A PUBLICATION FOR ALUMNI & FRIENDS OF UMDNJ-ROBERT WOOD JOHNSON MEDICAL SCHOOL





We're proud to support the good work of the Robert Wood Johnson Medical School and applaud its commitment to health, education and research. Thanks for making a difference in our community.

Johnson 4 Johnson

Dear Colleague,

his issue of Robert Wood Johnson Medicine features a close look at the school's origins, while looking to its future. Renewing our appreciation of the history of the school provides a strong sense not only of where we have been and where we are, but, of greater importance is, where we are going.

First Class: The Class of 1968 tells the story of the first 16 students to matriculate at what was then Rutgers Medical School. Interviews with members of that pioneering group offer a fascinating portrait of the early faculty, curriculum, and teaching facilities. They also bring us up-to-date on the lives of the school's first alumni.

Richard C. Reynolds, MD: A Clinician at Heart reintroduces us to one of our most respected, longserving, and beloved deans. Dr. Reynolds took the reins of the medical school during challenging times and left a legacy that included our evolution as an academic medical campus.

Four decades of RWJMS history are represented by the five alumni couples interviewed for Shared Memories, Shared Lives. Whether they are still actively involved in the day-to-day life of the medical school or practicing as far away as Tibet, they believe that starting their life together as students gave them deep ties to the medical school.

The Children's Champion portrays the interactive clinical and research strengths of our children's academic health campus, composed of four outstanding institutions: the Department of Pediatrics, with its 15 centers of excellence; the Child Health Institute of New Jersey; The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital (RWJUH); and the PSE&G Children's Specialized Hospital.

Bedside Ultrasound reports on the life-saving capabilities of this laptop-sized technology. The new division of emergency and critical care ultrasound in the Department of Emergency Medicine provides skillful point-of-care scanning, improving patient care and allowing hands-on training of medical students and residents.

The Department of Radiation Oncology offers team-based expertise in Gamma Knife Perfexion, the only radiosurgery built specifically for use on the brain. And, as described in A Knife That Isn't One, the Gamma Knife Center at RWJUH is the only location in New Jersey offering patients this advanced, non-invasive alternative treatment for intracranial problems.

Please enjoy this edition of Robert Wood Johnson Medicine.

Sincerely,

Amenta, MD, Ph D

Peter S. Amenta, MD, PhD Dean

You can continue to support the causes you care about, no matter what.



Foundation University of Medicine & Dentistry of New Jersey A New Jersey Health Foundation Affiliate

We want to reassure you that regardless of any possible restructuring at UMDNJ, funds donated in the past to the Foundation of UMDNJ for Robert Wood Johnson Medical School, and funds that will be donated in the future, will be used to support the programs and purposes you have designated. Wherever those programs may be located, your funds will remain under the stewardship of the Foundation of UMDNJ and New Jersey Health Foundation.

stewardship of the Foundation of the Foundation of UMDNJ and our To understand our commitment, you should know that the Foundation of UMDNJ and our parent company, New Jersey Health Foundation (NJHF), a public charity incorporated in Delaware, are both independent organizations, not agencies of the State of New Jersey or the University.

The annual reports and financial statements found on our web sites (www.foundationofumdnj.org and www.njhealthfoundation.org) show that we are independent and financially sound. The charter of New Jersey Health Foundation allows us to ensure that your gifts to fund breakthrough research, cutting-edge education and high-quality patient programs at UMDNJ will continue to be directed to those areas, regardless of where those programs may be housed. And 100 percent of your gift—every dollar—will be used as you designate.

be housed. And two percent of your support of programs you may have funded in Now is the perfect time for you to reaffirm your support of programs you may have funded in the past or to select a new area of research, education or patient care that you would like to support now or in the future. In this exciting time in healthcare, you can play an important role in support now or in the future. In this exciting time in healthcare, you can play an important role in

advancing the programs that mean the most to you. We remain committed to working with you and others to advance the breakthrough science, excellent education and vital patient care programs offered in New Jersey. Please don't hesitate to contact us personally by phone or e-mail to talk about opportunities. We hope to speak with

you soon.

Sincerely,

Gange

George F. Heinrich, M.D. Vice Chairman & CEO (908) 731-6607 heinrichmd@njhf.org

James M. Golubieski

James M. Golubieski President (908) 731-6601 jgolubieski@njhf.org

Newark • New Brunswick • Stratford • (866) 44-UMDNJ www.FoundationofUMDNJ.org

Α R т М E NT

Letter from the Dean		1
RWJMS News		4
Appointments		6
Research News		7
Research Profiles		8
Research Highlights		10
Volunteer Faculty Membe	r Profi	le 11
Education Highlights		12
Awards & Honors		13
Letter from the Alumni Association President		61
RWJMS Alumni News		63
Class Notes	70	-
Last Page	72	N. A

Robert Wood Johnson MEDICINE

A PUBLICATION FOR ALUMNI & FRIENDS OF UMDNJ-ROBERT WOOD JOHNSON MEDICAL SCHOOL

Spring 2012 • Volume 13, Number 1

Dean

Peter S. Amenta, MD, PhD

Executive Editor Patricia M. Hansen, MA Director Communications and Public Affairs

Editor Roberta Ribner

Writers Kate O'Neill Lynda Rudolph

Copy Editor Richard Slovak

Art Director Barbara Walsh

Cover Illustration Barbara Walsh

President-Elect Andrew Stefaniwsky, MD '77

Hank Lubin, MD '83

Secretary Sonia Garcia

Chair, Development Committee Thomas McPartland, MD '01

Chair, Membership Committee Geza Kiss, MD '95

Editorial and Advertising Office

UMDNJ-Robert Wood Johnson Medical School Roberta Ribner, Editor, Robert Wood Johnson Medicine 335 George Street • Suite 2300 • New Brunswick, NJ 08903 Telephone: 732-235-6310 • Fax: 732-235-9570 Email: ribnerrs@umdnj.edu

Alumni Association Officers:

President Tamara A. LaCouture, MD '94

Vice President/

Treasurer

Laumbach, MD '99

ontents

Е S E E R U

The Children's Champion

Combining Centers of Excellence, groundbreaking research, and acute inpatient and rehabilitative patient care, this complex of pediatric-focused organizations is on its way to becoming the health champion for the children of New Jersey. By Lynda Rudolph

Beginnings:

First Class: The Class of 1968

The first class of students arrived in Piscataway in 1966, bringing life and meaning to a brand-new medical school. In interviews, the living graduates of the Class of 1968 describe those early years ---learning under the watchful eye of the renowned

> DeWitt Stetten, MD, dean - and tell of the careers that evolved from that experience. By Kate O'Neill

Richard C. Revnolds, MD: A Clinician at Heart

43

15

34

Dean Reynolds led the medical school for nine remarkable years. His belief in the primacy of the physician-patient relationship, his grounding in academic medicine, and his commitment to public health shaped the school's bright future with gentle but firm diplomacy. By Kate O'Neill

Alumni Couples: Shared Memories, Shared Lives

47

Representing four decades of RWJMS history, five married alumni couples recount their common experience as medical students and their shared lives as physicians, balancing careers and families. By Kate O'Neill

Bedside Ultrasound: A Light in the Storm

Quickly becoming the standard of care in emergency room treatment, this portable diagnostic tool gives a fast, early glimpse into potentially life-threatening conditions. By Lynda Rudolph

A Knife That Isn't One Is Revolutionizing **Brain and Spine Surgery**

55

66

52

Radiosurgery with the latest generation Gamma Knife revolutionizes the treatment of tumors and improves the patient experience. By Lynda Rudolph

Alumni Profiles:

Vered Stearns, MD '92:

Developing and Delivering Personalized Cancer Treatment

A caring clinician, Dr. Stearns has gained wide respect as a scientist for her determination to combat cancer with innovative, targeted treatment. By Kate O'Neill

John Hohneker, MD '85:

Developing Drugs through the Paradigm of Cancer Research 68

Dr. Hohneker applies the advanced methodologies of oncology research to other areas of disease and oversees drug development and the regulatory processes. By Kate O'Neill



R W J M S EVENT

THE WOMEN AND CHILDREN'S INITIATIVE

The Women and Children's Initiative, formally launched last July, strengthens the partnership of three affiliated institutions: UMDNJ-Robert Wood Johnson Medical School, Robert Wood Johnson University Hospital (RWJUH), and PSE&G Children's Specialized Hospital (CSH). "The initiative is a restatement of our shared commitment to the health of women and children in our region," says Peter S. Amenta, MD, PhD, dean.

Situated in individual, state-of-the-art buildings, each institution is steps away from the research and specialty care at the others. For example: A child with a traumatic brain injury is admitted to the specialist-staffed Pediatric Emergency Department at Bristol Myers-Squibb Children's Hospital at RWJUH. She receives specialized care from an RWJMS pediatric neurologist in the hospital's Pediatric Intensive Care Unit and is subsequently transferred to CSH for rehabilitation.

The initiative will support new or expanded programs at RWJMS and its affiliates. They include an increase in basic and translational research at the Child Health Institute of



New Jersey; the addition of a pediatric cardiac surgery program; expansion of the nephrology program to support kidney transplants for children; further development of the robotic simulator program; and added preventive, diagnostic services for women.

ALUMNI ASSOCIATION ANNOUNCES SCHOLARSHIP GALA AWARDS

he Robert Wood Johnson Medical School Alumni Association announced that the inaugural Scholarship Gala to Celebrate with Alumni and Friends, held last April in New Brunswick, raised \$180,000 in support of student scholarships.

Eighteen \$10,000 scholarships were awarded to first-, second-, and third-year medical students. A Scholarship Committee selected recipients based on academic achievement, demonstration of professional attributes, faculty recommendation, and financial need.

The Alumni Association Board of Trustees approved \$140,000 in scholarships and loans, which will be awarded to RWJMS students for the 2012–2013 academic year. The scholarships include a \$20,000-per-year award to each of four Hippocrates Scholars. (See "Hippocrates Scholarship," page 63.)

SECOND ANNUAL GALA TO CELEBRATE WITH ALUMNI AND FRIENDS

Building on the great success of the 2011 Inaugural Gala to Celebrate with Alumni and Friends, RWJMS and the Foundation of UMDNJ promise an even more memorable event this year.

The Gala begins at 6:30 p.m. on April 21, in the elegant setting of The Heldrich, in New Brunswick. The company again will be superb, the dining top-notch, and the silent auction opportunities almost limitless — all

against the background of the very danceable cool jazz of the Warren Daniels Band. Three special awards will be presented:

- Meritorious Service Award: Harvey A. Holzberg, MBA, FACHE, President Emeritus, Robert Wood Johnson University Hospital
- Distinguished Alumni Award: Donald Rose, MD '80, clinical associate professor of orthopaedic surgery, NYU School of Medicine, and founding director,

Harkness Center for Dance Injuries at the NYU Hospital for Joint Diseases

• Honorary Alumni Award: posthumously, to Stephen F. Lowry, MD, MBA, professor and chair,

Department of Surgery, and senior associate dean for education

"We are excited about joining once again with faculty, alumni, students, and friends for a wonderful evening in support of our students," says Peter S. Amenta, MD, PhD, dean.

For information, email Patricia Hansen, hansenmp@umdnj.edu, or Denise Gavala, dgavala@njhf.org.

New England Journal of Medicine Publishes FOCUS Trial Findings

ew research published in the New England Journal of Medicine online on December 14, in advance of print, could refine post-operative care while preserving precious blood supply levels. The study, "Transfusion Trigger Trial for Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair (FOCUS)," indicated that using a liberal blood transfusion strategy in postoperative hip-surgery patients does not improve patients' recoveries or reduce the rate of death.

"The need for — and the quantity of - transfusion of red blood cells in postoperative patients had not previously been evaluated in a large study," says Jeffrey L. Carson, MD, Richard C. Reynolds Professor of Medicine and chief, division of general internal medicine, who was the FOCUS study chair. "This clinical trial is unique in that all patients were considered very high risk due to age and prior history of cardiovascular disease."

The study, funded by the National Institutes of Health, examined more than 2,000 high-risk patients, who were randomly assigned a liberal or restrictive transfusion strategy. At 30 and 60 days post-surgery, there was no difference between the



groups in the patients' inability to walk without assistance, nor was there a significant difference

in the rate of death or heart attacks.

-K.O'N.

JAMA PUBLISHES TRIAL CONFIRMING LEGACY EFFECT OF HYPERTENSION THERAPY

follow-up to the landmark clinical trial "Systolic Hypertension in the Elderly Program (SHEP)" has shown that the use of antihypertensive drug therapy is associated with longer life expectancy. The follow-up study, "Association between



Treatment of Systolic Hypertension and Long-Term Survival," was published online December

14 in the Journal of the American Medical Association. The study was led by John B. Kostis, MD, John G. Detwiler Professor of Cardiology, chair, Department of Medicine, and founding director, The Cardiovascular Institute of New Jersey.

SHEP, which lasted from 1985 to 1990, showed that chlorthalidone-based therapy for hypertension prevented about one out of two admissions for heart failure, one out of three strokes, and one out of four coronary heart disease events. There were no significant differences in mortality.

The current study showed that, compared to patients receiving the placebo, the group that received chlorthalidone treatment survived significantly longer without experiencing a cardiovascular-related death — approximately one day for every month of anti-hypertensive treatment.

The study was funded in part by the Robert Wood Johnson Foundation.

-K.O'N.

SURGEONS OFFER GROUNDBREAKING AORTIC VALVE REPLACEMENT TECHNIQUE

he Cardiovascular Center of Excellence at Robert Wood Johnson University Hospital and Robert Wood Johnson Medical School was recently selected by Edwards Lifesciences to be one of the

first sites in the nation to offer Transcatheter Aortic Valve Replacement (TAVR) since the procedure received FDA approval. Physicians at RWJMS will be among the first in the nation to offer this groundbreaking aortic valve replacement technique, which provides hope for patients diagnosed with severe aortic valve disease who are suffering from end-stage heart disease.

TAVR allows a multidisciplinary team of cardiac surgeons, vascular surgeons, interventional cardiologists, and cardiac anesthesiologists to replace a patient's diseased aortic valve without using traditional open-heart surgery. The patient's heart continues to beat during the procedure, avoiding the need for cardiopulmonary bypass.

"This innovative technique provides a new option for patients who have been diagnosed with severe aortic stenosis and need valve replacement, but who may be too high risk for open heart surgery," explains Mark B. Anderson, MD, professor of surgery and chief, division of cardiothoracic surgery. "TAVR can contribute to an enhanced quality of life for these patients, many of whom have no other options." — K.O'N.

ter Aortic Valve Re-



IN MEMORIAM

Stephen F. Lowry, MD

The RWIMS community L learned with sadness of the passing in June 2011 of Stephen F. Lowry, MD, professor and chair, Department of Surgery, and senior associate dean for education. (Please see Last Page, page 72.)

Sumiko Inouye, PhD

he RWJMS community was saddened by the passing in August 2011 of Sumiko Inouye, PhD, associate professor of biochemistry. Dr. Inouve joined the faculty in 1987 and was a dedicated scientist, teacher, and mentor. She was renowned for elucidating the signal transduction pathways in the soil bacterium Myxococcus xanthus. She served for many years as the faculty mentor for the student seminar series of the Graduate Program in Biochemistry and Molecular Biology, providing insight and guidance in her gentle manner to scores of doctoral students.

Dr. Inouye was born in Osaka, Japan, in 1935. Her obituary notes that she was the sole woman admitted to the Department of Engineering at Osaka University in 1954 and then studied organic chemistry in the School of Science. In 2004, Dr. Inouve was listed as one of the Institute for Scientific Information's Most Highly Cited Researchers at UMDNJ.

Robert Shelden, PhD

W7e report with sadness the death in November 2011 of Robert M. Shelden, PhD. Dr. Shelden earned his PhD in zoology from the University of Montana. He subsequently was a National Institutes of Health Postdoctoral Fellow in Reproductive Endocrinology and then a faculty member at Ohio State University.

Dr. Shelden joined the RWJMS faculty in 1976 and retired as associate professor of obstetrics, gynecology, and reproductive sciences. While at RWJMS, in 2006, he founded the research laboratory in his department and spearheaded the development of the reproductive endocrinology division to support clinical services. He later led the expansion of the laboratory to perform assays and analyses that are essential for patients requiring advanced infertility care. He is credited with the establishment of the In Vitro Fertilization (IVF) Program at RWJMS; in 1983, the program saw the first baby born in New Jersey through IVF.

Dr. Shelden is fondly remembered by his many colleagues, students, residents, and fellows, as well as the technicians he trained in IVF techniques. He published numerous research studies and abstracts. In 2009, he was elected the first president of the newly formed **RWJMS** Retired Faculty Association.

By Kate O'Neill

Kathleen W. Scotto, PhD, professor of pharmacology, RWJMS,



and vice president of research, UMDNJ, was appointed dean of UMDNJ-Graduate School of Biomedical Sciences (GSBS). Dr. Scotto had served as

interim dean since February 2007.

Dr. Scotto is internationally recognized for her work on the regulation of drug resistance genes that affect the sensitivity of cancer cells to therapeutic agents. Her laboratory at The Cancer Institute of New Jersey studies the regulation of alternative splicing, particularly as it relates to the cancer phenotype. She holds several patents, is widely published, and is a member of a number of committees within the cancer field. She also serves on the editorial boards of two cancer journals.

Dr. Scotto earned her PhD in 1983 from Weill Cornell Graduate School of Medical Sciences and recently received the school's Distinguished Alumna Award. Prior to joining the RWJMS faculty in 2004, she served as associate professor of molecular pharmacology and experimental therapeutics at Memorial Sloan-Kettering Cancer Center and as professor of pharmacology at Fox Chase Cancer Center.

Cheryl F. Dreyfus, PhD, professor and acting chair, Department of Neuroscience and Cell Biology, was



Dreyfus received her PhD in cell biology at Cornell University and completed her post-doctoral training at Einstein Medical College.

Before joining the RWJMS faculty in 1990, Dr. Dreyfus served on the faculties of Columbia University College of

Physicians and Surgeons and Cornell University Medical College.

Dr. Dreyfus is noted for her exceptional mentorship of medical students, graduate students, and junior faculty. She has served on the Appointments and Promotions Committee, the Admissions Committee, and a number of search and review committees.

Dr. Dreyfus's internationally recognized work focuses on the regulation of brain cell development and death. She has published more than 70 papers and 14 book chapters and is a frequent speaker and participant in national and international conferences and symposia.

Matthew Menza, MD, professor of psychiatry and neurology, was appointed chair of the



Department of Psychiatry. He had served as interim chair since November 2007. Dr. Menza

received his MD degree from Temple University. His residency at NYU/Bellevue Medical Center was followed by a fellowship in psychosomatic medicine at Massachusetts General Hospital. A member of the faculty since 1986, he served as chief of the division of clinical psychopharmacology in the Department of Psychiatry and as director of consultation psychiatry at Robert Wood Johnson University Hospital.

Dr. Menza's research has focused on the psychiatric aspects of Parkinson's disease. He was the lead researcher on the first trial sponsored by the National Institutes of Health of depression in patients with Parkinson's and on the first multi-center, controlled trial of insomnia in Parkinson's patients. He maintains an active clinical practice while pursuing his research in general psychopharmacology. He has conducted more than 50 clinical trials and written more than 90 journal articles and book chapters, and he co-edited *Psychiatric Issues in Parkinson's Disease: Practical Management.*

David Swee, MD, professor of



family medicine and community health and associate dean for education, was appointed associate dean for facul-

ty affairs and faculty development. Dr. Swee earned his MD degree

at Dalhousie Medical School in Halifax, Nova Scotia, where he completed the first year of a residency in family practice. He completed his residency at Somerset Medical Center, in Somerville, and joined the Department of Family Medicine in 1977. He was appointed professor in 1994 and served as department chair from 1994 to 2005.

At RWJMS and Robert Wood Johnson University Hospital, Dr. Swee has held leadership positions in many of the professional organizations and committees in which he has served. In addition, he chairs the American Medical Association's Council of Medical Education. His numerous awards include the 2009 Robert Raszkowski, MD, Accreditation Council for Continuing Medical Education Hero Award and the New Jersey Academy of Family Physicians 2009 Chair Award.

