Health Career Programs

2013

This report will examine the successes and areas for improvement for Health Career Programs 2013 summer experiences.

Annual Report

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I. Acknowledgements

The success of the summer programs offered by the Office of Health Career Programs (HCP) is the direct result of a team of dedicated individuals pulling together resources to help students prepare for future careers in the health professions. In an effort to acknowledge some, we will undoubtedly forget someone who we intended to say thank you to, so to all who are reading, "Thank you, for your support of our students and our programs!"

To the University of Tennessee Health Science Center administration and deans, Chancellor Schwab, Dr. Scheid and Dr. Brown, without your support financially and professionally the summer programs would not exist. We are proud to say that we have extraordinary support from within our institution.

Dr. Eoff, Dr. Thomason, Dr. Johnson, Dr. Covington, Mrs. Chandra Alston and Mr. Nelson Strother, thank you for your assistance in selecting an excellent group of students. The partnership with your colleges is such a blessing for our students.

To Elise Moore in the Department of Special Events, thank you for your daily contributions, guidance, and support.

To the faculty of the Colleges of Medicine, Pharmacy and Dentistry: thank you for your time and energy to teach our students not only the content knowledge, but how to be successful.

To the Track II faculty: Dr. Sherry Painter, Dr. Dan Osborne and Mary Avery Poole. The students are able to achieve their dreams because you care.

To the Track I preceptors, the exposure you provide to our students is invaluable to their career development. The students may have already said thank you, but please receive it one more time, "Thank you!"

To the HCP/SASS staff:, Kathy Gibbs, Laurie Brooks, Marcia Seeburg, Nikki Dyer, Tanya Biscardi, and Erin O'Brien thank you for working so hard to encourage and guide the HCP students into academic success. Whether it was copying stacks of papers, sorting excel spreadsheets, meeting with a student in crisis or giving encouragement, it is greatly appreciated.

To the Summer Research Programs mentors and their laboratory staff, thank you so much for the seeds you have sown in the next generation of biomedical scientists.

Summer Science Institute has been with us for four short years, but has already made an impact on UTHSC and Tennessee high school students. Thank you to our student assistants for being on the front lines and making everything flow. Your energy and knowledge excites, enlightens and engages. Thank you.

To our superstar tutors who helped guide Track III students to success, Thank you.

To the GEB staff, you make it happen! Scheduling, clean up, tables, IT, thank you for making it look easy.

We look forward to doing it again next year!

Constance Tucker

II. Executive Summary

Program Summary

In 2007, minorities (Latino, American Indian and Black) constituted about 30% of the US population but only 8.7 percent of doctors were from these groups. It is estimated that by the time the overhaul in healthcare is fully implemented there will be 35 million newly insured Americans, creating a shortage of 100,000 primary care doctors in 2020. Tennessee Institutes for Pre-Professionals (TIP) addresses the inequities that exist within professional school education, patient care and educational opportunities for traditionally underrepresented students. The program uses three tracks (Track I, Track II, and Track III) as a conduit to accomplishing its goal of increasing the number of underrepresented minorities in health professional programs (see page 8 for track descriptions).

Of our two hundred and thirty (230) applicants, TIP faculty and staff successfully supported fifty-nine (59) students in the 2013 summer program. The students reported overwhelmingly strong satisfaction with the program's ability to help them pursue their career goals in all three tracks. Faculty also expressed their overall contentment with the program and the students. However, there are three areas in which the program must address to continue its success. Below we identify the problem statement areas and our proposed response to each concern.

III. Program Improvements				
2013 Updates	2014 Program Improvements			
TRACK I				
A full time student assistant was assigned to Track I programming for consistency in services.	Friday activities with TIP I are dependent on the quality of the student assistant. Continuous monitoring of the Track I experience should happen by HCP staff to ensure quality experiences.			
Student assistant visited all Track I sites during students clinical experiences.	Continue to include scavenger hunt, case study reviews and CPR certification course.			
Weekly journals were submitted and graded via Blackboard	The Track I schedule was constantly in flux due to last minute changes and cancellations. Share Outlook calendar with students so they are able to see the last minute changes.			
The weekly book discussion was enhanced by asking students to regularly contribute to a blog.	Incorporate some spelling and grammar lessons for those students who struggle with writing.			
The Track 1 schedule was developed and maintained on Outlook, allowing all HCP staff to keep up to date at all times. Screen shots of the weekly schedule were taken and handed to students every Friday.	Include some verbal and speed reading workshops for students who perform poorly on Nelson Denny			
New programming was added including CPR certification, UTHSC Scavenger Hunt and case study reviews.				
PSR Lab was removed to allow for more study time				
TRA	CK II			
Continued restructuring of Track II to support long term stability and growth: Contract with Kaplan MCAT/DAT/PCAT On-Demand programs for Track II	Increase personal study time for students to prepare for upcoming lessons by removing unnecessary programming			
Increased materials and faculty support for DAT/PCAT: TOPSCORE, Crack the DAT/PCAT and Orgomon series material.	Provide a Dental, Pharmacy and Medicine student assistant for each track to answer questions specific to each track			
PSR Lab was removed to allow for more study time	Share the Outlook calendar with student assistants and students so they are able to view changes as they are made.			
Track II schedule was developed and maintained on Outlook, allowing all HCP staff to keep up to date with changes. Screen shots of the weekly schedule were posted to Blackboard for Track II participants to view	Meet the Deans event structure and set up should be revisited.			
	Include some verbal and speed reading workshops for students who perform poorly on Nelson Denny			
TRAC	CK III			
College of Medicine students completed with 100% success.	Distribute the same amount of petty cash to all students.			
Track III schedule was developed and maintained on Outlook and shared with all the faculty members and students. This allowed for instant notification of schedule changes.	Increase personal study time for students to prepare for upcoming lessons by removing unnecessary programming			
PSR lab was removed to allow for more study time	Have student assistants contact each participant before orientation to advise them on the intensity of the program.			
	Recruit tutors for subjects			

SSI			
COP MCOE grant was able to provide \$300 stipends to all students.	Increase and sustain focus on the overall theme of the program through more activities.		
The theme "The Use of Technology in Healthcare" promoted an awareness of the evolution of healthcare in the age of technology.	Increase student exposure to the process of graduate/professional school admission.		
SI	RS		
Weekly GRE prep sessions were provided to SRS students.	Provide more opportunities for social interaction and volunteer opportunities.		
Poster Presentations took the place of final oral presentations to give students experience creating and presenting a scientific poster.	Implement a more extensive questionnaire in the acceptance package in order to better match students with a preceptor/lab more geared to their interest/career goal.		
Workshops were given to teach students how to write scientific abstracts and create a scientific poster.	Create a more detailed program schedule for students which outlines who must attend which event.		
Students were mailed the results of their poster presentation including scoring sheets from judges.	Include sessions for students who would like to prepare for the PCAT and DAT as well as the MCAT and GRE.		
	Provide awards at closing lunch after poster presentation		
SUSTAIN	VABILITY		
Online Application for all HCP 2013 programs was successfully developed and implemented	A database and tracking system of all HCP recruits and enrollees continues to be developed.		
_	Develop a mass marketing plan to communicate HCP programs to a wider audience.		
Prepare a budget and programming to account for he lost of the MCOE grant and staff.			

Tennessee
Institutes for
PreProfessional
Students

2013

Annual Report

i. Introduction

General Information

The Tennessee Institutes for Pre-Professionals (TIP) program is a state-wide effort whose objective is to increase the representation of various groups of students who are underrepresented in the health professions. TIP operates on the campus of The University of Tennessee Health Science Center (UTHSC). Since TIP's inception in 1987, one thousand five hundred and nine (1,509) students have participated.

Program participants are all undergraduate or graduate students. The participants are recruited from colleges throughout Tennessee and bordering states, as well as other states where there are Historically Black Colleges and Universities (HBCU) and sizeable concentrations of Tennessee residents.(e. g. Atlanta, Georgia).

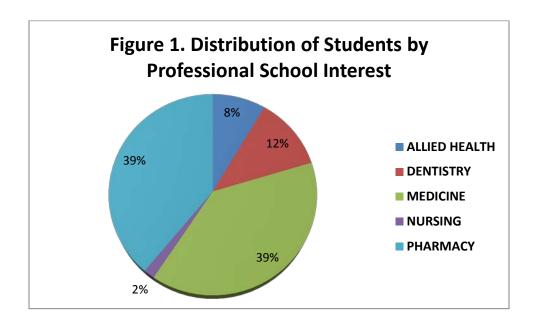
A total of on hundred and sixty-five (165) applications were received. Thirty-five (35) students were denied because of academic deficiencies in their records and/or ineligibility; One (1) student withdrew their application from consideration; seventy (70) applications remained incomplete despite repeated efforts to expedite their completion, 59 students were accepted. As is normally true, the majority of participants, forty-One (41) were women.

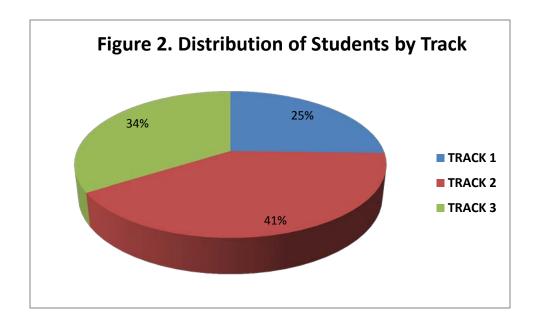
Out of the 59 participants, 39 students attended Tennessee undergraduate institutions. The number of students from various undergraduate institutions is reflected in Table 1 below.

The distribution of students relative to their health professional area of interest and TIP program tracks is summarized

in Figures 1 and 2, respectively.

Table 1. Distribution of Students by Institution				
Institution	Number of Students			
Alcorn State University	2			
Austin Peay State University	1			
Carson-Newman College	1			
Christian Brothers University	3			
Georgia State University	1			
Jackson State University	4			
Lane College	1			
Lemoyne-Owen College	1			
Middle Tennessee State University	6			
Mississippi State University	1			
Oakwood University	3			
Oral Roberts University	1			
Rhodes College	1			
Rust College	1			
Spelman College	1			
Southwest Community College	1			
Tennessee Tech University	1			
Tuskegee University	1			
UNC Chapel Hill	1			
University of Arkansas at Pine Bluff	1			
University of Memphis	12			
University of Southern Mississippi	1			
University of Texas at Arlington	1			
University of Tennessee - Chattanooga	5			
University of Tennessee - Knoxville	3			
University of Tennessee - Martin	1			
Vanderbilt University	2			
Xavier University	1			





ii. Program Description

There are three distinct components or Tracks of the TIP program:

Track I provides internship experiences where students work alongside local practitioners in the students' areas of interest. It enables students to fully understand the rigors and challenges of being a health professional. For many, it provides a framework by which students may come to (1) appreciate the stark realities of the profession, (2) reaffirm their desires to become health professionals, and (3) help them better articulate (to admissions committees) their reasons for wanting to pursue the vocation. So often, underrepresented students do not appreciate the importance of acquiring exposure to the health professional setting and are ill-equipped to express substantive reasons for their aspirations of becoming health professionals.

A total of twelve (12) practitioners were identified eight (8) physicians, two (2) pharmacists, one (1) nurses and one (1) occupational therapist. These individuals provided "shadowing experiences" for students. The Track I component was seven weeks in length between the months of June and July. Their eight hour work days were Monday through Thursday, Fridays the students devoted their time to academic workshops, site visits, and reflection about their internship experience.

Track II.

Members of underrepresented minority groups continue to experience difficulties associated with standardized exams. For example, the MCAT average at UTHSC for students who are accepted is a 9 or 10 in each of the three tested areas. (A perfect score in each area is 15). The Association of American Medical Colleges (AAMC) reports that the MCAT average for African American residents of Tennessee is a 7. The Track II component of TIP is a test preparation program, where the intent is to enhance students' understanding of standardized test construction and to improve their skill levels on such exams. This track helps students to identify any deficiencies they may have in their test taking and learning skills. The students then learn how to overcome these deficiencies, which in turn will enable them to achieve the criterion score on the entrance exam critical to professional school admission.

Track III.

The participants of the Track III component of TIP have already applied and been accepted for admission to UTHSC colleges of medicine and pharmacy, but their eventual matriculation into these colleges require that they achieve a grade of no less than a "C" in each of the courses offered in this track. The courses offered are the same as many in the first year's curriculum (discussed in detail below).

The Track III component also includes a great deal of learning skills preparation. Formal workshops were given for such topics as goal setting/time management, problem solving, memorization, stress management, etc., but time in the schedule also allowed students the opportunity to work individually.

iii. Program Participants

Faculty

Track I was facilitated by HCP staff. In addition, a preceptor or practitioner was assigned to each student for various internship exposures. There were three faculty members provided for in class instruction for Track II students in addition to the Kaplan online instructors. One Track II faculty member was full time faculty in Le Moyne-Owen's Chemistry and Physics Departments; one Track II faculty member was faculty at Southwest Community College in the Natural Sciences Department and one conducts research at Le Bonheur Children's Hospital. There were fifteen (15) UTHSC faculty members in Track III who taught courses to students holding acceptances to the College of Medicine and the College of Pharmacy.

Track II Faculty

Kaplan provided various faculty for Biology, Sherry Painter, Ph.D. Physics, Chemistry, Organic Chemistry, Reading Associate Professor Comprehension, Verbal Reasoning and Critical Chemistry

Thinking

Daniel Osborne, Ph.D. Mary Avery Poole **Assistant Professor** Verbal Reasoning

MCAT Science Review

Track III Medicine Faculty

Eldridge Johnson, Ph.D. Donald Thomason, Ph.D.

Professor & Dean of Graduate Health Sciences Professor

Anatomy & Neurobiology Physiology

Charles Leffler, Ph.D. Angela Cantrell, Ph.D. Professor Associate Professor

Physiology & Biophysics Anatomy & Neurobiology

Satoru K. Nishimoto, Ph.D. Pat Ryan, Ph.D.

Professor Associate Professor & Assistant Chair

Molecular Sciences Microbiology

Tony Marion, Ph.D. David Nutting, Ph.D.

Professor Associate Professor Physiology & Biophysics Immunology

Vicki M. Park, Ph.D. George Cook, Ph.D.

Associate Professor Professor Genetics **Biochemistry**

Track III Pharmacy Faculty

Michael Christensen, Ph.D.

Professor

Clinical Pharmacy

Pat Ryan, Ph.D.

Associate Professor & Assistant Chair

Microbiology

John Buolamwini, Ph.D.

Professor

Pharmaceutical Sciences

George Cook, Ph.D.

Professor Pharmacology

Lidia Gardner Instructor Neurology

Charles Leffler, Ph.D.

Professor

Physiology & Biophysics

Kafait Malik, Ph.D.

Professor Pharmacology

David Nutting, Ph.D. Associate Professor Physiology & Biophysics

Dale Suttle, Ph.D. Associate Professor Pharmacology

Donald Thomason, Ph.D.

Professor & Dean of Graduate Health Sciences

Physiology

Tony Marion, Ph.D.

Professor Immunology

Students

Table 2 below displays the names of the students, their respective tracks, health career profession of interest, and their undergraduate institutions.

