

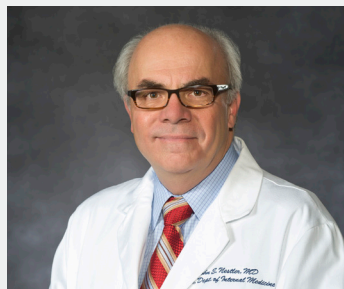
VCU Department of Internal Medicine

# PROGRESS NOTES

*Progress Notes is a Quarterly Publication of the Department of Internal Medicine*

V i r g i n i a   C o m m o n w e a l t h   U n i v e r s i t y

## Message from the Chair



**John E. Nestler, MD**  
Department Chair

This issue of Progress Notes highlights how the Department's mission to conduct cutting-edge medical research complements our mission to provide the highest quality state-of-the-art clinical care to our patients. **HIV research conducted in the Division of Infectious Diseases** improves the care of patients with AIDS; **research in the Pulmonary Division** on the potential of Vitamin C to attenuate the lung injury of sepsis focuses on a promising intervention to enhance survival of our sickest patients; and **research in the Endocrine Division**, conducted jointly with the Department of Pediatrics, offers comprehensive approaches to address the rising obesity epidemic in adolescent patients.

These research programs reflect the Department's expertise in and commitment to translational research that brings findings from the laboratory bench into the clinical practice of medicine. They also exemplify why research in academic medical centers is critical to advancing our nation's health.

The Department is proud of and expresses its deep appreciation to its many talented faculty who advance our research mission.



## Optimizing Life for HIV Patients

Page 2



## Vitamin C Study Awarded \$3.2 Million by NIH

Page 3



## Faculty Member Leads Way in Obesity Research

Page 4



## A Look at Nephrology's National Ranking

Page 8

## Additional Features:

- A look at the Central Virginia Center for Coagulation Disorders..... 5
- Update from Associate Chair for Faculty Development..... 5
- Update from Associate Chair for Outpatient Operations..... 6
- New Faculty..... 7
- Congratulations to Dr. John Clore..... 7

# Optimizing Life for HIV Patients through Comprehensive Care and a Multidisciplinary Approach



**Dr. Daniel Nixon**, Director, and **Dr. Veronica Ayala-Sims**, Clinical Director, of the VCU HIV/AIDS Center provide key leadership in the effort to treat and suppress HIV in the central Virginia region.

The **VCU HIV/AIDS Center** serves as the hub for almost all of the HIV/AIDS-related clinical, research, and educational activities at VCU and in the central Virginia region. Through this multidisciplinary approach, the Center is able to provide a unique service that not only meets the complex needs of patients, but also helps train physicians throughout the state and improves the public health of the region. While this means the VCU HIV/AIDS Center must coordinate many resources, the end result is better control of the epidemiology of HIV in Virginia.

## Background and Organization

The Center became part of the Department of Internal Medicine's Division of Infectious Diseases in 2005. At that time, the Division's NIH-funded HIV research portfolio was merged with the existing HIV Center's long-standing HRSA/Ryan White Programs and Virginia Department of Health-funded programs which provide clinical care and statewide HIV educational activities. By combining the disciplines of translational research in HIV and Hepatitis C, comprehensive clinical care, and education, the Center is able to attain a unique synergy which broadly impacts the epidemiology of HIV state wide. Patients have access to research treatments or special services. Clinicians and researchers benefit from a rich exchange of ideas and state-of-the-art management strategies. Furthermore, prevention education increases public awareness of HIV and how to prevent its transmission.

**Dr. Daniel Nixon** serves as the Center's Director and research Principal Investigator for the NIH-funded **VCU AIDS Clinical Trials Group (ACTG)** Clinical Research Site. Studies led and conducted by the VCU translational HIV research team include long-term studies on the neurologic, cardiovascular, and pulmonary effects of early HIV treatment; studies examining methods to attenuate the inflammatory effects of HIV; and studies

that optimize treatments for HIV/Hepatitis co-infection. **Dr. Richard Sterling** is also developing a study to examine fatty liver disease in HIV. These efforts are supported by the Commonwealth, the NIH, and recently, the Bill & Melinda Gates Foundation, which recognized the potential for this work to address the disease at an international level.

