

# HIV LINK

The Newsletter of the HIV Center for Women and Children

## Bringing together care and research in service to families in need

### Hepatitis C Virus: The Silent Epidemic

Hepatitis C virus (HCV) is the largest bloodborne viral disease epidemic in the US—five times the size of the HIV epidemic—and the leading cause of liver disease. At least 5 million persons in the US are living with HCV infection, whose major route of transmission is through blood contact. The major risk factor for infection is illegal injection drug use (IDU), which accounts for 60% of acute HCV infections in adults. Sexual transmission of HCV is very uncommon in long-term monogamous couples, but reports over the past decade from Europe and the US have implicated sexual transmission of HCV among HIV+ men who have sex with men (MSM). Infection with HCV is the number one reason for liver transplant in the US. Unlike hepatitis A and B, there is no vaccine to prevent HCV. HCV disproportionately affects the disadvantaged: people who inject illicit drugs, the poor, the uninsured or underinsured, members of ethnic minority groups (especially African-American men in their 40s and 50s), incarcerated persons, those with a history of incarceration, users of noninjected illicit drugs, and those with mental illness, diabetes and other comorbidities.



sure to symptoms is 6 to 7 weeks. In about 15-20% of people infected with HCV, the immune system is successful at clearing the infection. They remain HCV antibody positive but are uninfected. Most people infected with HCV (75-80%), however, go on to develop chronic infection. Individuals with chronic HCV are the source for all new infections and are at increased risk for chronic liver disease. Chronic hepatitis is associated with chronic liver injury and inflammation. Liver injury appears to be a result of the patient's immune reaction to the virus, rather than damage by the virus itself. Chronic infection usually results in progressive fibrosis of the liver, which may progress to cirrhosis, liver failure, liver cancer, or other disease states.

According to Brian Edlin, MD (Professor, SUNY-DMC Department of Medicine, Division of Infectious Diseases), the US government has all but ignored the threat of HCV. More than 10 times as many Americans have undiagnosed HCV infection as HIV infection, and 50% or more of them could be cured with a single 6-12 month course of therapy. Unfortunately few resources are available to provide testing and deliver care. Funding for prevention and research is negligible. A sound public health response to the HCV epidemic requires investing in prevention, testing, care, treatment, and research (as was done with HIV) to avert greater costs and loss of life in the future. Research on new strategies and interventions to reduce transmission and reach disenfranchised populations with life-saving care is urgently needed, but it is not a priority at the National Institutes of Health. A January 2010 Institute of Medicine report

warns that viral hepatitis will remain out of control unless adequate resources are devoted to prevention, control and surveillance. Existing surveillance systems are unable to accurately track the prevalence or incidence of the infection.

The current treatment for HCV consists of weekly injections of peginterferon, a long-acting form of alpha interferon (either peginterferon-alfa 2a or peginterferon-alfa 2b) combined with ribavirin, an oral drug. It is not clear how these drugs work. The regimen usually lasts either 24 or 48 weeks and costs more than \$30,000. Treatment can be difficult, causing flulike symptoms, depression, anemia and other problems. However, roughly half of patients who are treated are able to clear the infection after a year or less of treatment. Termed a "sustained virologic response" (SVR), this means that the virus becomes undetectable during treatment and remains undetectable for 6 months after treatment is completed. When this happens, the virus appears, in over 95% of cases, to be gone for good. New medications include telaprevir and boceprevir. When added to the combination of alpha interferon and ribavirin, telaprevir effectively cured 75% of patients, compared with 44% of those treated with existing drugs alone. For many patients, the course of treatment could be halved to 24 weeks. While the new drug regimens improve the ability to clear HCV infection, side effects, especially rash and anemia, are even more common. In addition, treatment strategies with persons who use drugs are needed to control the epidemic.

Dr. Edlin's current community-based studies with persons who inject drugs

(PWIDs) focus on how and why HCV continues to spread among young high-risk IDUs despite access to needle exchange and on overcoming the barriers to access to HCV treatment in active IDUs. A study of the clinical, behavioral, virologic, and immunologic characteristics of acute HCV infection among young, high-risk, street-recruited IDUs, known as the Swan Project, is underway on Manhattan's Lower East Side, where HCV incidence among IDUs is very high. Swan provides HIV and HCV testing and counseling and harm reduction services to young, predominantly homeless IDUs. Unlike many testing programs, participants receive testing not just for antibodies to HCV but for the virus itself, so that if they are antibody positive, they learn whether or not they are actually infected. Project participants who are uninfected are enrolled in a longitudinal study that employs a novel methodology: every other week, participants undergo risk behavior interviews and testing with highly sensitive transcription-mediated nucleic acid amplifications assays for HCV RNA. These procedures yield risk behavior assessments with enhanced precision and detection of new infections almost as soon as they occur.

