FUNCTIONAL CURE

Pediatric HIV specialist helps rid Mississippi toddler of dreaded virus

By Jack Mazurak

In the middle of a global media tornado of interest surrounding Dr. Hannah Gay’s functional curing of an HIV-infected child, the quiet, thoughtful Mississippi pediatrician never faltered.

Under TV studio lights and in front of lens after lens, she answered questions pleasantly, spoke in smooth, matter-of-fact tones and gave answers that were as thorough as they were concise.

The storm of interview requests from local, national and international media hit in early March after Gay and her two collaborators discussed their findings in the Mississippi-born infant’s case during a major infectious diseases conference in Atlanta.

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Aggressive, timely and precisely targeted therapies may be the answer for high-risk newborns

“We’re extremely proud of Dr. Gay’s work and for all she’s done in her career to improve the lives of Mississippi’s children,” said Dr. James Keeton, UMMC vice chancellor for health affairs. “She’s the kind of physician who takes a deep personal interest in her patients and in moving forward HIV care in a careful, evidence-based way.”

In late summer 2010, medics transferred a newborn baby to the Blair E. Batson Hospital for Children from another Mississippi facility. The mother found out during labor that she was infected with HIV.

Gay, associate professor of pediatrics and an HIV specialist, took over the infant’s care. Experience told her the child stood a high risk for infection. She decided to treat the infant, then just more than 30 hours old, with a three-drug antiretroviral therapeutic prescription.

Currently, high-risk newborns — those born to mothers with poorly controlled infections or whose mothers’ HIV status is discovered around the time of delivery — receive a one-or-two drug antiretroviral combination at prophylactic or protective doses for six weeks. Only if infection is diagnosed do they begin therapeutic prescriptions.

Gay’s previous findings — and those of others in the field — pointed to better viral control with earlier intervention.

Dr. Owen “Bex” Evans, professor and former chair of pediatrics at UMMC, said he’s not surprised Gay made the right call.

“She’s always been one of the most intelligent physicians I’ve ever known,” he said.

“She used her experience and clinical intuition. She knew the child was likely infected and, with the clock running, the risk of not treating was greater than the risks of treatment.”

Tests returned a few days following birth confirmed an HIV infection. Gay kept the infant on therapy for 18 months, when the child was lost to follow-up care. For five months the child didn’t receive the medications. A team of case managers at the Children’s Center virologist Dr. Deborah Persaud.

Using ultrasensitive laboratory tests, the researchers verified Gay’s clinical results. In their case report describing the world’s first case of a functional cure of an HIV infection in an infant, the three theorized quick administration of therapy kept the virus from establishing itself in the child.

The three submitted their abstract for the 20th Conference on Retroviruses and Opportunistic Infections in downtown Atlanta. Persaud presented it on Monday, March 4.


Gay stressed prevention, which can prevent 98 percent of newborn infections. Luzuriaga said complete viral eradication is the goal.

“But, for now, (that) remains out of reach, and our best chance may come from aggressive, timely and precisely targeted use of antiviral therapies in high-risk newborns as a way to achieve functional cure,” Luzuriaga said.

“Without the nurse practitioner and RN case managers in my division there would be no hope of getting even a small percentage of the babies in Mississippi treated appropriately,” she said of nurse practitioner Amy Smith and nurses Nita Boudreaux, Daphne Sigler and Tommie Bays.

Although he was not involved in this case, my colleague, Dr. Ben Nash (assistant professor of pediatric infectious disease), who treats HIV-infected women during pregnancy directly prevents this kind of case from coming up on a regular basis,” he said of nurse practitioner Amy Smith and nurses Nita Boudreaux, Daphne Sigler and Tommie Bays.

“Our next step is to find out if this is a highly unusual response to very early antiretroviral therapy or is something we can actually replicate in other high-risk newborns,” Persaud said.

Gay said careful and thorough research would show whether that’s possible, and that studies are already being designed. She emphasized that not enough data exist to recommend changing the current practice.

The child remains under Gay’s care and off antiretroviral medication. The mother and child have elected to remain anonymous.

Gay receives clinical-care funding through the federal Health Resources and Services Administration’s Ryan White HIV/AIDS Program, administered via contract through the Mississippi State Department of Health.

Research into the case was funded by the National Institutes of Health and the American Foundation for AIDS Research.

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After 13 years of working as a dental hygienist, Susan Hicks of Tupelo decided to shift gears and pursue a new career in teaching. In January, she enrolled in the online Health Sciences Program offered by the School of Health Related Professions to earn her bachelor’s with the aim of taking an alternate route to teaching certification. But after being out of school for 12 years, it wasn’t surprising that she needed some extra help on a paper for her cultural competencies class.

