



The Pitt Men's Study

News and Notes

Summer 2012

Meet Your Researcher - Beej Macatangay

Beej Macatangay is an attending physician at UPMC and a faculty member at the Pitt School of Medicine. He will be heading up a new study utilizing Pitt Men's Study volunteers, now tentatively titled the Herpesvirus Coinfection Study. We asked Beej a few questions about it.

Can you give us some of the background for this study?

One of the big things in HIV right now is trying to find out why there is an increased risk for non-AIDS related cancer, cardiovascular disease, metabolic disease and even premature aging in patients who are HIV-positive [as compared to patients who are HIV-negative]. Recent studies have shown that there was increased immune activation in HIV-positive patients, so the immune system is revved up, and it is believed that maybe it has something to do with bacterial products in the gut. It has been shown that early in HIV infection there are a lot of cells that are depleted in the gut, and that doesn't go back to normal after antiretroviral therapy. Since the cells that are supposed to be protecting the gut are depleted, some bacterial products can get into the

circulation and activate the immune response. That's the hypothesis being tested by a number of studies right now.



So the idea is that the immune system is working overtime...

Yeah, it appears that the immune system is working overtime. As a consequence there'll be increased inflammation, because these cells are releasing substances that can cause inflammation. And if we look at some of the conditions that go with heart disease there's always some inflammatory thing behind that, and people are saying maybe this is why there's increased risk of cardiovascular disease, metabolic diseases – because of this persistent level of increased inflammation brought about by the immune system that's always revved up.

Another idea is that maybe [this immune response] is because of reactivation of other viruses. People are thinking that if you are HIV-positive there can be a reactivation of herpesviruses [such as CMV, EBV, HSV], maybe not causing illness, but significant enough to cause the immune system to be activated.

The purpose of this study is to see if there really is herpesvirus reactivation and does this reactivation correlate with immune activation – does it correlate with early aging in HIV patients.

The Pitt Men's Study

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Pitt Men's Study Co-Investigator Awarded

Pitt Men's Study Co-investigator Anthony Silvestre, PhD, was recently recognized with the Pittsburgh AIDS Task Force's (PATF) 2012 Founders' Award. Says PATF: "The Founders' Award is presented to an individual who carries on the vision of the founders of the Pittsburgh AIDS Task Force, embodies the agency mission and demonstrates their commitment through long-term volunteer service to PATF and its clients."

Below is an account that Tony wrote for the occasion describing the PATF's genesis and its relationship to the Pitt Men's Study. Congrats, Tony!

A Reflection of the Past By Tony Silvestre

News of the first cases of a strange viral disease among gay men was passed over with little notice by nearly everyone in Pittsburgh. Virtually no one imagined that more than 50 million humans would be infected and that millions would die. A few scientists at the University of Pittsburgh knew differently. In 1982, they watched the mystery virus destroy the first Pittsburgher it infected.

A few activists in the Gay, Lesbian, Bisexual and Transgender community were also troubled and began raising the alarm. Few heeded it. With little fanfare, the scientists and community activists joined hands to submit a grant to the National Institutes of Health (NIH) to begin looking for this virus in Pittsburgh. In 1983, the NIH awarded the grant to create the Pitt Men's Study and the activists became members of its Community Advisory Board (CAB).

Within weeks, Study staff began receiving calls from people affected by the disease. A sister called wanting to know if her brother with this strange illness posed any health threat to her newborn child. A mother called wanting to know how to care for her son who was being released from a hospital. A niece wanted assistance after being fired her boss found out that her uncle died of this strange new disease.

When the calls became too numerous for staff to handle, the CAB contacted local governmental and private organizations to help. None did. Some did not return calls, one official said the problem wasn't serious enough, and others just did not have the resources.

The CAB decided to form a new organization to care for infected people and to educate the public. They put out a call for a public meeting and more than 40 people showed up. These 40 learned that no one knew the cause of this disease or exactly how it was transmitted. They learned that infected people, their families and caregivers were shunned and discriminated against. They learned that there were no funds, nor the expectation of any funds, from foundations or the government. Nevertheless, the group elected a Board of Directors and formed committees to begin the work.

Without the expectation of public approval or guarantees of personal safety, 40 people stood up and said "Enough!" They began an organization – the Pittsburgh AIDS Task Force – which continues to stand up and work to lessen suffering, increase knowledge, and affirm human dignity.

Meet Your Researcher

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What will you be taking from the selected volunteers?

We will be taking blood, urine, semen, throat washings, and stool. So really we are trying to get every body compartment because these are the places where the virus can be isolated. We'll get all these samples and the lab will try to see if there is herpesvirus in these specimens, and we'll try to correlate this with the immune system to see whether the virus is being shed in the body and whether it's correlating with this immune activation and inflammation. We're looking at three things – the virus, the immune system, and also the frailty index [handgrip, walking] because of premature aging, and trying to correlate these three things to see whether the virus actually is associated with any of these things, in order to prove the hypothesis that maybe premature aging is due to reactivation of viruses as well.

