the FUNDAMENTALS of HUMAN DISEASE and HEALTH

INVEST
in the HUMAN and TECHNOLOGICAL RESOURCES NECESSARY for INNOVATION

REACH
the COMMUNITY locally, NATIONALLY and GLOBALLY

EDUCATE
GENERATIONS of LIFE-LONG LEARNERS dedicated to EXCELLENCE
in BIOMEDICAL RESEARCH, PATIENT CARE and EDUCATION

CREATE
the LEARNING HEALTH DELIVERY SYSTEM of the FUTURE

TRANSLATE
OUR DISCOVERIES into NEW DIAGNOSTICS, TREATMENTS and CURES

SUSTAIN
AN OPERATIONALLY EXCELLENT and FISCALLY STABLE PLATFORM
Dear Baylor College of Medicine Friends and Colleagues,

Looking back on the past year, I am pleased with the progress we have made. As a health sciences university with four schools—School of Medicine, Graduate School of Biomedical Sciences, School of Allied Health Sciences and National School of Tropical Medicine, we train the health care leaders of the future. Our faculty are leaders in their fields and our programs fulfill our vision of improving health through science, scholarship and innovation.

This Annual Report shows many achievements on our Strategic Roadmap. The roadmap is comprehensive, with seven areas of focus:

- DISCOVER
- INVEST
- REACH
- EDUCATE
- CREATE
- TRANSLATE
- SUSTAIN

This report highlights accomplishments in each of these areas, from major awards, discoveries and commercialization efforts to advanced initiatives, expanded diversity programs, more faculty development offerings and new clinical space on our developing McNair Campus.

I am particularly pleased with our efforts to expand our mission in the community during the past year. We now have great partnerships with two public middle schools in Houston, as well as our continuing successful relationship with the Michael E. DeBakey High School for Health Professions. Our Global Health Initiatives program is expanding its outreach around the world to find affordable, creative solutions to healthcare issues, and our new Volunteer Time-Off Program is giving Baylor employees an opportunity to work in a great variety of programs across the area.

Fiscal Year 2017 was a great one for Baylor College of Medicine. I look forward to sharing our progress with you each year.

Paul Klotman, M.D.
President & CEO
Executive Dean
Baylor College of Medicine
BAYLOR COLLEGE OF MEDICINE RANKED IN TOP 20 PROJECTS AND FUNDING IN 2016

- #20 overall projects
- #4 NIH research projects

- $422.4M overall funding
- $240.6M NIH research funding

DEPARTMENTS RANKED IN TOP 20

- #1 Genetics
- #4 Anatomy and Cell Biology
- #6 Pediatrics
- #13 Biochemistry & Neuroscience
- #18 Neurosurgery & Physiology

Source: Blue Ridge Institute for Medical Research July 2017
NASA is joining with Baylor College of Medicine in Houston to operate a new institute charged with researching and developing innovative approaches to reduce risks to humans on long-duration exploration missions, including NASA’s Journey to Mars. Up to $246 million grant over 6 years.

Baylor’s Human Genome Sequencing Center named participant in TopMed (Trans-Omics for Precision Medicine)—a groundbreaking half-billion dollar program to bring whole genome sequencing and related technologies to the forefront of clinical research.

Through its TOPMed program, the National Heart Lung and Blood Institute is expanding its dedication to advancing the understanding of the underpinnings of complex diseases and how they develop.

- Timing exercise with muscle fuel switching could help you lose weight.
- Study reveals potential new strategy to prevent Alzheimer’s disease.
- Discovery of new hormone could have potential implications in treatment of diabetes.
- Single species of gut bacteria can reverse autism-related social behavior in mice.

