The George Washington University Division of Rheumatology offers state-of-the-art rheumatologic care in the heart of Washington, D.C. Our team of physicians and nurse scientists conducts ground-breaking research in myositis, wound healing, autoimmune diseases, immunology, education, and health care transitions.
The GW Division of Rheumatology has had another productive year.

Our clinical programs continue to expand, and we now have dedicated clinicians focusing on Myositis, Scleroderma, Rheumatoid Arthritis, Lupus, Gout, Hidradenitis and Osteoporosis. Our ultrasound clinic operates daily allowing improved access for patients with early arthritis, and those requiring urgent joint injections.

One of our proudest accomplishments is the role we play in training the future of rheumatology through our mentoring of undergraduates, students in medicine and the health sciences, residents and fellows. We educate the community we serve through patient support groups and faculty involvement in educational events for the Lupus Foundation, the Scleroderma Foundation and the Myositis Foundation. Our faculty also serves in leadership roles for international scientific meetings, ensuring that the educational impact of GW Rheumatology extends beyond the Foggy Bottom campus.

In the research arena, our team continues to advance scientific discoveries in the field of rheumatology. Our scientists have published research investigating the management of gout, the immunology of Hidradenitis suppurativa, the impact of opiate exposures on wound healing, healthcare transitions and the impact of genetics and the environment on triggering disease flares in myositis.

We are proud to be a part of GW Rheumatology and we hope you enjoy learning about our accomplishments.

Victoria K. Shanmugam, MRCP, MBBS, FACR, FACP
Director, Rheumatology
GW RHEUMATOLOGY: FOCUSING ON THE FUTURE

WELCOME
DR. SAIRA BILAL

Dr. Saira Bilal joins the GW Division of Rheumatology from the University of Texas Southwestern Medical Center. She is fellowship trained in Rheumatology and musculoskeletal ultrasound, and has a special interest in rheumatoid arthritis, spondyloarthritis, seronegative arthritis, inflammatory eye disease and lupus.

Dr. Bilal graduated from the King Edward Medical University in Lahore, Pakistan and trained as a house officer at the Mayo Hospital. She completed her medical residency in Baltimore, Maryland.

RHEUMATOLOGY FELLOWSHIP

The GW Rheumatology Fellowship is a two-year specialized training program that prepares physicians to become board certified in Rheumatology. As a senior fellow, Dr. Marc Phillpotts is currently receiving dedicated training in musculoskeletal ultrasound. Junior fellow, Dr. Erica McBride, was a former internal medicine Chief Resident, and is actively engaged with teaching our residents and medical students.

Dr. Bilal joins us as an Assistant Professor of Medicine at the George Washington School of Medicine and Health Sciences. She is interested in Rheumatoid Arthritis, spondyloarthritis, seronegative arthritis, inflammatory eye disease and lupus.
Mentoring GW undergraduates and School of Medicine and Health Sciences students is an important part of our mission. This year undergraduate Kanchan Misra won the Milken Institute School of Public Health Judges Choice Award for Undergraduates for her poster entitled “QuantiFERON-TB Gold Testing in Hidradenitis Suppurativa”. GW undergraduate and now SMHS student Marissa Mangini won second place in the Health Sciences category at the GW Research Day. SMHS METEOR student Peter Berger won the Donald H. Glew Prize at the School of Medicine and Health Sciences Research Day.

The Mark Millen Memorial Award in Rheumatology is presented annually to a member of the graduating class who has demonstrated exceptional proficiency in the field of rheumatology. This year the awardee was Dr. Sonia Silinsky Krupnikova. We are thrilled that Dr. Krupnikova has joined the GW internal medicine residency program.
GW RHEUMATOLOGY: IN THE NUMBERS

- Infusion Visits: 750
- Scientific Abstracts Presented: 31
- Peer Reviewed Manuscripts Published: 23
- Members of the Rheumatology Interest Group: 49
- Joint Injection Workshops: 2
- Patients enrolled in rheumatology research studies: 273
GW Rheumatology: Caring for the Community

Harnessing the Power of Ultrasound

Musculoskeletal ultrasound is a powerful diagnostic tool. Earlier diagnosis and treatment of inflammatory joint diseases such as rheumatoid arthritis improves outcomes and minimizes irreversible joint damage. Using state-of-the-art ultrasound machines our physicians are able to diagnose and treat inflammatory arthritis earlier, minimizing delays in diagnosis, and ultimately improving clinical outcomes for our patients.

In sports and soft tissue injuries, musculoskeletal ultrasound offers a safe and accurate alternative to MRI to diagnose rotator cuff disease of the shoulder, bursitis and tendonitis. Additionally, our rheumatologists are trained to administer therapeutic injections under ultrasound guidance improving efficacy, resulting in decreased pain and better outcomes. Our faculty regularly uses ultrasound in the clinic and as a teaching tool for students, residents, and fellows.