**Dr. Veronica Ayala-Sims** and **Dr. Sue Lavoie** serve as Principal Investigators for several Virginia Department of Health and Federal Ryan White-funded clinical service programs, including four regional community HIV clinics as well as adherence, care linkage, and telemedicine programs. **Dr. Jane Cecil** is the principal investigator for the VCU local performance unit of the HRSA-funded AIDS Educational Training Center (AETC).

## Delivering Care

The VCU HIV/AIDS Center provides clinical care through five clinics in the Greater Richmond Area. The largest is the newly renovated **VCU Infectious Diseases Clinic** in the VCU Medical Center West Hospital, which serves approximately 1800 patients. The Center also operates four community based sites that each serve about 150-200 patients. Patients come from all over the state to receive care at one of these specialized clinics. In addition to providing care in these clinics, the Infectious Diseases division faculty and 6 experienced midlevel providers also provide HIV telemedicine services to 400-600 patients within the Virginia Department of Corrections system. A pilot project will soon allow Center staff to begin to provide specialty telemedicine to community health clinics.

***"Close coordination of all the various activities in all three areas [research, clinical care, and education] creates synergy and keeps our work integrated and efficient. It allows us to be more than the sum of our parts." says Dr. Daniel Nixon.***

Since HIV has compounding negative effects on patients' health, the clinical services and expertise of the HIV Center must be extensive. "We offer comprehensive care services, not just general HIV management, but multidisciplinary services such as managing multi-drug resistant HIV; dealing with difficult pharmacological interactions with the help of **Patricia Fulco, PharmD**; Hepatitis co-infection management with the help of **Dr. Richard Sterling**; HIV perinatal and pediatric care; mental health services; case managers; and adherence counseling needs," says Dr. Nixon.

*(continued on page 3)*



The VCU HIV Center also partners with specialties within VCU, including Hepatology, Pediatrics, and Psychiatry, and draws upon resources at the **VCU Clinical Translational Research Center** and the **Women's Health Center**. In addition, a strong partnership exists between the VCU HIV Center and The Virginia Department of Health which collaborate on programs ranging from HIV testing, linking persons to specialized care, adherence and mental health service programs, and the west-central **Virginia HIV-AIDS Resource and Consultation Center**.

### Suppressing HIV and Looking Forward

"This is an exciting time to be treating HIV, because patients are living longer," says Dr. Ayala-Sims. "In 2013, there is no reason anyone should die of HIV, none." Because current treatments halt the development of AIDS and recent research shows the effectiveness of HIV suppression, clinical care can now focus on prevention rather than health crises. Dr. Ayala-Sims explains, "Research shows that HIV can be virally suppressed through proper treatment and that people with suppressed HIV are 96% less likely to transmit. Treatment is prevention."

In light of this, Dr. Ayala-Sims and the staff of the VCU HIV/AIDS Center focus on delivering a long term, evidence based course of treatment that results in HIV suppression, which is referred to as the

HIV Care Continuum. It is a four step process that involves getting people tested, linking them to care, keeping them in care, and keeping them on antiretroviral medication. The Center's team of physicians, nurses, staff, case managers, patient navigators, mental health and adherence counselors work together to make sure patients have the greatest opportunity to see their HIV virally suppressed. This takes persistence and coordination but Dr. Ayala-Sims is encouraged by how the Center is doing. "We have really consolidated all of our efforts over the last year and now we are focused on deploying our resources in the best way possible," she says.

Going forward, Dr. Nixon and Dr. Ayala-Sims are excited about how the VCU HIV/AIDS Center's efforts to suppress HIV in patients contribute to the possibility of an AIDS free generation. In the meantime, the research, education and clinical care the VCU HIV/AIDS Center provides is a vital resource to HIV patients and the state. Dr. Ayala-Sims points out that the people behind the Center is what really makes this possible. "Everyone who is a part of the system is amazing," she says. "They are really talented people who give a lot, I mean, a lot. Everyone from the front desk staff to the nurses to the physicians." As Dr. Nixon sums up the VCU HIV/AIDS Center "Close coordination of all the various activities in all three areas creates synergy and keeps our work integrated and efficient. It allows us to be more than the sum of our parts." **IM**

## VCU Awarded \$3.2 Million to Study Vitamin C in Septic Lung Injury

In July of this year, NIH's National Heart, Lung and Blood Institute awarded **Dr. Alpha (Berry) Fowler, III**, of VCU's Division of Pulmonary and Critical Care Medicine, a \$3.2 million grant to study the effect of high doses of vitamin C on septic patients with lung injury. Dr. Fowler will be the Principal Investigator for this phase 2 trial that will take place over three years and will be conducted across multiple centers: VCU, the Cleveland Clinic, Emory University, and the University of Virginia Medical Center. If the results of the study are positive, this has the potential to change the routine clinical practice of care for septic patients.