It's a pretty hot topic, this immune activation thing. This and a cure are the two hottest topics in HIV right now. If we find that there is a significant association between this reactivation, then we can go through a therapeutic study or intervention study and say "If we give this drug to decrease this, will it actually show a decrease in virus and a decrease in activation?"

You & Your Data

Questions, blood, urine, mental tests, even cups full of spit - we collect a lot from our volunteers at Pitt Men's Study appointments. So where does all that info go and what do we do with it? Below are some recent articles that appeared in scientific journals using data that you provided for us. The results aren't always groundbreaking or newsworthy - science generally moves in baby steps rather than strides - however without you and your data, none of these articles would exist.

Title of Article	Journal & Publication Date	The Gist of It
Labor Force Participation and Health-Related Quality of Life in HIV-Positive Men Who Have Sex with Men: The Multicenter AIDS Cohort Study.	AIDS and Behavior, 2012 Jul 20 (epub ahead of print).	This study examined the health effects of labor force participation in people with HIV using Multi-Center AIDS Cohort Study (or MACS, of which Pitt Men's Study is a part) data. It found that employment is associated with better physical and mental health quality of life, and suggests that policies that promote labor force participation may not only increase employment rates but also improve the health of people living with HIV.
The Impact of Impaired Kidney Function and HIV Infection on the Risk of Anemia.	AIDS Research and Human Retroviruses, 2012 Jun 29 (epub ahead of print).	It is known that chronic kidney disease and HIV infection both independently increase the risk of anemia. This study looked at MACS men to see if individuals with both HIV infection and kidney dysfunction are at greater risk of anemia from the combined effect of these factors. It was found that HIV infection and impaired kidney function have a combined impact on lowering hemoglobin levels, resulting in a higher risk of anemia.
Genome-wide association study of neurocognitive impairment and dementia in HIV-infected adults.	American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 2012 May 24 (epub ahead of print).	This study looked for relationships between certain genetic markers in MACS blood samples and HIV-associated neurocognitive disorders (using data from the neuropsych tests). None were found.
Comparative Risk of Liver-Related Mortality From Chronic Hepatitis B Versus Chronic Hepatitis C Virus Infection.	Clinical Infectious Diseases, 2012 May 21.	It is not known whether chronic hepatitis B or chronic hepatitis C carries a greater risk of liver-related mortality. This study compared rates of liver-related mortality between these two groups in the MACS, and concluded that chronic hep B carries a higher risk of death from liver disease than does chronic hep C, especially in HIV-infected men with greater immunosuppression.

Pitt Men's Study, Out and About

Sometimes we like to get out of the office, and this summer has so far presented a few opportunities for that. We attended the Seasons of Healing event in April (that's our man Nayck Feliz manning the table in the photo to the right), hosted a Shepherd Wellness dinner in May, and gave away more condoms and lube than you could probably imagine at PrideFest in June. See you next time we get out of the office (if Bill lets us)!



Save the Date! - World AIDS Day



This year's World AIDS Day service is on November 29th at 7:30pm. Please note that we are beginning at 7:30pm, which is a half hour later than our usual start. As in previous years, we'll hold the service at Heinz Chapel in Oakland. See you there!

Your WePay Card - Hang on to it!

When you get a stipend for your Pitt Men's Study appointment we will pay you using the University-wide WePay card system. If you get a card from us at one appointment and forget to bring it to your next one we can still load it, it's just important that you know where it's at so that you don't get home and find that it isn't there. We can always get you a new card, however this can create complications and confusion when volunteers wind up having several different cards in the system. Your best bet at avoiding frustration is to hang on to that WePay card!

Parking and Your Appointment



Parking in Oakland. Argh! Just the mention of it can get our panties in a bunch. The fact of the matter is that there simply aren't many places to park in Oakland. Street parking is great if you can find it, and we never mind if you have to duck out of your appointment for a few minutes in order to feed the meter. However, your best bet with parking is to use one

of the nearby parking garages.

There are two right across the street from one another on Meyran Avenue behind Forbes Avenue. Other options include the Medical Arts Building on Atwood Street behind Fifth and Forbes, and underneath Soldiers and Sailors Hall with entrances on University Place and Bigelow Boulevard. There is also valet parking at the University of Pittsburgh Medical Center. Best of luck and, as always, we are grateful for all our volunteers do to help contribute to bringing an end to HIV and AIDS!

pittmensstudy.com



Yes, the Pitt Men's Study has a website! We update it regularly with up-to-the-minute health and wellness information, interesting Pitt Men's Study news, and fun features. Check it out!

pittmensstudy.com