Table 2. Distribution of Stud		of Interest, and Undergraduate Institution
Name	Discipline	Undergrad Institution
Track I		Number of Track I Students:15
Female Student	Allied Health	Christian Brothers University
Female Student	Allied Health	University of Tennessee – Chattanooga
Female Student	Allied Health	Christian Brothers University
Female Student	Allied Health	University of Tennessee – Chattanooga
Female Student	Medicine	Spelman College
Male Student	Medicine	Vanderbilt University
Female Student	Medicine	Rust College
Female Student	Medicine	Middle Tennessee State University
Female Student	Medicine	South West Community College
Female Student	Medicine	Lemoyne-Owen College
Female Student	Medicine	University of Memphis
Female Student	Medicine	Middle Tennessee State University
Female Student	Nursing	University of Memphis
Male Student	Pharmacy	Oral Roberts University
Female Student	Pharmacy	Austin Peay State University
Track II		Number of Track II Students:24
Male Student	Allied Health	Carson Newman College
Male Student	Dentistry	Middle Tennessee State University
Female Student	Dentistry	University of Memphis
Male Student	Dentistry	Alcorn State University
Female Student	Dentistry	University of Memphis
Male Student	Dentistry	University of Memphis
Female Student	Dentistry	University of Memphis
Female Student	Dentistry	Jackson State University
Female Student	Medicine	Jackson State University
Male Student	Medicine	Vanderbilt University
Female Student	Medicine	Lane College
Male Student	Medicine	University of Tennessee – Knoxville
Male Student	Medicine	University of Tennessee – Chattanooga
Female Student	Medicine	Rhodes College
Female Student	Medicine	Oakwood University
Male Student	Medicine	Christian Brothers University
Male Student	Pharmacy	Oakwood University
Female Student	Pharmacy	Oakwood University
Male Student	Pharmacy	University of Arkansas at Pine Bluff
Male Student	Pharmacy	University of Memphis
Female Student	Pharmacy	University of Memphis
Female Student	Pharmacy	University of Tennessee – Martin
Female Student	Pharmacy	Alcorn State University
Female Student	Pharmacy	University of Memphis

Table 2. Distribution of Students by Track, Discipline of Interest, and Undergraduate Institution				
Name	Discipline	Undergrad Institution		
Track III		Number of Track III Students: 20		
Male Student	Medicine	Middle Tennessee State University		
Female Student	Medicine	Jackson State University		
Female Student	Medicine	Middle Tennessee State University		
Male Student	Medicine	University of Tennessee – Knoxville		
Female Student	Medicine	University of Tennessee – Knoxville		
Female Student	Medicine	Tennessee Tech University		
Male Student	Medicine	UNC Chapel Hill		
Male Student	Pharmacy	University of Tennessee – Chattanooga		
Female Student	Pharmacy	University of Texas – Arlington		
Female Student	Pharmacy	University of Memphis		
Female Student	Pharmacy	University of Memphis		
Male Student	Pharmacy	Tuskegee University		
Male Student	Pharmacy	Georgia State University		
Female Student	Pharmacy	Mississippi State University		
Female Student	Pharmacy	Jackson State University		
Female Student	Pharmacy	Middle Tennessee State University		
Female Student	Pharmacy	University of Southern Mississippi		
Female Student	Pharmacy	University of Tennessee – Chattanooga		
Female Student	Pharmacy	University of Memphis		
Female Student	Pharmacy	Xavier University		

iv. Program Operation

CURRICULUM

Track I

As has been mentioned, the primary objective of **Track I** is to provide students with an exposure to health career professions. Such experience is essential as students contemplate health professional school applications. A number of interesting workshops were scheduled, including such workshops as: *Internship Discussions, Study Skills, Meet the Deans, Interviewing and Writing of Personal Statements*.

Track II

The curriculum focused on the application of the scientific body of knowledge contained in the pre-health curriculum, and specific to entrance tests required for acceptance to professional school. The fact that **Track II** students have completed the minimum science pre-requisites enabled the curriculum to be structured in a test-specific manner.

The minimal pre-requisites for professional school exams require that students have taken the following courses: biology, general chemistry, organic chemistry, and physics. The online Kaplan course required students to sit for several full length practice tests during the program. Additional practice tests and questions were purchased for the DAT and PCAT students. Test review sessions were spent in class with our faculty reviewing all of the appropriate subjects. Faculty were trusted to gauge weak areas and spend more time on subjects accordingly.

TRACK II EXPOSURES

Table 3. Student Contact Hours in Track II Courses					
Lectures	MCAT Hrs. of Exposures	DAT Hrs. of Exposures	PCAT Hrs. of Exposures	GRE Hrs. of Exposures	
Physics	6	-	-	-	
General Chemistry	9	6	6	-	
Biology	9	6	6	-	
Organic Chemistry	9	6	6	-	
Quantitative	=	3	6	-	
Perceptual Ability	-	3	-	-	
Verbal Reasoning	25	-	9	8.5	
Test Review	26	49.5	43	-	
Math	-	-	-	14	
Reading Comprehension	-	3	3	-	
Critical Thinking	9	-	-	-	

Track III

The **Track III**, pre-matriculation program extends an acceptance to students contingent upon their successful completion of the eight week pre-matriculation program, consisting, largely, of courses which will be taken in the regular curriculum. These courses are taught by members of the UTHSC faculty. Students accepted to the College of Medicine were exposed to 99 hours of instruction; gross anatomy lectures (12 hrs.), gross anatomy lab (12 hrs.) biochemistry (13 hrs.), physiology (28 hrs.), genetics (10 hrs.), molecular biology (9 hrs.), microbiology (11), and immunology lectures (4). Students accepted to the College of Pharmacy had 97 hours of instructional time which consisted of classes in medicinal chemistry (16 hrs.), pharmacology (23 hrs.), pharmacy math (15 hrs.), physiology (28 hrs.) and microbiology (11 hrs.), and immunology (4 hrs.).

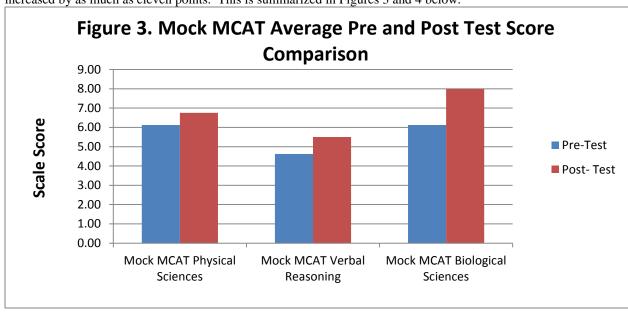
Additionally, five 1hour question group sessions and six 1 hour sessions with an Educational Specialist from Student Academic Support Services were provided to the College of Medicine students. Four 1 hour question group sessions and six 1 hour sessions with an Educational Specialist were provided to the College of Pharmacy students.

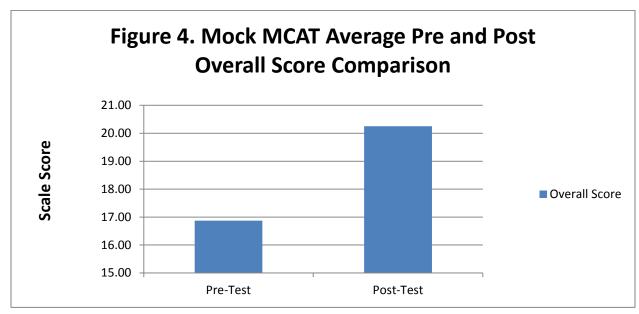
v. Program Outcomes

STUDENT PERFORMANCE (TRACKS II and III)

Track II students were offered basic science course review and were required to take several mock MCAT/PCAT/DAT standardized exams. All **twenty-four (24)** participants completed the program successfully.

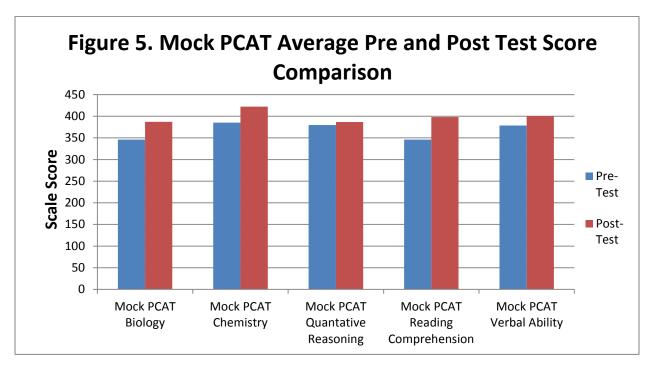
MCATIn all sections, students saw an average increase of two points. In some instances, students' MCAT total scores increased by as much as eleven points. This is summarized in Figures 3 and 4 below.

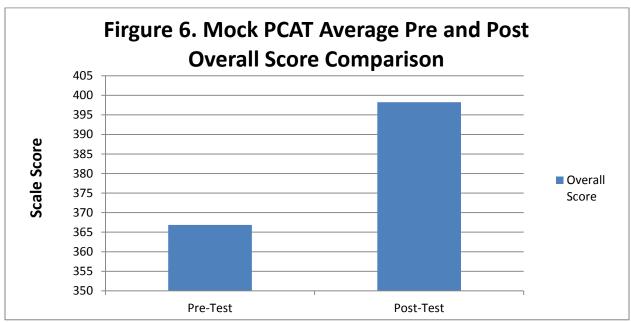




PCAT

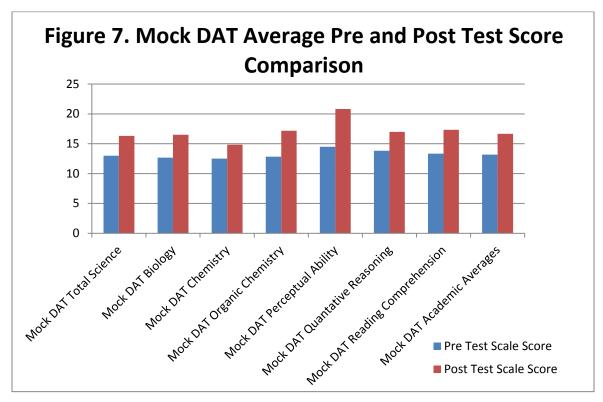
PCAT students had exposure to practice questions and full length tests via Crack the PCAT as well as the material and practice tests provided by Kaplan. In some instances, students' PCAT total scores increased by as much as on hundred and eighteen (118) scale points. PCAT students saw the greatest improvement in Biology and Reading Comprehension. Students' pre and post-test scores were taken from the Kaplan PCAT (Pre and Post Test). Figure 5 and 6 summarizes performance of the students on these tests.

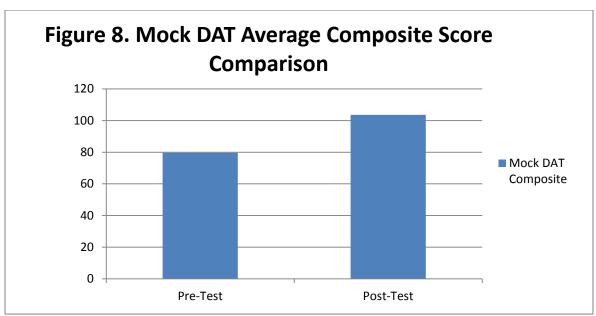




DAT

Students used TopScore DAT practice exams and Crack the DAT software. These exams allowed students to practice on the computer and seem representative of how most students will score. Pre and post-test scores were taken from the Kaplan course. The pretest DAT academic average was 13.17 points while the posttest average was 16.67. In some instances, students' DAT total scores increased by as much as thirty-three points. Figures 7 and 8 summarize students' performance on DAT. Note: data for one student was not available for inclusion in these figures.





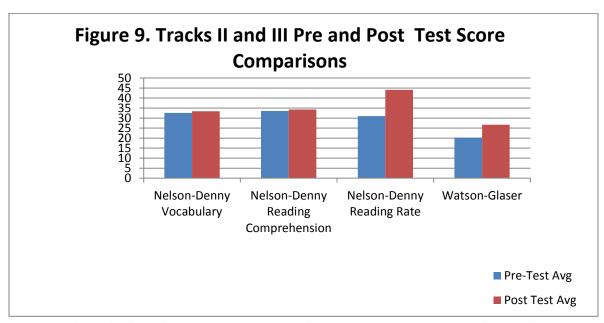
Successful performance in Track III was judged as the attainment of no grade less than "C" in any one course. There were 20 participants (7 medicine and 13 pharmacy). All College of Medicine students will be enrolling in the in-coming class. (ie. Medicine Class of 2017). Of the 13 College of Pharmacy students, 8 will be enrolling in the in-coming Class of 2017, 2 have been asked to repeat the TIP Track 3 program next year, and 3 were not successful.

LEARNING SKILLS DEVELOPMENT

TIP 2013 Report of Pre- and Post-Assessments

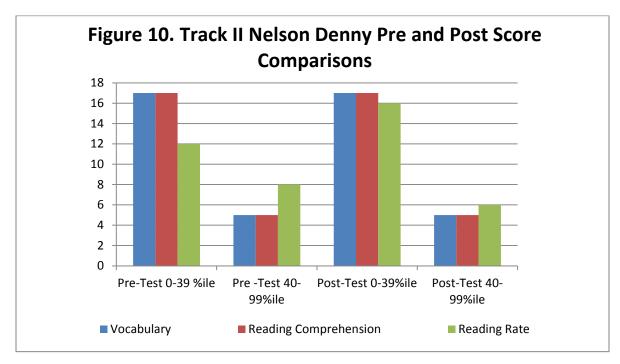
The students were administered the following pretest assessments: The <u>Nelson Denny Reading Test</u> and the <u>Watson-Glaser Critical Thinking Appraisal</u>. The students' results were used as a tool to develop individual learning plans by Educational Specialists when giving academic advice in order to assist them in improving their skills before matriculation..

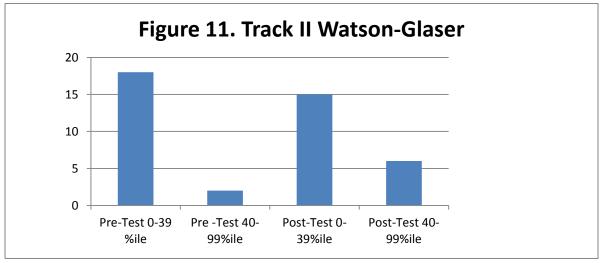
The range of scores indicative of average to excellent performance on the Nelson Denny Reading Test and the Watson-Glaser Critical Thinking Appraisal falls between the <u>40th and 99th percentiles</u>. TIP 2013 Tracks II and III students' pre- and post-assessment performance is summarized in Figures 9-15 below. Note: Track 1 students did not complete a post Watson-Glaser.

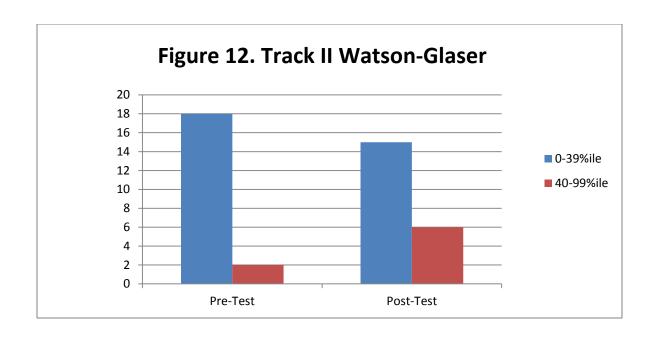


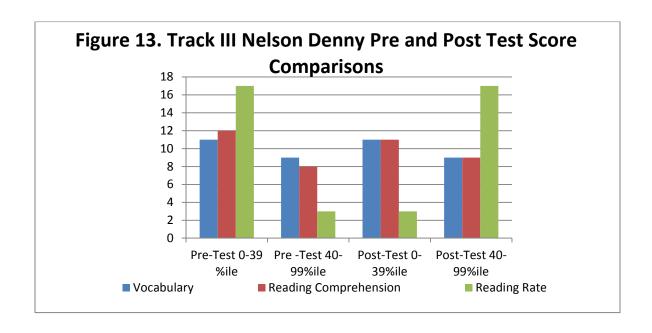
Note: the slight gains in performance may be a result of the reduced access to PSR labs for remedial work.

