The Legacy of HeLa Cells: Uncovering the Story of Henrietta Lacks

by Gaëtane Jean-Marie, PhD, Professor and Chair Department of Leadership, Foundations and Human Resource Education, College of Education and Human Development

The contribution of HeLa cells to humanity is countless (e.g., development of drugs for herpes, leukemia, influenza, and Parkinson’s disease). In particular, the HeLa cells have allowed scientists to unlock the mysteries of cancer, and eventually led to a cure for the disease. As Marc Silver of National Geographic (2013) reports, the fast-growing cells used in over 70,000 medical studies were harvested from a 31-year-old woman’s tumor, without her consent, and have continued to live on. For many years, Dr. George Gray, head of tissue research at The Johns Hopkins Hospital, conducted experiments to create an immortal life of human cells that could be used in medical research. He succeeded in the 1950s. Behind HeLa cells is the life of an African-American woman, Henrietta Lacks who until Skloot’s book was a mere reference in the medical field but today is getting recognition. Driven to know more about Henrietta, Skloot investigated the story behind HeLa cells. It took her a decade to complete the ethnographic study and brought to life the story of the human being associated with HeLa. Drawing from primary sources and personal interviews, Skloot provides the narrative accounts of Henrietta’s childhood, young adulthood, illness and tragic death, and the surviving members of the Lacks family. She also traced the birth and life of the immortal cell, HeLa and the resulting studies that significantly changed the landscape of medical research. Weaved through the narratives is the travesties experienced by Henrietta’s surviving children. For decades, they were not only unaware of the existence of their mother’s cells but were also not the benefactors of the multimillion dollar industry that developed around the production and use of HeLa cells. In short, while Lacks’ family struggled to make ends meet and did not have health insurance to tend to their own medical needs, their mother’s cells continue to enrich the health and lives of others.

Researchers are faced with this conundrum to pursue their work from an objective stance; yet, subjectivity is at the heart of whom and what we study. Skloot’s relationship with the family, in particular Deborah—the gatekeeper, who struggled (Continued on page 7)

Henrietta Lacks
ULSD Dental Hygiene Pilot Program with Central High School’s Dental Academy
by Rachel Quick, MEd, and Linda Hart Lewis, RDH, MEd

The University of Louisville School of Dentistry (ULSD) and Central High School has had a special on-going relationship. This relationship has been strengthened with the receipt of a grant through the Dental Pipeline National Leadership Institute.

Central High School, one of the Jefferson County Public Schools and a UofL Signature Partner, offers specialized magnet programs which includes the Dental Science Magnet. This program allows high school students to focus on dental sciences, and the possibilities within dental careers. ULSD partnered with Central to enhance their dental knowledge and provide exposure to dental career routes.

Under the leadership of Dr. Sherry Babbage, ULSD coordinator for diversity recruitment, and Ms. Wendy Robertson, ULSD Dental Hygiene Alum and Central Dental Magnet Faculty, the $12,000 grant allows ULSD and Central to create additional intentional, interactive relationships to help foster knowledge of dental career professions. UofL’s Dental Hygiene Program plays an intricate role in this connection.

This fall semester, the DH Program, Rachel Quick and Linda Lewis, developed and implemented a pilot initiative that allowed ULSD faculty, staff and students to work interactively with 32 of the Dental Magnet sophomore students. Dental Hygiene Senior’s April Key, Leondra Richardson and Jessikka Suazo were able to provide instruction to the students on varied topics, evaluating their success with pre and post-tests.

The efforts of Key, Richardson and Suazo increased the students’ knowledge about dental education, opportunities within the dental professions, and knowledge about the dental programs available at UofL.

The DH Program is excited to be a change agent in improving the working relationships with the University, the School of Dentistry and Central High School. Additionally, the DH Program will serve, along with other dental students, as mentors to students in the academy program. These community efforts are helping to bridge the gap and expand the knowledge of future dental professionals. A type of grow our own idea.

