SURGERY UPDATE LEADING THE WAY



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Department of Surgery

Dedicated to Clinical Care, Research and Education

- · Cardiothoracic Surgery
- Colorectal Surgery
- · Community Surgery
- Surgical Education
- · General Surgery
- · Pediatric Surgery
- · Surgical Oncology
- · Transplant Surgery
- Trauma and Critical Care
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Leading the Way is written for physicians for medical education purposes only. It does not provide a complete overview of the topics covered and should not replace the independent judgment of a physician about the appropriateness or risks of a procedure for a given patient.

Congratulations and Best Wishes to the Department of Surgery Chief Residents

The featured picture in this issue of *Leading the Way* acknowledges the departing Chief Residents as we prepare for the annual Eberbach banquet in their honor. We are extremely fortunate to host Dr. E. Christopher Ellison as this year's Eberbach Lecturer. Dr. Ellison holds the Robert M. Zollinger Endowed Chair and is Associate Vice President for Health Sciences, Vice Dean of Clinical Affairs, and CEO of the Faculty Group Practice at The Ohio State University.

Congratulations to the graduating Chief Residents (listed in left column). Words cannot express our appreciation for their many extra efforts on behalf of our patients, our staff, and our faculty. We would also like to recognize the departing fellows (listed in right column) as they move on to their new positions:

Amanda Amin, M.D.

Fellowship in Breast Surgical Oncology, Northwestern University, Chicago, Illinois

Ashley Kappes Cayo, M.D.

Fellowship in Endocrine Surgery, The University of Texas M. D. Anderson Cancer Center, Houston, Texas

Kelly Collins, M.D.

Fellowship in Solid Organ Transplantation, Washington University, St. Louis, Missouri

Jennifer Roberts, M.D., M.S.

Fellowship in Trauma and Critical Care, University of Minnesota, Minneapolis, Minnesota

James Rydlewicz, M.D.

Fellowship in Minimally Invasive Surgery, The Ohio State University, Columbus, Ohio

Vascular Surgery:

Nicholas Southard, D.O.—The Iowa Clinic, Iowa Methodist Medical Center, Des Moines, Iowa

Surgical Critical Care:

Thomas Carver, M.D.—Department of Surgery, Medical College of Wisconsin

Minimally Invasive Surgery:

Maurice-Pierre Pagé, M.D.—Central Ohio Surgical Associates, Columbus, Ohio

Hepato-Pancreato-Biliary Surgery:

Charles Pilgrim, M.D., Ph.D.—Monash University Department of Surgery, The Alfred Hospital, Melbourne, Australia

Endocrine Surgery:

Ν

Azadeh Carr, M.D.—Department of Surgery, Medical College of Wisconsin

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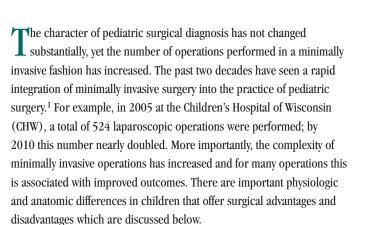
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Advances in Minimally Invasive Surgery



General Surgery Resident



Physiologic and Anatomic Differences in Pediatric Patients

There are several physiological and technical differences between performing laparoscopic operations in neonates and young children vs. adults. Neonates are particularly sensitive to absorption of CO₂ with pneumoperitoneum creation, and can develop respiratory acidosis (often correctable by increasing the neonate's minute ventilation).

Increased intra-abdominal pressure can also compromise venous return, causing hypotension. Intra-abdominal and intra-thoracic pressures >10 mmg Hg sometimes are poorly tolerated by the neonate.² Clinical experience has shown good adaptation to incrementally increased CO₂ pneumothorax and pneumoperitoneum.1 The volume of gas required for pneumoperitoneum in neonates is small, and flow must be kept low, utilizing an intentional leak from a trocar to help control pressure overshoot. Additionally, neonates are prone to hypothermia from insufflated gas (if used for longer operations). Use of heated circuits and blanket warmer, increasing room temperature, and minimizing gas flows are important methods to prevent hypothermia.

Several unique advantages are encountered when performing laparoscopy in young children. In most toddlers and many children, the umbilical ring remains open and allows easy access to the peritoneum with low risk of injury. In infants younger than eight weeks of age, the umbilical skin typically is healed incompletely, and can be spread open with a hemostat, allowing for direct access to the peritoneum through the open umbilical ring.³ In newborns, persistence of fetal circulation with patent



DAVID M. GOURLAY, MD Division of Pediatric Surgery

umbilical vessels and a potential right-to-left shunt makes the neonate more susceptible to severe inadvertent gas embolisms, and ligation of these structures prior to insufflation may be advisable. While no difference in outcome from open versus laparoscopic pyloromyotomy have been identified in numerous studies, all agree the cosmetic outcome is superior with the laparoscopic approach.⁴

Given the forgiving nature of the umbilical scar, the largest trocar is typically inserted through the umbilicus allowing for optimal cosmesis. If a laparoscopic assisted bowel resection is planned, enlargement of the umbilical incision a few millimeters on either side often permits evisceration of the bowel with relative ease. In such cases, bowel resections and reanatemosis can be performed extrapertioneal followed by closure of the umbilical incision with a relatively small visible scar. This approach is commonly used in laparoscopic choledochal cyst resections, bowel resection for Meckel's Diverticulum, and other congenital anomalies.

Because the abdominal wall of neonates and young children is relatively thin, the use of stab incisions without trocars improves cosmesis and decreases costs. With the advent of 3 mm instruments, these stab incisions allow for incisions that create scars that are barely perceptible in long-term follow-up. The thin abdominal wall also allows passage of intra-corporal suture directly through the abdominal wall without the need for larger trocars to accommodate the needle.

Another significant advantage in young children is the small diameter of intra-abdominal vasculature. It is not uncommon to use hook cautery to divide the short gastric vessels while doing a fundoplication or to divide the sigmoid and rectal vessels in doing endorectal pull-through for Hirschsprung Disease. The small blood vessels relative to adults avoids the need for more expensive sealant devices that may require the use of a trocar.

On the contrary, a major limiting factor in minimally invasive surgery in children has been the use of stapling devices. Until recently, there has been little interest or ability to create stapling devices specifically designed for children. Therefore, 12 mm or larger trocars have been required for endoscopic staplers. However, in the near future, 5 mm stapling devices are anticipated to come on to the market. Similarly, robotic surgery has found a limited role in pediatric surgery due to the size of the trocars and instruments required.

in Pediatric Patients

Improved Outcomes with Minimally Invasive Surgery in Children

In the last decade, there has been a tremendous shift for specialty trained pediatric surgeons to perform minimally invasive surgery over open procedures. However, not all laparoscopic procedures necessarily have demonstrable benefit. A good example is pyloromyotomy. Multiple, randomized control trials have been performed with conflicting results. Overall, there is better cosmesis, less postoperative pain, and fewer episodes of emesis vs. open pyloromyotomy. However, there is no difference in operating time, adverse events, or length of recovery.⁴ Another area of controversy is laparoscopic appendectomy. While it has also become commonplace to pediatric surgeons to perform a laparoscopic over an open appendectomy, the data to support this change are less clear. A recent review examining this issue using a national database of pediatric patients reported that laparoscopic appendectomy for perforated appendicitis was associated with shorter hospital stays and lower costs, but for non-perforated appendicitis, the laparoscopic approach was more costly without measurable differences in patient outcome.⁵

However, many minimally invasive procedures in children have been demonstrated to be associated with better outcomes. Laparoscopic reduction for patients with radiographically irreducible intussusception has been demonstrated to be highly successful and associated with shorter lengths of stay and lower hospital charges. ^{5,6} Long-term comparisons between the open transabdominal approach and the laparoscopic approach for Hirschsprung Disease also indicates that overall results are comparable with better cosmesis, quicker resumption of feeds, and earlier discharge from the hospital. ⁷

Our own center reported that in carefully selected newborns, thoracoscopic repair of congenital diaphragmatic hernia, with or without a patch, was associated with shorter hospitalizations and lower costs for the patient compared to open repair. ⁸ Similarly, thoracoscopic resection of congenital airway malformations is associated with reduced hospital stay, decreased pain, better post-operative pulmonary status, improved cosmesis, and perhaps, a lower complication rate. ⁹

Conclusions

The conversion rate from laparoscopic to open surgical case remains 1.2% depending on the case. The development of modern, low-flow CO_2 insufflators, smaller instruments and telescopes, as well as advanced techniques, have made minimally invasive surgery in neonates safe and feasible. While initially, operative times may be longer, increased experience of the surgeon has led to shorter operative times. Additionally, increased operative costs due to operative length are offset by decreased hospital costs. Decreased adhesion formation is a significant aspect of laparoscopic surgery considering that a neonate will face a 1-2% risk of adhesive bowel obstruction each year for the rest of their lives following open laparotomy.