Her professor suggested she make an appointment with a student tutor at the newly minted Virtual Writing Center.

“She was awesome,” Hicks said of her virtual tutor. “She didn’t tell me what to do, but helped me make the paper flow better.

“When you’ve been out of school that long, it’s hard to get back in the flow.”

Her tutor, Jennifer McNair, a sophomore at the University of Mississippi, was 40 miles away from Tupelo. But McNair was able to provide support online through a partnership between SHRP and Ole Miss’ Center for Writing and Rhetoric. And thanks to her help, Hicks managed to boost the grade of her final paper by 23 points.

“Working with Ole Miss faculty members Dr. Robert Cummings and Dr. Alice Myatt, Pollard spent last fall helping set up the technical part of the writing center, an online forum where SHRP students can book appointments with student tutors at Ole Miss. The service just became available to students on Jan. 31.

The student tutors, recruited by Ole Miss faculty, aren’t just good at writing, Pollard said. They also have an interest in allied health. Some are even pre-UMMC students.

“The training process is sound,” he said. “The center trains the tutors to use the Socratic method. Through this questioning the student begins seeing their presentation of ideas in a new light. They might receive sentence-level help, too, or guidelines for APA usage.”

McNair, who helped Hicks with her paper, is hoping to enter the Occupational Therapy Program in SHRP soon. She said health-care professionals need to have strong writing and literacy skills to be able to apply the latest evidence in their practice and for accurate documentation for insurance purposes.

SHRP has long placed a premium on writing skills. Instructor Dana Hairston has been teaching a health sciences writing course for four years and hosts occasional workshops to teach students APA Style (the American Psychological Association, a style most often used in the sciences) and the expectations for writing improvement.

“We know there’s a connection between writing and discovery of ideas,” Pollard said. “Our students may end up being involved in policy initiatives and policy writing. They may be involved in research.”

He adds that he encourages all the other schools on campus to reach out to the Center for Writing and Rhetoric.

“Within our programs at SHRP, we recognize that the ability to express oneself in written form is a marketable skill that is developed over time and with much practice,” said Dr. Jessica Bailey, interim dean of SHRP. “I’m pleased that Terry Pollard has discovered innovative ways we can collaborate with Ole Miss and has taken the initiative to provide this unique benefit to our students.”

By Matt Westerfield
Family medicine physicians expand treatment scope of domestic violence victims in Mississippi

By Gary Patett

She didn’t break away from her boyfriend until after he broke her teeth, pulled her hair and forced her into his car, where he kept a gun. Even after she escaped from him that night, Nicole Hanks wouldn’t admit the truth about her battered mouth.

“It was the first time in my life when I didn’t know if I was going to live or die,” she said. “But I told my friends I felt on the concrete.”

Hanks is one of many victims of domestic and sexual abuse who have been beaten into a passive pattern of lies or silence – an enduring problem faced by physicians and other health care providers who are otherwise in a position to help them.

“Last year, the total was 612; the year before, it was 594,” said Sandy Middleton, the center’s director.

“We often get referrals from emergency room physicians and social workers,” some are men, although women are the predominant victims.

“Domestic violence for an adult is different from child abuse,” said Sandy Middelton. “We expect a child to be cured at home; whereas, with a child, victims of violence or sexual assault, then doctors, nurses, social workers and others have a duty to report it.”

“For the adult victim, it’s up to him or her to report it.”

For her part, Hanks never reported it to anyone. She was afraid, she said. The only medical attention she sought was from a dentist to repair her chipped teeth.

But when she saw doctors for other issues, she said none ever mentioned domestic abuse to her. One could only imagine the stories she could have told them: about slashed tires, stolen money, damage to her body and self-worth.

“Her commitment to finding help for victims grew from this disheartening realization. That was a pervasive problem often underreported,” she said. “I feel comfortable now if I had to interview a sexual assault victim. I don’t want people to think there are no physical signs.”

Treadwell speaks with a patient

“Finally, one day, a bomb went off in my head: ‘Get with it, girl. This is not normal. If I don’t get out of this, where will I be a year from now?’ I knew I didn’t want to be there.”

“I feel comfortable now if I had to interview a sexual assault victim,” said Treadwell, a third-year family practice resident. “It was very helpful to have that dedicated, focused training.”

As for screening victims of domestic violence specifically, it’s “recommended” during medical training, she said. Students and residents do benefit from lectures on domestic abuse, at least in family medicine, Beebe said. Ob-Gyn students learn how to recognize and manage domestic abuse, as do emergency room personnel, she said.

“Some older studies show that physicians identify less than 10 percent of battered women,” she said.

Beebe has performed her own research on domestic abuse, which includes psychological cruelty.

