

THE PITT MEN'S STUDY



NEWS AND NOTES

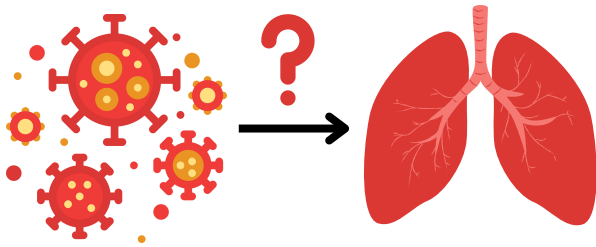
SPRING 2024

RESEARCH UPDATES: LUNG FUNCTION & HIV CONNECTIONS

Hi Pitt Men's Study participants!

I am very excited to share with you results from two recent research projects about lung health in HIV!

In the first project, we asked how HIV infection affects symptoms, quality of life, ability to exercise, and lung function and structure. To answer this question, we combined data from studies around the world, including the Multicenter AIDS Cohort Study and Women's Interagency HIV Study.



One of our major findings was that people living with HIV get out of breath more easily and that they cough, spit up phlegm, and wheeze more often than people without HIV. In addition, people living with HIV report worse lung-related quality of life and had decreased ability to exercise. These findings are probably related to the fact that COPD (as measured by breathing tests and chest imaging) is much more common in people living with HIV. We also found that lung function declines faster over time in people living with HIV compared to people without HIV.

These results are important for three reasons. First, they confirm that HIV is a risk factor for chronic lung disease. Second, they suggest that doctors should test people living with HIV who have breathing-related complaints to identify if they have COPD and might benefit from specific treatment. Third, they highlight the importance of addressing other risk factors such as smoking to minimize how fast lung function declines over time.

In the second project, we asked whether lung function changes in different ways over time among subgroups of people living with HIV and compared levels of inflammation between them. To answer this question, we used data from breathing tests and blood tests from the Multicenter AIDS Cohort Study and Women's Interagency HIV Study.

We found that some participants lost lung function much faster than others. These people were more breathless, had worse quality of life and decreased ability to exercise, and had more inflammation. Importantly, they had two risk factors in common: smoking cigarettes and having detectable HIV viral load. These results are important because they (once again) confirm the importance of quitting smoking and (also) consistently taking HIV medications. We hope that we may eventually be able to use clinical, breathing tests, and blood data to identify people with HIV who may develop lung disease in the future. This will allow us to provide treatments such as inhalers and exercise training to those who will benefit from them ahead of any irreversible lung damage.

We want to thank you, the participants in the Pitt's Men's Study, for your continued support! Without your dedication and help, none of this important research would have been possible. We look forward to giving you more updates in the next newsletter!

With gratitude,
Ioannis Konstantinidis,
MD MS



CONTACT US

The Pitt Men's Study
PO Box 7319, Pittsburgh PA, 15213
(412) 624 2008; (800) 987 1963
pittmensstudy.com
Facebook.com/PittMens

Charles R. Rinaldo, PhD
Principal Investigator

Ken Ho, MD
Medical Director

News and Notes is published by the Pitt Men's Study. All information and opinions are the sole responsibility of the study and do not necessarily reflect the policies or views of the University of Pittsburgh or the National Institutes of Health.



RESEARCH UPDATES: YOUR DATA AT WORK!

Hi Pitt Men's Study participants!

I'm very excited to update you with the results of our study on COVID-19 vaccines in people living with HIV! First, I would like to give a huge THANK YOU to all of you for your participation in the study; you make cutting edge research possible with your dedication. Our research team is made up of experts in the human immune system from all angles, and we sought to answer the question of how these vaccines behave in people living with HIV.

One of our major findings was that men living with HIV have slightly lower antibody levels from the vaccine than men without HIV. This was not surprising to us, because we know that this is true with other vaccines too. This re-enforces that people with HIV should receive the COVID-19 vaccines and boosters when they are available! One important note we found related to this fact, though, was that antibodies in men living with HIV decay at the same rate as men without HIV, which is important for the durability of protection the vaccines offer.