Left: Hirschsprung disease. Right: Hypertrophic pyloric stenosis.

Minimally invasive horizons continue to broaden with the advent of small instruments for both traditional minimally invasive and robotically assisted surgery, and newly developed natural orifice surgeries. •

FOR ADDITIONAL INFORMATION on this topic, see references, visit mcw.edu/surgery, or contact Dr. Gourlay at 414-266-6550; dgourlay@chw.org.

REFERENCES

- 1. Ponsky TA, Rothenberg SS: Minimally invasive surgery in infants less than 5 kg: Experience of 649 cases. *Surg Endosc* 2008;22:2214–2219.
- Ure BM, Suempelmann R, Metzelder MM, Kuebler J: Physiological responses to endoscopic surgery in children. Semin Pediatr Surg 2007;16:217–223.
- Taylor SP, Hoffman GM: Gas embolus and cardiac arrest during laparoscopic pyloromyotomy in an infant. *Can J Anaesth* 2010;57:774–778.
- St Peter SD, Holcomb GW, 3rd, Calkins CM, et al: Open versus laparoscopic pyloromyotomy for pyloric stenosis: A prospective, randomized trial. Ann Surg 2006;244:363–370.
- Masoomi H, Mills S, Dolich MO, et al: Comparison of outcomes of laparoscopic versus open appendectomy in children: data from the Nationwide Inpatient Sample (NIS), 2006–2008. World J Surg 2012;36:573–578.
- Fraser JD, Aguayo P, Ho B, et al: Laparoscopic management of intussusception in pediatric patients. J Lap Adv Surg Tech 2009:563–565.
- Kia KF, Mony VK, Drongowski RA, et al: Laparoscopic vs open surgical approach for intussusception requiring operative intervention. J Pediatr Surg 2005;40(1):281–284.
- Teitelbaum DH, Kim AC, Langer JC, et al: Endorectal pull-through for Hirschsprung's Disease—A multicenter, long-term comparison of results: Transanal vs transabdominal approach. J Pediatr Surg 2010;45:1213— 1220.
- Gourlay DM, Cassidy LD, Sato TT, et al: Beyond feasibility: A comparison of newborns undergoing thoracoscopic and open repair of congenital diaphragmatic hernias. J Pediatr Surg 2009;44:1702–1707.
- Diamond IR, Herrera P, Langer JC, Kim PC: Thoracoscopic versus open resection of congenital lung lesions: A case-matched study. *J Pediatr Surg* 2007;42:1057–1061.

Patient Derived Pancreatic Cell Lines



SUSAN TSAI, MD, MHS Division of Surgical Oncology

nancreatic cancer is one of the most lethal neoplasms, with an overall If ive-year survival rate of less than 5%. Despite progress in many other solid organ tumors, few therapeutic improvements have been developed for the treatment of pancreatic cancer. Thus, the prognosis for patients with pancreatic cancer has not improved appreciably. The challenge of developing effective therapies for pancreatic cancer lies in part in the complex genetic diversity of the tumor. Whole exome sequencing of 24 pancreatic cancer tumors has demonstrated that in a single pancreatic cancer more than 12 different core signaling pathways can be affected, but no single pathway is consistently mutated between different tumors.² Such heterogeneity makes the success of a single universal systemic therapy less likely and argues for a more personalized approach to pancreatic cancer therapy. To achieve this, it is important to establish primary human pancreatic carcinoma cell lines as clinically relevant in vitro models for studying the biologic and molecular properties of this cancer. In contrast to established pancreatic cancer cell lines, which are available from commercial vendors and have been cultured for a long time, primary patient derived cell lines are maintained at a low passage. This is important as a variety of biologic and genetic rearrangements can occur in established cell lines over time that alter the properties of these cell lines so that they may not reflect those of the original tumor tissues in vivo. Importantly, since the treatment history of primary patient derived cell lines is known, these cell lines may offer important insights to the biology of chemotherapeutic resistance.

Since 2011, we have attempted to establish pancreatic carcinoma cell lines from surgical specimens of adenocarcinomas. To do this, we have utilized a heterotopic xenograft model using immune-compromised mice for *in vivo* expansion. Briefly, pancreatic tumors from surgical specimens are rapidly processed and implanted into bilateral flanks of NOD/SCID mice. Engrafted tumors develop over a course of 16 to 20 weeks. Once the tumors reach ~1.5 cm in size, the animals are euthanized and the tumor is appropriated for additional tumor expansion in mice, cryopreservation, or cell line development. To develop cell lines, xenograft tumors are exposed to a brief collagenase digest and then cultured in enriched media. The tumor cells are then characterized by their immunohistochemical protein expression, doubling time, colony forming efficiency, chromosomal analysis, and tumorgenicity studies.

The first pancreatic cancer cell line developed at MCW was from a patient with metastatses to his liver and an elevated tumor marker (CA19-9) of greater than 2000 mg/dL (Figure 1A). His work-up included genetic testing, which revealed a BRCA2 mutation (predicting a favorable response to platinum-based

agents). After the initiation of a platinum agent, he received chemotherapy for over a year and had a complete radiographic response to therapy in his liver but developed new platinum resistant clonal metastases in his spleen—which incidentally ceased to produce the tumor marker CA19-9. From his splenic metastases, we were able to then develop a unique cell line utilizing the xenograft model (Figure 1B). This cell line demonstrates the characteristic immunohistochemical staining pattern of a pancreatic cancer (Figure 1C), but in addition, is remarkable for being resistant to platinum-based agents despite containing a BRCA2 mutation. To date, we have succeeded in establishing eighteen new human pancreatic cell lines. This serves as an important resource to propel ongoing translational efforts in the area of pancreatic cancer biology and therapeutics. •

FOR ADDITIONAL INFORMATION on this topic, see references, visit mcw.edu/surgery, or contact Dr. Tsai at 414-805-5084; stsai@mcw.edu.

REFERENCES

- Siegel R, Naishadham D, Jemal A: Cancer statistics, 2012. CA: Cancer J Clin 2012;62(1):10-29.
- Jones S, Zhang X, Parsons DW, et al: Core signaling pathways in human pancreatic cancers revealed by global genomic analyses. Science 2008;321(5897):1801-1806.

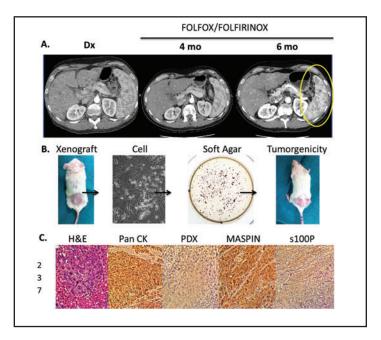


Figure 1—A. Metastatic pancreatic cancer with liver metastases at presentation. Subsequent platinum-based therapies produced a complete radiographic response in the liver with new splenic metastases. B. Development of xenograft tumors from which primary patient derived cell lines are produced and characterized. C. Immunohistochemical staining supporting the pancreatic origin of the cell line.