Research



The National Institutes of Health awarded substantial funding to the following members of the UMDNJ-Robert Wood Johnson Medical School faculty:

- Davide Comoletti, DVM, PhD, assistant professor of neuroscience and cell biology, a five-year, \$1.56 million grant for "Caspr2."
- Eunsung Junn, PhD, assistant professor of neurology, a five-year, \$1,706,250 grant for "Alpha Synclein Regulation by microRNAs."
- Jeffrey D. Laskin, PhD, professor of environmental and occupational health, a five-year, \$23,178,558 grant, in conjunction with Rutgers , The State University of New Jersey, for the UMDNJ/ Rutgers CounterACT Research Center of Excellence.
- Jianjie Ma, PhD, university professor and acting chair, Department of Physiology and Biophysics, a five-year, \$1,755,000 grant for "MG53-Mediated Membrane Repair in Muscle Physiology and Disease."
- Sharon Manne, PhD, professor of medicine and chief, section of population studies, The Cancer Institute of New Jersey, a fiveyear, \$4,310,150 grant for "Intimacy-Enhancing Couples' Intervention for Localized Prostate Cancer."
- M. Maral Mouradian, MD,

William Dow Lovett Professor of Neurology and director, Center for Neurodegenerative and Neuroimmunologic Diseases, a five-year, \$2,419,938 grant for "Manipulating Gene Expression in the Dyskinesias of Parkinson's Disease." This is a collaborative project with co-principal investigator Stella M. Papa, MD, assistant professor of neurology, Emory University.

News

- Mladen-Roko Rasin, MD, PhD, assistant professor of neuroscience and cell biology, a five-year, \$1,695,550 grant for "Role of First Neocortical RNA-Operon in Specification of Neocortical Projection."
- Stuart L. Shalat, ScD, associate professor of environmental and occupational medicine, a two-year, \$903,198 grant for "Validation of a Robotic Surrogate for Measurement of Early Childhood Personal Exposure."



15ml

professor of radiation oncology and chief, division of radiation cancer biology, a five-year, \$1,618,500 grant for "Alternative Mechanisms to Inactivate p53 During Oncogenesis."

— Continued on Page 8

Research

— Continued from Page 7

• Steven Silverstein, PhD,

professor of psychiatry, a five-year, \$2,198,520 grant for "Perceptual Organization Dysfunction as a Biomarker of Schizophrenia."

• Iris G. Udasin, MD,

professor of environmental

and occupational medicine and director, World Trade Center Respond-

News

ers Monitoring and Treatment Program, Environmental and Occupational Health Sciences Institute, a five-year, \$3,882,489 grant for "Clinical Center for Monitoring Health in World Trade Center Responders."

In another instance of noteworthy federal government funding, the Environmental Protection Agency awarded a \$1.2 million grant to a six-investigator team led by **Robert J. Laumbach, MD '97, MPH**, assistant professor of environmental and occupational medicine, for "Effects of Stress and Traffic Pollution on Childhood Asthma in an Urban Community."

PUBLISHED RESEARCH:

The following is a representative sample of articles by RWJMS faculty members, residents, fellows, and students published in leading biomedical journals:

- Konstantin E. Balashov, MD, PhD, associate professor of neurology, was first author of "Interferonβ Inhibits Toll-like Receptor 9 Processing in Multiple Sclerosis," published in Annals of Neurology 2010:68(6): 899–906.
- Jeffrey L. Carson, MD, Richard C. Reynolds Professor of Medicine and chief, division of general internal medicine, was first author of "Liberal or Restrictive Transfusion in High-Risk Patients after Hip Surgery," published in the New England Journal of Medicine 2011:365:2453-2462.

• Jeanne M. Ferrante,

MD, aassociate professor of family medicine and community health, was first author of "Primary Care Utilization and Colorectal Cancer Outcomes among Medicare Beneficiaries," published in *Archives of Internal Medicine* 2011: 171(19):1747–1757.

- Yanxiang (Jessie) Guo, PhD, a post-doctoral fellow in the Department of Biochemistry, was first author of "Activated Ras Requires Autophagy to Maintain Oxidative Metabolism and Tumorigenesis," published in *Genes &* Development 2011: 25(5):460–470.
- Bruce G. Haffty, MD,

professor and chair, Department of Radiation Oncology, was first author of "Positive Sentinel Nodes without Axillary Dissection: Implications for the Radiation Oncologist," published in the Journal of Clinical Oncology 2011:29(34):4479–4481. In addition, Dr. Haffty was a co-author with

Neil K. Taunk '12 and Sharad Goyal, MD,

assistant professor of radiation oncology, of "Radiation Recall 5 Years after Whole-Breast Irradiation for Early-Stage Breast Cancer Secondary to Initiation of Rosuvastatin and Amlodipine," published in the Journal of Clinical Oncology 2011:29(22):e661–e663.

- Nadine Housri, MD, a resident in the Department of Radiation Oncology, was first author of "Ethics and the Law: Is There Common Ground on Informed Consent for Disparities in Hospital Outcomes?," published in Annals of Internal Medicine 2011:155(4):260–264.
- Estela Jacinto, PhD, associate professor of physiology and biophysics, was first author of "TFEBulous Control of Traffic by mTOR," in *EMBO Journal* 2011: 30(16):3215–3216.

• Matthew Marcello,

PhD, a post-doctoral fellow in the Department of Molecular Genetics, Microbiology, and Immunology, was coauthor of "Germline Determination: Don't Mind the P Granules," published in *Current Biology* 2011:21(4) R155–157.

• Yoshihiro Yamaguchi, PhD, and Jung Ho Park, respectively a

post-doctoral fellow and graduate student in the Department of Biochemistry, were co-authors with **Masayori Inouye**, **PhD**, distinguished professor of biochemistry and member, Center for Advanced Biotechnology and Medicine, of "Toxin-Antitoxin Systems in Bacteria and Archaea," published in the *Annual Review of Genetics* 2011:45:61–79.

Shengkan (Victor) Jin Focuses on Autophagy and Type II Diabetes

ore than 25% of the population of the United States is obese and more than 8% is diabetic, according to the latest American Diabetes Association statistics. A primary cause of diabetes is obesity, which is the direct result of the accumulation of massive deposits of adipose tissue. In his lab, **Shengkan (Victor) Jin, PhD**, associate professor of pharmacology, has spent the past two years learning if autophagy — a process during which a cell cannibalizes its own damaged components — could have an impact on adipose tissue and ultimately on Type II diabetes.

"Each adipose cell, or adipocyte, has a unique structure," says Dr. Jin. "Under the microscope, it appears as one large cell, containing only one huge lipid droplet." The unique structure prompted him and his colleagues to wonder where other cytosolic components had gone. Knowing that autophagy is involved in the degradation of cell components, the question became, could autophagy have an impact on adipose tissue?

In a mouse model, one of these essential autophagy-related genes was inactivated. These gene-altered mice were compared to normal, or wild-type, mice. Both types were fed a high-fat diet, similar to fast food. In the end, the normal mice had gained 20 percent body weight, while the mutant mice — with the inactivated autophagyrelated gene — did not gain any weight while eating the same amount of food.

The team hypothesized that because of the inactivated gene, the mutant mice converted white adipose tissue (WAT) cells to brown adipose tissue (BAT) cells, which burn fatty acids. This result demonstrated that autophagy is critical for normal white fatty tissue to form — a process known as adipogenesis.

The mutant mice also appeared healthier overall. In addition to being resistant to



weight gain induced by a high-fat diet, they had an increased sensitivity to insulin.

Dr. Jin's work is funded by two NIH R01 grants, totaling more than \$2 million. Learning more about the role of autophagy in adipose tissue could lead to more effective treatments for Type II diabetes in the future.

Estela Jacinto Studies Signaling Pathways for Cancer Therapy

ur understanding of basic cell signaling mechanisms can be applied to many diseases," says Estela Jacinto, PhD, associate professor of physiology and biophysics. Currently, Dr. Jacinto is researching how cellular

metabolism is controlled by signaling pathways. How does the signaling control the growth of the cell? What happens to the cell when signals go wrong? Why do tumors keep growing? Those are the questions Dr. Jacinto is hoping to answer with her study.

One of the signaling pathways critical for the regulation of growth of cells involves a protein called TOR (a target of rapamycin). This

protein was identified based on the discovery in the 1970s of the antibiotic rapamycin, which was initially used as an antifungal drug. Rapamycin is now used as an immunosuppressant, in drug-eluting stents and as an anti-cancer drug. Dr. Jacinto is investigating how the TOR pathway can link nutrient signals to other extracellular and environmental signals to promote growth. "We are only beginning to appreciate the many functions of TOR," says Dr. Jacinto. "Rapamycin only inhibits some of these functions." The goal of Dr. Jacinto's study is to understand which functions can be inhibited by rapamycin, so that other drugs

> can be developed and possibly targeted for more effective cancer therapy.

Dr. Jacinto's work was recently cited by the editors of *Science Signaling* as a Signaling Breakthrough of 2010. Her team showed that mTORC2 — one of the protein complexes that are part of TOR — can associate with ribosomes, elements within the cell machinery that make proteins. By binding near

the "birth canal" of ribosomes, mTORC2 modifies the emerging new protein to control its quality and prevent premature degradation.

Estela Jacinto, PhD

Dr. Jacinto's research is supported by an NIH grant of approximately \$1.5 million as well as other funding, including \$750,000 from Stand Up To Cancer and \$50,000 from the Cancer Research Institute.

Research Highlights

By Kate O'Neill

Stem Cells May Be Viable Treatment for Spinal Cord Injury

esenchymal stem cells (MSCs), found mainly in bone mar-

row, are the focus of clinical trials that investigate methods of neurological repair and other regenerative applications. **Hatem E. Sabaawy, MD, PhD,**

assistant professor of med- ² icine, was a senior author of a study of MSCs that was published online ahead of print in *Stem Cells and Development.* "Although MSCs are widely known to be used in replacing damaged tissue, they may also recruit endogenous cells to help accelerate the repair

process," says Dr. Sabaawy.



The researchers examined the use of human MSCs to prompt repair of spinal cord injuries in

> transgenic zebra fish embryos. The study demonstrates that human MSCs affix to the injury site and influence spinal cord cells to accelerate the repair process.

"Our results indicate that MSC therapy not only augments recovery after spinal cord injury, but also accelerates the recovery time," said Pranela Rameshwar, PhD, professor of medicine, UMDNJ-New Jersey Medical School, also a senior author of the study. Dr. Smita Patel Co-authors Two Articles Published in *Nature*

n consecutive advance online issues, the journal *Nature* published articles

co-authored by **Smita Patel, PhD**, professor of biochemistry. In the first article, which appeared in the September 18, 2011, issue, Dr. Patel and her collaborators at

Cornell University discuss their new findings that identify how the ring-shaped helicase enzymes separating the strands of double helical DNA track forward by coordinating movement of its six subunits without slipping backward.

To initiate the unwinding of DNA, the helicase enzymes rely on an energy source, generally adenosine triphosphate (ATP). ATP alone causes the helicase to slip. The slippage stopped when another nucleotide, deoxythymi-



dine triphosphate (dTTP), was added to ATP, while different mixtures of ATP and dTTP controlled both slippage and speed of helicase movement. Improved understanding

of the helicase function could pave the way for new therapeutic treatments for human diseases, including those caused by infectious human papilloma virus, which encodes a similar helicase.

The second article, published on September 25, provides new insights into the antiviral immune response. The study was led by Dr. Patel and **Joseph Marcotrigiano, PhD**, assistant professor of chemistry and chemical biology, Rutgers, The State University of New Jersey, and a member of the Center for Advanced Biotechnology and Medicine.

The study showed, for the first time, the structure of RNA-bound RIG-1. This is an initial step in developing broad-based therapies against viral infections, because RIG-1 initiates an autoimmune response when it detects viral RNA. A failure of RIG-I to identify viral RNA can lead to alterations of the cell, including cell death, inflammation, autoimmune diseases, and cancer.

Study Finds Benefits of E-Prescribing within a Clinical Practice

Research led by Jesse Crosson, PhD, assistant professor of family medicine and community health, identified key techniques in the implementation and use of electronic prescribing (e-prescribing) that advance the efficiency and effectiveness of a clinical practice. The study, "Meaningful Use of Electronic Prescribing in 5 Exemplar Primary Care Practices," appeared in the September 2011 issue of

Annals of Family Medicine. Dr. Crosson found that by establishing incentive payments for physicians who make "meaningful use" of electronic health

record systems, the American Recovery and Reinvestment Act of 2009 (ARRA) stimulated a greater focus on implementing eprescribing.

"ARRA gives physicians an incentive to move toward electronic



health records," says Dr. Crosson. Successful e-prescribing can increase medication safety for patients, reduce health care costs, and increase a

patient's compliance with the recommended treatment.

Dr. Crosson's collaborators on the study included **Rebecca Etz, PhD**, adjunct assistant professor of family medicine and community health. CULTY

F R

VIJAYA RADHAKRISHNA, MD: A PATIENT-FOCUSED, LIFELONG LEARNER

By Kate O'Neill

ijaya Radhakrishna, MD, clinical associate professor of pediatrics, is a lifelong learner. Now in her third decade of solo practice, Dr. Radhakrishna has seen enormous change in the world of children's health. To stay current, she reserves every Tuesday morning for the clinical case conferences presented by the Department of Pediatrics. "It's a great opportunity to meet medical students, residents, and attending physicians and continue my own learning," she says.

"Dr. Radhakrishna is the person we want our pediatric residents to aspire to be, in learning, teaching, and staying open to new ideas," says **Dalya Chefitz, MD '90**, associate professor of pediatrics and chief, division of general pediatrics. She adds that Dr. Radhakrishna's weekly attendance at case conferences sets an extraordinary example for students and residents, as do her contributions to the discussions.

In addition, for Dr. Radhakrishna, each day begins by exploring the online "Daily Briefing" of the American Academy of Pediatrics. A strong advocate for the importance of electronic medical records (EMR), she personally investigated the options before introducing pediatric-oriented EMR software to her practice.

Pediatric residents from UMDNJ-Robert Wood Johnson Medical School are among the young clinicians who gain clinical experience at Dr. Radhakrishna's practice, and she teaches on rounds at Robert Wood Johnson University Hospital as well. "It's important for our residents to realize that no one can possibly know everything," says Dr. Chefitz. "Dr. Radhakrishna sets a great example by staying in close contact with our sub-specialists and using our network of consultants wisely. And she's just wonderful with children and families. The care she provides her hospital patients, from newborns to adolescents, is outstanding."

Dr. Radhakrishna earned her medical degree and did her internship near Bangalore, in southern India, before moving to the United States in 1977. She completed her residency in pediatrics at RWJMS, followed by a fellowship in infectious diseases at Beth Israel Medical Center, in Newark. Then, focusing once again on pediatrics, she opened a solo practice in Piscataway; she has since added a second practice, in East Brunswick.

She recently marked the 32nd year of her affiliation with RWJMS. Some of her newest patients are the third generation of their families to come under her care. "I feel the same affection for them as I do for my own children," she says.

In addition to practicing general pediatrics, Dr. Radhakrishna has two special interests: immunizations for foreign travel, and education and treatment for attention deficit hyperactivity disorder (ADHD). As hyperactivity showed up more frequently among her patients sometimes three or four new cases in a week — she began studying the condition.

"I learned that ADHD is a complex phenomenon, and it has been



Vijaya Radhakrishna, MD

a challenging learning curve for me," she says. "Many parents deny it. But as you sit and talk to them, they realize they should be concerned and get help." Dr. Radhakrishna has been pleased to

"Dr. Radhakrishna recently marked the 32nd year of her affiliation with RWJMS. ...In addition to practicing general pediatrics, she has two special interests: immunizations for foreign travel, and education and treatment for attention deficit hyperactivity disorder (ADHD)."

see treatment options expanding, with alternatives such as nonstimulant medication and a skin patch simplifying life for many parents and children coping with ADHD. To help parents and children accept treatment for ADHD, she compares it to getting eyeglasses: "It's a clinical problem, and you simply need to give the brain the help it needs."

A devotee of music, dance, tennis, and cooking, Dr. Radhakrishna has no plans for retirement and is developing a new skill. Already familiar with several Indian dialects, she is now learning Spanish. "I may not be fluent," she says, "but it shows respect to my Spanishspeaking patients, and I know that makes them feel good."

EDUCATION

Academic Management Platform: "Perfection in the Works"

he Office of Information Technology has designed an online application tailor-made for RWJMS. The Academic Management Platform (AMP), featuring a userfriendly interface and centralized information, went live at the beginning of the 2011-2012 academic year.

"AMP provides a way for students to easily navigate a curriculum that is based on the integration of information," says Andrew Orr '15. He uses AMP frequently, finding it most valuable for the way it intuitively combines required readings, recordings of lectures, and presentation slides in one self-contained interface.

Lucy Mashas.

manager of the web and collaborative services team, led the development of the platform. Ms. Mashas provides an example of its ease of use and functionality: following a lecture, a student could use a computer, iPhone, or iTouch to access AMP through the RWJMS Web site. After reviewing a video of the lecture, the student could navigate to the block schedule, review course assignments and required readings, and access supplementary readings and media resources.

students can review them in new contexts at any time. "From the ability to take guizzes and listen to recorded lectures to seeing our daily schedule and accessing all resources for each lecture easily, this site is perfection in the

The Class of 2015 in Profile

works," says Marissa Nadeau '14.

s undergraduates, the Class of 2015 had both a strong academic record and a substantial background in advocacy and service. In the United States and overseas, they gained health care experience in a wide variety of settings.

The 130 members of the entering class were educated at 57 different undergraduate institutions. Nineteen percent are alumni of Rutgers, The State University of New Jersey, and 16 percent attended Ivy League colleges. Eighty percent had a single or double major in the biological or physical sciences, and six students were pre-accepted as members of the MD/PhD program. Twenty-three percent were born abroad, while 63 percent are natives of the tri-state area. In addition to English, they speak 24 different languages, and, continuing the trend of the past decade, the majority - 57 percent — are women.

College Advising Program Interconnects RWJMS Community

WJMS introduced the College Advising Program in the first semester of the 2011-2012 academic year. Within the program, three "colleges" serve academic, social, and professional purposes. Every student is assigned to one of three colleges, which also include faculty members, alumni, and a dean from the Office of Student Affairs.

The colleges are named in honor and memory of three faculty members who will be celebrated at an event this spring: Pamela C. Champe, PhD; Parvin Saidi, MD; and Robert L. Trelstad, MD; The program was developed by Sonia Garcia Laumbach, MD '99, assistant professor of family medicine and community health and assistant dean for student affairs, and Carol A. Terregino, MD '86, associate professor of medicine, interim senior associate dean for education, and associate dean for admissions.

"Students had been requesting a program that encourages meaningful communication between students in all four years," says Dr. Garcia Laumbach. "We developed the program to meet that request. We expect it to create a sense of family and boost our sense of community." In addition, the program provides new opportunities for faculty and students to know one another outside the classroom.

Fall and spring events, beginning with the 2012 Clash of the Colleges, will highlight the program's social calendar.

By Kate

O'Neill

Gonors



Faculty Named to Leadership in National Board of Medical Examiners

Three faculty members were recently named to leadership positions in the National Board of Medical Examiners (NBME).

• Alfred F. Tallia, MD '78, MPH,

professor and chair, Depart-

ment of Family Medicine and Community Health, was elected to a four-year term as a









member-at-large. • Patricia Whitley-Williams, MD, professor and interim chair, Department of Pediatrics, was appointed chair of the NBME's United States Medical Licensing Examination Step 3 Computer-Based Case Simulation Test Material Development Committee.

• David Swee, MD, professor of family medicine and community health and associate dean for faculty affairs and faculty development, was named to a three-year term on the NBME Advisory Committee for Medical School Programs, representing the American Medical Association Council on Medical Education.

Dr. Amenta Elected to Board of **Joslin Diabetes Center**

eter S. Amenta, MD, PhD, dean, has been elected to a three-year term on the Board of Trustees of the Joslin Diabetes Center. "I am honored to work with the Board of Trustees

and the leadership of the Joslin Diabetes Center," says Dr. Amenta. "The center's dedication to helping improve the lives of individuals living with diabetes now and in the future through research, education, and care is a model for others to emulate."

The center, affiliated with

Harvard Medical School, is the world's largest diabetes clinic, diabetes research center, and provider of diabetes education. Joslin is dedicated to ensuring that people with diabetes have long, healthy lives and to offering real hope and progress toward diabetes prevention and, ultimately, a cure.