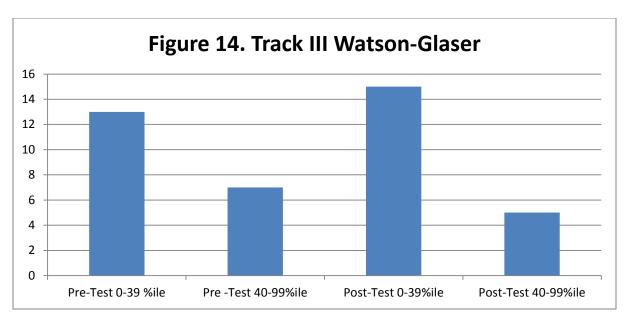
Track II only. Note: Data from 2 students was not included as they did not complete any post-tests

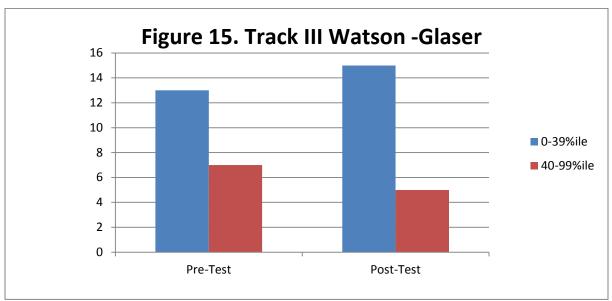






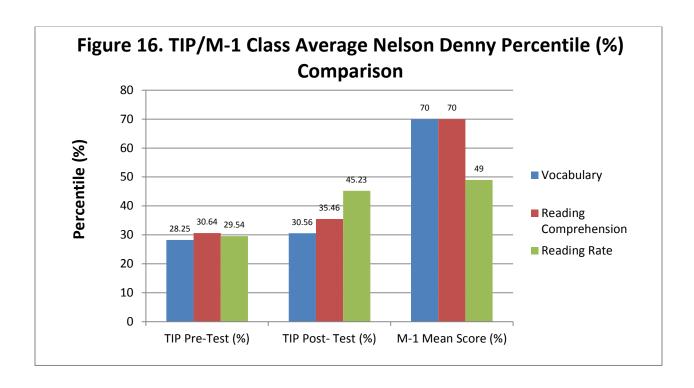


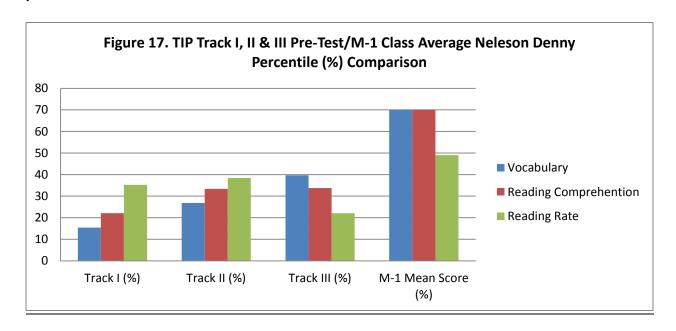


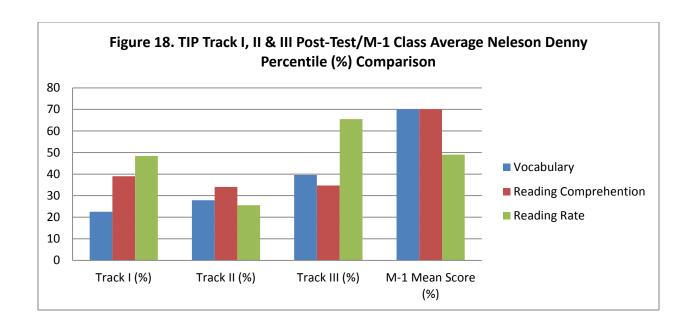


Comparison of TIP 2013 Students' Average Percentile rank scores with an M-1 Class Average Percentile rank scores

From the comparison of the average percentile rank scores of an M-1 class and the TIP 2013 Track I, II, and III students' post-test percentile rank scores, the following was noted (Figures 16-18):







vi. STUDENT, FACULTY and PROGRAM EVALUATION

Track I Course Ratings and Professor Ratings Track I Course Ratings

Number of students polled: 14

1. Choose the TOP 3 things the TIP I Program did well

Answer Options	Response Percent	Response Count
• Defining responsibilities in the Student Handbook	21.4%	3
 Organizing a smooth and orderly orientation/registration process 	21.4%	3
 Addressing my questions and concerns. 	85.7%	12
• Providing Internship Placement and Experiences	85.7%	12
Developing Weekly Career Sessions	14.3%	2
 Providing information helpful to the pursuit of my career goals. 	y 71.4%	10

2. For what reason would you recommend the TIP program to your peers interested in Medicine, Pharmacy, or Dentistry?

- It gives you the opportunity to have a better understanding of the health care profession and you will have an all-around great experience.
- I would recommend the TIP program to my peers because it is a perfect way to show people how the health care profession really is and how the real world works in the health care profession. It teaches you how to deal with patients and also learn information about the field that they are interested in from their preceptor.
- I would recommend this program to my peers because it exposes you to what you'll be doing in the health care career.
- I would recommend this program to my peers because through this program I truly gained a lot. The primary thing I gained was confirmation that I desire to be a physician. Additionally, through my preceptor, I've made numerous connections, and have been taught so much information on what being a doctor entails.
- Because it is a great program and an excellent resource for pre-health students.
- This program was such a good experience. Not only does it provide more than the minimum hours of shadowing needed, it allows one to learn and experience the life of a doctor inside a hospital/clinical setting.
 Through this program, I have met various patients, made new friends, and learned many things about cardiology and the medical field.
- The program helped me to learn different things about the health professions.
- This particular program allows you not only to gain experience in the profession of your choice but also allows you to meet others that have the same interest in you, become familiar with the health professionals and faculty of the program, learn as much about the program to prepare you for entrance, and receive compensation for the program.
- I would recommend this program as a great learning experience about health professions. It prepares you for a chance to go into the health career you've always wanted.

- The TIP program gives you a chance to network with the UT professors and deans and also build a relationship with our preceptors.
- Exposure to your desired field
- The TIP program allows students the opportunity to intern at a site and in a field that they are interested in pursuing.
- It gives people a good opportunity to explore the career that they're interested in.

3. Preceptor Evaluation

A	nswer Options	Strongly Agree	Agree
•	My Preceptor was a helpful resource in addressing my questions and concerns.	12	1
•	I learned new clinical skills and improved on others.	13	1
•	I acquired a better understanding of the requirements for career success.	14	0
•	I was provided an opportunity to meet new people and learned how to work with them effectively.	12	2
•	My motivation increased to perform well in academic course work	13	1
•	My confidence increases in the ability to take on more challenging course work. I developed a better understanding of personal career goals.	11	3

4. Choose the TOP 5 workshops provided during the summer.

Answer Options	Response Percent	Response Count	
Internship Discussion	64.3%	9	
 "The Immortal Life of Henrietta Lacks" Book Discussion 	35.7%	5	
Exploring Leadership	0%	0	
 Assessment Workshop 	14.3%	2	
 Social Media and Your Professional Career 	14.3%	2	
Test Taking	21.4%	3	
Time Management	57.1%	8	
Cultural Competence	7.1%	1	
 Interviewing Workshop 	7.1%	1	
 Meet the College Deans 	71.4%	10	
Mock Interviews	85.7%	7	
CPR Certification	42.9%	6	
Journal Experience	35.7%	5	
 Case Studies 	28.6%	4	

5. How would you improve on your TOP 5 workshops to make them even better?

Internship Discussion

- I would give more detailed description of my experiences.
- No improvement needed.
- Internship discussions were wonderful because one was able to gain knowledge about what others were
 doing daily. My only improvement would be to have specific questions to ask about our week because
 majority of the things we talk about are repetitive.
- Talk more in detail
- Maybe we could make the talking much shorter.
- Writing down my daily experiences more
- The internship discussion ran smoothly and I wouldn't change anything about it.
- Limiting people's talking time

Book Discussion

- I could have asked more question or answered more questions
- No improvement needed
- I would give more time to the discussions and introduce other cases pertaining to the book
- Search more for details
- · Annotating the text
- The book discussion was very informative and I wouldn't change anything.

Assessment Workshop

- I would set aside another day during the week in which students could work on their weaknesses with trained professionals
- I feel like the tests helped me figure out my skills, but I was hoping it would be more like the MCAT

Social Media and Your Professional Career

- use less time on social media
- Continue to remember to keep my social media site professional

Test Taking

- make a detailed schedule to follow
- None
- I enjoyed this session. It has helped to keep me prepared and prepare me for undergrad and graduate school.

Time Management

- Time management was extremely beneficial for me because I struggle with adequately being able to achieve
 everything I want to do because I run out of time. I think this workshop was helpful, and can't think of any
 specific changes.
- · This was perfect!
- None
- · Nothing I would change

Cultural Competence

• Have the group leaders practice getting the course started ahead of time.

Interviewing Workshop

• None

Meet the College Deans

- I will ask more questions
- I feel that there should have been more time to meet with the deans.
- More than one rep from each college
- Take the knowledge gained and apply throughout the rest of my undergraduate career
- Some of the deans should be certain about info before answering questions.
- None
- It was loud and I had difficulty hearing the dean at times. Have separate rooms for each dean
- Nothing needs to be changed. It has been an awesome experience.
- None

Mock Interviews

- I will try to be less nervous.
- Before the interview have a guideline that the interviewer will ask the interviewee and after the interview they will grade them on a scale from one to ten and also give the interviewee a copy of what the grade was. That will be helpful in the future to let them know what they need to work on and the interviewer can also add comments on it.
- I think they should have gone over the power points with the interns that were emailed to us. Also, it would have been nice to talk to someone from the admissions board for tips on interviewing.
- Mock interviews were my favorite because it was great practice for future interviews. Once again I don't have any specific corrections. I thought it was beneficial to say the least.
- I would have the students interviewed by more than one person for more about 30 minutes each
- Make the interviews more like the real ones.

- Discussing the strengths and weaknesses of the interview and more in depth session for tips/advice
- Looking over the questions more
- They could be a little more organized.
- Be interviewed by actual deans/ assistant dean/chairman of the dept.

Journal Experience

- I will turn in my journal earlier
- The preceptor should assign multiple duties during work hours to have more things to discuss in the journals.
- I would give a less detailed outline as to what the journal should be about. This way the students can explore more and not worry about answering every question on the outline.
- I have nothing to say about this one. I really liked it.
- None

CPR Certification

- No improvement needed
- Be comfortable applying what I know in case of an emergency
- None
- Maybe practice on baby dummies
- None

Case Studies

- Have everyone tell their opinion to the other people that are doing a case study in that group. They just picked two people to represent each case study. Have everyone talk on it.
- Smaller groups
- Nothing I would change
- Have more examples of case studies

6. Locate a moment that was a high point, when you felt most effective and engaged. Describe how you felt and what made the situation possible.

- There have been many high points in my internship. I have many wonderful memories. My preceptor, liked to give me and the other TIP participant topics to research. It was a lot of hard work but it paid off at the end. Mostly, every day we had to present a topic we learned about to him. It was hard work but it benefited me, I learned various life lessons in the internship. When I presented my topic and he and I really knew it, I felt effective. When my preceptor gave his insight on our topic, I was engaged.
- There were two moments in which I felt I was the most effective and engaged. I was really engaged in the case study. We had to pretend that we were board members of the school and read a bio of a student looking to get

into medical school. It was effective by getting some of the other students input, to know what they think to whether just accept that person or to give them an interview.

I loved the Scavenger Hunt. It was engaging because the first team that finds all of the correct answers win, even though there was no prize involved. It was very effective on teaching us things about the college and historic people.

- The time that I felt was most effective was when I got to test a patient's urine for an UTI. Also, I got to spin the sample of urine in the centrifuge and prep it onto a slide so I could look at it under a microscope. It was quite exciting because I got to use my skills from my chemistry lab. Being in the TIP program made this all possible.
- I recently felt a high point when meeting UT medical school student. Though this is something simple, she truly gave me insight and encouraged me. It was extremely beneficial talking with and getting to know someone who is where you want to be next in life. I met her at the Baptist Hospital as my preceptor was performing surgery, she was doing urology that day. Making connections is helpful as she is going to continue to help me on my journey to one day become a dermatologist.
- Every day on site. I felt like I was learning all the time.
- Every day when I shadow is a high point. I am always engaged in the medical conversations. I felt like a real doctor during these times. I would give my input and receive some. If I did not understand something, I would ask my preceptor and read up on it. It was just like taking a summer course, which was perfect for me. Because other than getting shadowing hours, my aim for participating in this program was to learn. And that was accomplished and then some!
- One moment that I would consider a high point would be assisting with one of the patients during treatment. I was able to help my mentor do their treatment with the patient, and also encourage them throughout the process. I felt as if I was an essential helping hand during that part of treatment. My mentor kept me engaged by explaining what I was doing, and allowing me to write down information to be used for his charting.
- I was highly engaged with my preceptor whenever I saw her. She was a wonderful woman, and she showed me the things I wanted to see. I felt engaged looking up new terms I haven't heard and assisting her with patients. I will never forget any of the moments I've shared with her.
- My high point of this program was when we did the mock interviews and met with the deans. I tend to get nervous in interviews, and the mock interviews made it a little easier for me. Meeting with the deans gave me a realistic view of the people that have the power to accept or decline my application. It was nice to match names and faces, and I enjoyed hearing the advice each of the deans gave based on some wrongdoings of their previous applicants.
- I felt most engaged during the mock interviews. I rarely reflect back on all I've done during my years in college and the interview forced me to do just that. It made me realize that I've done a lot and have come a long way. Reminding yourself of all you've done in your life makes you more motivated to continue the rest of your journey.
- I was most engaged in my intern site. The physical therapist made an effort to include me as part of the team which allowed me to relax and learn actively.
- At my internship when they were short on staff I was allowed to "play Physical Therapist." I called patients, reviewed exercises with them, and prepared ice and heat packs for them prior to their leaving. I felt proud that

they were trusting me and they believed in me so much that they allowed me to basically do their job.

When I met one of the physical therapist faculty from UTHSC. Meeting one of the faculty members made me
realize that being a physical therapist was something I really wanted to do. In fact, being in this internship had
increased my motive for being a physical therapist. However, meeting her made me feel even more confident
about my career choice.

7. Describe three concrete wishes for the future of this program?

- I would like to have more time with preceptor. I would also like to have more interactive programs, like the scavenger hunt.
- The people that are supposed to come for workshops on Fridays and do activities, make sure that they do not back out of it at the last minute. When giving out the lab coats, books, GRE Prep, MCAT, and etc. Think about letting the students have that material so they could use it in the long run or refer back to it. And also consider paying for them to take a practice MCAT/PCAT/DAT or GRE one time, preferably during the time in the program or at the end.
- The three wishes that I have for this program are: 1. To add a session that preps interns for interviewing skills.

 2. Continue to use previous TIP participants/ UT students as the leaders on Fridays. 3. Lastly, I don't think there was really anything else overall the program was well organized, but if I had to choose I say there needed to be a little improvement on communication for the future.
- 1) To continue allowing students to shadow and incorporating in workshops. It is effective and efficient.
 2) If at all possible to match students to the specific profession they want to attain. Though it was helpful shadowing a physician in general, it would have been even better to work with a Dermatologist
 3) To spend time preparing for the MCAT, and other future test depending on one's desired profession.
- That it will grow to include more students
 That more preceptors will be on board
 That creative leaders will always be available
- My wishes for this program are that I get to participate in TIP 2 and 3, that the program never dies down, and that it becomes bigger and extend to other schools.
- In the future, I hope the program can be a little more organized, maintain the sessions that were provided, and have more fun events with all of the tracks.
- I don't really have any in mind.
- I hope this program will continue to grow! I was expecting maybe thirty students for Track I, so I hope more students will try to apply. I wish that it would have been a tad bit more organized. Also, I would have loved to see Constance more often!
- I hope the program will be more organized in terms of activities planned for the day we meet.
- -To be better organized on the weekly track meetings.
 - -For the program to continue to expose students to actual work environments.
 - -To continue the mock interviews.

