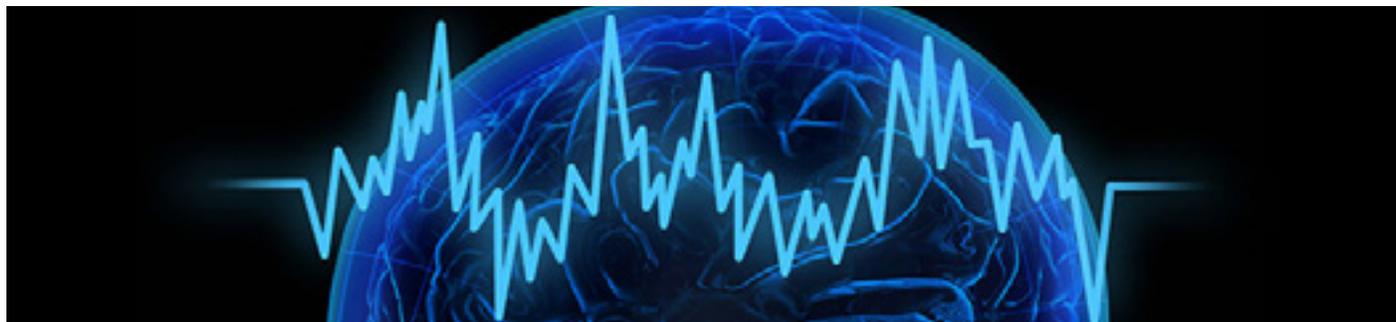


The Pitt Men's Study



What Did You Sign Up For?

Bill Buchanan, PMS Clinic Coordinator

Every volunteer has his own reason for joining the Pitt Men's Study. I joined as a volunteer in 1984 when a mysterious and scary disease was killing people like me and my friends. The consent form may have said it was a Study of Acquired Immune Deficiency in Homosexual Men, but all I heard was "we're gonna cure AIDS!" A lot of other volunteers signed up for the same thing.

Flash forward 35 years. We haven't cured AIDS, but we've figured out how to keep people's immune systems healthy so they don't die of HIV-related causes. PMS volunteers contributed to that, and with every visit they continue to help in the effort to find better ways of doing so and hopefully finding a vaccine and a cure. We are still committed to those original goals.

However, the study has to adapt to the changing face of the epidemic. For instance,

now that people with HIV are living normal life spans, we need to understand what other diseases and conditions occur in them, and why. We also need to study our HIV-negative men to compare the two groups for differences.

That's one of the reasons we've been doing studies of heart health using EKGs, heart monitors, and echocardiograms as well as studies of pulmonary function and sleep. Because we have such a dedicated, reliable, and diverse group of volunteers, we're the perfect place to figure this out.

Another reason we are looking so closely at cardiovascular health is that a large portion of our funding has switched from the National Institute of Allergy and Infectious Diseases to the National Heart, Lung, and Blood Institute. Given the name, you can see where their hearts lie (pun intended).

Continues on page 4

Inside the Issue

Cover Bill Buchanan, PMS Clinic Coordinator, offers his sincere thank you to study participants

Page 2 Health Alert and first results from Aging Survey

Page 3 PMS Welcomes new employee and Dr. Patel

Page 4 Dr. Rinaldo speaks with WTAE about HIV in 1998

Page 5 Learn about the aging HIV community

Page 6 Remembering Dr. Jerry Rabinowitz

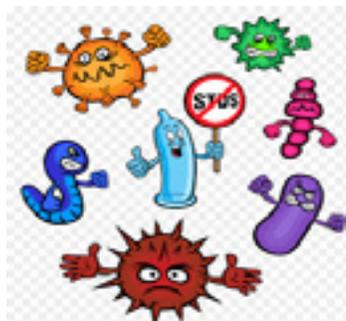
Page 7 Neuropsych unlocks secrets, and join us November 28 for World AIDS Day

Page 8 Stay updated with clinic news and studies

Health Alert: Rates of STDs Climbed for the Fourth Consecutive Year in the US

Ray Yeo

Rates of syphilis, gonorrhea, and chlamydia have climbed for the fourth consecutive year in the United States, the Centers for Disease Control and Prevention (CDC) announced recently. Last year, nearly 2.3 million US cases of sexually transmitted diseases (STDs)



were diagnosed, which is the highest number ever reported.

Chlamydia, which remained the most common, is easily transmitted during any form of sexual activity. If not treated, chlamydia can cause permanent damage to the reproductive system. In men, the infection can spread to the tube that carries sperm from the testicles, causing pain and fever.

If not treated, gonorrhea can cause severe and permanent health issues, including problems with the prostate and testicles in men or problems with pregnancy and infertility in women. Gonorrhea is also typically treated with antibiotics, but strains of antibiotic-resistant gonorrhea persist nationwide.

