Dialing Back to Strengthen Cancer Care

The operating room. It’s not a place often associated with feelings of calm and peace. But, for Shelley Hwang, MD, MPH, Professor, Division of Advanced Oncologic and Gastrointestinal Surgery, it’s a quiet reprieve. A place where she can set aside the day’s extraneous priorities to focus on the moment.

“Being in the operating room is still my favorite part of the week,” says the breast oncology surgeon who became the Vice Chair of Research of Duke’s Department of Surgery in November. “Surgery is a safe space in my life where the only thing that matters is the case at the moment and doing it to the best of my ability.”

In fact, that ideology has shaped her approach to medicine since her residency. During that time, she was also introduced to oncology and the complex questions of cancer care. The result has been an unending curiosity over what constitutes cancer and how providers can offer the most effective individualized therapeutic strategies.

This approach underscores Dr. Hwang’s research, clinical, and leadership decisions. At every turn throughout her career, her top priority has been combining her interests and skills to deliver the most precise level of care patients need – no more, no less.

“These fundamental questions of cancer are still the biggest challenges because it’s so hard to study them in an organized way; it is clear that there is no way to make important advances without acknowledging the necessity for team science,” says Dr. Hwang, an avid hiker and winter sports fan.

Breast Cancer the Targeted Way

Dr. Hwang’s clinical and research interests have centered on breast cancer – specifically ductal carcinoma in situ (DCIS), the most common type of non-invasive breast cancer. It starts in the milk ducts, but it’s not life-threatening because it hasn’t metastasized at diagnosis. It does, however, increase the risk of future cancers and carries an up to 30 percent chance of recurrence.

According to the American Cancer Society, approximately 60,000 cases of DCIS are diagnosed annually. But, finding one doesn’t necessarily mean the patient is in danger. More DCIS cases are now identified because people are living longer, and breast cancer risk rises with age. Additionally, diagnostic imaging, such as mammograms, makes it easier for doctors to pinpoint cancers early—perhaps too early. And, that’s where problems can develop.

“We are currently taking patients who don’t yet have cancers and treating them as cancer patients because we aren’t able to understand the natural history of the disease if we adopt a more conservative approach,” says Dr. Hwang. “We treat all DCIS like cancer because it might be in the future. That’s what a lot of our treatments are perpetuated on. To this day, it makes me frustrated that we can’t do better.”

It’s here that Dr. Hwang’s research comes in. She wants to identify ways for determining the level of therapy patients actually need to treat DCIS. Currently, she’s opening a trial for 1,200 women to participate in a randomized trial in which half will receive standard cancer treatment – surgery and radiation – and the others will be monitored for cancer progression. She will monitor their outcomes and quality of life with the goal of answering continued on page 3
I am pleased to present the spring 2016 issue of the Duke Department of Surgery newsletter. This spring, as nature envelops us in its warm, blossoming, serenading beauty, we feel a sense of transformation in the air. At Duke Surgery, we integrate this concept of novelty and innovation into our mission to improve the health of our patients. We would like to share with you several key efforts to meet this goal.

In April, the Department of Surgery held our first annual Research Day, which was a tremendous success. The day began with a masterful Grand Rounds presentation by Dr. Seth Karp, Chair of Surgery at Vanderbilt University School of Medicine, and transitioned into a scientific session that would rival any international plenary session. We received 124 abstract submissions in advance of this inaugural event, making the selection highly competitive, and this was apparent in the quality and diversity of the podium and poster presentations.

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A major department initiative is training surgeons from the ground up. Dr. Ranjan Sudan, our Vice Chair of Education, leads efforts to support the General Surgery Interest Group, a group run by medical students that aims to drive interest in pursuing surgery as a career. At our Grand Rounds, we recently welcomed Dr. Timothy Eberlein, Chair of Surgery at Washington University School of Medicine, and Dr. Keith Lillemoe, Chief of Surgery at Mass General, who spoke on decision-making and the state of surgical research.