Another question we wanted to answer was "What impact do these vaccines have on the baseline level of inflammation found in men living with HIV?" We found that there was a greater activation of a pro-inflammatory cascade triggered by vaccine antibodies in men with HIV. We are still not sure how this will affect people with HIV in the long run, if it has any effect at all. It may be beneficial and compensate for the lower antibodies, but it may also be the cause of unnecessary inflammation. We are still working to find out more information on the inflammation caused by this, and the protection this cascade could offer against COVID-19 infection.

Finally, other studies have found that, in the short term, other vaccines may cause a small rise in HIV viral load in suppressed people living with HIV; typically, only a few hundred virus copies per milliliter. We investigated this for the COVID-19 vaccines and found that, with a longer period, this viral load seems to go down, supporting that these vaccines are safe for people with HIV.

Related to this, we also found that antibodies against a particular HIV protein called Nef also decline post-vaccination. Nef is an important protein that HIV uses to impair the immune system. We still are unsure of the cause of this decline in residual HIV virus and Nef antibodies and are planning to look further into this in the coming year.

This study was finally published in *The Journal of Infectious Diseases*, and I will include a link to the study below. The paper is available by a subscription only however, so if anyone would like a copy, I have included my email as well. Please feel free to email me for a copy and I would be happy to send it along!

For our next steps, we really want to find out what causes these differences in antibody levels and this increase in inflammation-causing proteins, as well as other differences in antibody function. We also plan to study the cells that make antibodies, and dive into how they are different in men with HIV who receive the COVID-19 vaccines.

Our study was only done in men from the Pitt Men's Study, so we are also working on testing samples from the Women's Interagency HIV Study sites to see if these findings are the same for women with HIV. We have been testing samples from women with HIV from the University of California San Francisco WIHS cohort, and data from that should be coming up soon!



We again want to give a huge thank you to the participants in the Pitt Men's Study! Without your support, this critical work would not have been possible. I look forward to giving another update in the coming months on how the remaining questions are being answered.

Wishing all a happy and healthy new year,

Dylan J. Tuttle, BS, CPH-provisional
PhD Candidate, Pitt Public Health
djt52@pitt.edu



The link to our paper: <https://doi.org/10.1093/infdis/jiad544>





A FEW WORDS FROM JESSICA

Dear Faculty, Staff & Study Participants of the Pitt Men's Study,

The participants and coworkers have meant so much to me as trans-person and a hemophiliac survivor of the AIDS outbreak. I always felt a strong sense of community that can only come from being around fellow queer survivors for such a long time.

We've laughed together, grieved together, cursed about politicians together and quite literally bled together. I would often take a long time with participants because we would be chatting about anything and everything. I will carry these memories with me for the rest of my life. *Each one of you will always hold a special place in my heart, especially the ones who are no longer with us.*

There is an emotional roller coaster a person experiences from working at the Pitt Men's Study. In times of celebration, the laughter could be heard through the walls. In times of tragedy, you would only hear quiet sobs just under the sporadic sounds of typing. These experiences would help all of the unique personalities of our clinic to form a bond that only we can understand. I like to think that we put the "fun" in defunction. I've worked with a lot of teams in my past employment, and this is why I would often say that the people in our clinic were a family. I truly mean that.

In closing, the reasons for my separation from Pitt are both medical and personal. The people I've met and got to know through the course of my 10 years of employment was one of the most wonderful experiences of my life. Not only have I formed so many lifelong friendships, I'm not sure if I could have gotten through my survivor's guilt without the support of all involved with the Pitt Men's Study. I will always be eternally grateful for that.

Thank You!

Jessica McGuinness



Oh, 1 more thing.

My wife Tina works there now so I promise I'll never be far away.



WE MISS YOU!

YOUR PARTICIPATION HAS MADE THE PITT MEN'S STUDY THE LONGEST-RUNNING STUDY OF GAY AND BISEXUAL MEN'S HEALTH IN THE WORLD.

IF WE HAVEN'T SEEN YOU IN A WHILE, PLEASE REACH OUT.

WE HAVE MANY WAYS FOR YOU TO PARTICIPATE, INCLUDING PHONE INTERVIEWS IF YOU ARE NOT ABLE TO COME IN PERSON.

