The Patient, The Project, The Partnership

Mass Production & Distribution of HeLa Cells at Tuskegee University

Morehouse School of Medicine/Tuskegee University/University of Alabama at Birmingham Comprehensive Cancer Center Partnership

THE LEGACYMUSEUM
Dedication
Russell W. Brown and James H.M. Henderson

THE LEGACYMUSEUM is indebted to Clayton Yates for digital photographs of HeLa cells.

Dr. Clayton Yates, Department of Biology
Center for Cancer Research, Clayton Yates Laboratory, Tuskegee University
Yates’ research specialties are tumor engineering, prostate and breast cancers.
Greetings to all Attendees:

Welcome to the exhibit “The Patient, The Project, The Partnership.” We mount this HeLa Cell Exhibit to celebrate the life of the Virginia-born Henrietta Lacks (née Loretta Pleasant) who was a tobacco farmer that suffered from an aggressive form of cervical cancer “adenocarcinoma,” which landed her at Johns Hopkins University Hospital in Baltimore, MD at a time not too long ago. Her cells, harvested without her knowledge or that of her family, were discovered to possess the unique characteristics of growing and reproducing beyond measure. HeLa’s growth characteristics made it the ideal alternative primate host cell source for the massive testing of Jonas Salk’s polio vaccine. Tuskegee University’s Carver Foundation was one of the sites selected to mass produce the cell line and distribute it to laboratories worldwide for polio vaccine testing. It was transported to Tuskegee for further cell culturing procedures before it became available by mass production to science and medicine for a variety of research projects from which we all benefit today.

This HeLa Cell Exhibit is part of the total immersion experience associated with the 2012 “First Bioethics Conference in Cancer Health Disparities Research: Celebrating Scholars Ethically Working toward Reducing Cancer Health Disparities.” I encourage you to participate in all of the carefully structured immersion experiences. With the HeLa Cell Exhibit in particular, I want you to experience Henrietta Lacks as one who once lived among us, and whose “immortal cells” that still live among us were taken without asking, and reflect on the ethical appropriateness or inappropriateness of such an act, as well as its consequential assault on the race, the gender, the ethnic group, and Henrietta Lacks’ family. Perhaps you will come away with a new appreciation for what the HeLa Cell has meant to the world, and develop a renewed sensitivity to the plight of others less privileged, but who nevertheless, must never be subjected to the unethical, yet enduring ravaging effects of cancer disparities. We expect the total immersion experience will be a transformative one.

I commend the outstanding efforts and creativity of the Bioethics Shared Resource Core of the Morehouse School of Medicine/Tuskegee University/University of Alabama at Birmingham Comprehensive Cancer Center Partnership, the oversight that the Tuskegee University National Center for Bioethics in Research and Health Care provides, and the excellent work of THE LEGACY MUSEUM in making this experiential opportunity possible through necessary connections.

I want to encourage all attendees to observe diligently, learn decisively, reflect deeply, dialogue freely, and plan accordingly for a better tomorrow regarding conducting ethically sound cancer health disparities research.

Again, welcome! Enjoy the exhibition.

Gilbert L. Rochon, Ph.D., MPH
President
Rebecca Skloot’s recent book, “The Immortal Life of Henrietta Lacks,” about the African-American woman whose cancer cells, obtained and used without her knowledge, has enabled a multi-million dollars biomedical enterprise, and serves to remind us of the seminal role of Tuskegee University in global HeLa cell work.

A chronological breakdown of key events is as follows: a) in 1938, the National Foundation of Infantile Paralysis (National Foundation) was launched to support research and education activities to eradicate poliomyelitis; b) in the early 1950s, HeLa cells (epithelial cells secured by biopsy from Lacks) were shown to be immortal in tissue culture by biomedical scientists at Johns Hopkins University; c) subsequent to the development of the polio vaccine by Jonas Salk in 1952, scores of research laboratories were engaged in a massive effort to generate sufficient monkey kidney cells on which to grow the polio virus and assess the effectiveness of antibodies developed in response to the poliovirus antigen; d) Rhesus monkey tissues proved less desirable as the host for the virus and HeLa cells became the cell culture of choice; and e) a national effort was undertaken to massively produce HeLa cells to serve as replacements for monkey cells.

Undoubtedly influenced by the fact that the National Foundation’s director of research (H. M. Weaver) was acquainted with Tuskegee (Institute) University and the Foundation’s founder and chief administrator (Basil O’ Conner) was the chairman of Tuskegee’s Board of Trustees, Tuskegee (Institute) University was selected by the National Foundation as the central national HeLa cell production laboratory.

Benefitted by a grant from the National Foundation and subsequent to research consultations with colleagues at the University of Minnesota School of Medicine on in vitro culture techniques, two Tuskegee (Institute) University faculty members, Russell W. Brown and James H. M. Henderson, established the HeLa cell tissue culture laboratory at the Carver Research Foundation in 1953, under the overall leadership of the interim director of the Carver Research Foundation, Clarence T. Mason.

Operating under a Memorandum of Agreement from the National Foundation, Brown and Henderson, who assembled and trained a very large technical staff (totaling 35 persons at one period), began to produce and supply an array of national laboratories, including that of Jonas Salk, with HeLa cells. Noteworthy, in April 1953, the Tuskegee Laboratory received the original seed culture of HeLa cells as obtained from Lacks at Johns Hopkins School of Medicine in 1951. Interestingly, socio-politically, if not scientifically, since the growth medium for HeLa cells required human adult serum, at the John Andrew Hospital, there was “a regular time on Sunday to accommodate blood donors who included students at the Tuskegee, Auburn and Alabama State universities, service members stationed at Maxwell Air Force Base, as well as citizens of nearby towns.” Remarkably, by 1954, the Tuskegee laboratory achieved the projected level of production and, thus, was able to provide HeLa cells (routinely shipped via air freight from the Atlanta and Columbus, Ga. and Montgomery, Ala. airports) to the many laboratories participating in the polio vaccine evaluation project. By June 30, 1955, “approximately 600,000 cultures” had been produced and distributed.