Translating Laboratory and Clinical Studies to Improve Patient Outcomes-

30-Year Mission of the Surgical Microbiology Research Laboratory in the Department of Surgery



CHARLES E. EDMISTON, JR., PhD, MS, CIC

Professor of Surgery & Froedtert Hospital Epidemiologist and Director, Surgical Microbiology Research Laboratory

The Surgical Microbiology Research Laboratory was established as an independently funded research facility within the Department of Surgery in 1982. The focus of the laboratory has been the epidemiology, pathogenesis, management and prevention of surgical site infections. For the past 30 years, the laboratory has participated in several research "firsts" which have collectively served to improve surgical patient outcomes, while embracing a philosophy of interdisciplinary collaboration.

Selective "Firsts" Observations and Citations

- 1985—First laboratory to document the toxicity of povidone-iodine when used for peritoneal irrigation (Matthews *et al*, *Surg Forum* 1985;36:157–159).
- 1986—First pharmacokinetic study to document that aztreonam provides high therapeutic levels in both abdominal tissues and bile (Condon et al, Antimicrob Agents Chemother 1986; 29:1101–1103).
- 1988—First study to report that anaerobic bacteria play a major role in recurrent non-puerperal breast abscess, necessitating change in antimicrobial therapy (Walker et al, Arch Surg 1988;123:908–911).
- 1989—First study to demonstrate that antimicrobial agents used in preoperative oral bowel preparation reduced aerobic and anaerobic microbial colonization on colonic mucosal surface (Groner et al, Arch Surg 1989;124:281–284).
- 1990—First study to document that antibiotic (peritoneal) lavage was not an effective strategy for preventing colonic bacterial adherence to the serosal mesothelium following bowel perforation (Edmiston *et al, World J Surg* 1990;14:176–183).
- 1990—First study to document the skin-surface colonization of biofilm-producing staphylococci in hospitalized vascular patients prior to surgery (Levy et al, J Clin Microbiol 1990;28:664–669).
- 1991—First characterization of the role of Peptostreptococcus collagenase activity in the pathogenesis of non-puerperal breast infections (Krepel et al, J Infect Dis 1991;163:1148–1150).
- 1991—First observation that small bowel transplantation promoted bacterial overgrowth and translocation (Browne *et al.*, *J Surg Res* 1991;51:512–517).
- 1992—First documentation that untreated diabetes promoted intestinal bacterial overgrowth (Roza *et al*, *Am J Surg* 1992;163:417–421).

- 1992—First published pharmacokinetic analysis of the penetration of selective antimicrobial agents used in the treatment of diabetic foot infections (Seabrook *et al, Surgery* 1992;110:671–677).
- 1992—Earliest documentation that the "diabetic gut" is a risk factor in postoperative infection (Frantzides *et al, Surg Res Comm* 1992;12:33–42).
- 1992—First clinical study to document the therapeutic efficacy of beta-lactamase inhibitor (ampicillin-sulbactam) antibiotic in the treatment of intraabdominal infection (Walker *et al*, *Ann Surg* 1992;217:115–121).
- 1994—First case review validation of the efficacy of in-situ replacement of arterial prosthesis infected by biofilm-forming staphylococci (Towne *et al*, *J Vasc Surg* 1994;19:226–235).
- 1995—First clinical documentation in the U.S. of the clinical efficacy of "antibiotic-locked" therapy to treat central line infections in patients receiving total parenteral nutrition (Krzywda *et al*, *Infect Control Hosp Epidemiol* 1995;16:596–598).
- 1999—First laboratory model to document the therapeutic mechanistic efficacy of "antibiotic-lock" in treatment of line-associated (Hickman) infections (Andris et al, Nutrition 1999;14:427–432).
- 1999—First study to document microbial nasopharyngeal shedding in the operating room environment during revascularization procedures (Edmiston et al, AORN J 1999;69:1169–1183).
- 2003—First clinical report of multidisciplinary team response at Froedtert Hospital to Monkeypox outbreak in North America (Edmiston et al, Am J Infect Control 2003;31:382–384).
- 2004—First laboratory documentation that broadspectrum quinolone, Moxifloxacin was effective against surgical microbial pathogens (Edmiston et al, Antimicrob Agents Chemother 2004;48:1012–1016).

- 2004—First documentation that traditional antimicrobial dosing for patients undergoing bariatric surgery was sub-therapeutic leading to increased risk of infection (Edmiston et al, Surgery 2004;136:738–747).
- 2004—First clinical report of fungal biofilm formation on surface of infected cochlear implant device (Cristobal et al, Ped Infect Dis J 2004;23:774–778).
- 2005—First documentation of the molecular epidemiology of microbial contamination within the operating room environment during device-related (vascular graft implantation) surgery (Edmiston et al, Surgery 2005;138:572–588).
- 2005—First documented animal model to validate the benefit of interferon-gamma for the treatment of invasive aspergillosis (Johnson *et al, Surg Infect* 2005:6:397–407).
- 2006—First laboratory study to document that the antibiotic daptomycin was effective at penetrating bacterial biofilms on the surface of selective biomedical devices (Edmiston et al, Am J Surg 2006;192:344–354).
- 2006—First characterization of the impact of an antimicrobial-coated suture technology to prevent bacterial contamination by intraoperative surgical pathogens (Edmiston et al, J Am Coll Surgeons 2006:203:481–489).
- 2007—First clinical study (FDA) to document that a 2% chlorhexidine gluconate (CHG) coated polyester cloth was more effective than aqueous 4% CHG in reducing bacterial skin surface flora (Edmiston et al, Am J Infect Control 2007;35:89–96).
- 2007—First study to document the tissue penetration of the quinolone garenoxacin in surgical patients (Edmiston *et al, Surgical Infections* 2007;8:179–187).

Selective Firsts continued on page 7

Global Surgery and Children's Hospital



SARAH L. M. GREENBERG, MD General Surgery Research Resident



KEITH T. OLDHAM, MD Division of Pediatric Surgery



Members of the CHW and Peruvian Surgical Team in Moyobamba, Peru—September 2012.

In the United States, a society that spends nearly 10 billion dollars per Lyear on cosmetic plastic surgery, 1 it is difficult to imagine a place with no surgical infrastructure. However, this is the reality of life, and often death, in many parts of the world. According to the World Health Organization (WHO), two billion people across the globe have no access to emergency or surgical care.² This is two billion people for whom obstructed labor means almost certain death, two billion people for whom a broken bone equates to permanent disability, two billion people for whom breast cancer is an untreatable disease. However, unlike the success of plastic surgery in captivating the public's interest, lack of broad-based and general surgical care in many parts of the world has yet to garner any significant attention. Noncommunicable disease, including most diseases amenable to surgical intervention such as cancer, trauma, and congenital anomalies, is a growing disease entity that has become the leading cause of death worldwide. Nearly eight million people died of cancer in 2010, an increase of 38% over the last two decades. Similarly, over five million people died of injuries in 2010, a 24% increase from 1990, making injuries the etiology of nearly 10% of all global fatalities.3



Dr. Oldham and colleagues operating on a child in Lima, Peru in Sept. 2011.