The Dental Pipeline National Leadership Institute program is under the Robert Wood Johnson Foundation in partnership with the American Dental Education Association and the University of the Pacific Arthur A Dugoni School of Dentistry. While the program is a 1-year grant, ULSD and Central are committed to continued efforts to promote the profession, expand the knowledge prospective students, and build future leaders.
School of Medicine

New Book Club for SOM Faculty, Staff, and Students
by Michael Rowland, PhD

School of Medicine faculty, staff, and students are cordially invited to participate in a new School of Medicine Book Club endeavor this spring beginning on Friday, February 28, from 12:00 - 12:45pm (location TBA). The book club is the Ubuntu Lunch group which exists to bridge cross-cultural divides through open and safe dialogue. Ubuntu is the Xhosa (South Africa) word that means "I am as you are" or "I see you in me" and is one of the foundational principles of the new South Africa. To participate in the Ubuntu Lunch group is to be committing to learn from others who are different from you, to get their help to see the world as they see it. Our first book we will be reading is Seeing Race in Modern America by Matthew Pratt Guterl.

The book club is open to all School of Medicine faculty, staff and students. One of our first year medical students, Elena Brown initiated this project and will be one of the facilitators of the book club discussions. On February 28, we will focus only on Chapter 1.

Please feel free to purchase a copy of this book and if so, inclined, please consider buying a copy for a needy medical student. Not having the book will not hinder you from participating in the conversation.

If you would like to participate in the book club, please send me an email so we can plan accordingly. I look forward to your participation in the book club!

Black History Month: What Do You Know About Louisville’s African American Medical School?

Louisville National Medical College (LNMC) began in 1886 by Drs. Henry Fitzbutler and Rufus Conrad of Louisville and William A. Burney of New Albany, IN. It was chartered by the Kentucky General Assembly on April 24, 1888. It was originally located at 108 W. Green Street (now Liberty) and subsequently merged with State University (now known as Simmons College) in 1903. LNMC was the only medical school in North America entirely under black control. It operated until 1912 when the Flexner report precipitated changes in standards in medical education. After its' closure, the training hospital became the Simmons Nursing Department.

Get Involved with ALIANZAS, The Hispanic Latino Faculty and Staff Association’s Mentoring Program

ALIANZAS (partnerships), a mentoring program for Hispanic and Latino students has been recently organized by the University of Louisville Hispanic Latino Faculty and Staff Association (HLFSA). This program is designed to enhance the educational experience, morale, career planning and professional competence of Hispanic/Latino students at UofL. Students will be paired with a faculty member or senior student and the mentoring relationship will address the particular needs and goals of each student. Mentors will provide advice, guidance and counseling in academic, professional, career, and school involvement areas. Mentors teach or major in most areas, from Humanities to Engineering and Medicine; speak English, Spanish and Portuguese among other languages and they or their parents have come from different Latin American countries. Upcoming mentoring sessions will take place February 19, March 18 and April 16, from 12:00pm – 1:30pm in room W210 of the Ekstrom Library on Belknap Campus. For further information or if you are interested in serving as a mentor, please contact Dr. Jose Fernandez or Dr. Claudio Maldonado.
In my role as Director of Practice and International Affairs I have been beyond blessed. Personally, I have had the unique opportunity to travel all over the world as a member of the International Service Learning Program (ISLP) faculty. Exploring different cultures and meeting the most interesting people has enriched my life beyond measure. As Director of the Kentucky Racing Health Services Center here in Louisville I have been privileged to work with a group of extraordinarily gifted and compassionate nurse practitioners (NP) that bring a unique insight to patient care everyday they come to work. Our patients come from all over the globe and these NPs consider this issue when planning each aspect of their care.

My experiences, both locally and internationally, with underserved populations experiencing health disparities have allowed me to grow in ways I am sure I have yet to acknowledge, but my interactions with the students that participate in both of these programs/projects are where I find the most satisfaction. This is especially true when a student finally “gets it”. Breaking down assumptions and building a broader appreciation of culturally differences AND similarities is truly rewarding. The following example is one of those experiences.

In all of our ISLP programs we try to assist students in having an authentic experience. Not just working in a clinic or school where the village members come to us, but we seek out opportunities to speak with people in the community; walking around the village/town, home visits, etc. On one particular program trip to Belize (2006), we were approached by a young man who requested that we make a “house call” to a woman and her twenty-something son. All that we were told was that he had fallen out a second story window five years ago and experienced a closed head injury, I was preparing myself for what I knew we would inevitably see. She also told us that he suffered multiple daily seizure episodes that would last several minutes. He was incontinent and had to be fed. With this information at hand, I prepared the medical student and the nursing student to do an assessment of the young man, gather any data that might be helpful and report back to me (I usually wait outside).

When the students returned I was told that the young man was thin, bedfast and really only responded to his mother. He had these “things” that resembled bedrails that were covered in old carpet scraps. There were jars of unlabeled malodorous ointments, creams and medications lining the windowsills. He was lying on an old mattress that had old plastic bags covering it. There was little food visible.

