Excellence and Discovery: An Overview

Updated: February 2015
Table of Contents

• About Johns Hopkins  Slide 3
• The Founding Physicians  Slide 10
• Facts and Major Components  Slide 15
• Strategic Affiliation Highlights  Slide 29
• Notable Research and Clinical Milestones  Slide 38
• Building on the Promise  Slide 50
• Medical Education  Slide 59
• Basic and Translational Research  Slide 66
• Community Relations  Slide 74
• Students and Staff  Slide 80
The Johns Hopkins Hospital opened in 1889, and the Johns Hopkins University School of Medicine opened four years later.

In 1986, the hospital trustees created the Johns Hopkins Health System to serve as the parent of the hospital and future subsidiary entities.

In 1996, the health system and the school of medicine joined together to become Johns Hopkins Medicine, a pioneer in academic medicine.
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.
Johns Hopkins Medicine

Vision

Johns Hopkins Medicine pushes the boundaries of discovery, transforms health care, advances medical education and creates hope for humanity.

Together, Johns Hopkins Medicine will deliver the promise of medicine.
Core Values

Excellence & Discovery
Leadership & Integrity
Diversity & Inclusion
Respect & Collegiality
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).
History

- Emphasized scientific discovery to advance patient care
- Established a joint appointment model for faculty who also served as hospital attending physicians; the move integrated science, teaching and clinical care
- Standardized advanced training in specialized fields of medicine through residency programs, house staff fellowships and postgraduate internships
History

The Flexner Report for the Carnegie Foundation (1910) surveyed all 150 medical schools in the U.S. and Canada and held up Johns Hopkins as the model.

Abraham Flexner
The Founding Physicians

William Henry Welch
Sir William Osler
Howard Kelly
William Stewart Halsted
William Henry Welch (1850-1934)

- Created the first graduate training program for physicians
- Founded nation’s first (and currently largest) school of public health
William Stewart Halsted (1852-1922)

- Started first formal surgical residency training program
- Invented and was first to use surgical gloves
- Radical mastectomy, hernia repair and thyroidectomy among his innovations
William Osler (1849-1919)

- First physician-in-chief at The Johns Hopkins Hospital (1889)
- Established first medical residency program as backbone of physician training
- Pioneered practice of bedside teaching (medical rounds)
- “He who studies medicine without books sails an uncharted sea, but he who studies medicine without patients does not go to sea at all.”
- Authored *The Principles and Practice of Medicine*, the most influential medical textbook of the 20th century
Howard Kelly (1858-1943)

- Established gynecology as a true specialty
- Invented numerous medical devices, including a urinary cystoscope and absorbable sutures at Johns Hopkins
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 second in National Institutes of Health (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 in *U.S. News & World Report*’s Best Medical Schools
Facts and Components

Johns Hopkins University School of Medicine

- M.D./Ph.D. program—largest NIH medical science training program in the country
- M.D./M.P.H. and M.D./M.B.A. joint degree programs
- M.A. degree in medical and biological illustration
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 first 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**
National Cancer Institute-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™

*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 System (2013 projected)

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
Facts and Components
Johns Hopkins Health Care & Surgery Centers

**Johns Hopkins Green Spring Station**
(Northern Baltimore County)

- Johns Hopkins Medicine’s largest nonhospital ambulatory center
- Comprehensive medical and ancillary services covering most specialties

**Johns Hopkins White Marsh**
(Eastern Baltimore County)

- Comprehensive services, including outpatient surgery, cardiology, radiology, orthopaedics/rehabilitation, gyn/ob, Wilmer Optical and medical laboratory
**Facts and Components**

**Johns Hopkins Health Care & Surgery Centers**

**Johns Hopkins Odenton**
*(Western Anne Arundel County)*

- Serves the Baltimore/Washington corridor
- Services include internal medicine, family practice, gyn/ob, pediatrics, cardiology, gastroenterology, ophthalmology and orthopaedics
- Johns Hopkins and its affiliate Anne Arundel Health System opened a new medical pavilion in Odenton in December 2012
**Facts and Components**

**Johns Hopkins Health Care & Surgery Center**

---

**Johns Hopkins Bethesda**

(formerly Suburban Outpatient Medical Center)

Comprehensive medical and ancillary services covering most specialties

**Johns Hopkins Health Care and Wellness Center** - Germantown, Montgomery County

Services include adult and pediatric dentistry, primary care, physical medicine
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 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 Community Physicians
More than 820,000 annual patient visits at 39 primary and specialty care outpatient sites.