Despite the great burden of surgical disease and the devastation lack of treatment can cause, creating equitable and universal access to essential and emergency surgical care has yet to become a global priority. Many argue that the need does not exist, that it is too difficult and expensive to perform, and that it will take necessary resources away from the majority only to help a few. All these arguments, however, are false. Numerous analyses have proven surgery to be at least as cost-effective as treatments commonly delivered for other diseases, such as oral rehydration solution⁵ and antiretroviral therapy,⁶ and well within recommended international financial thresholds for program implementation. 4-6 Additionally, many international and local organizations have demonstrated that it is possible to successfully perform surgery in low-resource settings. In 2011, Smile Train performed more than 117,000 procedures, Médecins Sans Frontières completed more than 73,000,8 and the non-governmental organization Partners In Health delivered low-cost surgical care to many patients throughout rural Haiti and Rwanda. However, despite the focus of a few groups like these, equitable delivery of global surgical care remains grossly unrealized. The WHO reports that 10 to 20% of deaths of young adults in developing countries are secondary to inadequate surgical knowledge, ² earning global surgery the poignant but persistent designations of the "neglected stepchild of global health"9 and the "most serious manifestation of social inequity in health care." ¹⁰

In order to help address the unmet burden of global surgical disease, the pediatric surgeons from Children's Hospital of Wisconsin (CHW) have partnered with Dr. Luis Vasquez and the Yantaló Foundation to build surgical capacity and educational opportunities in Peru. Dr. Vasquez and his family established the Yantaló Foundation in 2005 to augment the health and education of the town of Yantaló, a small farming community nestled deep in the Peruvian Amazon, where Dr. Vasquez's mother was born. Since its creation eight years ago, the Foundation has spearheaded many community health and education initiatives, including the construction of Adelina Soplin—Clínica Yantaló & Centro de Diagnóstico, a 16bed medical facility named after Dr. Vasquez's mother, which is scheduled to open later this year.

of Wisconsin

Since 2008, teams of pediatric surgical specialists from CHW and around the world, led by Dr. Keith Oldham, have traveled to Peru to work with the Yantaló Foundation. These surgical specialists, which have included Milwaukee's Dr. Keith Oldham, Dr. Thomas Sato, Dr. Casey Calkins, Dr. Dave Lal, Dr. Frank Ruiz, Dr. Li Ern Chen, Dr. Ramin Jamshidi, and Terry Derks, PA-C, work with local surgeons to provide surgical care to children who would otherwise not be able to access needed operations in Yantaló and the surrounding areas. They have performed numerous procedures, including surgeries for anorectal malformations, complex urogenital abnormalities and esophageal reconstruction. These teams also unite with local Peruvian pediatric surgeons in hosting an annual international pediatric surgical conference, generating an environment of sustainable local care provision and quality improvement through education. The next conference is scheduled for September 2013 in Arequipa, and will coincide with the group's next trip. Pediatric surgical colleagues from France and across the United States have joined Dr. Oldham and Dr. Vasquez on these trips, helping to ensure that the children of Yantaló and other areas of Peru are not included within the two billion people across the globe without access to surgical care. •

FOR ADDITIONAL INFORMATION information regarding the Yantaló Foundation and the work they and CHW's surgeons are doing, please visit http://www.yantalo.org or contact Dr. Oldham at 414-226-6557; koldham@mcw.edu.

REFERENCES

The American Society for Aesthetic Plastic Surgery: Cosmetic Surgery: 15 Years of Facts and Figures. Available at http://www.surgery.org/ consumers/plastic-surgery-news-briefs/cosmetic-surgery-15-yearsfacts-figures-infographic-1036566. Accessed April 7, 2013.

- World Health Organization: Essential surgical care makes a difference. Available at http://www.who.int/surgery/publications/ EssentialsurgicalcareSept2010.pdf. Accessed October 21, 2012.
- Lozano R, Naghavi M, Foreman K, et al: Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: A systematic analysis for the Global Burden of Disease Study 2010. Lancet 2012;380(9859):33.
- McCord C, Chowdhury Q: A cost effective small hospital in Bangladesh: What it can mean for emergency obstetric care. Int J Gynaecol Obstet 2003;81(1):83-92.
- 5. Gosselin RA, Thind A, Bellardinelli A: Cost/DAIY averted in a small hospital in Sierra Leone: What is the relative contribution of different services? World Journal of Surgery 2006;30(4):505-511.
- Gosselin RA, Heitto M: Cost-effectiveness of a district trauma hospital in Battambang, Cambodia. World Journal of Surgery 2008;32(11):2450-2453.
- Smile Train: 2011 Annual Report—Smile Train. Available at http:// www.smiletrain.org/assets/pdfs/2011-annual-report.pdf. Accessed December 30, 2012.
- Medecins Sans Frontieres: Activity Report 2011. Available at http://www.msf.org/shadomx/apps/fms/fmsdownload.cfm?file_ uuid=EA778CB4-85CC-4B8D-A269-8072DF2448E9&siteName=msf. Accessed October 20, 2012.
- Farmer PE, Kim JY: Surgery and global health: A view from beyond the OR. World Journal of Surgery 2008;32(4):533-536.
- 10. Mahler H: Healthcare for all. XXII Biennial World Congress of the International College of Surgeons. Mexico City, Mexico, June 1980. Available at http://www.who.int/surgery/strategies/ Mahler1980speech.pdf. Accessed October 20, 2012.

Surgical Microbiology Research Laboratory Selective Firsts continued from page 5

- 2007—First study documenting the in vitro activity of a novel neolipoglycopeptide active against vancomycinresistant enterococci (Griffith et al, J Am Chem Soc 2007;129:8150-8155).
- 2008—First study to document the impact of a standardized protocol for achieving high skin surface concentrations of chlorhexidine gluconate (CHG) for patients undergoing elective surgical procedures (Edmiston et al, J Am Coll Surg 2008;207:233-239).
- 2010—First laboratory study documenting the *in vitro* activity of a silver antimicrobial nano-technology luer activated device (LAD) for reducing the risk of MRSA infection in vascular access patients (Edmiston et al, Am J Infect Control 2010;38:421-423).
- 2011—First study to document the potential riskreduction benefits of an innovative antimicrobial glove

- technology to prevent bacterial contamination of the surgical wound. (Edmiston et al, Am J Infect Control 2011;39:98-103).
- 2011—First documentation that patients with BMI > 30 undergoing C-section were sub-optimally dosed prior to surgery increasing the risk for postoperative surgical site infection (Pevzner et al, Obstetrics & Gynecol 2011;117:877-882).
- 2013—First demonstration that an innovative antimicrobial surgical glove was effective at neutralizing enveloped viruses (HIV, HEP-C) following percutaneous injury (Edmiston et al, Surgery 2013;153:225-233).
- 2013—First mechanistic clinical study of the epidemiology of bacterial contamination of sutures in

- infected and non-infected surgical patients (Edmiston et al, J Clin Microbiol 2013;51:417:421).
- 2013—First reported (in vitro and in vivo) laboratory studies documenting the antimicrobial efficacy of 0.05% CHG as an intraoperative irrigation fluid (Edmiston et al, In Press 2013: Am J Infect Control).
- 2013—First North American evidence-based metaanalysis documenting the risk reduction (level 1A) benefit of antimicrobial (triclosan) coated suture technology to reduce the risk of surgical site infections (Edmiston et al, In Press 2013: Surgery). •

FOR ADDITIONAL INFORMATION

on this topic, visit mcw.edu/surgery or contact Dr. Edmiston at 414-805-5739; cedmisto@mcw.edu.

Who is the Quarterback?

Navigating the



DOUGLAS B. EVANS, MDChair, Department of Surgery

B just retired from his position in retail after a very successful career. He had taken care of his body quite well; exercise, weight reduction and minimal alcohol use. He and his family were particularly surprised when he complained of fatigue, anorexia, and then his sclera were noted to be vellow. After he became jaundiced, he called his long-time internist who saw him immediately. Computed tomography (CT) imaging was followed by endoscopic retrograde cholangiopancreatography (ERCP) and a plastic stent was placed in the bile duct. The gastroenterologist who performed the ERCP suggested that he then reconnect with his internist to discuss overall management; was he operable, what is his stage of disease—all questions that the gastroenterologist was not equipped to answer at the time of the procedure. The patient and his family were somewhere between horrified and confused; should he go directly to surgery? Is there a clinical trial that may offer a better chance for cure? He and his family had read on the internet of the poor prognosis (no one had said the words pancreatic cancer, but the diagnosis had been implied by the doctors and nurses they had seen). There were simply too many options and they needed a quarterback. Someone who they could trust to provide them accurate medical advice, inform them of possible regional experts in the field, and provide access to potential new and emerging treatments which may offer a better chance of survival. The literature was simply too overwhelming for them to navigate even though TB's three children were all on the case and included one pharmacist and one nurse practitioner.