"We are delighted to have Dr. Amenta on board, as we can learn from the advances he is directing in education, research, patient care, and community health," says John L. Brooks III, president and chief executive officer of the Joslin Diabetes Center.

Supercomputer "Watson" Shares Jeopardy Prize

n IBM supercomputer called Watson competed with and defeated some of the top human contestants in the history of the long-running game show Jeopardy. IBM shared Watson's winnings with six

scientists worldwide,

including David J. Foran, **PhD**, professor of pathology and laboratory medicine, chief, division of medical informatics, and director, Center for Biomedical



Imaging at The Cancer Institute of New Jersey. Dr. Foran was awarded \$75,000 to support his work on the IBM World Community Grid.



Faculty Honors and **Distinctions**

- Thomas Newmark, MD, professor of psychiatry, was chosen as president-elect of the American Association of Psychiatric Administrators.
- Sidney Pestka, MD, adjunct professor of molecular genetics, microbiology, and immunology, received the Distinguished Service Award from the International Society for Interferon and Cytokine Research. Dr. Pestka is the founder and chief scientific officer of the PBL InterferonSource, described as the world's leading source of interferon and related products.
- Norma B. Saks, EdD, associate professor of psychiatry, assistant dean for educational programs, and director, Cognitive Skills Program, is chair-elect of the Northeastern Group on Educational Affairs of the American Association of Medical Colleges. Her new role becomes effective in the spring of 2013.
- Ann M. Stock, PhD, professor of biochemistry, and associate director, Center for Advanced Biotechnology and Medicine, was appointed an editor of the Journal of Bacteriology. She has been a member of the editorial board since 2003.
- Melvin Weinstein, MD, professor of medicine and pathology and laboratory medicine, received the 2011 bioMérieux Sonnenwirth Award for Leadership in Clinical Microbiology, presented by the American Society of Microbiology.

President Obama Appoints Dr. Spitalnik to National Committee on Disabilities



resident Barack Obama appointed Deborah Spitalnik, PhD, professor of pediatrics and executive director, The Elizabeth M. Boggs Center on Developmental Disabilities, to the President's Committee for People with

Deborah Spitalnik, PhD

Intellectual Disabilities. She is one of 15 people selected for this distinction. In his announcement, President Obama said, "These fine public servants bring both a depth of experience and tremendous dedication to their new roles. Our nation will be well served by these men and women, and I look forward to working with them in the months and years to come."

RWJMS Faculty Receive III Awards

wo RWJMS faculty members will receive 2012 Edward I. Ill





Excellence in Medicine Awards. The Outstanding Medical Research Scientist Award for Clinical Research will be presented to Jeffrey L. Carson, MD, Richard C. Reynolds Professor of Medicine and chief, division of general internal medicine. Jeffrey C. Brenner, MD '95, adjunct instructor of family medicine and community health, will receive the Edward J. Ill Physician's Award.











B Y LY N D A R U D O L P H

PHOTOS BY John Emerson

Children's Champion

SK ANY PARENT. WHEN A CHILD IS ILL, EVERYTHING ELSE TAKES A BACK SEAT. AT FIRST THERE ARE QUESTIONS:

What is the best place to treat my child? Which specialists should we consult? What it the prognosis? After the initial steps are taken to seek care, when gaps become evident, other questions emerge: Why do I have to leave the area to get the best care? Why aren't there new treatments to help my child? "This is a unique campus dedicated to the health of the children of New Jersey," says Patricia Whitley-Williams, MD, professor and interim chair, Department of Pediatrics, and physician-in-chief, Bristol-Myers Squibb Children's Hospital at RWJUH.

Children's Champion

The answers become even more important when you look at the statistics. More children have chronic diseases than ever before. Cancer is the leading cause of death by disease among U.S. children 1 to 14 years of age. One in every 150 children in the United States has autism or a related disorder. But there is good news, particularly for the more than 2 million children living in New Jersey. A new health champion is emerging — one that is gaining influence and robustness to drive change that will improve children's lives.

The Children's Academic Health Campus in New Brunswick is composed of institutions that individually have significant medical might. The Department of Pediatrics at UMDNJ-Robert Wood Johnson Medical School offers care through 15 centers of excellence. The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital (RWJUH) is a 105-bed acute care pediatric facility that's in its tenth year of providing clinically superior pediatric care. The Child Health Institute of New Jersey (CHINJ) is beginning its sixth year of pursuing basic and translational research in childhood diseases and has more recently upped its game in recruiting investigators in the areas of inflammation, autism, stem cells, and genetics. The PSE&G Children's Specialized Hospital (CSH) - which opened four years ago in New Brunswick - is considered to be the area's preeminent provider for children with special needs, including those who are born early, are developmentally delayed, or have life-changing illnesses.

These institutions provide more than quality pediatric care. They are also about a passion to help and heal the youngest and most vulnerable among us. "This is a unique campus dedicated to the health of the children of New Jersey," says Patricia Whitley-Williams, MD, professor and interim chair, Department of Pediatrics, and physician-in-chief, Bristol-Myers Squibb Children's Hospital at RWJUH.



Robotic Surgery Simulator Trains Students and Residents

ELDOM HAS AN EDUCATIONAL PROgram generated as much enthusiasm from medical students as the new RoSS Robotic Simulator, a one-ofits-kind training station that students and residents use to practice robotic surgery in a lifelike environment.

"We saw what this simulator could be, so we made a commitment to buy the RoSS when it was in its infancy," says Joseph G. Barone, MD '87, associate professor of surgery, chief, division of urology, and chief, The Bristol-Myers Squibb Children's Hospital at RWJUH.

Encouraging students to practice robotic surgery is of critical importance, as there is no doubt that it represents the future of surgical medicine. This type of surgery typically achieves dramatically improved patient outcomes, and it is increasingly being sought after by discerning patients. At RWJUH, robotic surgery is a popular option that patients can now choose, at their doctors' discretion, for many gynecologic, chest, urological, and general surgeries.

RWJMS students are quite aware of the popularity of robotic surgery. "They're already enticed to develop these skills. They know this is what their patients will be demanding from them in the future," says Dr. Barone. M

Thomas F. Scanlin, MD, professor of pediatrics, chief, division of pulmonary medicine, and director, the Cystic Fibrosis Center at RWJMS, spearheads the efforts to establish a comprehensive program to improve the outcomes for cystic fibrosis patients of all ages.

"Our goal has been and continues to be to bring together the brightest minds to make a difference in the lives of the children and their families who turn to us for care," says Peter S. Amenta, MD, PhD, dean.

The centralization is deliberate. The goal is to create a collaborative environment that will not only provide exceptional clinical expertise, but also offer opportunities for close collaboration that can lead to the creation of breakthrough therapies. An important element of this is the Department of Pediatrics, which has developed centers of excellence where children are treated now, and where future clinicians are trained to serve as a catalyst for change in the evolution of care.

Examples of progress are evident everywhere you look.

Centers of Excellence That Fuel Progress

HE BRISTOL-MYERS SQUIBB PEDIATRIC Rheumatology Center is involved in the diagnosis and management of a wide array of complex rheumatic diseases, including juvenile rheumatoid arthritis, systemic lupus erythematosus, reactive arthritis, systemic sclerosis, and regional musculoskeletal pain syndromes.

The Pediatric Diabetes Center, established in 2003, has grown to include two clinicians, a certified diabetes educator, and a research arm. The center looks at the autoimmune characteristics of relatives of those with type 1 diabetes — siblings, parents, and cousins — to determine their risk, so that they can enter prevention trials. Ian Marshall, MD, assistant professor and chief, division of pediatric endocrinology, emphasizes the importance of widespread education about pediatric diabetes. "We see type 1 diabetes in children of all ages after one to two years of age," says Dr. Marshall. "We work very hard to involve the extended family, the community, teachers, nurses, and coaches so they know as much as they can about this condition, for the young patient's sake."

The Cystic Fibrosis Center at RWJMS has established a comprehensive program to improve the outcomes for cystic fibrosis patients of all ages, from newborns to adults. Spearheading the efforts is Thomas F. Scanlin, MD, professor of pediatrics, chief, division of pulmonary medicine, and director, the Cystic Fibrosis



Center, who previously led the renowned program at the Children's Hospital of Philadelphia and the University of Pennsylvania. Since Dr. Scanlin's arrival in 2005, outcome data for the CF Center in the Cystic Fibrosis Foundation National Registry have demonstrated a dramatic improvement in key measures of nutritional status and pulmonary function.

Prior to 2005, the results for many of these key measures were at or below the national average. Now the CF Center is consistently ranked among the top five out of 117 CF centers in the United States. The program features a strong multi-disciplinary team practicing a coordinated, family-centered approach to this complex, chronic inherited disease. — Continued on Page 23 Ian Marshall, MD, assistant professor and chief, division of pediatric endocrinology, emphasizes the importance of widespread education about pediatric diabetes.





K. Jones, FACHE,

and Robert Wood

Johnson Health

System.

president and CEO,

Robert Wood Johnson University Hospital

Children's Champion

Synergy in a Pediatric Focus with Area Hospitals

TEPHEN K. JONES, FACHE, PRESIDENT and CEO, Robert Wood Johnson University Hospital (RWJUH), agrees that collaboration is key. "I believe that much of our future success lies with us continuing to build relationships in our communities, and with other hospitals and physicians in New Jersey," he says. "As we all work toward providing greater value to our patients, strengthening these relationships will be incredibly important."

At RWJUH, pediatric patients are about 10 percent of overall inpatient admissions annually, and that figure climbs to more than 25 percent of total activity in the emergency departments. "We are definitely seeing growth in several areas of care — particularly in key sub-specialties within surgery," says Mr. Jones. "We work collaboratively with the medical school to identify and obtain any needed resources to meet these changing community needs."

Children's Specialized Hospital (CSH) opened PSE&G Children's Specialized Hospital, a state-of-theart, 60-bed inpatient unit, in New Brunswick in 2007. Here, children stay an average of 31 days, undergoing extensive rehabilitation for traumatic brain injury, spinal cord dysfunction, special infant care, chronic conditions, and sudden injuries. CSH was founded in 1891 in Mountainside. In 1999, CSH became affiliated with the Robert Wood Johnson Health System.

"This is the only place in New Jersey where there has been the investment to create one pediatric campus where you have research, teaching, and care of children both for their immediate needs and for rehabilitation, working hand in hand," says Amy B. Mansue, president and CEO of CSH. "The things possible today were almost unfathomable ten years ago. Babies born at 23 weeks are surviving and thriving on a regular basis. To support a child with that level of care requires an integrated team."

This is not just about saving lives. This is about ensuring that the children served by CSH have quality of life. "We are fully committed to continuing to improve the health of New Jersey's children," says Ms. Mansue. Barbara Ostfell, Pho Neonatology 2

THOMAS HEGYI, M

Efforts to avoid post-birth tragedies are led by Thomas Hegyi, MD, professor of pediatrics, and pediatric psychologist Barbara M. Ostfeld, PhD, professor of pediatrics, who serve as medical director and program director, respectively, for the Sudden Infant **Death Syndrome** Center of New Jersey.

A cornerstone of the family-centered approach to care is the Family Advisory Council, which meets regularly with members of the CF Center team to review clinical practice and policy in the center. This approach serves as a model for a medical home for chronic pediatric lung diseases that provides outstanding outcomes in cystic fibrosis.

The maternal fetal medicine (MFM) program, a collaborative effort of RWJMS and RWJUH, contributes a breadth of expertise toward creating a healthier population of children. Genetic counseling — particularly as it applies to identifying those at higher risk for having children with chromosomal issues - has become the focus of the division of medical genetics, headed by Susan Sklower Brooks, MMS '73, MD, professor of pediatrics. Screenings for fragile X, Tay-Sachs disease, and cystic fibrosis, among others, and an examination of family histories help to determine if measures such as nutritional supplements to reduce risks can be taken. Efforts to avoid post-birth tragedies are led by Thomas Hegyi, MD, professor of pediatrics, and pediatric psychologist Barbara M. Ostfeld, PhD, professor of pediatrics, who serve as medical director and program director, respectively, for the Sudden Infant Death Syndrome Center of New Jersey. MFM is also involved in teaching and inspiring the next generation of pediatric specialists. The RWJMS Neonatal Intensive Care Unit fellowship program adds to the high level of knowledge and patient-focused care available in the unit.

The Elizabeth M. Boggs Center on Developmental Disabilities has taken a lead in providing a fulfilling life for children who are born with Down syndrome and similar disabilities. The Boggs Center is New Jersey's federally designated University Center for Excellence in Developmental Disabilities Education, Research, and Service. Deborah M. Spitalnik, PhD, professor of pediatrics and executive director of the Boggs Center, was recently named by President Barack Obama as one of the 15 individuals to serve on the President's Committee for People with Intellectual Disabilities. The Boggs Center educates the community and clinicians on how to work with people with developmental disabilities. "We are committed to promoting the understanding that people with intellectual disabilities are active, valuable individuals who can have a career and a social life, and can make a contribution to society," Dr. Spitalnik says.

The Institute for the Study of Child Development is a research center within the Department of Pediatrics and a collaborative effort in which pediatrics "We are committed to promoting the understanding that people with intellectual disabilities are valuable individuals who can make a contribution to society," says Deborah M.



and psychology come together. The goal is to understand children by looking at emotional, social, and psychological functioning, along with any environmental influences that affect development. The institute is involved in a myriad of efforts, among them researching children with autism spectrum disorders, understanding the development of gifted children, and studying the effects of cocaine and other drugs on fetal emotional, psychological, and intel-

Spitalnik, PhD, professor of pediatrics and exectutive director of The Elizabeth M. Boggs Center on Developmental Disabilities.

"Roughly 50 percent of children with neurological problems have epilepsy," says Jan Wollack, MD, PhD, associate professor of pediatrics and neurology, and chief, child neurology and neurodevelopmental disabilities.

Children's Champion

lectual development. Several research studies are also under way with Children's Specialized Hospital in the areas of autism and Asperger's syndrome.

According to Michael Lewis, PhD, University Distinguished Professor of Pediatrics and Psychiatry and director, Institute for the Study of Child Development, "This isn't all clinical research. Our unit of study is the child embedded in his or her environment involving parents, peers, and those who interact with the child at school." Dr. Lewis feels that the academic campus has incredible potential, saying, "With an overarching connectedness and a structure that incorporates all of these entities addressing the problems facing the children in New Jersey — autism, obesity, psychological health — the impact could be profound."

The faculty of the Institute for the Study of Child Development includes Margaret Wolan Sullivan, PhD, associate director and professor of pediatrics; Dennis Carmody, PhD, professor of pediatrics; Barbara Young, PhD, associate professor of pediatrics; Jason Gold, PhD, assistant professor of pediatrics; Geraldine V. Oades-Sese, PhD, assistant professor of pediatrics; and Yiping Wang, PhD, assistant professor of pediatrics.

The Child Neurology Center, headed by Jan Wollack, MD, PhD, associate professor of pediatrics and neurology, has grown to four clinicians, including three with additional training in epilepsy and neurology. "Roughly 50 percent of children with neurological problems have epilepsy," says Dr. Wollack. While the group's activities involve the diagnosis and management of a wide variety of acute and chronic neurological illnesses, epilepsy is the central focus. The state-of-the-art epilepsy program is fully operational and handles the most complex epilepsy cases, including continuous video-EEG monitoring and epilepsy surgery evaluations.

The group maintains a close working relationship with Rachana Tyagi, MD, assistant professor of sur-



Treating Babies at Risk

ODD ROSEN, MD, ASSISTANT PROFESSOR of obstetrics, gynecology, and reproductive sciences, director, maternal-fetal medicine, and director, Regional Perinatal Center at RWJUH, has taken a leadership position in establishing a centrally located, state-of-the art, multi-disciplinary maternal-fetal medicine center that incorporates advanced treatments and diagnostic options for high-risk pregnancies. The center will give New Jerseyans a place to go for at-risk pregnancies so that parents-to-be no longer have to travel out of state to receive this caliber of treatment.

A team of physicians is devoted to fetuses in need of special care for congenital anomalies and birth defects. "This inter-professional team treats highrisk cases now referred to out-of-state hospitals," says Dr. Rosen. "We are centrally located, we have the Bristol-Myers Squibb Children's Hospital at RWJUH to take care of these newborns, and we have the required expertise to give babies the greatest chance of a healthy outcome." M

"This is a unique collection of entities together on one campus that could have national implications," says Arnold B. Rabson, MD, Laura Gallagher Endowed Chair of Developmental Biology, professor of molecular genetics, microbiology, and immunology, pathology and laboratory medicine, and pediatrics, and director of the Child Health Institute of New Jersey.

gery, a pediatric neurosurgeon, as well as with counterparts in adult neurology and neurosurgery. There are four pediatric neurologists and a pediatric neurosurgeon on the pediatric side and three epileptologists and another neurosurgeon on the adult side. "We have a lot of firepower in one location," observes Dr. Wollack.

This collaboration has already resulted in a new program that uses continuous EEG monitoring with quantitative trending in patients with subarachnoid hemorrhage to give advance warning of the onset of vasospasm, which is the major complication of that disorder and can lead to further brain damage and even death. Lessons learned in such joint programs will help to transform clinical protocols for pediatric patients. Two of the four new research recruits at CHINJ are neuroscientists, which Dr. Wollack sees as an exciting match to the expertise in the clinical area.

Sharing the Wealth of Knowledge

T'S NOT ENOUGH TO DO; TEACHING the next generation is also a priority. Identifying gaps is leading to new programs. Kapila Seshadri, MD, associate professor of pediatrics, saw a need for advanced education for people interested in the development and behavior of children. She created a fellowship program to fill that need. This year the first fellow started taking the three-year program, which is accredited by the Accreditation Council for Graduate Medical Education, and is matriculating in a curriculum that includes clinical care, didactic conferences, self-learning, and research. Dr. Seshadri, who directs the program, works in close collaboration with Frank Castello, MD, associate professor and vice chair, Department of Pediatrics, and medical director, Children's Specialized Hospital. "What we do really does touch and affect the children in all of the entities of the health campus," says Dr. Seshadri.

A Renewed Dedication to Research

HAT IS NOT VISIBLE, BUT IS OBVIOUS in the minds and hearts of all involved, is a deep desire to make things happen. Nowhere is that more evident than in the attitude of Arnold B. Rabson, MD, Laura Gallagher Endowed Chair of Developmental Biology, professor of molecular genetics, microbiology, and immunology, pathology and laboratory medicine, and pediatrics, and director of CHINJ. Kapila Seshadri, MD, associate professor of pediatrics, saw a need for advanced education for people interested in the development and behavior of children. She created



"This is a unique collection of entities together on one campus that could have national implications," says Dr. Rabson. "The potential to have interaction among all of us is exciting. The challenge is to develop a set of research activities and a research faculty who are interacting with the clinical faculty, and move into translational clinical activity." a fellowship program to fill that need.

The vision is broad: to do research on children's

Mantou Bhaumik, PhD, assistant professor of pediatrics, provides a shared resource that makes mouse models of human disease not only for the Child Health Institute of New Jersey but also for The Cancer Institute of New Jersey; Rutgers, The State University of New Jersey; and Princeton University. diseases that has an impact on treatment and prevention. Research will take place in four major areas. The first is inflammation, immunity, and infection. "Most human disease has inflammation involved in it," says Dr. Rabson. The second is neurodevelopment and autism. "Since Children's Specialized Hospital has a large population of very well characterized autistic children, there is a lot of activity we can build on here," says Dr. Rabson. "Coupled with the neuroscientists and psychologists in the Department of Pediatrics and RWJMS, there is a chance to synergize." The third is an amalgam of stem cells and pediatric cancers - important since almost all pediatric cancers are diseases of stem cells. "We're studying the ability to use the programming and differentiation of stem cells to understand disease and for therapy and also to determine how these properties of stem cells relate to pediatric cancer," says Dr. Rabson. The fourth area of focus is childhood obesity and metabolism.

Ten Laboratories with Unlimited Collaboration Potential

S OF NOVEMBER 2011, CHINJ IS occupied by ten active research laboratories. Dr. Rabson's lab is focused on human retroviruses, including HIV and a leukemia-causing virus called HTLV-1, and also on the study of genes involved in the development of blood cells and leukemia. Mantou Bhaumik, PhD, assistant professor of pediatrics, provides a shared resource that makes mouse models of human disease not only for CHINJ but also for The Cancer Institute of New Jersey; Rutgers, The State University of New Jersey; and Princeton University. Amale Laouar, PhD, assistant professor of surgery, heads a biomedical research team working on understanding how the gut recognizes foreign antigens — and determining which of these foreign substances are "good" ("good" food and "good" bacteria) and which are "bad" (such as diseasecausing microbes). The work has implications for celiac disease, inflammatory bowel disease, and cancer.