I was actually very proud of my students for making observations of the environmental conditions. This is something we really try to impress upon our nursing students. I did, in my infinite wisdom, have a couple of additional questions.

(Continued on page 8)
Reflections of Personal and Environmental Influences on Healthy Eating: The Case of Low Income Families

by Muriel Harris, PhD, MPH, and Members of the CPPW Evaluation Team, School of Public Health and Information Sciences

US dietary guidelines recommend eating fruits and vegetables to balance calories and reduce rates of obesity-related high-cost medical conditions. Two-thirds of Kentuckians are either overweight or obese, which is influenced by eating practices and poor access to healthy foods. In communities across the country, poor neighborhoods and communities of color have fewer supermarkets and limited availability of healthy food options. Neighborhoods like this are often referred to as “Food Deserts.” We gained key insights into these issues from interviewing 38 families that live in low income neighborhoods in Louisville. These “experts” discussed their attitudes to healthy eating and access to fresh fruits and vegetables.

One challenge families experience in having access to healthy foods is that many do not have vehicles of their own and rely on family members, neighbors and friends to take them shopping. For many, shopping is a social activity, a time to reconnect with others and give the children a treat. However, these events take place only once a month after the social security check comes in! This has many consequences for eating fruits and vegetables; one especially is the short shelf-life of these groceries. They talked about using public transportation (TARC) to go shopping but lamented the difficulty of taking groceries on and off the bus. So, grocery shopping trips meant making elaborate arrangements in order to maximize the time and opportunity. Two people put it this way, “They walk and have to go get their groceries, catch the TARC.” “We don’t have a vehicle so we would have to either pay somebody to take us or just wing it, you know, do the best we can….We have to get a ride. When the month comes up we got to do groceries, (we) make preparations to do all of that.”

Families talked about the difficulty in being able to purchase healthy foods and fruits and vegetables due to low levels of income. The money they receive or the allowances that food stamps afford has to stretch to include fruits and vegetables, but they are forced to purchase them on sale or make choices between fresh fruit and canned or frozen fruits and vegetables. One person said, “I think we would eat a lot more fresh vegetables if I could afford it… I like to eat healthy too but a lot of fresh fruits and vegetables tend to cost more so I will cut out on those, just try to get what I can afford, canned or whatever. I feel like if I made more money, I’ll be able to buy healthier foods but I don’t.”

Despite the barriers that they face we found many families that eat healthy foods and fresh fruits and vegetables whenever they can. For some it is after a member of the family is diagnosed with a health related problem, often diabetes related but one person admitted that her family ate healthier food after they found out her kids had ADHD. She said, “We get the mandarin orange cups. My kids have ADHD. Food-wise, I know what triggers are and what are not. Yes, the apples and the fruits have sugars but its natural sugars.”

(Continued on page 7)
Black History Month: Remembering Louisville’s Red Cross Hospital

The following is a summary of a historical series originally published by the Greater Louisville Medical Society.

Just over 100 years ago, life was very different than it is today. This applied to healthcare for African-Americans in the Louisville area as well. In 1896, three physicians formed African American Physicians Inc. and founded the Red Cross Hospital in Louisville, Kentucky. They were Drs. W.T. Merchant, Ellis D. Whedbee and R.B. Scott. It was born out of the need for medical care facilities for African Americans. Originally located at Sixth and Walnut (now Muhammad Ali Boulevard where the current Convention Center is), the Red Cross Hospital suffered from its inception many financial hardships. The initial location was a one story five room frame house and in 1905, the hospital was moved to 1436 South Shelby Street into a ramshackle two-story wooden cottage just southeast of downtown.

The move to South Shelby Street was not a sound decision since most of the African American population at the time lived in West Louisville. This inconvenient location surely slowed the growth and development of the hospital. Even the private offices of the practicing physicians were in the West End which ended up being three trolley rides away.

Over the years the Red Cross Hospital grew slowly. In 1910, a new building was added at a cost of $4,000. In 1915, a middle wing was added. After some fundraising, a second wing was added six years later, and in 1923, a third wing was added. A crippled children’s unit was on the first floor of the North Wing. In 1932, a new nurse’s home opened. In 1944, a $36,000 annex, including 10 rooms and nurse’s quarters, and two new surgery rooms were added. Construction of a new four-story building began in 1949. This is the building you see today at this site which houses the Volunteers of America Inc. This new building included five surgery rooms, an X-ray laboratory, two delivery rooms and an orthopedic clinic.