Sepsis is a devastating condition that causes cascading organ failures as a result of infection. Despite decades of study and extensive funding aimed at attenuating lung injuries in septic patients, no positive solution has been found. Dr. Fowler's research involves giving septic ICU patients suffering from lung damage large doses of vitamin C as an adjunctive therapy to routine critical care. This treatment is promising not only because the phase 1 trial was positive, but also because it is very accessible and affordable.

In 2010, Dr. Fowler, Chair of the Division of Pulmonary and Critical Care Medicine, conducted a phase 1 randomized, double blind, placebo-controlled trial at VCU. The phase 1 patients responded very well to vitamin C treatment (mortality 38% vs. 62.5 % on placebo). Dr. Fowler says "Our phase 1 trial was small, our goal [with phase 2] is to subject vitamin C to the rigors of a multi-center trial, where the practice of critical care medicine is fundamentally different than ours, so we can determine if patients get better as long as they get vitamin C."

Dr. Fowler's research started ten years ago while collaborating with a basic scientist in the Division of Pulmonology, **Ramesh Natarajan, Ph.D.**



**Dr. Alpha (Berry) Fowler** will be leading the Phase 2, multi-center trial which will study treating septic lung injury with vitamin C.

While working together, research prompted Dr. Fowler and Dr. Natarajan, to the idea that vitamin C could potentially help sepsis patients by resisting a particular protein hypoxia inducible factor 1. They designed lab trials, then a phase 1 trial, and now the project has progressed to the \$3.2 million phase 2 trial funded by the NIH.

This multi-disciplinary synthesis of basic science and clinical medicine is a model of successful translational research. "This is an example of what research is supposed to do," says Dr. Fowler. "It starts with an observation and a lab test and it ultimately is translated to the bedside, which could develop into a new form of therapy." Dr. Fowler also points out that the study would not

*(continued on page 4)*

have been possible without the strong resources of VCU. The **VCU MRICU and nursing team** worked diligently to support the phase 1 trial and the **VCU Center for Clinical and Translational Research** provided essential help with grant writing and data analysis planning in order to secure funding.

Dr. Fowler's task is now leading preparations for trials across the four medical centers where the study will take place. He looks forward to the starting Phase 2 and says, "We want to be convinced of the clinical effectiveness of the treatment we propose, and would be happy to see this eventually become a standard of care." **IM**

## Endocrinologist Applies Multidisciplinary Training to Research and Treat Insulin Disorders Across the Life Span of Patients

Many of our faculty members are nationally recognized in their fields, excel in scholarship and are dedicated to teaching, but the spectrum of **Dr. Edmond "Trey" Wickham's** work is particularly notable. Dr. Wickham, who trained in both adult and pediatric medicine, has a dual appointment on the physician-scientist track in the Departments of Internal Medicine and Pediatrics at VCU Medical Center. He focuses on treatment and research of obesity, insulin resistance and weight-related medical conditions. His work is leading to more comprehensive and effective care for patients with these conditions.

Dr. Wickham completed his residency training in both Internal Medicine and Pediatrics, followed by fellowship training in Endocrinology and Metabolism at VCU. While his training path was challenging, his unique multi-disciplinary expertise allows him to research and provide care for patients of all ages. Dr. Wickham emphasizes, "the Department of Internal Medicine, as well as the Department of Pediatrics and the School of Medicine, have been extremely supportive of my career development."

Having joined VCU faculty on the physician-scientist track, a majority of Dr. Wickham's time is devoted to clinical research. Currently, he is the recipient and Principal Investigator for a Research Career Development Award from the NIH titled "**Adiponectin and Endothelial Dysfunction in Adolescents**" (K23HD053742) that investigates the role of alterations in the fat-derived hormone, adiponectin, in the development of insulin resistance and early vascular dysfunction in adolescents. He is also the Principal Investigator for a pilot project supported through the NIH grant, "**Translational Research in Polycystic Ovary Syndrome (PCOS)**" (U54HD034449), which investigates the role of vascular changes in the early development of PCOS.