Multifaceted in its representation “The Patient, The Project, The Partnership” powerfully portrays the heroic and intellectual work of Brown and Henderson conducted at Tuskegee (Institute) University. Yet, in the aggregate, it exhibits an irony, American-style. To have been the national laboratory of HeLa cell culture in the 1950s, at a time essentially coincident with the discovery of the structure of DNA, one might reasonably expect that, by this date, Tuskegee University would be a, if not, the leading center of cell biology! The fact that such is not the case is rendered ironic, further, by the lack of a substantial amount of physical evidence that the HeLa cell culture laboratory ever existed. This observation is only slightly less troubling than the fact that Tuskegee would become the national site for the culture of Lacks’ immortal cells, three years subsequent to her being subjected to at least one bioethical violation by Johns Hopkins University School of Medicine. Viewing and reflecting on the exhibit sensitizes us to these issues.
The Patient: Henrietta Lacks (née Loretta Pleasant)
Photograph of Henrietta Lacks
Courtesy of the Lacks Family and Crown Publishing, a division of Random House
This HeLa Cell exhibition entitled “The Patient, The Project, The Partnership” encapsulates “her stories” and “histories” highlighting the interrelatedness of the “Immortal Life of Henrietta Lacks” and the work of the Morehouse School of Medicine/Tuskegee University/University of Alabama Comprehensive Cancer Center Partnership (The Partnership) and THE LEGACY MUSEUM at Tuskegee University.

The Patient: The exhibit reveals information about the Virginia-born Henrietta Lacks (née Loretta Pleasant), a black woman with a sixth or seventh grade education, who was a housewife and mother of five. She was not particularly skilled in reading or writing, nor was science a subject she had studied in school. She and her family harvested tobacco in Virginia. When her family moved from Virginia to Maryland, medical issues brought her to Johns Hopkins University Hospital as a cancer patient. Due to the immoral racism of 1951, she fell through the cracks of the medical establishment’s ethical barometer. Cancer cells from her body ultimately became available to the global research community as the infamous HeLa cells. Her “private body” became a “public text.”

Debates, discrepancies and disputes abound from writers weighing in on Lacks’ diagnosis and what is detailed, supposedly, in her medical charts from the university hospital which indicate that she had syphilis, gonorrhea, and multiple copies of HPV-18, which is one of the most virulent strains of the virus — this caused her aggressive cervical cancer called “adenocarcinoma.” Lacks died from this vicious case of cervical cancer. However, before she died, a surgeon took samples of her cancerous tumor (without her permission) and put them in a petri dish. For years, scientists had been trying to keep human cells alive in culture for decades. All eventually died, except Lacks’ cells. Her cells became the first immortal human cells ever grown in a laboratory. Lacks, an underserved minority with cancer, was profoundly an embodiment of health disparity. As a black female of the 1950s with a cancer-ridden body, she suffered the consequences of gender, racial, economic, historical, educational and psychological stigmatization. With no agency or empowerment, with a white medical establishment in control of her body as avowed by black feminist writer Audre Lorde “… she was never meant to survive.” Her heart and brain stopped functioning at 12:15 a.m. on October 4, 1951. Her cells were another matter.

Lacks’ family had neither the knowledge that her cells had entered the public domain, nor were they aware that these cells were being used all over the world for profitable medical and scientific research until 25 years later. Her husband had signed the agreement for a partial autopsy and additional cells were taken for a central HeLa production laboratory with Russell Brown and Henderson six weeks studying cell and tissue culture methods at the University of Minnesota.

In October 1952, H. M. Weaver discussed the need for young black female and male scientists, and funding for other research at the Carver Research Foundation at Tuskegee. For many years, Basil O’Connor, founder and chief administrator of the National Foundation, was chairman of the Board of Trustees of Tuskegee University. His frequent visits to Tuskegee acquainted him with the excellent faculty and facilities at the institution. The selection of Tuskegee to do the HeLa Project may have been influenced by O’Connor’s confidence in the quality of effort and cooperation available at Tuskegee.

In October 1952, H. M. Weaver discussed the need for a central HeLa production laboratory with Russell Brown, director of the Carver Research Foundation. Subsequently, it was agreed that the project would be awarded to Tuskegee and supported by a grant from the National Foundation. Brown was to act as principal investigator (PI) with James Henderson, as co-PI. Weaver arranged for Brown to spend three months and Henderson six weeks studying cell and tissue culture methods at the University of Minnesota under the supervision of Jerome T. Syverton and William F. Scherer.

Another version explaining the Tuskegee selection suggests that Charles Bynum, who worked at the Foundation as director of “Negro Activities,” was the reason. Science teacher and civil rights activist Bynum, the first black foundation executive in the United States, desired Tuskegee because it would provide money for funding Carver Fellows, jobs and training for young black female and male scientists, and funding for other research at the Carver Research Foundation.
Carver Research Foundation.

cells by plane to the Tuskegee (Institute) University
Scherer brought the original seed culture of HeLa
at Johns Hopkins University Hospital. In April 1953,
HeLa cell line, which he obtained from George Gey
vided Tuskegee with the original seed culture of the
F. Scherer, from the University of Minnesota, pro-
University Archives at Tuskegee indicate that William
Brown and James H. Henderson exhumed from the
mission was given to George Gey. Notes from Russell
sue biopsy obtained surreptitiously and without per-
ted one from her healthy cervical tissue nearby. This tis-
ton, Jr., the surgeon on duty for Lacks, shaved two
dime-sized pieces of tissue, one from her tumor and
one from her healthy cervical tissue nearby. This tis-
sue biopsy obtained surreptitiously and without per-
mission was given to George Gey. Notes from Russell
Brown and James H. Henderson exhumed from the
University Archives at Tuskegee indicate that William
F. Scherer, from the University of Minnesota, pro-
vided Tuskegee with the original seed culture of the
HeLa cell line, which he obtained from George Gey
at Johns Hopkins University Hospital. In April 1953,
Scherer brought the original seed culture of HeLa
cells by plane to the Tuskegee (Institute) University
Carver Research Foundation.

This version is consistent with a reliable eyewitness
this writer spoke to in preparing for the exhibit. An
individual who was very knowledgeable about the
flourishing HeLa cell project and its unfolding, Dr.
Eugene Adams, Professor Emeritus, School of Vet-
inary Medicine, confirms the altruism of Brown and
Henderson. What trumps both these versions is that
Tuskegee University may have had a connection with
Jonas Salk through his wife, Donna Lindsay Salk. That
connection may further explain Tuskegee’s selection.