Dr. Huda Zoghbi wins Breakthrough Prize in Life Sciences.
INVEST in the HUMAN and TECHNOLOGICAL RESOURCES NECESSARY FOR INNOVATION

MILESTONES AT THE MCNAIR CAMPUS

- BUILD-OUT OF ADDITIONAL OUTPATIENT CLINICS PLANNED FOR 2018
- MORE PATIENT SERVICES OFFERED
- ROOMS IN FIRST PATIENT TOWER BEING READIED FOR OPENING IN EARLY 2019

DIVERSITY INITIATIVES

The College’s Inclusion and Excellence Council works to maximize the engagement of people throughout the Baylor community who share passion for inclusion and diversity. The council includes 25 members representing faculty, staff and trainees.

The Inclusion and Excellence Council also serves as an umbrella organization for diversity initiatives that are developed and implemented across the College.

CENTER FOR PRECISION ENVIRONMENTAL HEALTH CREATED

To understand causes of disease through research at the intersection of genetics, environmental health and computational biology.

FACULTY SENATE LEADERSHIP TRAINING PROGRAM

This program exposes leaders in Baylor College of Medicine’s Faculty Senate to the critical business concepts necessary to support their roles as faculty leaders within the college organization.
FACULTY DEVELOPMENT PROGRAMS

Baylor faculty members are supported throughout their career paths. New programs continued to be added.

**ADVANCED CORE LABS EXPANDED**

- Antibody-based Proteomics
- Bioengineering Core
- Biostatistics and Informatics
- Cell Processing and Vector Production
- Center for Advanced MR Imaging
- Cytometry and Cell Sorting
- Genetically Engineered Mouse
- Genome-wide shRNA Screening
- Genomic and RNA Profiling
- Human Tissue Acquisition and Pathology
- Integrated Microscopy
- Mass Spectrometry Proteomics
- Metabolomics
- Monoclonal Antibody/Baculovirus
- Mouse Embryonic Stem Cells
- Mouse Metabolic Research Unit
- Mouse Phenotyping and Metabolism
- Multi-omics Data Analysis
- NMR and Drug Metabolism
- Optical Imaging and Vital Microscopy
- Pathway Discovery Proteomics
- Patient-Derived Xenografts
- Pluripotent Stem Cells
- Population Sciences Biorepository
- Protein Production and Purification
- RNA in Situ Hybridization
- Single-cell Genomics
- Small Animal MRI

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**OMBUDS OFFICE CREATED**

The Ombuds position was created to resolve problems, conflicts and concerns in an independent, neutral, impartial, confidential and informal manner as a voluntary alternative to formal process.

- Confidential
- Neutral
- Independent
- Informal

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**FACULTY DEVELOPMENT PROGRAMS**

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PARTNERSHIP WITH HESS CORP.

Baylor College of Medicine and the Hess Corporation partnered to offer a free Science, Technology, Engineering, Mathematics (STEM) education curriculum for schools nationwide. Since 1964, Hess has unveiled a unique toy truck each year. Baylor faculty wrote a curriculum for the 2016 truck that focused on the STEM concepts of friction, velocity, sound generation, energy transfer and measurements of speed, distance, mass and weight. Five hundred trucks and kits were given out.
GLOBAL HEALTH INITIATIVES

NASA
Successfully executed the Space Act Agreement to investigate the infrastructure and potential technologies associated with treatment and emergency settings in remote locations, including medical habitation and space use.

EMERGENCY SMART POD
Being deployed in Liberia with training from Baylor faculty and staff. The Pod can serve as any type of field hospital.

ACADEMIC PARTNERSHIPS
Establishing comprehensive, renewable, multi-year agreements in 10 countries that encompass education and training opportunities for Baylor students and trainees.

2017 HACKATHON TOP PRIZE GOES TO AN OXYGEN BACKPACK
Determined to be the most creative solution offered to some of the world’s most difficult healthcare problems at this year’s competition.

