Wake Forest Baptist Celebrates New Era of Medical Education with Opening of the Bowman Gray Center for Medical Education


Wake Forest Baptist Medical Center today announced completion of the new medical education building for its School of Medicine. The Bowman Gray Center for Medical Education opened in Wake Forest Innovation Quarter in downtown Winston-Salem after an 18-month renovation of a former R.J. Reynolds Tobacco Co. manufacturing plant.

The Bowman Gray Center qualified for historic tax credits worth more than $23 million toward its estimated $60 million cost.

“Today marks the end of a well-executed vision to move a significant portion of our School of Medicine and become part of a community of innovation, discovery and collaboration in Wake Forest Innovation Quarter,” said John D. McConnell, M.D., CEO, Wake Forest Baptist Medical Center. “Wake Forest School of Medicine’s growth is not defined by this new location, but by its great faculty, staff, students and alumni. Its footprint now covers many education, research and health care facilities including the new Bowman Gray Center.”

The facility is designed with the next generation of physician-leaders in mind. Today’s medical learners are diverse, just like Wake Forest Baptist’s patients. They are technologically savvy. Team-based, interprofessional learning for students requires flexible spaces—the new building provides and includes a tiered classroom, large and small group classrooms, and dedicated areas for quiet, individual study.

“We are preparing a collaborative, highly skilled health care workforce that is better prepared to respond to our community’s health needs,” said Edward Abraham, M.D., dean of Wake Forest School of Medicine. “Research shows patient outcomes improve with interprofessional team-based care. Medical students who learn alongside students from other health care professions report a better understanding of collaborative care, and higher levels of overall satisfaction with their medical training and practice.”

The timing of today’s opening of the new Bowman Gray Center for Medical Education coincides with Wake Forest School of Medicine introducing one of the most advanced medical school curricula in the country. It allows medical students to prepare for real-life experiences in the most modern of settings: from outpatient clinic to trauma center bay, complete with the new informatics and technologies used in patient care today.

continued >
Wake Forest Baptist Celebrates …

The Bowman Gray Center for Medical Education consists of five floors, with spaces uniquely fitted for the medical student now and in the future.

**Teleconferencing Learning Spaces.** The fifth floor is home to a setting that prepares students for a modern medical career with expanded technology, new and different types of study spaces to accommodate team-based learning, and more opportunities for educators from all aspects of medicine to interact with students. It consists of a tiered classroom that seats 165 and is designed to encourage students to work together; two large flat, flexible space classrooms; a small flat, flexible space classroom; teleconferencing capabilities in all classrooms; and four small group study classrooms.

**Experiential Learning Spaces.** Our experiential curriculum focuses on safety and quality throughout the medical school continuum and uses various learning modalities and technologies appropriate for today’s learners. The fourth floor includes a large clinical skills center with 20 simulated patient rooms (18 outpatient clinic rooms and two inpatient hospital rooms). The Advanced Clinical Skills area focuses on training in procedures and ultrasound skills. The Center for Experiential Learning includes a resuscitation suite, an operating/procedures suite and an intensive care suite. Cameras throughout the entire experiential learning area allow faculty to watch and record from a control room, as well as remotely monitor performance from any location with a computer. This experiential training will prepare our graduates to recognize system error, advocate for system improvement, and be stewards of safe, high-quality and high-value, patient-centered care. Students will practice the unique skills needed to deliver patient-centered care, resulting in improved health outcomes for the patients they will serve.

**Clinical Anatomy.** Medical students will learn the fundamentals of human structure and development in an expanded laboratory on the fourth floor. Anatomy is fully integrated with physiology and pathology in the first and second years of the curriculum. A comprehensive ultrasound curriculum has been integrated into programs in anatomy and physiology. The Advanced Clinical Skills lab on the fourth floor will provide space for ultrasound training. Although ultrasound has become a fundamental part of modern medical practice, starting training in this modality during medical school is relatively uncommon. Teaching this skill is of major importance in enhancing student learning, applying anatomic and physiologic knowledge in a comprehensive manner, and improving patient safety.

**Student Houses.** Student life is a very important aspect of the health and well-being of medical students. Each year’s class is divided into collaborative groups that will occupy four “houses” on the third floor. The houses are not areas for residential living but rather spaces where students can gather for mentoring, group study, conversation, meals, exercise and rest.