This exhibit conveys the importance of the ground-
breaking, historic role of Tuskegee University in the
production and distribution of HeLa cells. It address-
es Tuskegee’s role in the HeLa cell narrative. It should
be noted that Tuskegee had nothing to do with ob-
taining, by biopsy, the tissue from Henrietta Lacks.
The HeLa cell line was isolated at Johns Hopkins
University Hospital on Feb. 8, 1951. George Gey
brown and his wife Margaret had worked for three decades at-
tempting to grow malignant cells outside the body.
George Gey was head of tissue culture research at
Johns Hopkins University and he took any cells he
could get his hands on. According to Rebecca Skloot
in “The Immortal Life of Henrietta Lacks,” Dr. Richard
Wesley TeLinde, a nationally recognized cervical can-
cer specialist, often used patients from Johns Hop-
kins University Hospital’s public wards for research,
usually without their knowledge. Dr. Lawrence Whar-
ton, Jr., the surgeon on duty for Lacks, shaved two
dime-sized pieces of tissue, one from her tumor and
one from her healthy cervical tissue nearby. This tis-
sue biopsy obtained surreptitiously and without per-
mission was given to George Gey. Notes from Russell
Brown and James H. Henderson exhumed from the
University Archives at Tuskegee indicate that William
F. Scherer, from the University of Minnesota, pro-
vided Tuskegee with the original seed culture of the
HeLa cell line, which he obtained from George Gey
at Johns Hopkins University Hospital. In April 1953,
Scherer brought the original seed culture of HeLa
cells by plane to the Tuskegee (Institute) University
Carver Research Foundation.

Brown and Henderson discovered that HeLa cells
were temperature sensitive. The extreme tempera-
tures of summer and winter were hazardous to the
shipment of the cell cultures and the shipping agen-
cies were alerted to this issue. From April to Septem-
ber, one or two cans of Equitherm (sodium sulfate
decahydrate) were placed in each package as an
aid in keeping the temperature of the cultures be-
low 36° C. The shipping container was a heavy-duty
cardboard box lined with fiberglass-aluminum sheet
insulation, and with cardboard separators to avoid
breakage and to keep the cultures upright. When the
package was closed, it was made airtight with heavy-
duty gummed tape and securely wrapped. Packages
were taken directly to Columbus, GA or to Montgom-
ery, AL, airports in time for prearranged regular air
express flights with the most favorable long distance
connections. The airlines were extremely cooperative
in adjusting their shipping standards to accommodate
the varying packaging sizes.

Half a century has elapsed since 1951 when Henrietta
Lacks’ “brain and heart stop functioning” and when
the partnership was founded in 2001. And many sci-
entific advances could be credited to the use of HeLa
Cells. In 1954, Microbiological Associates, Inc. began
mass-producing Lacks’ cells in a former Fritos facto-
ry in Bethesda, MD. Since then, more than 50 metric
tons of her cells have been produced and distributed
globally.

**The Partnership**: The Morehouse School of Medicine/
Tuskegee University/University of Alabama Com-
prehensive Cancer Center Partnership uses eight (8)
components for implementing its work. These in-
teractive working components include: (1) Scientific
Research, (2) Research Training and Career Devel-
ment, (3) Cancer Education, (4) Community Out-
reach, (5) Recruitment, (6) Planning and Evaluation,
(7) Biostatistics, and (8) Bioethics. The partnership’s
necessity and importance in addressing ethical issues
such as the ones raised by Johns Hopkins University
Hospital’s treatment of Lacks and her family by hospi-
tal staff and doctors cannot be overstated. The HeLa
Cell exhibit is a bioethical “trigger tool” mounted as a
part of an immersion experience designed to engage
emotions, stimulate observation and reflections of
all viewers including potential research subjects, and
particularly human research investigators, research
administrators, and IRB members. Viewers should see
**The LEGACYMUSEUM** exhibit, “The Patient, The Proj-
ect, The Partnership” as an experiential opportunity
to develop empathy with and respect for not only
those who participate in research, but those whose
place in society may be very different from their own.
A full engagement with the total immersion experi-
ence should help researchers: to anticipate the kind
of ethical issues their research might raise, to exam-
ine these issues, and to critically reflect on how they
plan to resolve them.
Timothy Turner, professor of biology, is the deputy director of research and training in the Tuskegee University National Center for Bioethics in Research and Health Care, program director of the Center for Biomedical Research/Research Centers at Minority Institutions, and the lead principal investigator for the MSM/TU/UAB CCC Partnership. Turner received his B.S. degree in biology from Jackson State University, Jackson, MS. His cancer research career started at the University of California, Berkeley where he received his Ph.D. in endocrinology and tumor biology. His research interests focus on identifying and disrupting signaling mechanisms involved in the progression of prostate cancer to its invasive and metastatic stages. Within this approach, his lab has utilized luteinizing hormone releasing hormone receptors as the tumor target for the delivery of cancer drugs to prostate cancer cells. Turner believes this approach will ultimately provide clinically relevant anti-cancer therapies that limit the side effects of drug interactions with normal cells. In addition to his administrative, research and teaching obligations, he is responsible for the training, advising and mentoring of graduate and undergraduate students in his laboratory. In connection with these interests, Turner’s major focus is to increase biomedical and cancer research ongoing at Tuskegee University to promote the reduction of health disparities affecting African-Americans.

Roberta Troy, associate professor of biology, is the founding director of the Tuskegee University Health Disparities Institute for Research and Education and co-principal investigator (Co-PI) for the MSM/TU/UAB CCC Partnership. She also oversees the Tuskegee component of the research training and career development and cancer education cores. She most recently served as Tuskegee’s interim provost and director of the SACS-required Quality Enhancement Plan. Her other leadership positions include assistant provost for undergraduate studies, head of the Department of Biology, and chair of the Faculty Senate. With a primary interest in mentoring students, Troy has used her own research to propel students into science and medical careers. Her cancer research focus has been on examining the chemo-preventive and -therapeutic effects of natural products on breast and cervical cancer cells in African-American women. Troy has studied the mechanisms of invasion and metastasis in cancer progression. She received both the B.S. and the M.S. degrees in biology, and was awarded the Ph.D. in biochemistry and molecular biology from the University of Florida.