- I wish the program was more organized.
 I wish that events planned for the day, such as the Hip Hop class, should be executed if planned.
 I wish the program, as far as the beneficial opportunities it offers, continues.
- 1. being more organized during weekly tip program meetings

8. Describe any change in your educational and/or career goals as a result of this experience.

- I still want to be a doctor but I am also thinking about staying with the Biochemistry major and double minor in Biology and Neuroscience instead of switching to Biology major and minor in Chemistry and Neuroscience
- The change that I have in my educational and career goals are that I have completely decided that I do want to be a Medical Doctor in Internal Medicine. I was not quite sure before I signed up with the program whether I wanted to do Internal Medicine or not.
- Being placed at my clinical site, my preceptor has taught me the importance of being well rounded so I plan on continuing to learn new things even when I'm not told. Also my preceptor said he never missed a party in college because of study because he always stayed ahead in all his classes. So this upcoming semester I plan on staying ahead in all my classes so ill have time for other stuff.
- I have no change in my goals, but I've been motivated and encouraged to achieve my ultimate goal.
- My career goals were further fortified. Having participated in this program gave me a greater conviction to work harder to become a doctor.
- I have learned so much and I'm ready to know what it's going to take to be an pharmacist
- I plan to focus much more on my courses, acquire more experience to gain more knowledge of Occupational Therapy, and set higher goals for myself throughout my college career.
- I haven't really changed any of my dreams. They were just enhanced tremendously. I got to see what it's like to be an OB/GYN. It's something I want to be one day and seeing everything that my preceptor did gave me an idea of what I will be going through. It just made me even more excited and now, I really want to become one.
- This program has really opened my eyes and made me understand that this IS definitely something I want to do! I have not looked at my college education very seriously, but now I am going to make sure I stay on top of everything so I can be the applicant they pick to be a part of UT Pharmacy School!
- I feel more motivated and confident as a result of this experience.
- No changes. I am still very interested in becoming a physical therapist.
- The program has made my desire and drive to reach my goals so much higher.
- I am more confident in my career choice.

Track II Course and Professor Ratings

Number of Students Polled: 22

- 1. For what reason would you recommend the TIP program to your peers interested in Medicine, Pharmacy, Dentistry or Allied Health
- TIP has prepared me for the DAT. It has all sources that can help me to succeed on the test.
- The program provides a rigorous schedule that really helps prepare students for their professional tests.
- The program helps fully prepare you for your entrance exams for a health career profession of your choice.
- The program really prepares students and helps them get into the mindset of health care professionals.
- It offers opportunities to those who are interested in health careers which are not regularly available to most students.
- It is a fantastic opportunity to hone your skills and learn what it takes to succeed in your career of choice.
- It not only prepares you to take the DAT but also teaches you how to deal with stress or problems that might occur when you are in school.
- Great way to get prepared for dental school and the DAT. It is also a great way to meet new people. Also, the fact that you are getting paid to study.
- TIP provides a lot of material for preparing for the DAT. It helps to sculpt you're study habits, as well. I've never studied this hard before. Also, since we're studying for the same thing with other people, you don't have to stress or feel alone on this journey.
- This program would be able to prepare you for the real world and it also will help get you ready for applying to medical, dental and pharmacy schools
- This program is a good way to get focused and increase your ability on problem solving. Also it is a very good way to get to know the staff.
- The staff is very supportive and works hard to make sure that students are well informed about opportunities. They acknowledge that the path to becoming a professional isn't easy; however, they show students better ways to handle the various difficulties.
- It will prepare you for their future health care profession.
- I feel as though this was a great program as far as preparation for the entrance exam. I learned a lot, and obtained good study tips.
- TIP 2 really prepares you for the PCAT. You work hard and it really pays off.
- This program gives students a great opportunity to be more competitive when applying for their professional schools. The material is priceless, as are the workshops and personal advice that is given throughout the program.
- it is good exposure to the school, and the people there. It can benefit you very well and it is wise to apply for TIP

- It prepares future medical professionals academically by providing courses/materials geared toward the professional school of choice. In addition to academics, TIP provides information on how to be successful in professional school interviews as well as other ways to successfully matriculate through school once accepted. In my opinion, TIP is a highly rewarding summer program dedicated to a student's future success.
- Great mentorship which can guide you to right direction.
- The TIP program really prepared me to take my PCAT. It is a great program to meet people and to learn what it takes to get into pharmacy school.
- They provide you with the needed resources to achieve your goals
- TIP offers individual instruction that minorities would not otherwise receive. I've learned what to expect from my entrance exams and what to do to better prepare myself. It is a great learning experience.

2. Choose the TOP 3 things the TIP II program did well

Answer Options	Response Percent	Response Count
Defining responsibilities in the Student Handbook	9.1%	2
 Organizing a smooth and orderly orientation/registration process 	31.8%	7
 Addressing my questions and concerns 	54.5%	12
 Providing sound curriculum to prepare for the PCAT, DAT or MCAT 	86.4%	19
• Regular review sessions with Dan, Sherry or Mary	81.8%	18
 Providing information helpful to the pursuit of my career goals in career development sessions.(i.e. personal statement, interviewing, etc.) 	50.0%	11
• Other (please specify)		0

3. Test Preparation Evaluation: What benefit, if any, did you derive from the summer test preparation portion of the program?

Answer Options	Very Beneficial	Beneficial	Not Beneficial	Detrimental	N/A
 Academic Strategy Sessions 	9	13	0	0	0
 Kaplan Course 	10	11	1	0	0
 MCAT Review Sessions (Dan Osborne) 	5	3	0	0	14
 PCAT/DAT Review (Sherry Painter) 	10	3	0	0	9
• GRE Review (Sherry Painter)	1	0	0	0	21
 Verbal Reasoning (Mary Avery Poole) 	6	3	0	0	13
 Crack the PCAT/DAT 	5	8	0	1	8
 TopScore Additional Comments	5	4	1	0	12 4

- We were never really told when to use the TopScore program. I thought we would be given an assignment to use it, but I believe we were only told once to use it, so it wasn't very beneficial for me. We also used Crack the DAT, but we weren't given an opportunity to review answers we missed. However, we did have a day when we didn't have anything scheduled, so that's when some of us looked over the answers we missed.
- I would have liked a few more sessions with Dan although I realize he was quite busy. Some additional content explanation would have been slightly more helpful to me.
- Someone needs to update the software for crack the PCAT.
- The Pearson Practice Tests were very helpful.

4. Choose the TOP 3 workshops provided during the summer

Answer Options	Response Percent	Response Count
• Interviewing Workshop	4.5%	1
 Mock Interviews 	59.1%	13
 Personal Statement 	27.3%	6
 Perfectionism 	18.2%	4
Time Management	31.8%	7
 Learning Skills and Goal Setting 	13.6%	3
• Test Anxiety	63.6%	14
 Note taking 	4.5%	1
• Test taking	18.2%	4
 Meet the Deans 	50%	11

5. How would you improve your TOP 3 workshops to make them even better?

Interviewing Workshop

- More feedback
- More feed back
- I would have two interview workshops instead of one, to see how we improved.

Mock Interviews

- Use dental students for the dental interviews
- I like more feedback based on improvements to be given to the student after the interview.
- Have non-students conduct interviews
- Give feedback to students!
- Mock interviews were great. They actually felt like real interviews, therefore I would not change anything.
- Practice answers to common interview questions.
- Give more Mock Interviews one when we first start and one at the end of the program

- I think that it is very helpful as it is.
- written feedback
- it was fine the way it is
- Have a panel similar to actual interview instead of just one person.
- Give a detailed review after on what was good and what needs to be improved

Personal Statement

- A sample personal statement would have been great. It would have provided me with an idea on what an ideal personal statement looks like.
- Maybe have someone help us write our personal statements or proof-read them.
- Have a list of what should be on the statement!
- I will try to be original as possible, and make sure I have the statement proofread multiple times.
- nothing
- I would like more help with the personal statement by allowing us to turn in a rough draft.
- Read some examples of good personal statements

Perfectionism

- You have to strive for excellence, not for perfection.
- nothing

Time Management

- I would improve it by having a session where we practiced by actually making our own individual schedule.
- I like the time management I don't think anything should change
- Very good workshop

Learning Skills and Goal Setting

- I need to improve the way I learn things. It takes me longer than others to learn things, so I need a quicker way to retain information.
- It could possibly be helpful to have a session to prepare a reasonable after class schedule.

Test Anxiety

- N/A
- Propose situations.
- I would improve it by having us practice using the text anxiety techniques with a practice test.
- I really like the fact that the counselor had one on one time with us
- Perhaps a more detailed presentation.
- I thought this doesn't need improvement
- it was fine the way it is
- If we could learn about the technique earlier, it would be more beneficial.
- I would have liked more times to practice the Heartmath techniques.
- Continue to provide sessions that can help reduce test anxiety

Note Taking

- I learned to organize a series of question style notes.
- Let the students try out a type of note taking to see if it is beneficial to them

Test Taking

- Let us see how well we do with and without the strategies.
- Practice taking more full length tests, so I won't shut down when I take the real DAT.
- It is helpful as is.

Meet the Deans

- N/A
- No improvements needed. This was a great workshop!
- Have more time for questions
- This one was pretty good.
- None. We got to meet with the Deans personally and I believe that it was very helpful.
- The deans had a lot to offer; I would recommend some additional time for questions and answers.
- Actually having the dean of Medicine there
- it was fine the way it is
- smaller group with a dean would give us more chance to talk to him.

6. If you were admitted to professional school at the University of Tennessee Health Science Center (UTHSC) and all the other schools you applied to, would you attend UTHSC?

	Response Percent	Response Count
• Yes	95.5%	21
 No 	4.5%	1

7. If you selected no to the previous question, please describe the reasons you would choose to attend another institution?

	Response Percent	Response Count
Negative experience or perceptions of UTHSC	0.0%	0
Financial aid	0.0%	0
• Diversity of students/faculty (i.e. HBCU)	100.0%	1
• Location	0.0%	0
Size of Institution	0.0%	0
Supportive Academic Environment	0.0%	0
• Other (please specify)		

- 8. Locate a moment that was a high point, when you felt most effective and engaged. Describe how you felt and what made the situation possible.
- A high point is after I took the Crack the DAT. My score was really low, and I know that I have to work on my weak areas. I started studying hard and brought my scores up.
- On the Kaplan Final, I made a 17. A 17 is the highest score I've made while participating in the program. It made me feel as if my studying was paying off.
- I felt most effective during the verbal reasoning sessions with our Student Assistant. They gave me a chance to participate more and actually have fun doing it.
- The moment where I began to ask questions in class was the moment where I felt the most engaged, and in tune with the material. Working on material at home and preparing questions for review sessions is what made these moments possible.
- When using the individual study time to gather other MCAT students to work through MCAT questions. It felt accomplishing to have all of us learning at the same time so we could understand where everyone was at in their preparation. If people needed assistance more than likely there was another student who could help them and vice versa.
- A high point for me was when my MCAT scores started to go up on my diagnostic tests. I felt most effective and engaged while taking the tests and seeing the fruits of my labor. I felt good and this program is what made it possible.
- When I was able to meet with the Dean and have a little interview with him. I was nervous but still excited to meet and get to know the Dean. We were guided to the lab too and the experience was great! Our Student Assistant worked hard to get us this opportunity.

- The moment in which I felt the most effective and engaged was whenever we were with our instructor going over the Science portion of our tests. During those moments I could actually see which areas I was struggling in and which areas I was actually good at. It made me feel like I was unprepared, therefore it made me want to study more. This helped push me to study more and to work on my weak areas. Our instructor was able to clear up any confusion and answer any question. She was extremely helpful.
- A high point was when I scored higher in reading comprehension than anyone else. I finally felt like I was good at something.
- When I first came here I felt like I was not organized and I felt like the others in my group knew a lot more than I did so I tried so hard to grasp the concepts but I knew some of the courses that I had not taken were the reasons why my scores were so low. In this program the teacher and our student tutor made me feel hope and made me feel like I can do this. I have to work twice as hard but now I'm seeing the light and I want to thank the TIP program for helping and guiding me in the right direction.
- When being able to review with our Student Assistant, I was more engaged in wanting to learn and make the best score possible. After reviewing with her, I felt my scores really were improving which gave me more confidence.
- I think it would be in the sessions with our instructor. I had been exposed to many concepts before and didn't really remember them. However, when he explained certain things, they just clicked. His shortcuts seem helpful too. As he went through several questions and explained which answers did and didn't fit, I would think oh my gosh why did I even guess that answer? I would say now I see the reason why this is the best answer.
- The Mock interviews were a high point of this summer, because it made me realized what I need to work on during an interview.
- When we had our small meetings with our instructor. I felt like I could ask her about anything and she would be able to effectively answer my questions.
- The mock interviews were the high point for me. It put everything in perspective. I felt like I knew exactly what I needed to do.
- I enjoyed working with our instructor, he was able to answer all of our questions and also added his expertise to what to expect on the actual test.
- When I was doing GRE prep with the Kaplan class. I felt event though it was online, the teacher was engaging and answering questions quite well. The other students were nice and engaging.
- I felt more effective and engaged as my scores started to increase from previous tests. Working with our instructors helped me achieve this goal.
- When everyone gathered together and worked on a sample test, I was learning what I was lacking. Through the teamwork, I was able to identify my weakness. The idea was suggested by our instructor. He was an amazing teacher.
- I felt active and engaged in all of our group learning sessions when we went over test and practice problems. I enjoyed hearing how other people solved the problem as well as showing others how I solved different problems.

- I felt the most engaged during the test anxiety and note taking workshop. My needs were acknowledged and I felt like I had people who understood what I was going through, really wanted me to do better, and were willing to help in any way they could.
- It was a high point when my group and I came together to help each other. It's a great feeling to know others want to help you succeed.

9. Describe three concrete wishes for the future of this program?

- I wish the program could be longer.
 - I wish the program has more DAT preparation software such as DATqVault,...
 - I wish the program could start at 9:00 instead of 8:00 am.
- 1. Use Chad's Videos as another study resource
 - 2. More individual study time
 - 3. Track III for dentistry
- I wish the Kaplan sessions were maybe just an hour longer. This way the lessons won't be so rushed. I wish one or two fun activities could have been planned for the students as a getaway from the learning environment. I wish maybe more resources were available as a learning tool.
- More time with the instructor.
 - More interaction with individuals from the medical program.
 - Less individual study time and more group oriented work.
- Give the Track II medicine people another source for information.
 - Give out more petty cash to pay for gas.
 - Have more time to study.
- Lots of computers do not work properly for the Kaplan courses and it takes time to try to find one that works. A Quantitative Reasoning professor would be great too.
 - A printer that we students can get access to print practice tests or make copies of notes would also be great.
- I wish more people would learn about this program because it really is a very helpful program.
 - I wish that this program will continue to have excellent student instructors like ours who was always there to help us in any way possible.
 - I wish that this program would have more instructors like ours to help us with each section in the DAT.
- 1.) Our schedule for the last 2 weeks was wrong. We didn't have our Student Assistant with us so we were pretty much on our own. I wish that the schedule was better thought out.
 - 2.) That more students like our student assistant work with TIP students. She is a hard-worker and was dedicated to helping us to succeed.
 - 3.) A planned day of classes with our instructor would have been nice. We usually went in class and answered questions, but I felt like the topics would jump all over the place, however I would rather have a lesson plan and go through that.