TB's internist, Dr. C, was the consummate physician and he had cared for TB and his family for many years. Dr. C was part of a large physician group that recently had been acquired by one of the health systems in the

area. The health system had good outcomes, was highly regarded in the community, and staffed two or three of the hospitals closest to where TB lived. When TB had an episode of chest pain three years ago, he was cared for at one of these hospitals; after placement of a coronary stent and started on aspirin and Plavix, he was well and has remained asymptomatic. After obtaining the results of the abdominal CT and having a stent placed in the bile duct, Dr. C met with TB, his wife, and three children. At this time, the bilirubin was coming down, TB was feeling better, and they all assumed the diagnosis was pancreatic cancer even though a biopsy had not been performed. The family had done as much research as possible and although not physicians, they had created a list of questions, some of which included:

- Should a biopsy be done?
- What is the best treatment: surgery, chemotherapy, a combination of both, should radiation be included? If so, in what order?
- Will the treatment be more effective if it is part of a clinical trial?
 Do you have access to any new and innovative clinical trials?
- What is the importance of the so called "volume-outcome" relationship? Do we need to be treated at a "high volume" center?
- Do we need a high volume surgeon? If so, is your health system high volume? If not, who would you recommend that we see?

Dr. C was ill-equipped to provide accurate and adequate answers to these questions as after all, he was an internist and spent most of his time staying up-to-date on the literature involving cardiovascular disease, hypertension and diabetes. He suggested a referral to one of their surgeons and medical oncologists as the next best step. TB's daughter (call her daughter #1) was a nurse practitioner and asked if these physicians, who were the suggested next referral, specialized in the management of pancreatic cancer or were more general in scope. She was familiar with PubMed and could not find either of the physicians to have a track record of publications in the field. The family was (rightly or wrongly) associating such intellectual commitment to the disease with perhaps the ability to access newer and innovative therapies. For patients and their families, innovation, clinical trials, and related emerging



Dr. Tina Yen

Tina Yen, MD, MS, receives Society of Surgical Oncology Award

Tina Yen, MD, MS, Associate Professor, Division of Surgical Oncology, is one of two recipients of the Society of Surgical Oncology's James Ewing Foundation 2013–2015 Clinical Investigator Award for her proposal titled: "A population-based study of sentinel lymph node biopsy adoption among breast cancer patients: Does efficacy translate into effectiveness?" This two-year, \$100,000 award is intended to promote patient-oriented research conducted by surgical oncologists in clinical and translational science. Congratulations Dr. Yen!

Complex Healthcare Environment

technology often provide hope. Daughter #1 went on to ask Dr. C about referral to a high volume provider; clearly complicated questions for the dedicated family internist who was now an employed physician. Hospital systems have employed physicians for good (business) reasons—it provides them the freedom to require that employed physicians refer patients to the practitioners within their own service lines. Such referral can preserve market share, ensure that their facilities are used, and capture valuable downstream revenue.1 To what degree did Dr. C feel pressure to maintain TB within his health system? The discussion became more difficult when TB's wife, who had been largely silent throughout the discussion, asked about the experience of the recommended surgeon. Although the association between volume of the surgeon (and institution) and outcome of the patient remains controversial for some medical conditions, there is little debate in two surgical procedures: esophagectomy and pancreatectomy.^{2,3} The demonstrated improvement in mortality and long-term survival with increasing volume is likely multifactorial and includes the management of complications when they occur. The failure to manage such complications, referred to as "failure to rescue" can occur at low volume institutions even when the surgeon may be experienced. 4 Indeed, at many high volume (pancreatic) institutions, the nurses caring for postoperative surgical patients have a knowledge of pancreatic surgery which far exceeds that of many physicians. This can provide a level of patient safety that often cannot be compensated for by even the most dedicated physician if working at a low volume hospital.

The result of the meeting with Dr. C proved unsatisfactory; Dr. C was conflicted and uncomfortable recommending a physician outside of his hospital system, at least at this visit, and TB's family was not satisfied; some were disappointed. They felt that Dr. C had an allegiance to his employer that superseded his commitment to their father/husband. They left the office without a clear plan and were not sure that Dr. C was the right physician to manage this life changing event despite the long duration of their relationship. At this time, there was no quarterback of the team and there was no plan of care.

There is no stress greater than that faced by patients and their loved ones who are given a cancer diagnosis, and then asked to make life-altering decisions under enormous stress and time-pressure. TB's family felt this stress and began the process of investigation and research, something few can accomplish successfully in the absence of a sophisticated medical background. While on the one hand, patients should be applauded for their heroic efforts in taking on such a challenge, on the other, these patients often end up being shortchanged. Instead of concentrating on fighting their disease, the patient and their families spend valuable time and energy combing through every resource available, often largely from the internet, in an effort to quickly become experts in cancer diagnosis, staging, and treatment, in addition to the complexities of insurance/Medicare. If there is a gap in the coordination of care, patients can fall through the cracks in communication and crucial interventions can be delayed.

The absence of a quarterback in this case may have been related to the employment status of the physician, who worked at a low-volume institution (for pancreatic cancer management) but there are other potential reasons for the loss of a quarterback: the failure of (some) physicians to assume this responsibility, the decreasing availability of doctors, and the apparent increasing barriers to direct physicianpatient communication. The result is that patients and their families feel compelled to investigate their disease themselves, to the best of their ability, and seek out the expertise of those who they feel are most likely to help them. A physician quarterback, when committed, not conflicted, and free to advocate for the patient in whatever way necessary, can help put the diagnosis and at least some of the treatment options in perspective and seek the advice of the best available expert consultants appropriate for the diagnosis. Importantly, the physician quarterback can usually interact in an efficient manner with the specialists, streamlining the referral process, limiting duplication of testing, and preventing misinformation. Most patients with a new diagnosis (cancer being just one example) want two things: hope and a plan. Unfortunately, it has become increasing complicated to develop the plan which has limited our ability to maintain the hope and confidence that should be in the eyes of our patients and their families. •

FOR ADDITIONAL INFORMATION on this topic, see references, visit mcw.edu/surgery, or contact Dr. Evans at 414-805-5706; devans@mcw.edu.

REFERENCES

- Charles AG, Ortiz-Pujols S, Ricketts T, et al: The employed surgeon: A changing professional paradigm. JAMA Surg 2013;148:323-328.
- Birkmeyer JD, Sun Y, Wong SL, Stukel TA: Hospital volume and late survival after cardiac surgery. Ann Surg 2007;245:777-783.
- Finks JF, Osborne NH, Birkmeyer JD: Trends in hospital volume and operative mortality for high risk surgery. NEJM 2011;364:2128-2137.
- Ghaferi AA, Birkmeyer JD, Dimick JB. Hospital volume and failure to rescue with high-risk surgery. Med Care 2011;49:1076–1081.

