

VALUE

Your health is the most valuable thing you have in life. Invest in yourself.

THROUGH...



Pharmaceutical Sciences

Making state of the art, cutting-edge pharmaceutical advances through technology and novel data analysis.



From Bench to Bedside to Community

Front-line, leading academics that aligns research, education, and programming into practical solutions to real world health issues.



Health and Life Sciences

Focused on innovative research developed to address the biggest challenges to health, nationally and globally.

“Our programs are focused on reducing the gap between science and practice, with faculty very much in tune with real world applications. That allows us to bring a unique vision to healthcare.

– Dean Carmen Sceppa, MD, PhD, FGSA