



# LGM | NEWS

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## Race Modifier Comment Eliminated from eGFR Reporting

*By: Caroline Franks, PhD and Mitch Scott, PhD*

Measurement of glomerular filtration rate (GFR) is used to detect, stratify, and monitor progression of kidney dysfunction, and it also serves as a prognostic tool for staging chronic kidney disease. The most common method to determine GFR is the use of equations, which extrapolate estimated GFR (eGFR) from creatinine. As creatinine is directly proportional to muscle mass, correction factors representing gender, age, and race have been reported to improve equation performance as markers of lean body mass.

As of August 12th, 2020, BJC no longer reports eGFR with an interpretive comment describing the use of a race factor for Black/African American patients. Previously, eGFR was reported with the interpretive comment, "If African-American multiply value by 1.16." The population used to develop the Black/African-American race factor was small, relatively homogeneous and not reflective of diverse patient populations. Furthermore, ethnicity is complex and likely cannot be qualified by a 2-level descriptor (i.e. Black or other).

We strongly encourage our clinical teams to avoid use of such race correction factors for the following reasons:

- Race is a social construct with no biological basis and should not be used a proxy for genetic variation among Black/African American individuals.
- Research studies supporting the use of a Black/African American race factor for calculation of eGFR were limited in terms of geography and sample size, and qualified race based on "examination of skin color".  
*(continued on page 2)*



# Race Modifier Comment Eliminated from eGFR Reporting

*(continued from page 1)*

Instead, we encourage our clinical teams to consider other factors when interpreting eGFR results, such as muscle mass, nutritional status, comorbidities and presence or absence of proteinuria. This change is endorsed by the BJC Clinical Laboratory Standardization Committee and the BJC Center for Clinical Excellence and reflects our commitment to improving health equity for patients of all racial and ethnic backgrounds.

For more information, see recent articles published in:

## **The New England Journal of Medicine**

Vyas DA, Eisenstein LG, Jones DS. Hidden in Plain Sight - Reconsidering the Use of Race Correction in Clinical Algorithms. NEJM. 2020. DOI: 10.1056/NEJMms2004740

## **The Clinical Journal of the American Society of Nephrology**

Grubbs, V. Precision in GFR Reporting. Let's Stop Playing the Race Card. CJN. 2020. DOI: <https://doi.org/10.2215/CJN.00690120>

## **The Journal of the American Medical Association**

Eneanya ND, Yang W, Reese PP. Reconsidering the Consequences of Using Race to Estimate Kidney Function. JAMA. 2019; 322(2):113-114. DOI:10.1001/jama.2019.5774

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**To contact an LGM faculty member,  
please email them or call 314-362-2998**



## LGM helps to implement new COVID-19 saliva tests

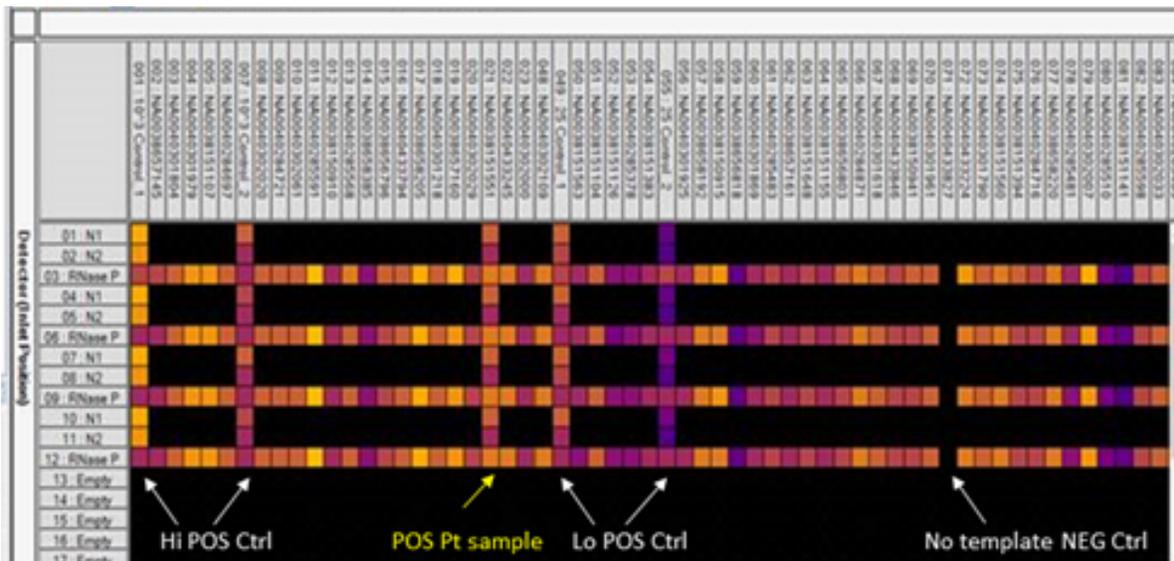
By: Jon Heusel, MD, PhD

After nearly three months under review, the FDA formally approved an Emergency Use authorization for an innovative molecular diagnostic assay that detects SARS-CoV-2 virus in human saliva. This assay, the Washington University SARS-CoV-2 Ultrasensitive-High-Throughput-Saliva Version 1.0 (WUSC2-USHT-S.1 ;see figure for example of assay results), was pioneered by Rich Head and his team at (Genome Technology Access Center) GTAC. It represents a collaboration with Fluidigm, which manufactures the microfluidic components of the testing process.

