Excellence and Discovery: A Brief
Origins of Johns Hopkins Medicine
Facts and Components
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The Future
Origins of Johns Hopkins Medicine

Johns Hopkins, the Quaker merchant, banker and businessman, left $7 million in 1873 to create The Johns Hopkins University and The Johns Hopkins Hospital, instructing his trustees to create new models and standards for medical education and health care.

He was named for his great-grandmother, Margaret Johns, her last name becoming his first (and confusing people ever since).
Origins of Johns Hopkins Medicine

From the 1889 opening of The Johns Hopkins Hospital, to the opening of the school of medicine four years later, there emerged the concept of combining research, teaching and patient care. This was a model, the first of its kind, that would lead to a national and international reputation for excellence and discovery.

Today, Johns Hopkins uses one overarching name—Johns Hopkins Medicine—to identify its entire medical enterprise.

This over $7 billion system unites the physicians and scientists of the Johns Hopkins University School of Medicine with the health professionals and facilities that make up the broad, integrated Johns Hopkins Health System.
Mission

The mission of Johns Hopkins Medicine is to improve the health of the community and the world by setting the standard of excellence in medical education, research and clinical care. Diverse and inclusive, Johns Hopkins Medicine educates medical students, scientists, health care professionals and the public; conducts biomedical research; and provides patient-centered medicine to prevent, diagnose and treat human illness.

Vision

Johns Hopkins Medicine pushes the boundaries of discovery, transforms health care, advances medical education and creates hope for humanity. Together, we will deliver the promise of medicine.

Core Values

- Excellence & Discovery
- Leadership & Integrity
- Diversity & Inclusion
- Respect & Collegiality
Excellence and Discovery
Facts and Components
Facts and Components
Johns Hopkins Medicine (FY 2015)

• Over $7 billion in operating revenues
• More than 42,000 combined full-time equivalent employees; among largest private employers in Maryland
• Annual outpatient visits: over 2.8 million
• Annual Emergency Department visits: over 350,000
• Annual hospital admissions: over 115,000
• At over $2 billion, The Johns Hopkins University is, for the 34th straight year, the leading U.S. academic institution in total research and development spending, according to the National Science Foundation’s rankings.
Facts and Components
Johns Hopkins University School of Medicine

- Annually ranked #2 in NIH funding for U.S. medical schools (more than $400 million)
- Medical and doctoral students: over 1,250
- Full-time faculty: over 2,700
- Part-time faculty: over 1,250
- Pioneered new curricula, including current Genes to Society curriculum, which teaches an “individualized medicine” model based on genetic variability, interdisciplinary diagnostics and treatment, evidence-based care, health disparities and safety
- Consistently ranked among the top three schools of medicine by *U.S. News & World Report*’s Best Medical Schools
Facts and Components
Johns Hopkins Nursing

• **Magnet Certification**
  The Johns Hopkins Hospital, in 2003, was the first health care organization in Maryland to receive Magnet® Designation for excellence in nursing practice from the American Nurses Credentialing Center.
  – Received third consecutive Magnet Designation in 2013

• **Interdisciplinary Collaboration**
  Johns Hopkins nurses collaborate with physicians, pharmacists and other health care professionals on patient rounds, policy committees and research studies.
Facts and Components
The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center (FY 2015)

The Johns Hopkins Hospital
Johns Hopkins is the only hospital in history to have been ranked #1 in the nation for 22 years by U.S. News & World Report.

1,145 licensed beds, over 1,950 full-time attending physicians

Johns Hopkins Children’s Center
Consistently ranked by U.S. News & World Report as one of the top centers in the nation

Johns Hopkins Sidney Kimmel Comprehensive Cancer Center
NCI-designated cancer center; consistently ranked among the top in the nation by U.S. News & World Report

Johns Hopkins Bayview Medical Center
527 licensed beds, over 600 attending physicians

Note: all licensed bed counts are 2014, including NICU
**Facts and Components**

**Other Johns Hopkins Hospitals**

**All Children’s Hospital** *(St. Petersburg, Florida)*
259 licensed beds, over 280 active medical staff

- Received the HealthGrades Pediatric Patient Safety Award
- One of 19 centers in the Neonatal Research Network, an NIH-sponsored consortium dedicated to research on improving neonatal outcomes

**Howard County General Hospital** *(Columbia, Maryland)*
277 licensed beds, over 540 physicians

- Received the HealthGrades Distinguished Hospital Award for Clinical Excellence™

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*Note: all licensed bed counts are 2014, including NICU*
Facts and Components
Other Johns Hopkins Hospitals

Sibley Memorial Hospital (Northwest Washington, D.C.)
318 licensed beds, 850 active medical staff
• Ranked among the top 100 hospital programs in the country for hip replacement and is a benchmark hospital for successful hip replacement surgeries