“Some older studies show that physicians identify less than 10 percent of battered women,” she said.

Beebe has delivered numerous talks about domestic abuse and has helped promote relevant training for nurses, ER workers, BHPs, police officers and others.

“Having a set of non-threatening questions, such as ‘Most couples fight from time to time. When you and your partner argue, does it ever turn violent?” she said.

With the issue of domestic violence, Beebe said, she would like to speak to the reader directly.

“Is it safe for the patient to go home?”

“Are there any plans or agreements in place with the perpetrator to help protect the victim?”

Quite often, she said, the only response is a “no.”

“I’d like to paint a beautiful picture of what is normal.”

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“For Hanks, the answer to each of those questions would have been “yes” 10 years ago. But if a physician had ever posed them, she isn’t sure she would have told the truth.

Still, she believes physicians should ask.

And she’s ready to tell the truth now.

“I want to talk about it,” she said, “because a lot of people like me have dreams, and they’re taken from them. I would like to tell victims some real-life stories of people I know who overcame this. And I’d like to show them pictures of those who didn’t get the chance to see what the next year would be like.”

“My message is, ‘What you’re going through is not normal. And I’d like to paint a beautiful picture of what is normal.’

Centerpiece

Domestic Violence Census – Mississippi

| Sept. 15, 2011 |
| Violent: 216 |
| Adult Victims: 140 |
| Children: 116 |
| Hotline Calls: 119 (nearly four per hour) |

Source: Domestic Violence Services of Mississippi; Mississippi Department of Health

Approaching Victims

Ask: Develop a set of open-ended questioning. Reassure: Tell the patient it’s OK to talk about it, that no one deserves to be abused, that resources are available.

Give Info: Physicians can’t force people to leave the situation, but they can refer them to the crisis hotline, shelters, counseling, and other resources.

Assess the patient’s safety: Is it safe for the patient to go home? Are there threats in the home? If so, is the perpetrator leaving? Provide information on how to make a plan and what to do during a problem.
Grant’s Ferry LPN’s social media campaign promotes health through racing

It was three years of high cholesterol that started everything. Rod Simmons visited his family physician in 2009, and when the test results came back showing his numbers were up for the third year in a row, he got a chiding from the doctor.

“She sent me a letter and said, ’I’ll give you three months to straighten it out,’” recalled Simmons, an LPN in the Family Medicine/Pediatrics & Allergy Clinic at Grant’s Ferry.

Having lost his father to heart disease in 2003, he took the ultimatum seriously.

“I got the letter on a Tuesday, and that Saturday I did my first 5K, just like that. No training, nothing. That was the Rush to Brush in February 2009.”

Simmons hasn’t slowed down yet. In the years since, he has run or walked in hundreds of races all around the state and has developed an organization that bears his name to promote races large and small through social media.

All of it with the simple goal of getting Mississippians on their feet and moving.

Simmons walks fast, even in the workplace. And he talks fast, too.

Originally from Flora, Simmons attended East Flora High School, where he ran the two mile on his track team his sophomore year. In fact, before the school closed and Simmons switched to the new Madison Central High School, his track team won the state championship in 1990. But that essentially concluded his interest in running, at least for that decade.

Instead, he set his sights on the Army, hoping to follow his older brother, Danny, who served for 23 years before retiring in 2007.

“I wanted to go into the Army; that was my first intention,” Simmons said. “My brother came home my senior year, home for the holidays, and he said, ‘Man, I don’t think you can handle the Army. I think you need to go to nursing school.’
"I said one word to him: OK. So I just set my ambition on nursing when I graduated from high school."

He enrolled in the practical nursing program at Hinds Community College in 1994.

"I got my degree in July of 1995, got my license in August of ‘95, and UMCC hired me," he says, with an uncommon memory for dates. "I started at UMCC on Sept. 25, 1995. Been here ever since."

During that time, he has bounced around from one unit to the next, enjoying each new set of experiences. He started off working with renal patients before moving on to an internal medicine clinic and from there to a stint on the general surgery and trauma unit.

After that, he moved into the newly opened University Hospital in 2006. He even helped cut the ribbon.

"I had a great opportunity; the administration allowed me to cut the ribbon during the ceremony," he said. "That must have been October 2006 — that was a great moment. I loved that."

He remained in that unit until 2010, when the new Grant’s Ferry facility opened. He transferred to the Family Medicine Clinic and learned the difference between hospital-based and clinic-based nursing.

"Being in the hospital for 14-and-a-half years, it was a big transition coming out here."

Last year, he began working in the Med/Peds & Allergy Clinic.

Jennifer Philipson, an RN at Grant’s Ferry and Simmons’ coworker, describes him as a very caring person.

