



*Update*

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## **HIV in South Africa: Engaging the Community** (Page2)



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# HIV in South Africa

## CAB Members Help Engage the Community



*Pamela Tshandu is a member of the Wits CAB in Johannesburg.*

Pamela Tshandu will never forget the drastic change in appearance her friend Thami underwent upon taking his HIV medications regularly.

“He was very sick, but then after he began taking his antiretrovirals (ARVs) daily, he became healthy again,” recalls Tshandu, a Community Advisory Board (CAB) member at one of the AIDS Clinical Trials Group (ACTG) Network’s sites in Johannesburg, South Africa. “He told me ‘now that I am healthy, people see me for me and see how intelligent I am.’”

Thami’s attitude toward adherence changed after Tshandu’s sister, a community liaison officer at Wits Clinical HIV Research Site, sat him down and educated him about living with HIV. She showed Thami his medical file detailing all his missed doses of medication. She also explained the research being conducted into new ARVs and

co-infections at sites like the ACTG’s Wits HIV Clinical Research Site at Helen Joseph Hospital in South Africa.

“Not only did he become a clinical trial participant, but he also joined Wits’ CAB. Thami began speaking to the community about the research being done there into new medications,” Tshandu says. “Education was the key to Thami becoming healthy and getting involved. I would never visit the clinic either if I didn’t understand the research being done there and the benefits to enrolling in a study. Health education should be ongoing.”

### **Barriers to Care in Johannesburg**

Her friendship with Thami and her sister’s chosen profession of educating South Africans living with HIV motivated Tshandu to volunteer at Wits. In 2005, she joined the ACTG CAB there. Each of the ACTG’s more than 70 sites globally has CAB participation, which includes members of the local community as well as former and current clinical trial participants. She says there are about 16 people involved with the ACTG’s CAB at Wits.

CAB members can then apply for one of 28 positions on the ACTG’s Community Scientific Subcommittee (CSS). CSS representatives serve on the Network’s many committees as well as each study team, providing the community’s view of the research being proposed and conducted. Tshandu is also a CSS representative.

Like Thami, Tshandu says most South Africans are unfamiliar with HIV prevention techniques, testing opportunities and research into treatment. South Africa bears the brunt of the global epidemic with 5.6 million people living with HIV according to UNAIDS 2011 estimates. When Tshandu learned her brother tested positive, she became a full time HIV/AIDS teacher.

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“It has been an eye-opening experience,” Tshandu says. “You meet people who ask you the most basic questions about HIV because they really know nothing about it. And then you meet people with different cultural attitudes that can conflict with prevention.”

Polygamy and extramarital affairs hinder prevention efforts in South Africa, Tshandu says. When outreach workers like herself go into the community offering testing, not all of the family’s members may be present. Tshandu says she stresses to polygamist families that everyone needs to be tested routinely to ensure the family is HIV-free. And sometimes a household may test negative for HIV, but the man will take a mistress during the weeks he works in Johannesburg, placing everyone’s health in jeopardy. Tshandu informs families that regular testing is critical.



*Zethu Gwamanda is a CAB member at the Durban Adult HIV CRS.*

“Cultural beliefs are definitely a challenge I see when I educate the community about HIV,” Tshandu says. “Very few polygamists will test all their wives and be faithful. It is predominately men who cheat, but women do it, too. Education is needed to combat cheating. Polygamy is a cultural practice; if it is done correctly, then everyone involved will be safe. Therefore, ongoing education is important for behavioral change.”

## Changing the Culture of HIV in Durban

Nearly 300 miles southeast of Johannesburg, Zethu Gwamanda says the city of Durban faces its own cultural barriers to HIV education, prevention and treatment. Gwamanda is a phlebotomist and HIV counselor. For the past seven years, she has been a member of the Community Advisory Board (CAB) at the ACTG’s Durban Adult HIV Clinical Research Site.

“I wanted to work with people living with HIV, but I knew I did not want to become a nurse,” Gwamanda says. “I like to communicate with the community and I wanted to use these skills to link people to proper treatment.”