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 Home Care Group
Joint Commission-accredited and CMS-certified, with over 130,000 patients served.

Johns Hopkins Bloomberg School of Public Health
First institution, and largest institution of its kind in the world; Ranked #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 in Best Nursing Programs.
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)
Strategic Affiliation Highlights
Anne Arundel Health System (Anne Arundel County)

- AAHS’s DeCesaris Cancer Institute is closely aligned with Johns Hopkins Medicine through:
  - Breast Reconstruction Program
  - Expanded cancer clinical trials available to Anne Arundel Medical Center patients
  - Jointly held tumor conferences

- The Johns Hopkins Children’s Center hosts clinics at Anne Arundel Health System in the areas of pediatric gastroenterology, pediatric neurology, pediatric pulmonology and pediatric surgery
Greater Baltimore Medical Center (Towson)

- Through a collaboration with GBMC, Johns Hopkins cardiologists manage and supervise all heart-related inpatient and outpatient testing.

- Collaboration in pediatric surgery and an enhanced pediatric surgery practice at GBMC

- Johns Hopkins physicians collaborate with GBMC with the Johns Hopkins Head and Neck Cancer Surgery and Voice centers, as well as in microvascular reconstructive services

- GBMC houses two Johns Hopkins integrated residency programs for ob/gyn and otolaryngology

- In 2009, GBMC became part of the Johns Hopkins Clinical Research Network
Good Samaritan Hospital (Baltimore)

- Main home of Johns Hopkins Department of Physical Medicine and Rehabilitation
- Includes a 51-bed comprehensive inpatient rehabilitation unit, electrodiagnostics laboratory and an outpatient clinic
- Johns Hopkins orthopaedic surgeons and rheumatologists practice at Good Samaritan Hospital.
- Johns Hopkins University residents and fellows rotate through the PM&R rheumatology, nephrology and orthopaedic surgery programs at Good Samaritan Hospital.
Extended Services

- Patient First at Johns Hopkins Bayview Medical Center, Howard County General Hospital, Green Spring Station, Towson and Odenton; owned by Johns Hopkins Medicine, managed and operated by Patient First
Johns Hopkins Medicine International Highlights

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

**Jointly Owned**

- **Kingdom of Saudi Arabia:** Johns Hopkins Aramco Healthcare (Dhahran)
  - *Joint health care venture to serve employees and beneficiaries of Saudi Aramco*

- **Johns Hopkins Singapore**
  (clinical oncology unit in Tan Tock Seng Hospital)
  - *Outpatient unit for chemotherapy*
  - *Clinical research/medical education*

**Managed**

- **United Arab Emirates:** Tawam Hospital (Al Ain);
  Al Rahba Hospital (Abu Dhabi)
Johns Hopkins Medicine International
Affiliations

- **Brazil:** Hospital Moinhos de Vento
- **Chile:** Clínica Las Condes
- **Japan:** Tokyo Midtown Medical Center
- **Lebanon:** Clemenceau Medical Center
- **Turkey:** Anadolu Medical Center
- **Panama:** Hospital Punta Pacífica
- **Peru:** Pacífico Salud (not shown)

Clockwise from top left: Johns Hopkins Medicine International affiliations in Chile, Japan, Lebanon and Turkey.
• **China**: Sun Yat-sen University
• **Colombia**: Fundación Santa Fe de Bogotá
• **Malaysia/United Arab Emirates**: Amcare Labs
• **Mexico**: Instituto Tecnológico de Monterrey – Monterrey Tec
• **Trinidad and Tobago**: Trinidad and Tobago Health Sciences Initiative
Notable Research and Clinical Milestones
Notable Milestones 1

- First major medical school in the U.S. to admit women (1893)
- First medical illustration program: Art as Applied to Medicine (1911)
- First to use rubber gloves during surgery (Halsted)
- Pioneered surgery for breast cancer (1889)
- Isolated the hormone epinephrine—adrenalin (1897)
- First to develop renal dialysis (1912)
Notable Milestones 2