Three other laboratories have moved into CHINJ. Sevgi Gurkan, MD, assistant professor of pediatrics and a pediatric nephrologist, studies nephrotic syndrome, which is the second-leading cause of renal failure in childhood. Dr. Gurkan's roots are in research: "Although I was hired as a clinician here, during my Mt. Sinai fellowship I was active in research." Her study is investigating both the genetic Amale Laouar, PhD, assistant professor of surgery, heads a biomedical research team working on understanding how the gut recognizes foreign antigens. The work has implications for



and immune triggers for nephrotic syndrome in twoto six-year-olds and in teens — where the disease progresses at a rapid pace.

Yufang Shi, DVM, PhD, professor of molecular genetics, microbiology, and immunology, is investigating how cell death happens in the immune system — work that has major implications for all autoimmune and inflammatory diseases, including asthma. His second major activity, for which he now holds a celiac disease, inflammatory bowel disease, and cancer.

"Looking at autism from a molecular and cellular point of view will generate new information about the possible cause of autism, helping translational medicine and eventually drug design," says Davide Comoletti, DVM, PhD, assistant professor of neuroscience and cell biology.

-

leadership role in the world, studies how certain kinds of stem cells regulate the immune system. "We found there is an inflammation measure somewhere in the body and that stem cells migrate to that inflammation," says Dr. Shi."Those stem cells release immunosuppressents, which in turn release growth factors to initiate repair." The potential may be to develop this research into cellular therapeutics for different types of pediatric disease processes.

Chi-Wei Lu, PhD, assistant professor of obstetrics, gynecology, and reproductive medicine, is working with induced pluripotent stem cells (stem cells not derived embryonically but that are converted from somatic cells). She is investigating trophoblast cells found in the placenta and how they influence the developmental process. She is also studying genes and pathways that play a role in pediatric malignancies and has projects related to Down syndrome and other chromosomal disorders as well. "I look at my research as the seeds — I look forward to reaching out to work with other labs to bring resources to apply to developmental conditions," says Dr. Lu.

Four new scientists have joined the CHINJ faculty. Derek Sant'Angelo, PhD, associate professor of pediatrics, who was recruited from Memorial Sloan-Kettering Cancer Center, is an immunologist who studies how transcription and gene regulation work in the immune system, with implications for many pediatric diseases such as asthma, juvenile diabetes, and cancer. Lisa Denzin, PhD, associate professor of pediatrics, also from Sloan-Kettering, is studying how a foreign molecule is presented as an antigen how it's seen by the immune system, which then reacts against it. Her work has direct implications for many autoimmune diseases and also involves studying Type 1 juvenile onset diabetes. A new set of projects recently undertaken by Dr. Denzin includes studying cell-cycle regulation in leukemias.

In the neurodevelopment and autism area, Davide Comoletti, DVM, PhD, assistant professor of neuroscience and cell biology, is investigating the neurexin and neuroligin proteins — molecules at the synapse between two neurons that are among the most commonly implicated genes in autism. As a structural biologist, he is studying how these proteins work, how their structure influences their function, and what are the biochemical consequences of the mutations associated with autism. "Looking at A new CHINJ member, Derek Sant'Angelo, PhD, associate professor of pediatrics, is an immunologist who studies



autism from a molecular and cellular point of view will generate new information about the possible cause of autism, helping translational medicine and eventually drug design," says Dr. Comoletti.

Zhiping Pang, MD, PhD, assistant professor of neuroscience and cell biology, who was recruited from Stanford University, is an expert on neuronal synapse. Widely published, Dr. Pang's work studies the molecular mechanisms that underlie how brain cells convey information from one to another. His interest has taken him into a new area: a series of neural connections in the hypothalamus in the brain that are involved in the regulation of feeding, satiety, and energy homeostasis. His ultimate goal is to how transcription and gene regulation work in the immune system, with implications for many pediatric diseases such as asthma, juvenile diabetes, and cancer.





Zhiping Pang, MD, PhD, assistant professor of neurocience and cell biology, is an expert on neuronal synapse. understand how the human brain controls energy homeostasis and why misregulation of hypothalamic neural circuitry leads to abnormal eating disorders such as anorexia, hyperphagia, and obesity.

Dr. Pang also has been recognized for developing new techniques for regenerative medicine, converting human skin cells into functional neurons by defined factors. This could apply, for example, to a child with a neurological disease lacking effective therapy — the potential could exist to convert the patient's skin cells to neurons in a culture dish, modeling the disease to screen for effective therapies.

All the components are in place. Knowledge is a shared resource. Goals are collaborative. The term "team" has never been more appropriate.

For the 2 million children in New Jersey, the future holds more promise than it ever has. \mathbf{M}

[Special Section]

Alumni issue draws its theme from the three articles in this section. "First Class: The Class of 1968" takes readers back to 1966, when the first group of future alumni matriculated at what was then Rutgers Medical School. The graduates of that class became the original 15 alumni; today the Alumni Association represents more than 5,000 graduates. Richard Reynolds, MD, served as dean from 1979 to 1987. He brilliantly guided the school through a succession of crossroad decisions that determined its future as an academic medical campus and defined its mis-

Seginning

sion in community health. The five alumni couples interviewed for "Shared Memories, Shared Lives" graduated between 1973 and 2005. Their common memories of the medical school enrich their lives. Their reminiscences about each decade at the school enrich ours.

Beginnings

First Class The Class of 1968

1966, a new medical school was born on the banks of the Raritan. Four years in the making, Rutgers Medical School (RMS) was the brainchild of Mason Gross, PhD, then president of Rutgers, The State University of New Jersey. Dr. Gross recruited DeWitt Stetten, Jr., MD, in 1962 to serve as the school's founding dean.

In the mid-20th century, the United States was home to only 87 medical schools. But by 1966, a surge in state and federal funding for medical education had changed the landscape, and 14 new medical schools were



DeWitt Stetten, Jr., MD,

a noted biochemist, had a distinguished career in both academic medicine and research. Prior to accepting the leadership position as dean of RMS, he had taught at Harvard Medical School. In addition, he had

served as associate director in charge of research and chief of the section on intermediary metabolism at the National Institutes of Health (NIH)/National Institute of Arthritis and Metabolic Diseases.

In 1970, Dr. Stetten returned to the NIH, where he led the National Institute of General Medical Science. In 1986, the NIH established the DeWitt Stetten, Jr., Museum of Medical Research, which preserves and interprets the material culture of the scientific work of the NIH through physical and virtual exhibits.

The NIH further honors Dr. Stetten by offering the Stetten Fellowship in the History of Biomedical Sciences and Technology of Medicine. in the planning stage. In that competitive environment, Dr. Stetten successfully recruited six worldclass scientists and two renowned physicians as his department chairs. They, in turn, recruited the medical school's first faculty, which totaled 42.

In characteristic hands-on style, Dr. Stetten personally oversaw the construction projects that would become the first teaching facilities at RMS, a freestanding medical school. A multi-purpose teaching laboratory housed all classrooms, lockers, a study area, and all laboratories except the anatomy lab, an innovation that the new dean conceived as a pilot concept in medical education. In 1966, the cornerstone was laid for the Research Tower, which was completed and dedicated four years later.

At Dr. Stetten's suggestion, the walls of the teaching labs were hung with enlargements of the "Muscle Men," woodcuts from *De Humani Corporis Fabrica*, Andreas Vesalius's 16th-century text that inaugurated the modern study of anatomy. In 1970, when the main building of the medical school was complete, larger reproductions would grace the walls of

BY KATE O'NEILL
For its time, the Class of 1968 was diverse. Women made up a striking 20 percent of the class, at a time when 93 percent of the nation's physicians were men.

[Beginnings]





Dr. Stetten personally oversaw the construction projects that would become the first teaching facilities at RMS, a freestanding medical school.... The walls of the teaching labs were hung with enlargements of the "Muscle Men." woodcuts from "De Humani Corporis Fabrica", Andreas Vesalius's 16th-century text that inaugurated the modern study of anatomy.... In 1966, the cornerstone was laid for the Research Tower, which was completed and dedicated four years later.

its Great Hall. To everyone — faculty, students, and visitors alike — it was clear that this new medical school was both humanistic and erudite.

Like many debuting medical schools, RMS opened as a two-year school, teaching the basic sciences and offering a master's degree in medical science (MMS). From the start, science was never taught in isolation from its clinical correlations: Dr. Stetten insisted that in addition to the six basic science departments — anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology — the school would have a Department of Medicine and a Department of Psychiatry. As soon as the medical school could establish clinical teaching facilities, it would add third- and fourth-year studies. This transition was complete by 1974, when the first medical degrees were awarded.

A Sense of Adventure

Starting in 1963, Rutgers Medical School faculty were doing research at several locations on and near the Piscataway campus. But not until 1966, when the charter class matriculated, did the medical school finally became a reality. The elite group of 16 students had been selected from nearly 1,000 applicants.

For its time, the Class of 1968 was diverse. Women made up a striking 20 percent of the class, at a time when 93 percent of the nation's physicians were men. The class came from wide backgrounds and a variety of undergraduate schools, ranging from Sarah Lawrence College to New York University (NYU) and the University of California at Los Angeles (UCLA). Five of the 16 were from New Jersey, but only one was a graduate of Rutgers University.

Many had majored or double-majored in the sciences, but the admissions committee had included liberal arts majors as well. In contrast to the Class of 2015 at UMDNJ-Robert Wood Johnson Medical School, in which 23 percent were born outside the United States, only two members of the Class of 1968 were foreignborn; both had emigrated to escape Communist repression.

Eight of the 15 graduates of the Class of 1968 continue to practice today. Two retired voluntarily, three were sidelined by disabilities, and two are deceased.

What motivated this high-powered group of students to apply to and accept admission to an unproven medical school? "I thought it would be a great adventure to start out with a new school," recalls Rodger Searfoss, MD. "It seemed unique."

Sheila Nagar, MD, recalls a similar feeling: "It was exciting to be part of a new adventure," she says. "The school was very idealistic; it had very high standards and was going to chart new ways in medical education while building on the infrastructure of an outstanding university." Both Dr. Nagar and her classmate Linda Pollack, MD, narrowed their options to Rutgers Medical School when their families pressed them to stay near home, in New Jersey.

As a senior at the University of Miami, Luis Villa had

not firmly decided between medicine and law. He chose RMS, believing that if medicine didn't prove a good fit, he could switch to law more gracefully after graduating from a two-year school. "But I loved it all from the first day — my classmates, the environment," he says. "I never gave another thought to law school."

In the spring of 1966, Eric Wurmser, then a senior at Miami University in Ohio, was in a biology lab when

someone hand-delivered a slim envelope from Rutgers. "Thin envelopes usually brought bad news," he recalls, but he read the words "We are pleased to announce," and, overjoyed and relieved, put down both the letter and the scalpel and walked right out of class. Then, torn between acceptances from Case-Western Reserve and RMS, he sought the advice of the dean. "He was familiar with the Rutgers reputation, and he said, 'Go!' So I went!"

Walter Rosett was attracted by the financial support that Rutgers offered, and Milton

Koch believed it would be interesting to be part of a medical school in its formative years. "And it was," says Dr. Koch. "It was a great experience."

Opening The Trail: *The First Two Years*

The First Day

puzzling case study highlighted the first-day welcome session in September 1966. "Since this was a medical school," Dr. Stetten recalls in his memoir *How My Light Was Spent*, "it would be well to initiate the students at once into the problems of medicine and to introduce the students to the object of medicine — namely, the patient." Clifford Gurney, MD, then professor and chair, Department of Medicine, presented a 40-year-old patient with sickle cell anemia, reviewing the genetics of the disease, its peculiar cytology, heme metabolism, and the apparent intolerance of the plasmodium of malaria toward sickle hemoglobin. The patient provided an excellent opportunity to indicate to the students "the reasons for the study of the several basic sciences: biochemistry, anatomy, genetics, parasitology, etc.," continues

Dr. Stetten.

NEWSLETTER



Sheila Nagar, MD, recalls: "It was exciting to be part of a new adventure. The school was very idealistic: it had very high standards and was going to chart new ways in medical education while building on the infrastructure of an outstanding university."

Describing the diagnostic test, Dr. Gurney presented the students with an anomaly on the test strip: a strong spot at the location of hemoglobin S, and an additional spot, faint but still clearly visible, in the location of hemoglobin A. "A young woman immediately saw the resolution of this difficulty, and her hand shot up,"

[Beginnings]

continues Dr. Stetten. "'You can't fool me,' she said. 'That spot for hemoglobin A comes from the transfusion the patient received last week.'"

"That student was Linda Pollack," says Dr. Villa, recalling the incident as though it had occurred yesterday.

The Faculty

r. Koch remembers that he and his classmates were surprised by the emphasis placed on virology, when they had come "expecting 'old school science.' But we came to appreciate that the curriculum

was ahead of the curve, and the school was progressive. They were out front on health indicators like cholesterol. It was great to be part of such a small class and such a bright group of people."

The faculty is remembered by many in the class for its generosity, hospitality, and dedication. "They were excellent teacher-scientists," says Robert O'Neill, MD, as he ticks off the names of some of his favorites: microbiologist Thomas Stevens, PhD; psychiatrist Edward McGough, MD; biochemist Alexander Eichholz, PhD ("the way he taught enzymes, you never forgot it"); and virologist Walter Schlesinger, PhD, a pioneer in dengue fever research.

Neuroanatomy was taught by Richard Sidman, MD, and Merrill Wolfe, MD, two professors from Harvard Medical School who flew in once a week for 16 weeks to teach for two days. "They had written the prototype of a new text on neuroanatomy, which featured a brand-new concept, programmed learning," says Elliot W. Jacobs, MD. "They made this course — usually regarded with dread as the most difficult in medical school — the most interesting and exciting course that I took at RMS. The course was so vastly popular with the students that we would return in the evening to the classroom and review slides with the profs, who were there for us. Just for the fun of it!"

As the first class at RMS, the Class of 1968 had no student mentors. With no upperclassmen to guide them, many found it difficult to budget study time in order to master the essentials. "There could be challenges with some of the faculty," says Dr. Jacobs. "I asked the physiology professor what was 'core.' He tapped this huge textbook, and said, '*That's* core.'"



RMS opened as a twoyear school, teaching the basic sciences and offering a master's



degree in medical science (MMS). From the start, science was never taught in isolation from its clinical correlations: Dr. Stetten insisted that in addition to the six basic science departments – anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology – the school would have a Department of Medicine and a Department of Psychiatry.

"You spent a lot of time wondering what really mattered and what might just be a pet topic of the professor," says Dr. Rosett. "I bugged one guy to tell me what was important, and he told me to figure it out for myself. In the end, I guess my system worked, because I did very well on my boards — disproportionately well compared to my grades."

Yearbook: THE CLASS OF 1968 IN 2012

"Some faculty were writing the course as they went along, staying just ahead of the class," adds Dr. Rosett. "This made it interesting, because science is constantly changing, and things were happening while we were learning."

The following year, the Class of 1968 felt a mentoring responsibility to the entering class, says Walter Rymzo, MD. "We provided something for them that we hadn't had."

Clinical Correlations

rom the first day, when the students met the patient with sickle cell anemia, they were eager to experience medicine in a clinical environment. The medical school had not yet officially affiliated with a hospital, but on Saturday mornings, in "Clinical Correlations," the class traveled to area hospitals to meet patients whose medical conditions related to the curriculum.

Not everyone in the class was satisfied with the amount of clinical exposure that RMS offered. But many were. "Dr. Stetten's philosophy was 'We don't speak science here," says Dr. Nagar. "The faculty may have been innovators in introducing the clinical connection early on and integrating it with technical studies."

Another clinical correlation involved a patient with coarctation (narrowing) of the aorta. "We were taught how to diagnose the condition using the symptoms, without doing angiography," says Dr. Jacobs. Recalling the cardiac patient, Dr. Nagar says, "We learned that you don't always know what the problem is, but you know the questions to ask in order to find out."

Dr. O'Neill recalls a time when the class showed its barely contained eagerness for clinical experience. A clinical neurologist had invited them to St. Peter's Medical Center, in New Brunswick, where he presented a patient whose face drooped markedly on one side. He hardly had finished the question, "What do you think might be causing this?," when all 16 students unanimously said with conviction, "Bell's palsy!"

"And we were right," adds Dr. O'Neill.

One of the original 16 switched from medicine to law before graduation. All the others earned an MMS degree and then completed their MD degree at a four-year medical school. Dr. Jacobs was among the five RMS students who went on to Mount Sinai School of Medicine, which opened in 1968. "We were probably the only five students in the country who were in the first class at two different medical schools," says Dr. Jacobs. M



Elliot W. Jacobs, MD plastic and reconstructive surgery, New York City.



• BS in chemistry, Queens College; MD, Mount Sinai School of Medicine; internship/ residency (general and plastic surgery) at Mt. Sinai Hospital

RMS memories: Neuroanatomy, "a superb course"... social evenings at the homes of the Stettens and department heads . . . Ping-Pong, Friday night beer and (piz)"za"... gross anatomy cadavers, one with a fatal knife wound to his head . . . working weekends as a professional accordionist and entertainer.

Two years as a major in the U.S. Air Force in Abilene, Texas . . . 32 years in private practice, New York City... specialty: aesthetic surgery . . . widowed, divorced, now "deliriously happy" with third wife, Leigh, and sons, Jeffrey, 31, and Benjamin, 18.



Milton J. Koch, MD gastroenterology, Potomac, Maryland

• BA in German, New York University; MD, Mount. Sinai School of Medicine;

> internship/residency (internal medicine) at Bellevue Hospital; fellowship (gastroenterology) at Veterans Administration Medical

Center; research in neurology at National Institutes of Health (NIH), while serving in Public Health Service in lieu of uniformed military service.

RMS memories: Faculty hospitality . . . the 42/16 faculty-student ratio . . . teachers like the "tremendous" Walter Schlesinger, recruited from the NIH . . . Dean Stetten: always available to share information as well as great historical/medical perspectives.

A founding partner in Capital Gastroenterology Consultants, Montgomery County, Maryland, which grew to four offices with 11 doctors . . . world traveler with "self-designed trips". . . book club and family genealogy . . . wife, Susan; children, Matt, 38; Mike, 35; and Alexis, 32.

Yearbook: THE CLASS OF 1968 IN 2012



Linda Pollack Mercer, MD pediatrics, child psychiatry (retired)

Crystal Lake, Illinois

• BS in biology, New York University; MD, Mount. Sinai School of Medicine: internship/

residency (pediatrics) at Los AngelesCounty Hospital/Columbia Presbyterian Babies Hospital; fellowship (child psychiatry) at Rutgers Mental Health Center/Long Island Jewish-Hillside Medical Center

RMS memories: Being part of the Ping-Pong brigade . . . at age 20, the youngest member of Class of '68 . . . "I was sassy!" ... the school was a "neonate, but provided a good balance of scientific and clinical education."

Headed the Inpatient Child Psychiatry Unit at Children's Memorial Hospital in Chicago for four years . . . retired to be with family . . . with her late husband, John Mercer, started Serve and Protect to rescue pets whose owners were victims of the September 11, 2011, attacks . . . children: Jennifer, 33, and Johnathan, 31; stepchildren: Mike, 53, and Mark, 51; three grandchildren.



Walter Rosett, MD internal medicine (retired), Albuquerque, New Mexico

• BS in chemistry, Johns Hopkins University; MD, Mount Sinai School of Medicine; internship

at William Beaumont Army Medical Center; residency (internal medicine) and fellowship (infectious diseases) at University of Kansas Medical Center

RMS memories: The school was still a work in progress with heavy emphasis on science . . . ever-improving Ping-Pong skills but never the champ . . . Cliff Gurney, chair, Department of Medicine, his mentor and co-author of several papers.

Repaid Army by working as general medical officer at Sandia Base and Fort Carson, Colorado (lots of skiing) . . . returned to Albuquerque, which he "unequivocally loves"... joined a solo practice; built a new office and then a larger one as practice grew . . . sold practice to the local hospital . . . it had become "a second family"... "as wonderful a career as I could've hoped for" ... no more skiing and ski racing but keeping busy with tennis, reading, computers, woodworking, gardening, and genealogy research . . . married to Louise; children, Julia, 41, and Brian, 43.