RESEARCH COLLABORATIVE WITH BAYLOR-EMPLOYED FACULTY AT

CLINICALLY INTEGRATED NETWORK
Physician network expands to reach more individuals in Texas

VOLUNTEER TIME OFF RESULTS
The new Volunteer Time Off Program is popular with employees, who are paid up to 8 hours per year for volunteering with a community organization. From the local food bank to a medical trip to Guatemala, faculty and staff have embraced the program. The program that emphasizes Baylor’s commitment to community service.

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EDUCATE

GENERATIONS OF LIFE-LONG LEARNERS DEDICATED TO EXCELLENCE IN BIOMEDICAL RESEARCH, PATIENT CARE AND EDUCATION

BAYLOR COLLEGE OF MEDICINE
CLASS OF 2017 GRADUATES

167
SCHOOL OF MEDICINE

77
GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

167 - 77

7
NATIONAL SCHOOL OF TROPICAL MEDICINE

7
M.D./PH.D.
1
M.D./M.B.A.
2
M.D./M.P.H.

SCHOOL OF ALLIED HEALTH SCIENCES
CLASS OF 2016 GRADUATES

18
DOCTOR OF NURSING PRACTICE PROGRAM

19
ORTHOTICS AND PROSTHETICS PROGRAM

39
PHYSICIAN ASSISTANT PROGRAM

The first graduating class in December 2016 of the Master of Science in Orthotics and Prosthetics Program.
BAYLOR’S PARTNERSHIP WITH MIDDLE SCHOOLS IN HISD

BAYLOR COLLEGE OF MEDICINE ACADEMY AT RYAN received the 2017 Magnet Schools of America President’s Award, one of the organization’s top national awards, as well as being honored with a Magnet Schools of Excellence Award.

BAYLOR COLLEGE OF MEDICINE BIOTECH ACADEMY AT RUSK in 2016 began transitioning from a general STEM magnet school serving grades pre-K-8, to a middle school STEM magnet program (grades 6-8) focused specifically on biomedical sciences, with an emphasis on medicine and technology. The school changed its name to include Baylor College of Medicine in 2017.

CAREER DEVELOPMENT CENTER ESTABLISHED

Baylor established the Career Development Center in 2016 to complement the College’s academic mission by providing the necessary training, resources and connections for students and trainees to achieve their professional goals and develop meaningful careers.
BAYLOR, GEISINGER WORK TO IMPROVE DIAGNOSTIC PERFORMANCE

Misdiagnosis affects at least one in 20 U.S. adults each year. Baylor, in collaboration with pioneering integrated healthcare system Geisinger, has been awarded a grant to develop a novel program to systematically measure and improve the safety of clinical diagnosis. It’s called “The Safer Dx Learning Lab.” The learning lab will be made possible by a three-year, $3.5 million grant from the Gordon and Betty Moore Foundation.

DEVELOPING PROGRAMS TO SERVE PATIENTS FASTER AND IMPROVE THE PATIENT EXPERIENCE

Baylor is serious about improving patient satisfaction. Carefully tracking the patients’ scores and comments from each clinical service, the Patient Experience team works to help each area improve the service it provides.

TEAM LAUNCH PROGRAM

Team Launch was initiated to prepare students for careers in team-based science and healthcare.

PASSPORT FOR CARE

Passport for Care, a program of Texas Children’s Cancer Center and Baylor College of Medicine’s Center for Collaborative and Interactive Technologies, ensures that childhood cancer survivors in Texas receive healthcare that meets their unique needs. A third $1.5 million grant from the Cancer Prevention Research Institute of Texas this year expands the innovative, web-based program to reach even more survivors.

