

DIVISION OF NEPHROLOGY

WELLER SOCIETY NEWSLETTER

August 2020 (Issue 5)



Welcome from the Chief



So much has changed in our world since the last alumni newsletter from the fall of 2019. First, I hope that each of you has managed to stay healthy during these tumultuous times, and please know that we are here to support you if needed – don't ever hesitate to reach out! In Ann Arbor, the entire division joined together responding to the pandemic surge. The hospital census peaked in early April with over 220 COVID-19 patients, many of whom required nephrology services. While this placed tremendous stress on the resources of our health system and our division, it also brought out the best in our faculty. I am deeply grateful for the resilience and engagement of the entire division and especially those care givers who are on the front lines. In this newsletter, we will highlight some of the amazing and innovative preparations that we went through in order to ensure that we could meet all our patients' needs. These are important lessons that we had to learn in real time, and that will serve us well in future surges – although we hope we won't need them!

I extend my best wishes for the health of you and your loved ones during these difficult times.

-Sub Pennathur

Introducing our new Division Administrator

After 3 years of strong advocacy for our division, this past winter **Giselle Ciorciari** received an industry offer that she could not refuse. She is now enjoying the flexibility of working from home while raising her young family. Giselle remains a very strong supporter of our division, and we will miss her!

In April, we welcomed a new division administrator, **Jason Ceo**, MHA, JD. He comes to us most recently from Deloitte Consulting, where he was a senior consultant of operations and strategy, bringing extensive experience working with healthcare systems. He's also a 2-time Michigan alum (BA and MHA), and previously worked in the Michigan Medicine office of clinical safety. So this was a homecoming for Jason! Despite starting his position remotely and during a pandemic, he has rapidly adapted to the needs of the Division and is already making a difference as we navigate through an economic recovery plan necessitated by the pandemic.



Annual Weller Society Meeting

Remember when social distancing wasn't a thing? We once again had a terrific turnout at our annual ASN Kidney Week meeting, last November in Washington D.C. It was great to catch up with old friends and colleagues. Sadly, we won't be able to reconvene in person this year, since Kidney Week will be virtual. But let's hope for a reunion in San Diego in November 2021!



Some of our senior fellows got to experience the networking that comes with being part of the Michigan nephrology family.



*A chance to catch up with former program director (now Chief of Nephrology at Penn) **Larry Holzman '89** and his wife Liz.*



*The Vanderbilt connection: our faculty (and Vandy alum) **Julie Wright (L)** chats with current Vandy faculty **Bill Fissell '03 (R)**.*

2019 Weller Society Meeting in Washington DC

Fellowship Update

This spring, pandemic precautions were relaxed in Michigan just in time for us to be able to celebrate our graduating fellows in person (outdoors and socially distanced, of course!). **Puneet Garg** was kind enough to host the gathering in his backyard, on a beautiful June evening. We will miss this stellar group! Except **Travis Ludwig ('20)** – only because we were lucky enough to recruit him to stay on as faculty.



From L to R: Houssam Mhanna, Scott Buchowski, Travis Ludwig, Associate Fellowship PD Laura Mariani, Fellowship PD Pandu Rao, Wajdi Al-Shweiat, Ryan Krahn.

Research Updates: The Future is Bright!

Our division remains a leader in innovative and important kidney disease research, in both the clinical and basic sciences, which makes it an ideal place to develop an academic career. On the next page, we highlight a few of our recent fellowship graduates who are making a name for themselves.



Improving women's kidney health: **Andrea Oliverio ('17)** was awarded a career development award through the Michigan Institute for Clinical and Health Research (MICHR) to study reproductive health information needs and pregnancy decision-making among women with CKD. Working with a team from the Kidney Epidemiology and Cost Center, her recent findings from the USRDS showed an increasing delivery rate among women in the US on hemodialysis or with a kidney transplant from 2002-2015 (<https://www.ncbi.nlm.nih.gov/pubmed/31785826>). However, use of recommended extended hemodialysis therapy remains uncommon, suggesting there is still significant room for improvement. Using other national data sources, Andrea has also shown that women with CKD and ESKD are at significantly increased odds of severe maternal morbidity at delivery, particularly blood transfusions (<https://www.ncbi.nlm.nih.gov/pubmed/31606232>).

Engineering solutions: Where is that bioartificial kidney that our patients are always asking about? **Jeff Beamish ('16)** hopes to add to the long history of innovation at Michigan in the development of bioengineered alternatives to dialysis and transplantation. He completed his MD and PhD at Case Western Reserve University where he studied biomaterials engineering. He brought his expertise to our fellowship, where he worked in the Department of Biomedical Engineering using new material platforms to study how biomechanical cues guide both renal tubular epithelial regeneration and microvascular self-assembly. However, vexed by the significant functional differences between cultured epithelial cells in these systems and those in our patients, Jeff has refocused his efforts on better understanding the molecular genetic mechanisms that underpin epithelial regeneration under the mentorship of Greg Dressler. His goal is to learn how microenvironmental cues can drive regeneration programs toward functional tissues and help make the bioartificial kidney an everyday reality for our patients. Jeff's dedication and hard work were recently recognized by receiving an NIH K08 career development award for his work on molecular genetic mechanisms of renal cell regeneration.