Syphilis can affect the heart, nervous system and other organs if left untreated. Syphilis is most often transmitted through sexual contact and is 100 percent curable with antibiotics.

Gonorrhea and chlamydia can infect other sites of the body such as the rectum and the throat and diagnosis requires a swab of each site. A urine test alone is not sufficient to diagnose STDs of the throat and the rectum. These STDs can be transmitted through unprotected oral sex in addition to rectal or vaginal sex.

It is important to remember that even if you don't have symptoms, you can still be infected. If you're sexually active, you should get tested for a full range of STDs, including the ones listed here. Don't be shy about asking your

doctor for a full screening. The Pitt Men's Study provides on request free and confidential testing for these STDs. Other testing sites may be found at https://www.health.pa.gov/topics/Documents/Programs/STD_PROVIDERS.pdf

Health Alerts are presented by the Pitt Men's Study and the HIV Prevention and Care Project at the University of Pittsburgh, with funding from the State Department of Health.

Preliminary Results for Healthy Aging Study

Many of you have completed our Healthy Aging Survey. As the Healthy Aging Study enters its final wave, we are beginning to explore our first results for the MACS-wide sample.

The concept of *resiliency*, the process of overcoming the negative effects of risk exposure, coping successfully with traumatic experiences, and avoiding the negative trajectories associated with that risk, has shown promising findings.

- Men with high resilience were less likely to have a detectable viral load
- Black men and older men are more likely to show traits of high resilience
- People who had depressive symptoms, and people who only had a high school or college education were less likely to show traits of high resilience

We also found interesting results involving stigma.

- Men who experienced high stigma were less likely to have high resilience.
- Experiencing and feeling stigmatized significantly predicts current and future health behavior.

The study also has important findings on viral load.

- Black men in our study are more likely to have a higher viral load than their white peers.

PMS Welcomes New Faces

Most of you who have come into the clinic lately will have heard about our infamous sleep study. But who is the man behind the PMS Sleep Study?



Meet Dr. Sanjay Patel. Sanjay got his undergraduate degree in mathematics at Princeton University, before going onto Harvard University to complete medical school, and his residency in internal medicine at the Hospital of the University of Pennsylvania. He returned to Harvard to complete a fellowship in pulmonary and critical care medicine as well as training in sleep medicine. He has conducted research on how poor sleep can impact health at Case Western Reserve University and Harvard Medical School before moving to the University of Pittsburgh in 2016 to lead the sleep research program in the Department of Medicine. He also oversees the clinical program caring for patients with sleep disorders at UPMC Montefiore Hospital.

Sanjay's research interests have focused on understanding the impact poor sleep habits and sleep disorders, like sleep apnea, can have on long term health outcomes, such as worsening chronic diseases like obesity, diabetes, and heart disease. He has found that people who sleep less than seven hours a night are more likely to gain weight at a rapid level compared to people who sleep seven to eight hours. As a result, they are more likely to become obese and also develop pneumonia.

He began working with the Pitt Men's Study in 2017 to study sleep in people living with

HIV to understand the factors that lead to poor sleep patterns in this population and how improving sleep might be a way to reduce some of the risks of heart disease and other health problems. Working with Dr. Beej Macatangay, he recently received funding from the NIH to study how sleep affects the immune system and risk of heart and lung disease both in the short term and long term.

Having grown up in Western New York, Sanjay is an avid Buffalo Bills fan. Their performance over the past 25 years however, has led him to quickly adopt the Steelers as a second home team. His free time is mostly spent with his twin daughters, aged 8. Given their desires to grow up to be a vet and wildlife biologist respectively, he finds himself at the zoo, aviary, or hiking through the woods most weekends.



The Pitt Men's Study welcomes our newest medical technician, Kaitlin Bodnar. Kaitlin is no stranger to Pittsburgh, having graduated *cum laude* from Pitt with a major in Psychology and a certificate in Gender, Sexuality, and Women's Studies. As an undergrad, she worked in studies researching LGBTQ parents and grandparents, and her own study on lesbian and bisexual women's health.

When she is not working, she enjoys playing the flute, hiking around Allegheny County, and getting caught up with all of her favorite science fiction and fantasy shows. Kaitlin can often be found at the nearest ice rink perfecting her toe loop and flip jumps.

What Did You Sign Up For?

Continued from page 1

But we haven't forgotten about better treatments, a vaccine, or a cure. I've worked with Dr. Rinaldo for thirty years, and I know how deeply he and everyone at the Pitt Men's Study are committed to those ends. Recent PMS studies have revealed cellular cholesterol's role in HIV transmission (which might lead to a treatment, vaccine, or cure) and have led to the creation of a more sensitive and accurate way of measuring HIV hidden in the body (which has implications for treatment and cure).