**Deacon Gallery.** Located on the first floor is a gallery to inspire current and future medical students about the role Wake Forest School of Medicine has played in advancing medical education, research and clinical care. The gallery will rotate exhibits that inspire all who walk through it. The Deacon Gallery will be completed at the end of August.

continued >
The Bowman Gray Center for Medical Education connects via a bridge on the fifth floor to 525@vine, home to Wake Forest Baptist’s Department of Physician Assistance Studies and its Nurse Anesthesia program.

The renovated former 60 series R.J. Reynolds Tobacco Company complex encompasses the new School of Medicine in 168,000 square feet of space on the north side of the building. Next year, Wake Forest University will introduce new undergraduate programs in biomedical sciences and engineering in 115,000 square feet on the south side of the building.

“Dr. McConnell and Dean Abraham’s vision for the future of medical education is complemented by the intersection of tradition and innovation that defines the school’s new location,” said Wake Forest University President Nathan O. Hatch. “This building, which will literally and figuratively bring medical and liberal arts education together under one roof, greatly enhances opportunities for closer collaboration among our students and deeper engagement within our community.”

The Bowman Gray Center for Medical Education was developed in partnership with Wake Forest Baptist’s Innovation Quarter partner, Wexford Science + Technology. The other principals involved in the project are Gaudreau Architects, which designed the project, and general contractor Whiting-Turner, which constructed the building seeking LEED certification, as determined by the U.S. Green Building Council.

“Wake Forest Baptist has been an excellent partner in this project to bring the vision for a knowledge-based community to life in downtown Winston-Salem,” said Daniel C. Cramer, senior vice president of development, Wexford. “Together we’ve shared a single vision in developing these communities—from Biotech Place to 525@vine to now the Bowman Gray Center for Medical Education.”

Wake Forest’s first-year medical students, the Class of 2020, will arrive next week for orientation and begin classes in the new building.

For more information, visit: school.WakeHealth.edu.
<table>
<thead>
<tr>
<th>PROGRAM</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowman Gray Center for Medical Education</td>
<td>Tiered Classroom</td>
</tr>
<tr>
<td>475 Vine Street</td>
<td></td>
</tr>
<tr>
<td>11 a.m. \ July 19, 2016</td>
<td></td>
</tr>
<tr>
<td>Welcome and Opening Remarks</td>
<td>John D. McConnell, M.D.</td>
</tr>
<tr>
<td>Chief Executive Officer</td>
<td>Wake Forest Baptist Medical Center</td>
</tr>
<tr>
<td>The Need for a New Medical Education Center</td>
<td>Video</td>
</tr>
<tr>
<td>A Space and Curriculum Designed for 21st Century Health Care, Personalized Learning</td>
<td>Edward Abraham, M.D.</td>
</tr>
<tr>
<td>Professor and Dean</td>
<td>Wake Forest School of Medicine</td>
</tr>
<tr>
<td>A Shared Vision</td>
<td>Nathan O. Hatch, Ph.D.</td>
</tr>
<tr>
<td>President</td>
<td>Wake Forest University</td>
</tr>
<tr>
<td>A Historic Partnership</td>
<td>Daniel C. Cramer</td>
</tr>
<tr>
<td>Senior Vice President, Development</td>
<td>Wexford Science + Technology</td>
</tr>
<tr>
<td>Tiered Classroom Demonstration</td>
<td></td>
</tr>
<tr>
<td>Tour Begins</td>
<td></td>
</tr>
</tbody>
</table>
Dr. McConnell joined Wake Forest Baptist Medical Center (WFBMC) in November 2008 after being named the Medical Center’s first Chief Executive Officer. WFBMC is composed of the fully integrated health care system (Wake Forest Baptist Health), Wake Forest School of Medicine and Wake Forest Innovations. As CEO, he has the overall responsibility for the Medical Center’s research, commercialization, education and patient care programs. The Medical Center’s annual operating budget is $2.2 billion. Previously, Dr. McConnell was the Executive Vice President for Health System Affairs at the University of Texas Southwestern Medical Center. In that capacity, he had the overall executive responsibility for the UT Southwestern faculty physician practice, University Hospitals and outpatient clinics.