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National Cancer Data Base Study Results Define an Optimal Waiting Time Before Surgery Following Chemoradiotherapy for Rectal Cancer

Eight-week interval shows best timeframe for overall survival and tumor downstaging according to new Journal of the American College of Surgeons study

Duke researchers analyzing data from the National Cancer Data Base (NCDB) have found that patients who had a cancer operation at precisely eight weeks—56 days—after the end of combined chemoradiotherapy had the best overall survival and successful removal of their residual tumors. The six-year study of almost 12,000 patients may bring clarity to doctors who have long debated the ideal waiting time between combined chemotherapy and radiation for rectal cancer and surgical removal of the cancer.

The study, published online in the Journal of the American College of Surgeons in advance of print publication, investigated outcomes of 11,760 patients with advanced-stage localized rectal cancer who had chemoradiotherapy and surgical treatment from 2004 to 2012. The patients had either stage II or III localized rectal cancer (stage IV is the most advanced stage). Christopher Mantyh, MD, FACS, Professor, Division of Advanced Oncologic and Gastrointestinal Surgery, led the study, and its results were presented at the Southern Surgical Association meeting in Hot Springs, Virginia, in December 2015.

Colon and rectal cancers are the third most common cancers in the United States, according to the Centers for Disease Control and Prevention (CDC), with about 135,000 new cases and 51,000 deaths per year.* (The CDC does not separate out colon and rectal cancer operation at precisely eight weeks—56 days—after the end of combined chemoradiotherapy had the best overall survival and successful removal of their residual tumors. The six-year study of almost 12,000 patients may bring clarity to doctors who have long debated the ideal waiting time between combined chemotherapy and radiation for rectal cancer and surgical removal of the cancer.

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Dr. Mantyh noted that this study differs from previous studies that evaluated the interval between chemoradiotherapy and surgery for rectal cancer in its sheer size; previous studies were typically smaller and involved single institutions. “Due to its size, we thought NCDB was a perfect resource to answer the question about the timing of surgery after chemoradiotherapy for rectal cancer. The data set represented all types of hospitals,” says Dr. Mantyh.

NCDB, a joint program of the Commission on Cancer (CoC) of the American College of Surgeons and the American Cancer Society, captures an estimated 70 percent of newly diagnosed cancer cases in the United States and Puerto Rico from approximately 1,500 cancer programs accredited by the CoC.

Patients with many types of cancer typically have a course of combined chemotherapy and radiation treatments before undergoing surgery to remove the tumors. The treatment before the operation helps to treat surrounding tissue and shrink the tumor. The researchers set out to determine the best timing interval in terms of two key measures of cancer treatment: margin positivity, that is, the cancer-free zone in the tissue surrounding the cancerous tumor after it is surgically removed; and tumor downstaging, which means the amount of the tumor that is downgraded in terms of its size and penetration into surrounding tissue. Secondary outcomes the study evaluated were readmission and death rates within 30 days of hospital discharge and overall survival.

The investigators found that the median time between chemoradiotherapy and surgery was 53 days, with the actual timing ranging from 43 to 63 days. “The odd thing about the study is that when we looked at the best timing for pathological downstaging as well as margin positivity, they both arrived at exactly the same time—56 days,” says Dr. Mantyh.

The study analysis divided patients into two groups: short-interval, those who underwent operations within 55 days of chemoradiotherapy, and long-interval, having had an operation 56 days or more after radiotherapy. The long-interval group was slightly older (age 59 vs. 58 years), more likely to be black (9.5% vs. 8%), treated at an academic hospital, and less likely to have private insurance (50.2% vs. 55.4%) and stage III disease (51.4% vs. 54.2%).

Moreover, extending the delay beyond 56 days between radiation and surgery did not result in a greater downstaging effect but was associated with a higher likelihood of positive resection margins and compromised long-term survival, suggesting that longer waiting times may risk tumor regrowth. Long-interval patients also had a lower risk of returning to the hospital within 30 days after surgery with no difference in death rates in that period, but they also had worse long-term survival.

