

PATHWAY TO PROFESSIONALISM IN MEDICAL LABORATORY SCIENCE FOR AFRICAN AMERICAN WOMEN

KATHLEEN M. KENWRIGHT & LINDA L. WILLIFORD PIFER

DEPARTMENT OF CLINICAL LABORATORY SCIENCES

COLLEGE OF HEALTH PROFESSIONS

UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

MEMPHIS, TENNESSEE 38163



**ASSOCIATE PROFESSOR
KATHLEEN M. KENWRIGHT**

CO-AUTHOR ON DIVERSITY SUMMIT PRESENTATION, THE PAPER ACCEPTED FOR PUBLICATION & THE AWP GRANT. SHE IS CHAIR & PROGRAM DIRECTOR OF CLINICAL LABORATORY SCIENCE DEPARTMENT, COLLEGE OF HEALTH PROFESSIONS, UTHSC, MEMPHIS. SHE IS MEMBER OF THE TENNESSEE MEDICAL LABORATORY BOARD & ATTENDING THAT MEETING TODAY.

EXACTLY WHO ARE WE?

- We are Medical Laboratory Scientists
(formerly called Medical Technologists)



We perform all Lab Tests on blood, spinal fluid, biopsies, etc. ordered by your physician.
Without us 70% of all medical diagnoses would be impossible...

OUR PROFESSION HAS A LONG HISTORY WHOSE DEEP
ROOTS BEGAN IN KNOXVILLE 221 YEARS AGO AT
THE UNIVERSITY OF TENNESSEE AT KNOXVILLE

UNIVERSITY OF TENNESSEE KNOXVILLE EST. 1794



UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER EST. 1911 (104 YRS. OLD) IN MEMPHIS, TN.



COLLEGE OF HEALTH
PROFESSIONS ESTAB.
1972 (78 yrs. old)

THE UNIVERSITY of
TENNESSEE 
HEALTH SCIENCE CENTER



CLINICAL LABORATORY SCIENCES DEPARTMENT IS 92
YRS. OLD & WE'VE BEEN A PART OF UT MEMPHIS SINCE
1923 as OUTGROWTH OF PATHOLOGY...
WE ARE 50 YRS. OLDER THAN OUR OWN COLLEGE!!!



WHAT MADE US DECIDE THAT AFRICAN AMERICAN WOMEN STUDENTS NEEDED A HELPING HAND?

- 1. THIS GROUP REFLECTS THE DEMOGRAPHICS OF MEMPHIS. (THE 1ST AFRICAN-AMERICAN STUDENT GRADUATED FROM OUR PROGRAM IN 1964).
- 2. IN SOME YEARS, OUR CLASSES ARE 50% AFRICAN AMERICAN WOMEN .
- 3. SINCE RECESSION OF 2008, SEVERAL EXCELLENT STUDENTS HAD TO DROP OUT DUE TO THE ECONOMIC SITUATION...IT CAME TO A CHOICE OF BREAD OR BOOKS, RENT OR REGISTRY EXAM FEES, STUDY TIME OR WORK TIME. WE HAVE A VERY DEMANDING COURSE OF STUDY.
- 4. ALL OF OUR LIVES DEPEND ON MLS's FOR OUR LAB RESULTS. WE CAN'T GRADUATE STUDENTS WITH 'D' AVERAGES BECAUSE THEY CAN'T PASS THE BOARD OF REGISTRY EXAM.
- 5. SO, WE DECIDED TO INTERVENE BECAUSE IT WAS CLEAR THAT THEY NEEDED SOME FINANCIAL HELP...NOT A LOT, BUT ENOUGH TO CLOSE THE GAP...

WE DID NOT ACHIEVE UNIVERSAL SUCCESS BY ANY MEANS.

WE WERE TURNED DOWN BY THE LUMINA FOUNDATION.

WE WERE TURNED DOWN BY THE WALMART FOUNDATION.

FINALLY, THE ALLIANCE OF WOMEN PHILANTHROPISTS OF UT
AWARDED US A GRANT OF \$15,500 TO ASSIST 14 AFRICAN
AMERICAN WOMEN STUDENTS.