Rodger Searfoss, MD

orthopaedic surgery (retired, 2008), Greensburg, Pennsylvania



 BA in history, Johns Hopkins University; MD, Stanford Medical Center; residency (surgery/orthopaedic

surgery) at University of North Carolina School of Medicine; fellowship at Bone Cancer Service, Memorial Sloan-Kettering Cancer Center, New York City

RMS memories: The school was rigorous, challenging, and comprehensive . . . strong emphasis on neuroscience . . . indelible sights and sounds of autopsy observed at St. Peter's . . . playing on a "pretty good" six-man, intramural flag football team fielded by RMS.

30 years in private practice in Latrobe, Pennsylvania . . . three "eye-opening" medical missions to Vietnam and Myanmar to teach and perform surgery . . . gardening and golf . . . wife, Beth; children, Ann, 35, and Erin, 31; one grandchild.



Rhoda Goldwasser Padow, MD

psychiatry, private practice, Fulton, Maryland

• BA, Sarah Lawrence College; MD, Tufts University School of Medicine; internship at

Boston VA Hospital; residency (general psychiatry) at McLean Hospital, Belmont, Massachusetts; fellowship (child psychiatry) at New England Medical Center, Boston; psychoanalytic training: Baltimore-Washington Psychoanalytic Institute

RMS memories: Class of '68 was very close . . . so small it was like being in a goldfish bowl . . . communal study sessions . . . everyone had keys to the "tiny building that was then the medical school"... Associate Dean Richard Cross, MD: "a lovely man who took a fatherly interest in our class"... Clinical Correlations at friendly Princeton Hospital.

Worked 12 years with seriously ill patients at Chestnut Lodge in Rockville, Maryland . . . after her husband's fatal car accident, she opened a home office to be near her young twins . . . continuing love of classical music . . . children, twins Jeremy and Victoria, 23.

Yearbook: THE CLASS OF 1968 IN 2012



Lawrence Sirott, MD family practice/adult primary care (retired, 2006), Berkeley, California

• BA in developmental psychology, University of Minnesota; MD, University of Minnesota Medical School; rotating internship at San Francisco General Hospital

RMS memories: Attracted to the school by enthusiasm and idealism of several founding faculty members, small size, financial support, and promise of learning by the Socratic method.

Public Health Service assignments on a Navajo reservation and in the National Health Service Corps as a primary care physician in an underserved rural community clinic . . . seven years at La Clinica de la Raza in Oakland . . . helped found group practice in Alameda, California . . . spent five years as a primary care physician at Kaiser, in Oakland . . . "retired as it became clear that the cognitive changes of Parkinson's disease interfered with my ability to practice medicine effectively". . . co-founded PD Active, a now-thriving organization that first brought the Mark Morris "Dance for Parkinson's" program to California . . . wife of 35 years, Harriet Charney; children, Irisa, 34, and Jonah, 32.



Eric Wurmser, MD plastic surgery, Red Bank

• BS in chemistry, Miami University; MD, Mount Sinai School of Medicine/NYU; internship/residency

(surgery and plastic surgery) at Kings County Hospital Center, Brooklyn, New York

RMS memories: "Rhoda and I, tiny and big, as lab partners . . . faculty favorites: Larry Silverman and the psych professors.

Planned a PhD in chemistry and a career in research . . . after seeing very sick patients in residency at Kings County, switched to plastic surgery . . . taught for ten years at Kings County . . . specialty: repairing cleft lips and palates . . . developed a non-profit organization to support and equip annual medical missions (22 to date) to the Philippines and Southeast Asia to teach and care for underserved . . . wife, a nurse, is always on the team . . . teaches poetry at Georgian Court University . . . certified ringside boxing physician . . . wife, Teri; children, Kurt, 37, and Rachel, 31 (in medical school at Columbia).



Walter Rymzo, MD

internal medicine, West Hyannisport, Massachusetts

• BA in biology, Johns Hopkins University; MD, Harvard Medical School; internship (medicine) at Boston City

Hospital; residency (internal medicine) at Massachusetts General Hospital; fellowship (forensic pathology) in Office of the Medical Examiner, New York City.

RMS memories: "Dean's Cup Trophy for Ping-Pong Excellence" . . . Gerhart Plaut's "substandard" comments . . . the wonderful "Schles."

Two years in Commissioned Corps of the U.S. Public Health Service Ecological Investigation Program "chasing dengue and schistosomes in Puerto Rico"... 15 years practicing internal medicine and infectious disease on Cape Cod ... chief of medicine, Cape Cod Hospital ... "amid deteriorating medical climate on the Cape, became chief of medicine, MIT"... back to Cape with concierge medical practice ... longtime aviation medical examiner ... kayaking, crewing on racing sailboats ... wife of 42 years, Inara; children, Ben, 35, and Matt, 32.



Luis Villa, MD

oncology, hematology, and pathology, Miami, Florida

 BA in chemistry, University of Miami; MD, Harvard Medical School; residencies (medicine) at

Jackson Memorial Hospital; (clinical pathology) at NIH Bethesda, Maryland; and (internal medicine and anatomic pathology) at Jackson Memorial Hospital; fellowship (hematology/oncology) at Miami Cancer Center

RMS memories: "Very special environment, very individualized teaching"... emphasis on learning from case studies ... formative summer job after first year, doing pathology rotation at Princeton Hospital.

"Incredibly grateful to this country: when nobody wanted us, the U.S. opened its doors"... board-certified in six areas ... for 30 years, had simultaneous full-time careers in oncology/hematology and pathology ... cut back to eight-hour work days in 2011... 30 years as volunteer for and 15 years as president of the League Against Cancer, which has treated more than 30,000 patients gratis and continues to do so ... second wife, Jennifer; children, Luis IV, 33; Daniel, 31; Jennifer, 20; and David, 19.

Yearbook: THE CLASS OF 1968 IN 2012



John Szabo, MD radiology, Palm Desert, California

• BS in chemistry, UCLA; MD and residency (diagnostic imaging, nuclear medicine, and radiation therapy) at UCLA, David Geffen School of Medicine; fellowship at Wadsworth VA Hospital, Los Angeles

RMS memories: "It was not yet a true medical school, but the students were well supported in all practical aspects". . . "edifice was excellent for teaching, faculty was marvelous, and Dean Stetten was a true force.". . . enjoyed exposure to clinical work at local hospitals.

Special interest in nuclear medicine.



Sheila C. Nagar, MD

endocrinology, Jerusalem

 BA in French, Douglass College; MD, New Jersey Medical School; internship/residency at UMDNJ University Hospital

RMS memories: Turned

to medicine from graduate studies in French literature, seeking something that would "nail my feet to the floor"... the prevailing attitude of excitement ... pioneering psychiatrist Albert Silverman, MD ... visiting a lab where innovative lipid research had opened a new world.

During residency, fell in love with endocrinology: "excursions in hormones and their effects on human behavior"... practicing in Jerusalem since 2003... involved in housing south Sudanese refugees in Israel... daughters, Ornitte and Talia; three grandchildren.



Robert O'Neill, MD

emergency medicine (retired), Bainbridge Island, Washington

• BS in biology and chemistry, Bucknell University; MD, internship/residency (internal medicine) at

University of Washington School of Medicine

RMS memories: Admissions interview with Richard Cross, PhD, associate dean . . . "DeWitt Stetten was capable of bringing brilliant minds together . . . "we knew they were at the top of their game."

Practiced emergency medicine for 30 years . . . "loved the ER: getting to the bottom of things every day, then starting with a clean slate". . . "a truck that did an unexpected 180 in front of me" caused injuries that forced early retirement . . . still racing six-meter sailboats and flying 50-year-old Mooney planes . . . married 45 years to Julie; children, Megan, 36, and Griff, 33; two grandchildren.

IN MEMORIAM



Steven R. Koller, MD rheumatology, Richmond, Virginia 1945–1991

• BSE in electrical engineering, Princeton University; MD, Mount Sinai School of Medicine; residency

(internal medicine) and fellowship (rheumatology) at Medical College of Virginia

Dr. Koller was the first student admitted to Rutgers Medical School, says his widow, Miriam (Mimi) Koller Pizzani, who became his wife in 1967. He wanted to be a biomedical engineer, she adds, but someone convinced him he should start with an MD.

Dr. Koller served as a major in the U.S. Army and received a Distinguished Service Medal. Loved and admired by his patients, he served on the clinical faculty of the Medical College of Virginia until the time of his death, from cancer, at age 46. Shorlty before his death, he had been promoted to the rank of clinical professor. He also chaired the medical advisory board of the Lupus Foundation of Virginia, where an endowment supports the annual Steven R. Koller Address. He is survived by Mimi; their two children, Elisabeth, 41, and Roger, 39; and two grandchildren.



Joseph S. Tulumello, MD pulmonology, Buffalo, New York 1943–2009

• BA, Harvard University; MD, Weill Cornell Medical

College; internship/residency (internal medicine) at New York Hospital; fellowship (pulmonology) at University of

California at San Diego Hospital

Dr. Tulumello served in the military as a flight surgeon, and he practiced internal medicine and pulmonary medicine in New York, California, Michigan, and Wisconsin. Although he was diagnosed with bipolar disorder in 1978, he persevered through the next two decades, pursuing the career for which he had trained with intelligence and intensity, according to his RMS classmates, and which he loved. He retired in 2003 and died in November 2009.

News of Dr. Tulumellos's illness and death came as a shock to his RMS classmates, who remember him for his kindness to all (Dr. Padow), his studious work habits (Dr. O'Neill), and his solidity and intelligence (Dr. Searfoss).

"When I think of him," says Dr. Pollack, "all I see is his huge, bright smile."

[Beginnings]

Richard C. Reynolds, MD: A Clinician at Heart

Clinician at heart, Richard C. Reynolds, MD, former dean, UMDNJ-Robert Wood Johnson Medical School, enjoyed a remarkable career in clinical and academic medicine. In 1978, he came to Rutgers Medical School (RMS) from the University of Florida College of Medicine, where he was founding chair of the Department of Community Health and Family Medicine. He served as dean of Rutgers Medical School for nine years before rounding out his distinguished career as executive vice president of the Robert Wood Johnson Foundation (RWJF).

The Early Years

R ichard Reynolds decided at age 16 to become a doctor. Starting that journey, he majored in biology at Rutgers, The State University of New Jersey. Then, after acceptance at the Johns Hopkins School of Medicine, he hitchhiked to Baltimore to begin his medical studies. In his first clinical encoun-

Dr. Richard Reynolds and his wife, Mary Jane, in the 1960s

> ters, Dr. Reynolds discovered that medicine exceeded his expectations. "I had always been shy," he says, "but I discovered that the shyness left me when I saw a patient. I realized what I could do, and what my limitations were."

> BY KATE O'NEILL

In 1953, he earned his medical degree at Hopkins, where he also completed his internship and residency in internal medicine and, later, a fellowship in infectious diseases.

During a fourth-year elective in his last year of medical school, Dr. Reynolds was working in the delivery room one evening, assisted by a nursing student with fiery red hair. "That was it," he says. "I was smitten, and it ruined any plans I'd had for my bachelorhood!"

Dr. Reynolds and the red-headed Mary Jane Beck married the following year, after his internship and her graduation from nursing school. They promptly headed for Alaska, where he served in the Public Health Service for two years. As an itinerant doctor covering the villages of Alaska's southern tier, he encountered and addressed issues of community health that would influence his priorities throughout his career. While there, he delivered two of the most important patients of his career: the couple's first two children, Karen and Stephanie. Their son, Wayne, was born following the family's return to Maryland.

After Dr. Reynolds's fellowship, they moved to the small town of Frederick, Maryland, where he started a muchneeded medical practice in a downtown storefront. "It was a good time, and I worked with wonderful partners," recalls Dr. Reynolds, who ran the practice solo for seven years.

A decade later, he would revisit some of his Frederick patients in his essay "A Day in the Life of an Internist." An old appointment book provided not only the framework for the essay, but also the *dramatis personae*: the patients he had seen between 7 AM and 7 PM — or consulted about, in the case of a 2:30 AM call from the hospital — in his office, at the hospital, and in their homes. Although ten years had passed since making those entries, Dr. Reynolds says he "was amazed at how vividly I could recall many of the patients."

The essay was included in *On Doctoring*, an anthology of essays, poems, and stories, co-edited by Dr. Reynolds and cardiologist John Stone, MD. Sponsored by the Robert Wood Johnson Foundation, the work was first published in 1989. For years, the foundation presented a copy of the book to first-year medical students throughout the United States — more than 200,000 copies to date — aiming to share "not only the triumphs and joys of medicine, but also its unique perceptions of human beings."

Dr. Reynolds's innate curiosity tended to express itself as restlessness, a sense, he says, that he wanted "something else." Serendipitously, after he'd been in Frederick for nine years, a phone call came from Leighton Cluff, MD, a longtime colleague and friend. Dr. Cluff, then chair of the Department of Medicine at the University of Florida College of Medicine in Gainesville, hoped to recruit Dr.



Dr. Reynolds brought important strengths to the medical school, including experience in academic medicine and an appreciation for the organization of medical student and resident training.

Reynolds as chief of the division of ambulatory medicine and community health.

Dr. Reynolds accepted the offer. Among his responsibilities was the development of a rural education program through which, under faculty supervision, medical students and residents would provide care to people who were medically underserved: the region beyond Gainesville was rural, sparsely populated, and impoverished; nearby Lafayette County had been without a doctor for ten years.

Under Dr. Reynolds's leadership, the new department established three satellite clinics. The pilot clinic, in Mayo — affectionately known to the staff as the Mayo Clinic was open around the clock and saw 5,000 medically underserved patients each year. In addition to providing primary care, the clinics became an important teaching resource and a locus for research on rural health. "Dr. Reynolds's landmark work in Gainesville brought him kudos for ambulatory care service, an area for which he became known nationwide," says Raymond M. Russo, MD. During Dr. Reynolds's early tenure as dean, Dr. Russo was director of ambulatory care at Middlesex General Hospital — later renamed Robert Wood Johnson University Hospital (RWJUH).

[Beginnings]

The Years as Dean

Dr. Reynolds was beginning to feel restless again when a call came from Stanley S. Bergen, Jr., MD, president, College of Medicine and Dentistry of New Jersey (CMDNJ), the future UMDNJ. Dr. Bergen's offer of the position of interim dean at Rutgers Medical School sounded like exactly the sort of new challenge Dr. Reynolds had been looking for.

"Dr. Bergen said there was no expectation that I'd become dean," Dr. Reynolds recalls. "Still, I vowed to myself that, as interim dean, I'd walk through the door every morning and *act* like a dean." To deal with prickly problems, he turned to his clinical experience. "If faculty members came into my office upset about something, I would think of them as my patients. I'd ask what the problem was, and how I could help them so they could do their job."

Dr. Reynolds maintained his clinical skills by leading hospital rounds whenever he could. He enjoyed any opportunity to meet with students. "The school was getting stronger," he says, "and the students were first-rate. They didn't know how good they were, and one of my jobs was to buck them up and make sure they lifted their sights."

The Teaching Hospital

r. Reynolds's primary job was to establish an interface between the medical school and a hospital that would serve as a major teaching affiliate. In a characteristic understatement, he says, "It was a challenge, but I thought it would be fun to give it a try."

A year after his initial appointment at Rutgers Medical School, Dr. Reynolds was named dean. He brought important strengths to the medical school, including experience in academic medicine and an appreciation for the organization of medical student and resident training. Dr. Russo, who worked closely with Dr. Reynolds, says that, most important, "Dick's a quick study, and he's fantastic with human relations. He persuaded people because he was usually right, and people knew it."

These strengths helped the school evolve in new directions, with three particular achievements marking "the Reynolds years:" the establishment of a teaching hospital, the change in the name of the school, and the creation of the Eric B. Chandler Health Center. By good fortune, Dr. Reynolds's arrival on the Piscataway campus — there was no New Brunswick campus in 1979 — coincided with Johnson & Johnson's decision to maintain its world headquarters in New Brunswick. The corporation's commitment to community development complemented the medical school's mission in community health.

After a comprehensive analysis of the four leading candidates, Dr. Bergen's Alternatives Committee determined that the 400-bed Middlesex General Hospital in New Brunswick was the clear choice to be named the medical school's teaching hospital. If the hospital leadership and staff had any remaining doubts about the school's total long-term commitment to the affiliation, says Dr. Reynolds, they were put to rest when RMS put the Medical Education Building "on the tarmac" immediately contiguous to the hospital.

What's in a Name?

hat's in a name? A lot, Dr. Reynolds would discover.

Originally part of Rutgers University, the medical school remained Rutgers Medical School when the state put it under the CMDNJ umbrella. By 1985, CMDNJ had evolved and become UMDNJ, and the board and Dr. Bergen felt that Rutgers Medical School needed to clarify its independence from Rutgers. When the contentious process of name selection became deadlocked, Dr. Reynolds proposed that the school be named for the New Jersey poet and physician William Carlos Williams. When his suggestion itself proved controversial, Dr. Reynolds supported an alternative proposal, that the school be named for Robert Wood Johnson — widely known as "the General" — a business leader who had built Johnson & Johnson into a worldwide corporation. UMDNJ and the medical school readily embraced the plan to name the school for Mr. Johnson. At the same time, Middlesex General became Robert Wood Johnson University Hospital, strengthening the bond between the two institutions.

The Legacy The Richard Reynolds Chair

hile Dr. Reynolds was working at RWJF and serving at Chandler, the foundation wanted to honor him with a meaningful, lasting contribution to the medical school. The legacy they chose was the establishment of the Richard C. Reynolds Chair in General Internal Medicine. The endowment recognizes Dr. Reynolds's passion for protecting and promoting generalism in internal medicine, says Jeffrey L. Carson, MD, Richard C. Reynolds Professor of Medicine and chief, division of general internal medicine. Dr. Reynolds was instrumental in creating the division and recruited Dr. Carson to build it. "The division does 75 percent of the attending on the hospital medical teaching service in the Department of Medicine," says Dr. Carson. "In addition, it provides teaching service in the outpatient general internal medicine practice, the ER, and at Chandler." A large portion of the endowment supports research in general internal medicine.

A Dean's Success

dean's success depends on others," says Dr. Reynolds.

"A nationally prominent academic medical campus has evolved from the affiliation of Robert Wood Johnson Medical School and Robert Wood Johnson University Hospital," he adds. "This could only have happened with prodigious efforts by many, including the faculty, a loyal cadre of community physicians, involved local citizens, members of the hospital board, and many others." He recognizes, in particular, the support he received from Dr. Stanley Bergen as president of UMDNJ during his tenure.

The Key

nce, while he was dean, Dr. Reynolds decided after a series of meetings in Washington, D.C., to phone Dr. Stetten, who lived nearby, in Bethesda, Maryland. The two deans met that afternoon, and the conversation, "tentative but cordial," as Dr. Reynolds recalls, seemed to bridge the longtime gap between Dr. Stetten and the school he had founded. A few days later, Dr. Reynolds was at his desk, writing a note to Dr. Stetten, when his assistant entered with a small, carefully wrapped package. Inside was a gold-plated key. The key, Dr. Stetten explained in the attached message, had been presented to him at the dedication of the new building in Piscataway. "This is the key with which I entered the building every day," he wrote. "When I left the school, I took it with me. Now I am passing it along to you."

"After that, every time I entered the building, I used Hans Stetten's key," says Dr. Reynolds, using Dr. Stetten's lifelong nickname. "When I went to the Robert Wood Johnson Foundation, I passed it on to [Dean] Norm Edelman. It was a treasure."

Once again, Dr. Reynolds had taken the time to listen and to care. A clinician at heart. \square

The Eric B. Chandler Health Center

E arly in his tenure, Dr. Reynolds realized that being dean of a medical school is as much a community job as an academic one. The development of the Eric B. Chandler Health Center may best demonstrate his skills as a community leader. To bring the health center from concept to reality required an effective collaboration among three parties: RWJMS, RWJUH, and the New Brunswick Board of Education. The support of the Civic League was also critical to the project's success.

When the hospital outgrew its ambulatory care space, Dr. Reynolds located six trailers formerly used by a medical practice in southern New Jersey. He also found the funds to purchase the trailers and transport them to New Brunswick. The hospital supported the proposal that its ambulatory services be moved to property owned by the school board. Quietly, Dr. Reynolds made sure that Chandler would always be part of the medical school.