“The real significant thing we found was that long-term mortality was significantly higher after 56 days,” reports Dr. Mantyh. “Study results suggested longer wait times might risk tumor regrowth.

The study findings can bring some clarity to the debate among oncologists about the timing of an operation after patients complete radiotherapy. “In the global picture, there’s a lot of discussion about if waiting longer for surgery is better, and if you don’t wait as long there’s less chance of tumor spreading, but none of it is backed up on good modeling data like we have in this study,” says Dr. Mantyh. “This kind of analysis is what we need in medicine and surgery. We need to have good population-based data.”

The study co-authors are Zhifei Sun, MD, Mohamed A. Adam, MD, Jina Kim, MD, Mihthin Shanois, MD, and John Migaly, MD, FACS, from the Department of Surgery at Duke University Medical Center.

Citation: Optimal Timing to Surgery After Neoadjuvant Chemoradiotherapy for Locally Advanced Rectal Cancer. Journal of the American College of Surgeons. DOI: http://dx.doi.org/10.1016/j. amjsurg.2015.12.017


Continued on page 7
Duke Surgery’s Immune Profiling Core to Assess Candidate Malaria Vaccine

Thanks to a new multimillion dollar grant from the National Institutes of Health, Dr. Kent Weinhold, Professor and Chief, Division of Surgical Sciences, and Dr. Emmanuel Walter, Department of Pediatrics, will lead efforts to evaluate the immunogenicity and efficacy of a novel malaria vaccine as part of the Vaccine Trials Evaluation Unit (VTEU) at Duke.

Led by Dr. Weinhold, Duke Surgery’s Immune Profiling Core (DIPC) will assess the cellular immune responses of volunteers in an upcoming malaria vaccine trial through the VTEU. A licensed malaria vaccine remains elusive because so far no vaccine has induced a clinically beneficial immune response in recipients.

“Malaria vaccines to date have proven to be kind of a disappointment,” says Dr. Weinhold. “The highest efficacy in the last trial reported in the New England Journal of Medicine was less than 20% so there’s a lot of room for improvement.”

According to the World Health Organization, 214 million cases of malaria and 438,000 deaths from malaria occurred in 2015. Children under the age of 5 who are more immunologically susceptible than adults represent 70% of all malaria deaths. Malaria is caused by five different species of the Plasmodium genus, a parasite transmitted by Anopheles mosquitoes.

Current malaria vaccines target antigens that elicit immune responses to disrupt the parasite life cycle or destroy infected cells in the body. However, parasite drug resistance poses a significant challenge to the development of a highly efficacious vaccine. A key goal of this award is to optimize assays for measuring specificity and immunogenicity of the candidate vaccine.

Building New Capabilities

This new funding will also enable the DIPC to monitor immune responses to novel, first-in-human vaccines against newly emerging pathogens that have migrated to the Western hemisphere and are now appearing in the Caribbean and southern United States. These emerging infectious diseases include avian influenza, West Nile Virus, chikungunya virus, and dengue virus. Additionally, future trials may assess candidate vaccines to combat the global threat of the Zika virus.

“This award creates the infrastructure for identifying efficacious vaccine strategies for developing pathogens. With this funding, we hope to make vaccines better and better over time,” says Dr. Weinhold.

As part of their capacity-building efforts, the DIPC will acquire a Becton Dickinson FACSymphony™ A5 flow cytometer. This highly sensitive instrument, just released in 2016, can perform up to 50-parameter flow cytometric analyses, essentially taking "immunological snapshots" of patient samples. This cutting-edge technology uses a lower number of cells per sample, which reduces the need for large-volume samples.

The addition of this next-generation technology to the DIPC’s immune profiling repertoire will greatly enhance ongoing multidisciplinary collaborations at Duke. The DIPC is now working to identify immune signatures that predict clinical outcomes of neoplastic, pulmonary, autoimmune, and infectious diseases, as well as treatment responses to novel cancer immunotherapies. In addition, efforts are underway to pinpoint the immune markers of cognitive decline following surgery and ischemia-reperfusion injury following transplantation.