THIS ALLOWED US TO ALLOT \$600/STUDENT = TEXTBOOKS
\$100/STUDENT = LAB ATTIRE
\$250/STUDENT = REGISTRY EXAM
FEE

THIS GRANT TRANSLATED INTO TIME AND/OR MONEY
FOR THESE YOUNG WOMEN. IT MEANT TIME TO STUDY
OR MONEY TO BUY NECESSITIES. TO STUDENTS, TIME AND
MONEY BECOME INTERCHANGEABLE COMMODITIES.

TIME NOT WORKING = STUDY TIME

MONEY = EITHER FOOD, RENT, CLOTHING or RESPITE
FROM WORK SO THAT STUDENTS CAN STUDY, AND YET
NOT FAIL TO PROVIDE THE NECESSITIES OF LIFE.



OUTCOMES AT THIS POINT IN APRIL, 2015: 2 MS & 2 BS GRADUATES IN MLS IN 2014

KIM B. GRADUATED WITH MS (CLS) IN 2014:



RESEARCH MENTORS: DR. J. DALE & DR. V. BASELSKI

SIGMA XI: EXCELLENCE IN STUDENT RESEARCH AWARD 2014
FOR RESEARCH ON STREPTOCOCCUS

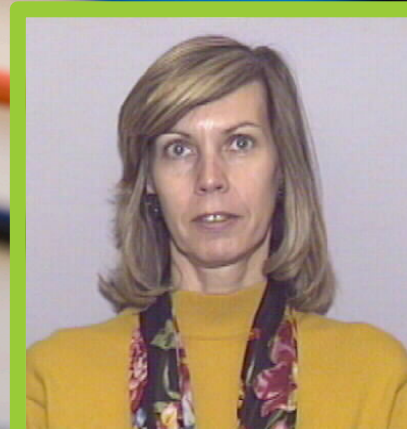
IMHOTEP HONOR /LEADERSHIP SOCIETY AWARD

ASCP NATL. STUDENT HONOR AWARD

ALPHA TAU MU HONOR SOCIETY AWARD

BRENTA DAVIS AWARD (HIGHEST CLS AWARD TO MS STUDENT)

TRAVEL AWARD CHICAGO ASCLS NAT'L. MEETING AS
DELEGATE IN 2014





JESSICA C. RECEIVED HER MS(CLS) IN 2014 & RECEIVED A SIGMA XI EXCELLENCE IN STUDENT RESEARCH AWARD FOR HER WORK ON ORAL CANCER. HER MENTOR WAS DR. YANHUI ZHANG, DEPT. OF BIOSCIENCE RES., COLLEGE OF DENTISTRY. ALL MS STUDENTS ARE ASSIGNED A PERSONAL RESEARCH MENTOR WITH WHOM THEY STUDY, WRITE & PRESENT A PAPER IN A FORMAL SEMINAR AT THE END OF THE SUMMER. WE FEEL IT'S A UNIQUE AND ENRICHING EXPERIENCE OFFERED BY NO OTHER MLS PROGRAM IN THE U.S.



DEZ E. EARNED HER BS(MLS) IN 2014, MAINTAINING A HIGH 'B' AVERAGE DESPITE THE FACT THAT HER SON ARRIVED AT AN ACADEMICALLY "ROLLER COASTER" TIME. HOWEVER, SHE WON THE ALICE HITT AWARD FOR ACADEMIC EXCELLENCE DURING "CHALLENGING DAYS"! SHE HAS AN ENVIABLE POSITION AT DCI TRANSPLANT LABS IN NASHVILLE WHERE SHE DOES DELICATE TISSUE TYPING AND CROSSMATCHES FOR ORGAN TRANSPLANT PATIENTS.