Gwamanda is of Zulu descent. She says it is helpful to have CAB members like herself available to explain the cultural norms that prevent certain prevention and research conversations around HIV.

“In the Zulu culture, you can’t ask older adults about sex,” she says. “My mother-in-law died and my father-in-law began dating again. I wanted to tell him about ways to protect himself, but I couldn’t. Now he is sick. We need to be brave and talk to our elders and also to our children. The HIV epidemic in South Africa is high.”

## Moving Toward an AIDS-free Generation

From 2001 to 2011, South Africa reported a 41 percent decrease in new infections, according to

# CAB Members Help Engage the Community

UNAIDS. In 2012, 2 million South Africans living with HIV had access to life-saving treatment. While this news is encouraging, Gwamanda and Tshandu understand that the fight is not over. Both women say the co-infection of tuberculosis (TB) and HIV is of serious concern in South Africa as well. TB is the number one killer of people living with HIV globally.

While the ACTG's investigators are conducting studies into treatments for the TB-HIV co-infection at its sites in South Africa, Gwamanda and Tshandu say community education is critical to connecting people living with HIV to services.

In Johannesburg, Tshandu says she and other community volunteers are offering door-to-door HIV testing. Yet, testing large groups of people at once, like in a polygamist home, raises confidentiality issues. Tshandu says the South African Department of Health is partnering with HIV specialists to provide individualized testing in the workplace.

“Management might say that HIV education is mandatory for all staff,” Tshandu says. “We will then go into the workplace and test people. If they test positive for HIV, we will refer them out to a service provider, keeping their diagnosis private.”

The ACTG research unit at Wits employs staff who specialize in recruiting people living with HIV into clinical trials. However, the CAB does play a role in getting the word out about the site's research.



*Ian Sanne, MBBCH, is the Principal Investigator at the Wits ACTG site.*

“CAB members open the doors for education and recruitment by sharing information about new studies with the community through outreach programs,” Tshandu says. “We provide education on HIV, AIDS and TB to broaden the understanding of clinical trials as well as the value of research. When we exchange information with the community about the causes and symptoms of HIV and TB, people are more likely to face problems head on and seek correct solutions.”

The CAB also hosts health workshops to allow the community and clinical trial participants to learn more about a certain topic, like HIV and TB co-infections. Tshandu credits the CAB with helping investigators word study brochures into lay language to ensure the community understands the research question and what would be asked of participants. After the discussion, time is left for attendees to meet CAB members and ACTG researchers like Ian Sanne, MBBCH, Principal Investigator at the Wits site and International Vice Chair of the ACTG.

“The community partnership with the research unit has greatly assisted in allaying the stigma and fears around the fatal diseases of HIV and TB,” says Sanne. “Opportunities for cross-CAB training has ensured that CAB members are proficient in supporting treatment and prevention activities, including youth advisory boards. In some communities, the CAB members have been successful in obliterating the ignorance around HIV and TB.”

Realizing that some people might feel more comfortable initially engaging with Wits virtually, radio spots, text messaging and even a recently created [Facebook page](#) give the Wits site an electronic

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presence.

“Social media is a great platform to engage communities,” says Tshandu. “The aim of our Facebook page is to have an interactive dialogue on TB, HIV and AIDS, as well as clinical trials. We have been posting interesting medical news and videos. We also use it as a way to post our CAB events.”

The next CAB event is on Thursday, Sept. 5, in Johannesburg and will focus on HIV and the human papilloma virus (HPV). HPV causes genital warts and cervical cancer. People living with HIV are at higher risk for HPV-related complications. Women living with HIV tend to have multiple types of HPV, are less likely to clear HPV-related conditions, and are more likely to progress to HPV-related disease. A PAP smear test, a microscopic examination of cells taken from the opening of the cervix, is used to diagnose HPV.



