Neonatal Kidney Collaborative (NKC) • nkc@peds.uab.edu

Neonatal KIDNEY Collaborative

The NKC's mission is to improve the health of newborns with or at risk for kidney disease through multidisciplinary collaborative research, advocacy, and education.

March 31, 2021

Dear NKC Members,

We hope you are all well and enjoying the spring weather. We are sending a rare second email this month to remind you about the opportunity to join the Research Committee and participate in the development of Neonatal Nephrology curriculum.

Research Committee Seeking New Members

The Research Committee is accepting applications for new members. We are striving to assemble a diverse group to carry out the mission of the Committee.

WE WELCOME NEW MEMBERS AT ALL LEVELS (residents to full professors). Trainees will have the opportunity to be mentored and serve on the committee for at least one year. Junior faculty (assistant professors) will be able to expand their network of colleagues and collaborators and be mentored on reviewing others' work and developing their own work products. Senior faculty's experience and expertise will help develop the next generation of subspecialists interested in the neonatal kidney.

To apply, please fill out the webform at: NKC Research Committee Application.

Please note, you must register as a member of the website in order to access the form. If you have any issues with the application form or website access, please email mcstarr@iu.edu. If you have questions regarding the Research Committee, please email co-chairs Jennifer Charlton (JRC6N@hscmail.mcc.virginia.edu) or Ronnie Guillet (Ronnie_Guillet@URMC.Rochester.edu). **The deadline for applications is April 2nd. If you are interested but unable to respond by the deadline of Friday, please contact Dana, Jennifer or Ronnie as soon as possible.**

Help with the National Neonatology Curriculum

The National Neonatology Curriculum is a novel flipped classroom curriculum that employs peer-reviewed pre-class online videos and in-class facilitator-led group discussions of clinical cases highlighting physiological concepts. Thus far, ONTPD has developed curricula for systems

including: respiratory, GI, and MFM. The National Neonatal Nephrology section will be the first collaborative curriculum designed for fellows from both training programs.

The curriculum is divided into 12 topics (ex. AKI); each topic has 1 neo and 1 nephro author and 3 total editors. This team works together to create: 3 to 5 short online videos (4 to 10 minutes each) housed on MedEd On The Go (www.mededotg.com/pediatrics), learner and facilitator guides to promote group discussion of clinical cases, and suggested reading lists.

Benefits: Peer-reviewed lasting educational materials that can be used for promotion and tenure, national editorial leadership positions, and an opportunity to participate in scholarly investigations related to curriculum design and implementation.

Sign up information: https://docs.google.com/spreadsheets/d/1jbB28SMztGdW3CpGNA-q_U8q9rwSHXjH56qTCIlNw2A/edit#gid=14123406. If you have any questions, please contact Liz Bonachea at elizabeth.bonachea@nationwidechildrens.org.

#KIDNEO – Neonatal Nephrology Twitter Journal Club

Journal clubs on social media are a growing timely and interactive way to share and discuss new additions to the literature.

The next #KidNeo journal club will be on **Wednesday April 21th at 9pm Eastern**. Stay tuned to Twitter and the website for more details. We look forward to discussing the recent article by Dr. Perazzo and colleagues in KI Reports looking at a new approach to recognize neonatal impaired kidney function – something that all neonatologists and pediatric nephrologists should be familiar with and interested in! Check out this figure below for a preview.

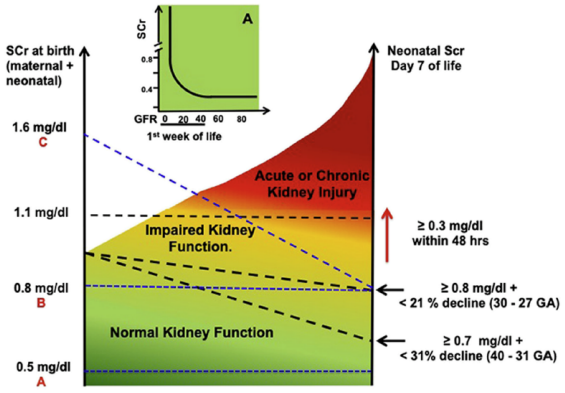

Figure 8. Approach to identify newborns with impaired kidney function (IKF) during the first week of life. (a) At high levels of kidney function, large changes in glomerular filtration rate (GFR) result in small or no changes in serum creatinine (SCr). In contrast, at lower levels of kidney function, as seen in neonates during the first week of life, small changes in the SCr decline are associated with clinically relevant changes in GFR. The graph shows the SCr decline and threshold cutoff values for newborns of 40 to 31 and 30 to 27 weeks of gestational age (GA), respectively. Patient A shows SCr levels on day 1 (0.5 mg/dl) that are normal for the 7 day of life as well. In this case, the SCr decline cannot be used to detect IKF, because a further decline or lack of decline, within the normal SCr range, has no clinical value for this purpose. Patient B shows normal SCr levels for the first day of life (0.8 mg/dl). However, on day 7, both the SCr decline and absolute SCr values are abnormal. Patient C shows high SCr levels for the first day of life (1.6 mg/dl) and a normal SCr decline for the first week of life. Both patients B and C show similar abnormal SCr values on day 7 of life (blue dotted lines representing both patients merge at 0.8 mg/dl). However, assuming they have similar GA and risk factors, patient B is more likely to have a worse renal outcome in subsequent days. Finally, patients who show a rise in SCr from baseline ≥0.3 mg/dl within 48 hours are considered to have neonatal acute kidney injury according to the Kidney Disease: Improving Global Outcomes definition.

Best Wishes,

Michelle Starr and Matthew Harer
NKC Communication Committee Co-Chairs