We understand the burden of staying with a study for decades, and we know that these extra studies have various extra burdens associated with them. Please know that we really appreciate your participation, your dedication, and your patience. We're still looking for that cure, and with your help we will find it one day along with a lot of other important information.

I know what I signed up for – what did you sign up for?

I invite you to send us your thoughts on why you joined, why you still participate, why you maybe don't participate like you used to, how the evolving nature of the epidemic and the study has affected you, etc. Send them to Bill Buchanan, POB 7319, Pittsburgh, PA 15213. I'm looking forward to hearing from you.

Thank You



Check out a new YouTube video of Dr. Rinaldo!

Type in the link to your internet browser to watch it for yourself.

<https://bit.ly/2PgtsDD>

Travel back in time to the late '90s. Almost twenty years ago, on November 25, 1998, Dr. Rinaldo sat down with WTAE news to discuss breakthroughs in anti-HIV medications. When highly active antiretroviral therapy (HAART) or “drug cocktails” were introduced in the mid-'90s, deaths of positive PMS volunteers went from an annual rate of nearly sixty to about five in just two years. Now for the first time, the video is available online for public viewing.

Joining him in the interview is the late community leader, Bridget Murtagh. While working as a nurse, Bridget acquired HIV via a needle stick injury. Bridget was an active member of the Pittsburgh AIDS Task Force. Sadly, Bridget passed away from AIDS-related complications a few years after this interview. She is remembered through The Bridget Murtagh Award, which honors dedication and service to the HIV community.

Watch Dr. Rinaldo and Bridget Murtagh talk about drug resistance, viral load, and curing HIV with WTAE News.

The video can be found on YouTube under “IDM's Rinaldo discusses HIV wonder drugs and curing HIV in 1998 World AIDS Day interview”.

The Aging HIV Community: From the Castro to Pittsburgh

New Report Shows Challenges Facing the Aging HIV Community in San Francisco

A new study was recently released addressing the needs of San Franciscans with HIV. While HIV started out as a sickness largely impacting the young, the face of HIV has changed in the United States. Thanks to advancements in HIV care, those infected are now living into old age. This creates new challenges as people infected in the 1980s and early 1990s now cope with getting older on top of living with HIV.

The study looked at 197 people with HIV who were older than 50, including gay men, African Americans, Asian and Pacific Islanders, Spanish speakers, and transgender people. The report found that over half of those surveyed had trouble with at least one activity of daily living, such as doing housework or preparing their own meals. While people often turn to family in old age, those surveyed were turning to friends and neighbors for help instead. Furthermore, over one quarter said that they did not have anyone to turn to for help with common household tasks.

Older adults with HIV are particularly vulnerable to age-related diseases. Participants had an average of 6.7 physical and mental conditions, not including HIV. Some of the most common disorders across different classes of diseases reported include neuropathy, chronic pain, fatigue, arthritis, dermatological disorders, hypertension, cancer, hepatitis C, diabetes, and having recently fallen.

Participants reported lower levels of psychological wellbeing compared to the general population, as well as greater rates of mental illness: over 60% reported having been diagnosed with depression or anxiety. Likewise, seventy percent of participants met the lowest cut-off criteria for symptoms of post-traumatic stress disorder (PTSD). While the trauma of living with HIV and the stigma and fears attached to it could contribute to this high number, over half of participants also

reported other traumas that could result in PTSD.

Likely because of San Francisco's extremely high cost of living, many participants reported economic challenges such as not having enough money to cover living expenses, and not having a permanent residence.

As a result, the study calls for improved access to mental health treatment and tailoring that treatment to older adults with HIV. The researchers also call for HIV care providers to be more familiar with geriatric care, as many with HIV begin to manage multiple conditions as they age.

Pitt Men's Study Continues to Research Healthy Aging

By 2020, over half of men with HIV in the United States will be over 50 years old. As the face of HIV continues to age, many researchers around the country have studied challenges facing gay and bisexual men with HIV. From stigma to chronic illness, there are a lot of negatives.

The "Lost Generation" was coined to reflect survivors of WWI, who had a mortality rate of 12%. In comparison, the mortality rate of men in our study who joined as HIV-positive is around 49%. Despite all of these challenges and the significant loss to the community, the men in our study are comparatively thriving. This makes us ask, "What is it about this group that allows them to do so well in the face of the AIDS epidemic?"

To do this, we created the first study ever aimed to show how strengths and resilience change over time among aging gay and bisexual men. 1,143 seropositive and seronegative men were enrolled across the country. In the survey, we ask about numerous variables of interest, such as resilience. This is a longitudinal study, which means we have asked many of you to complete this survey several times.

The Pitt Men's Study extends a sincere thank you to all who have completed the Healthy Aging Survey as we strive to learn what makes our participants so special.