In 1987, Dr. Reynolds stepped down as dean to become executive vice president of the Robert Wood Johnson Foundation. Steven Schroeder, MD, was president of RWJF during the last seven years of Dr. Reynolds's service there. "Dick was my mentor at the foundation," he says, and "and you couldn't ask for a better partner. His personal values and social ethic came together in his commitment to medicine and the problems of health care."

Dr. Reynolds was delighted when, in 1991, RWJF awarded \$3 million to Chandler, by then a federally qualified health center. The grant from the foundation supported the construction of permanent facilities on George Street, in downtown New Brunswick. At 15,000 square feet, the new building would triple the area of the trailers and comfortably accommodate an expansion of patient enrollment and services. Although by then he was an officer at RWJF, Dr. Reynolds volunteered, one evening each week, as a provider at Chandler. "I couldn't stay away," he says. "I loved it, and so many of the patients had heart-rending stories."

Eric G. Jahn, MD '88, associate professor of family medicine and community health and senior associate dean for community health, was an attending at Chandler in the 1990s and served as the center's medical director. "Sometimes things could be in turmoil at Chandler, but Dr. Reynolds brought an overwhelming sense of care and calm that extended to the patient and spilled over into the center," he recalls. "He always left us with the impression that we were doing the right thing by being there."

[Beginnings]

Alumni Couples: Shared Memories, Shared Lives

Deep Roots

We like to say that we have deep tap roots at the medical school," says Ronald Nahass, MD '82, clinical professor of medicine, UMDNJ-Robert Wood Johnson Medical School. Like Ron and Rosanne Vita Nahass, MD '84, the four other couples interviewed for this article appreciate their mutual ties to RWJMS, finding that shared recollections of classes and classmates, faculty and friends, light moments and somber ones, enrich their lives. "People from Robert Wood always know we go together," says Rosanne. "It's great! Some of them knew our first son and ask, 'How's the baby?' (He's now 25!) Twenty-five years out and we still have those connections."

Introductions



Maura Santangelo, MMS '73, MD, MPH, and Lawrence Schenk, MMS '73, MD

> Since 1994, RWJMS has hosted the White Coat Ceremony to welcome first-year students as future physicians. No such ceremony existed in the 1970s, says Dr. Santangelo. On

the first day of classes, students went to their locker, donned a white coat, and headed for class. "Anatomy, taught by a surgeon, was "the first 'doctor' thing the class did together," she says. "It was treated differently from other sciences. It was like a medical apprenticeship.

"There were only 64 students in our class, with 16 of us in each anatomy lab," she adds. "You got to know people quickly, and that's where I met Larry." They began studying together, not only enjoying each other's company, but also benefiting from their complementary learning styles. "I'm an aural learner," he says, "while she's visual — a note taker."

Michele Hickman Johnson, MD '79, and Hubert Johnson, MD '79

In the summer of 1975, before starting their first-year classes, Michele Hickman and Hubert Johnson were part of a small group of students who elected to take an anatomy course at the medical school. The students lived in New Brunswick, commuting to Piscataway. Or at least they did until, "in that summer of rains," Hubert says, "the Route 18 bridge washed out." Stranded in Piscataway, the students had to sleep in the lounge downstairs.

BY KATE O'NEILL

[Beginnings]



The couples interviewed for this article appreciate their mutual ties to Robert Wood Johnson Medical School, finding that shared recollections of classes and classmates, faculty and friends, light moments and somber ones, enrich their lives. On the first day of classes, Michele was stranded again when the ride she'd arranged was delayed by a flat tire. But Hubert swung by and got her to school on time. They became inseparable in school and out and were married at the end of their third year. "He's always there for me," she says. "And I'm always there for him."

Michele recounts an example of Hubert's extrasensory perception of her needs. "Our first child, Christopher, was born 11 days before graduation. When they called us up to the stage for our diplomas, I climbed the steps really cautiously, for fear I'd fall over my gown. Hubert was right in front of me and, without looking back, he put out his hand and supported me the rest of the way. The whole crowd cheered!"

Ronald Nahass, MD '82, and Rosanne Vita Nahass, MD '84

Ron Nahass was two years ahead of Rosanne in medical school, so they never shared classes, but they have been together since Rosanne's first year at RWJMS, with the medical school playing a continuous role in their lives. That fall, Rosanne attended a

> Halloween party, an informal welcome event for the new class. Ron, the host, recalls immediately noticing "the pretty firstyear student across the room." As they began spending time together, they discovered that they could have met much sooner:

they grew up in adjacent towns in North Jersey and attended high schools with a long-standing rivalry in sports.

Ronald & Rosanne Nahass Then They were married at the end of Rosanne's second year, just before Ron graduated and started his residency.

Christina Miller Reiter, MD '03, and Mark Reiter, MBA, MD '03

Although both Christina and Mark Reiter majored in biology at Rutgers, The State University of New Jersey, they met while she was a senior at Rutgers, and he was in his first year at RWJMS, on an interview for a teaching assistantship in a summer chemistry course. "It turned out that the school needed more than one assistant," she says, "so we both got the job."



Mark & Christina Reiter

That summer they began dating and talking about careers in medicine. Christina had always been interested in medical school, but as she considered applying, she became intimidated. "I wondered if I would be accepted and succeed," she says. "Mark listened patiently. At the right moment, he gave me the push I needed, but he would have supported my decision either way."

Mark took a year off between his second and third years to complete the combined RWJMS/Rutgers Master's Program in Business Administration. Then he and Christina completed medical school together, as members of the Class of 2003, and were married during their fourth year.



The Nahasses Today

Joanne Kulinski Mazzarelli, MD '05, and Anthony Mazzarelli, JD, MBE, MD '02

oanne Kulinski met Anthony Mazzarelli when she was in sixth grade and he was in seventh. They lost track of each other and met again when she was at Rutgers, applying to medical schools. They started dating when she was a senior and he was a third-year medical student. "We spent



a lot of time talking about medicine and discussing my decision," she says.

When Joanne was a first-year student in New Brunswick, Anthony was in his fourth year of medical school on the Camden campus, simultaneously completing his second year of law school at the University of Pennsylvania and his first year of a master's degree at Penn's Center for Bioethics. At the end of that year, the U.S. Junior Chamber of Commerce named Anthony one of Ten Outstanding Young Americans. He had been nominated for the honor by Joanne, who cited not only his academic achievements, but also his community involvement. Anthony co-founded the student-run Healthcare Outreach Project (HOP) in Camden, where Joanne would volunteer during her clinical years. She currently serves as an attending preceptor at HOP.

The Mazzarellis were married at the end of her third year.

The Residency Years: -Choices and Challenges

aura Santangelo and Lawrence Schenk were married in 1973, after earning their master of medical science degrees at RWJMS (then Rutgers Medical School). They completed their MDs at separate schools, however: Maura at Brown University Medical Center and Larry at Tufts Medical School.

They were back together for their residencies at Tufts New England Medical Center, though their contrasting personal styles had guided them to very different programs. Maura is detail-oriented and considered neurology before deciding on ophthalmology because "ophthalmologists seem to enjoy what they're doing. They're happy doctors." Larry would go into orthopaedic surgery. "I take a broader approach to issues," he says. "My preferred tool is a twoby-four."

Their first child, William, arrived at the end of the first year of their residencies. Three years later, their second, Candace, was born. Larry was chief resident in the orthopaedic surgery residency program, on call 24/7, and Maura was completing a fellowship in glaucoma at Massachusetts Eye and Ear Infirmary. "Having a child while you're a resident or fellow is insane," Maura says, "and it was worse before there were laws limiting residents' working hours. You try to schedule your hours so you're not on call at the same time, but it's hard. And the whole time you're at work, you're conscious that your children are out there, somewhere."

ichele and Hubert Johnson entered the Couples Match and went to Boston, their first choice, for their residencies. Hubert would do surgery at Tufts, while Michele did obstetrics and gynecology at Beth Israel Deaconess Medical Center. After two years, they took deferments to serve as general medical officers in the Public Health Service (PHS) in South Carolina, where twoyear-old Christopher was joined by a sister, Kimberly. "The PHS mandated you see 100 patients per week," says Hubert. "We learned a lot of medicine, but no matter how busy we were there, we weren't as busy as we were as residents with clinical hours plus administrative work."

Following their residencies in Boston, Hubert did a fellowship in vascular surgery, Michele entered private practice, and Nicole was born. "We enjoyed our time at RWJ and are grateful for the excellent education and opportunities it provided," Hubert adds. "We both graduated from excellent residencies in Boston, all of which we attribute to being so well prepared by RWJ."

The Nahasses' determination to stay near each other guided many of their career decisions. Ron doesn't recall a match process, but Rosanne still had two years before graduation, so the residency program in the Department of Medicine at RWJMS was a clear first choice. He subsequently served a fourth year, as chief resident, before completing a fellowship in infectious diseases, also at RWJMS, and joining the full-time faculty of the Department of Medicine.

[Beginnings]

Rosanne was an intern in the Department of Medicine's residency program when she became pregnant. Thirty-six-hour shifts, often starting at 6:00 AM, took their toll, and in the seventh month of her pregnancy, bed rest was prescribed. Six weeks later, she was able to complete her internship, and their first son, Ronald, was born on the last day of her last elective.

Ron promptly took over at home, as Rosanne started her second year. "Once you've done residency training, you're prepared for anything," he says. "You have your medical job and your parent job. You do this, and then you do that, then you run back and do something else, and you figure out ways to do it at the highest level you can."

"We were pros by the time Thomas was born 21 months later," says Rosanne. And when Meghan was born — at Robert Wood Johnson University Hospital, like her brothers — Ron was on the full-time faculty at RWJMS, and Rosanne was working part-time in the Rutgers Community Health Program.

From This Day Forward

Still, Rosanne's mornings could start with a "4:00 AM schlep" to North Jersey to drop off the children with their grandparents and get back to work in New Brunswick by 7:00. "When Ronald was little," says Rosanne, "the car was a second home to him; he called it 'the moving room.'"

Sometimes she took the children along to work, with toys and sleeping bags, but the logistics paled by comparison with the residency years. "There weren't a lot of options," she says. "You knew this was the way it was going to be, so you just *did* it. I never felt overwhelmed or depressed. We knew we'd get through it though now I wonder how!"

www.ith plans to marry during their last year of medical school, *Christina and Mark Reiter* entered the Couples Match. "It adds a layer of complexity to the match process," says Christina, who interviewed with 26 programs to ensure the optimum match. "But it worked out well: neither of us had to sacrifice, and we both got our first choice." Christina matched with the anesthesia residency at Duke University School of Medicine and Mark with the emergency medicine residency at the University of North Carolina School of Medicine.

he Mazzarellis, who graduated three years apart, didn't have to navigate the obstacle course of residency years. While Joanne was completing her clinical years, Anthony was in the second year of his residency in emergency medicine at Cooper Medical Center. When Joanne matched with her first-ranked choice, the internal medicine residency at the University of Pennsylvania School of Medicine, Anthony was a newly appointed faculty member in the **RWJMS** Department of Emergency Medicine, working in the Emergency Department at Cooper. Joanne has since completed her residency as well as a three-year fellowship in cardiovascular disease at Cooper, where she was chief fellow.

hile the 21st-century alumni are busily building and shaping their careers, the graduates from the 1970s and 1980s are starting to reduce their hours or following new career paths.

hen Larry Schenk finished his training, he and Maura moved to Binghamton, New York, and went into private practice.

In 1991, the family journeyed to Nepal, where Larry took the children trekking and sightseeing, while Maura did cataract surgery and taught about glaucoma. "In South Asia, cataracts are the predominant cause of blindness," says Maura. "Two-thirds of the burden of blindness in the world is borne by women, though they are less likely to get the care needed."

She returned to the region every year as a volunteer with the Seva Foundation (*seva* means "service" in Sanskrit). In 1995, she started an eye care program to train and lead teams that perform cataract surgery. Established in the Tibetan Autonomous Region, it has since expanded to three other western Chinese provinces and southern Tibet.

To better prepare herself, Maura earned a master's degree in public health at Johns Hopkins University. She also retired from private practice. Although 40 million people in the world are blind, she says, ophthalmologists don't have a lot of opportunities to "give back." But she found a way not only to volunteer, but also to help develop a sustainable social system in a region with a vast need.

[Beginnings]

Ten years ago, Larry and Maura bought a house in Umbria, Italy, where they live for four months a year, as he inches toward retirement. An avid gardener, he tends his vineyard and 400 olive trees. He has also followed his love of biking across the United States, Italy, New Zealand, Scotland, and France.

As Hubert and Michele Johnson reminisce, shared memories emerge of outstanding RWJMS faculty, such as the late Pamela Champe, PhD, professor emeritus of biochemistry. "You never realize how much they have influenced you," says Hubert, "and you can never thank them enough."

Michele was in solo practice for 23 years before joining a seven-physician, hospital-based practice and a coverage group that guarantees her an occasional night's sleep. While still practicing obstetrics, she specializes in office-based, minimally invasive gynecologic procedures.

Hubert works in Partners Health System, the largest health care provider in Massachusetts, and is associate chief of vascular surgery at North Shore Medical Center. He holds an appointment as clinical associate professor of surgery at Massachusetts General, where he has served on the faculty for 24 years. From 2007 to 2008, Hubert did an endovascular fellowship at the Cleveland Clinic. "From the time you start, keep your eyes on the prize," he says. "You just want to be good doctors and good parents."

Michele and Hubert recall superb views of the Rutgers University Golf Course from classrooms in the Research Tower at RWJMS. Years later, Hubert got hooked on the game and then surprised Michele with her own set of clubs. "He'd been figuring out what we would do together when we retire," says Michele. The clubs have accompanied them to their 15th Reunion at RWJMS and to wonderful golf courses around the world. hile practicing, Rosanne Nahass scheduled office hours so that she would be at home when the children got off the school bus, and a sit-down dinner was part of the family's daily routine. "Time together meant spending time as a family, whether it was vacations or weekend outings," says Ron.

In 1980, Rosanne had put a career in piano performance on hold as she entered medical school. After she practiced internal medicine for 18 years, her interest in the piano was rekindled. She resumed her own musical career as a student at the Westminster Choir College of Rider University, in Princeton.

A 2004 performance opportunity at Rutgers' Zimmerli Art Museum led to a new position, as the museum's pianist in residence. Her medical practice simmers on the back burner as she delves into her "Art of Music" project, presenting exhibition-linked lectures and recitals.

Ron's career has taken a new direction as well. In 2001, he founded and became president of the 33-physician ID Care, in Hillsborough. In addition to running the practice and serving as an attending physician at several area hospitals, he is earning a master of science in management degree at the Harvard School of Public Health. The program links his interests in health care reform, practice management, and clinical care, topics he covers in regular lectures to house staff and small groups at RWJUH.

ark and Christina Reiter practice at St. Luke's Medical Center, in Bethlehem, Pennsylvania, where they also serve on the clinical faculty of the Temple University School of Medicine. Their first daughter, born during the last year of Christina's fellowship at UNC, has been joined by two sisters, born two years apart.

Combining his interests in medicine and business, Mark founded Emergency Excellence, a consulting company dedicated to improving emergency department performance. With 40 clients, Em-Ex has become a second full-time job, but he decided that working harder at this point would give him time with his family as the girls grow up.

The Mazzarellis' shared love of travel has taken them around the world not just as tourists, but also because they share an interest in community and global health. Joanne and Anthony served with International Healthcare Volunteers (IHCV) on a medical mission to Ghana led by James Aikins, MD, associate professor of obstetrics, gynecology, and reproductive sciences. Joanne also spent two months on a medical mission to Gaborone, Botswana, while a resident at the University of Pennsylvania. She now serves on the board of directors of IHCV.

They enjoy having medical careers that can interact but remain distinct. She practices cardiology at Cooper University Hospital, while Anthony is an adjunct assistant professor of emergency medicine working one day a week in the Emergency Department. He also serves as administrative vice president of strategic planning and implementation at Cooper.

Life evolved with the birth of Sophia, at the end of Joanne's cardiology fellowship. Now the Mazzarellis don't talk shop at home. "Anthony has changed!" Joanne says. "We turn off our cell phones as soon as we walk through the door, and as long as Sophia's awake, we're not on the computer."

"Sophia is the focus," Anthony adds, "because, as you can imagine, everything she does is wonderful." M



he American College of Emergency Physicians section of Emergency Ultrasound now requires training in bedside ultrasound for all emergency physicians. "Our residents will leave here completely prepared. We dedicate one month of training to bedside scanning, after which they must take both an online and hands-on examination," says Rajesh N. Geria, MD, assistant professor and chief, division of emergency and critical care ultrasound.



hy work in the dark when you have a flashlight?" That's the analogy used by Rajesh N. Geria, MD, assistant professor and chief, division of emergency and critical care ultrasound, when he's explaining the value of bedside ultrasound to emergency medicine residents. Patients may consider it more of a

"It enables us to take a closer look in the Emergency Department and get the yes or no answer we need," says Robert M. Eisenstein, MD, associate professor and interim chair, Department of Emergency Medicine. Because physicians can pinpoint a problem quickly, without the risk of moving patients, potential life-anddeath treatment decisions can be made virtually instantly.

guiding light in the tumultuous storm of an emergent health situation.

The size of a laptop computer and easy to transport, bedside ultrasound is becoming a new point-of-care tool with a high degree of clarity and resolution, providing clear direction to physicians in critical care situations.

Lifesaving and Time-Saving Applications

The power of the technology in the Emergency Department lies primarily in its ability to help physicians evaluate unstable patients. If an older person comes into the ED with lower back pain, bedside ultrasound can look for an abdominal aortic aneurysm. "We can actually call a code aorta — alerting the vascular surgeons that we have an abdominal aortic aneurysm — in order to rapidly expedite care," says Dr. Geria.



If a woman appears with severe pelvic pain, bedside ultrasound can determine if there is an ectopic pregnancy. "We had one patient who was in shock and we used the ultrasound to find the pregnancy in the adnexa," recounts Dr. Geria. "Five minutes after she came through the door, we called the senior OB resi-

dent and they took her to the OR." For pregnant women who enter the ED concerned that the fetus has stopped moving, bedside ultrasound provides invaluable peace of mind when they learn there is a heartbeat.

In fact, there are several core applications, including cardiac and FAST trauma, looking for cardiac activity in cardiac arrest situations and signs of fluid around the heart (pericardial effusion) and in the abdomen (hemoperitoneum), that allow the trauma team to immediately change clinical management at the bedside.

The technology is also very useful for providing procedural guidance and increasing productivity in the Emergency Department. For example, difficult peripheral intravenous lines are now being placed using ultrasound guidance, where the needle is visualized entering the vein. Using this technique results in a decrease in the number of blind attempts and therefore the number of complications such as infection and arterial puncture. If a successful peripheral line can be placed using ultrasound guidance, the more invasive central lines can be avoided.

While not a substitute for traditional radiology, bedside ultrasound technology is very goal-directed. Rather than being used for comparable studies, it's performed and interpreted by the emergency physician at the bedside to find specific things and answer specific questions. It focuses on a limited study to rule out life-threatening illnesses.

A New Standard of Care a New Curriculum Requirement

Bedside ultrasound is now a standard of care in emergency rooms. At Robert Wood Johnson University Hospital, there are four machines now in use in the Emergency Department: two for the trauma team and two for the Emergency Department team. The first ultrasound machine was purchased in 2006.

The American College of Emergency Physicians section of Emergency Ultrasound — of which Dr. Geria recently became the chair-elect — now requires training in bedside ultrasound for all emergency physicians. Everyone who graduates must be prepared to perform the procedures and interpret the findings. "Our residents will leave here completely prepared," says Dr. Geria. "We dedicate one month of training to bedside scanning, after which they must take both an online and hands-on examination."

These skills are also taught to medical students within the emergency

medicine clerkship and dedicated four-week elective. The education also appeals to students from radiology and surgery because 90 percent of the training is hands-on. "The program is always full," says Dr. Geria. The hands-on training has become a differentiator for the program at UMDNJ-Robert Wood Johnson Medical School as students and residents are exposed to a wide variety of pathology, an abundance of trauma and critical care, and high severity of illnesses.

Efforts are also under way to train nurses and physician assistants in using the technology.