Interviews ascertain specific injection practices in more detail than has been possible in previous research. Epidemiologic studies examine the prevalence, incidence and predictors of HCV infection, while clinical, virologic, and immunologic studies examine the HCV-specific immune responses in parallel with the viral kinetics of those rarely observed acute infections to better characterize the components of an effective immune response. Since 2005, more than 700 young PWIDs have been tested and counseled, more than 300 have been enrolled in long-term follow-up studies, and more than 45 new acute HCV infections have been detected. Research staff develop a strong rapport with cohort participants and provide extensive counseling and support, assistance with accessing medical care, substance abuse treatment and other core services, overdose prevention training, and assistance with identifying and overcoming barriers to safer injection practices. When acute HCV infections occur, because they are detected during the asymptomatic acute phase, participants can receive treatment at a time when it is approximately twice as effective as during the chronic phase of the infection.

More than a million IDUs in the US are estimated to have chronic HCV but because of their active drug use are not considered candidates for antiviral treatment. To address this problem, a novel collaboration has been developed between our tertiary care medical center and community-based needle exchange programs to offer integrated, multidisciplinary, client-centered care for HCV. The model integrates antiviral therapy with psychiatry, substance use treatment, primary medical care and intensive case management. Pilot studies of this model have shown promising results, with high rates of treatment acceptance, adherence, completion and virologic response, accompanied by reductions in substance use initiated by study participants. This initial experience suggests that active IDUs offered a real hope of being cured of HCV infection through state-of-the-art antiviral treatment may make other healthy changes they had not previously been ready to make. Further studies are underway to further explore whether offering expert, culturally competent HCV care through a community-tertiary care collaboration will prove effective for engaging IDUs in successful health care and enabling them to improve their health.

## GRANT AWARDS

SUNY Downstate's Adolescent Education Program has been selected to receive an award of \$303,700 from the NYS Department of Health for the Comprehensive Adolescent Pregnancy Prevention (CAPP) Program, which will also fund a HEAT Program clinician. CAPP is aimed at decreasing adolescent pregnancy, STIs and HIV/AIDS rates among NYS adolescents.

The Special Treatment and Research (STAR) Program was awarded \$80,000 from the Health Resources and Services Administration for a Health Center Planning Grant (HCPG) to support the development of a Federally Qualified Health Center (FQHC). The proposed FQHC will be modeled on the STAR Program, a NYS Designated AIDS Center and multidisciplinary HIV care, research and clinical education program that has provided innovative outpatient primary and specialty care and essential support services to HIV+ persons and their families since 1985.

The STAR Program received funding through SUNY Stony Brook to develop a program to screen and treat first responders to the September 11 attacks at the World Trade Center. The Stony Brook University Medical Center (SBUMC) World Trade Center Medical Monitoring and Treatment Program (WTCMMTP) will expand its clinical center of excellence to care for

thousands more who were exposed to toxic chemicals and who continue to suffer from upper and lower respiratory tract distress, mental health symptoms, and other conditions related to the environment at ground zero. In operation since immediately after 9/11, the WTCMMTP is a federally funded program largely supported by the National Institute for Occupational Safety and Health (NIOSH), an arm of the CDC. With an annual budget of more than \$8 million, the SBUMC program to date follows 6,000 9/11 responders, including police officers, firefighters, paramedics, and construction workers with an 80% retention rate. This program has grown an average of 17% annually. The Long Island WTCMMTP's role is to provide comprehensive and integrated health care to all eligible WTC responders who are based in Nassau, and Suffolk counties and now, with new NIOSH funding, Kings County. The new Brooklyn satellite clinic based at SUNY Downstate will address the need for geographic accessibility to medical care for the WTC responders who live in Kings County and have, until now, been an underserved population.

The STAR Program was awarded \$159,745 in continuation funding from Ryan White (RW) Part A/MAI (via Public Health Solutions) for Educating People at Risk (EPAR), STAR's outreach and HIV counseling and testing (C/T) arm. This award will also augment HIV C/T resources for adolescents and young adults

at the HEAT Program. The STAR Program also received \$107,512 in continuation funds for its Emergency Department (ED) Rapid HIV Testing (RHT) Project, a NYC Department of Health and Mental Hygiene funded collaboration between STAR and SUNY Downstate's ED (since 2005) that offers free RHT to patients who present to the ED for care.