- I wish for this program to always stay the way it is. It really is helpful. I also wish to perhaps have more students/teachers for the specific health career. The people that have helped us (our instructor and Student Assistant) have truly been supportive and helped with increasing our scores; so having them help other students would be very beneficial.
- I hope that almost everyone will get satisfactory scores on their tests. I would like the HCP staff to remain supportive and continue assisting students. I hope that the program can have more spaces available in the future.
- I wish that the program would incorporate more fun activities to do within the city. It would also be nice to have more learning assessments. I would also hope that the program would bring in more assessments.
- 1. more time for individual study
- More organization.
- For interning, we should be exposed to different clinics as opposed to one More time should be spent on test preparations for allied health, at least 3 times a week as opposed to two A fun day for track 2 students.
- Have actual instructors to help in areas of deficiencies.
- I wished if we could meet our instructor earlier and more often. He was very effective teacher. Second, the actual real person teaching MCAT class would far more beneficial than these online courses. Third, little more petty cash would be great since the dorm in the University of Memphis does not have a fridge in each room. It was hard for me to buy healthy food.
- I hope the program continues for years to come. It is a great program and I will recommend it to everyone I know that is interested in a career in medicine.
 - I hope that more Pearson practice tests are made available for future TIPS students.
 - I also hope that future TIP student get to work with people who are just as helpful as the people who taught me.
- I wish that this program was more organized and that students were always informed of changes and given general information of scheduled events.
 - I wish that all tracks, whether MCAT DAT or PCAT, could have mentors or someone to check in on them and make sure they are doing well and are constantly informed.
 - I would also like to see a few more social events of planned get-togethers so we can get to know our peers and network.
- More people would take advantage of it It continues to advance as times/tests change More people continue to give back and help with the program

10. Do you feel you will be prepared to take the GRE, MCAT, PCAT or DAT within a month after completing the program?

	Prepared	Somewhat Prepared	Not Prepared	N/A
GRE	0	1	0	11
PCAT	5	2	0	8
MCAT	2	5	0	7
DAT	4	3	0	7

11. What might be done to make you feel more prepared to take the MCAT, PCAT, or DAT?

- More individual study time
- I need more time to study and to work on my weak areas before taking the PCAT in a few months. I also will need to dissect my old practices tests that I've taken in order to fully understand the concepts.
- More time with our instructor. Integrate multiple sources of MCAT prep ie Berkeley, Exam Krackers, Princeton, Kaplan.
- If the program started a week earlier so I had more time to review after this course.
- An online/chat help center that can give feedback as soon as possible so that after the program finish, if we have any question, we can get help from there.
- I believe I need to take more practice tests to help me feel more prepared. The more that I improve on my practice tests, the more I feel prepared and secure. I also may need to keep reading the review notes to help me maintain information in my head and clear up any confusion.
- I need more time to learn the information. We covered so much and I don't feel secure that I will retain the information I've learned. I also don't feel secure that I'll have time to learn the information I haven't covered. So, more time would be great. Maybe extend the program to 8 weeks.
- I think I need to retake a couple of general classes to get me well prepared but other than that I feel confident
- There was not really anything more that could be done. I felt we were given sufficient material and many practice tests.
- I personally realize that I lack understanding of some concepts in certain subjects, so additional content review would have been better for me.
- If the PCAT had less Kaplan courses and more time with the instructor, we would be much more prepared.
- More individual study time.
- More focused studies on the material that I was struggling with.
- For the GRE, I think if we could add 3 days of studying as opposed to 2, it would be very good

- Practice more with sample test and work on my weakness
- I feel very confident that I will perform very well on my PCAT after going through the TIP program. I don't think I could be any more prepared to take the July 18 test.
- More structure to the prep program.
- Focusing more on my struggle areas.

Track III Course and Professor Ratings

Number of Students Polled: 18

1. Program Evaluation

	Strongly Agree	Agree	Disagree	Strongly Disagree
The online Student Handbook was clear and helpful.	7	11	0	0
Program orientation/registration process was smooth and orderly.	8	7	3	0
The SASS(Student Academic Support Services) was a helpful resource in addressing my questions and concerns.	13	5	0	0
Faculty/Director/TIP's Staff was sensitive and responsive to my needs and concerns.	10	8	0	0
Student Assistants were available and helpful.	9	8	0	1
I fully understood my responsibilities in the summer program.	9	7	2	0
My summer experience was enjoyable and beneficial.	7	10	1	0
Overall, the program provided information that will be helpful in the pursuit of my career goals.	17	1	0	0

2. Rate your professors. MEDICINE ONLY. How helpful was your professor?

	Very Helpful	Helpful	Not Helpful
Dr. D. Thomason- Physiology	5	2	0
Dr. A. Cantrell- Anatomy	6	0	0
Dr. E. Johnson- Anatomy	6	0	0
Dr. S. Nishimoto- Biochemistry and Molecular Biology	3	3	0
Dr. D. Nutting- Physiology	5	1	0
Dr. V. Park- Genetics	6	0	0
Dr. P. Ryan- Microbiology	5	2	0
Dr. T. Marion- Immunology	4	2	1

3. Rate your professors. MEDICINE ONLY. What was the overall quality of your professor?

	very Good	Good	Poor	Very Poor
Dr. D. Thomason- Physiology	5	1	0	0
Dr. A. Cantrell- Anatomy	6	0	0	0
Dr. E. Johnson- Anatomy	6	0	0	0
Dr. S. Nishimoto- Biochemistry and Molecular Biology	3	3	0	0
Dr. D. Nutting- Physiology	5	1	0	0

Dr. V. Park- Genetics	5	1	0	0
Dr. P. Ryan- Microbiology	4	2	0	0
Dr. T. Marion-Immunology	4	0	2	0

4. Rate your professors. PHARMACY ONLY. How helpful was your professor?

	Very Helpful	Helpful	Not Helpful
Dr. D. Thomason- Physiology	6	5	0
Dr. G. Cook- Pharmacology	4	8	0
Dr. J. Buolamwini- Medical Chemistry	12	0	0
Dr. D. Suttle- Pharmacology	3	6	1
Dr. Christensen- Pharm. Math	4	6	2
Dr. D. Nutting- Physiology	6	5	0
Dr. L. Gardner- Pharmacology	4	6	2
Dr. K. Malik- Pharmacology	9	3	0
Dr. T. Marion- Immunology	9	2	0
Dr. P. Ryan- Microbiology	8	4	0

5. Rate your professors. PHARMACY ONLY. What was the overall quality of your professor?

	Very Good	Good	Poor	Very Poor
Dr. D. Thomason- Physiology	9	2	1	0
Dr. G. Cook- Pharmacology	5	7	0	0
Dr. J. Buolamwini- Medical Chemistry	12	0	0	0
Dr. D. Suttle- Pharmacology	4	7	1	0
Dr. Christensen- Pharm. Math	2	7	3	0
Dr. D. Nutting- Physiology	6	6	0	0
Dr. L. Gardner- Pharmacology	3	5	3	1
Dr. K. Malik- Pharmacology	9	3	0	0
Dr. T. Marion- Immunology	9	2	1	0
Dr. P. Ryan- Microbiology	7	5	0	0

6. Which instructor(s) did you find exceptional and why?

- I felt that Dr. Cantrell was exceptional; she was relatable, approachable, and very organized.
- Dr. Buolamwini, Dr. T. Marion, Dr. Suttle, and Dr. Christensen. They were not just teaching for the sake of teaching, they had a passion to make us be able to retain the information for future use. They showed a lot of interest in us (we the students).
- Christenson, Thomason, Buolamwini, and Dr. Marion, Shuttle. These were the best teachers I consider because they were ready to answer any kind of question I asked. Also they are humble hearted and ready to be on our side during any adverse time (exam time).
- Dr. Nutting was exceptional in that he was very knowledgeable in his subject and presented it well. Dr. Cantrell was exceptional in that she was also clearly very knowledgeable, organized, and presented the information exceptionally well.
- Dr. Marion...He provided a great review session and study guide. Dr. Buolamwini...He taught a complex subject with great simplicity and provided a study guide. Dr. Gardner. Dr. Malik and Dr. Nutting made you

think on a higher level by relating the lessons to real life.

- Thomason and Buolamwini because they really took the time to make sure we understood everything and guided us on what to know for the test so we could focus on passing.
- Dr. Buolamwini, he was very helpful in making sure that we understood the concepts.
- Dr. Buolamwini and Dr. Marion are awesome teachers! They take the time to answer several questions. They also prepare study guides and/or review sessions to help you prepare for the exam.
- I found Dr. Buolamwini very helpful because he was able to break the material down in a way that was easy to understand as well as keep class interesting.
- Dr. Buolamwini, Dr. Nutting, Dr Marion, and Dr. Malik were very helpful and made sure we knew the material.
- The ones listed "very good" really took the time to make sure you understood the material. You could tell they were interested in your well-being. Dr. Nutting was a hoot:)

VERY GOOD INSTRUCTORS

- Dr. Nutting brought the class to life. He was really into his lecture.
- Dr. Malik brought real world experiences into the classroom. I could just sit and listen to him for as long as he wanted to speak.
- Dr. Marion was very informative. I learned more about immunology the 2nd time around.
- Dr. Buolamiwini pointed out chemical structures and their related activities that put my past Biochemistry and Organic Professors to shame. This man is Awesome!

NOT AS GOOD INSTRUCTORS

Dr. Leffler's test material did not reflect a fourth of what was discussed in the classroom. Several of us were up way past midnight trying to seek understanding and alternative educational materials to prepare for his test. Kevin, a tutor, highlighted key points for us to prepare for and made the concepts easier to grasp. Please know he was not a bad teacher, we just did not fully grasp his lectures, nor have the correct expectation of his test. The practice exam he provided was indicative of about 25% of his test. Thus, you already failed the test before you took the exam.

Dr. Christensen's math should have been taught on a beginner's level e.g. break it down. Learning the math language and trying to hurriedly develop the skill sets needed to understand and master the math problems were very very stressful. He is experienced and knowledgeable and I would have preferred my grade to reflect his level of experience. Covering almost 13 chapters in five weeks did not allow time to master skills. One can tell he loves what he does and I feel badly as a student that my test scores does not reflect the energy he put into teaching us. I am going to master this skill because I know the importance of being able to assist customers when computers are no longer available due to a power outage or you may be in a rural or developing country. These math skills will definitely be an asset and I will master them.

Dr. Gardner read "directly from slides". She made the subject matter easier to understand but we are all adults and can read. We need info not presented on the slide to reinforce learning techniques and learning objective.

- Dr. Marion, Dr. Cantrell, Dr. Johnson, Dr. Thomason, Dr. Nishimoto, Dr. Parks. Great instructors; their passion for making sure we learned information was evident.
- Dr. Cantrell was extremely helpful in lecture and lab. She was very well organized and helpful. Dr. Johnson was pretty awesome as well. Dr. Nutting was very entertaining yet effective! Dr. Park wanted us to succeed and really tried hard to make us understand genetics (which I find very complicated). Dr. Marion I found to be long

- winded, but pretty thorough. I don't know why but Dr. Park and Dr. Thomson made you feel good when u answered their questions. It made me feel smart, like I was doing something right!
- Dr. K. Malik, Dr. J. Buolamwini, Dr. T. Marion and Dr. D. Thomason. I was touched when Dr. Malik for instance, went out of his way to give the whole class his cell and home phone numbers and said, " call me if you need extra help, I want to help you . . ." In addition, the above mentioned exhibited superior lecture presentation skills.
- Dr. Nutting was the best at balancing instruction with keeping our attention. And he was excellent at answering questions.
- Dr. Cantrell and Dr. Johnson were exceptional professors. Their love for the subject and orderly teaching made this subject enjoyable to learn.

7. Rate the quality of tutoring.

	Very Good	Good	Poor	Very Poor
Availability of tutors	9	8	1	0
Quality of tutors	14	4	0	0
Amount of tutoring time	10	7	1	0
Overall tutoring	11	7	0	0

Additional Comments:

- The tutor (Med Student) was very helpful in breaking down stuff.
- The tutor and Student Assistant were excellent!
- The COM tutor was great. A COP student volunteered his time to turor...Awesome
- I wish there were more tutors for Pharmacy related classes available because there were times when I would ask a professor a question and still be confused.
- Tutoring schedule should have been set up from Day One. Many times, I felt we had to hunt down tutors and this was valuable time wasted. Math tutor and respiration tutors should have a set schedule for us to sign in and not be informed one or two days prior to exams, of their availability. Again, both tutors were an excellent. They broke it down and they were very enthusiastic toward the subject matter. On a scale of 1-5 they will get a 10.
- I, along with some of my peers, received most of my tutoring from a Pharmacy Year 3 student. I do not think he was on the list of tutors but he graciously made himself available to assistance us in any area 95% of the time. I would definitely recommend him to be placed on the list of tutors available.
- The tutor and Student Assistant were beyond great
- The tutor and Student Assistant were amazing! Could not have done as well without them!
- Tutoring assistance in some subjects proved extremely helpful. The Student Assistants and volunteer were great with Pharmacy Math.
- The Tutor and student assistant were awesome as tutors, they went above and beyond.

8. What benefits, if any, did you receive from the following activities/workshops? Please choose the appropriate rating.

Answer Options	Very Beneficial	Beneficial	Not Beneficial
Meet the Educational Specialist	6	8	4
Question Group Sessions	4	10	4
Group Study	9	9	0
Group Tutoring Sessions	12	6	0
Additional Comments:			

- I love the way our Student Assistant handled us although it was tough for her to deal with each one of us behavior.
- I wish the question group sessions were more organized and had more interactive learning maybe practice
 quizzes and tests. One on one sessions with students would also be very beneficial to where the gap could be
 met.
- Group tutoring was definitely "the bomb".
- Some of these sessions, e.g. Meet the Educational Specialist and Question Group needed better scheduling and or timing.
- We did not continue to benefit from the question sessions in the later weeks, especially when the questions were not correlated with what we were learning. One of our question sessions only covered two questions in 45 minutes, so it took up too much time for the amount of information we were able to cover.

The meetings with educational specialists greatly varied in quality and benefit. The ones with Kathy Gibbs and the walk in the park session with Constance Tucker were great. I think the sessions with the counseling interns were very poorly timed. It made it difficult for us to benefit from them (and from the question sessions) when they were several hours after we were finished with class. By that time, we were exhausted and frustrated about waiting so long. The sessions with the counselors would have also been better if they were more structured.

9. What were the strengths of the TIP program?

- The TIP program helped familiarize me with material I'll be encountering during the first year of medical school. It was very beneficial in providing me with an educational support system and introducing me to some of my classmates for the upcoming year. It also helped me improve my study methods and time-management skills.
- Prepare me for what to expect, remove anxiety of a new thing/change.
- Organizes and makes me anticipate what will be in the fall. Also, gave us a start point to proceed in our career. Also, the tutor and the Med. student assistant were very helpful.
- It was great preparation for the fall semester. I feel 100 % more prepared than I would have been without tip. The tutor and student assistant were extremely helpful!
- Prepare you for a higher level of learning: study skills, time management etc.