A New Division Spearheads Change

The new division of emergency and critical care ultrasound at RWJMS gives official status to the new technology and highlights its importance within the medical school and the hospital. Both Dr. Geria and Daniel S. Morrison, MD, assistant professor of emergency medicine — a second member of the team and respected ultrasound authority — are fellowship-trained in bedside ultrasound. Four emergency medicine physicians also commit extra time to do shifts with students, lecture, and speak at conferences.

The division has established some ambitious goals, including interdepartmental collaboration with other physicians — including critical care and internal medicine specialists and surgeons — on not only clinical protocols but research as well. Also in the plans are the initiation of a fellowship program by 2013 and the creation of an interface that will link the Web-based archival system to the hospital system for medical records and order entry, allowing consultants to view emergency ultrasound reports from anywhere within the hospital.

The objective is to position the division as a center of excellence within the medical school and hospital, creating opportunities for research, interdepartmental collaboration, advanced education, training, and improvements in patient care. This light in a storm benefits not just patients but also physicians and scientists.



THAT ISN'T ONE IS

R E V O L U T I O N I Z I N G

BRAIN AND SPINE

S U R G E R Y

hen someone says "surgical knife," your mind probably conjures up an image of a typical scalpel. But for brain surgery — and in particular for brain metastases - the term "knife" applies not to steel but to a technology that combines radiation and physics. Known as the Gamma Knife, it's a surgical tool that's been around for more than 40 years. But four decades of refinements have dramatically increased its capabilities and outcomes. The Gamma Knife Perfexion is the most advanced, non-invasive alternative treatment to intracranial problems - and it hasn't existed in central New Jersey until now.

BY LYNDA RUDOLPH

LEKSELL GAMMA KNIFE

PERFEXION



Robert

Wood Johnson University Hospital (RWJUH) acquired called Gamma Knife Perfexion — in March 2011. Center was specially designed to house the Gamma Knife Perfexion. Left to right: coordinator, Gamma Knife Center; Venkat Narra, PhD, associate professor of radiation oncology; and Shabbar F. Danish, MD '01, assistant professor of neuroneurosurgery, and director, Gamma Knife Center at RWJUH.



he Gamma Knife was first used in Sweden in 1968. The first installation in the United States occurred in 1987. According to Elekta Neuroscience — the manufacturer of the Leksell Gamma Knife — Gamma Knife surgery has been used to treat more than 500,000 patients. The number of patients treated per year has increased by 300 percent since 2006. The advantages — providing treatment that is less invasive and less harmful to normal brain tissue surrounding tumors — are favored by clinicians and patients alike.



: JOHN

EMERSON

LEFT: ALAN SCHINDLER/COURTESY OF ROBERT WOOD JOHNSON UNIVERSITY

"This technology is the gold standard of precision in intracranial applications requiring sub-millimeter accuracy of radiation delivery."

> — Ning Jeff Yue, PhD, professor and vice chair, Department of Radiation Oncology

Robert Wood Johnson University Hospital (RWJUH) acquired the most advanced version of the Gamma Knife technology — called Gamma Knife Perfexion in March 2011. It was used for head and neck radiosurgery five years ago and has come to represent the most advanced application of radiosurgery, with its greater flexibility and convenience in treatable volume and dose planning. The RWJUH Gamma Knife Center was specially designed to house the Gamma Knife Perfexion.

"This technology is the gold standard of precision in intracranial applications requiring sub-millimeter accuracy of radiation delivery," says Ning Jeff Yue, PhD, professor and vice chair, Department of Radiation Oncology. "Older versions were more cumbersome. But the latest generation is flexible and streamlined."





RADIOSURGERY HARDWARE AND PROTOCOLS DIFFER FROM HOSPITAL TO HOSPITAL

Il radiosurgery technology is not the same," cautions Shabbar F. Danish, MD '01, assistant professor of neurosurgery, director, stereotactic and functional neurosurgery, and director, Gamma Knife Center at RWJUH. "In New Jersey, there is overlapping technology, and it's important to know that Gamma Knife is the only radiosurgery that was built specifically for use on the brain.

"The importance of training is paramount to surgeons using the Gamma Knife," adds Dr. Danish. "Many surgeons don't have fellowship training." Dr. Danish has completed a fellowship in Gamma Knife radiosurgery.

In fact, RWJUH is the only facility in New Jersey that has a dedicated team, including a neurosurgeon, radiation oncologist, and medical physicist, all specially trained and certified for Gamma Knife surgery using the Perfexion model. The same team performs the radiosurgeries every time — without using substitutes.

THE ADVANTAGES OF THE LATEST GENERATION

urrently being used for brain cancer and to treat arteriovenous malformation (AVM), pain disorders, and tremor, the Gamma Knife Perfexion has several advantages compared to earlier versions of the technology. "There is a greatly reduced treatment time, and because the technology is fully robotic, we can adjust the positioning, making patients more comfortable, and provide more conformal dose coverage," says Dr. Danish.

Perfexion streamlines work flow and can deliver treatment to one or more tumors in a single session. It can treat lesions in the sinuses, orbits, and upper cervical spine. Because of its unique automated collimator, it offers greater accuracy, conformity, and dosimetry. "Because there is less beam time, there is less radiation scattered to surrounding tissue such as the thyroid, pelvis, and breast," says Dr. Danish. "The ability to treat more complex tumors and deliver a more finite dose leads to the potential for better outcomes."

Robert Wood Johnson MEDICINE 59



A COMFORTABLE PATIENT EXPERIENCE

B efore treatment, a stereotactic head frame is attached painlessly to patients. The frame is designed to prevent head movement during the procedure, ensuring that only the targeted area receives the radiation. Imaging tests are conducted, to precisely pinpoint the size, shape, and location of the tumor. Markers are placed on the head frame to serve as a pattern for the planned treatment. Once brain images are computerized and the treatment plan is completed, the patient, while still awake, moves into the dome section of the unit for the procedure, which on average lasts 45 minutes.

"In most cases, patients need only one single treatment; a few others require more," says Dr. Yue. "It really depends on the size and number of the tumors and how close they are to other critical organs." Dr. Yue also cautions that the procedure isn't right for every tumor diagnosis: "It's a better alternative to invasive surgeries when the tumors are small. However, sometimes it's impossible to conduct radiosurgery. If the tumors are large, or in the case of certain diseases, other options may need to be considered."

CANDIDATES FOR GAMMA KNIFE TREATMENT

amma Knife stereotactic radiosurgery can be a treatment recommendation for patients with brain lesions that are four centimeters or smaller in diameter. It is also a treatment option for patients who have no other apparent course of action. In addition, Gamma Knife may be used on patients who have had prior radiation treatments, in the case of a cancer recurrence.

For patients with disease of the brain, the Gamma Knife — requiring no incision and as a result with a far smaller risk of complications — provides an option they didn't have locally until now.

LETTER FROM THE ALUMNI ASSOCIATION PRESIDENT

Dear Alumni and Friends:

t is my pleasure to welcome you to the spring issue of *Robert Wood Johnson Medicine*! It is an exciting time to serve as the president of the Robert Wood Johnson Medical School Alumni Association. We are looking forward to another successful year with many opportunities to mentor current RWJMS students, reunite with classmates, and collaborate on a variety of initiatives. We began our year with the 24th Annual Career Night, with Dean Amenta again joining us to open the evening. I would like to express my thanks to all those who volunteered their time to make this event a success (see Career Night article on page 64).

We are very excited to announce our support of the Second Annual Scholarship Gala to Celebrate with Alumni and Friends on Saturday evening, April 21, 2012, at The Heldrich in New Brunswick. With increasing financial demands on our students, the ability to offer scholarship support has never been more important. RWJMS attracts an incredibly talented and diverse group of young men and women who are the future of medicine. Our students and alumni are recognized in the region and beyond for their contributions in patient care, education, research, and community health. Our colleagues across the country clearly agree, as this year our students achieved the remarkable accomplishment of a 100% Match!

At the Gala we will enjoy an evening with friends, classmates, and colleagues, while providing much-needed financial support for our RWJMS students. Last year, the Gala raised more than \$205,000, from which we awarded 18 scholarships in the amount of \$10,000 each. We will honor the anniversaries of the following classes: 40th: 1972, 35th: 1977, 30th: 1982, 25th: 1987, 20th: 1992, 15th: 1997, 10th: 2002, 5th: 2007. I look forward to seeing everyone there!

As you are aware, the Alumni Association has a long history of striving to provide support for the young men and women who attend RWJMS. Through the efforts of the Alumni Association and the generous support of our donors, we will award \$140,000 in scholarships and loans to RWJMS students in the 2012–2013 academic year. We thank you for your contributions during this very difficult financial climate and ask for your continued dedication to this cause.

The Alumni Association is a wonderful way to keep in contact with fellow classmates, network with other colleagues, socialize with our students, collaborate on community/institutional projects, and keep abreast of the ongoing advancements at RWJMS. We welcome all alumni and invite you to contact Roberta Ribner at



ribnerrs@umdnj.edu if you are interested in learning more about the Alumni Association. I want to thank the past presidents of the Alumni Association and members of the Board of Trustees for all the work that they have done and continue to do. It is my hope that we can continue to accomplish wonderful things together this year.

Sincerely,

Tamara A. LaCouture, MD '94 President, RWJMS Alumni Association

P.S. Please visit our Web site at http://rwjms.umdnj.edu/alumni and click on *Make a Gift* to contribute to the 2012 Alumni Association Annual Fund or mail your gift in the envelope enclosed in the magazine. In addition, please join the Alumni Association on Facebook.

Programs



UMDNJ-Robert Wood Johnson Medical School and the Foundation of UMDNJ Invite You to Attend the

THE SECOND

ANNUAL

S C H O L A R S H Ì P

TO Celebrate with alumni and friends

Saturday, April 21, 2012

The Heldrich New Brunswick New Jersey

6:30 pm Cocktails and Silent Auction

7:30 pm

Awards Presentation Dinner and Dancing

Black Tie

For more information, *call* 732.729.4670.



A New Jersey Health Foundation Affiliate

2012 Gala Honorees:

MERITORIOUS SERVICE AWARD

Harvey A. Holzberg, MBA, FACHE President Emeritus Robert Wood Johnson University Hospital

DISTINGUISHED ALUMNI AWARD

Donald Rose, MD '80 *Clinical Associate Professor of Orthopaedic Surgery, NYU School of Medicine Founding Director of the Harkness Center for Dance Injuries NYU Hospital for Joint Diseases*

HONORARY ALUMNI AWARD To be awarded posthumously

Stephen F. Lowry, MD, MBA *Professor and Chair, Department of Surgery, Senior Associate Dean for Education UMDNJ-Robert Wood Johnson Medical School*

HONORING THE FIRST CLASS: CLASS OF 1968

CELEBRATION OF THE FOLLOWING ANNIVERSARY CLASSES:

40th: 1972 • 35th: 1977 • 30th: 1982 • 25th: 1987 20th: 1992 • 15th: 1997 • 10th: 2002 • 5th: 2007

RWJMS • ALUMNI



ophia Sequeira '15, of Millstone, is the Alumni Association's tenth Hippocrates Scholar. The association awards the scholarship annually to an incoming first-year student based on academic excellence. Hippocrates Scholars receive \$20,000 toward their tuition each year.

Hippocrates Scholars learn about their selection from Carol A. Terregino, MD '86, associate professor of medicine, interim senior associate dean for education, and associate dean for admissions. Describing her reaction to Dr. Terregino's call, Sophia says, "I wondered if she was calling to tell me I'd forgotten something on some form. When I realized it was about a scholarship, I was very excited, but I thought she meant it was, maybe, \$2,000. It just couldn't sink in that it was \$20,000.

ALUMNI ASSOCIATION AWARDS HIPPOCRATES SCHOLARSHIP TO SOPHIA SEQUEIRA '15

I am so grateful!" Sophia was 12 years old when her grandmother, "the backbone of the family," developed terminal brain cancer. English was not her parents' first lan-

guage, and Sophia sensed their frustration when the physicians' explanations came up short." As I grew up, I learned how helpful it is when physicians communicate well with their patients and patient families. I realized I wanted to become a physician who really focused on communication with patients and who worked to create a solid patientphysician relationship."

The sciences have always been Sophia's favorite subjects, because she finds them the most challenging. At Williams College, she majored in biology with a concentration in biochemistry and wrote an honors thesis on the molecular basis of stem cells in leeches. "Yes, leeches," she repeats with a laugh. "They were good organisms to study because they have large stem cells and carry their embryos outside their bodies."

She was accepted for a

one-year assistantship at the Women's Health Center at the Atrium Medical Center, in Cincinnati, where she aided with procedures and referrals and helped patients understand their mammogram results. Her mentor, radiologist Hugh Hawkins, MD, says that when he first interviewed Sophia, "she came across as a doctor: a leader, a team player, strong academically, and an excellent communicator." He became her role model, exemplifying the communication skills her family had needed during her grandmother's illness.

The internship reinforced her decision to go to medical school. "I was really set on RWJMS," says Sophia. "I wanted to come home for med school. I see myself practicing and giving back in the community where I grew up."

-K.O'N.

COMMUNICATE WITH ALUMNI ON SOCIAL MEDIA SITES

RWJMS news and events and an opportunity to participate in conversations with alumni and students are now available on facebook.com,



linkedin.com, and twitter.com. On Facebook and LinkedIn, search for "UMDNJ-Robert Wood Johnson Medical School" and "Robert Wood Johnson Medical School Alumni Association." On Twitter, search for "UMDNJ_RWJMS." Participation on Facebook and LinkedIn is by approval of the site administrator, but all can register.

RWJMS · ALUMNI NEWS

ALUMNI ASSOCIATION HOSTS 24TH ANNUAL CAREER NIGHT

by Kate O'Neill

areer Night, a long-standing Alumni Association tradition, is always a highlight of the RWJMS winter calendar. The 24th Annual Career Night, held on January 17, attracted more than 50 alumni volunteers, representing 25 specialties. Students gathered in the Great Hall to enjoy dinner and the opportunity to discuss

medical specialties with alumni, for whom the event also served as a mini reunion.

Psychiatrist Ricardo Fernandez, MD '79, was grateful to see, still in place, the Renaissance-

era anatomical posters that have always adorned the Great Hall. "It was very nostalgic for me to return to the place where I first entered this great society of medicine, which I feel so fortunate to belong to," he says.

Dr. Fernandez looks forward to putting Career Night on his 2013 calendar, and he also signed up for the Alumni Association's A Day in the Life program.

For further information on

Career Night, A Day in the Life, and other Alumni Association programs, please contact Roberta Ribner, coordinator, Alumni Affairs: ribnerrs@umdnj.edu.







1: Alumni and students enjoy good conversations about medical specialties and a delicious dinner.

> **2:** Oncologist Eduardo Fernandez, MD '89, discusses career choices with a student.

3: Ursula Pogany, MD '81, discusses careers in pediatrics.

4: Scott Woska, MD '97, counsels students on careers in physical medicine and rehabilitation.

5: Anthony Mazzarelli, MD '02, advises students on career options.























- **6:** Pediatrician Lee Vogel, MD '80, shares his experiences.
- **7:** Marissa DeFreese, MD '03, talks about her experiences as an acute care surgeon.
- 8: Tamara LaCouture, MD '94, president, Alumni Association, discusses careers in radiation oncology.
- 9: Lynn Helmer, MD '82, advises students on careers in medical administration.
- **10:** Sonia Garcia Laumbach, MD '99, assistant professor of family medicine and community health and assistant dean for student affairs, counsels students on career options.
- 11: Francine Sinofsky, MD '81, and Frederick Licciardi, MD '86, share their experiences in OB/GYN with students.
- **12:** Lasanta Horana, MD '04, discusses careers in emergency medicine.



13: Sundip Patel, MD, talks about his experiences as an emergency medicine physician.

BY KIM

14: Michael Rosenberg, MMS '74, MD, discusses career options in neurology.

Vered Stearns, MD '92: DEVELOPING AND DELIVERING

PERSONALIZED CANCER TREATMENT

n oncology, the trend is toward whole-patient treatment. This suits Vered

Stearns, MD '92, to a T. Dr. Stearns, a dedicated, accomplished, and resourceful clinician-scientist, is working on several "outside-the-box" lines of breast cancer research, always with the patient as her first priority. An associate professor of medicine at the Johns Hopkins School of Medicine, she was appointed in 2010 as co-director of the Breast Cancer Program at the school of medicine's Sidney Kimmel Comprehensive Cancer Center.

Dr. Stearns recalls a turning point during her fourth year at UMDNJ-Robert Wood Johnson Medical School, Camden campus. She was still looking into her career options when she spent several weeks on a clinical rotation in the oncology unit at Cooper University Hospital. "I was struck by the close connection between the doctors and their patients," says Dr. Stearns. "I'd never wanted to be a generalist, and I liked the idea of providing specialty care while also becoming that patient's primary care physician."

During her residency in internal medicine at Georgetown University School of Medicine, Dr. Stearns began to focus on solid tumor oncology and then on breast cancer in particular. "It was an amazing experience," Dr. Stearns recalls. Working with patients, families, and clinical care teams in the outpatient oncology unit, she gained a better sense of the field as a whole and of the growing sub-specialty of outpatient care for patients with breast cancer.

As she completed a medical oncology fellowship at Georgetown University Medical Center and the affiliated Lombardi Comprehensive Cancer Center, her interest in translational research evolved. "I felt the need to find better treatments and decided to combine research and clinical care," she says.

In 1996, Dr. Stearns sought out as a mentor Daniel F. Hayes, MD, an internationally renowned leader in breast cancer research. "She was waiting at my office door the day I arrived at Georgetown," he recalls, "and told me: 'I want to study breast cancer.'" She became a valued member of his laboratory and subsequently moved with the team to the University of Michigan Comprehensive Cancer Center.

Her work with Dr. Hayes exposed Dr. Stearns to a wealth of advanced pharmacogenetic-based research. She became a leader in the multi-center, multi-disciplinary Consortium on Breast Cancer Pharmacogenetics (COBRA), which seeks to create personalized prevention and treatment of each patient's breast cancer. By establishing a molecular profile of the cancer, based on a blood test, COBRA aims to discover how genes alter an individual patient's response to a drug.

The study focuses on the common chemotherapy drug tamoxifen and a class of drugs known as aromatase inhibitors. Identification of patients for whom tamoxifen is wrong would lead to safer, more effective treatment with fewer negative side effects.

Dr. Stearns has been awarded significant funding. As a junior investigator, she received prestigious clinical



investigator awards from the American Cancer Society and the Damon Runyon Cancer Research Foundation. In addition, she was the first recipient of the American Society for Clinical Oncology's Advanced Clinical Research Award. Subsequent grants from the National Institutes of Health, the Breast Cancer Research Foundation, and the Mary Kay Ash Charitable Foundation, as well as several grants from industry, helped advance her research and provided more time to work with her mentors.

A Johns Hopkins faculty member since 2002, Dr. Stearns continues to pursue novel approaches to breast cancer research and treatment. One of her strategies is the use of molecular markers to target clinical trial participants. Groups of several hundred genetically profiled participants may well provide more useful results leading to more effective treatment and better treatment outcomes - than might come from a trial that enrolled thousands of unprofiled patients.

Along with Sara Sukumar, PhD, co-

Dr. Stearns is also exploring the viability of administering powerful chemotherapy drugs in decreased amounts directly into the ductal system of the breast. Because most breast tumors originate within the ductal tree, the researchers hope this radical technique will prevent the development and spread of the disease.

In a third area, Dr. Stearns is working with the knowledge that some, but not all, forms of breast cancer are estrogen receptive and can be treated with anti-estrogen therapy. Pursuing research in collaboration with several Johns Hopkins faculty members and her former mentor Nancy Davidson, MD, she seeks to alter the non-receptive genes, making them estrogen receptive and thus treatable.

"Vered is a great scientist, but she isn't hung up on her science. She's always thinking about the patient," says Dr. Hayes. "She's a great teacher, already preparing the next generation of people. And she's a terrific clinician. I'd want anyone in my family to be treated by her, and that's the highest praise you can give." M

John Hohneker, MD '85: DEVELOPING DRUGS THROUGH THE PARADIGM OF CANCER RESEARCH

n February 2011, Novartis Pharma

promoted John Hohneker '85 to senior vice president and global head of development, integrated hospital care. With the new position came a move from Morristown, to Basel, Switzerland, home of the corporation's global headquarters. The assignment is an ideal match for Dr. Hohneker's passion for science and his meticulous approach to drug research and development.