The STAR Program was awarded \$450,000 over three years from the HIV/AIDS Bureau of HRSA to expand opportunities to train medical residents in HIV/AIDS care and treatment, in collaboration with Downstate's Internal Medicine Residency Program of the Department of Medicine. This fully accredited residency program offers tracks in categorical medicine, combined medicine and emergency medicine, and preliminary medicine. The proposed project will initiate developmental work toward expanding the existing accredited primary care residency program to include an HIV-focused 4th residency track, with the ultimate goal of training 4 new residents per year or 12 new residents over the life of the project.

**Tonya N. Taylor, PhD, MS** received a K01 award (\$666,350 over five years) from the National Institutes of Mental Health to research the intersections between HIV, aging, and sexuality among women. The grant uses the Women's Interagency HIV Study (WIHS) as a platform.

## FACULTY AND STAFF UPDATES

**Michael Augenbraun, MD** was appointed as chief of the Division of Infectious Diseases (ID) at SUNY Downstate, replacing Dr. Bill McCormack who retired after 30 years of extraordinary service. Dr. Augenbraun has been at Downstate for 23 years, since beginning his clinical fellowship in ID in 1988. He did his undergraduate and medical studies at the University of Rochester. After a residency at North Shore, Dr. Augenbraun undertook a research fellowship in ID and then joined the faculty, in which he is now professor of Medicine and Public Health. Dr. Augenbraun has served as medical director of the Kings County Hospital Center Sexually Transmitted Disease Clinic for the last 16 years. At University Hospital of Brooklyn (UHB), he served as hospital epidemiologist, Department of Epidemiology director, chair of the Infection Control Committee, emergency preparedness coordinator (past 10 years), and chair, Environment of Care Committee (since 2008). He is on the editorial board of the journal, Sexually Transmitted Diseases, and is a regular reviewer for 9 ID-related peer-reviewed journals. He has been principal investigator or co-investigator on multiple peer-reviewed research grants, including a currently active NIH award, the Women's Interagency HIV Study (WIHS), funded by NIAID. He has authored or co-authored almost 100 peer-reviewed articles, reviews and chapters.

**Gina Bonilla** joined the STAR Program in February of 2011 and works with the Swan Project as a Field Site Coordinator. She has a Bachelor of Arts in Media Arts from Emerson College, and has worked as a Return Peace Corps Volunteer, at the

AIDS Center of Queens County, Inc., and at National Development & Research Institutes, Inc.

**Dorothy Charles**, Community Liaison Worker with the STAR Program's Educating People at Risk (EPAR) program has joined the new SAMHSA-funded Ready to Respond (RTR) project as a part-time health educator.

**Jovonte Foster** joined the HEAT Program as a LGBT Peer Outreach Worker. Prior to HEAT, Mr. Foster worked at Harlem United's Black Men's Institute as a Risk Reduction Counselor and a HIV Test Counselor. Before that, he was an outreach worker for the Sexual Minority Alliance of Alameda County (SMACC) Youth Center in Oakland, CA, which serves LGBT youth.

**Tina Jones**, LGBT Outreach Coordinator at the HEAT Program, earned a Bachelor of Arts in English from Marymount Manhattan College.

**Alecia C. Johnson** joined the STAR Program as a Health Educator for the SAMHSA-funded Ready to Respond (RTR) project. Ms. Johnson previously worked at Bronx Works and has substantial experience in project implementation including recruitment, retention, health education/promotion, and linkage to services.

**Gordon Stanford** received the STAR Program Employee Recognition Award in August 2011, in recognition of his work for the STAR Information Services (IS) Unit. Mr. Stanford joined STAR's IS Unit in August 2006 and troubleshoots technical issues throughout STAR. He has also assisted SUNY Downstate in implementing their hospital-wide desk-



(Gordon Stanford (left) and Dr. Jack DeHovitz, STAR Program Director)

top security and antivirus policies. Due to the multiple clinical and third party applications used within STAR, Mr. Stanford also works with other IS staff throughout the institution to ensure that their applications function as expected on STAR personal computers.

**Konstantin Tchergueiko** joined the STAR Program as the International Program Coordinator. Mr. Tchergueiko received a Master of Arts in Russian and Eastern European Studies from Columbia University's Harriman Institute. He also holds a Bachelor of Arts from Indiana University where he majored in History, Russian, and Philosophy. He has worked in digital sales for Barnes & Noble, Inc. and has archiving and research experience at Columbia University's Regional Studies Library.

**Josephine Walker, MSA** joined the STAR Program as a Case Manager. Ms. Walker was previously employed by the former Brooklyn Pediatric AIDS Network (1991-2005). She completed her graduate studies in Community Health Administration and Wellness and then worked as a health administrator at Sibley Hospital's assisted living facility in Washington, DC. She returned to SUNY Downstate's FACES Program in 2009.