TISSUE TYPING FOR ORGAN TRANSPLANTATION

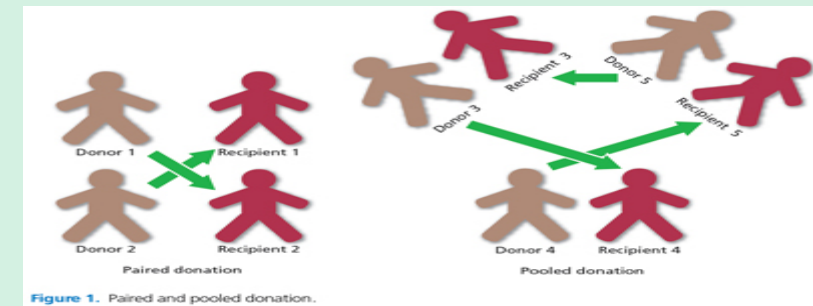
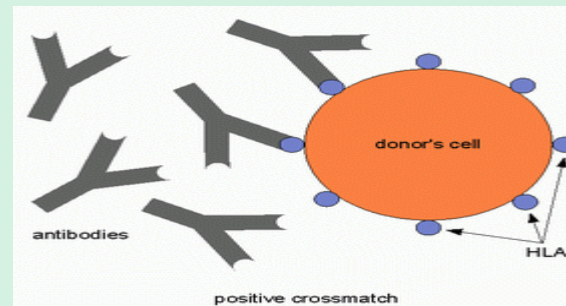


Figure 1. Paired and pooled donation.



JACKIE HAD BEEN DEPLOYED TO AFGHANISTAN PRIOR TO ENTERING OUR PROGRAM. SHE EARNED HER BS (MLS) IN 2014 & ALSO WON THE STUDENT OF ACHIEVEMENT AWARD GIVEN BY THE BLACK STUDENT ASSOCIATION.

SOLDIER, SCHOLAR, MOTHER, GRANDMOTHER & MEDICAL LABORATORY SCIENTIST!



BRITTANY J. IS CURRENTLY ON A 2-WK CLINICAL ROTATION IN MICROBIOLOGY AT BAPTIST HOSPITAL IN DESOTO, MS, ADVISING PHYSICIANS WHICH ANTIBIOTICS THEIR PATIENTS SHOULD BE GIVEN FOR GREATEST SUCCESS OR, IF THEY HAVE AN ANTIBIOTIC-RESISTANT WOUND INFECTION. SHE WILL GRADUATE WITH HER BS(MLS) NEXT MONTH.



MADelyn D. WAS ELECTED PRESIDENT OF HER CLASS, IS PRESENTLY DOING A TWO-WEEK ROTATION IN HEMATOLOGY AT THE V. A. HOSPITAL IN MEMPHIS, AND WILL BE REPORTING ANY SIGNS OF ANEMIA, IRON OVERLOAD OR LEUKEMIA IN OUR VETERANS. SHE WILL BE RECEIVING HER BS (MLS) NEXT MONTH, AND WILL BE QUALIFIED TO WORK AT ANY HOSPITAL IN THE WORLD (AS ARE ANY OF THESE YOUNG WOMEN) WITH HER BOARD OF REGISTRY LICENSE & WILL HAVE AN ESSENTIAL, RESPECTED PROFESSION FOR LIFE. **UNEMPLOYMENT IS <2% IN MEDICAL LAB SCIENCE.**



YARSHA J. WILL BE MENTORED BY DR. TAYEBEH POURMOTABBAD, PROF. OF MICRO., IMMUN. & BIOCHEM., IN A RESEARCH PROJECT ON ALZHEIMER'S DISEASE IN JUNE. SHE HAS RECENTLY DONE A CLINICAL ROTATION IN BLOODBANK AT METHODIST GERMANTOWN WHERE SHE HAS TYPED AND CROSSMATCHED BLOOD FOR TRANSFUSIONS DURING AND FOLLOWING SURGERY.