Stephen Olufemi Sodeke, professor of allied health, is a bioethicist at the Tuskegee University National Center for Bioethics in Research and Health Care (the Center). He has served as associate and interim director of the Center at various times during the last nine years. Sodeke provides intellectual leadership to the programmatic mission of the Center and engages various communities in ethical decision-making. He has also been the lead bioethicist for the MSM/TU/UAB CCC Partnership for the past six years providing: bioethics teaching, research, scholarship and grant writing regionally and nationwide. He is the principal investigator for the NIH grant supporting this First Bioethics Conference on Cancer Health Disparities Research. His research interests include: using experiential learning, literature and art as narrative imaginations into ethical questions to teach bioethics; community and cross-cultural bioethics; health and human rights; ethical issues in health and health outcomes disparities, and in research with vulnerable populations in the developed and the developing world. Sodeke currently chairs the Institutional Review Board. He serves as special government expert on the DHHS Secretary’s Advisory Committee for Human Research Protections, and is resource expert for Bioethics Beyond Borders.
Dr. Daniel S. Blumenthal is the lead principal investigator for the MSM/TU/UAB CCC Partnership. He is a graduate of Oberlin College and the University of Chicago School of Medicine. He completed his residency in pediatrics at Charity Hospital of New Orleans (Tulane Division) and received his master of public health degree from Emory University. Blumenthal is board-certified in both pediatrics and preventive medicine.

He served as a VISTA volunteer physician in Lee County, AR; as an epidemic intelligence service officer with the Centers for Disease Control and Prevention in Atlanta; and as a medical epidemiologist with the World Health Organization Smallpox Eradication Program in India and Somalia. He was on the faculty of the Emory University School of Medicine and has been at Morehouse School of Medicine since 1980, where he served as chair of the Department of Community Health and Preventive Medicine from 1984 to 2009. He is currently associate dean for community health.

He has served as president of the Association of Teachers of Preventive Medicine, as a regent of the American College of Preventive Medicine, as a member of the Governing Council of the American Public Health Association, as Fulton County (Atlanta) Health Officer, and as a Robert Petersdorf Scholar-in-Residence at the Association of American Medical Colleges.

He is a recipient of the Georgia Public Health Association’s Sellers-McCroan Award “for outstanding achievement and service to Georgia in public health.” He was named the Outstanding VISTA Volunteer of the 1960s. He received a “Shining Light” Award from the Georgia Association for Primary Health Care and the Leonard Tow Humanism in Medicine Award from Morehouse School of Medicine. He was the 2010 recipient of the Duncan Clark Award from the Association for Prevention Teaching and Research, the association’s highest award.

E. Shyam P. Reddy, co-principal investigator for the MSM/TU/UAB CCC Partnership, is a professor and co-director of the Cancer Biology Program in the Department of Obstetrics and Gynecology at Morehouse School of Medicine. He is also the Georgia Cancer Center Distinguished Cancer Scholar. Reddy’s research focus is on identifying the function of oncogenes and targeting the oncoproteins and their functions to develop novel targeted therapeutic agents. ERG and human FLI-1 oncogenes, discovered by Reddy, are involved in 50-60 percent of prostate cancers and 90 percent of Ewing sarcomas respectively. Both of these cancers show a disparity among minorities. Using function based therapeutic strategy, Reddy’s team has developed several novel targeted therapeutic agents that target prostate, Ewing Sarcoma, breast (triple negative breast cancer), pancreatic cancer, ovarian, and colorectal cancers. They plan to reduce cancer health disparities seen among minorities by developing targeted therapeutic agents. Reddy participated as a research pilot project principal investigator in both the U56 (2003 to 2007) and U54 Partnership grants (2007 to 2011). He has mentored several junior faculty, postdoctoral fellows and graduate students within the U54/U56 Partnership pilot projects. In addition, he has mentored U54 Partnership Summer Institute undergraduate students from Tuskegee University who rotated in his laboratory.
The Morehouse School of Medicine/Tuskegee University/University of Alabama Comprehensive Cancer Center Partnership: An Introduction to a decade-long collaboration

Upender Manne, professor of pathology and an associate scientist of the cancer control and prevention program of the University of Alabama at Birmingham Comprehensive Cancer Center, is the lead principal investigator for the MSM/TU/UAB CCC Partnership. He is also an associate scientist of the Minority Health Disparities Research Center and the co-head of the program in translational research in Neoplasia in the Department of Pathology. For more than 17 years, his research has centered in the areas of tumor molecular biology; cancer genetics; discovery and validation of cancer biomarkers (early detection, risk, prognostic, and predictive); and racial/ethnic disparities in the biology, genetics, epidemiology, and pathology of human malignancies. His studies, which relate to the heterogeneity of cancer, have assessed how admixtures of patient populations with different race/ethnic backgrounds influence cancer outcomes. The results show that consideration of patient race/ethnicity is clinically relevant. In 2009, he was invited by the Presidents Cancer Panel to deliver a lecture on how racial/ethnic admixtures affect the findings of molecular biomarker studies relating to cancer outcomes.

Manne is currently serving on the External Advisory Committee of the Tuskegee University Research Infrastructure in Science and Engineering (RISE) grant, funded by the National Science Foundation.

Dr. Mona Fouad, professor of medicine and director of the Division of Preventive Medicine, is the founding director of the UAB Minority Health and Health Disparities Research Center. Fouad is a national leader in health disparities research and a member of the NIH National Advisory Council on Minority Health and Health Disparities. She is principal investigator of the NIH P60 Comprehensive Minority Health and Health Disparities Research Center and for the UAB Minority Screening Center of the NCI-funded Prostate, Lung, Colorectal, Ovarian Cancer Screening Trial and the National Lung Screening Trial. She is also the principal investigator for the CDC-funded center entitled, Racial and Ethnic Approaches across the U.S. (REACH U.S.) Mid-South Center of Excellence in the Elimination of Disparities, a model that serves regionally and nationally evidence-based interventions to reduce breast and cervical cancer disparities between African-American and white women. Fouad has also played a prominent leadership role in the merging of efforts with UAB and Historically Black Colleges and Universities to train minority researchers to eliminate health disparities, serving as a co-principal investigator for the NCI-funded MSM/TU/UAB CCC Partnership and is responsible for the training and career development of minority students and faculty within the Partnership to enhance their research capabilities. Through these efforts, Fouad is making an enormous contribution to the next generation of leaders in the fight against health disparities.

In addition to being principal investigator of the Deep South Network for Cancer Control, he has the knowledge and experience with community-based participatory and prevention and control research. All of the above grants are large complex programs requiring excellent leadership ability.