In addition to those studies, Dr. Wickham is involved in care for adult and pediatric patients with cystic fibrosis-related diabetes and the transition from pediatric to adult specialty care for adolescents and young adults with endocrine disorders. Dr. Wickham also teaches medical students, residents, and fellows within the Departments of Internal Medicine and Pediatrics.

Dr. Wickham's efforts have been instrumental in the development of the **Healthy Lifestyles Center at Children's Hospital of Richmond at VCU**, a 4,000 square foot facility which provides comprehensive treatment and research opportunities for children and adolescents with obesity. Dr. Wickham is a Co-Director for the center, along

with Dr. Melanie Bean, a health psychologist in the Department of Pediatrics. The center is funded by a generous grant from the Children's Hospital Foundation and includes the multidisciplinary T.E.E.N.S. (Teaching, Encouragement, Exercise, Nutrition, and Support) Healthy Weight Management Research Program, of which Dr. Wickham is the principal investigator. In Dr. Wickham's words, "The success of the clinical and research programs at the Healthy Lifestyles Center is the result of the collaborative efforts of many expert faculty at VCU, who represent a myriad of different



**Dr. Edmond Wickham**, Director of the Healthy Lifestyles Center, stands in the gym of the center where clinical care and research for the T.E.E.N.S. Program is provided.

disciplines – including pediatrics, internal medicine, psychology, exercise physiology, epidemiology, and biostatistics. We offer comprehensive family based clinical services that include nutrition education, exercise training, behavior support for children of all ages and their families."

Dr. Wickham's expertise in both pediatric and adult care is particularly relevant to the Healthy Lifestyles Center because of the unique challenges obesity creates in young patients. "With a pediatric obesity epidemic, many children and adolescents are developing problems like Type 2 diabetes mellitus, high blood pressure, high cholesterol; conditions which in the past were largely considered adult disorders," explains Dr. Wickham.

Dr. Wickham's goal is to continue his funded research investigating the pathophysiology and treatment of obesity across the lifespan. "The origins of adult diseases often start early in life, and we have to be able to define the ways to address the obesity epidemic through effective, cross-specialty, prevention and treatment interventions."

**IM**



# Meeting the Challenges of Treating Rare Coagulation Disorders

VCU's **Central Virginia Center for Coagulation Disorders (CVCCD)**, a part of the Division of Hematology, Oncology and Palliative Care, is the largest hemophilia care program, and the only federally funded, lifespan hemophilia program, in the Commonwealth of Virginia. The center manages more than 150 classic hemophilia patients and more than 100 additional patients with other inherited bleeding disorders. The Center is comprised of adult and pediatric hematology nurses, a physical therapist, a nutritionist, a pediatric education consultant, and research and administrative staff. Grant funding was recently secured to add genetic counseling to the program. Collaborative arrangements with both the School of Pharmacy and MCVH pharmacy round out the program.



Jan Kuhn, RN, MPH

Essential to the success of the center has been the tireless efforts of **Jan Kuhn, RN, MPH**, the program coordinator for the CVCCD. Jan works to coordinate the many aspects involved in the center, from care and education to funding and research. As **Lauren Dunn, MSW**, notes, "Jan wears about 10 different hats within the **VCU hemophilia program** and the statewide **VA Bleeding Disorders Program**. It could be easy to lose sight of the patients given all of the day to day management issues that come up constantly, but that isn't the case with Jan. The most valuable thing she brings to her role is her genuine concern and compassion for the patients we serve."

While these rare, inherited bleeding disorders affect a small number of people in Virginia, their complex medical needs and lack of comfort of most providers in dealing with these medical problems create many challenges in coordinating safe, effective, and timely care for affected patients. "We provide phone triage and educational programs. Our goal is to keep people as independent as possible," says Jan. The center staff works extensively with the patients and their families, teaching them necessary skills such as self-administration of coagulation factors and coping, which allow the patients to maintain normal lifestyles despite the serious impact of the diseases. **Dr. Christian Barrett**, Medical Director of the Center, notes, "It is amazing to listen to the patients talk about

playing with their kids or the outcomes of their soccer matches. The work of Jan and the whole team has an impact everyday for so many people."