SHE WILL EARN HER MS(CLS) IN AUGUST, 2015

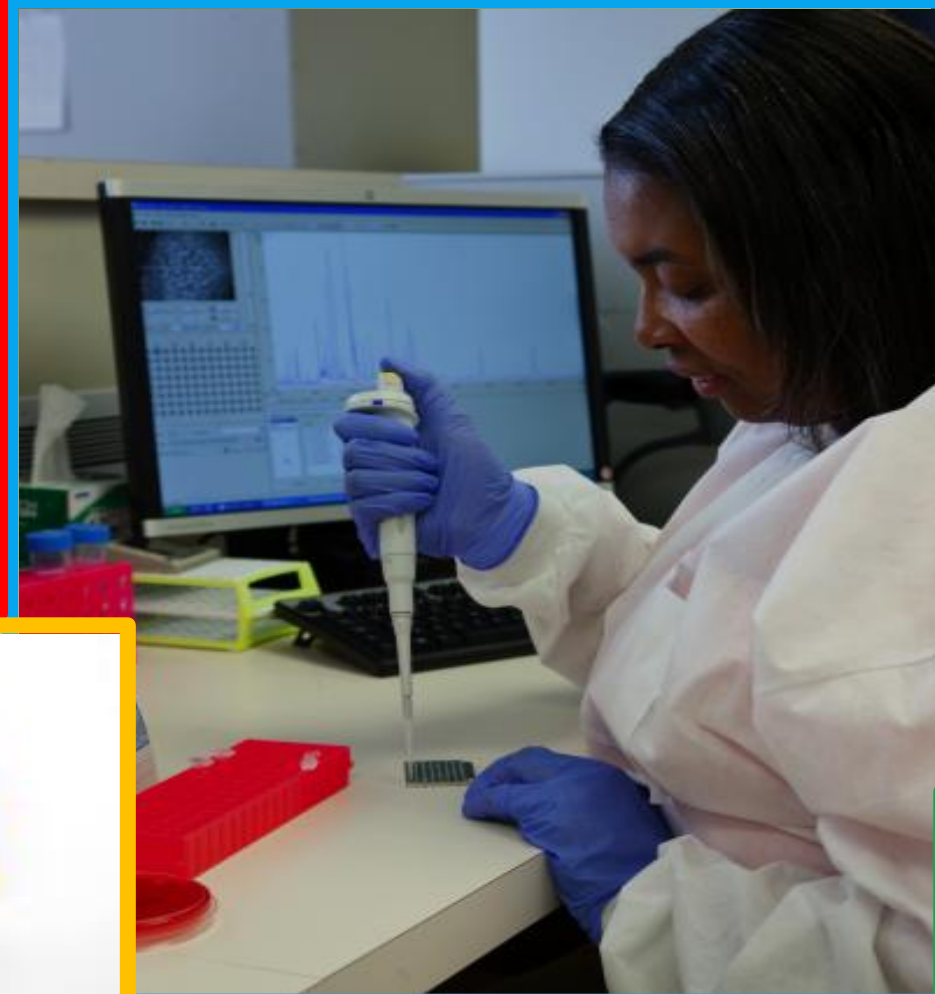


AMBER D. IS CURRENTLY COMPLETING HER CLINICAL ROTATION AT METHODIST-UT-LEBONHEUR IN CHEMISTRY WHERE SHE MEASURES PEDIATRIC ENZYME LEVELS, ELECTROLYTES, AND OTHER BIOCHEMICAL COMPONENTS IN PEDIATRIC PATIENTS. SHE WILL RECEIVE HER MS (CLS) IN AUG., 2015. HER PERSONAL RESEARCH MENTOR IN JUNE WILL BE DR. STEPHANIA CORMIER IN THE DEPT. OF PEDIATRICS. HER RESEARCH WILL FOCUS ON THE HUMAN GI TRACT MICROBIOME AND VIRUSES INFECTING PEDIATRIC PATIENTS.



LEKEISHA P. WILL BE WORKING WITH MACROPHAGES FROM ARTHRITIC JOINTS IN CELL CULTURE, AND HER MENTOR IS DR. RICHARD SMITH, PROGRAM DIRECTOR OF BIOMATERIALS AND ORTHOPAEDICS. SHE WILL STUDY INTERACTIONS BETWEEN NANOMATERIALS & CELLS FROM SYNOVIAL FLUID. SHE WILL ALSO BE DOING A MICROBIOLOGY ROTATION AT ST. FRANCIS HOSPITAL IN MAY.