- Getting you ready for the fall, preparing you for the work, and teaching time management
- The TIP program helped to understand the role of being a full-time student. Since I am non-traditional. It also gave me open access to all that UT has to provide.
- There were several available resources from the SASS. It has definitely prepared me for what's to come in the fall.
- The TIP program is a very intense program that gives a big simulation of the level of study that is expected in the Fall and as school will begin. The information is priceless because you are given the opportunity to get a head start on things you will learn in the near future.
- Learning how to study
 - Time management
 - A great head start for the upcoming semesters.
- *Preparing one for mastering their time management when it came to blocking off/cutting off time from studying one subject to move on to the next. It took five weeks for me to learn to keep going forward and not go back to reviewing old material.
 - *Counselors providing fore warnings of how stressful this program can become and what one must do to counteract it.
 - *TIP was always open to address questions or concerns and everyone was friendly and professional.
 - *Paying for tutors
 - *Paying a stipend and providing a weekly allowance for meals.
 - *Thinking ahead by asking we complete this survey so the next term will be better and so forth. It is always refreshing to be involved in an organization that really tries to improve on its assets.
- The strengths included being a precursor to the actual requirements of Pharmacy School and enabling a student to get familiar with study and time management to be an efficient student. TIP also allowed its student to get familiar with the campus.
- TIP showed me how the upcoming fall semester will be like. It also showed me how I need to study
- Great preparation for Fall, great professors and staff.
- The tutors were the best thing ever. The question group was very helpful. I still have a ways to go, but I feel a lot more prepared for med school this fall.
- Great resources: Tutors, Specialists, Books, online resources and more.
- I was very grateful for the opportunity to adjust to being back in school after my time off. I think it will help me to be more successful in the fall.
- The strengths of the TIP program are that they definitely help to get a small taste of what MedSchool will be like in the fall. It helped to place students in close proximity with med students who have been in the program and give great advice.

10. What assistance could the TIP staff have provided to support your academic success?

- 1)Give advance notice if they have to change anything.
 - 2) Avoid lectures on the week of exam.

- 3)Provide study questions in good time instead of last minute.
- networking with one another. provided us with resources and answered several questions which we had difficulty with. 24/7 open for email and even phone call..
- There should be less breaks in the track 3 schedule. It would have been a better use of our time to have the educational specialist sessions within 15-30 mins after class or lunch as instead of having to wait around for an hour or 2.
- More Tutors on a regular basis for each subject
- · Every class should have had study guides and practice questions for the upcoming exams
- I wish that we were able to move into the dorms on Saturday. I was very tired on Monday when the program started. So, I felt as if I was already behind. I also wish we had more study time during the week.
- More tutoring sessions built in to schedules, More structured schedule i.e. "9-5", After hour opportunities for students who have questions in the evenings, An outline detailing the summer plans so students can prepare for the task at hand.
- A math tutor and a great respiratory tutor would have been very beneficial.
- Providing math and respiratory tutor during the first week of Pharmacy Math and Respiratory.
- SASS was very beneficial in allowing to me to develop better study and time management. Talking with the psycho-therapist also allowed me to manage life circumstances in a better way so that I could be a productive student. The educational specialists provided very good advice on how to manage.
- Better information given on the nature of the program prior to its start.
- I think people are more willing to expose feelings in a more private setting, whether or not someone else is going through the same thing. At least one private setting with a counselor would have been more beneficial.
- I think they provided everything and anything they possibly could.
- Nothing more could have been done. Everything that could have been done was done.

11. Describe any change in your educational and/or career goals as a result of this experience.

- I feel more wise and full of knowledge. No longer in a panic mode but feel more acclimatized to the new environment. I know where to find what, who to talk to and also acquired some new ways of studying better.
- I love my goal, I love to keep doing well on it.
- No change.
- I still desire to become a community pharmacist.
- No changes so far
- There are no changes. I still plan to attend UT School of Pharmacy.

- There are no changes. I still want to be a pharmacist.
- No, I am still as passionate if not more passionate about my choice. This summer has pushed me to levels that I didn't know were possible. I have started to study a lot more than ever and it helps to retain a lot more information.
- I have become aware that I have to study my notes at least five times a week and review each day after lecture to be successful.
- I fully understand why UTHSC does not want their students to work the first year. This acclimation of what to expect in the Fall is an experience I will never forget. My career choice has not changed, I fully realize, attending graduate school is nothing compared to going to undergraduate full-time, working full-time and caring for parent. A lot of changes have to be made in preparation for grad school.
- This program along with SASS has caused me to be even more excited about becoming a pharmacist and helping someone else. My triumphs and my failures have truly shown me that I can help those who struggle and I can help those who have not struggled, because at one point or another in my life, I have been one of those people.
- None, still pursuing an MD degree.
- I have to be willing to change when I FINALLY come to the conclusion that what I may be currently doing is not working. I now know where to go to help figure out what to fix.
- There is no change in terms of my career path. If any, I feel more prepared to pursue my career goals at UTHSC.
- None
- None.

12. For what reason would you recommend the TIP program to your peers interested in Medicine, **Dentistry or Pharmacy?**

- I would recommend the TIP program to others because of its immense helpfulness in preparing me for my time in medical school.
- It is a helpful program where your potential could easily be discovered due to a small setting as compared to when the group is large. You also bond and learn from your peers. You also feel a need to help those who will be coming after you.
- It helps a lot in providing the base needed for the real 4 year course.
- The program will help you learn how to study for and survive in professional school.
- It will better prepare you for higher learning.
- So they can get a glimpse of how intense Pharmacy school is and also get an introduction into courses they will see their incoming P1 year
- The TIP Program allows you to become familiar with your first years classwork. It is a great learning

experience. It teaches you how to have time management and improve your study skills.

- TIP is a great program to get you prepared for the fall semester. It certainly points out your strengths and weaknesses. It teaches you how to study and prepare for exams.
- The TIP program is an excellent opportunity to force students to put their best foot forward in order to gain full admission into their health career path as well as get a feel for what they will experience in the Fall.
- I would have them know that the TIP program really prepares you by giving you a glance of what you will encounter while in school. It also allows you to possibly see if the profession is really what you want to pursue. It also gives you great study skills and preparation.
- I would fervently inform them to be seek TIP to get firsthand experience, beneficial knowledge and a wonderful real world insight to expectations of being in UT graduate program. TIP has been a lifesaver because I now know there was no way I could maintain a FT job and be successful in the TIP program nor graduate school.
- The TIP Program truly helps a student improve him or herself. It allows a student to fully understand what they may need to change or maintain from their undergraduate program. I would definitely recommend the program.
- Great preparation for professional programs in a great environment.
- It gets you in the medical mind set. I think people know med school is hard, but you don't really realize how difficult it can be until you are thrown in. Plus, I met a small percentage of my peers, and faculty and have a connection and can feel more comfortable when needing assistance.
- I recommend TIP for ALL students seeking to pursue a health career program at UTHSC for the simple reason that it provides a perfect simulation of how rigorous the academic experience will be. I think I am better prepared to face the coming fall.
- It is a great preparation for professional school!
- This will really give you a small dose of what life will be like in Med School and the study demand.

13. Additional Comments:

- I highly recommend this program.
- We had to deal with more load after the break in one week that in the previous 5 weeks and yet the grading criteria seems the same, like 50% each tim, so it hurts grade wise. Teachers on that last week seemed too rash and cover what they had to finish and they were just flipping pages too fast. I remember we had close to 200 power point slides for one class covered by three teachers. So many of us, including I, scored less and hope it should not reflect our knowledge.
- More specific information should be provided on the TIP website or in the acceptance packet i.e a rough schedule, and exactly what the program encompasses. Also, correct housing (dorm) information should be given. Richardson Towers does not have a kitchen on each floor. That was a big problem for many students who opted not to bring personal refrigerators.
- Great job to everyone.
- Thank you for allowing me the opportunity to be a participant in the TIP Program. I will see you all again in

the Fall.

- Overall the TIP experience went well. There were many resources available to me for which I am thankful from academic to life coaching. I do however, hope that the students in the future are informed fully of their expectations during the summer. TIP is definitely something I could see myself helping out with in the future, to make sure that others after me succeed because I understand the level of stress and pressure you are under. There is a lot of information that is packed in these 7 weeks and I wish that during test weeks there were no lectures because at some point there is an overload on the body and more memorization occurs than learning. I would like to say thank you most of all for an enriching experience that I will never forget.
- I fully understand why UTHSC does not want their students to work the first year. This acclimation of what to expect in the Fall is an experience I will never forget. I was so overwhelmed and stressed at times during TIP, I wanted to scream. And this was only in the third week. Thank God for Ms. Marcy and Ms. Gibbs who taught us how to breathe and zone out in a peaceful place. This was a lifesaver.
- I would like to thank the Director, Educational specialists, Professors, and Tutors who offered their time and experience throughout this program as I worked towards balancing school and all the current situations in life that I was experiencing. I know how enthused and determined I am to become a pharmacist. I have not and I will not give up, because it is something that is embedded deep within my heart. I thank you in advance for considering me for the Pharm.D. Program. With God's assistance, I am eager to show and prove that I will do well in the program, If I am granted the opportunity. Thank you in advance for granting me that opportunity. I look forward to seeing you all in August!
- The SASS staff and tutors in particular have been extremely helpful. They are always ready to help and finding out how they can help. Thank you!
- Thank you so much! I think SASS is one of the best assets UT has to offer students.
- Students, especially TIP III students should be well informed about the situation they are coming into. As for TIP III this is our only option we should be informed about stipend information and accurate living conditions. The information I received did not let me know I would be having a roommate. It also did not let me know that there would be no living room. The description I actually received stated that there would be a shared living room and kitchen. There needs to be more communication to students prior to the beginning of the program. Maybe the TA could call each individual student, welcoming them and letting them know what the program would be like. The classes that students will be taking should be outlined.

vii. Recommendations for TIP 2013

- Incorporate sessions on grammar and writing skills for Track I
- Include PSR lab to improve reading rate and comprehension
- Look at additional resources
 - o DAT: DATqVault and Chad's Videos
 - MCAT: Berkley Exams and Books
- Work with Kaplan to lengthen the lectures in an effort to slow down the content learning
- Provide a printer in the SASS computer lab.
- Plan a "Fun Day" for all TIP students at end of program (ex. Laser tag, Bounce Gym)
- Notify students in dorms that there are no refrigerators and they will have a roommate.
- Work on providing more time with instructors.
- Set up tutoring schedule for Track III in advance.

- Plan structured sessions with counseling interns.
- Schedule question groups and meet with Educational Specialists during lunch hour with food.
- Provide draft copy of the schedule for Track II and III in their acceptance packages
- Update housing information in acceptance package to reflect University of Memphis housing and not UTHSC housing.

Summer Research **Programs**

Annual Report

IV. Summer Research Programs

i. Program Overview

The Summer Research Program is a seven week program offered by the University of Tennessee, College of Graduate Health Sciences (CGHS) under the oversight of the Office of Health Career Programs with the goal of increasing enrollment of talented prospective U.S. students in the various graduate programs offered by the CGHS. Three programs were offered this summer, namely, the Summer Research Scholar (SRS) program, Summer Undergraduate Research Fellowship (SURF) and the Pre-Science Program. The SRS program was funded by the CGHS (support from this source was open to all U.S. citizens) and the College of Pharmacy's Minority Center of Excellence program (support from this source was limited to underrepresented minority students). The Pre-Science program was funded by the College of Pharmacy and Dr. Eldridge Johnson. SURF was sponsored by Dr. Rennold Ostrom.

There were twenty-six (26) participants involved in research this summer. Twenty-three (23) participants were enrolled undergraduate students and three (3) were high-school students. Eighteen (18) Summer Research Scholars, four(4) Pre-Science students and four (4) SURF students participated in the program . The female to male ratio was 17:9. Half of the participants (50%) attended Tennessee institutions. The students were assigned faculty mentors who provided them with hands-on biomedical research experiences. Table x below provides the names of the student participants, program of participation, institution, classification, mentor, and the department in which they conducted their research experience.

Program Participants

Table x. Distribution of Students by Program, Institution, Classification, Mentor, and Department of Placement					
Student	Program	Undergraduate Institution	Classification	UTHSC Faculty Mentor	Department
Female Student	Summer Research Scholars (SRS) - MCOE	Xavier University of Louisiana	Junior	Dr. Ioannis Dragatsis	Pharmacy
Male Student	Summer Research Scholars (SRS) - MCOE	Brown University	Freshman	Dr. Isaac Donker	Pharmacy
Female Student	Summer Research Scholars (SRS) - MCOE	Xavier University of Louisiana	Sophomore	Dr. Hassan Almoazen	Pharmacy
Female Student	Summer Research Scholars (SRS) - MCOE	University of Alabama at Birmingham	Sophomore	Dr. Adams-Graves	Nursing
Female Student	Summer Research Scholars (SRS) - MCOE	LeMoyne-Owen College	Junior	Dr. Michio Kurosu	Pharmacy
Male Student	Summer Research Scholars (SRS) - MCOE	Middle Tennessee State University	Junior	Dr. Lawrence Brown	Pharmacy
Female Student	Summer Research Scholars (SRS) - MCOE	Rust College	Junior	Dr. Tao Lowe	Pharmacy
Female Student	Summer Research Scholars (SRS) - MCOE	Tennessee State University	Junior	Dr. Charles Yates	Pharmacy
Female Student	Summer Research Scholars (SRS) - MCOE	Columbus State University	Sophomore	Dr. Song Hee Hong	Pharmacy
Female Student	Summer Research Scholars (SRS)	Union University	Sophomore	Dr. Charles Leffler	Pediatrics
Female Student	Summer Research Scholars (SRS)	Christian Brothers University	Junior	Dr. Rennolds Ostrom	Pharmacy
Female Student	Summer Research Scholars (SRS)	Cleveland State Community College	Senior	Dr. Wei Li	Medicine
Male Student	Summer Research Scholars (SRS)	Lipscomb University	Senior	Dr. Scott Heldt	Biomedical
Male Student	Summer Research Scholars (SRS)	Clemson University	Junior	Dr. Denis DiAngelo	Medicine
Female Student	Summer Research Scholars (SRS)	University of TN - Knoxville	Freshman	Dr. Junling Wang	Pharmacy
Female Student	Summer Research Scholars (SRS)	Emory University	Sophomore	Dr. Monica Jablonski	Medicine
Male Student	Summer Research Scholars (SRS)	University of TN - Knoxville	Junior	Dr. Denis DiAngelo	Biomedical
Male Student	Summer Research Scholars (SRS)	OKC Christian	Sophomore	Dr. Adebowale Adebiyi	Medicine
Female Student	Pre-Science	Collegiate School of Memphis	High School Senior	Dr. Shelley White- Means	Psychiatry

Female Student	Pre-Science	Harding Academy	High School Senior	Dr. Stephania Cormier	Medicine
Male Student	Pre-Science	Collegiate School of Memphis	High School Junior	Dr. Shelley White- Means	Pharmacy
Male Student	Pre-Science	Rust College	Sophomore	Dr. Kazuko Sakata	Medicine
Female Student	SURF	Harvard University	Graduate	Dr. Alejandro Dopico	Pharmacy
Female Student	SURF	Mississippi State University	Sophomore	Dr. Hao Chen	Pharmacy
Male Student	SURF	University of TN -Martin	Senior	Dr. Kafait Malik	Pharmacy
Female Student	SURF	Christian Brothers University	Junior	Dr. WenLin Sun	Pharmacy

ii. Evaluations

Summer Research Scholars Student Program Evaluation

Number of students polled: 16

1. What activities, if any, would you say contributed	d to the success of the pr	rogram?
HCP Bowling Night	31.3%	5
GRE Prep Sessions with Dr. West	37.5%	6
Workshop on Changes in the GRE/MCAT	62.5%	10
Workshop on Writing an Abstract	68.8%	11
Workshop on Poster Presentations	62.5%	10
Abstract Assignment	75.0%	12
TIP Closing Program	12.5%	2
Poster Presentations	50.0%	8
Other (please specify)		1
• Research		

2. How can we improve the activities you selected above?

- Change the times of the prep sessions to first thing in the morning that way they don't interfere with experimentation in the lab
- Overall, the activities did foster learning and participation. No complaints here.
- I thought the abstract and poster workshops were great; the instructor was very informative and his explanations and examples were extremely helpful. I would have liked more guidance in our writing of the abstract. For example, I was not aware that our format had to exactly match that of the example provided (it seemed like we only needed to include all of the information on the rubric, but not necessarily in such a specific format). I also thought the poster presentations went very well, and I hope HCP does them in the future! It would have been nice to have a short program during the lunch that followed with closing remarks from the HCP staff and/or judges, as well as the announcement of the "winners" of the poster presentations.