IQUEST, THE CENTER FOR INNOVATIONS IN QUALITY, EFFECTIVENESS AND SAFETY

is a combined Baylor and a Veterans Affairs Health Services Research & Development Center of Innovation. The Center focuses on conducting research that improves the health of veterans and patients across the nation, by helping to ensure the patient-centered delivery of scientific discoveries.
OUR DISCOVERIES INTO NEW DIAGNOSTICS, TREATMENTS AND CURES

BAYLOR LICENSING GROUP FY17

43 NEW LICENSING TRANSACTIONS

100 DISCLOSURES

$17,946,140 LICENSING INCOME

17 PATENTS ISSUED

73 NEW PATENT APPLICATIONS

INDUSTRY SPONSORED RESEARCH

$3,699,040

START-UPS OF NOTE

EXCLUSIVE OPTION TO POLYVASCULAR, INC.
Developing new synthetic heart valves for pediatric applications.

EXCLUSIVE LICENSE TO VIRACYTE, INC.
Developing cytotoxic T-lymphocyte (CTL) products for the treatment of virus infection/activation events after hematopoietic stem cell transplant.
CONSULTAGENE
A NEW, INNOVATIVE VIRTUAL PLATFORM FOR GENETICS SERVICES

Consultagene, a product of Baylor College of Medicine faculty and partners from Baylor Genetics, is a personalized web and app-based platform that integrates research and clinical care through genetic counseling, peer-to-peer consultation, patient and provider education and diagnostic interpretation of clinical genomic data.

SCALP COOLING EFFECTIVE IN REDUCING HAIR LOSS DURING CHEMOTHERAPY

An oncologist at the Lester and Sue Smith Breast Center within the NCI-designated Dan L Duncan Comprehensive Cancer Center achieved results in research studying the effectiveness of scalp cooling therapy in reducing hair loss in women undergoing some chemotherapy regimens.

BAYLOR AND CELL MEDICA announce groundbreaking collaboration to create cellular immunotherapy products for cancer treatment.
SUPPORT FROM PRESIDENT’S CIRCLE AND THE PARTNERSHIP

The Baylor College of Medicine President’s Circle and the Partnership—the College’s largest volunteer organization—includes business and community leaders from diverse industries and backgrounds who share an interest in science and medicine and a commitment to shaping the future of Baylor.

The President’s Circle meets throughout the year to learn about areas of strategic importance to the College and for presentations by biomedical leaders on topics ranging from genomic medicine to lung disease to global health.

CAFÉ SOCIETY SOIREE BENEFITS PHASE 1 CLINICAL TRIAL UNIT AT DAN L DUNCAN COMPREHENSIVE CANCER CENTER

The Partnership celebrated another successful fundraiser with an evening of glitz and glamour at Café Society Soirée benefiting the Dan L Duncan Comprehensive Cancer Center and honoring Director C. Kent Osborne, M.D. Cora Sue and Harry Mach, chairs of the Café Society Soirée, led the classic evening of fun that exceeded its fundraising target and also raised awareness for the Phase 1 clinical trial unit that is an important stepping stone to getting new drugs and treatments to cancer patients.

ALUMNI FUNDRAISING EFFORTS

WHITE COATS & SCHOLARSHIPS

At Baylor, there is a proud tradition of alumni providing scholarships to current students. These scholarships may be established by an individual alumnus or by a class.

The White Coat Fund gives white coats and lab coats to medical, graduate and allied health students as they begin their training.
BAYLOR MIRACA GENETICS LABORATORY NAMED ‘DEAL OF THE YEAR’

Baylor Miraca Genetics Laboratory (now Baylor Genetics)—a joint venture between Baylor and Japan-based Miraca Holdings Inc.—was named the winner in the healthcare category of Houston Business Journal’s Deals of the Year awards.

STANDARD &POOR’S

A STABLE

#25

HEALTHIEST 100™

2016

TOP WORK PLACES 2016

H100 WINNER

scored by Springbuk®

#5

- Houston Chronicle HoustonChronicle.com
MISSION
Baylor College of Medicine is a health sciences university that creates knowledge and applies science and discoveries to further education, healthcare and community service locally and globally.

VISION
Improving health through science, scholarship and innovation.

VALUES
RESPECT
Integrity
INNOVATION
Teamwork
Excellence