About the VTEU

The Duke VTEU is one of eight other VTEUs in the United States funded by the National Institute of Allergy and Infectious Diseases. Clinical activities under the Duke VTEU are coordinated through the Duke Clinical Research Institute, while international clinical trials are coordinated through FHI360, the Duke Global Health Institute, and the Naval Medical Research Center. The VTEU is administered by the Duke Human Vaccine Institute and includes collaborations with the Departments of Pediatrics, Obstetrics and Gynecology, Medicine, Immunology, Pathology, and Surgery.

Mapping the Volume Requirements for Thyroid Surgery

As the average number of cases increased, the risk of complications for patients steadily decreased. Risks leveled out for surgeons who performed an average of 25 or more operations a year.

*Thyroid nodules, which can give rise to thyroid cancer, are a growing health issue, partly because we have better imaging and are able to discover them more easily,” says Dr. Sosa. “As many as 68% of healthy adults have thyroid nodules, and this, in part, has significantly increased the number of biopsies and surgeries performed in the U.S.”

More Cases Lead to Better Surgical Outcomes

Patients of low-volume surgeons (25 or fewer thyroidectomies per year) have an increased risk for complications when compared to patients of high-volume surgeons (26 or more operations a year).

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<thead>
<tr>
<th>Thyroidectomies Per Year</th>
<th>Risk of Complication</th>
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<tr>
<td>1 case</td>
<td>87% increased risk</td>
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<tr>
<td>2-5 cases</td>
<td>68% increased risk</td>
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<tr>
<td>6-10 cases</td>
<td>42% increased risk</td>
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<tr>
<td>11-15 cases</td>
<td>22% increased risk</td>
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<td>16-20 cases</td>
<td>10% increased risk</td>
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<tr>
<td>21-25 cases</td>
<td>3% increased risk</td>
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*Surgeon volume is one factor doctors and patients should consider as we talk about value-based care—helping patients get appropriate care at an optimized cost and with fewer complications,” says Dr. Sosa.

In addition to senior author Dr. Sosa, the study authors include Mohamed A. Adam, MD, Samantha Thomas, Linda Youngworth, MD; Terry Hyllop, PhD, Shelby D. Reid, PhD; Randall P. Scheri, MD, and Sanziana A. Roman, MD.
Surgical Publications in High Impact Factor Journals*


Journals with an impact factor of 10.0 or higher.
General Surgery Interest Group Ignites Surgical Interest in Medical Students

The life of a medical student is that of long days studying medicine, sleepless nights spent tirelessly working away, all while juggling one’s professional and personal life. With all the time and effort involved, it is a surprise that medical students are able to spend their time doing anything else. And yet, that is exactly what many of Duke’s medical students are doing, specifically the officers behind the Duke General Surgery Interest Group (GSIG).

The Duke GSIG is an organization that works in conjunction with the Duke Department of Surgery to foster interest in general surgery. The group holds workshops, discussions, and case studies, and provides students with research and mentorship opportunities. The entire organization is student-run, with six medical students at its helm.

“We have a mission statement, which is to stimulate interest in surgery among all Duke medical students, and to specifically get students to apply into general surgery residency programs when they have finished medical school,” says Trey Sinyard, a third-year medical student from Athens, Georgia, on a dual-degree track with the Fuqua Business School. “Sinyard plans to go into trauma surgery, critical care, and surgical oncology.

“Medical students often do not get exposure to general surgery until later in their career. So by virtue, you lose some of that interest you can generate when students first come in. We thought it would be very important to get students when they first arrive to campus to build as much of that energy as we could,” adds Harold Leraas, a third-year medical student from Olympia, Washington, who plans to go into pediatric general surgery.

“The group's mission is threefold: (1) promote interest in surgical careers, (2) serve the community, and (3) expand student knowledge by building on medical curriculum. This past year, new initiatives have arisen to further the mission’s goal.