In addition, Partridge directed the Division of Gynecologic Oncology and has been actively involved in the American College of Surgeons, serving as chair of the Commission on Cancer in 1993. He is currently president of the National Board of Directors, American Cancer Society.

Partridge currently serves as director of the UAB Comprehensive Cancer Center, professor of obstetrics and gynecology, and holds the Evalina B. Spencer Endowed Chair in Oncology. His clinical interests are cancer control and prevention; cervical cancer; community based research; gynecologic oncology; minority health disparities; and ovarian cancer.

Upender Manne, Ph.D.
Lead Principal Investigator
Morehouse School of Medicine/Tuskegee University/University of Alabama at Birmingham Comprehensive Cancer Center Partnership

Mona Fouad, MD, MPH
Co-Principal Investigator
Morehouse School of Medicine/Tuskegee University/University of Alabama at Birmingham Comprehensive Cancer Center Partnership

Dr. Edward E. Partridge
Co-Principal Investigator
Morehouse School of Medicine/Tuskegee University/University of Alabama at Birmingham Comprehensive Cancer Center Partnership

Dr. Edward E. Partridge serves as co-principal investigator for the MSM/TU/UAB CCC Partnership. He has experience in translational and clinical research having served as principal investigator for the UAB SPORE in ovarian cancer, and now as principal investigator for the UAB component of the Cervical Cancer SPORE (with Johns Hopkins University).
In March 2000, the National Cancer Institute (NCI) sponsored an informational workshop to promote three new initiatives (the P20, U56, and U54) directed at increasing the cancer research presence and infrastructure at minority-serving institutions (MSIs), and enhancing the ability of NCI-designated Comprehensive Cancer Centers (CCCs) to better conduct cancer disparity research through the development of mutually beneficial partnerships. Investigators from MSIs and NCI-designated CCCs attended this workshop to seek potential partners to respond to one or more of these initiatives. At this particular workshop, during a working lunch breakout session, Tuskegee University representatives (Roberta Troy and Timothy Turner) met with the representatives from the University of Alabama at Birmingham (Ed Partridge and Earl Sanders) and had constructive dialogue about the formation of a P20 partnership. The P20’s focus was on initiating feasibility studies for collaborative interactions between MSIs and CCCs. Since UAB had a U56 partnership with Morehouse School of Medicine, these discussions not only addressed the P20 partnership, but also envisioned our current U54 comprehensive three-way partnership, whose essential core elements were mapped out at this meeting on a napkin. Those very concepts and ideas written on a napkin turned out to be the defining foundation of this 10-year partnership.

The tripartite partnership between the Morehouse School of Medicine, Tuskegee University, and the UAB Comprehensive Cancer Center was built on two established joint partnerships: a U56 grant between Morehouse School of Medicine and the UAB Comprehensive Cancer Center and a P20 grant between Tuskegee University and the UAB Comprehensive Cancer Center. Although the partnership was initially functioning under two separate mechanisms, the three partners have been effectively engaged as a tripartite unit from the inception of the P20 grant in 2001. In 2005, the existing three-way partnership was officially formalized via a U54 grant, and designated as the Morehouse School of Medicine/Tuskegee University/UAB Comprehensive Cancer Center (MSM/TU/UAB CCC) Partnership (the Partnership).

The Partnership has eight components: (1) scientific research, (2) research training and career development, (3) cancer education, (4) community outreach, (5) recruitment, (6) planning and evaluation, (7) biostatistics, and (8) bioethics. Biostatistics and bioethics serve as shared resources within the Partnership. From its initiation, the Partnership has seen the importance of having a bioethical and ethical compass to guide it in every facet of its makeup. Thus, the one key component that has assured its longevity and productivity, as well as allowed it to endure and progress through its growing pains, has been the Bioethics Shared Resource (BESR). This shared resource has been guided by the ethical and bioethical expertise and conscience of the Tuskegee University National Center for Bioethics in Research and Health Care (the Center). The importance of the Center was seen from the start and therefore built into the fabric holding together the Partnership itself. The Center has stressed the importance of mutual respect and open communication by all members of the three institutions in establishing and maintaining trust, respect, and open lines of communication. The BESR group foresaw the challenges of communicating in such a complex research partnership, and planned for and monitored interactions to enhance benefits and avoid harm. Noting that while effective communication is critical to the achievement of mutual goals, an understanding and prudent use of proven communication principles is a sine qua non for success.

The Partnership has employed various means to confront the difficulty of communicating the logistics of its work; the HeLa Cell Exhibit and dramatic presentation that are part of this important conference are ways to trigger constructive dialog of the importance of bioethical principles in the work done among all involved or interested in cancer health disparities.
Partnership members attending one of their annual Program Steering Committee Meetings that was held at Tuskegee University in 2009. Members are: First Row—Vivian Carter, Stephen Sodeke, Maria Pisu, Rebecca Cabrea, Roberta Troy and Timothy Turner. Second Row—William Grizzle, Daniel Blumenthal, Michelle Martin, Barbara Howard, Nedra Lisovicz, Nichole Powell, Chiquita Lee and Selina Smith. Third Row—Don Hill, Shyam Reddy, Mona Fouad and Veena Rao. Fourth Row—Edward Partridge, Deli Wang, Harvey Bumpers, Adelia Bovell-Benjamin and Fifth Row—Elvan Daniels
Russell Wilfrid Brown, born Jan. 17, 1905 to John D. Brown and Lizzie Saulsby Brown in Gray, LA, received the Bachelor of Science degree from Howard University in 1926. Brown began teaching at Rust College as an instructor of biology (1930-31). He earned a Master of Science degree from Iowa State University in 1932 and married the former Mildred McConnell. McConnell was from Taft, OK. Mildred McConnell Brown received her Doctor of Philosophy degree and was professor of physical education at Tuskegee (Institute) University.

Russell Brown became assistant professor of bacteriology at Langston University (1932-33) and then Tuskegee (Institute) University (1933-34). He returned to Iowa State University as a research fellow and assistant, where he received the Doctor of Science degree in 1936. Upon completion of his degree, Brown was again named to the faculty of Tuskegee (Institute) University, but before assuming his duties at that institution he spent a year as a senior post-doctoral fellow at Yale University School of Medicine. After his return to Tuskegee, Brown rose through the ranks of administrative posts while continuing to teach and do research. He was appointed head of the Department of Bacteriology (1936-42), head of the Department of Natural Sciences (1942-46), director of the Carver Research Foundation (1944-57), vice president and dean of graduate programs (1946-62) and then as vice president (1968-70), 1970-1976 he was professor of microbiology, School of Medical Sciences, University of Nevada at Reno. He returned as interim director of the Carver Research Foundation (1976-79). He also spent time as a distinguished professor of microbiology at the School of Medical Sciences, University of Nevada at Reno. Brown was a member of the National Institute of Science, serving as its president, and a member of the Southern Branch of the Society of Microbiology. He also served as chairman of the Board of Trustees of Stillman College. Brown is credited with the invention of the viral impinger, which is used to inject foreign matter into a cell. He was a member of Phi Beta Kappa.