Partnering to Support Our Patients

GW Rheumatology hosted several patient education events this year. The Scleroderma Foundation Greater Washington DC Chapter patient education conference was a full day meeting with lectures on nutrition, dental issues, lung disease, digital ulcers, wound care, and a research update for our patients and their families. Several GW faculty presented and close to 50 patients attended. The GW Hidradenitis Support Group continues to thrive and had several meetings focusing on surgical interventions, urologic management, diet and nutrition.

In the coming year GW Rheumatology and the School of Medicine and Health Sciences will also host the CureJM Update on Juvenile Myositis Care and Research.
### Early Arthritis

As part of our drive to improve access to care for our patients, we have expanded our ultrasound clinic. This allows us to use point of care ultrasound in the diagnosis and management of patients with early arthritis and gout.

### Lupus

Systemic Lupus Erythematosus is an autoimmune disease in which the immune system becomes over active and attacks normal healthy tissues. Lupus can affect any organ in the body, including the joints, skin, kidneys, blood cells, brain, heart and lungs and through our clinic and inpatient consultation services we provide care for a large number of lupus patients. The GW Lupus study supports research into potential drivers of lupus activity.

### Scleroderma

Scleroderma is an autoimmune disease characterized by inflammation, vasculopathy and fibrosis. Our multidisciplinary team provides care for patients with scleroderma, focused on controlling inflammation and slowing disease progression to control the symptoms of scleroderma. Research through the STOP Scleroderma Study is investigating delayed wound healing in scleroderma, as well as the genetic basis of scleroderma.

### Osteoporosis

In the United States osteoporosis is a major cause of disability as we age. Our team of rheumatologists provides care to patients with osteoporosis, and focuses on individualized therapy and tailoring treatment to patient needs.

### GW CureJM Myositis Center

The George Washington University Medical Faculty Associates Myositis Center is a multidisciplinary center focused on the evaluation and treatment of inflammatory muscle diseases. The center provides clinical consultation to patients with established or suspected inflammatory muscle diseases and conducts research into juvenile dermatomyositis. The team has published several manuscripts presenting their research including a study investigating environmental factors associated with disease flare in juvenile and adult dermatomyositis.

### Hidradenitis Suppurativa

The George Washington University Hidradenitis Clinic provides coordinated care for patients with Hidradenitis Suppurativa. We focus on improving symptoms and controlling disease activity. Research studies conducted through the clinic have demonstrated the benefit of combining targeted biologic therapy with surgical interventions in the management of hidradenitis.
Environment Drives Dermatomyositis Activity

Research done by Dr. Gulnara Mamyrova in the GW Myositis Clinic investigated environmental factors associated with disease flare in juvenile and adult dermatomyositis. Their study showed that certain environmental factors including sun exposure and medications can be associated with the initiation of myositis, and play a role in disease flares in both juvenile and adult dermatomyositis.

Opiates and Wound Healing

Through the Wound Etiology and Healing (WE-HEAL) study our team is investigating the interplay between the host immune response, medication and healing in patients with chronic wounds. Recent work has demonstrated that exposure to opioid based analgesics is associated with a reduced likelihood of healing in patients with chronic wounds. Our team is investigating the mechanisms driving this observation with a view to identifying new pathways for treating chronic wounds.

Role of IL-22 in Hidradenitis Suppurativa

Hidradenitis Suppurativa is a common disease for which there is no known cure. Recent data suggests that there is an immune basis for this disease and our team is studying molecular pathways in Hidradenitis Suppurativa with a view to identifying potential new therapeutic targets. Through work performed in our laboratory we were able to show that skin cells from hidradenitis suppurativa release lower amounts of the cytokine IL-22 compared to normal skin cells. This finding is very exciting since it suggests for the first time that defects in IL-22 signaling may play an important role in Hidradenitis suppurativa.

Advocating for Access to Care

Emeritus Professor, Dr. Patience White, has made great strides in developing policies focusing on the healthcare coverage needs for children and ensuring they have access to care. Her research especially focuses on young adults making the transition to adult rheumatologic care.

**SPOTLIGHT ON**

**DEREK JONES, PHD**

Dr. Derek Jones is a postdoctoral research fellow in the Division of Rheumatology. A graduate of the University of Texas, he completed his PhD at Case Western Reserve University in Biomedical Engineering. Dr. Jones is researching Hidradenitis suppurativa, scleroderma, and systemic lupus erythematosus.
The majority of donations to the GW Division of Rheumatology come from people whose lives have been changed by our work. That includes alumni who trained and had research exposures at GW, faculty whose careers are supported by the work that we do, and our grateful patients who help us in so many ways.

This year we have been particularly honored to receive an endowment to support a visiting professorship focused on educating the future of rheumatology, and significant gifts supporting the WE-HEAL Study, the GW Lupus Study, the STOP Scleroderma Study, and the Myositis Center.

We thank everyone who supports the work that we do.

We invite everyone who reads this brochure to join us in celebrating what we have achieved so far, and to support us as we continue to change the dialogue about rheumatology and show that a small group of committed individuals, working towards a common goal, can change rheumatologic care in our nation’s capital. Donations to support the Division of Rheumatology may be made online at:

go.gwu.edu/Give2Rheumatology