Dr. Jerry Rabinowitz

One of the First Doctors in Pittsburgh to Treat Gay Men and People with HIV

The Pitt Men's Study extends its heartfelt sympathy and condolences to all those touched by the shooting at the Tree of Life Synagogue in Squirrel Hill on October 27. While all the deaths that day were tragic, the death of Dr. Jerry Rabinowitz is particularly significant to our volunteers and staff.

Dr. Rabinowitz was one of the first doctors in Pittsburgh to welcome both gay men and people with HIV into his practice, a safe space and source of compassionate and accepting care for many of our volunteers for three decades. Long-time staffer Bill Buchanan remembers, "Every time volunteers completed releases to send their results to Dr. Rabinowitz - and that happened a lot - they would express their deep respect and admiration for him. I never heard a bad word about him from anybody in thirty years." Jerry Rabinowitz was a pillar of the community, and he will be sorely missed.

Donations can be made in his memory to Dor Hadash, 5898 Wilkins Avenue, Pittsburgh, PA 15217.



Neuropsychology Unlocks More Brain Secrets

Bill Buchanan, PMS Clinic Coordinator

Red, red, blue, green, blue, red.... Ah, the Stroop - one of many challenging, sometimes frustrating tests that are part of the full neuropsychological (NP) battery. Some like doing NP, some not so much, but what we can agree on is that these tests are revealing more about what factors affect our ability to remember and reason and how this could impact our medical care. Check out these synopses of some recently published articles (full copies available on request).

HIV disease and diabetes interact to affect brain white matter hyperintensities and cognition (AIDS 2018, 32:1803-1810)

322 MACS volunteers had brain MRIs that revealed white matter hyperintensities (WMH, essentially small brain lesions). Study of these WMHs linked with blood results from volunteers' routine MACS visits and performance on NP tests showed that diabetes has a specific impact on the cognitive function of HIV-infected men (but less so in HIV-uninfected men). This suggests that infected men should be more aggressively treated for increased blood sugar, even in prediabetes.

Impact of glycemic status on longitudinal cognitive performance in men with and without HIV infection (AIDS 2018, 32:1849-1860)

Researchers looked at blood sugar levels in 900 HIV-infected and 1149 uninfected MACS volunteers and compared them to how they did on NP testing. High blood sugar and diabetes were associated with impaired cognitive performance regardless of HIV status, but blood sugar abnormalities were more common among men with HIV. This suggests that physicians should look at blood sugar in addition to age and previous immunosuppression as a predictor of cognition problems.

Effect of ageing on neurocognitive function by stage of HIV infection (Lancet HIV 2017; 4:e411-22)

Researchers looked at 5086 HIV+ and HIV- men over nearly 50,000 MACS visits and studied the impact on cognition caused by aging and by how far a person's HIV disease had progressed. It turns out that aging was particularly hard on motor function and episodic memory (e.g., remembering time and place and any associated event or emotion). This

suggests that older HIV-infected men should be screened for cognitive problems, particularly with tests for those two brain functions. (BTW, that's not a misprint - the Brits spell aging that way.)

Neuropsychological phenotypes among men with and without HIV disease in the Multicenter AIDS Cohort Study (AIDS 2018, 32:1679-1688)

In the early days of the HIV epidemic it appeared that there was a specific pattern of cognitive loss associated with AIDS. An analysis of the thousands of data points in the MACS tell us now that this is no longer the case and that other health factors are more important than HIV infection in determining the pattern of cognitive loss in our men.

Next time you wonder why we ask you to do all those NP tests, well, now you know. Thanks for your participation in the Pitt Men's Study, and in particular for doing the NP testing. We couldn't do this without you!

The Changing Face of AIDS

Join the Pitt Men's Study in our Thirty-First Annual
World AIDS Day Commemoration



Wednesday, November 28, 2018
Heinz Chapel, 7:30 pm

Interested in joining the Community Advisory Board?

Established in 1984, the Community Advisory Board (CAB) was founded to create a space for the LGBTQ community to provide input and feedback to the Pitt Men's Study. Now the CAB is looking for dedicated volunteers in PMS to reach out and let your voices be heard.

The Community Advisory Board meets the third Monday of every month at 6:00 pm in the Keystone Building.

Those interested can e-mail Kaitlin Bodnar at kab307@pitt.edu or call the clinic at 412-624-2008.

Contact Us

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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.

Thank You

for attending this year's
Educational Forum!

*We hope to see you again
next year.*

We Are Still Recruiting for the Sleep Study!

The Pitt Men's Study extends our sincerest thanks to everyone who has participated in our special substudy about sleep so far.

Luckily, the sleep study is still ongoing! Those of you who only completed a survey about sleep are still eligible to take home the sleep kit for the second part of the study. And those who declined before are still eligible.

We are only able to set people up for the sleep study when we have equipment and specialized staff available.