Brown died on July 29, 1985. He is buried at Greenwood Cemetery in Tuskegee, AL.

The Hela Cell Project: In 1952, Tuskegee (Institute) University was selected to carry out the HeLa cell culture project because of the outstanding work of two scientists, Russell Brown and James Henderson. This project was the first successful attempt to culture cells of human origin on a massive scale for nationwide distribution. The cells distributed were used to measure antibody responses in the evaluation of the field trial of the Salk vaccine for polio. Tuskegee (Institute) University’s HeLa project established that it is feasible to mass produce cultures of animal cells and was indeed the forerunner of the current commercial biomedical production of cells, globally. HeLa and other cell strains continue to be used by biomedical researchers world wide.
James H.M. Henderson

James H.M. Henderson was born Aug. 10, 1917 to Edwin Bancroft Henderson and Ellen Meriwether in Falls Church, VA. He received the Bachelor of Science degree from Howard University in 1939. He earned a Master of Science degree from the University of Wisconsin in botany, aided by a work assistantship. He went on to receive an MPH in plant physiology, and later a Ph.D. in June 1943.

In the summer of 1948, Henderson and Betty Alice Francis were married. That same year, he worked as a postdoctoral fellow with James Bonner at the California Institute of Technology.

In 1950, Tuskegee Institute offered Henderson an appointment as research associate professor in biology and a $10,000 grant from the American Cancer Society to do research in plant physiology, especially as it related to plant cancer. With this offer, Henderson, for the next 50 years, was affiliated with Tuskegee in both teaching and research.

Dr. Henderson, who was a member of Phi Beta Kappa, began in 1953 the HeLa cell project with Dr. Russell Brown, who was also, a member of Phi Beta Kappa. In April, Dr. William F. Scherer, HeLa Project Consultant, brought a culture of HeLa cell to Tuskegee. Beginning May 11, 1953, experimental shipments of cells were sent to Scherer and occasional shipments to Jonas Salk at the University of Pittsburgh. The objective was to develop the capacity to ship at least 10,000 cultures per week, beginning June 1, 1953.

Renovation of the area in the Carver Research Foundation building assigned to the HeLa project and installation of major items of equipment were accomplished in record time and the laboratory for Henderson and Brown was exceptional.

In February, 1954 the laboratory of Drs. Henderson and Brown achieved the projected level of production; it was then possible to supply the requirements of the many laboratories participating in the polio vaccine evaluation program. From April 1 through September 30, 1954. Approximately 133,000 tube cultures and 1800 bottle cultures of HeLa cells were sent from Tuskegee laboratories to 23 cities throughout the United States. By June 30th 600,000 cultures had been sent. In 1955, the first effective vaccine against polio was used.

In 1957, Henderson became head of the Department of Biology. In 1968, he was appointed the director of the George Washington Carver Foundation and held this position until 1975. The second foundation director, Austin Curtis, served only a year and in 1976 was succeeded by Russell W. Brown, who had recruited Henderson to come to Tuskegee. Brown served as interim director of the Carver Foundation until 1979.

In 1978, he directed the Research Education Apprenticeship Career in Health Opportunities for University Training (REACH-OUT) funded by NIH. Between 1988 and 1994, this program engaged approximately 150 students in biomedical research, many of whom went on to college to receive undergraduate and graduate training in the biomedical fields.

ENHANCES, a program funded by the Howard Hughes Medical Institute in 1989, was directed by Henderson and offered opportunities in the sciences to talented high school students.

In May 1988, he married Gwendolyn Persley Kenney. They were married for 10 years. During his final years at Tuskegee, Henderson changed his emphasis from training students in research to mentoring and promoting African-American students to acquire college degrees in the sciences and postgraduate positions and careers.

Henderson died on Dec. 3, 2009. His ashes were interred at his family home in Highland Beach, MD.
AFTERWORD

From the Tuskegee University National Center for Bioethics in Research and Health Care, I bring greetings to all conference attendees and to those who will view the HeLa Cell Exhibit “The Patient, The Project, The Partnership” long after the conference is over. The HeLa Cell exhibit is a tribute to Henrietta Lacks whose cells were harvested and cultured without permission from her cancer biopsy. The cells possessed innate characteristics that researchers globally have exploited to benefit humanity. For this very reason, the exhibit serves as an expression of our long-overdue gratitude to the Lacks Family, and as a monument orchestrated to provide consolation to humanity.

As you well know, the HeLa Cell exhibit is only one of the “trigger tools” we are using during this one-of-a-kind conference to engage attendees in a series of planned experimental and experiential learning opportunities. We mount the exhibit specifically to increase awareness, raise consciousness and stimulate sensitivity to the enduring bioethical issues of doing human subjects research. These issues are generated by the nature of scientific work globally, and by all that is done or not done by the local, state, federal officials, institutional administrators, and the research community to facilitate human research in general, but particularly cancer health disparities research. It is our hope that you have permitted yourself to observe closely, reflect deeply, converse openly, and will share your diverse reflections with us such that our collective wisdom will make all of us bioethically richer than we would otherwise have been in our efforts to serve humanity.

With this important event, we “celebrate scholars ethically working to reduce cancer health disparities.” We are thankful to you for sharing your scholarly and outstanding work with us. We will share the compilation widely with the research community and the public through a publication of the proceedings of this conference in a professional journal.

I want to commend the steering committee, composed of MSM/TU/UAB CCC Partnership members and leaders, for their hard work in making the total immersion experience possible. Each person contributed to the success of the team. We recognize with deep regard and respect the dedicated commitment, creative work, energy, tireless efforts and leadership of Stephen Olufemi Sodeke and Timothy Turner who secured the grant for the conference. I commend Jontyle Robinson, curator of The Legacy Museum, who diligently worked to make ideas on paper come alive brilliantly.