This assay is unique as it:

- 1) allows for specimen self-collection using a small 1.8 mL vial,
- 2) accurately detects SARS-CoV-2 particles in saliva without the need for extensive processing
- 3) does not require extraction of viral mRNA,
- 4) has performance characteristics that make it useful for screening asymptomatic populations (high analytical sensitivity, and very low false-positive rate)

Additionally, the assay is relatively inexpensive and has a very high throughput, with a capacity for more than 2,000 samples per day. Given the need for formal clinical validation and oversight, the WUSC2-USHT-S.1 assay will be performed in the CLIA lab managed by the Cytogenetics group. As Medical Director for the Cytogenetics & Molecular Pathology Lab, Dr. Julie Neidich will oversee this new COVID-19 testing operation. She has been very busy managing the validation, electronic systems integration and documentation phases now nearing completion.



**WU-COV2HT.s1 assay results.** Graphical summary output from Fluidigm analysis software from a recent testing run. Each sample (columns) are tested in quadruplicate for two SARS-CoV2 viral targets: N1, N2 and an internal RNA control, RNaseP (rows). Positive and negative controls are indicated, as is a single positive saliva from a study participant. Fig. modified from C. Sawyer, GTAC

## LGM Faculty Member receives American Society of Clinical Pathology Award

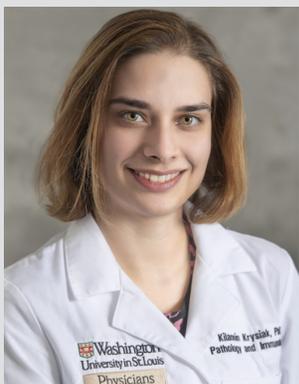
LGM Faculty Member, Dr. Suzie Thibodeaux, was named to the ASCP 40 Under Forty 2020 list. Founded in 1922 in Chicago, ASCP is the world's largest professional membership organization for pathologists and laboratory professionals. ASCP's 40 Under Forty program recognizes 40 highly accomplished pathologists, pathology residents and laboratory professionals under the age 40 who have already made significant contributions to the profession and stand out as leaders who will help shape the future of pathology and laboratory medicine on behalf of patients.



Recipients were selected based on their accomplishments, experience, leadership skills and their dedication to innovation in the field of laboratory medicine and pathology. Dr. Thibodeaux's selection was based on her enthusiasm for sharing laboratory medicine and transfusion medicine with colleagues. Her proactive approach to sharing knowledge across specialties and training levels has manifested in several ways at BJH and Wash U, including course directorship of laboratory medicine medical student rotations, serving as the laboratory medicine content expert for the Gateway Curriculum, educational activities with post-graduate trainees in other specialties with a focus on relevance to their clinical practice, and collaborative research projects across institutions.

**Congratulations Dr. Thibodeaux!**

## LGM Featured Colleague



Dr. Kilannin Krysiak joined the LGM faculty in August. Dr. Krysiak will provide bioinformatics support, sign out for next generation sequencing (NGS) and cytogenetics. She will also continue several research projects in cancer variant interpretation and the genomics of lymphoma.

Dr. Krysiak earned a PhD in Molecular Genetics and Genomics in Matthew Walter's lab at Washington University in St. Louis. She received the Siteman Cancer Center Special Emphasis in Cancer Pathway Fellowship and an NIH F31 Ruth L Kirschstein NRSA Predoctoral fellowship for her work on the genetics of myelodysplastic syndromes. Her postdoctoral work was undertaken at the McDonnell Genome Institute in the labs of Obi Griffith and Malachi Griffith, where she was involved in the analysis and interpretation of a number of next generation sequencing projects of various sizes and was a lead analyst for the Genomics Tumor Board.

Dr. Krysiak was part of the original team that created the CIViC (Clinical Interpretation of Variants in Cancer; [www.civicdb.org](http://www.civicdb.org)) knowledgebase and continues to be a lead curator and feature development consultant. This work led to her promotion to an Instructor in the Division of Oncology where she served as an Expert in Residence for the Melbourne Genomics Health Alliance. She transitioned to the Laboratory Genetics and Genomics fellowship in 2018 in the Department of Pathology and Immunology to pursue her interest in clinical genetics. As a junior member of the Cancer Genomic Consortium's Board of Directors and a member of the ClinGen Somatic Working Group, she continues her international involvement in guideline development in cancer molecular genetics, where she strives to advance both understanding of cancer evolution and clinical utility of cancer genomics.

**We welcome Dr. Krysiak to the LGM community!**