A urologist and translational researcher by training, Dr. McConnell has served on the Advisory Board of National Institutes of Health-National Institute of Diabetes and Digestive and Kidney Diseases, and was elected to the Institute of Medicine of the National Academy of Sciences in 2004. He has received the Barringer Medal from the American Association of Genitourinary Surgeons and the Fuller Award from the American Urological Association in recognition of his contributions to the field of prostate disease. He has published more than 100 peer-reviewed articles and 10 books.

Dr. McConnell currently serves on the boards of Winston-Salem Business, Inc., the Winston-Salem Chamber of Commerce, the Winston-Salem Alliance, the Winston-Salem Foundation, Senior Services of Winston-Salem, Inc. and United Way of Forsyth County. Dr. McConnell also serves on the Wells Fargo Winston-Salem Advisory Board, the Piedmont Triad Partnership and the North Carolina Hospital Association Board of Directors, serving as its chair-elect and the chair of the Policy Development Committee. Dr. McConnell also serves on the American Hospital Association Regional Policy Board 3 (alternate) and the AMC Network Board of Managers.

He and his wife, Melinda, have one daughter, Cara.
Dr. Abraham received both his undergraduate and medical degrees at Stanford University and trained in internal and critical care medicine at the University of California, Los Angeles (UCLA). He was a Fulbright Postdoctoral Fellow in the Laboratory of Immunobiology at the Pasteur Institute in Paris.

After completing his training, Dr. Abraham joined the faculty at UCLA, where he was Associate Director of the Division of Pulmonary & Critical Care Medicine, Program Director of the Multi-Hospital Critical Care Training Program, Chief of Critical Care Services in the Division of Pulmonary & Critical Care Medicine and Associate Professor in the Department of Medicine.

In 1993, Dr. Abraham moved to the University of Colorado Health Sciences Center in Denver. He held numerous leadership roles during 13 years at the University of Colorado Health Sciences Center.

In 2006, Dr. Abraham moved to the University of Alabama at Birmingham (UAB) as Professor and Chair of the Department of Medicine. During his five years as chair of medicine at UAB, the department increased research funding by 25 percent, developed a physician-scientist track in the residency program, initiated a mentoring program for junior faculty, enhanced diversity among faculty and trainees, and fostered a culture of collaboration and teamwork among faculty and staff.

Dr. Abraham joined the Wake Forest Baptist Medical Center as dean of Wake Forest School of Medicine on Aug. 1, 2011. He also holds a faculty appointment as professor in the Department of Internal Medicine, Section on Pulmonary, Critical Care, Allergy and Immunologic Diseases. He is a Fellow of the American College of Physicians and the American College of Critical Care Medicine, as well as a Diplomate of the American Board of Internal Medicine and Critical Care Medicine and a member of the American Society for Clinical Investigation, Association of American Physicians, American Thoracic Society and the Society of Critical Care Medicine.

Dr. Abraham has received numerous honors, including most recently the Recognition Award for Scientific Accomplishments from the American Thoracic Society. He has published more than 400 original research articles, reviews, editorials and book chapters.

Dr. Abraham’s family includes his wife, Norma-May Isakow, Associate Director at the Institute for Public Engagement at Wake Forest University, daughter Claire, a graduate of Stanford University and medical student at Wake Forest School of Medicine, and daughter Erin, a graduate of Dartmouth College.
Dr. Nathan O. Hatch recently began his 11th year as president of Wake Forest University. In more than a decade at the helm, Wake Forest has assembled a remarkable team of leaders, made significant realignments in business and medicine, developed new programs to educate the whole person, reinvented the 21st century liberal arts education with personal and career preparedness, build a greater community through a three-year residency requirement and launched the largest fundraising effort in the University’s history.

In addition to being Wake Forest’s president, Dr. Hatch is regularly cited as one of the most influential scholars in the study of the history of religion in America. As an exceptional scholar, he joined the faculty at Notre Dame in 1975. In 1996, he was named provost and became the first Protestant to ever serve in that position at Notre Dame. Throughout his career, he has been an active leader in American higher education, most recently serving as chair of the Division I Board of Directors of the NCAA, where he led the transformative restructuring of the top division’s governance system. In 2014, Dr. Hatch was honored by his election to the American Academy of Arts and Sciences.
Dan is responsible for evaluating and executing new investment opportunities for Wexford. He brings over 38 years of diverse real estate experience throughout the U.S.