*Umesh Laloo, MD, is the Principal Investigator at the Durban ACTG site.*

“We know many women are not coming in regularly to be screened for cervical cancer. That is why our CAB is joining forces with the Cervical Cancer Unit at Helen Joseph Hospital and Right to Care (a non-profit organization that supports and delivers prevention, care, and treatment services for HIV and associated diseases) for this outreach event on Sept. 5,” says Tshandu. “The plan is to have a mobile van where health sisters will be providing PAP smear services to the community. CAB members will share information and pamphlets about the hospital with the community. When I joined the Wits CAB, I wanted to make a difference in people’s lives; and looking back, I am happy I continue doing just that.”

## Carrying the Baton Forward

Umesh Laloo, MD, is the Principal Investigator at the ACTG’s Durban site. He says CAB members serve as a vital connection between site staff and the community and they make sure the research strides made thus far in South Africa will continue.

“After intensive and often painful advocacy, we now have universal access to comprehensive HIV care. This is the continuum of care concept that our Unit (ECI) promoted from 1998. But this is no time for complacency. It is very much a work in progress. It is like having the building blocks and architects’ plans, but we need builders and implementers,” says Laloo. “Our CAB is quite dynamic and we must use that as one of the vehicles to reach out to our communities. We are proud to be part of the ACTG community that has empowered us with regionally relevant research programs that translate rapidly into community benefit, created opportunities for people like Zethu Gwamanda to realize their dreams to serve their communities in special ways, and develop local researchers and research capacity. This way we will ensure the baton in the race to defeat the epidemic is carried forward.”

Currently, the Durban CAB is focused on educating the community about Kaposi sarcoma, a form of cancer people living with HIV can develop, says Gwamanda. The Durban site is conducting Kaposi sarcoma clinical trials and she hopes to make people aware of this opportunity. The CAB has begun partnering with faith organizations to help spread the word.

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# Don't Miss the Conversation Online



## AIDS Clinical Trials Group Network Annual Meeting 2013

By AIDS Clinical Trials Group · Updated about 3 weeks ago · Taken in Washington, District of Columbia · 1/1

The AIDS Clinical Trials Group (ACTG) Network held its annual meeting in Washington, DC, USA, from July 29 - Aug. 2, 2013. Site staff and community members from the Network's 75 sites around the world gathered to talk about the ACTG's HIV research agenda and share results of recent studies.



Do you know the many ways to connect with the ACTG online?

Don't miss out on seeing photos from the summer meeting and viewing video tributes to A5001 ALLRT study participants!



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# Spotlight on Service with a Neuro-AIDS Researcher

## Serena Spudich Follows Her Parents' Lead



*Serena Spudich, MD, specializes in neuro-AIDS.*

Serena Spudich, MD, remembers walking to school on Castro Street in San Francisco, California, USA, as a young girl. Back then, she did not realize she would have a professional connection to her childhood neighborhood.

“The recruitment of patients for our studies in San Francisco takes place two blocks from where I used to go eat ice cream as a kid,” says Spudich, a neurologist and investigator with the AIDS Clinical Trials Group (ACTG) Network. “I’ve really come full circle.”

Castro Street was one of the hardest hit neighborhoods in the United States during the AIDS epidemic in the 1980s and 1990s. Spudich, whose parents are both research scientists, became interested in following in her mother and father’s footsteps. She says her love of interacting with people and her fascination with the brain attracted her to the field of neurology.

“I highly respect the lab scientist,” Spudich says. “But as a clinical researcher, the joy of the work is seeing the impact of your research on the person right in front of you.”

After college, she earned her master’s degree in philosophy of the mind and brain. Spudich then went on to medical school at the University California San Francisco (UCSF). This was in the 1990s and during her first rotation in the hospital, half of her patients had AIDS.

“On the neurology service, I was treating patients with brain complications due to AIDS,” Spudich says. “I realized there weren’t enough neurologists who understood how AIDS was affecting the brain.”

As a resident at the University of Washington (UW) in Seattle, Spudich met Christina Marra, MD, an investigator at the UW ACTG site and a leader in the field of neuro-AIDS.