“Most of the GSIG initiatives are brand new, but they are still well funded and appreciated by the Department of Surgery,” Sinyard explains. These new initiatives include an education outreach program at two local high schools. GSIG members volunteer their time to teach high school students who are interested in medicine, helping them learn an array of skills, including the basics of anatomy and how to diagnose patients. The outreach program offers medical students a unique opportunity to serve the community while developing their teaching skills.

The program has been a tremendous success. In October 2015, members of the GSIG flew to Chicago to discuss the program’s findings at the American College of Surgeons (ACS) Clinical Congress.

The GSIG has also recently introduced a program that brings medical students and residents together for dinners so students have an opportunity to interact with and learn from residents. “I cannot speak highly enough about how the residents have taken time out of their own schedules to be involved,” says Sinyard. The relationships fostered with residents act both as a form of mentorship and as a way to dispel many preconceived notions that medical students may have about a surgeon’s lifestyle, such as being too overwhelming and all-consuming to have a life outside of medicine.

Therefore, along with teaching students about the technical side of surgery, the GSIG aims to combat surgeon stereotypes, allowing students to realize they do not have to conform to a particular trope to succeed. These interactions allow medical students to see surgeons as regular people — people with hobbies, interests, and passions like any other person.

The greatest goal of the GSIG is to spark students’ interest in general surgery by providing more exposure to surgery than what is typically included in the medical school curriculum. As Sinyard explains, the initial interest in surgery among medical students wanes over time. “We thought that was an unfair judgment of surgery because students only received 8 weeks of very condensed, very hard work during their second year of medical school. We thought that if we could stretch the exposure of surgery into first and second year, students could make better decisions about whether surgery is for them.”

To assist students in their surgery curriculum and to cultivate greater interest in surgery, the GSIG developed a background curriculum to accompany their normal anatomy dissections. The curriculum is intended to complement the knowledge they will need during surgical rotations.

This curriculum initiative was popular among medical students, with over half of the first-year class participating in this completely optional program. The GSIG hopes that programs like these will allow medical students to be better prepared for being a surgeon, and give them the tools necessary to thrive.

“As for the future of the GSIG, Sinyard and Leraas agree they hope to see the programs continue to expand. They are also looking to eventually create an educational model for other institutions that may be having difficulties recruiting students to surgical careers.

“I would love for this to be a launching pad to engage residents and attendees so that you are plugged into that community long before you consider a surgical career,” says Sinyard.

The pair also mentions how fantastic the support has been from the Department of Surgery.

“I think this group, in particular, has been very engaged and have revived the General Surgery Interest Group,” says Ranjan Southerland, MD, Chief of Surgery, Massachusetts General Hospital, as Grand Rounds guest speakers.

“At Duke this year, it was an honor and a privilege to have two of the major thought leaders in American academic surgery speak to us,” says Dr. Kevin Southell, Chief Administrative Resident.

“In his talk, Dr. Eberlein offered a thoughtful and insightful approach to the myriad of challenges facing surgical education today. I hope that we at Duke can be early-adopters of the flexible training paradigm that Dr. Eberlein has pioneered at Washington University in St. Louis.”

“Dr. Lillemoe’s talk was both inspirational and encouraging. I especially appreciated his transparency and willingness to share how his personal decisions impacted his career trajectory,” says Dr. Southell.
Dr. Allan D. Kirk Honored as NIH Distinguished Clinical Research Scholar and Educator in Residence

Dr. Allan D. Kirk, David C. Sabiston Jr. Professor and Chairman of Surgery, was named the 2016 NIH Distinguished Clinical Research Scholar and Educator in Residence. Dr. John I. Gallin, director of the NIH Clinical Center, described Dr. Kirk as a great teacher and outstanding selection for this honor. Dr. Kirk serves as the editor-in-chief for the American Journal of Transplantation and is the surgeon-in-chief of the Duke University Health System. He is a former NIH staff member and an internationally recognized surgeon and expert on transplant immunology. He has mentored over 40 pre- and post-doctoral students during his medical career.