• Discovered heparin (1916) to prevent blood coagulation
• Isolated and crystallized insulin (1926)
• First open-heart surgery (blue baby operation in 1944)
• Discovered that Dramamine alleviates motion sickness (1947)
• Developed cardiopulmonary resuscitation—CPR (1958)

The first open-heart surgery (blue baby) in 1944
Notable Milestones 3

• Invented first implantable, rechargeable pacemaker for cardiac disorders (1972)

• Discovered restriction enzymes—“biochemical scissors”—that gave birth to genetic engineering (Nobel Prize, Daniel Nathans and Hamilton Smith, 1978)

• Discovered vitamin A supplements, which led to dramatic drop in infant death rates in developing nations (1983)

• Linked Marfan syndrome to genetic defect; 50 years later, discovered a treatment for its most lethal complication
Notable Milestones 4

- Pioneered complex surgeries for separating twins joined at the head (1987)
- Introduced prostate surgery that preserves sexual function and continence (1992)
- Linked gene to colon cancer (1992) and developed early detection stool test (2002)

Ben Carson, center, with arms raised, during a surgical rehearsal for separating twins conjoined at the head
Notable Milestones 5

• Developed first and only effective treatment for sickle cell anemia (1995)

• Introduced a way to put chemotherapy straight into the brain (1997)

• Isolated and cultivated human embryonic stem cells, the primordial cells that give rise to all body tissues (1998)

• Identified protein that controls body’s ability to release water (Nobel Prize, Peter Agre, 2003)
• 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
• One of nine medical schools in 2009 to receive top rating from the American Medical Student Association for the strength of their policies regulating interaction between students and faculty and industry
Restriction enzyme experts Daniel Nathans and Hamilton Smith share 1978 Nobel Prize in Physiology or Medicine

Hamilton Smith, M.D., professor of microbiology, Johns Hopkins University School of Medicine

Daniel Nathans, M.D., professor of molecular biology and genetics, Johns Hopkins University School of Medicine

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.
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.

Carol Greider also shares 2006 Albert Lasker Basic Medical Research Award.
Aquaporin Protein Expert Peter C. Agre Shares 2003 Nobel Prize in Chemistry

Peter Agre, M.D.
Professor of Biological Chemistry, Director of the Johns Hopkins Malaria 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)
Awards & Honors

• MacArthur “Genius Award” winner: 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.
Patient- and Family-Centered Care

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
Remodeled Nelson/Harvey Building Provides Healing Environment—October 2014

• 136 private patient rooms

• Family features, such as lounges and in-room sleep furniture

• Serene, landscaped gardens nestled throughout the campus for meditation and reflection

• Adjacent and seamless connection to the Sheikh Zayed Tower and The Charlotte R. Bloomberg Children’s Center
Sheikh Zayed Tower
Opened: May 2012

• 12 stories, 913,000 square feet
• 23 operating rooms
• 224 acute care rooms
• 96 intensive care rooms
• 35 obstetrical rooms
• Adult Emergency Department
• Adult diagnostic imaging/radiology
The Charlotte R. Bloomberg Children’s Center
Opened: May 2012

• 12 stories, 560,000 square feet
• 205 private inpatient rooms
• 45-bed neonatal intensive care unit, 40-bed pediatric intensive care unit
• 10-bed research unit
• 10 surgical suites
• Pediatric radiology unit
• Pediatric Emergency Department, Level I Pediatric Trauma Center
• Pediatric burn care
• Pediatric diagnostic imaging/radiology
Wilmer Eye Institute
Robert H. and Clarice Smith Building and Maurice Bendann Surgical Pavilion

- 7 stories, 200,000 square feet
- 6 outpatient operating rooms
- Additional research facilities
- Designed to foster collaborative research
Anne and Mike Armstrong Medical Education Building

• 100,000-square-foot, state-of-the-art building specifically designed around the Genes to Society curriculum

• Curriculum merges evidence-based science with patient-centered clinical care

• High-tech medical classrooms along with digital communications technology, including virtual reality simulations, MRI images, CT scans and surgical videos