We Care Fund Grant Recipients Announced

by Meg M. Bilicki, Director of Development for the Department of Surgery

The Department of Surgery is pleased to announce its inaugural We Care Fund for Medical Innovation and Research faculty seed grant recipients. The We Care Fund Scientific Review Committee carefully reviewed a total of 11 exceptional submissions and selected two seed grant proposals for funding by the Department of Surgery. Two researchers were awarded a combined total of \$50,000. The awardees and their proposals are:

- Susan Tsai, MD, MHS, Assistant Professor, Division of Surgical Oncology Evaluating Predictive Chemotherapeutic Biomarkers in Localized Pancreatic Cancer
- John C. Densmore, MD, Assistant Professor, Division of Pediatric Surgery Mitochondrial Reactive Oxygen Species Inducing Bronchiolitis Obliterans Organizing Pneumonia in Lung Ischemia

This internal award encourages and supports funding for innovative basic, clinical or translational research by investigators within the Medical College's Department of Surgery. "These projects represent precisely the kind of ambitious scientific research that defines an academic medical center; we have no greater priority," said Douglas B. Evans, MD. "The awards underscore the quality and scope of research underway in the Department of Surgery and demonstrate our commitment to the patients of tomorrow. We are all very proud of our faculty and the research they are conducting."

Established in 2010, the "We Care Fund" has raised private funds from grateful patients, families, friends, faculty, and alumni. Contributions to the We Care Fund will support scientists and clinicians in the Department of Surgery for innovative medical research and clinical projects in the fields of cancer, cardiovascular disease, organ transplantation, trauma, and basic fundamental research.

The We Care Fund Committee plays a critical role in both fundraising and increasing community awareness. Committee Chair Arlene Wilson said "The funds made available through the We Care Fund represent an investment made by the community to support innovative medical research that is providing new insight into how to treat and prevent disease and injury." The committee includes 19 business, professional and civic leaders who are committed to advancing sophisticated medical research at the College and have generously donated their time and many extra efforts.

Private gifts from generous donors help sustain the We Care Fund; therefore the grant cycles are not predetermined and will be announced. Philanthropic support plays a vital role in providing seed grants.

If you would like to learn more about the We Care Fund, or are interested in making a gift, please visit the website at www.mcw.edu/surgery/WeCareFund.htm or contact Meg M. Bilicki, Director of Development for the Department of Surgery, at (414) 805-5731. •



Susan Tsai, MD, MHS



John C. Densmore, MD

To refer a patient or request a transfer/consultation, please use the references below:

Froedtert & The Medical **College of Wisconsin**

Referrals: 800-272-3666

Transfers/Consultations:

877-804-4700

mcw.edu/surgery

Clinical Cancer Center

Referrals: 866-680-0505

Transfers/Consultations:

877-804-4700

Children's Hospital of Wisconsin

Referrals/Transfers/

Consultations: 800-266-0366

Acute Care Surgery:

414-266-7858

MCW-UWM Faculty Leadership Development Program



arlier this year, the Office of Faculty Affairs, under the direction of Dr. LAl Walker, initiated a redesign of the Faculty Leadership Development Program to focus on the challenges and skillsets needed to lead effectively in academic medicine. The inaugural year of the new program recently concluded with great success.

Applicants to the program had to complete a rigorous application process, which required them to be nominated by Chairs, Senior Associate Deans, or Center Directors, and be new to a leadership role or be considered for a leadership role in the near future. Scores of applications were reviewed by an Admissions Committee and 30 faculty members were selected for the program. Six Department of Surgery faculty members were accepted into the program and are pictured above with the class of 2012-2013:

- Marshall Beckman, MD, Division of Trauma and Critical Care
- Kellie Brown, MD, Division of Vascular Surgery
- Laura Cassidy, PhD, Division of Pediatric Surgery
- David Johnstone, MD, Division of Cardiothoracic Surgery
- Paula Termuhlen, MD, General Surgery Residency Director
- Tracy Wang, MD, MPH, Division of Surgical Oncology

In addition to six "classroom" sessions, participants were split into five capstone project groups and assigned institutional level projects specifically chosen by MCW leadership. These projects involved a great deal of collaborative work over the six months of the program. The capstone projects were:

- The Zoo Interchange Reconstruction: A Campus-Wide Effort to Avoid "Carmageddon"
- Integrating Civic and Community Engagement: The Strategic Educational Engagement Development (SEED) Initiative
- Identifying Competencies Necessary for Training our Students for Changing Health Care and Research Environments
- · Faculty Development
- Improving Teaching Effectiveness

The culmination of the program included the presentation of these projects on March 6, 2013, in which many senior College leaders had the opportunity to be in attendance. The findings of the capstone projects are being reviewed for direct application to current projects, policies and procedures. •

The Department of Surgery welcomes the incoming 2013–2014 PGY 1 Categorical General Surgery Residents:

Maher Abadeer, M.D.

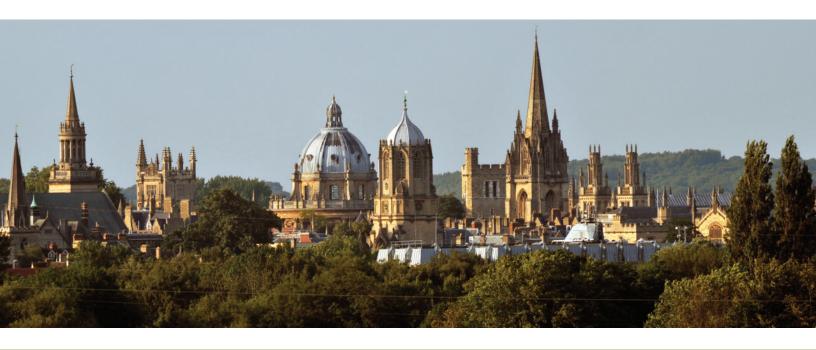
Fadwa Ali, M.D.

Chad Barnes, M.D. Nicholas Berger, M.D. **Gregory Larrieux, M.D.**

Tanner Spees, M.D.

Joseph Helm III, M.D.

History Corner



The Oxford Experience

Contributed by Lyle Henry, MD

Clinical Professor, Department of Surgery, Medical College of Wisconsin; MCW Alumnus, GS 1977

Early in 1974, Dr. DeCosse, the MCW Chair of Surgery, called to say that the Department was starting a resident rotation at the Nuffield Department of Surgery in Oxford, England, and that I was to be the first resident to go. I thanked him and told him I would speak to my wife. He said that would be fine, but I was going anyway!

Dr. Decosse and Peter Morris, the newly appointed Nuffield Professor at Oxford, hatched this idea on the golf course at Milwaukee Country Club. Originally it was to be an exchange, but the Brits ran out of money after they sent their first registrar.

Nancy, my two boys ages 2 and 4, and I arrived in England on July 4th. Nancy was worried that everything would be closed on that day until I reminded her that the English don't celebrate that particular holiday. We were met by Joan Cracknell, Prof. Morris' secretary. They had arranged rental of the third floor flat of a University owned building several blocks from the Radcliff Infirmary. The flat was roomy, had no central heat, a tiny refrigerator, no screens, and no use of the "garden" or yard for the kids. We also had no car, but bought two bikes as soon as possible.

The hospital was built in the mid 1700s; the ER, known as Casualty, or CAS-E, was in continuous use since 1753. I think it had the original equipment. On my first day, I ventured on to one of the department wards to make rounds and introduce myself to the ward sister or head nurse about 8 AM. Sister informed me that her patients had not had breakfast nor been bathed and I would be welcome back around 10!

The "England Rotation" for MCW General Surgery Residents began in 1975. The genesis of this rotation is described by Dr. Lyle Henry, who was the first resident selected. During the next 23 years, 74 general surgery residents did six-month rotations at Oxford (Nuffield Department of Surgery), Warwick, and Exeter.

My boss was Mr. Mike Kettelwell, the department reader or Assistant Professor. He had been a registrar for 12 years before landing a consultant post. He could do anything and everything from pulmonary embolectomy to TURP. He is one of the most talented surgeons I have ever seen. Together we had a clinic, operated together, and he "staffed" me on my own operative schedule and when I was on "take" or call. He knew how important individual responsibility was in a surgeon's training; he encouraged me but almost never came to the OR when I was working independently. In six months I did more than 90 cases with the assistance of only a house officer, or intern. I was a PGY4!