“I met Serena when she was an intern in internal medicine rotating on the inpatient neurology service at the University of Washington’s Harborview Medical Center in Seattle,” says Marra. “As her attending, I was impressed with her intellect, enthusiasm and ease with our sometimes challenging patients. I was delighted when she decided to become a neurologist, and thrilled when she chose to further specialize in neurological infections with a focus on HIV. The number of neuro-HIV researchers is small and Serena is a fabulous addition to the field and to the ACTG, not only because she is smart, creative, thoughtful and dedicated, but because her interest in the neurological consequences of very early HIV infection fills a void in our previous research agenda.”

“I learned so much from Christina and I realized I liked this neurology specialty,” Spudich says.

The experience at UW prompted Spudich to complete a fellowship in neuro-AIDS at UCSF with a senior member of the field, Richard Price. She joined the ACTG five years ago at the Network’s

# Spotlight on Service with Dr. Serena Spudich

UCSF site. She is the Vice Chair of the ACTG's Neurology Subcommittee, Vice Chair of the Neurology Collaborative Science Group and a member of the Cure Transformative Science Group.

"The wonderful thing about the ACTG is that when I started as a young investigator, I was on conference calls and attending meetings with my idols in the neuro-AIDS field. They are so respectful and encouraging of my career. They went from being my professional mentors to my real friends and that makes the work all the more meaningful."

Spudich's research focuses on how HIV affects the nervous system from the start of the infection. She is chairing her first study and expresses gratitude to the people living with HIV who decide to participate in clinical trials.

"When you volunteer to be in a neuro-AIDS study, you may consider undergoing challenging neuropsychological testing, and occasionally an invasive procedure like a lumbar puncture," Spudich says. "This really takes effort and energy. I am so humbled by how many people are willing to share themselves to further research. It really is wonderful."

Spudich travels to the annual ACTG meeting each summer in Washington, DC, USA, joining her investigator colleagues as well as other site staff and community members from the Network's more than 70 sites globally. She spoke about how HIV affects the brain during the 2012 meeting and received positive feedback from the people living with HIV in attendance.

"People appreciated my talk last year. I enjoy attending the meetings each year and reconnecting with some of my patients from San Francisco who attend the conference," says Spudich, who now lives in Connecticut and works at Yale and is affiliated with the ACTG's Cornell site in New York City. "The work we do is so interesting, but it is also meaningful and valuable. It helps when you are writing grants to be passionate about your work and I am. One of the rewarding things I have discovered about clinical research and HIV is that my colleagues and I truly love our patients. It is a privilege for us to have people living with the virus we are investigating right there at these meetings or at our sites to make suggestions."

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"We do make presentations at local churches," she says. "I presented during Women's Equality Day on Aug. 23."

Having CAB members make themselves available at the clinic to talk with and listen to people living with HIV is important as well. Gwamanda says fostering this personal connection makes people more likely to remain in care.

"I rotate through our site's clinic and see how everyone is feeling about their treatment," Gwamanda says. "Sometimes patients have questions and they don't feel comfortable asking site staff. But they will talk to a community member. I am here to just sit and listen to them. I think it's important to let them know that even though they are sick, we still love them and are here for them."

# Study Shows Gender Differences When Treating HIV in the Genital Tract



*Susan Cu-Uvin, MD, is Co-Chair of A5185s.*

Susan Cu-Uvin, MD, Investigator at the AIDS Clinical Trials Group (ACTG) Network's Miriam Hospital site in Providence, RI, USA, says her female patients living with HIV often ask her if they can stop using condoms when their plasma viral load is undetectable. She advises them to keep using condoms to prevent transmitting HIV to their partners and results from her latest research study support this advice.

Cu-Uvin and Susan Fiscus, PhD, Investigator at the ACTG's University of North Carolina AIDS Clinical Research Site in Chapel Hill, co-chaired the Network's A5185 study exploring the genital tract viral load (GTVL) of men and women living with HIV in seven countries. They discovered that combination antiretroviral therapy (cART) decreases the viral load in men and women's genital tracts differently.