• Anatomy and simulation labs
Science + Technology Park and Around Eager Park

- A project of the city and private developers in collaboration with the community and Johns Hopkins
- Adjacent to Johns Hopkins Medicine medical campus
- Redevelopment of 88 acres in East Baltimore
- 1.1 million square feet of lab and office space
- New housing, shops, restaurants, parking and other amenities
Biotech Park

John G. Rangos Sr. Life Sciences Building

- 278,000 square feet
- Tenants include:
  - Johns Hopkins Institute for Basic Biomedical Sciences (IBBS)
  - Johns Hopkins Diabetes Research Center
  - Cangen Biotechnologies
  - Howard Hughes Medical Institute
  - Siemens
Medical Education

• Pioneered new curricula, including current Genes to Society curriculum, which teaches to an “individualized medicine” model based in genetic variability, interdisciplinary diagnostics and treatment, evidence-based care, health disparities and safety.

• Emphasizes small-group and seminar learning and maximizes use of simulation laboratories and high-tech teaching tools.
Genes to Society Curriculum

• The framework is based on the precepts of individuality and systems biology.

• Reframes the context of health and illness so that students consider all aspects impacting an individual’s health—social, cultural, psychological, environmental and genetic.

• The linchpin is called Scientific Foundations of Medicine. Course required in year one, with topics ranging from principles of protein structure to clinical research.

• 2013 first graduating class
Important curriculum innovations:

• Interspersing one-week “intersessions” to create more active learning techniques and move away from a heavily lecture-based curriculum.

• Weaving “horizontal strands” (e.g., nutrition, public health, patient safety, pain, aging, imaging, genomics, etc.) throughout the entire curriculum.

• Starting Clinical Skills in the first year, instead of the second.

• Starting off the medical school experience with Anatomy, instead of Molecules and Cells.
Created the College Program

- Grouping medical students around student-faculty pairings to enhance student-faculty and student-student interaction.
- Students and faculty are organized into four colleges.
- Each college is populated by 120 students (30 from each class) and six core faculty.
- Arrangement offers students a unique opportunity to learn the fundamental skills of medicine and lessons in professionalism and humanism from a trusted advisor.
- Builds valued student-faculty connections.
Clinical Advancement—PACE
The five-level advancement program, PACE (Professional Accountability and Clinical Excellence), recognizes and rewards nurses for their experience, competencies and good bedside manner, and gives them opportunities for increased clinical responsibility.
Nursing

Research

Johns Hopkins encourages research by nurses (e.g., a fellowship in outcomes management allows two nurses each year to devote 16 hours per week for six months to develop outcomes management skills).

Global Reach

Johns Hopkins nurses volunteer at community health centers, join medical relief missions in the U.S. and abroad, and have both a national and international presence in nursing education, research, practice and service.
Institute for Basic Biomedical Sciences (IBBS)

Combines the school of medicine’s nine basic science departments to foster research programs in emerging and promising fields

Conducts over $100 million in fundamental research

- Biological Chemistry
- Molecular and Comparative Pathobiology
- Biomedical Engineering
- Biophysics and Biophysical Chemistry
- Molecular Biology and Genetics
- Cell Biology
- Neuroscience
- Pharmacology and Molecular Sciences
- Physiology
Interdisciplinary Technology Hubs

- High Throughput Biology Center (HiT Center)
- ChemCORE Facility
- Ross Flow Cytometry Core Facility
- Genetics Resources Core Facility
- Mass Spectrometry Laboratory
- Microarray Core Facility
- Microscope Core Facility
- NMR Spectroscopy and Imaging Facility
- Protein/Peptide Sequencing Facility
- Proteomics Facility
- Transgenic Core Facility
Institute for Cell Engineering (ICE)

• Funded privately to maximize resources focusing on stem cell (including embryonic stem cell) therapies, safety and basic research.

• Ongoing work includes emphasis on Parkinson's disease, cancer, Lou Gehrig's disease (ALS), diabetes and heart failure.
McKusick-Nathans Institute of Genetic Medicine

- Organized to integrate research and clinical care based on understanding of human heredity and genetic medicine, multigenic, widespread diseases.
- IGM faculty in many disciplines work together to foster multidisciplinary research and collegiality.
- Named for Victor A. McKusick and Daniel Nathans.
The university’s intellectual property administration center, serving researchers and inventors as a licensing, patent and technology commercialization office.