**SHE WILL RECEIVE HER
MS(CLS) IN 2015.**



BRITTANY R. HAS BEEN AT METHODIST-UT-LEBONHEUR IN THE COAGULATION LAB MONITORING BLOOD CLOTTING TIMES AND BLEEDING DISORDERS IN PEDIATRIC PATIENTS. SHE WILL DO HER RESEARCH AT LEBONHEUR ON MALDI-TOF RAPID DIAGNOSIS OF PEDIATRIC BACTERIAL INFECTIONS WITH LAB DIRECTOR TEKITA MCKINNEY THIS SUMMER, & WILL RECEIVE HER MS (CLS) IN AUGUST. AGAIN, ALL STUDENTS DO ROTATIONS IN ALL DIVISIONS OF THE LABORATORY TO BUILD THEIR EXPERTISE.





BRITTANY J. WILL BE DOING HER RESEARCH WITH LAB DIR. RICK TUCKER AT BAPTIST DESOTO IN MS ON SYSMEX ANALYSIS OF URINARY TRACT INFECTIONS VS. CULTURE PLATES. SHE IS CURRENTLY ON CLINICAL ROTATION AT ST. THOMAS W. IN NASHVILLE IN SPECIAL HEMATOLOGY WHERE SHE DOES BONE MARROW ANALYSIS IN THE DIAGNOSIS OF LEUKEMIA & OTHER DISORDERS. SHE WILL RECEIVE HER MS (CLS) IN AUGUST, 2015.



LAUREN D. WILL FINISH HER MS(CLS) IN AUGUST HAVING DONE HER RESEARCH WITH DR. MONICA JABLONSKI OF THE DEPARTMENT OF OPHTHALMOLOGY AT THE HAMILTON EYE INSTITUTE. HER RESEARCH WILL BE ON THE GENETICS OF MACULAR DEGENERATION AND GLAUCOMA. LAUREN HAS COMPLETED A ROTATION IN BLOOD BANK AT METHODIST HOSPITAL, CHEMISTRY AT METHODIST NORTH, AND HAS EXPERIENCE IN EACH REQUIRED DISCIPLINE, AS DOES EACH OF OUR GRADUATES.

ALL MS AND BS STUDENTS HAVE DONE ROTATIONS IN MOLECULAR DIAGNOSTICS, HEMATOLOGY, CHEMISTRY, BLOOD BANK, MICROBIOLOGY, SPECIAL HEMATOLOGY, AND COAGULATION TO GIVE THEM EXPERIENCE IN EVERY PHASE OF LABORATORY MEDICINE TO PROVIDE DOCTORS WITH THE DATA REQUIRED TO MAKE DIAGNOSES. THEY'VE WORKED AT ST. JUDE, VA. BMU, METHODIST, ST. FRANCIS, ETC.

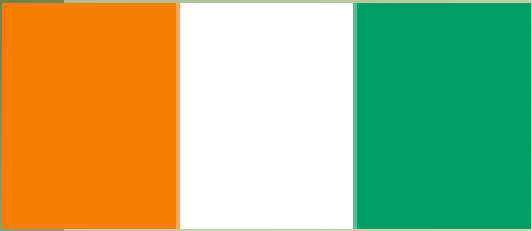
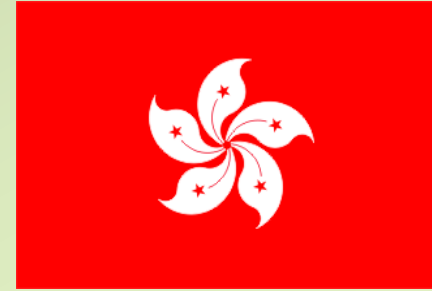


IN CONCLUSION WE HAVE, AS THE SAYING GOES, TAUGHT MANY STUDENTS "HOW TO FISH", AND HAVE PROVIDED THEM WITH A STABLE AND CHALLENGING PROFESSION FOR LIFE.

WE HAVE ENCOURAGED DIVERSITY IN OUR CLASSROOMS AND PROFESSION AND TENNESSEE WILL BE FAR THE BETTER FOR IT!



WE'VE PROUDLY TAUGHT STUDENTS FROM 24 NATIONS !





**"EDUCATION IS THE MOST POWERFUL
WEAPON WHICH YOU CAN USE TO
CHANGE THE WORLD"**

NELSON MANDELA

THANK YOU! QUESTIONS???