- · Overall, good
- Better communication and better organization
- Transportation could have been provided for those at the dorms. It was late at night, and not everyone was from around Memphis.
- Have a closing night ceremony for all the programs
- To have workshops about the PCAT in future
- The activities were great! Not much change needed.
- · Have specified workshop for nursing students
- It would be nice to have had a practice poster presentation. Also more group get-togethers maybe once a week outside of work for dinner, laser tag, etc.
- The activities could be a lot more organized
- Instruct students to write scientific articles
- Personally, I think the abstract workshop would have been more beneficial if we all already came with a draft of our abstract prepared, or there was some sort of follow up session after the first one.
- Do not just cater to one group of students. I plan on taking the PCAT so those workshops didn't benefit me. However, the ones taking those tests were helped.

3. How did the program confirm your interest in research?

- The program helped me confirm that although research is time consuming and tedious, the results are very important in the long run.
- This was my second year at UTHSC, and I greatly enjoyed my research experience. I felt more confident in the lab, in the background material, and in the final presentation. I especially liked the opportunity to present my research as a poster, as it gave me a feel for what a real research conference might be like. Aside from gaining more experience and knowledge in the lab, the program opened my eyes to an interactive way of research presentations. I can definitely see myself participating and enjoying research conferences in the future!
- It was great lab experience.
- I found that research might not be the route for me.
- This program confirmed that I'd rather collect than analyze data. I would definitely prefer working in a lab compared to what I did this summer.
- It made me want to do more research
- The experience helped me realize if I really want to do research in the future.
- I learned some basic skills that are required in research, such as writing an abstract and preparing for a poster

presentation. I was also given a role in a research project that interested me very much.

- I loved being in the laboratory.
- The program made me more interested in research and showed me just how enjoyable research can truly be.
- I enjoyed discussing the experimental design and reading about the science behind the experiments we were conducting. It has been a few years since I've been in a lab and I had forgotten how much I enjoyed analyzing data.
- It helped me to realize that this wouldn't be a field that I would choose to pursue.

4. What helped you network and stay connected to other students?

- Attending the workshops
- The weekly GRE prep sessions and enrichment workshops allowed us to stay connected throughout the program (in addition to FaceBook)
- The various sessions each week and the final poster presentation
- The meetings and workshops
- HCP bowling night, first day orientation, talking before sessions
- Carpooling helped me connect with other students. Besides that I didn't know anyone I didn't meet at orientation.
- · Weekly meetings
- The weekly meetings allowed me to stay connected with other students.
- Frequent encounters with students at workshops
- Seeing them at GRE prep helped, but more activities would be nice.
- Working in labs adjacent to other students and the weekly meetings
- Asking them questions about the type of the work they are doing and the procedure they use
- Dr. Ostrom organized some lunches for SURF fellows and I really enjoyed our tour of St. Jude.
- The first day and the weekly meetings.
- The workshops

5. How can we enhance the areas you described above?

• If you create a FaceBook group for SRS students, the interns will have a space to engage in conversation among themselves and share whatever they desire. Also, this will allow the interns to know each other on a more personal level and network since it helps with breaking the initial ice.

- I think that the sessions that we attend should not be geared only to GRE and/or medical school preparation and information. Rather, there could be various information sessions about the different programs UTHSC offers (these could even be run by current students). I really liked the "Meet the Deans" session. It not only allowed me to ask questions about my area of interest, but I also was able to meet and talk to students who had similar interests.
- Maybe more frequent program meetings
- Have more opportunities for students to see each other, maybe have group activities like community service in a hospital
- The workshops seemed disorganized. No one seemed to know what was going on.
- Better communication, more prepared as some things seemed thrown together last minute.
- The weekly meetings were alright, but they took away from the amount of work I could get done in a day. Most of the experiments I did were very time sensitive, and the meetings would sometimes inhibit the work I was expected to accomplish.
- By assigning hands-on jobs in labs for all students to help them experience more in research
- Have more formal opportunities to discuss the research we are doing with other students in the program.
- Make sure the professors, or their students properly introduce us to our project. I felt thrown into my project.

6. What did you enjoy most about your lab experience?

- Every aspect of my lab experience was amazing, from the people I worked with to the subject matter of the research
- Independence
- Learning new techniques, planning experiments, interpreting results
- The people in my lab were very helpful.
- N/A- was not in lab
- I enjoyed learning from my mentor and strengthening my research writing skills.
- Working with my mentor and her assistants.
- Actual hands-on experience, making mistakes, discovering new techniques, and learning how to be a good researcher.
- The surgeries that I performed in the lab are what I enjoyed the most. It gave me the opportunity to have independent control over the research project to which I was contributing.
- Interactions with patients
- · Meeting new people, i.e. grad students, professors

- I enjoyed being part of a well-known research team, and being able to contribute to the overall aims of the team. In addition, we had weekly lab meetings in which I would give presentations on my work, which I found to be very beneficial.
- My project in lab and the people I worked with.
- I enjoyed working with different machines and learning how they contribute to different experiments.
- · Meeting new people and learning the lab careers

7. How can we enhance lab experience?

- No complaints here.
- I think the lab experience depends primarily on the preceptor, and it doesn't seem like the HCP needs to do much in this sense. Perhaps a helpful thing to do would be to meet with the preceptor to describe the program and give him or her the schedule so that the PI knows the time frame of the summer project, etc.
- It was good.
- More essential lab skills available to learn. Many mentors and PhD students were too busy to teach or help.
- · Very educative
- Get a better understanding of what each student wants to do to better place them in a lab.
- I do not have any suggestions for improvement in my lab. My post-doc and my PI were very helpful and kept me extremely busy to make sure that I got the most out of this experience.
- The lab experience was fun.

8. What would be integral activities to include (those currently included and not currently included) in the SRS program?

- A scavenger hunt at the beginning of the program may help the students learn the campus while simultaneously allowing them to bond.
- Meet the Deans, lunch sessions describing general UTHSC fields (medicine, graduate school, pharmacy, nursing, dentistry, etc.), poster presentation
- · more team building activities and chances to discuss what we're doing in the lab throughout the eight weeks rather than just in the beginning and in the end of the program
- All of the activities currently included in the program
 - -session on the PCAT
- Meet the Deans
 - **GRE Test Prep AND Practice**

- Sports and community service
- Bowling night, weekly meetings, and the Abstract and Poster Workshops should be included in the program.
- Dinner get-togethers, tours/meetings with current students or deans.
- I would have liked to have more interactions with the faculty of various colleges. Possibly having a representative come and talk to us about his or her college and having an open question forum would have been helpful
- Working with new (up-to-date) lab instruments
- Lunch discussions
- Since we are always reading through many different scholarly articles, it would be nice to have a fun activity every now and then versus abstract workshops.

9. How can we encourage future student engagement throughout the eight week program?

- Keep students informed about events, changes, and requirements (email), make sessions mandatory, give sessions variety, give students opportunities to network with professionals in fields of interest, provide lunch:)
- · Have students participate in outreach activities, discuss their research with their peers more
- Match the student with a preceptor and research that will help them the most in their interests and goals for the program
- Everyone pretty much worked one on one. If there had been an opportunity to collaborate with other students on projects, I would have taken it.
- get some opinions of the students
- If activities outside of work for students were offered once a week or once every other week instead of only at the beginning of the program, student engagement and networking would become better.
- More games & activities like the first day
- More activities, more communication.
- By showing them and explain for them the kind of work they are going to do in the program.
- Have prep sessions catered towards student interests (rather than have everyone go to the GRE prep session. I know a handful of people, including myself, are not going to take the GRE)
- Increase fun or non-scientific workshops.
- Better communication

10. What steps should be taken to accomplish your vision?

- Take into account whether or not the student's goals depend on whether or not they are put in a lab
- The first and most important step is to have everyone on one accord.
- Do more research
- Hard work and persistence are necessary for me to accomplish my vision. I've experienced a lot from the program, but now I must remain motivated.
- Complete school with awesome grades
- Get a better understanding of each student's individual research goals.
- Persistence, hard work, and the strong desire to succeed.
- I believe there is no real steps to be taken because insight on abstracts or tips for how to get through medical school can be directly given from the professors.
- Spread the word around the city

11. Additional comments and suggestions.

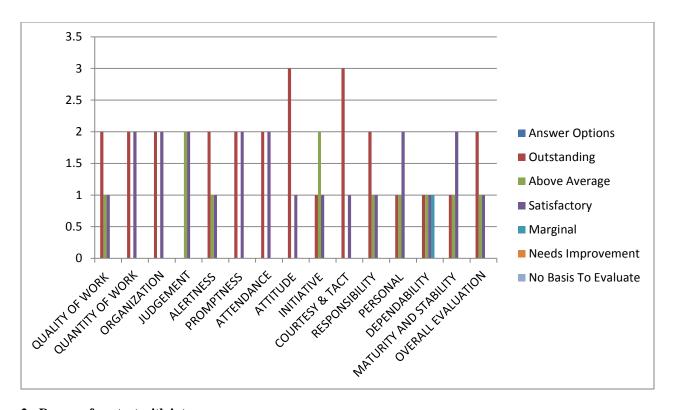
- Thanks for the experience!
- Overall a good experience.
- Involve the SRS more since they felt left out this year.
- Workshops time & classrooms should be more organized as to when & where they will be held. There were a couple of times where meetings were in the wrong location with the wrong instructor
- It was a great program! Thanks!
- From the beginning, there was a huge lack of communication between the programs. I think it is important to either keep the programs completely together, or make them entirely independent. It seemed that SURF and SRS were always on different pages in terms of what was required for their respective programs.

Preceptor SRS Student and Program Evaluation

Number of Preceptors polled: 4

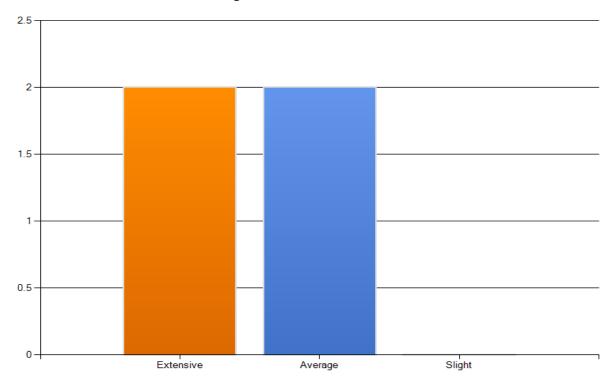
1. Please rate the SRS students in the following categories.

Answer Options	Outstanding	Above Average	Satisfactory	Marginal	Needs Improvement
QUALITY OF WORK - effective, neat, accurate QUANTITY OF WORK-	2	1	1	0	0
effective completion of volume of work under normal conditions	2	0	2	0	0
ORGANIZATION - proper planning of work: knowing priorities	2	0	2	0	0
JUDGEMENT - ability to alert you to problems and important matters	0	2	2	0	0
ALERTNESS - ability to learn and understand; flexibility for mastering new routines and work	2	1	1	0	0
methods; grasping and retaining instructions	Z	1	1	U	U
PROMPTNESS - observation of lab hours, lunch hours and breaks	2	0	2	0	0
ATTENDANCE	2	0	2	0	0
ATTITUDE - behavior regarding total work situation; follows established office procedures	3	0	1	0	0
INITIATIVE - self-starter in obtaining work objectives	1	2	1	0	0
COURTESY & TACT - relations with other employers	3	0	1	0	0
RESPONSIBILITY - works independently without direct supervision	2	1	1	0	0
PERSONAL - uses time effectively; limits personal phone calls; appropriate personal grooming and dress	1	1	2	0	0
DEPENDABILITY - reliability to see a project through to conclusion	1	1	1	1	0
MATURITY AND STABILITY - ability to withstand pressure in crisis situation	1	1	2	0	0
OVERALL EVALUATION of intern's performance	2	1	1	0	0



2. Degree of contact with intern:

Degree of contact with intern:



iii. Recommendations for Summer Research Scholars 2014

- Request that directors give recommendations for mentors in February & ask and confirm possible mentors in March
- Request that directors select students no later than the end of March
- Students suggested keeping weekly sessions, but making them more interactive.
- Request extended access to lab area as some students work past 5pm and on some weekends
- Integrate more opportunities for social networking.
- Start program with a scavenger hunt that includes lab locations of all students who will be placed on campus. This will allow participants the opportunity to see where their fellow students will be for the summer.
- Send summer schedule to all preceptors so they are aware of when students will be out of lab.
- Hold weekly sessions first thing in the morning, avoiding disruption of the research day.
- Have accepted students complete a survey which asks their field of interest and if they plan to take a standardized exam. Place students with preceptors conducting research in their field of interest. Provide prep sessions for applicable standardized exams.
- Connect with SURF coordinator to merge scheduling and events.

Summer Science Institute

2013

Annual Report



V. SUMMER SCIENCE INSTITUTE

i. SUMMARY OF PROGRAM

UT's Summer Science Institute was offered under the umbrella of the Office of Health Career Programs. It was a two week program for upcoming juniors and seniors with strong academics, citizenship, community involvement, and a commitment to pursuing a career in the health sciences.

The SSI curriculum consisted of at least two community service projects, didactic science lectures, pharmacy compounding, nursing, and dental hygiene labs, DNA experiments, Davinci Box practice, as well as exposure to medical simulations. The students also learned more about bioethical issues in health care by debating several real case topics such as healthy limb amputation, creating a life to save another, and decisional capacity and refusal of medical treatment.

Our students completed 5-9 hours of community service. Students baked cookies for the families at FedEx Family House which is a home away from home for out-of-town families who come to Le Bonheur Children's Hospital for treatment. SSI participants also made care packages filled with inexpensive items like soap, shampoo, oral hygiene supplies, tissues, socks, shaving supplies, and lotion for the Memphis Union Mission. This facility ministers to the physical, spiritual, and emotional needs of men, women and children who are homeless and in crisis. For a more personal effect, the students also made personalized cards and notes of encouragement for each care bag and packs of cookies that they filled for these facilities. In addition, the students in the second session of SSI had the opportunity to volunteer at the Mid-South Food Bank where they sorted and packed enough food boxes to serve 3,726 meals to needy families across the Mid-South.

In addition to their community service projects, the SSI students had the opportunity to participate in several off campus field trips including: Memphis Education & Research Institute (MERI), St. Jude Children's Hospital, and the Methodist LeBonheur Children's Hospital.

MERI

The Medical Education & Research Institute (MERI) is a nonprofit medical teaching and training facility in Memphis, TN. The MERI conducts state-of-the-art, hands-on educational courses for physicians from across the country and around the world. Learn more about MERI at http://www.meri.org/

St. Jude Hospital

SSI participants took a tour of the LeBonheur facility, watched a film about the services offered at St. Jude, met with several medical doctors and researchers at the facility, and had the opportunity to tour a neurobiology laboratory. www.stjude.org

Methodist LeBonheur Children's Hospital

SSI participants took a tour of the facility including the Emergency Room (ER) and had the opportunity to hear from several ER staff including nurses, EMTs, and medical doctors. http://www.lebonheur.org/

STAFF

NaKeshi "Nikki" Dyer

SSI SESSION I

STUDENT PARTICIPANTS

Student Name	Classification	High School	School District
Female Student	Junior	Lausanne Collegiate School	Private
Female Student	Junior	Evangelical Christian School	Private
Female Student	Junior	Memphis Academy of Health Sciences	Charter
Female Student	Sophomore	Immaculate Conception	Private
Male Student	Junior	Central High School	Public
Female Student	Sophomore	Millington Central High School	Public
Male Student	Junior	Germantown High School	Public
Female Student	Sophomore	Bolton High School	Public
Female Student	Junior	Immaculate Conception	Private
Female Student	Junior	Houston High School	Public
Male Student	Junior	Kingsbury High School	Public
Female Student	Junior	Memphis Catholic High School	Private

ii. Program Survey Results Session I

SSI SESSION I PRE-SURVEY RESULTS

TOTAL RESPONSES 12/12

1. What made you choose to participate in this summer program?

 Interest in science 	9
• Interest in UT	0
• Friend	1
• Parent	2
 Teacher/Counselor 	0
• UT rep visit to your school	0
• Other (please specify)	0

2. My level of interest in a career in sciences is...

 Very high 	7
• High	1
 Moderate 	3
• Low	1

3. What area of science are you most interested?

 Biology 	6
• Chemistry	1
• Physics	1
• Research	1
• Other	3

4. The area of science that I plan to work in is...

Medicine Nursing None 1

5. My current level of knowledge in Health Science is...

Very High
 High
 Moderate

7

6. What is your current level of knowledge in Environmental Science...

Very High
 High
 Moderate
 Low
 1

7. On a scale of 1 to 5, with 1 being no expectations and 5 being the highest expectations, how would you rate your expectations for the Summer Science Institute?