"Our results showed that more women continued to have detectable GTVL compared to men at weeks 48 and 96 on cART," says Cu-Uvin. "Because sexual HIV transmission is greater with higher GTVL, it would seem that women would have a greater chance of transmitting the virus despite being on cART."

A5185 is a genital compartment substudy of A5175: The Prospective Evaluation of Antiretrovirals in Resource-Limited Settings or PEARLS. Since most research on initial HIV treatment is based in resource-rich countries, the A5175 study launched with a goal of testing the safety and efficacy of initial treatment in a resource-limited, culturally diverse population. Another aim of the study was to ensure women were well represented.

Similarly, Cu-Uvin says most research into combination ART and its impact on plasma and genital tract viral loads has also only been done in resource-rich countries. The PEARLS study allowed her and Fiscus to research people living with HIV in resource-limited settings as well as people living with different clades or distinct subgroups of the virus divided by geographical region. Past cART studies had also usually only focused on one gender. A5185 looked at both men and women.

"Initially there was considerable opposition to adding a genital secretion substudy to A5175, the ACTG's first international protocol," says Fiscus. "Despite concerns from ACTG leadership, the Community Advisory Board and one of the sites, we were successful in fully enrolling the substudy, collecting adequate samples for testing, and as a consequence, obtained some intriguing results. The sites did a fantastic job enrolling participants and retaining them through 96 weeks. In fact, only 10 percent did not complete 96 weeks of follow-up for various reasons. These results should encourage other protocol teams to



*Susan Fiscus, PhD, encourages other protocol teams to include the collection of genital secretions in their studies.*

# Study Shows Gender Differences When Treating HIV in the Genital Tract

consider including the collection of genital secretions or other biological fluids in their studies.”

Fiscus and Cu-Uvin’s study followed 158 men and 170 women from countries including Brazil, India, Malawi, Peru, South Africa, Zimbabwe and the United States. Study participants were each given different combinations of cART. Their blood and genital fluid viral loads were measured at 48 and 96 weeks. These tests revealed that despite all participants having similar baseline CD4 cell counts and blood plasma viral loads, 16 percent of women and four percent of men experienced a persistent viral load in their genital secretions at week 96. The results also differed depending on the subtype of the virus. Women with HIV subtype C had higher detectable viral load levels in cervical samples than women with subtype B.

“The higher baseline GTVL among women with subtype C compared to men and women with non-subtype C is surprising. In many parts of the world, subtype C is the predominant HIV clade,” says Cu-Uvin. “Both female and male genital tract can be a reservoir for virus despite undetectable plasma viral load. I would not argue that having GT viral reservoir is unique to women. However, there may be differences in the source, behavior and characteristics of reservoirs in men versus women. In our particular study, we did find a lower response to cART in the female genital tract than in men.”

The study’s results prove that further research into understanding the female genital tract is needed, not only to learn the best course of treatment for women, but for cure research in general.

“We need to analyze why women continue to shed virus in the genital tract. Where is the virus coming from? Why are they not affected by cART? Which cART would work best for genital tract virus in women?” says Cu-Uvin. “Investigators are talking about a ‘cure’ for HIV. But unless we understand these reservoirs, we may not be able to eliminate virus from all sanctuaries.”

## Summer Meeting Slides on the Member Website



Did you miss a session during the summer ACTG meeting in Washington, DC?

Or would you like to see the slides from a presentation made during the week again?

Materials from many of the sessions can be found on the ACTG member website.

Go to <https://member.actgnetwork.org/cms/folder/9854> and then log into the member site using your username and password.

# Researchers Hope HIV Genotyping and Text Messages Lead to Viral Control, Adherence



*A5288 Co-Chair Peter Mugenyi, MB ChB, F.R.C.P., D.Sc, leads the ACTG's Joint Clinical Research Center site in Kampala, Uganda.*

For some people living with HIV, first-line and even second-line anti-HIV medications do not control their virus. There are several reasons why this can happen: sometimes a person has a bad reaction to a medication and must stop taking it; sometimes a person forgets to take their medications; and sometimes a person's virus becomes resistant to the medication.

