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UNC
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Center for AIDS Research

UNC CENTER FOR AIDS RESEARCH

NEWS LETTER | October 2023

Fourth Edition



Celebrating a Year of Breakthroughs and Progress

MESSAGE FROM OUR OFFICE OF COMMUNITY ENGAGEMENT (OCE) MANAGER

By Alicia Diggs, CFAR Office of Community Engagement Manager

As we approach the end of another year, it is with great enthusiasm and gratitude that we share with you the CFAR End of Year Newsletter. 2023 has been a year filled with dedication, collaboration, and innovation as we continue our mission to combat the HIV/AIDS epidemic. It is a time to reflect on our collective achievements, acknowledge the challenges we have overcome, and look forward to the promising horizons that await us in the year to come.

Throughout the past year, our remarkable team of researchers, clinicians, advocates, and community partners has worked tirelessly to advance our understanding of HIV/AIDS, improve the lives of those affected, and strive for a world without new HIV diagnoses. With your support, we have made significant progress in key areas such as research, prevention, treatment, and advocacy.

In the spirit of the holiday season, we extend our warmest wishes for a joyous and peaceful year-end celebration. May the new year bring renewed strength, inspiration, and a shared determination to achieve remarkable things.



Thank you for being an essential part of the UNC CFAR family.



A Look into Our Cores...

Clinical Pharmacology and Analytical Chemistry (CPAC)

By Lauren Tompkins- CPAC Core Program Manager

Our Clinical Pharmacology and Analytical Chemistry Core (CPAC Core), co-directed by Angela Kashuba and Mackenzie Cottrell, has been busy over the last few months! In August, CPAC Core met with the Community Collaboration Board (CCB) for their feedback to help drive our research direction. During the meeting, the CPAC Core explained the separate ways that medications for HIV treatment and prevention are measured in the body as an indicator of treatment adherence. Members of the CCB shared perspectives on whether these measures, potentially alongside viral load, might be incorporated into virtual or community-centered point-of-care systems to keep patients engaged in their care and taking their medications on schedule.

CCB members highlighted the influence of patients' unique circumstances on their care engagement. This underscores the need for diverse options in both method and location of medication measures, ranging from less-invasive sampling done at home to blood draws obtained in the clinic. Remote sample collection gained favor, especially post-COVID, as healthcare and clinical study participation shifted online. Pharmacies and community centers were also emphasized as vital resources for HIV testing and care, particularly in rural areas.

The CPAC Core then took what was learned from this CCB discussion back to the HIV research community! CPAC gave three scientific presentations at the International Workshop on Clinical Pharmacology in Rome, Italy in September: 1) comparing the performance of different dried blood sampling devices for use at home to measure drug adherence (presenter: Amanda Schauer), 2) comparing the performance of hair and Tasso® sampling to help collect samples at home or in a pharmacy, community center, or clinic (presenter: Elias Rosen), and 3) alternative methods of measuring drug adherence in studies conducted in countries with limited resources (presenter: Craig Sykes).



Amanda Schauer (left) following her presentation at the International Workshop on Clinical Pharmacology 2023, where Elias Rosen and Craig Sykes also presented as mentioned in the article's main body, as well as Mackenzie Cottrell (third from right) and Lauren Tompkins (right).



The Kashuba Lab, from left to right: Amanda Poliseo, Mackenzie Cottrell, Craig Sykes, Angela Kashuba, Yury Desyaterik, Lauren Tompkins, Amanda Schauer (front row); Talisa Kinsale, Nicole White, Brian Van Horne, Hannah Bryan (middle row); Elias Rosen, Adrian Khoel (back row). Julie Dumond, Cassie Gilbert, and Daniel Oliveira (not pictured).

CPAC Core's next step is to move the collaboration back to the lab - starting with a virtual lab tour and round table for CCB members planned for the coming months. This will be an opportunity to partner in shaping other areas of research for the CPAC Core and Kashuba Lab, such as the development of long-acting HIV therapeutics for treatment and prevention and optimization of strategies for HIV cure.

[Learn more](#)

HIV/STD Laboratory (HSL)

By Kristina De Paris- HSL Core Director



The HSL Core from left to right: Kiera Williams, Laura Langer, Aidyn Cada, Kristina De Paris, Robert Krysiak, and Ryan Hansen

The *mission* of the HSL Core is to provide the necessary laboratory infrastructure, scientific and technical expertise to assist clinicians, basic science researchers, and industry partners in their HIV-related studies. Towards this goal, the Core provides consultation, support in grant writing, hands-on training, sample processing, biorepository function, and numerous testing services.

In the next few years, the HSL Core hopes to incorporate more advanced technologies, - such as multiplexed Primer ID Next Generation Sequencing or CyTOF technology, - into its research portfolio. In addition, the Core will enhance its role in assisting UNC's international partner sites in expanding their local lab infrastructure and supporting training and collaboration across sites.

The year 2023 has been *challenging* for the Core. Julie Nelson, who served as Core Director for 14 years, decided to leave the university to take on a new research position. Coinciding with her decision, every staff member was successful and got admitted to medical, dental, or graduate school. The UNC CFAR can certainly take pride in having contributed to the career advancements of all of them.