[5] 5[4] 5[3] 2

8. How would you rate your Summer Science Institute orientation experience?

Very SatisfiedSatisfiedAcceptable

9. What could be done to improve your orientation experience?

- Encourage the students to interact more.
- More people interacting
- I understand that orientation can be a little boring and there really isn't a way to make it fun. So I was satisfied with it because the information as presented to me in a timely fashion.
- Nothing. It was good!
- It was done okay. It was just very long.
- I am fine with expectations I am seeing.
- More details
- Getting the kids more involved in conversation.
- Nothing!

10. What are your expectations for the Summer Science Institute? What would you like to get out of the experience?

- I expect to learn a lot of interesting things in different fields of science and experience some great hands-on activities that I would not be able to do in a high school science class. I would like to explore different fields of science to determine what I would like to do when I am older. I expect to learn more about research and nursing. I also expect to meet new people. I plan to be able to know more than I came into the program. I would like to experience hands-on work and I expect lots of things that are new to me.
- To gain more knowledge about the career I want to pursue in. Doing as much hands on activity as I can.
- I hope to make connections for further internships or job shadowing. I hope to narrow my interest on which type of medicine I would like to practice

- Learn more on how to become a nurse and what you have to do to get there.
- To enjoy learning about the medical field with hands on experiences I would like to have a better understanding of the medical field..
- t will be very interesting and helpful. I would like to know more about the medical field. I'm looking forward to everything!!!.

SSI SESSION I POST-SURVEY RESULTS

TOTAL RESPONSES 8/8

1.	My level of interest in a career in sciences is Very high High	5 3
2.	What areas of science are you most interested?	
	Biology	1
	Chemistry	1
	Health Science	5
	Research	1
3.	The area of science that I plan to work in is	
	Medicine	3
	Dentistry	1
	Research	1
	Nursing	3

4. As a participant in SSI, I have increased my current level of knowledge in the Health Sciences.

You participated in team building activities on your first day. What did you take away from this 5. experience?

- That communicating well is very important..
- New friends
- I learned a lot about the other participants of SSI.
- I learned how to work together and act as one rather than acting as different groups.
- It gave me an opportunity to get to know the other students.
- That you always have to learn to work together even if it is with people that you don't know that well.
- It was a good ice-breaker and I'm glad I got to meet everyone the first day.

6. How were your expectations for the Summer Science Institute met/not met?

- They were all met because I just wanted to gain more knowledge about the career I want to pursue. I learned about different sciences. It was new and a little frightening at first, but I enjoyed every bit of it. I'm learning to try new things even if I think I think I might not like it.
- They were met, because they explained the fields that I am interested in.
- I developed a great new perspective of career possibilities, but was somewhat disappointed that I did not learn to suture.
- My expectations were met.
- I expected to be exposed to numerous careers in the health care industry; SSI met this expectation.
- I learned a lot of new things that I did not know. I also learned that there are way more science jobs out there than I thought.
- One thing I'm not very happy with is that the description of the program says we get to dissect a pig, which was one of the main reasons I signed up for it, however we never actually dissected one and I was pretty sad about that. However I am glad that I now know so much more about the medical field than I did before.

7. What would you say was the best part of your summer experience?

- Doing all the hands on activities and being in the SAC Building.
- Interacting with the nurses and students.
- I really enjoyed touring St. Jude and especially loved learning about their research in cancer and other diseases.
- The best part would have to have been when we went to St. Jude.
- The hands-on activities.
- Learning about other jobs, visiting the different places, and doing things for others.
- I really enjoyed going to MERI and playing with the organs.
- MERI & St. Jude

8. What could have been done to make your experience better?

- Actually the whole experience was great so no complaints here.
- More interactions and longer periods at destinations.
- I would like to have spent more time in the lab or learning about different medical procedures and scientific research.
- We could have went back to the creek like we did last year but overall everything was great!
- More speakers.
- More hands on things.
- It would have been a little better if we had a few more hands-on activities or if some of the speakers were a tad bit more exciting.
- More hands-on activities such as dissecting animals and doing labs/experiments.

9. Would you recommend the Summer Science Institute to a friend, classmate, sibling, etc.?

• Yes

SSI SESSION II

STUDENT PARTICIPANTS

Student Name	Classification	High School	School District
Female Student	Junior	Houston High School	Public
Female Student	Junior	Arlington High School	Public
Female Student	Sophomore	Millington Central High School	Public
Female Student	Sophomore	Millington Central High School	Public
Female Student		St. Mary's Episcopal School	Private
Male Student	Sophomore	Covington High School	Public
Female Student	Junior	White Station High School	Public
Male Student	Sophomore	Millington Central High School	Public
Female Student	Junior	First Assembly Christian School	Private
Female Student	Sophomore	Soulsville Charter School	Charter
Female Student		St. Agnes Academy	Private
Female Student	Junior	White Station High School	Public
Female Student	Sophomore	Immaculate Conception	Private
Female Student	Sophomore	Central High School	Public
Female Student	Sophomore	Soulsville Charter School	Charter
Male Student	Sophomore	White Station High School	Public
Female Student	Sophomore	Central High School	Public

iii. Program Surveys Session II

SSI SESSION II PRE-SURVEY RESULTS

TOTAL RESPONSES 17/17

1. What made you choose to participate in this summer program?

• Interest in science	7
• Interest in UT	1
• Friend	1
• Parent	2
• Teacher/Counselor	2
• UT rep visit to your school	4

2. My level of interest in a career in sciences is...

 Very high 	9
• High	3
 Moderate 	4
• Low	1

3. What area of science are you most interested?

 Architecture 	1
 Biology 	8
 Chemistry 	3
 Engineering 	3
Other	2

4. The area of the science that I plan to work in is...

• Medicine	8
• Pharmacy	3
 Nursing 	3
• Engineerin	ng 2
• None	1

5. My current level of knowledge in Health Science is...

•	Very High	0
•	High	3
•	Moderate	1
•	Low	3

6. What is your current level of knowledge in Environmental Science...

•	Very High	1
•	High	1
•	Moderate	11
•	Low	4

7. On a scale of 1 to 5, with 1 being no expectations and 5 being the highest expectations, how would you rate your expectations for the Summer Science Institute?

• [5]	8
• [4]	8
• [3]	1

8. How would you rate your Summer Science Institute orientation experience?

 Very Satisfied 	1
 Satisfied 	7
• Acceptable	8
• Poor	1

9. What could be done to improve your orientation experience?

- We had to wait for a long time in a room doing nothing. Other than that, it was fine..
- It was really quiet, and I wasn't sure who was in charge for a while. I also didn't hear the first lady's name. We were left for 20 minutes with nothing to do, so it felt like they were not prepared. I understand that orientation can be a little boring and there really isn't a way to make it fun. So I was satisfied with it because the information as presented to me in a timely fashion.
- Students could introduce more things about them. This could probably help others to get to know each other easier.
- I was satisfied with my experience.
- Perhaps more preparation on the assistants' part. I did not get to meet the coordinator today, but we still wasted the first hour doing absolutely nothing in the classroom.

- An introduction of the staff that will be guiding us throughout the day.
- Probably more talking and interacting.

10. What are your expectations for the Summer Science Institute? What would you like to get out of the experience?

- I expect to learn a lot about careers in the Health Sciences. I want to know more about physical/real-life applications. I especially want to learn more about pharmacy and educational opportunities and higher education. My friend told me this was very fun in an educational way, so I expect to be entertained and informed.
- I expect to learn about the various health science careers and what duties each job holds.
- My expectations are very high. I'm excited for the field trips and service opportunities, and I'm excited to do labs with people who share the same interests. What I'd like to get out of this experience is just some general knowledge about different health related jobs, especially pharmacy as that is what I would like to do for a future career.
- I would like to further expand my knowledge on the sciences. Furthermore, I would like to solidify my decision for a career in the sciences. Having little to no idea of what a career in pharmacy is like, I would like to take the opportunity to understand what I am heading into.

SSI SESSION II POST-SURVEY RESULTS

TOTAL RESPONSES 16/16

11.	My level of interest in a career in sciences is Very high High Moderate	8 6 2
10	XXII	
12.	What areas of science are you most interested?	
	Biology	3
	Chemistry	4
	Health Science	7
	Physics	1
	Environmental	1
12	The area of science that I plan to work in is	
13.	The area of science that I plan to work in is	7
	Medicine	/
	Pharmacy	3
	Allied Health	2
	Nursing	2
	None	2

14. As a participant in SSI, I have increased my current level of knowledge in the Health Sciences.

Yes 16

16. You participated in team building activities on your first day. What did you take away from this experience?

- It was a great way to warm up to people.
- I felt the team activities help the group feel more comfortable and get to know one another.
- How to think more positive and just have fun and enjoy what you are doing.
- I got to know the SSI participants better, and had a fun time getting to know them.
- Nothing.
- It was fun! I loved the experience. But, the exercises could've been more interesting.
- Considering that we had no choice in what we wanted to do and our suggestions were not taken into account, I did not enjoy the team building at all and "we were to do what was on the paper."

17. How were your expectations for the Summer Science Institute met/not met?

- We didn't do some things I thought we were going to do.
- Met by the detail each speaker put into discussing their profession.
- They were met as the days went on and I found it more enjoyable.
- My expectations have been met.
- Exceeded expectations.
- As a student who has very little time, I cannot say this program met all of my expectations. I was very upset when I discovered that we weren't doing the fetal pigs. I also did not appreciate one of the SA's constant attitude or all the time we wasted simply waiting because the student assistants did not know what to do. I really wish the program coordinator was there more often. I was disappointed in some participants who constantly complained, lacked any interest in science at all, and were simply here to add on to their resume. Not everyone even volunteered half the time when we were at the Midsouth Food Bank.

18. What would you say was the best part of your summer experience?

- Hip hop class!
- The best part of camp was getting to make a mold of our own thumbs.
- It was getting to know about the health science a little more and getting to know new people.
- The simulation labs were nice. The scavenger hunt was a lot of fun too!
- The hands-on activities.
- The best part was the nursing simulation on the second day.
- None.
- I enjoyed the hip hop dance and yoga classes. I also enjoyed volunteering at the Mid-South Food bank. The
 activities were fun, too, like when we made lip balm and learned other things. Overall, I enjoyed all the
 activities

19. What could have been done to make your experience better?

- Less doing nothing time.
- More tours.
- Nothing, everything was great.
- Perhaps accept students who have a real interest in science, because I have observed in many programs that there are usually students who are simply there to add something to a college resume.
- More interested counselors.
- More activities, less videos.
- Breakfast.
- More focus on medicine programs.

20. Would you recommend the Summer Science Institute to a friend, classmate, sibling, etc.?

Yes - 13 No - 3

iv. SSI Recommendations for the future:

- 1. Provide even more diverse healthcare activities/labs.
- 2. Try to build more relationships with faculty/staff/students in the Colleges of Medicine, Nursing, and Graduate Health Sciences who would be willing to volunteer to work with SSI.
- 3. Include questions in the SSI application that will help to gauge potential applicants STEM field interests and try to tailor more activities around these interests.
- 4. Build more didactic lectures and experiential learning activities into the curriculum.
- 5. Use the HCP student assistants more to conduct educational lectures for SSI.
- 6. Interview student assistants to ensure they are a good match for working with the SSI demographic.
- 7. Begin working with student assistants as early as possible to help acclimate and familiarize them with the goals of the program, curriculum, activities, program needs, etc.
- 8. Update SSI recruitment materials.
- 9. Revisit orientation schedule and include more engaging activities
- 10. Update program information on webpage, application and recruitment materials so it accurately reflects SSI programming.
- 11. Over-program events so the schedule does not have gaps.

Community Affairs Service Program (CASP)

2013

This report will briefly highlight CASP, a non-HCP, pilot program initiated by the Office of Special Events and Community Affairs during the Summer of 2013. Areas for possible consideration if the program should continue will also be recommended.

Annual Report

VI. Community Affairs Service Program

SUMMARY OF PROGRAM

The Community Affairs Service Program (CASP) was held for the first time this year. Although it is not an HCP program, the HCP office had the opportunity to partner with UTHSC's Offices of Community Affairs, Human Resources, the College of Nursing, and Frayser High School to offer a 3-week healthcare immersion experience to recent graduates of Frayser. Criteria for participation included an initial application and face-to-face interview with CASP administrators. Those selected to participate in CASP demonstrated strong academics, citizenship, school and community involvement, and a commitment to pursuing a career in the health sciences.

The CASP students often joined Summer Science Institute (SSI) participants for community service projects, didactic science lectures, pharmacy compounding, nursing, and dental hygiene labs, DNA experiments, Davinci Box practice, as well as exposure to medical simulations. They learned more about bioethical issues in health care by debating several real case topics such as healthy limb amputation, creating a life to save another, and decisional capacity and refusal of medical treatment. Human Resources provided valuable training to the CASP students in areas of financial literacy and planning, technology etiquette, interview skills, wellness, and personal safety. With the College of Nursing, participants received information about medication math, patient safety, nursing school prerequisites as well as participated in Heart Saver CPR training and nursing skills labs.

In addition to their classroom activities and community service projects, the CASP participants had the opportunity to participate in several off campus field trips including: Memphis Education & Research Institute (MERI), St. Jude Children's Hospital, and the Methodist LeBonheur Children's Hospital.

CASP Administrators, Faculty, & Staff

College of Nursing

Tommie L. Norris, DNS, RN

Associate Professor & Associate Dean/Chair

Alise Farrell, MSN, RN

Instructor

Cheryl Scott, B.S.N., M.P.A.

Instructor, Nursing Simulation Lab

April Jones

Administrative Services Assistant

Human Resources

Darnita Brassell

Training Administrator

Monica Fleming Everett

Training Coordinator

Special Events

Pamela Houston

Director of Special Events

Community Affairs

Elise Moore

Vice Chancellor

Health Career Programs

NaKeshi "Nikki" Dyer, MS, NCC Educational Specialist

Tanya Biscardi

Administrative Coordinator

CASP recommendations for the future:

- Student Evaluations should be completed
- Planning should begin in the spring
- A minimum of five (5) participants is necessary to make the program beneficial
- Examine ways to merge SSI and CASP programming

VII. Overall HCP Suggestions:

- Develop a Marketing Plan for all summer programs
- Petty cash and Stipend checks are becoming more difficult to pay. HSCP staff should consider adding students to payroll.
- As HCP programs expand, non-HCP programs will be monitored and tracked by Human Resources
- In future programming, HCP will need to increase participation with Allied Health. This may require a reduced number of participants from other colleges. Meetings should be scheduled with all college contacts to discuss these changes and their implications.