



University of Michigan Health System

HATP News

“Because we recognize that HIV can affect you in so many ways...”



Winter 2007

Staff Spotlight: Carole McIntyre-Ramm

Please help us in welcoming the latest addition to our HATP team, Carole McIntyre-Ramm! Carole began working with us in September as the new Study Coordinator where she eagerly works on upcoming clinical trials. Please take a moment to get to know this exciting new member of the team.

Where are you from?

Carole: I am originally from Michigan but moved to California after finishing my undergraduate degree here at Michigan. I lived there for the past 5 years until moving back recently.

What brought you back to Michigan?

Carole: Family. I always knew I would eventually move back to be close to my family, after 5 years in California I was ready to get back.

Do you have any children?

Carole: Yes, I have a 9 month old daughter.

Do you have any pets?

Carole: No, raising my daughter takes up just about all of my free time!

Why did you choose University of Michigan and the HATP?

Carole: I was working in HIV research in LA with Kaiser Permanente before moving back to Michigan. I have always been interested in pharmaceutical research and was lucky that this position had just opened up with the HATP.

What do you enjoy most about work in the HATP?

Carole: I like the constant new approaches to medicine and new drug classes. Every time you think there are no more options, something new happens. Its very dynamic.

[How to Contact Us](#)

The University of Michigan
HIV/AIDS Treatment
Program

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Web:

<http://www.med.umich.edu/int-med/infectious/hiv/index.htm>

[Dates to Remember](#)

2008 Community
Advisory Council
Meetings

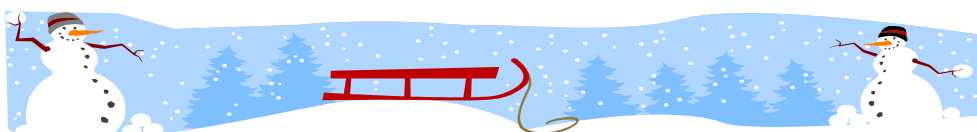
February 6th

April 9th

July 9th

October 8th

All meeting will be held at
4:00 pm in Taubman
Center, Room 3201



HIV Tropism and Its Effect On Medication Regimens

By Mark Cichocki

What Is Viral Tropism?

HIV needs our cells to make copies of itself -- also known as replication. The type of cell the HIV needs is called the CD4 cell. HIV attaches to CD4 cells and transfers its genetic material into the cell. The virus attaches to the CD4 receptor itself as well as a second co-receptor. These receptor molecules provide a place to which HIV attaches.

There are two types of these receptor sites:

- CCR5 receptors
- CXCR4 receptors

A person's HIV usually uses one receptor or the other, meaning certain people have an HIV type that uses CCR5 receptors to attach to the cell and others have an HIV type that uses CXCR4 receptors. However, there are even people whose

HIV can use either CCR5 or CXCR4 receptors to attach to the CD4 cell in order to replicate.

Why Does It Matter Which Receptor Your Virus Is?

CCR5 inhibitors like Maraviroc are only effective in blocking the CCR5 receptor site. Therefore, any HIV that uses the CCR5 receptor will not be able to replicate. (Continued on back)



My Story



Bottom line, when I was diagnosed in 1994, I immediately felt like I could die. I knew treatments were failing and feared becoming a burden to those around me. I had worked so hard to be an independent person and didn't want them to watch and take care of me while I got sick. Being the youngest of three siblings and my mom as my single parent, money was always tight; I became aware of being a financial burden at a young age. At the age of seven I opened a bank account and started mowing lawns and delivering newspapers. My mother worked so hard to keep her children and her home, which set the example for me to work hard throughout my life. Despite my diligent work ethic, I was devastated when I became HIV positive at age 29.

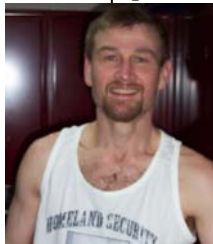
With in an hour of finding out, I called my sister to tell her. She "let me go" and from that point on, I felt I had died. My heart was still beating, but I was not the same to those who I grew to accept, respect and expect to be there for me. My relationships have forever been colored by the transparent pallor of HIV.