The *new team* of the HIV/STD Lab Core is led by Kristina De Paris with Rob Krysiak as Associate Director. Kristina is a trained immunologist with an appointment as professor in the Department of Microbiology and Immunology. She oversees a rigorous research program that focuses on the development and testing of HIV vaccine strategies

Over the years and the existence of the UNC CFAR, the Core has changed its portfolio to respond to the changing face of the HIV/AIDS epidemic. In the early years, the Core predominantly developed and conducted virological testing. To better understand HIV pathogenesis, the Core incorporated immune assays and limited testing for pathogens causing sexually transmitted diseases. When the COVID pandemic hit, the HSL Core was an integral part of UNC's response and ability to perform timely COVID-testing and specimen storage, as well as in supporting numerous SARS-CoV-2 vaccine studies.

The Core is instrumental for the many clinical trials conducted at UNC by the ACTG, the HVTN, IMPAACT, and other networks by providing sample processing and testing services that are performed according to GCLP guidelines. Furthermore, the Core maintains a large CAP- accredited biorepository of blood, and other samples, from the UNC CFAR HIV Clinical Cohort and the Multicenter AIDS Cohort Study/ Women's Interagency HIV Study (MACS/WIHS).

In early life. In addition, she is actively collaborating with Dr. Jeff Stringer on identifying biological mechanisms associated with adverse birth outcomes in pregnant Zambian women, especially women living with HIV. Rob brings immense expertise to the Core lab as he has led the Clinical Lab at the UNC Project in Lilongwe, Malawi, until his return to the US this summer. Rob and Kristina are supported by a great team of research technicians and specialists named KARL, prompted by their own names of Kiera, Aidyn, Ryan, and Laura. They have quickly learned and adapted to their new positions, prompting the Core leaders to translate KARL to "Kick-Ass Research Lab"; however, "Key AIDS Research Lab" will be the politically correct translation. The Core personnel kindly asks for patience and understanding as they transition to their new roles and responsibilities. The HIV/STD Laboratory Core is fully committed to excelling in the support they provide for HIV research at UNC and its CFAR partners. They are happy to meet with anyone who could benefit from their services.

[Learn more](#)

Strategies to Eliminate PrEP-related and other Stigmas impacting PrEP interest and uptake among cisgender African American women: A community informed approach

Here we showcase the research activities being done with the community and the collaboration between UNC CFAR, our stigma research interest group, our social and behavioral core, and Duke CFAR.

By Suur Debrah Ayangeakaa, PhD, MPH

Through support from the Duke CFAR [Developmental Core Pilot Awards](#), **Suur Debrah Ayangeakaa, PhD, MPH** is utilizing a community informed approach to understand and address stigmas impacting interest in and access to HIV prevention methods, particularly PrEP, for cisgender African American women. Her study, STEPS—Strategies To Eliminate PrEP-related and other Stigmas— is being conducted in collaboration with the longstanding I'm Fully Empowered (IFE) community academic partnership and the ongoing IFE4Her study led by UNC colleagues, Drs. Carol Golin and Lauren Hill, which focuses on improving PrEP awareness and access to African American women living in low-income housing in Durham. Dr Ayangeakaa became involved as a co-investigator on the IFE4Her study since 2020 while she was a postdoctoral research fellow at UNC, Cecil Sheps Center for Health Services Research.

Dr. Ayangeakaa, an Assistant Professor at Duke University School of Medicine and the Duke Global Health Institute, is involved with the Duke CFAR and UNC CFAR Stigma Research Interest Group. Her CFAR pilot grant focuses on understanding intersectional stigma affecting cisgender African American Women, addressing factors like racism, classism, and sexism. The aim is to design, implement, and assess a community-informed intervention to combat HIV-related stigmas and improve HIV prevention, including PrEP, for these women in the Durham, Raleigh, and Chapel Hill communities.

In 2019, HIV diagnoses increased in NC; 63% of cases were among African American residents and 19% were among women. Intersecting stigma impacts HIV disparities among African American women but is not well understood. Formative



As part of the initial phase of the STEPS study, Dr. Ayangeakaa has formed a work group to engage in an iterative process of consensus building, brainstorming of ideas, and systematic planning for the stigma reduction intervention design and implementation. The STEPS study just launched its first kickoff work group meeting on October 12, 2023 (see photo), where community partners and researchers from both Duke and UNC worked together to iron out study design strategies and lay the groundwork for subsequent study activities. The work group includes cisgender African American women from Durham and nearby NC Triangle communities, as well as representatives from organizations offering services to predominantly African American women, including sexual health and HIV prevention/care.

findings from the IFE4Her study with women in Durham hinted at the existence of various stigmas, which women reported are expected to deter some women's interest in PrEP and from talking to providers or partners about PrEP. Thus, understanding intersecting stigmas can enhance efforts to increase HIV prevention among African American women by improving acceptability of PrEP.



STEPS - Strategies to Eliminate PrEP-related and other Stigmas



Dr. Suur Debrah Ayangeakaa, PhD, MPH

Announcements



December 1st

UNC CFAR's Annual World AIDS Day Symposium

Join us on Friday, December 1st, in the Bioinformatics Auditorium and listen to our speakers spark insightful conversation. Breakfast and Refreshments will be served.

[RSVP](#)

[Schedule & Speakers](#)



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