- **Total revenue**: $18 million
- **Total invention disclosures**: 441
- **Number of license and option agreements**: 133
- **Active issued patents** (U.S. and international): 2,078; 77 were newly issued U.S. patents
- Formed eight startup companies based on licensed university intellectual property; created more than 100 startup companies since 2000.

*Note: above figures are for FY2013*
The Institute for NanoBioTechnology (INBT)

- Established in 2006 with grants from the National Science Foundation and the Howard Hughes Medical Institute.
- Brings together Johns Hopkins faculty and students using nanotechnology to generate new diagnostic and therapeutic tools, including biosensors and DNA nanoparticles.
Johns Hopkins Institute for Clinical and Translational Research

- Established in 2007 under $100 million NIH grant.
- Largest single NIH award to Johns Hopkins in institution’s history
- Goal: To accelerate bench-to-bedside medical innovations and new translational treatments for patients
- Supports the work of more than 100 faculty members from the schools of medicine, engineering, nursing and public health.
Community Relations

East Baltimore Programs
Community Relations: Health Care

- Johns Hopkins Adolescent Clinic: Serves over 3,000 youngsters, ages 10 to 21
- Avon Breast Care Initiative: Free clinical breast exams and mammogram screenings
- Children and Adolescent Mental Health Center
- East Baltimore Medical Center: serves over 19,000 patients
- Prostate Cancer Screening Program
Community Relations: Outreach

• Community of Caring Campaign: Encourages staff involvement and provides support for revitalization and redevelopment initiatives

• Johns Hopkins Hospital Summer Jobs Program

• INROADS Baltimore: Offers summer internships and career development training for minority undergraduate students in business and allied health

• Operation PULSE (People United to Live in a Safe Environment): Provides residents with crime prevention training programs

• Johns Hopkins Injury Prevention and Community Outreach Collaborative: Prevents violence through education and outreach

• Computer Donation Program: Provides software instruction and computer technician training
Community Relations: Outreach

**Urban Health Institute**

- Improves collaboration between Johns Hopkins and the community in research, community projects, program planning and implementation.
- Makes possible collaborative, sustainable community health interventions.

**Community Health Partnership**

- Building on existing programs, the Community Health Partnership (also known as J-CHiP) was catalyzed by a $19.9 million Centers for Medicare & Medicaid Services grant
- An innovative approach to improve health outcomes, deliver better care, and reduce costs and disparities in care using multidisciplinary care teams for inpatients and in the community
Community Relations: Education

- Collaborative partnership with community schools
- Adopt-a-Class Program: Tench Tilghman Elementary Middle School
- Alternative Career Programs: Expose students to health care career options
- Dunbar-Hopkins Health Partnership: Helps prepare students through school-to-career transition initiatives
- Paid internships in allied health professions
- Summer tutorial program for elementary school students
- Full-tuition Johns Hopkins scholarships for Baltimore City Public Schools students

Larry Epp and Ayannah Brower-Jones, at Dunbar High, and fellow therapists have helped hundreds of East Baltimore students as part of the little-known but vitally important school-based mental health program.
Opened in 2013, the K–8 school is operated by The Johns Hopkins University’s School of Education, in partnership with Morgan State University’s School of Education and Urban Studies, and is viewed as a bedrock of East Baltimore’s ongoing revitalization.

Students and faculty from the Johns Hopkins University School of Nursing and staff from the Baltimore City Health Department oversee the health suite and work with families on issues related to health and nutrition.

Johns Hopkins Hospital employees Marlen and Keith Foster were thrilled when their son Kaden, 6, was accepted to the first new school built in East Baltimore in 20 years.
Students and Staff
Students and Staff

- Office of Diversity and Cultural Competence, school of medicine
- Johns Hopkins University Office of Institutional Equity
- Universitywide Commission on Equity, Civility and Respect
- Universitywide Diversity Leadership Council
- Annual Diversity Recognition Awards, Johns Hopkins Institutions
- Annual Diversity Leadership Conference, Johns Hopkins Institutions
“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 Rothman, M.D.
Dean of the Medical Faculty
CEO, Johns Hopkins Medicine