The burden, I didn't want to be, prevented me from seeing a doctor. Also, spending money on treatment in 1994 was proving too expensive. In 1996, protease inhibitors made life manageable for a few who could afford medical care; again I did not feel worth the burden. Instead, I just opted to not pass HIV to anyone else. I also decided to begin eating better and exercising. For work, I began to clean houses. I was by myself physically and mentally when I cleaned homes, I did not have to face the disdain I perceived from others. Instead, I interacted with people who really needed my help and were genuine in their happiness to see me. I needed that spiritually. I cleaned houses until I was put in the hospital in March of 2002.

In August 2001, I had my first blood work done. I had almost no CD4's and a viral load of 20,000. It was then I became the burden I'd feared but, I still wanted to believe I could take care of myself. The doctors decided they wanted me to go on Bactrim as a precaution

against PCP pneumonia. I stopped taking them in early September because I could not take the fevers followed by severe chills. I also cancelled my appointment the following week because I wanted to believe I was well enough to get back to cleaning houses and Bactrim was not working for me.

The next few months were surreal. I became steadily calmer and sicker. My only outward sign was my exhaustion. In February 2002, Mark Cichocki, one of the HATP nurses, called to see how I was doing. Lying face down in bed, I defiantly told Mark I was fine, he said he was glad to hear that and reminded me call them anytime I needed. So, I got out of bed, found the nurse line phone number, 734-936-8186, (I'll always remember that number), and called him back to set-up an appointment for the next Monday. Over the weekend, shingles developed on the underside of my right arm. I didn't know what it was, it didn't hurt although it looked like the hind end of a baboon in estrus and besides, I was going to see Dr. Cinti on Monday.



After a course of Valtrex it cleared quickly and without complications. I was thankful for their care and returned the next month for a follow up. I thought I was doing great and expected them to suggest a course of treatment, I didn't expect to go straight to the hospital with pneumonia. The nurse was pushing me in a wheelchair and I began crying, it was me who helped people, I didn't want to admit I needed help.

Ultimately, it is 2008 and I am more than twice the person I was in 1994. The issues I have with feeling like a burden will always be with me. The accountant in me wants to calculate how much cost I prevented by not seeking healthcare for seven years but, then caused by having to treat the resulting PCP, Shingles and low CD4's along with the cocktail for viral suppression over the past eight years; but I don't do it. Today, the focus everyday is on living, taking my meds, keeping my appointments and working.
~ Steve, current HATP patient.

(Continued from front)

However, the HIV that uses CXCR4 receptors will be unaffected, meaning replication can continue. Simply put, CCR5 inhibitors like Maraviroc will only be effective in people with HIV that uses the CCR5 receptor for replication.

How Can You Tell Which Receptor Your HIV Uses?

Since CCR5 inhibitors only work on virus that uses the CCR5 receptor, it makes sense that your doctor would have to know which type of virus your HIV is; one that uses CCR5 or one that uses CXCR4.

There is a way to tell which type of virus you have using a blood test called the *Trofile Assay*.

The Trofile Assay:

The Trofile Assay is a type of genetic testing of a person's blood. The virus in a blood sample is tested against cells that are CCR5 and CXCR4. If the HIV only replicates in the presence of the CCR5 cells, it is said to be *CCR5 tropic* or R5 for short. If, on the other hand, the virus only replicates in the presence of the CXCR4 cells, it is said to be *CXCR4 tropic* or X4 for short. On those occasions when HIV replicates in the presence

of both CXCR4 and CCR5 cells, it is said to be *dual tropic*.

Once a person's HIV is identified as either R5 or X4, an HIV medication regimen can be developed accordingly; a Maraviroc containing regimen for people who are R5 and a regimen without Maraviroc for X4. For those people dual tropic, a regimen may or may not contain Maraviroc.

Currently the Trofile Assay is the only test available to type a person R5, X4, or dual tropic. At \$1500, the price is a bit steep especially for people without insurance. Others are at work trying to develop cheaper and more sensitive tropism tests.