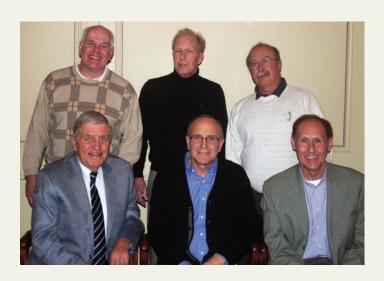
What I learned in those six months could be crystallized into two ideas. The first is that healthcare CAN be delivered to everyone. Remember England has a national health plan AND private insurance as well. And despite the constraints on spending and incomes, the physicians I worked with were all gifted, worked hard, and took wonderful care of their patients. Secondly, although the diseases we saw were just like the ones in Milwaukee, the approach and procedures were often different, but the outcomes were the same; patients got well. The England experience opened my eyes and my mind to allow me to look at problems from multiple points of view and with a more critical eye. These ideas have been with me my entire surgical career and, along with the gift of early independent surgical experience, have been the foundation of my practice. They provided the roots of my passion for surgical history and evidence-based decisions which I try to pass on to students and residents every day. •

Surgery Class of 1982 Reunion

Contributed by Steven Kappes, MD Clinical Professor, Department of Surgery, Medical College of Wisconsin

The Medical College of Wisconsin General Surgery Affiliated Residency class of 1982 had a 30-year reunion recently. During the year prior to our graduation, the surgical residency of Mt. Sinai Hospital was incorporated into the Affiliated Program of the medical school. Two residents from the Mt. Sinai program graduated with five residents from the Medical College Program. Unfortunately, Rick Saltzstein, who had started with the Medical College group, was not able to finish due to illness. Ultimately, he passed on from complications of his multiple sclerosis, however his presence was strong at the reunion.

The group from the Medical School Program was the last class recruited by Dr. Jerome DeCosse. Robert Condon became Chairman of the Department of Surgery towards the end of this class' term. The picture at right shows Dr. Condon (age 52) with the class minus Robert Schmus. From left to right on the bottom row are Ahmed Rahman, Robert Condon, John (Jack) Graber, and Rick Vanik. On the top row from left to right are Steve Kappes, Saleem Bakhtiar, and Kevin Quinn.



The reunion occurred at The Milwaukee Club. This was the site of the group's graduation ceremony. Sherkow Formal Wear gave a large discount to residents renting a tuxedo for this event. The ceremony was therefore known as "The Sherkow Dinner." In earlier times, the graduation ceremony was very different than today. Only surgical staff and residents attended in those days.

Dr. Stuart Wilson was kind enough to join the reunion dinner. He stood in for Dr. Condon, who now resides in Seattle. Saleem Bakhtiar had to attend to an emergency at Sinai Medical Center and was unable to attend the dinner. All five graduates from the Medical School Program were able to attend. Again starting from left to right in the first row Stuart Wilson, Jack Graber, and Rick Vanik are pictured. In the top row are Steve Kappes, Bob Schmus, and Kevin Quinn.



Saleem and Nausheen Bakhtiar remained in the Milwaukee area. Saleem has worked at both Hartford Hospital and Aurora Sinai. He currently is chief of surgery at Sinai Hospital.

John (Jack) Graber did a vascular surgery fellowship in Boston. Jack and his wife, Susan, moved to Minneapolis after fellowship. He was a pioneer in the development of laparoscopic cholecystectomy. He stopped doing general surgery a few years ago but remains in the active practice of vascular surgery at Abbot Northwestern Hospital.

Steven Kappes went on to a vascular fellowship at Henry Ford Hospital in Detroit. He and his wife, Suzette, moved back to Milwaukee, and he joined the Milwaukee Medical Clinic practicing at Columbia Hospital. He has remained active in the surgical residency and practices general and vascular surgery. Recently, his group became affiliated with Aurora Health System.

Kevin and Michelle Quinn moved to the Fox Valley region of Wisconsin after residency and continues to practice in that area. I am sure to no one's surprise, he has remained independent. He is in solo practice at New London Hospital.

Ahmed Rahman practiced in Milwaukee for a short time after residency but then moved to Virginia Beach, where he remains in practice.

Robert Schmus has continued to practice general surgery in Wisconsin. He lives with his wife, Tracey, in Reedsburg (near Wisconsin Dells) and is employed by Upland Hills Health and STJ Gundersen Lutheran.

Richard Vanik went on to complete two fellowships (hand surgery at University of Louisville & plastic surgery at Duke University). He has been in solo practice in Houston, Texas practicing at Memorial Hermann Hospital. His wife's name is Rachel. As if he did not acquire enough training, he also obtained a law degree along the way.

The group appreciated Dr. Wilson's presence and several great stories were told. Some of them might even be true. It was great fun, and the group would suggest other classes get together as well. •

THE MEDICAL COLLEGE OF WISCONSIN **DEPARTMENT OF SURGERY**

LIST OF FACULTY BY SPECIALTY -

Acute Care Surgery, Trauma and Critical Care

Marshall A. Beckman, MD Karen J. Brasel, MD, MPH Thomas Carver, MD Panna A. Codner, MD Terri A. deRoon-Cassini, PhD Jon C. Gould, MD Jeremy S. Juern, MD David J. Milia, MD Todd A. Neideen, MD Jasmeet S. Paul, MD Lewis B. Somberg, MD Travis P. Webb, MD, MHPE John A. Weigelt, MD, DVM, MMA

Adult Cardiac Surgery

G. Hossein Almassi, MD Husam H. Balkhy, MD Wade L. Fischer, MD R. Eric Lilly, MD Robert B. Love, MD Alfred C. Nicolosi, MD Zahir A. Rashid, MD Charles F. Reuben, MD Paul Seifert, MD

Bariatric and Minimally Invasive Surgery

Matthew I. Goldblatt, MD Jon C. Gould, MD Andrew S. Kastenmeier, MD James R. Wallace, MD, PhD

Breast Surgery

Amanda L. Kong, MD, MS Miraj Shah-Khan, MD Paula M. Termuhlen, MD Alonzo P. Walker, MD Tina W.F. Yen, MD, MS

Colorectal Surgery

Lauren A. Kosinski, MD, MS Kirk A. Ludwig, MD Mary F. Otterson, MD, MS Parvaneh Rafiee, PhD Timothy J. Ridolfi, MD Toku Takahashi, MD, PhD

Community Surgery

Marshall A. Beckman, MD Dean E. Klinger, MD David J. Milia, MD Charles F. Reuben, MD Paul Seifert, MD

Endocrine Surgery

Douglas B. Evans, MD Tracy S. Wang, MD, MPH Stuart D. Wilson, MD Tina W.F. Yen, MD, MS

General Surgery

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General Thoracic Surgery

Mario G. Gasparri, MD George B. Haasler, MD David W. Johnstone, MD Daryl P. Pearlstein, MD William B. Tisol, MD

Pediatric Cardiothoracic Surgery

John E. Baker, PhD Mats Hidestrand, PhD Aoy T. Mitchell, PhD Michael E. Mitchell, MD Jack Schneider, MD Mary Shimoyama, PhD James S. Tweddell, MD Ronald K. Woods, MD, PhD

Pediatric General and Thoracic Surgery

John J. Aiken, MD Marjorie Arca, MD Casey M. Calkins, MD Laura D. Cassidy, PhD, MS John C. Densmore, MD David M. Gourlay, MD Denise B. Klinkner, MD, MEd Dave R. Lal, MD, MPH Qing Miao, PhD Keith T. Oldham, MD Kirkwood Pritchard, Jr., PhD Thomas T. Sato, MD Amy Wagner, MD Hao Xu, PhD Hao Zhang, PhD