Hopefully, this has been an enjoyable and transforming experience for you! Do feel free to stay connected with us; and, help us spread the word about the HeLa Cell exhibit.
Operation of THE LEGACYMUSEUM is shared by two individuals, the curator, Dr. Jontyle Robinson and Office Manager, Myrtis Morris. I would like to express my sincere gratitude to Ms. Morris for her assistance with this very, very, very ambitious exhibition. I am also indebted to her for her preliminary layout and design of this brochure and the layout of the Timeline used for the exhibition. (JTR)

Juanita Roberts, Director of Library Services, Tuskegee University
Dr. Eugene Adams, Professor Emeritus, Tuskegee University School of Veterinary Medicine
Alex Fiorentino, Program Coordinator, Koch Public Galleries, The David H. Koch Institute for Integrative Cancer Research at MIT
Dr. John W. Williams, III
Dr. Richard A. Long
Carol Bodas, Manager, Library Services, The Salk Institute
Rebecca Skloot, Author; Miriam Feuerle, The Lyceum Agency; Renee Coale, assistant to Ms. Skloot; Emma Shafer and Penny Simon, Random House Publications
Tony Daniels, IT Infrastructure Manager, Tuskegee University
Linda H. Cade, Graphic Artist, Tuskegee University Veterinary Medicine
Dana Chandler, University Archivist
Roderick Wheeler, University Archives
Cheryl Ferguson, University Archives
Erick Butler, Sr., University Archives
Lanice Middleton, University Archives
Chiquita Lee, Tuskegee University Program Manager, MSM/TU/UAB CCC Partnership
Diane Kenney and Linda Kenney Miller, granddaughters of Dr. John A. Kenney
Dr. Stephen Sodeke
Dr. Nedra Lisovicz, University of Alabama at Birmingham Comprehensive Cancer Center Program Manager, MSM/TU/UAB CCC Partnership
Dr. Daniel Blumenthal, Professor, Community Health, Morehouse School of Medicine, Lead PI, MSM/TU/UAB CCC Partnership
Dr. Timothy Turner, Professor of Biology, Tuskegee University, Lead PI, MSM/TU/UAB CCC Partnership
Rebecca Cabrera, Morehouse School of Medicine Program Manager, Lead PI, MSM/TU/UAB CCC Partnership
Ann Smith, Program Manager, Research Training Program, MSM/TU/UAB CCC Partnership
Dawn Fizer, University of Alabama, Birmingham
Dominique Davis, Brea Hilliard, Maurice Barnard, Sr., William Truss, Lauren Bales, Jessica Warbington, Courtney Bryant, Morgan Walton, and Jasmine Stansberry
Tuskegee University students workers and volunteers for THE LEGACYMUSEUM
Johnny Morgan, Head Painter and Charlie Snipe, Assistant Painter
Erick Kidd, General Maintenance and Museum Design Construction
Prajjon Nicolle Robinson, always patient, poised, positive, and productive daughter of Praylor Robinson and Jontyle Robinson
McQuick Printing, Montgomery, AL
Gary Super, Exhibition Designer, Michael Gokey and Nancy Roberts, Assistants
Jean Belt and Keven Belt Corporate Art Source
Dr. Gregory Pritchett, Chair, Department of Chemistry
Deborah L. Long, Project Manager, Producer Executive AARP
Cassandra P. Cooper, Tuskegee University Webmaster, Office of Communications, Public Relations and Marketing

Brock, Dan W. *Broadening the Bioethics Agenda.* Kennedy Institute of Ethics Journal, Volume 10, Number 1, March, 2000, pp. 21-38.


Centers for Disease Control and Prevention Report on Findings from the U.S. Public Health Service Sexually Transmitted Disease Inoculation Study of 1946-1948, Based on Review of Archived Papers of John Cutler, MD, at the University of Pittsburgh, 29 September, 2010.


http://coloncancer.about.com/od/glossaries/g/Adenocarcinoma.htm

http://cervicalcancer.about.com/od/glossary/g/cervix def.htm

http://www.itsyoursexlife.com/gyt/std-low-down-text-only-version/


Landecker, Hannah “Seeking Cellvation ©: HeLa Cells and Immortality” Working Paper Number 25, Program in Science, Technology, and Society 1996 Massachusetts Institute of Technology Supported by Social Science and Humanities Council of Canada


Scherer, William F. and Russell Brown, *Transportation of Human Cells Cultured In Vitro* (Aided by grants from National Foundation for Infantile Paralysis) Proceeding of the Society for Experimental Biology and Medicine, 1956 (92) 82-84


HeLa cell: One of the cells grown from the cervical cancer of a young African-American woman, Henrietta Lacks. HeLa cells were the first human cells to be continuously grown in culture. The cells were first cultured in February 1951 by George and Margaret Gey at Johns Hopkins University Hospital in Baltimore, Md. The cells appear “immortal” and are still used in medical research today.

Who owns those cells? For many years, Lacks’ children have sought recognition of their mother’s contribution to science. The designation “HeLa” was taken from the name of Henrietta Lacks.

Cervix
The lower portion of the uterus that attaches to the top part of the vagina. It is approximately two inches long and is tubular in shape.

The cervix dilates (widens) during child birth to allow the passage of a baby. It also allows the passage of menstrual fluid from the uterus. Sperm also need to travel through the cervix to reach the uterus.

Adenocarcinoma
“Adeno-” is a prefix that means “gland.” In general, glands secrete things and are classified as endocrine or exocrine. Endocrine glands secrete things into the bloodstream, like hormones. Exocrine glands secrete things that go outside of the body, like mucus and sweat.

The word “carcinoma” means a malignant tumor that starts in epithelial tissue. Put the two words together and you get “adenocarcinoma,” which means a malignant tumor in epithelial tissue, specifically in a gland. Adenocarcinomas account for about 90-95 percent of all colorectal cancers.

What is HPV?
Human papillomavirus is viral infection with over 40 types that can infect the genitals, anus, or throat, including HPV types that cause warts and cancer.

How many people get HPV in the U.S.?
More than 50 percent of sexually active people will get HPV at some point in their lives. An estimated 6 million new cases occur each year, with at least 20 million people already infected.

Testing and Vaccinations
All women should get screened for cervical cancer (Pap test) starting at age 21. HPV vaccines for males and females can protect against some of the most common types of HPV. It is best to get all three doses (shots) before becoming sexually active. See a health care provider if you think you may have genital warts.