"His compassion shows in his work and friendships with coworkers," she said. "Rod is always helping or looking for ways to help. He is always encouraging from both a personal and professional standpoint."

Along the way, Simmons found a wife, April (married in 1997), and raised a daughter, Roslyn, now 13. And that’s when his cholesterol levels caught up with him.

Simmons followed up his first race in 2009 with many more and found that race-walking was his strong suit. Soon, he joined the Mississippi Track Club.

"I was the public relations guy as part of the board," he explained. "I helped them promote races. When December came, I decided I wanted to do something different, reach out to more people. So Rod’s Racers was born in December 2010."

Rod’s Racers, which began as a Facebook effort, eventually expanded to Twitter and a blog and has a 10-member board. Simmons networked with like-minded racers around the state using Rod’s Racers to help with promoting races and to give advice to race directors.

He said his organization will "promote just about anybody’s race," including any races whose organizers reach out to him. "We don’t charge anything."

The most visible element of the Rod’s Racers effort are the photos that Simmons and other members take at every race they attend and post on Facebook, an idea as ingenious as it is simple — runners love to see pictures of themselves running.

"Through Rod’s Racers, and his posts on Facebook, he really keeps us runners in the know about all the races that are happening," said Dr. Dona Lee Andrew, professor of occupational therapy and an avid runner. "Besides, he is a really nice person.

"Another thing I like is that through Rod’s Racers, he has people out taking pictures of different runners in the races and posting. And, having been in a couple pictures, it is nice to see yourself running along so many others."

"When we first got into road racing in ’09, I decided I was going to take as many photos as I could of everyone, regardless of whether they win or lose," Simmons said. "That’s how people started noticing us more.

"One thing I learned about social media is, pictures draw people. People will follow the photos. A lot of the photos we take are of people doing their first 5K. It’s always great to hear comments like that."

"Rod has been totally tireless in promoting our sport," said Collin Johnson, a Jackson-area runner and member of the Mississippi Track Club. "I don’t know how much he works in his regular job, but I know he works constantly, getting the word out about races and healthy living.

"I’ve gotten notices where he’s tagged me in a race photo from two years ago at 3 a.m."

Simmons and his wife spend a lot of time on road trips these days, and they work to promote lesser-known races around the state. And not just foot races, either. He’s just as happy to promote cycling events, triathlons and even more unique races like this month’s Color Me Rad event.

His personal record for race-walking a 5K: 32:50, and yes, his cholesterol levels came down without medication.

"I still run from time to time, but the majority of my racing is going to be walking," he said. "I enjoy it; it’s easy for me to do."

"I’m just trying to get folks to be active. You don’t have to settle for walking, you don’t have to settle for running. Whatever works for you, just be active. If you want to be competitive, go for it."

March 18, 2013 | CENTERVIEW
The University of Mississippi Medical Center’s Telehealth Project is set for a major expansion, thanks to a $450,000 grant from the Delta Regional Authority.

Dr. Kristi Henderson, chief advanced practice officer and Telehealth director, said the funding will provide equipment and resources to broadcast education and training around the state, making UMMC’s expertise available to more clinics and institutions across Mississippi.

It is estimated the expansion will eventually create 200 jobs.

“It’s focused on mental health because we have such a shortage of mental-health providers in rural areas of this state,” said Henderson, who explained that there are two goals to the expanded access.

“One is that we will target incumbent health-care workers who are out in the trenches who are not mental-health providers — family doctors, family nurse practitioners — and we will provide web-based portal access to the latest information on how to handle psychiatric behavioral disorders, all kinds of mental health issues that they have to deal with day in and day out, but don’t have the expertise and certifications to do,” she said.

“It’s to develop their skills so they can do a better job with their population.”

The other goal, she said, is to use telehealth services to train community health workers across Mississippi to help local residents navigate the health system by helping them maintain access to health-care providers. That education also will be specific to mental and behavioral health.

“The grant is going to augment my call center so they can schedule education offerings through our headquarters in Jackson and we can provide that anywhere in the state,” Henderson said.

As part of this initiative, Henderson said UMMC is working toward a partnership with every office of the Mississippi State University Extension System to provide locations for educational teleconferencing. All told, she expects to provide education and training to more than 500 health-care providers and community health workers in the state.

Chris Masingill, Delta Regional Authority federal co-chairman, visited UMMC March 5 and toured the Telehealth headquarters in Jackson.

“Because of this investment, Mississippi’s rural care providers and their patients will now be connected to cutting-edge education and medical services . . .”

—CHRIS MASINGILL

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The Delta Regional Authority is a multi-state partnership with a congressional mandate to help create jobs, build communities and improve lives in the 252 counties and parishes of the Mississippi River Delta.