On September 2, 1951, the new hospital was officially dedicated. By 1957, the Red Cross Hospital was fully accredited. 9 years later, in 1960, a $60,000 renovation established a new reception room, and the middle building was razed in 1972, the Red Cross Hospital name changed to Community Hospital. Just three years later on September 18, 1975, the last patient was admitted and in February 1976, bankruptcy was declared. Red Cross Hospital closed after 77 years of existence. It wasn’t until June 11, 1980 the Volunteers of America converted the building into their rehabilitation center.

The Red Cross Hospital survived on community support with the African American community, and was dedicated to providing training programs for African American nurses and doctors. One notable figure associated with Red Cross Hospital is Mary E. Merritt, RN. She served as superintendent and head nurse of the hospital and was

(Continued on page 8)
and they burn off differently and they affect the body differently as opposed to the processed sugars.”

Many children would cringe at the thought of eating vegetables. In this study, the children also got to tell their stories, in fact one young man very proudly said he loved tomatoes, but when pressed for how he liked them he said “the ones in the bottle”! He meant ketchup. One of the children talked about her mother’s cooking that she loves and did not shy away from talking about her love for vegetables. She said, “My favorite thing my mom makes is some spaghetti...mama makes spaghetti with tomatoes and she puts some cheese in it...she puts spinach in a meatball...sometimes we have mixed vegetables...I like the lima beans.”

This “expert panel” highlighted both the personal challenges low income families have in purchasing and consuming healthy foods and their level of resourcefulness. Many described bargain hunting to find the cheapest fruits and vegetables and healthy food options, yet these options are not all healthy! They said the fresh fruits and vegetables they could afford to buy had often been sitting around for a few days already and lasted only a day or two once they got them home. The corner stores which are closest to their homes rarely stock fresh fruit and vegetables of any kind. As part of the Communities Putting Prevention to Work program, Healthy in a Hurry corner stores stocked with fresh fruits and vegetables to help increase the availability of fruits and vegetables in seven low income neighborhoods. One respondent remembered that she had seen a newly renovated store in her neighborhood and said this, “It’s called, Healthy in a Hurry. They have multi-grain bread, they also have tomatoes. They have fruits, they have a nice variety. They have cabbage and lettuce, tomatoes, onions and stuff of that nature. They got they fruits...” The students at Meyzeek Middle School had suggested the name! Efforts like this lead to improving access to fruits and vegetables in low income communities.

Acknowledgment: This work was supported by a cooperative agreement from CDC’s Communities Putting Prevention to Work program (1U58D002619-01. The study was conducted by the Louisville Putting Prevention to Work Evaluation Team, School of Public Health and information Sciences (2011-2012)

tissues on file that are being used in research somewhere but don’t realize it. Samples from routine medical procedures, like fetal genetic-disease screening and circumcisions are important for science. But do people have a right to know when and how their tissues are being used in research?

Since the book was published, readers of all kinds — scientists, teachers, nurses, librarians, high school and college students, and others have been drawn to the story behind HeLa. In sum, The Immortal Life of Henrietta Lacks tells a captivating story of the collision of ethics, race, medicine, scientific discovery, faith healing, and a daughter’s desire to know more about the mother she never knew. Inextricably connected, it reveals the inhumane medical treatment of African Americans during that period. Best-selling author, Rebecca Skloot takes readers on an extraordinary journey, from the ‘colored’ ward of Johns Hopkins Hospital in the 1950s to East Baltimore today, where Henrietta’s children, unable to afford health insurance, wrestle with feelings of pride, fear and betrayal.

Dr. Jean-Marie will further discuss Rebecca Skloot’s The Immortal Life of Henrietta Lacks at an upcoming HSC Diversity Lunch and Learn sponsored by the Office of Diversity and Inclusion (See Events on P. 9).
They did not mention ever rolling the young man over to look at the condition of his skin. Based on what I know from years of long-term care and the condition of the home, not to mention the minimal care the mother was able to provide I felt this assessment was warranted. After careful instruction, the students returned upstairs, made their assessment and reported their findings…absolutely no skin breakdown, anywhere. What? Not possible. I expected at least a stage 2-3 ulcer, maggots maybe…something. My first thought of course was that they didn’t really look. You know how students are. I had to see for myself. Nothing, nada…How could this be? Years of incontinence, poor nutrition (assumption), no state of the art bed with alternating air pressure, poor hygiene and care (assumption) and that oppressive heat of Belize. The perfect set up for horrific skin breakdown. This, after all was NOT the US.