The culture and location are an equally good match for his outside interests: travel, hiking, theater, gastronomy, and now, Old World wines. "Everything in Switzerland works!" he says. "The trains are on time and reliable. Many of the billboards advertise watches. Clearly they are obsessed with time—and, of course, chocolate."

In high school, Dr. Hohneker loved science, especially biology, including laboratory dissection. "I began to think how cool it would be to discover new medicines," he recalls, "and I was lucky to have a biology teacher who recognized my interest and encouraged me to pursue medicine."

After earning a bachelor of arts degree in chemistry at Gettysburg College, he entered Rutgers Medical School. "I got an excellent scientific foundation in medicine, courses like medical physiology and pathology," he says. During medical school, Dr. Hohneker was first introduced to his future field of expertise, medical oncology. During his third-year clinical rotations, he recalls, he followed a few cancer patients of Michael Nissenblatt, MD, a community physician who is now a clinical professor of medicine at RWJMS.

Dr. Hohneker was Alpha Omega Alpha at RWJMS, which acquired its new name during his graduation year. He did a three-year internship and residency at the University of North Carolina (UNC) at Chapel Hill, where he found a true mentor in John Parker, MD, a professor of medicine in the division of hematology/oncology.

"John was the person who really got

me interested in oncology," Dr. Hohneker says. "We often reviewed the blood smears of leukemia patients on admission to the hospital and made their diagnosis. I'm not sure many physicians these days actually look at their patients' blood smears under a microscope."

He adds, "John was amazing — a triple threat: he was a great teacher, a superb physician, and an excellent researcher. Sadly, he passed away from lung cancer during my oncology training."

With the exception of his first year of a hematology/ oncology fellowship at the University of California at San Diego, Dr. Hohneker was in Chapel Hill for 16 years. At UNC, he completed his fellowship, which also included training in drug development sponsored by Burroughs Wellcome. He continued to work for the company as a senior clinical research physician in oncology research, while serving as an adjunct professor of medicine.

In high school he had imagined himself discovering new medicines; in the pharmaceutical industry that he had a chance to realize his dreams. While at Burroughs Wellcome, he led the development of Navelbine, a treatment for very advanced lung cancer, and successfully guided it through the regulatory approval process.

When Burroughs Wellcome and GlaxoSmithKline merged and the new corporation was renamed Glaxo-Wellcome, Dr. Hohneker became the head of clinical development for oncology. Four years later, he was appointed worldwide therapeutic area head, oncology. "Cancer is fascinating, because it isn't a single disease and no sin-

Goncology is paving a new way for drug development by focusing on the genetics and biology of disease," says Dr. Hohneker. "We are applying these principles to broader areas of medical research." He adds, "Cancer research provides the paradigm for future drug development."

gle organ is typically involved," he says. "You have to look at the interaction of multiple facets to understand the disease."

Dr. Hohneker felt some ambivalence when, in 1995, Novartis offered him the position of vice president, U.S. medical affairs, oncology. In accepting the position, he would be ending a long and productive relationship with GlaxoWellcome. At Novartis, however, he would have the opportunity to work on a variety of late-stage drugs, including new "targeted" therapies. This is an area of research that particularly interests Dr. Hohneker and would prove a major factor in his decision to accept the offer from Novartis.

"Understanding the specific genetic drivers of tumors is essential to finding successful treatments for patients," he says. "Novartis is committed both to this approach and to developing drugs for people without treatment alternatives. It's extremely rewarding."

Dr. Hohneker served in this position for ten years; leading clinical research teams, he ensured proper clinical trials and adherence to good clinical practice. The development of targeted cancer therapies in North America was his focus during this period.

Now, in his new position with Novartis, as global head of development, integrated hospital care, Dr. Hohneker has expanded responsibilities. Although the methodology of cancer research is still embedded in his thinking, the focus of his work has moved to other areas of disease. He directs and manages project leaders and heads of clinical support units for the Integrated Hospital Care Franchise, which includes organ transplant/nephrology and rheumatology/ autoimmune diseases, as well as anti-infectives. In these areas, he is responsible for taking drugs through the latestage development and regulatory approval processes.

"Oncology is paving a new way for drug development by focusing on the genetics and biology of disease," says Dr. Hohneker. "We are applying these principles to broader areas of medical research." He adds, "Cancer research provides the paradigm for future drug development."

BY KATE O'NEILL



WHAT'S NEW? Please send your professional and personal news for CLASS NOTES to: Roberta Ribner, Editor, *Robert Wood Johnson Medicine*, Coordinator, Alumni Affairs, UMDNJ-Robert Wood Johnson Medical School Alumni Association • 335 George Street • Suite 2300 New Brunswick, NJ 08903 • Phone: 732-235-6310 • Fax: 732-235-9570 Email: ribnerrs@umdnj.edu • http://rwjms.umdnj.edu/alumni

NINETEEN SEVENTY-ONE

Richard Jackson co-edited a new book, *Making Healthy Places: Designing and Building for Health, Well-being, and Sustainability* (Island Press, 2011). Dr. Jackson also hosts a new series on PBS titled *Designing Healthy Places*, which looks at the impact of our built environment on the nation's key health concerns.

NINETEEN SEVENTY-FIVE

Susan Rosenthal reports: "I assumed the position as corporate director of medical education for Meridian in 2009. I am enjoying my new position, especially teaching RWJMS students rotating at Jersey Shore University Medical Center."

NINETEEN SEVENTY-SIX

Brenda Shank writes: "I retired as of December 30, 2010, as director of the division of radiation oncology at Doctors Medical Center in San Pablo, Calif."

NINETEEN SEVENTY-NINE

Christina Mora is a professor of anesthesiology at Stanford University School of Medicine.

Alessio Salsano is the author of The High Calling: A Christian Physician's Journey Through the Career of Medicine.

Winston Scott is a founding member of the Caribbean Medical Mission, a humanitarian group that provides medical care to the needy in the Caribbean.

N I N E T E E N E I G H T Y

Diane Gabe writes: "Wonderful career as pediatrician, but now retired and loving it."

NINETEEN EIGHTY-ONE

Frank Briglia joined the Atlanti-Care Regional Medical Center as medical director of the Pediatric Hospitalist Program for Nemours Pediatric Partners.

Linda Meloy writes: "I am now a full professor of pediatrics at Virginia Commonwealth University Medical Center."

NINETEEN EIGHTY-TWO

Grace Chang was appointed a professor of psychiatry at Harvard Medical School.

Marilyn Heine received the Council Meritorious Service Award from the American College of Emergency Physicians.

Deborah Young is a member ofthe medical staff at Pottstown Memorial Medical Center, Department of Family Medicine.

N I N E T E E N E I G H T Y - F O U R

Kathryn Holloway was selected as one of the 2012 honorees to the Rutgers Hall of Distinguished Alumni. She is a professor at Virginia Commonwealth University School of Medicine and chief of neurosurgery at the Hunter Holmes McGuire V.A. Medical Center in Richmond, Va.

N I N E T E E N E I G H T Y - F I V E

Martin Evers was recognized by the Pennsylvania Chapter of the American College of Physicians (ACP) for his exceptional dedication to and leadership of the Pennsylvania chapter of the ACP. He practices medicine at Bon Secours Community Hospital in Port Jervis, N.Y.

Raymond Sanders is an attending neonatologist at Children's Hospital at St. Francis in Tulsa, Okla.

NINETEEN EIGHTY-SIX

Richard Angelo is chief of the Department of Obstetrics and Gynecology at Cape Cod Hospital in Hyannis, Mass.

Joseph Costabile reports: "I have received a two-year billet again with the 4th Medical Battalion, United States Marine Corps."

N I N E T E E N E I G H T Y - E I G H T

Constantine Audeb joined Banner Thunderbird Medical Center in Glendale, Ariz., as a hospitalist, in May 2011.

Steven Sheris is chief of cardiology at the Gagnon Cardiovascular Institute at Overlook Medical Center, Atlantic Health System, in Summit.

NINETEEN EIGHTY-NINE

Gastroenterologist *Richard Mailloux* opened a new practice, Bellefonte Digestive Disease Center, in Bellefonte, Ky.

N I N E T E E N N I N E T Y

Peter Sayre is an assistant clinical professor of medicine at the University of California–San Francisco (UCSF), division of hematology-oncology. He is also executive director of clinical trials at the UCSF School of Medicine Diabetes Center.

Laura Sinai writes: "I am serving a two-year term as chair of the North Carolina Breastfeeding Coalition."

NINETEEN NINETY-TWO

John Capo recently became a full professor in the Department of Orthopaedics at UMDNJ-New Jersey Medical School.

Jonathan Fellus is the director of rehabilitation at Meadowlands Hospital Medical Center, Secaucus.

NINETEEN NINETY-THREE

Richard Mellon, an obstetrician/ gynecologist, joined Pen Bay Women's Health in Rockport, Maine.

N I N E T E E N N I N E T Y - F O U R

Tamara LaCouture, assistant professor and vice chair, Department of Radiation Oncology, RWJMS, was honored at the Pink Roses Teal Magnolias Brunch, sponsored by the Cooper Cancer Institute, in October 2011.

Catherine Shanahan, who specializes in family medicine and weight loss, recently joined the Queen of the Valley Medical Associates in Napa, Calif.

NINETEEN NINETY-FIVE

Henry Kong and Jessica Treisman, MD, PhD, were married in September 2011.

James Metz is an assistant professor of radiation oncology and chief of clinical operations at the University of Pennsylvania. He is also editor-in-chief of OncoLink.

NINETEEN NINETY-SIX

Internist *Carole Lytle* joined the Summit Medical Group.

NINETEEN NINETY-SEVEN

D. *Robert Jordan* writes: "I recently joined the practice of DePersia Medical Group in Swedesboro and Woodbury as an internal medicine physician seeing primary care patients."

Jocelyn Mitchell-Williams was appointed to the Board of Trustees of Family Service in Moorestown.

N I N E T E E N N I N E T Y - E I G H T

Steven Bromley is director of outpatient services of neurology for the Virtua Medical Group throughout South Jersey.

Stella King is director of women's health services at Sheehan's Family Care Clinic in Buffalo, N.Y.

Marcus Magnet is chair of the Department of Family Medicine at Underwood Memorial Hospital in Woodbury.

N I N E T E E N N I N E T Y - N I N E

Robert Donatiello writes: "I am chair of the Department of Anesthesiology for John Muir Medical Center in Concord, Calif. I am also the proud father of two."

Samantha Leib writes: "I had a baby boy! Brady Michael was born on June 23, 2011."

Jongming Li joined the Regional Cancer Center in Erie, Pa., as a medical oncologist and hematologist.

TWO THOUSAND

Shaya Ansari writes: "I live and work in Kansas City, Mo. I am a clinical assistant professor of radiology and director of Body MRI at the University of Missouri in Kansas City. I have been here for four years and love the Midwest. Best-kept secret: great appreciative patients and great lifestyle, far superior than the Northeast. I miss New Jersey, though — great pizza!" **David Otterburn** is an assistant professor of surgery in the Department of Surgery, division of plastic and reconstructive surgery, at Weill Cornell Medical College.

Orthopaedist *Fotios Tjoumakaris* joined the Rothman Institute in Egg Harbor Township.

TWO THOUSAND

Carrie Burns writes: "My husband, *Gregg Gagliardi '01*, and I are thrilled to announce the birth of our son, Christian Michael Gagliardi, born on May 4, 2011. He was delivered at the University of Pennsylvania by *Irina Burd '03*, who is a friend and was one of my anatomy lab partners!"

Kathleen Greaney writes:

"My husband, Michael Schmidt, and I welcomed our first child, Lauren Elizabeth Schmidt, on December 22, 2011. I am a boardcertified pediatrician and partner at Maple Avenue Pediatrics in Fair Lawn."

Felix Olobatuyi was appointed an assistant professor at Texas A&M University School of Health Sciences in Temple, Texas.

T W O THOUSAND

Danielle Ludwin is an assistant professor of anesthesiology at Columbia University Medical Center and the associate director of the regional anesthesia fellowship.

Biren Saraiya was named medical director of The Cancer Institute of New Jersey–Hamilton.

Sathya Sembugamoorthy-

Bhandari reports: "We are back in the U.S. We moved to Lansing, Michigan, for my interventional and pain and EMG fellowship at Michigan State University."

T W O THOUSAND THREE

Grant Cooper and his wife, *Ana Bracilovic '04*, opened the Princeton Spine and Joint Center in 2008.

Dianna Deignan, a primary case physician with Harbor Family Practice in Stone Harbor, has been appointed chief medical information officer at Cape Regional Medical Center.

TWO THOUSAND FOUR

Lasanta Horana writes: "I was awarded the honorary status of fellow in the American College of Emergency Physicians in October 2011."

T WO THOUSAND

Christopher Gentle writes: "My wife and I had our first child, Alicia Doligosa Gentle, born on March 1, 2011. I was inducted as a fellow in the American College of Emergency Physicians in October."

Nicole Eftychiou Post writes:

My husband, *Robert Post II '05*, and I are happy to announce the birth of our daughter, Olivia Nicole, on June 7. Our son, Bobby (3), is so happy to be a big brother! We are happy to be living in the Northeast again. Rob is the research director for the Virtua Family Medicine Residency in Voorhees. I am working as a geriatric psychiatrist in Philadelphia."

TWO THOUSAND

Kalpana Narayan and Ganesh Shankar, MD, PhD, were married in May 2011. Dr. Narayan is an emergency room physician at the Hospital of the University of Pennsylvania, where she is also a Robert Wood Johnson clinical scholar, focusing on research on the elderly and longterm care. *Michael Zozzaro* joined The Family Center for Otolaryngology in Rutherford, affiliated with Hackensack University Medical Center.

T W O THOUSAND E I G H T

Adrienne Collier writes: "Upon completion of my pediatrics residency at RWMS at Bristol-Myers Squibb Children's Hospital, I will be relocating my family to Maryland to work as a pediatrician at the People's Community Health Center in Baltimore."

Kelli Davis completed a residency in internal medicine at Emory University. She is working as a hospitalist for The Southeast Permanente Medical Group in Atlanta.

Andrew Demidowich completed his internal medicine residency at Mount Sinai Medical Center. He is working as a hospitalist in Denver, and will start a fellowship in endocrinology in September 2012 at the National Institutes of Health.

F O R M E R R E S I D E N T S

Veronica Anderson is the founder and host of a web radio talk show, Wellness for the Real World.

Tyrone Krause is a cardio-thoracic surgeon at Jersey City Medical Center.

Sanjay Kumar specializes in vascular surgery and treatment at Physicians of Southern New Jersey in Vineland.

IN MEMORIAM

Surekha Dwivedi, MD '94,

passed away on August 27, 2011. She was a family physician and practiced in the Meridian system in New Jersey. She is survived by her husband, Jonathan Briggs, MD, and her two sons.

Nancy Mao Gevirtz, MD '86, passed away on August 25, 2011.

Janet Hamilton, MD '83, passed away on May 12, 2011.

LAST P A G E

In Memoriam: Stephen F. Lowry, MD

ith great sadness, the RWJMS community learned of the death, in June 2011, of Stephen F. Lowry, MD, professor and chair, Department of Surgery, and senior associate dean for education.

An eminent physician scientist, Dr. Lowry led internationally recognized research and clinical trials. He defined the central role of cell-derived mediators as a mechanism for systemic inflammation, septic shock, and organ dysfunction in critically ill patients. In addition, he developed novel immunotherapeutic approaches for the management of these life-threatening conditions. He recently integrated *in vivo* and computational systems approaches to the study of systemic inflammation and sepsis and was developing novel technologies for the assessment of patient risk and responses to therapy. He was instrumental in creating the division of surgical sciences, which focuses on core research issues of inflammation, developmental biology, and healing.

A superb mentor, he was the first faculty member named to the Harvey Professorship in Innovative Teaching. He was among the first surgeons to earn the National Institutes of Health's prestigious Research Career Development Award. In 1997, his research grant earned MERIT Award status from the National Institute of General Medical Sciences. He later received the Flance-Karl Award from the American Surgical Association as well as the Philadelphia Academy of Surgery's prestigious Samuel D. Gross Prize in Surgical Research. He was made an Honorary Fellow of the Royal College of Surgeons of Edinburgh and received the

BYKATE O'NEILL



Outstanding Medical Research Scientist Award for Clinical Research from the Edward J. Ill Excellence in Medicine Foundation. He is listed as a highly cited author by the Institute for Science Information in the field of immunology.

"As remarkable as these accomplishments are, they don't define Steve adequately," says Peter S. Amenta, MD, PhD, dean. "Steve was a genuine and caring person, who showed respect and consideration to everyone. He loved his family, and his extended family in the Department of Surgery and the Office of Education as well as the entire Robert Wood Johnson family. His warmth and sense of humor are deeply missed."

In addition, the Honorary Alumni Award will be awarded posthumously to Dr. Lowry at the Scholarship Gala to Celebrate with Alumni and Friends on April 21, 2012. Please join us at the Gala to celebrate Dr. Lowry's life and career.

Dr. Lowry's family has established The Stephen F. Lowry, MD, Memorial Fund to support medical research and academic education. Checks may be made payable to the New Jersey Health Foundation (NJHF)–Dr. Lowry and mailed to 120 Albany Street, Tower II, Suite 850, New Brunswick, NJ 08901. Donations may also be made at www.njhealthfoundation.org. Please click on "Make a Gift"; in the first gift designation box, write "Dr. Lowry Memorial Fund."

New location in **Princeton!**

800 Bunn Drive *Call today at 609-688-6859*

> The Robert Wood Johnson Medical Group *is Now in Princeton and focused on:*

Specialties include: Cardiac Surgery Urology Pediatric Surgery Plastic Surgery Pulmonary Disease Infectious Disease Vascular Surgery International Travel Medicine and Immunization

Main Campus: New Brunswick

Satellite Practice Locations:

Hamilton • Montclair Monroe • Piscataway Princeton • Somerset

Where Great Medicine is Academic

Academic Health Center Partner is Robert Wood Johnson University Hospital



You.

The Robert Wood Johnson

Medical Group now has an office in Princeton. The RWJMG in Princeton is comprised of RWJ Medical School faculty who are experts in specialty and subspecialty care. Specialties offered in this location include Urology, Pulmonary, Plastic Surgery, Cardiac Surgery, Infectious Disease, Vascular Surgery, Travel Medicine and Immunization. The RWJMG physicians can provide you with the specialty care found only at top academic health centers.

Brilliant minds. Better medicine. All for you.



The Robert Wood Johnson Medical Group

Robert Wood Johnson Medical School

1-877-4RWJDOC www.rwjmedicalgroup.org



125 Paterson Street • Suite 1400 New Brunswick, New Jersey 08903-0019



Susanna thought her life was over. In three minutes, RWJ gave it back.

Language Arts teacher, Susanna DeNude has a lot to say about brain cancer. For seven years, she lived with it every day, often wondering whether she would ever see the last of it. Her two previous open craniotomies, plus radiation, did not slow the growth of a tumor in her brain. Believing she had run out of options, the Riverdale resident was fortunate to get another chance.

The neurosurgical team, under the guidance of Dr. Shabbar F. Danish, director of stereotactic and functional neurosurgery at Robert Wood Johnson University Hospital and assistant professor of surgery at UMDNJ-Robert Wood Johnson Medical School, felt that Susanna was a candidate to undergo the nation's first laser ablation surgery for an intracranial ependymoma, a tumor that grows from the cells lining the ventricles of the brain.

The surgery has proven to be effective in both adult and pediatric brain tumors, and can reduce a patient's hospital stay from a week to a day, with fewer side effects from surgery and anesthesia since the procedure is performed using only local anesthetic. And, unlike other surgeries, if the tumor returns, laser ablation can be safely performed again, sparing the patient the need for more invasive treatment.

Robert Wood Johnson has successfully performed more of these cutting-edge surgeries than any hospital in the country. Now that Susanna is back in her classroom teaching, a lot can be learned from her experience.

RWJUH.edu/laser

1-888-MD-RWJUH

Robert Wood Johnson University Hospital is one of America's best hospitals, where, what others call miracles, we simply call great medicine.



The Heart of Academic Medicine

Principal Teaching Hospital for UMDNJ-Robert Wood Johnson Medical School • Flagship Hospital for The Cancer Institute of New Jersey Core Academic Medical Center for the Robert Wood Johnson Health System and Network