Patients with coagulation disorders also face very high treatment and medication costs. The average patient's annual medical expenses are over \$125,000. To help them manage this, the CVCCD educates patients about how to stay insured so that their medical expenses are covered.

Another challenge the CVCCD team faces is securing the funding it needs to meet its full operational costs. While some funding is provided by the Virginia Department of Health, the CVCCD pursues grants and research protocols as well. Through additional research funding the Center has continued to provide care, whereas other programs in the state have had to reduce their scope.

The Center has been able to have a broader impact on treatment through their policy and research efforts. They have presented at national and international meetings, and also worked with regional and national groups to help direct decisions that affect coagulation disorder policies. One of the studies the CVCCD will be involved with in the near future will be testing new long-acting replacement coagulation factors that will reduce the frequency of treatments for patients.

Jan and the other Center team members strive not just to provide specialized medical care but to address the patient as a whole person. From hemophilia camps, school outreach, sports planning, and college transitions, to maintaining insurance coverage and advocacy with state and national policy makers, the center staff is involved with their patients at every step of the way. Thus, the strength of the program lies not merely in the medical care it provides but in the relationships and trust that Jan and her team build everyday.

While the CVCCD faces unique obstacles, Jan enjoys the work because it challenges her to think outside of the norm and it provides new challenges on a daily basis. "One day looks totally different than the next day. There is direct patient care, which I love, but it is not just patient care," says Jan. "This position allows me to see a need and address the need at the policy and program level." **IM**

## Update from the Associate Chair for Faculty Development

On September 5, 2013, **Dr. Nestler** presented the "State of the Department" at the first Grand Rounds conference of the fall. The purpose of this presentation was to highlight departmental accomplishments over the past year. The take-home message: Our faculty are phenomenal.

We currently have 187 MD faculty, 29 PhD Faculty and 376 Adjunct or Affiliates. Like past years, our faculty continue to receive awards, grant funding and national recognition. It is our faculty that provide the base for our excellence as a department. This excellence comes with significant hard work and commitment.

In a time of growing regulations often associated with more

administrative requirements (ah, the paper work), increased pressure to do more, see more, teach more (and differently) our faculty are continually faced with growing responsibilities and stresses. Recognizing this, Dr. Nestler has led the charge to develop programs and support for our faculty.

While I suspect that our trainees and staff will also benefit from the

(continued on page 6)



**Elizabeth (Betsy) B. D. Ripley, MD, MS**  
Associate Chair for Faculty Development

outcomes of these programs, they are specifically designed for the benefit of our faculty.

Here are four of our highlights:

- **First Year Assistant Professor Mentoring Program**

We are set to have 29 new Assistant Professors within a 6 month period (from July, 2013 through Dec, 2013). A new first year Assistant Professor mentoring program began this year, to assist these faculty with getting started as a VCU faculty member. Learning to be a faculty member is not a course offered in medical school or residency. Having a one-year mentor to get new faculty familiar with VCU, help them adjust to new responsibilities, work on goal setting, time management, scholarship and teaching basics will hopefully provide a good foundation for them as new faculty develop their career paths.

- **Faculty Training Travel Grant Program**

In order for our faculty to continue to learn and either expand their expertise or develop in new areas, procedures, or techniques, a faculty training travel grant program was established. This fund is only for faculty and will award up to \$2500 per individual. During the last academic year approximately \$20,000 went to 13 faculty.

- **Clinical Teaching Training**

Teaching plays an important role for all faculty. This year we held a one and a half day training on clinical teaching using

the Stanford Clinical Teaching Curriculum. **Dr. Stephanie Call** and three national experts provided instruction and encouragement to 32 of our faculty. This program discussed key pieces like establishing a learning climate, keeping control of the session, and evaluation and feedback.

- **Career Progression Review for Promotion & Tenure**

The academic metric of progression through your career is Promotion and Tenure. Last fall, **Dr. Jay Kuemmerle** assisted with reviewing career progression and status in the P & T process with interested faculty. This program assisted faculty in understanding the process, critically looking at their CV and status, and developing a plan for progress. It helped several faculty know how to be ready for applying for promotion this year and helped others determine what steps would need to occur before they would be ready. This program will continue this year.

These are four of our key programs. In order to continue to be a premiere Internal Medicine Department we must attract, cultivate, and reward our faculty. Our Faculty Development Program will continue be responsive to the needs of our faculty and provide support tailored to their success.