All it took was a conversation with the young man’s mother to understand. She realized early on that he would need to be moved at least every couple of hours, and getting him out of bed would really be best. Those plastic bags; modified chux. The carpet covered boards; seizure rails. The multitude of creams and ointments on the windowsill; herbal concoctions used for cleaning and protecting the skin. Starting to make sense. But she’s so small, how could she possibly move this 140lb man. This is where community plays a role. Every day, twice a day, without fail, people from the village show up to help get him up and put him back to bed.

It is interesting that in this instance my experience had failed me. The students were struggling to understand why I was so surprised. I explained that at home (US) with the best care, costliest medications and equipment we still haven’t been able to prevent the morbidity and mortality of skin breakdown. Case in point, actor Christopher Reeve (played Superman). He suffered a C1 and C2 fracture during an equestrian event that left him a quadriplegic. He died from complications related to a decubitus ulcer. Here, a wealthy man with access to the best care money can buy dies of a pressure sore. What did I miss?

I missed a lot. This changed the lens by which I view the world forever. Since that time I have worked in areas of the world where conditions are not fit for human life; Haiti, post-earthquake and the slums of Managua, Nicaragua in particular. Two things are constant; people, no matter where they live have the same needs and desires for themselves and their families. Human innovation is a spectacular thing. Where there is need, we find a way. It may be a different way and just may take a second look to see it.

Red Cross Hospital

Red Cross Hospital was one of Louisville’s African American’s most prized public institutions. It was supported by countless church contributions, baking contests, picnics and other fund raising events. The integration of Louisville’s African American physicians into the Jefferson County Medical Society, along with the desegregation of local hospitals, brought about the demise of the Red Cross Hospital.

To learn more about the history of Red Cross Hospital, check out the full series (Part 1, Part 2, Part 3, Part 4, Part 5) from the Greater Louisville Medical Society.
Upcoming Events and Announcements

- **LGBT HSC Student Networking Event**
  Date: Thursday, February 20 at 8pm
  Location: PLAY Dance Bar
  Contact: Stacie Steinbock

- **International Banquet**
  Date: Saturday, February 22 from 7 - 10pm
  Location: Student Activities Center, Belknap
  Contact: Ashley Gray-Ziba

- **Women’s Center Breakfast HSC Staff Forum**
  Date: Thursday, February 27 from 9 - 10:30am
  Location: Abell Building, Room 109
  RSVP to Phyllis Webb by February 24

- **HSC Cultural Competency Committee Lunch and Learn**
  Topic: “Examining Inherent Biases in Health Disparities”
  Date: Tuesday, February 25 from 12 - 1pm
  Location: School of Nursing, Room K2006
  RSVP: Francesca Kingery or David Taylor

- **International Women’s Day**
  Date: Thursday, February 27 at 11:30am

- **School of Medicine Book Club**
  Date: Friday, February 28 from 12 - 1pm
  Location: TBD
  Contact: Dr. Michael Rowland

- **Dr. Martin Luther King, Jr. Display Unveiling**
  Date: Friday, February 28 from 5:30-7:30pm
  Location: School of Law, Belknap

- **41st Dr. Joseph H. McMillan National Conference on The Black Family in America: A Project Progress Event**
  Date: March 6 - 8
  Location: Hilton Garden Inn Hotel, Louisville
  Registration Information

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### March HSC Campus Diversity Lunch and Learn:

**“Exploring the Immortal Life of Henrietta Lacks”**

with Gaëtane Jean-Marie, PhD

**HSC Campus Lunch and Learn**

Date: Wednesday, March 19
Time: 12:00-1:00pm
Location: Kornhauser Auditorium
RSVP: Katie Leslie

*All HSC faculty, staff, and students are encouraged to attend!*

This session will focus on *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. Attendees are encouraged (but not required) to read the book in advance.

**Sponsored by:**

The Office of Diversity and Inclusion

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- **LGBT Center’s PINK! 2014 Annual Drag Show**
  Date: Friday, March 21 from 8 - 10:30pm
  Location: Student Activities Center, Belknap
  Contact: Lisa Gunterman

- **LGBT HSC Training Series**
  Topic: “LGBT Patient Mental Health and Suicide Risk and Prevention”
  Date: Friday, March 28 from 12 - 1pm
  Location: Instructional Building B, Room 202
  Contact: Stacie Steinbock