Suburban Hospital (Bethesda, Maryland)
220 licensed acute beds, more than 600 active medical staff
• Joint cardiac surgery program with Suburban and NIH
• Focus on open-heart surgical procedures

Note: all licensed bed counts are 2014, including NICU
Facts and Components
Johns Hopkins Health Care & Surgery Centers

Johns Hopkins Green Spring Station
(Northern Baltimore County)

Johns Hopkins White Marsh
(Eastern Baltimore County)

Johns Hopkins Bethesda (formerly Suburban Outpatient Medical Center)
(Central Montgomery County)

Johns Hopkins Odenton
(Western Anne Arundel County)

Virtually all specialty services are offered, including outpatient surgery, internal medicine, family practice, gyn/ob, pediatrics, cardiology, gastroenterology, ophthalmology, orthopedics/rehabilitation, radiology, Wilmer Optical and medical laboratory.
Facts and Components
Johns Hopkins Health System (FY 2015)

Johns Hopkins HealthCare
Managed care plans covering 345,000 lives in three unique populations, including Medicaid, Employer Health Programs and US Family Health Plan

Johns Hopkins Community Physicians
More than 820,000 annual patient visits at 39 primary and specialty care outpatient sites

Johns Hopkins Home Care Group
A full-service home care provider; Joint Commission-accredited; CMS-certified; with over 130,000 patients served
Johns Hopkins Medical Enterprise (FY 2015)

Johns Hopkins University School of Medicine
Consistently ranked by USN&WR among top three U.S. medical schools; ranked #2 in NIH funding for U.S. medical schools—$400 million; 2,700 full-time faculty; 1,250 M.D. and Ph.D. students.

Johns Hopkins Community Physicians
More than 820,000 annual patient visits at 39 primary and specialty care outpatient sites.

Johns Hopkins Health System Hospitals and Health Care and Surgery Centers
Includes The Johns Hopkins Hospital, ranked among the top hospitals in the nation by USN&WR; Johns Hopkins Bayview Medical Center; All Children’s Hospital; Howard County General Hospital; Sibley Memorial Hospital; and Suburban Hospital. Johns Hopkins Health Care and Surgery Centers: Green Spring Station, Odenton, White Marsh, Bethesda.

Johns Hopkins HealthCare
Managed care plans at financial risk for over 345,000 lives in three unique populations, including Medicaid, commercial and US Family Health Plan; served by a statewide owned and contracted provider network.

Johns Hopkins Medicine International
Provides personalized care for international and out-of-state patients; works to improve health care delivery through high-impact collaborations around the world.

Johns Hopkins University Partners

Johns Hopkins Bloomberg School of Public Health
First institution, and largest institution of its kind in the world; Ranked No. 1 by USN&WR; over 500 full-time faculty members. National leader in risk assessment, health care measurement and forecasting.

Johns Hopkins School of Nursing
Ranked by USN&WR as first overall for Graduate Programs.

Johns Hopkins Home Care Group
Joint Commission-accredited and CMS-certified, with over 130,000 patients served.
Johns Hopkins Hospitals and Medical Centers

One-stop medical care with comprehensive diagnostic and specialty services provided by Johns Hopkins faculty or Johns Hopkins community/affiliated physicians in Maryland.

Not shown on map:
All Children’s Hospital
(St. Petersburg, Florida)
Facilitates the global expansion of the Johns Hopkins Medicine mission

- Provides personalized care for patients from outside Maryland and the U.S., and for local patients with limited English proficiency

- Mission-driven collaborations throughout the world:
  - Jointly owned: Johns Hopkins Singapore, Johns Hopkins Aramco Healthcare
  - Managed: Tawam, Al Rahba hospitals (United Arab Emirates)
  - Affiliations: Brazil, Chile, Panama, Peru, Japan, Lebanon, Turkey
  - Strategic collaborations: Canada, China, Colombia, Malaysia, Mexico, Trinidad and Tobago
Excellence and Discovery
Achievements and Honors
Achievements

• Pioneered surgery for breast cancer (1889)
• First major medical school in the United States to admit women (1893)
• First to develop renal dialysis (1912)
• First direct heart surgery (blue baby operation, 1944)
• Developed cardiopulmonary resuscitation – CPR (1958)
• Invented first implantable, rechargeable pacemaker for cardiac disorders (1972)
• Discovered opiate sensors in the brain and how brain cells “talk” to one another (1972)
• Pioneered complex surgeries for separating twins joined at the head (1987)
• Created a database that compiles 30 years of human genetic data, known as the Online Mendelian Inheritance in Man (1989)
• Identified the first “tumor-suppressor” gene, p53, associated with colon cancer (1989)
Achievements

• Discovered the gene hedgehog that controls limb growth in developing organisms (1992)

• Identified the HIF-1 protein that controls genes in response to low oxygen, a process linked to cancer growth (1995)