**Elizabeth (Betsy) B. D. Ripley, MD, MS**  
Associate Chair for Faculty Development  
Division of Nephrology

## Update from the Associate Chair for Outpatient Operations

Access, access, access. That has certainly been the mantra of the last year. The consulting firm Woodcock and Associates was hired by MCV and the Health System. Current practice patterns were placed under the microscope, financial bottom lines were examined, individual and group productivity charted, schedules redesigned...all in all, a needed exercise. But was it really the answer to our ultimate goal of delivering quality patient care? While timely access is critical for realizing good medical outcomes and is also an important determinant of patient satisfaction, if you were like me, the process might have felt a little bit like adding more entrance ramps to an already overcrowded freeway, jammed up with stop-and-go traffic.

So where do we go from here? Perhaps it would help to ask the question: "What do traffic engineering, manufacturing and healthcare have in common?" Whether building a car or delivering health care to patients, workers must rely on multiple, complex processes to complete a series of tasks or actions to accomplish their goal of smoothly delivering a high quality, valued product to the customer. Good traffic engineers study traffic patterns and adjust the timing of lights in order to produce a continuous steady stream of traffic, avoiding the headaches, anxiety, and inefficiencies that result from stop and go traffic. For decades, manufacturing companies have successfully employed the concepts of lean management or lean thinking. Few have embraced or developed this process better than Toyota and their Toyota Production System (TPS). The TPS design process organizes jobs around human motion using standardized work to create an efficient production

sequence that reduces and/or eliminates "muri" or overburden stress, "mura" or inconsistency, and "muda" or waste.

So how could we apply these principles to better design processes to create a system that is not only effective, but also efficient and responsive to the needs of our patients? And if we do so, how does this affect us? The answer may come from places like Seattle's Virginia Mason Medical Center, where application of these principles resulted in a rebalancing of duties or work, a reduction in waste or non-value added activities, and an improvement in flow. Most importantly, they improved the quality and safety of the care delivered. Oh, and by the way, both the providers and patients were happier!

Truly integrating TPS and other lean management strategies would obviously require a major culture shift on every level...oh, and a lot of work. But I think it will be worth it—for us and for our patients—so I hope to bring you all on board. Stay tuned.

**Lisa Brath, MD**  
Associate Chair for Outpatient Operations  
Division of Pulmonary Disease and Critical Care Medicine



## Welcome to Our New Faculty

**Jason M. Kidd, MD**, is joining the Division of Nephrology and comes to VCU from the University of North Carolina in Durham, North Carolina.

**Reena Hemrajani, MD**, is joining the Division of General Internal Medicine and comes to VCU from George Washington University Hospital in Washington, D.C.

**Amanda L. George, MD**, is joining the Division of General Internal Medicine and comes to VCU from Duke University Medical Center in Durham, North Carolina.

**Nassifa Hossain, MD**, is joining the Division of General Internal Medicine and comes to VCU from Henry Ford Hospital in Detroit, Michigan.

**Samira Shojaee, MD**, is joining the Division of Pulmonary Disease and Critical Care Medicine and comes to VCU from Dartmouth Hitchcock Medical Center in Lebanon, New Hampshire.

**Imran Farooq, MD**, is joining the Division of General Internal Medicine and comes to VCU after completing his Internal Medicine residency at VCU.

**Thokozeni Lipato, MD**, is joining the Division of General Internal Medicine and comes to VCU from the University of Minnesota Medical Center in Minneapolis, Minnesota.

**Cynthia F. Yazbeck, MD**, is joining the Division of Endocrinology and comes to VCU from the University of Pittsburgh Medical Center in Pittsburgh, Pennsylvania.

**Victor Yazbeck, MD**, is joining the Division of Hematology, Oncology and Palliative Care and comes to VCU from the University of Pittsburgh Medical Center in Pittsburgh, Pennsylvania.

**Azeem Mohammed, MD**, is joining the Division of General Internal Medicine and comes to VCU from Saint Barnabas Hospital in Bronx, New York.

**Danielle Shafer, MD**, is joining the Division of Hematology, Oncology and Palliative Care and comes to VCU from Loyola University Medical Center in Maywood, Illinois.