GIVE US A CALL TODAY!

412-621-1643

CELEBRATING THE LIFE OF DONNY THINNES

Longtime LGBTQ community member Donny Thinnies peacefully passed away in his home on Saturday January 20, 2024; surrounded by loved ones and his faithful 4-legged companion Honey. Donny had been an active member of Pittsburgh's LGBTQ community since the 1970s. He owned and operated a gay bar on Herron Avenue in Polish Hill that had numerous names over the years including DB's, The Norreh, Leather Central, and Donny's Place. Donny was a member of the Pittsburgh Tavern Guild, a group of bar owners that held a variety of events and raised money for many LGBTQ causes. He was a founding member of the Delta Foundation of Pittsburgh, an LGBTQ advocacy organization which planned Pittsburgh Pride and other community events.

Pitt Men's Study principal investigator
Dr. Charles Rinaldo shared this:



"Recognizing the recent passing of Donny Thinnies brings back in focus the history of Pittsburgh's LGBTQ community's historic role in the Pittsburgh fight against the HIV/AIDS pandemic and the formation and success of the Pitt Men's Study. Donny was one of more than a dozen Pittsburgh area gay bar owners who formed the Pittsburgh Tavern Guild in the early 1980s and who we worked closely with, especially Donny, Chuck Tierney, Chuck Honse, Chuck Locy, Bill Kaelin and Robert "Lucky" Johns. Donny owned the Norreh Social Club and later Donny's Place in Polish Hill. I especially remember his large collection of keepsakes and memorabilia in the bar and at his home. Other bars and related establishments in the Tavern Guild included the Holiday, Zack's, Brewery, Crossover Lounge, Jackson's Restaurant, Pegasus Lounge, Pittsburgh Trucking Company, Tender Trap, Travelers, Players Lounge, Arena Health Club, and House of Tilden. I list them to honor their role as a critical factor in the Pittsburgh community effort of education and prevention in establishing and supporting our fight against HIV/AIDS throughout the 1980s and 1990s."



Photo courtesy of QBurgh's QArchives:
<https://www.qburgh.com/qarchives>



QBURGH.COM

Pittsburgh's LGBTQ
News Source



RESEARCH UPDATES: HIV FRONTIERS

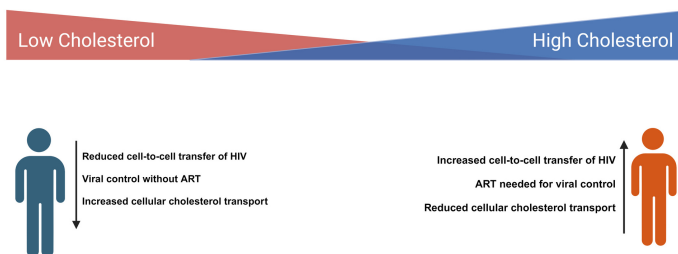
Hello everyone!

I am thrilled to share my current research with you, it is focused on solutions that would be critical for improved care and treatment for people living with HIV. Our team is currently focused on unraveling the role of cellular cholesterol levels in preventing the establishment of latent reservoirs during antiretroviral therapy. We have made significant strides in unraveling this association and it is only possible thanks to your commitment and support.

One of the last frontiers of HIV care is the prevention of reservoir establishment and while antiretroviral therapy (ART) prevents active infections, it cannot stop cell-to-cell transfer of HIV during ART. Reservoir establishment raises the risk of viral rebound and progression to AIDS if ART is stopped or fails due to drug resistance. My research is driven by an important finding from our group, where a lower level of cellular cholesterol was found to be a critical factor in preventing cell-to-cell transfer of HIV during ART. My research is focused on identifying key cholesterol genes and genetic factors that can serve as drug targets for controlling cholesterol levels which would help prevent the cell-to-cell transfer of HIV during ART. Identifying these genes would offer us a broad set of targets that can change how we care for people living with HIV and bring us closer to total eradication of the virus.