**Derrick B. Weekes, MSA** Deputy Executive Director of the FACES Network, earned a Master of Science in Administration (MSA) from Central Michigan University.

**Hope York** joined the HEAT Program as an outreach worker to young women of color. Prior to HEAT, Ms. York was an Advocacy & Thought Leadership Intern at the Brooklyn Young Mother's Collective, an administrative assistant at Breakthrough NY, an internship placement fellow at Exalt Youth, and a field worker for NYC Council Member Jumaane D. Williams.

## PROGRAM UPDATES

The STAR Health Center (SHC) is the recipient of the 2011 National Quality Center (NQC) Quality of Care Award for Quality Improvement Activities that led to significant advances for HIV-infected patients with co-morbidities. Dr. Jayashree Ravishankar, STAR Health Center Medical Director, received the award on October 7, 2011 at the NQC's Steering Committee meeting in Washington, DC. The SHC received the award based on the addition of primary care indicators into their 2010 Quality Management Program, focusing on diabetes and cardiovascular risk assessment in HIV patients, and the improvements made in these important clinical areas.

On June 15-16, 2011, SUNY Downstate's New York State International Training and Research

Program (NYS-ITRP) (<http://www.downstate.edu/nysitrp/>) collaborated with the NIH Fogarty-funded programs from Emory University to hold its annual meeting on infectious disease research in Tbilisi, Georgia. This meeting updated participants on TB, HIV, and HCV epidemiology, prevention, and treatment, especially in the context of implementing research programs in Georgia. More than 100 participants attended including former NYS-ITRP fellows, Georgian Ministry of Health officials, US collaborators, Georgian infectious disease researchers, and representatives from Tbilisi State Medical University School of Public Health. Sandra Roelofs, the First Lady of Georgia, who addressed the SUNY Downstate campus last year, presented at this meeting. SUNY Downstate's NYS-ITRP program continues to work aggressively to enhance infectious disease research and public health infrastructure in Georgia.

On May 13, 2011, the STAR Program's AIDS Education and Training Center (AETC) and Clinical Education Initiative (CEI) collaborated with the

Health and Education Alternatives for Teens (HEAT) Program on a conference entitled "HIV Prevention and Treatment for Lesbian, Gay, Bisexual, Transgender (LGBT) Youth" at Brooklyn Borough Hall. More than 70 people attended, including physicians, nurses, and social workers. The meeting provided an overview of skills and resources to assess sexual health and risk, provide HIV prevention counseling, and provide HIV clinical care to LGBT youth. Contributing collaborators including the adolescent programs at Harlem Hospital Center/Columbia University, Mt. Sinai Hospital, Montefiore Medical Center, and the Callen-Lorde Community Health Center. HEAT Director Jeffrey Birnbaum, MD, MPH provided a special presentation on the clinical care of transgender youth. The STAR Health Center's Katherine Marx, FNP, MPH presented a case illustrating the challenges of providing HIV care to young women who have sex with women. Brooklyn Deputy Borough President Yvonne Graham presented a commemorative declaration from Brooklyn Borough President Marty Markowitz.

## PHONE LINK

All of the programs listed below are part of SUNY Downstate's HIV Center for Women and Children. For more information about the services each program provides, please call the numbers listed or the HIV Center for Women and Children at:

(718) 270-2301 or 4736  
OR visit our website at:

[www.hivcenter.org](http://www.hivcenter.org)

### PATIENT CARE AND SERVICES FOR ADULTS

Out-Patient Care  
STAR Health Center (SHC):  
(718) 270-3745

Mental Health Services:  
(718) 270-3745

Family-Centered Care Program  
(FCCP) (718) 270-2357 or 3745

### FOR ADOLESCENTS

Family, Adolescent &  
Children's Experience at SUNY  
(FACES):  
(718) 270-3826

Health & Education  
Alternatives For Teens (HEAT)  
Program:  
(718) 467-4446

### FOR CHILDREN

Infant and Child Learning  
Center (ICLC):  
(718) 270-2598

Family Care Center (at KCHC):  
(718) 245-2562

### COMMUNITY AND MEDICAL EDUCATION

Prevention Services for  
Adolescent and Young Adults -  
SUNY Adolescent Education  
Program (AEP):  
(718) 270-3203

Educating People at Risk  
(EPAR):  
(718) 270-3897

HIV Clinical Education  
Initiative:  
(718) 270-4752

### RESEARCH

Adult Clinical Trials:  
(718) 270-4487

## PUBLICATIONS

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## HIV link

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