**Andrea Goldberger, MD**, is joining the Division of General Internal Medicine and comes to VCU from Medicus Healthcare in Salem, New Hampshire.

**Jennifer Jorge, MD**, is joining the Division of General Internal Medicine and comes to VCU from Henry Ford Hospital in Detroit, Michigan.

**Stephanie Mayer, MD**, is joining the Division of Endocrinology and comes to VCU from Duke University Medical Center in Durham, North Carolina.

### Congratulations to

### John N. Clore, M.D.

Associate Vice-President for Clinical Research  
Director, VCU Center for Clinical and Translational Research  
Division of Endocrinology and Metabolism,  
Department of Internal Medicine

### Recipient of

*Virginia Commonwealth  
University's*

*Distinguished Service Award*



## Division of Nephrology Ranked 41st in the Nation by U.S. News and World Report

In addition to naming the **VCU Medical Center** a top hospital in Virginia in 2013, **U.S. News & World Report** ranked the Division of Nephrology of the Department of Internal Medicine 41st in the nation. The Division of Nephrology has three key functions - providing clinical care for the VCU Medical Center; teaching fellows, residents and medical students; and conducting nephrology research. The clinical program is particularly noteworthy for providing comprehensive nephrology care as well as the medical component of the very effective **VCU Hume-Lee Transplant Center**.

Excellent clinical care distinguishes the Division of Nephrology. The division provides robust and outstanding clinical services in the following three areas: outpatient and home dialysis, consultative nephrology, and transplantation.

The Division of Nephrology's dialysis services are truly comprehensive, offering every kind of end stage renal disease and acute kidney injury care, including all forms of continuous renal replacement therapy and different types of therapy. "We do everything there is to do for patients that require renal care whether they are critically ill or they are stable on any form of dialysis for their end stage kidney disease," says **Dr. Todd Gehr**, Chair of the Nephrology Division. Providers serve at the VCU Medical Center and the Hunter Holmes McGuire Veterans Administration Medical Center. The division also has a very vibrant home dialysis program, both home hemodialysis and peritoneal dialysis. Dr. Gehr adds "We owe a lot to the nursing service in this. It is not just the faculty that allow us to deliver excellent care but the nurses and other support services - technicians, social workers and dieticians."

The Nephrology Division also provides the consultative nephrology services for the VCU Medical Center. This is a multi-disciplinary team that includes experts in hypertension, orthostatic hypotension, Chronic Kidney Disease care and other nephrology conditions. For more complicated cases, there is also a high degree of collaboration with other divisions within the Department, such as the Divisions of Pulmonary and Cardiology. The expertise carried by the faculty makes the Division a strong resource for complex nephrology

issues in the central Virginia regions.

In addition to the dialysis program and consultative services, the Division of Nephrology operates the outstanding VCU Hume-Lee Transplant Center in collaboration with the Department of Surgery. The transplant center, led by **Dr. Anne King**, M.D., is

among the nation's most active and successful kidney-transplant programs, with one of the best patient and graft survival rates in the United States. Over 3,000 kidney transplants, 14 pancreas transplants and 110 combined kidney-pancreas transplants have been performed at the center. The center also performs liver, pancreatic islet and liver cell transplants.

In addition to its exemplary clinical services, the faculty of the Division of Nephrology are also active in teaching and research. Nephrology faculty teach through the VCU Medical Center's fellowship programs, residency program and medical school. Basic and clinical research is also conducted by division faculty. Currently, faculty in the division are investigating chronic kidney disease, end stage

renal disease and biomarkers of ischemia. **Dr. Siddhartha Ghosh** spearheads science in the division and is developing models for the treatment of chronic kidney disease and hepatorenal syndrome.

While the work of veteran faculty has helped bring the division national recognition, there are a number of young faculty working to distinguish themselves as well. **Dr. Jason Kidd** will be developing the division's expertise with glomerular diseases; **Dr. Daniel Carl** is working to better understand the pathophysiology of liver and kidney diseases; and **Drs. Gaurav Gupta** and **Dhiren Kumar** are studying patient response to transplantation.

Given the expertise of the faculty and the comprehensiveness of medical care offered by the Division of Nephrology, it is clear to see why the program is ranked in the top 50 in the US. While the tangibles there are obvious, Dr. Gehr points out that "We have excellent faculty and staff here and being able to work well together is an enormous part of what makes this division strong." **IM**