To effectively identify these genes, we are utilizing modern genomic screening assays such as the CRISPR-Cas technology to zero in on which genes are functionally important in preventing this cell-to-cell transfer of HIV. Recently, we have successfully optimized the system to identify genes that are important in cholesterol transport and are investigating their effect on the cell-to-cell transfer of HIV in laboratory settings. Our next steps include a genomic sequence study to identify a host of genetic differences between individuals who can control the virus without ART and those who require ART for viral control.

Cholesterol Metabolism modulates cell-to-cell transfer of HIV



We are thankful for the support from the participants at the Pitt Men's Study! We would not be making such research strides without your consistency over the years. I look forward to providing more groundbreaking findings in the next issue of the newsletter.

Best regards,
Daniel M. Okpaise
PhD Student, Integrative
Systems Biology
University Pittsburgh
School of Medicine.



Interested in joining the PMS Community Advisory Board?

We are looking for motivated and community-minded individuals who would like to help shape the direction and focus of the study. The PMS CAB meets about six times a year virtually. For more information, email us at: pittmenshealth@pitt.edu



OLDER WISER LEADERS
A GROUP FOR 50+ LGBTQ+ FRIENDS AND ALLIES

JOIN US EVERY THURSDAY FROM 10AM - NOON FOR COFFEE AND CONVERSATION
FOR MORE INFO CONTACT JBLATZ@PERSADCENTER.ORG



Shepherd Wellness Community

Helping people living with HIV/AIDS improve their wellness

Become a Member of the Shepherd Wellness Community!

Shepherd Wellness Community (SWC) is the only AIDS Community center in western Pennsylvania and the only AIDS community serving the 11-county region of southwestern Pennsylvania. SWC is often the first place a person seeks help after an HIV positive diagnosis.

Since its inception in 1987, Shepherd Wellness Community has offered supportive services for people living with and affected by HIV/AIDS.

Shepherd Wellness members have access to many free programs and services, including Wellness Dinner, social events and outings, wellness education programs, support groups, fitness programs and more. Transportation assistance to SWC is available.

Apply for membership by filling out an application form online at: <https://swconline.org/we-are-swc/become-a-member/>

Or reach out via phone or email for more info:

Phone: (412) 683-4477

Email: office@swconline.org





MEET THE NEW PMS STAFF MEMBERS

**TINA WATSON**

Tina loves 4 things in this life: her wife (Jess), her cats, traveling, and bothering her co-workers. Tina is a graduate of Point Park University with a bachelors degree in English. Tina's favorite time of year is June, when she gets to organize the annual Dormont Pride events!

**LAUREN BERRY-KAGAN**

Lauren is getting her Master's in Public Health in Infectious Disease Prevention and Community Practice from Pitt. Before grad school, she worked at a homeless shelter, as a housing case manager for people with HIV, and in drug user health research. Lauren's favorite things include the WNBA, tea, grilled cheese sandwiches, *The X-Files*, and the color green.

**EEVE BAK**

Evee recently graduated from Pitt with a BS in Microbiology with a minor in Chemistry. She is also getting her Master's in Public Health in Infectious Disease Prevention and Community Practice. When not at the office you can find her reading science fiction, biking, rock climbing, or knitting.

**NORA ST. CLAIR**

Nora St. Clair is a new assistant data manager for the Pitt Men's Study. She is a Pitt graduate with a bachelor's degree in anthropology, a minor in the Korean language, and a certificate in global health studies. Outside of work, Nora loves to travel and explore new places!

**NADIA MANASFI**

Nadia obtained her undergraduate degrees in Psychology and Women's, Gender, and Sexuality Studies from Lafayette College in 2023. She is currently working with the Pitt Men's Study as she is interested in health disparities affecting LGBTQ+ individuals. She plans on getting her PhD in Gender and Sexuality Studies in the future to specifically focus on the health of queer Arab folks. In her free time, you can find her trying different spots to eat in Pittsburgh!



SAVE THE DATE! MORE INFO COMING SOON

Cheers to
40
years

JOIN US IN CELEBRATING
THE PITT MEN'S STUDY

September 27, 2024 | 6 pm - 10 pm

The University Club | 123 University Pl, Pittsburgh, PA 15213