• Among the first to isolate and cultivate human embryonic stem cells (1998)

• Discovered that in vitro fertilization (IVF) appears to be associated with a rare combination of birth defects characterized by excessive growth of various tissues (2002)

• Developed the first biologic pacemaker for the heart, paving the way for a genetically engineered alternative to implanted electronic pacemakers (2002)
Achievements

- Pioneered exchange of kidneys among incompatible donors:
  - First triple transplant, 2003
  - First five-way domino transplant, 2006
  - First six-way donor kidney swap among 12 individuals, 2008
  - First eight-way donor kidney swap among 16 individuals, 2009

- Developed a “safety checklist” that has saved thousands of lives by reducing blood stream infections (2006)

- Surgeons at Johns Hopkins pioneered brain operations by entry incision through the eyelid to reach the skull and deep brain, replacing the more physically damaging and invasive traditional means of entry, which required opening the top half of the skull (2010)
Drs. Smith and Nathans were awarded the 1978 Nobel Prize in Physiology or Medicine by the Royal Swedish Academy of Sciences for discovering and identifying applications for restriction enzymes, proteins that act like molecular scissors to cut DNA. They first used these enzymes as genetic tools to shuffle genes between different pieces of DNA, marking the beginning of modern molecular biology.
Telomere Expert Carol Greider Shares 2009 Nobel Prize in Physiology or Medicine

Carol Greider, Ph.D.
Daniel Nathans Professor and Director of Molecular Biology and Genetics, Institute for Basic Biomedical Sciences

Dr. Greider, one of the world’s pioneering researchers on the structure of chromosome ends known as telomeres, was awarded the 2009 Nobel Prize in Physiology or Medicine by the Royal Swedish Academy of Sciences. She was recognized for her 1984 discovery of telomerase, which maintains the length and integrity of chromosome ends and is critical for the health and survival of all living cells and organisms.
Peter C. Agre, M.D.
Professor of Biological Chemistry, Director of the
Johns Hopkins Malaria Research Institute

Dr. Agre, a 1974 graduate of the Johns Hopkins University School of Medicine, was awarded the 2003 Nobel Prize by the Royal Swedish Academy of Sciences for his discovery of what he called the “aquaporin” proteins, which form the channels that enable water to flow in and out of cells. His discovery was recognized as “of great importance for understanding many diseases of the kidneys, heart, muscles and nervous system.” Scientists throughout the world now are searching for drugs that can specifically target water channel defects.
Awards & Honors

- 21 current/former school of medicine scientists are Nobel laureates
- 8 school of medicine faculty have received the Lasker Award (“American Nobel”)
- 16 members of the school of medicine’s current faculty have been elected to the National Academy of Sciences; 30 faculty elected to Institute of Medicine
- 4 school of medicine faculty/alumni have received the Presidential Medal of Freedom (Denton Cooley, Arnall Patz, Benjamin Carson and Donald Henderson)

Helen Taussig, M.D.  
Lasker Award

Benjamin Carson, M.D.  
Presidential Medal of Freedom

Solomon Snyder, M.D.  
National Academy of Sciences
Awards & Honors

• MacArthur “Genius Grant” winners: 2008, Peter Pronovost, M.D., Ph.D.
• Patient safety innovator: 2007, Lisa Cooper, M.D., minority health barriers; 2001, Kay Redfield Jamison, Ph.D., mental health treatment; and 2001, Geraldine Seydoux, Ph.D., developmental biology
• 2007 National Physician of the Year Award for Clinical Excellence: Patrick Walsh, M.D.
• 2007 King Faisal International Prize in Medicine: Patrick Walsh, M.D.
Excellence and Discovery

The Future
The Johns Hopkins Hospital’s newest clinical buildings reflect Johns Hopkins focus on providing the best in patient- and family-centered care.

- 696 private patient rooms—491 for adults and 205 for children
- 33 new, state-of-the-art operating rooms
- Expanded, easy-to-access adult and pediatric emergency departments
- Quiet patient care areas, healing gardens and a children’s meditation room
“At Johns Hopkins Medicine, we talk about excellence and discovery because both are firmly embedded in our over 125-year history. The modern medical education was born and revolutionized at Johns Hopkins, and countless advances in medicine were made here by Johns Hopkins physicians and scientists. Now, at the beginning of the 21st century, Johns Hopkins Medicine has evolved into a nationally and internationally recognized organization—a medical system, built to deliver evidence-based medicine, with cutting-edge innovation. But beyond the Nobel Prizes and high rankings and brick-and-mortar towers, Johns Hopkins is about our people—skilled and dedicated, always tempered with compassion and altruism.”

Paul B. Rothman, M.D.
Dean of the Medical Faculty
CEO, Johns Hopkins Medicine
To learn more, please visit us at:

www.hopkinsmedicine.org