Using new anti-HIV medications and a blood test, investigators with the AIDS Clinical Trials Group (ACTG) Network are testing a different way to treat people living in resource-limited settings (RLS) who have had to change their anti-HIV medications at least twice.

In ACTG study A5288 (Management Using the Latest Technologies in Resource-limited Settings to Optimize Combination Therapy After Viral Failure), study participants' treatment regimens are chosen based on a blood test that is performed before they enter the study. This test, called a resistance test or HIV genotype, tells doctors which anti-HIV medications should be able to control a person's virus.

"The pioneering A5288 study is vitally important, especially for Sub-Saharan Africa (SSA)," says Peter Mugenyi, MB ChB, F.R.C.P., D.Sc, Co-Chair of A5288 and Leader of the ACTG's Joint Clinical

Research Center site in Kampala, Uganda. "SSA has 60 percent of the burden of HIV in the world. This region is already the biggest user of ARVs (antiretrovirals), but that is shadowed by emerging ART (antiretroviral therapy) resistance."

Some of the study regimens include new anti-HIV medications. About half of study participants will receive occasional text messages for up to one year. The study will test whether these messages can help participants remember to take their study regimen and stay in touch with their clinic if they have any trouble taking their study regimen. After at least one year on the study, some participants will have the option to remain in the study for another year. In this last year, there are fewer study visits. Researchers are trying to see how well people make the change from being part of a research study to getting routine, locally-provided HIV care.

"The study design is especially appropriate in RLS because it includes guidance for treating clinicians on how to use resistance reports to select from a limited number of treatment options," says Beatriz Grinsztejn, MD, PhD, Principal Investigator at the ACTG's FIOCRUZ Therapeutic and

# Researchers Hope HIV Genotyping and Text Messages Lead to Viral Control, Adherence

Prevention HIV/AIDS Clinical Trials Unit in Rio de Janeiro, Brazil. “We hope that the evaluation of new ARVs in this population will help inform decisions about broadening the availability of these drugs. Finally, the addition of the text message adherence component will help investigators evaluate an alternative measure to improve patient outcomes.”

Men and women over the age of 18 living with HIV are eligible for the study if they:

- have an HIV viral load (virus level) currently 1,000 copies or higher
- have been on their current, second anti-HIV drug regimen for at least 24 weeks that includes a protease inhibitor (a type of anti-HIV drug)
- have exposure to multiple regimens of anti-HIV drugs
- have no active tuberculosis

The ACTG sites already participating in A5288 are in Johannesburg, South Africa; Lilongwe, Malawi; and Rio de Janeiro, Brazil. Other sites (in India, Thailand, Peru, Haiti, South Africa, Malawi, Zimbabwe, Kenya, Zambia, and Uganda) are expected to be participating in the near future. The study lasts for at least one year with an additional year for participants who are able to participate in the transition to local care component.

“The findings of A5288 will contribute scientific data that will inform and prepare for evidence based guidelines and optimum use of third-line ARV drugs,” says Mugenyi.

“The study can have a great impact for people living with HIV in a resource-limited setting,” says Grinsztejn. “Resistance to commonly used first- and second-line regimens requires the immediate evaluation of different strategies. The use of new antiretrovirals that are highly effective against a resistant virus is very important. The evaluation of a cell phone based adherence intervention in the setting of third-line treatment is innovative and will inform the community and providers on the use of a novel adherence intervention for this study population.”

Click [here for more information on A5288](#).



*A5288 Co-Chair Beatriz Grinsztejn, MD, PhD, is Principal Investigator at the ACTG's FIOCRUZ Therapeutic and Prevention HIV/AIDS Clinical Trials Unit in Rio de Janeiro, Brazil.*

## Questions, Comments and Story Ideas

This is the fifth edition of the ACTG Update. If you would like your enrolling study featured or results from your completed trial highlighted, please contact Morag MacLachlan at [mamaclachlan@partners.org](mailto:mamaclachlan@partners.org). Any questions, comments and story ideas are also welcomed!