As part of the recognition, Dr. Kirk was invited to present the Clinical Center Grand Rounds lecture on “Costimulation Blockade for Organ Transplantation.” The videocast is available on the NIH Clinical Center website (http://videocast.nih.gov/launch.asp?19482).

New Faculty

Amy R. Alger, MD
Division of Trauma and Critical Care Surgery
Clinical interests include graduate medical education, simulation training, quality improvement, and surgical outcomes.
919-681-9361

Michael T. Stang, MD
Division of Advanced Oncologic and Gastrointestinal Surgery
Clinical interests include treatment of aberrant endocrine gland function and tumor process of the thyroid, parathyroid, adrenal glands, and endocrine pancreas. Research interests include outcomes of robotic surgery of the thyroid, molecular mechanisms of thyroid cancer, and cell biology, including the study of how cells process and recycle (autophagy) and how this is impacted by the most common inflammatory disease that affects thyroid patients — autoimmune thyroid disease (Hashimoto’s Thyroiditis).
919-576-8000

Faculty Promotions

Michael N. Ferrandino, MD
Division of Urology
was promoted to Associate Professor

Mark W. Onaitis, MD
Division of Cardiovascular and Thoracic Surgery
was promoted to Associate Professor with Tenure

Jeffrey G. Gaca, MD
Division of Cardiovascular and Thoracic Surgery
was promoted to Associate Professor

G. Chad Hughes, MD
Division of Cardiovascular and Thoracic Surgery
was promoted to Associate Professor with Tenure

Georgia Tomaras, PhD
Division of Surgical Sciences
was promoted to Professor with Tenure

Detlev Erdmann, MD, PhD
Division of Plastic Surgery
was promoted to Professor

Walter T. Lee, MD
Division of Head and Neck Surgery and Communication Sciences
was promoted to Associate Professor

Duke Surgery Advanced Educational Courses

Duke Surgery is dedicated to training surgeons using the latest surgical techniques and innovative approaches in minimally invasive surgery, microsurgery, and robotic surgery. Utilizing a combination of didactic lectures, live surgeries, video, and hands-on labs, hundreds of surgeons and allied health professionals from around the world have been trained at Duke Surgery. CME credit is available for a number of courses held throughout the year in a wide range of surgical specialties. Following are upcoming Duke Surgery advanced educational courses. For a complete list of all of Duke Surgery’s educational initiatives, visit surgery.duke.edu/education.

Duke Tuesday in Urology
July 12, 2016
Searle Center – Duke Campus
Durham, NC

Masters of Surgical Oncology
July 29-30, 2016
Umstead Hotel
Cary, NC

Annual Fresh Cadaver Flap Dissection Course
August 5-7, 2016
Duke Campus
Durham, NC

Duke Tuesday in Urology
November 1, 2016
Searle Center – Duke Campus
Durham, NC

Duke Masters of Minimally Invasive Thoracic Surgery
September 15-17, 2016
Waldorf Astoria
Orlando, FL

Duke Masters of Minimally Invasive Bariatric Surgery
March 2-4, 2017
 JW Marriott
Orlando, FL

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As part of the recognition, Dr. Kirk was invited to present the Clinical Center Grand Rounds lecture on “Costimulation Blockade for Organ Transplantation.” The videocast is available on the NIH Clinical Center website (http://videocast.nih.gov/launch.asp?19482).
Duke Surgery Announcements and Honors

Joshua S. Broder, MD, Associate Professor, Division of Emergency Medicine, received the Duke University School of Medicine’s Master Clinician/Teacher Award for 2016.

Delilah Erdmann, MD, PhD, Professor, Division of Plastic, Maxillofacial, and Oral Surgery, was appointed as a scientific reviewer on the Joint Program Committee for Clinical and Rehabilitative Medicine with the Department of Defense (January 7-8, 2016).

Shelley Hwang, MD, Professor, Division of Advanced Oncologic and GI Surgery, was appointed Vice Chair of the 2016 CORD Faculty Teaching Award.