Since 1994, Dan has contributed to the purchase, development and sale of more than 5 million square feet of commercial space for Wexford and Townsend Capital, LLC. His experience includes development, construction and repositioning of commercial assets, including office, industrial, retail and research projects. In addition, Dan has been actively involved in the structuring of creative products for tax-free exchanges and the use of historic and new market tax credits to enhance project feasibility.

As Senior Vice President and Managing Director of Ackerman and Company's Washington, DC office, Dan developed and constructed the Washington Center, a multimillion-square-foot, mixed-use commercial development in Gaithersburg, Md. Prior to that, as Director of Real Estate at Opus Corporation, Dan developed, constructed, leased and sold over 2 million square feet of office, research and warehouse space in Chicago, Ill., and Tampa, Fla.
FLOOR PLANS
Bowman Gray Center for Medical Education

1st floor
Administration
Medical Grounds Cafe
Deacon Gallery

2nd floor
UGME Offices

3rd floor
Learning Communities
Resource Center

4th floor
Healthcare Learning
Collaborative

5th floor
Large Classrooms

Entrance
Courtyard

Bowman Gray Center for Medical Education
Wake Forest School of Medicine
BOWMAN GRAY CENTER

Developer Wexford Science + Technology
Architect Gaudreau Inc.
General Contractor Whiting-Turner Contracting Company
Civil Engineer/Landscape Architect Stimmel Associates
Mechanical, Electrical, Plumbing Engineer Kibart Inc.
Original Construction 1923, with 1924, 1928 and 1980 additions
Previous Uses Tobacco processing, manufacturing and storage

$60 Million cost of renovation

168,000 square feet

December 2014 renovation started

July 2016 renovation completed

1,806 construction workers employed

1,092 local employment

27 minority/female-owned businesses contracted

2,967 lights

132 tons of sheet metal

113 miles of wire

1,785 sprinkler heads

30.58 miles of conduit
SCHOOL OF MEDICINE HISTORY

1902  Wake Forest College Medical School is founded as a two-year program on the campus of Wake Forest College in Wake Forest, N.C. Thirteen students make up the charter medical class. Tuition is $37.50 per term.

1939  The will of Bowman Gray Sr. pledges a trust fund of $750,000 (approximately $12.7 million in today’s dollars) to relocate the medical school to Winston-Salem and expand its program to four years.

1941  The medical school opens as Bowman Gray School of Medicine in Winston-Salem with 75 students and aligns with North Carolina Baptist Hospital.

1943  The first class (31 members) graduates.

1944  The first woman (Jean Bailey Brooks) receives an M.D. degree.

1968  The Division of Allied Health Sciences and the Physician Assistant Program are established.

1972  The first African-American (William Grimes) receives an M.D. degree.

1993  The Department of Physiology and Pharmacology moves into a converted R.J. Reynolds Tobacco Co. warehouse in downtown Winston-Salem, the start of what would become Wake Forest Innovation Quarter.

2003  Research funding from the National Institutes of Health reaches $100 million.

2007  A legal integration forms a “single CEO” organization for the Medical Center, with clinical, research and education leaders reporting to a chief executive officer.

2011  Wake Forest University Baptist Medical Center is renamed Wake Forest Baptist Medical Center. As part of that change, the medical school is renamed Wake Forest School of Medicine.

2012  Wake Forest Biotech Place, a new biotechnology research center, opens at Innovation Quarter.

2014  525@vine, which houses the Division of Public Health Sciences and physician assistant and nurse anesthesia programs, opens in Wake Forest Innovation Quarter.

Wake Forest Baptist leaders announce plans to build a new medical education facility in Wake Forest Innovation Quarter.

2016  Bowman Gray Center for Medical Education opens.
DEACON GALLERY

Coming in late August
Beginning in 2013, the Wake Forest School of Medicine established Learning Communities or “Houses,” in support of the education of our students. Within each House, mentors, including specialty advisors representing many of the major subspecialties, serve as points for contact for academic, career, and personal advice throughout medical school. Students will meet regularly with clinical skills coaches for coaching and career advising during the first and second years. This team mentoring approach builds a solid foundation of support for medical school.