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Transplant Surgery

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Vascular Surgery

Kellie R. Brown, MD Charles E. Edmiston, Jr., MS, PhD, CIC James B. Gosset, MD (Vascular Medicine) C.J. Lee, MD Brian D. Lewis, MD Michael J. Malinowski, MD Peter J. Rossi, MD Gary R. Seabrook, MD

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LEARN MORE AT MCW.EDU/SURGERY

A Disease-specific Pilot Program for Outpatient EPIC Referrals

The Medical College of Wisconsin Department ▲ of Surgery has initiated a pilot program for disease-specific, outpatient EPIC referrals for those programs previously placed via either the 'General Surgery' and/or the 'Clinical Cancer Center' referrals:

Bariatric/Minimally Invasive Surgery (RFSUC.002)

Bariatric Surgery, foregut surgery (achalasia, hiatal hernia, reflux surgery)

Breast Cancer Surgery (RFCCC.003)

For benign breast conditions, use the Breast Care Referral, Undiagnosed

Colorectal Surgery (RFSUC.003)

Anorectal disease, colorectal cancers, benign colorectal disease, inflammatory bowel disease

Condon Hernia Institute (RFSUC.005)

All abdominal wall defects/hernias including ventral, recurrent, incisional, inguinal, femoral

Endocrine Surgery (RFSUC.001)

Thyroid cancer, benign thyroid disease, parathyroid disease, adrenal tumors, carcinoid tumors, carcinoid disease, inherited endocrine tumors

General Surgery (RFSUC.000)

Abdominal pain, abdominal mass, gallbladder disease, soft tissue masses/nodules, feeding tubes

Hepatobiliary Surgery (RFSUC.004)

Liver tumors (benign and malignant), gallbladder disease, biliary tree disorders, bile duct cancers

Pancreatic Surgery (RFSUC.006)

Pancreatic cancer, benign pancreatic diseases (cysts, pancreatitis), pancreatic neuroendocrine tumors

Surgical Oncology (RFCCC.002)

Melanoma, retroperitoneal sarcoma, neuroendocrine tumors, carcinoid tumors, carcinoid disease, carcinomatosis, hyperthermic chemoperfusion therapy (HIPEC)

For urgent/emergent issues requiring same-day attention, please call the Acute Care Surgery service via the Froedtert Hospital operator (414-805-3000).

Department of Surgery Welcomes New Faculty

A brief bio of new faculty will be included in this issue and the September issue of *Leading the Way*. Please welcome our new faculty and residents:

The Department of Surgery and the Division of Cardiothoracic Surgery are pleased to welcome Wade Fischer, MD. Dr. Fischer is currently Assistant Professor of Surgery and Director of Adult ECMO at The Methodist Hospital in Houston, Texas, and Medical Director of Cardiovascular Surgery at San Jacinto Methodist Hospital. He is a graduate of Tulane University School of Medicine, completed a general surgery residency at the Cleveland Clinic, followed by subspecialty training in cardiac, thoracic, and vascular surgery at the State University of New York Health Science Center at Brooklyn and Maimonides Medical Center. After several years in private practice, Dr. Fischer completed a fellowship in heart and lung transplantation and mechanical assist devices at the University of California, Los Angeles. He served as Clinical Assistant Professor at the University of Kansas School of Medicine-Wichita for seven years, and was appointed Chairman of the Cardiothoracic Surgery Section at Via Christi Regional Medical Center-St. Francis. Dr. Fischer joined the faculty of Houston's Methodist—DeBakey Heart & Vascular Center in 2010.

Dr. Fischer has a broad range of clinical interests in cardiothoracic surgery, heart and lung transplant, and mechanical circulatory support. His research interests include new device trials for Bridge to transplant and destination therapy and expanded indications for adult ECMO. We welcome Dr. Fischer to the Department of Surgery.

The Medical College of Wisconsin, Department of Surgery, Division of Surgical Oncology is pleased to announce the addition of Fabian Johnston, MD as an Assistant Professor of Surgery. Dr. Johnston obtained his medical degree from Pennsylvania State University College of Medicine and completed his general surgery training at Washington University in St. Louis, Missouri. Currently, Dr. Johnston is completing a Surgical Oncology fellowship at Johns Hopkins University as well as obtaining a Masters in Health Science from the Bloomberg School of Public Health.

Dr. Johnston will join the MCW faculty on August 1. His research interests are focused on patient outcomes and palliative cancer interventions. Dr. Johnston's clinical interests include regional therapies for advanced malignancies and sarcoma in addition to general surgical oncology.

The Department of Surgery and the Division of Transplant Surgery are delighted to announce that Joohyun Kim, MD, PhD will be joining the Division of Transplant Surgery in July 2013. Dr. Kim received his MD, PhD, and MS at the College of Medicine at Kyung Hee University in Seoul, South Korea. He also completed his residency in general surgery at Kyung Hee University. After finishing his residency, Dr. Kim served as an Army Surgeon in South Korea and Iraq. Following his military service, he completed a clinical fellowship in Liver Surgery and Transplantation at Seoul National University in South Korea. He is currently completing a fellowship at the Hume-Lee Transplant Center in Richmond, Virginia. Dr. Kim brings significant experience (from both Korea and Virginia) in live-donor liver transplantation which will remain the focus of his clinical and research efforts at MCW.

The Department of Surgery and the Division of Colorectal Surgery are pleased to welcome Timothy Ridolfi, MD back to the Medical College of Wisconsin. Dr. Ridolfi received his medical degree from MCW in 2005, and graduated from the MCW General Surgery Residency Program in 2012. He is currently completing his fellowship in colon and rectal surgery at the Cleveland Clinic Foundation in Cleveland, Ohio and will join the Department of Surgery in August 2013. During his General Surgery Residency at MCW, Dr. Ridolfi spent two years in the Colorectal Surgery basic science laboratory under the direction of Drs. Takahashi and Ludwig, where his investigations centered on understanding how the pelvic autonomic nerves affect the motility of the left colon and rectum. Dr. Ridolfi was recognized as an outstanding teacher by the MCW medical students and served as Administrative Chief Resident during his final year of training. On his return to MCW, Dr. Ridolfi will resume his laboratory program and will have a practice focused on colon and rectal surgery both at Froedtert Memorial Lutheran Hospital and the Zablocki VA Medical Center with special emphasis on colorectal cancer and the surgical treatment of ulcerative colitis and Crohn's disease.



Department of Surgery 9200 West Wisconsin Avenue Milwaukee, WI 53226

MARK YOUR CALENDARS

August 13, 2013: 27th Annual Morrison C. Schroeder Lecturer—Ronald Busuttil, MD, PhD

The Department of Surgery is honored to welcome Ronald Busuttil, MD, PhD as the 27th Annual C. Morrison Schroeder lecturer on Tuesday, August 13, 2013. Dr. Busuttil is the Distinguished Professor and Executive Chairman of the UCLA Department of Surgery and holds the William P. Longmire, Jr. Chair in Surgery.

September 7, 2013: First Annual Early Career Development Retreat

Fellows, Instructors, and Assistant Professors from all MCW departments are invited to attend this exciting retreat being developed by Drs. Clark Gamblin and Jon Gould. Attendees will learn how to navigate promotion and tenure, submit and revise manuscripts, and balance work and professional life, among other topics.

April 18, 2014: Acute Care Surgery: Trauma, Critical Care, and Emergency General Surgery Symposium

This day-long educational activity will provide updates and general information regarding the practice of emergency general surgery, surgical critical care, and trauma care.

SAVE THE DATE!

October 7, 2013
Reception at American
College of Surgeons Clinical
Congress, Washington, DC

Plan to join us at the
MCW Department of Surgery/
Alumni Association reception during
the American College of Surgeons
99th Annual Clinical Congress on
Monday, October 7, 2013.
The reception will be held
from 6 to 8 p.m. at
The University Club
of Washington DC,
1135 Sixteenth St., NW.