Brant Inman, MD, Professor, Division of Urology, was selected to participate in the Early Career Researcher program at the Center for Scientific Review, National Institutes of Health (NIH).

The birthplace of the PA program, Duke welcomed its first class of three PAs in 1965. The program was developed by Dr. Eugene Stead, former chairman of the Department of Medicine, who believed that mid-level practitioners could increase consumer access to health services by extending the time and skills of the physician. Today, physician assistants are well-recognized and highly sought-after members of the health care team. Working interdependently with physicians, PAs provide diagnostic and therapeutic patient care in virtually all medical specialties and settings.

DUKE NEWS AND HONORS

U.S. News ranks DUHS hospitals among national, state, local leaders

Duke University Hospital (DUH) again is included on the Honor Roll of top hospitals in the nation by U.S. News & World Report. Duke ranks Number 14 in the magazine’s 2015-16 listings.

DUH was ranked number 1 in North Carolina and number 1 in the Raleigh-Durham area. In addition, Duke Regional Hospital and Duke Raleigh Hospital were ranked eighth and twelfth, respectively, in North Carolina, and third and fifth in the Raleigh-Durham area. Of note is that Duke Regional was ranked ahead of both Rex Hospital and WakeMed Hospitals in both the state and the Raleigh-Durham area. Duke Raleigh Hospital was ranked ahead of WakeMed Hospitals in both the state and the Raleigh-Durham area.

Honor Roll designations were awarded to just 15 hospitals out of nearly 5,000 evaluated by U.S. News for its rankings.

Hospitals on the exclusive list achieved high scores in at least six of the 16 medical specialties that form the basis of the magazine’s survey.

Among specialties receiving top scores at Duke were cardiology and heart surgery (6th), pulmonology (7th), ophthalmology (8th), urology (9th), rheumatology (12th) and nephrology (17th).

Duke University Hospital is ranked nationally in another six adult specialties (cancer, diabetes/endocrinology, geriatrics, gynecology, neurology/neurosurgery, orthopedics), along with eight pediatric specialties (cancer, cardiology/heart surgery, diabetes/endocrinology, gastroenterology/GI surgery, neonatology, nephrology, pulmonology and urology). It was also high-performing in one adult specialty (gastroenterology/GI surgery).

Duke Regional was ranked “high performing” in four specialties: diabetes and endocrinology, geriatrics, pulmonology and urology. Duke Raleigh was ranked “high performing” in nephrology and orthopedics.

Duke Children’s Hospital listed among nation’s best by US News

U.S. News & World Report has included Duke Children’s Hospital and Health Center in its 2015-16 list of the nation’s best children’s hospitals.

Duke Children’s Hospital was ranked in cancer, cardiology and heart surgery, diabetes and endocrinology, gastroenterology and GI surgery, neonatology, nephrology, pulmonary, and urology.

Duke PA Program Ranked Number One in Country

Duke University’s Physician Assistant (PA) Program ranked number one among PA programs in the country, according to new U.S. News & World Report graduate and professional school rankings released on March 10, 2015.
Mission
Through sustainable, multidisciplinary teams Duke Surgery will:
• Provide insight regarding the fundamental nature of patient health and disease
• Empower all patients, trainees, and colleagues with knowledge
• Provide safe and high quality care based on an advanced understanding of and respect for our patients’ needs and guided by best practices

Vision
Duke Surgery: United, for All Patients

Partners in Philanthropy
A gift to the Duke Department of Surgery is a gift of knowledge, discovery, and life. Every dollar is used to further our understanding of surgical medicine, to develop new techniques, technology, and treatments, and to train the surgeons and researchers of the future.

We would like to welcome Marcy Romary, Senior Major Gifts Officer, with Duke Health Development and Alumni Affairs.

If you would like to make a philanthropic investment in Duke Surgery, please contact Marcy at marcia.romary@duke.edu or visit surgery.duke.edu/gift.

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