Symptoms
Most infected people have no symptoms. But some HPV types can cause genital warts-- small bumps in and around the genitals (vagina, vulva, penis, testicles, and anus, etc.). If they do occur, warts may appear within weeks or months of having sex with an infected partner. Cancer-causing HPV types do not cause symptoms until the cancer is advanced.
**Possible consequences if HPV is left untreated**

Genital warts will not turn into cancer over time, even if they are not treated. Babies born to women with genital warts can develop warts in the throat. Cancer-causing HPV types can cause cervical cancer and other less common cancers (like anal cancer) if the infection lasts for years. Cervical cancer is rare in women who get pap smears.

**How is it passed on?**
Through vaginal, oral, or anal sex. It can also be passed on during skin-to-skin sexual contact, and in rare cases, from mother to child during childbirth.

**HPV treatment**
There is no cure for HPV (a virus), but there are ways to treat HPV-related problems. For example, warts can be removed, frozen off, or treated through topical medicines. Even after treatment, the virus can remain and cause recurrences (warts come back).

**What is gonorrhea?**
Gonorrhea is a sexually transmitted disease (STD). Gonorrhea is caused by Neisseria gonorrhea a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.

**How common is gonorrhea?**
Gonorrhea is a very common infectious disease. CDC estimates that more than 700,000 persons in the U.S. get new gonorrheal infections each year. Less than half of these infections are reported to CDC. In 2009, 301,174 cases of gonorrhea were reported to CDC.

**How do people get gonorrhea?**
Gonorrhea is spread through contact with the penis, vagina, mouth, or anus. Ejaculation does not have to occur for gonorrhea to be transmitted or acquired. Gonorrhea can also be spread from mother to baby during delivery. People who have had gonorrhea and received treatment may get infected again if they have sexual contact with a person infected with gonorrhea.

**Who is at risk for gonorrhea?**
Any sexually active person can be infected with gonorrhea. In the United States, the highest reported rates of infection are among sexually active teenagers, young adults, and African-Americans.

**What are the complications of gonorrhea?**
Untreated gonorrhea can cause serious and permanent health problems in both women and men.

In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). About 750,000 women each year in the United States develop PID. The symptoms may be quite mild or can be very severe and can include abdominal pain and fever. PID can lead to internal abscesses (pus-filled “pockets” that are hard to cure) and long-lasting chronic pelvic pain. PID can damage the fallopian tubes enough to cause infertility or increase the risk of ectopic pregnancy. Ectopic pregnancy is a life-threatening condition in which a fertilized egg grows outside the uterus, usually in a fallopian tube.
In men, gonorrhea can cause epididymitis, a painful condition of the ducts attached to the testicles that may lead to infertility if left untreated.

Gonorrhea can spread to the blood or joints. This condition can be life threatening. In addition, people with gonorrhea can more easily contract HIV, the virus that causes AIDS. HIV-infected people with gonorrhea can transmit HIV more easily to someone else than if they did not have gonorrhea.

**What is the treatment for gonorrhea?**

Antibiotics can successfully cure gonorrhea in adolescents and adults. However, drug-resistant strains of gonorrhea are increasing in many areas of the world, including the United States, and successful treatment of gonorrhea is becoming more difficult. CDC now recommends dual therapy (i.e. using two drugs) for the treatment of gonorrhea. Persons with gonorrhea should be tested for other STDs.

It is important to take all of the medication prescribed to cure gonorrhea. Although medication will stop the infection, it will not repair any permanent damage done by the disease. People who have had gonorrhea and have been treated can get the disease again if they have sexual contact with persons infected with gonorrhea. If a person's symptoms continue even after receiving treatment, he or she should return to a doctor to be reevaluated.

**What is syphilis?**

Signs and symptoms of syphilis include a firm, round, small, and painless sore (chancre) on the genitals, anus, or mouth, or a rash on the body, especially on the palms of the hands or the soles of the feet. In the primary stage, syphilis chancre appear in the place where the syphilis bacteria entered the body. On average, this will be 21 days after sexual contact with an infected person. The chancres take between two and six weeks to heal. If the infection is not treated, then it will progress to the secondary stage. The secondary stage will appear from three to six weeks after the appearance of chancres. Symptoms often include a flu-like illness, a feeling of fatigue and loss of appetite, accompanied by swollen glands (this can last for weeks or months); a non-itchy rash covering the whole body or appearing in patches; flat, warty-looking growths on the vulva in women and around the anus in both sexes; white patches on the tongue or roof of the mouth; patchy hair loss. During this stage syphilis is very infectious and may be sexually transmitted to a partner. These symptoms will usually clear up within a few weeks, but may re-occur for years. Treatment at any time during the first two stages of syphilis will cure the infection. The final stages, latent or tertiary, occur in about one third of those who are not treated. Many organs are affected. Common symptoms include fever, painful, non-healing skin ulcers, bone pain, liver disease, and anemia. This stage can also affect the nervous system (resulting in the loss of mental functioning) and the aorta (resulting in heart disease). Syphilis has not been eradicated. You can still become infected with syphilis and it is a “gateway” for HIV/AIDS.

Information in the Glossary and Medical Resources is pulled from two websites, www.itsyoursexlife.com/ and www.cdc.gov/
THE LEGACY MUSEUM

Address:
Benjamin Payton Drive
Tuskegee University, AL 36083

Phone: 334-727-8889
Fax: 334-725-2400
Email: legacymuseum@mytu.tuskegee.edu

Parking:
There is ample visitor parking surrounding the museum at no charge.

Museum Admission:
Free and open to the public.
Suggested donation is $3 per person.
All contributions are welcome.

Directions to the Museum:

By Car:
From Montgomery, AL: I-85 to exit 32
From Mobile, AL: I-65 North to I-85 North to exit 32
From Atlanta, GA: I-85 South to exit 38

By Air:
Montgomery, AL: Dannelly Field Airport
Columbus, GA: Columbus Metropolitan Airport
Dothan, AL: Dothan Airport
Atlanta, GA: Hartsfield-Jackson International Airport

By Train:
Take Amtrak to Anniston, Birmingham, or Tuscaloosa, AL and then to Tuskegee by car, taxi or bus

Accommodations:
Kellogg Hotel and Conference Center at Tuskegee University
1-800-949-6161

Additional bed and breakfast accommodations are available in the Greater Tuskegee Area.