**LEARNING COMMUNITIES/HOUSES**

The goals of the Learning Communities/Houses are:

- Fostering relationships between students and faculty
- Vertical integration of medical students across class years
- Advising, mentoring, and career planning
- Modeling medical professionalism
- Creating community service opportunities
- Social networking

**Learning Communities consist of the following Houses:**

- **Red House**
- **Yellow House**
- **Blue House**
- **Green House**
GRAY FAMILY LEGACY

The Wake Forest School of Medicine and Wake Forest Baptist Medical Center have been shaped by the generosity of the Gray family for generations.

Bowman Gray’s Gift

Upon his unexpected death from a heart attack while at sea in 1935, Bowman Gray, president and chairman of R.J. Reynolds Tobacco Co., left a trust fund of $750,000 to be used for a “charitable endeavor” to help the people of Winston-Salem and the surrounding region.

The responsibility for overseeing the fund and interpreting his bequest fell to his family—primarily his widow Nathalie and his brother James.

Family Contributions

The initial gift, its stewardship by the Gray family and subsequent gifts from Gray family members helped create in Winston-Salem one of the 20th century’s finest academic medical centers.

In addition to helping to guide the decision to contribute his brother’s money toward the school, James Gray contributed his own trust fund donation of nearly $1 million. His efforts bolstered the medical school during its struggling early years.

Sons Bowman Gray Jr. and Gordon Gray each established trusts that initiated the departments of neuropsychiatry and preventive medicine.

Nathalie Gray later contributed several parcels of land and buildings at the Graylyn Estate. The land was used over the years as a neuropsychiatric hospital and as a treatment center for geriatric patients that became known as Amos Cottage. The latter was converted in the late ‘50s to serve special needs children.

The family’s philanthropy carried Wake Forest Baptist in an era before the availability of government grants, which helped the Medical Center grow in prominence as a research institution.

continued >
The Bowman and James Gray Scholarship

In addition to naming the Bowman Gray Center for Medical Education, the Bowman and James Gray Scholarship has been established to sustain the family’s legacy at Wake Forest Baptist.

Established in 2015 initially using institutional funds, the scholarship is awarded each year to four medical students in the incoming class. Each student receives at least $10,000 each year, and they are known as Bowman and James Gray Scholars throughout their medical school careers.

Recipients are chosen based on a diverse set of considerations, including financial need, extraordinary achievement and nontraditional background, to help ensure that the most exceptional physician leaders of tomorrow will continue to seek out Wake Forest School of Medicine to prepare them for careers serving humanity.

Gray family members who are also medical school alumni include: Ward Robinson, M.D. ’79 (grandson of James Gray), and his wife Pamela Pittman, M.D. ’79, both of Greensboro; their son Patrick Robinson, M.D. ’14, of Roanoke, Va.; and Carter Gray, M.D. ’99 (great granddaughter of James Gray), who practices in Raleigh.
FLOOR PLANS

Bowman Gray Center for Medical Education
First Floor

- Entrance
- Atrium
- 1st Floor
- Small Group Classrooms/Study
- Conference Rooms
- Counseling & Wellness Services
- Flex Office
- Administration
  - Enrollment Services
  - Office Of The Dean

Vine Street

Entrance

Atrium

1102
1103
1104
1105

1206

Deacon Gallery

Medical Grounds

Courtyard
FLOOR PLANS

Bowman Gray Center for Medical Education
Third Floor
FLOOR PLANS

Bowman Gray Center for Medical Education
Fourth Floor
FLOOR PLANS

Bowman Gray Center for Medical Education
Fifth Floor
Bowman Gray Center for Medical Education
First Floor
FLOOR PLAN
Bowman Gray Center for Medical Education
Second Floor

Small Group Classrooms/Study
Conference Rooms
Debrief
Flex Office
Offices
- Undergraduate Medical Education
FLOOR PLAN

Bowman Gray Center for Medical Education
Fifth Floor

Small Group Classrooms/Study
Conference Room
Quiet Study
Collaborative Classrooms
Tiered Classroom