Unraveling mechanisms of disease: **Jason Watts ('17)** investigates how nucleic acid structure and chromatin environment influence gene transcription. His group is interested in the mechanism of RNA polymerase pausing and its role in human disease. Interestingly, his work is relevant to understanding COVID-19 pathophysiology and he is currently helping to develop a novel therapy targeting the SARS-CoV-2 virus. Jason's work has been supported by a career development award from the ASN Harold Amos Medical Faculty Development Program. This fall Jason is continuing his career at the National Institute of Environmental Health Sciences, where he will be the Earl Stadtman Investigator and Director of the Transcriptional Responses in Disease Group. Importantly, he will remain our adjunct faculty so we still expect to see him around Ann Arbor quite a bit!

Clinical Updates: COVID Edition



As COVID-19 began spreading across the U.S., Michigan Medicine was busy planning for the worst, and the division of nephrology was right at the forefront. As the pandemic unfolded in March, our faculty and fellows stepped up to help cover the overwhelming numbers of COVID-19 patients. Some faculty even helped out on the general medicine services, providing key relief for our exhausted hospitalist colleagues. And of course our dialysis nurses were their usual heroic selves, expanding coverage hours (including Sundays) to meet all dialysis needs and placing themselves at risk by providing extended bedside care.

Although much of the early concern centered around ventilator availability, we quickly recognized that many critically ill patients with COVID-19 would develop AKI and require dialysis. Led by **Lenar (Leo) Yessayan** and **Michael Heung ('05)**, the division developed a scarce resource plan to ensure that all patients would receive adequate dialysis care. This would be critical, because during the peak of the surge, Michigan Medicine more than doubled its ICU bed capacity (from 100 to 250) and the census on the nephrology ICU consult services swelled to over 60 patients.



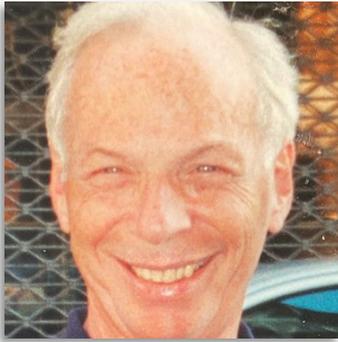
One important addition was the Regional Infectious Containment Unit (RICU), an entirely negative pressure isolation ward created for this purpose in Mott Children's Hospital. The division added a faculty-only service to cover the critically ill COVID-19 patients with nephrology needs on this ward. In addition, we purchased new dialysis machines and repurposed older machines in order to expand our overall capacity.



While the above measures were important, we also faced potential shortages in disposables. Leo worked tirelessly with our suppliers to ensure an adequate supply chain of catheters, filter sets and other disposables. And then, when it appeared we might face a shortage in dialysis solutions, he worked with our biomedical engineering teams (and following FDA guidance) to develop a protocol whereby we were able to generate our own CRRT/SLED solutions!

Looking back at the past 5 months, this was an incredible effort across the board. We are proud of the central role that the division of nephrology played in the care of some of the sickest patients with COVID-19 at Michigan Medicine, and in rising to the occasion to make sure that all clinical needs were met. We hope that you have all been able to stay safe in your practices, and if there's anything we can do to help, please don't hesitate to reach out.

Sad News



On February 22, **Dr. Richard (Dick) Tannen** passed away peacefully in New York City at the age of 82 years. Dr. Tannen served as our division's third Chief of Nephrology, from 1978 to 1988. He later went on to serve as Chair of Medicine, University of Southern California, Senior Vice Dean at University of Pennsylvania as well as President, American Society of Nephrology. Even after leaving Michigan, Dr. Tannen always remained a strong supporter and friend of our division. He will be greatly missed.

<https://www.legacy.com/obituaries/nytimes/obituary.aspx?n=richard-tannen&pid=196131630>

Dr. Raj K. Dhingra MD unexpectedly passed away in Dayton, Ohio at the age of 49. Dr. Dhingra did his internal medicine residency and nephrology fellowship at University of Michigan as well as obtaining an MS degree from the School of Public Health. He was a practicing nephrologist at Renal Physicians Inc. in Dayton, and has helped thousands of patients in the Dayton area and beyond. He was a generous supporter of the Division of Nephrology and remained in close contact with many of his peers in Ann Arbor and beyond. He will be deeply missed!

<https://www.legacy.com/obituaries/dayton/obituary.aspx?n=raj-dhingra&pid=196142149>



Brosius Professorship

We are continuing to solicit donations to help establish the **Frank C. Brosius M.D. Collegiate Professorship in Nephrology**. After many years as the Fellowship Program Director, Chip went on to serve as Division Chief from 2004 until 2016, all while maintaining a highly successful research career. We hope to permanently honor his many achievements and contributions to the University through this professorship. If you haven't already, please consider making a contribution.

<https://leadersandbest.umich.edu/find/#!/give/basket/fund/799814>

Contact Us!

We are always looking for updates from alumni and friends of Michigan Nephrology. If you wish to share any information, or have suggestions for other future content, please send a message to associate division chief Michael Heung (mheung@med.umich.edu; @keepingitrenal on Twitter).

The Weller Society brings together alumni, faculty and friends of the University of Michigan Division of Nephrology. The Society is named after Dr. John Weller, who served as the first Chief of Nephrology at University of Michigan from 1964-1977.

