

Health
Career
Programs

2014

This report will examine the successes and areas for improvement for Health Career Programs 2014 summer experience.

Annual Report

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I. Acknowledgements

The success of the summer programs offered by Health Career Programs (HCP) in the Office of Equity and Diversity 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 most, we will undoubtedly forget someone whom we intended to say thank you to, to all who are reading, “Thank you! Thank you for your continued 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.

To Drs. Eoff, Finerson, Thomason, and Johnson, 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 Office of Student Life: thank you for working so hard to provide another successful year of the Summer Science Institute. Your assistance and support is greatly appreciated.

To Renata Gillispie in the College of Graduate Health Sciences: thank you for organizing the Summer Research Scholars Program and assisting the students whenever needed.

To the Track III faculty of the Colleges of Medicine and Pharmacy: 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: Drs. Dan Osborne and Sherry Painter, 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 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.

To Dr. William Brescia, Ms. Cristi Gewin, and Ms. Ruby McNeal: thank you for all your hard work in preparing the exams for our Track III students and ensuring test days went smoothly, as well as keeping up with the administrative side of the Colleges of Medicine and Pharmacy.

To the HCP/SASS staff: Kathy Gibbs, Tia Kofahl, Laurie Brooks, Marcia Seeburg, Nikki Dyer, Tanya Biscardi, Derek Wilcox, Jamie Gilbreath, Sarah Dunnavant, and Joyce Jackson, thank you for working so hard to encourage and guide the HCP students into academic success. From facilitating workshops and/or assessments, helping find books in the library, meeting with a student in crisis, or giving encouragement, it is appreciated more than we can say.

To the OED staff: Dr. Michael Alston, Ashleigh Brock, Dustin Fulton, Kristan Tucker, Denise Steverson, thank you for your continued support and for helping our students become culturally well-rounded.

To all of our awesome student assistants: thank you for being on the front lines and helping make everything flow. Your energy and knowledge excites, enlightens, and engages.

To all of our superstar tutors: thank you for helping guide our Track III students to success.

To the GEB staff: thank you for all of the room scheduling, clean-up, tables, IT, etc. You make it all happen!

We look forward to doing it again next year!

Kamaria Robinson, Travis Liggins, and Cynthia Crowe

Tennessee
Institutes for
Pre-
Professional
Students

2014

Annual
Report

II. Tennessee Institutes for Pre-Professionals (TIP)

i. Executive 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 with the newly implemented healthcare laws, there will be about 35 million new 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 9 for individual track descriptions).

Of our one-hundred forty-seven (147) applicants, TIP faculty and staff successfully supported fifty-five (55) students in the 2014 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 is always room for improvement which will help with future success of the program. Below we identify the updates to the 2014 program, as well as areas we will look to improve upon in 2015.

ii. Program Improvements

2014 UPDATES

- A full-time student assistant was assigned to Track I programming for consistency in services.
- A series of Cultural Competence workshops were provided for students.
- A student assistant panel was provided for students to learn more about the application process for graduate/professional school.
- Reserved rooms for Friday meetings in the following buildings: GEB, Hyman Administration Building, and 930 Madison.
- Updated the scoring rubric for poster presentations and utilized the professional poster boards in the GEB Café for the presentations.
- Continued book discussions – the students were very engaged during these.
- COP MCOE grant was able to provide stipend funding for those Track I students interested in pharmacy.
- Continued to include the CPR certification course.

TIP Track I

- Utilize Blackboard for more book and internship discussions to monitor the Track I students' experience; also for schedule changes.
- Create a more diverse list of workshops in order to provide a different experience each Friday.
- Ensure students receive UTHSC NetID early on during orientation
- Consider laminating poster presentations for a more professional look.
- Provide workshops on the following: taking the PCAT/DAT/MCAT/GRE, timeline of admissions process/when to apply, mock interview.
- Bring back the scavenger hunt and case study reviews.
- Incorporate a fun day or outing for Track I students to interact with the other TIP students.
- Assign the full-time student assistant to facilitate more sessions during Friday discussions.

TIP Track II

- Continued restructuring of Track II to support long term stability and growth; contract with Kaplan on-demand programs for Track II.
- Met with Track II faculty for periodic updates on students and test scores.
- Continued to utilize study materials like Crack the DAT/PCAT and Orgomon series.
- Met with Track II students one-on-one to discuss progress and any concerns
- Shared Outlook calendar with staff in OED and SASS so they were able to view changes as made.
- Implemented Mid-Summer Focus Groups in order to check-in with each section about their experience thus far and how it could be improved.
- COP MCOE grant was able to provide stipend funding for those Track II students interested in pharmacy.

- Make tutoring available for Track II students.
- Research alternative test prep sites: Princeton Review, Berkeley.
- Provide the following workshops: mock interviews and personal statements.
- Include a student panel discussion.
- Continue to share Track II calendar with students on Blackboard, but provide them with a hard copy at orientation.
- Look into having an on-site instructor for GRE students.
- Incorporate a fun day or outing for Track II students to interact with the other TIP students.

TIP Track III

- College of Medicine students completed with 100% success.
- Shared Outlook calendar with staff in OED and SASS so they were able to view changes as made.
- Recruited tutors for each subjects.
- Implemented Mid-Summer Focus Groups in order to check-in with each section about their experience thus far and how it could be improved.
- Review sessions with faculty were added to the schedule.
- Incorporated wellness meetings with University of Memphis practicum students
- COP MCOE grant was able to provide stipend and book funding for Track III College of Pharmacy students.

- Create separate Meet the Deans session for Track III students.
- Have student assistants contact each participant before orientation to advise them on the intensity of the program.
- Incorporate a fun day or outing for Track III students to interact with the other TIP students.
- Incorporate pre-exam refreshment (cookies, ice cream, etc.) breaks, rescue puppies, pizza, and music to relieve stress.

iii. 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 six-hundred fifty-four (1,564) students have participated.

Program participants are all undergraduate students or new graduates. 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, GA).

A total of one hundred forty-seven (147) applications were received. Thirty-nine (39) applicants were denied because of academic deficiencies in their records, ineligibility, and/or applications that remained incomplete despite repeated efforts to expedite their completion; eighteen (18) applicants were waitlisted; sixty-two (62) applicants were accepted and of those accepted, seven (7) withdrew their application for personal reasons. As is normally true, the majority of accepted students were women. There were thirty-six (36) women and nineteen (19) men.

Out of the 55 participants, 40 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 professional school interest and TIP Program track is summarized in Figures 1 and 2, respectively.

Institution	Number of Students
Alcorn State University	1
Arkansas State University	1
Austin Peay State University	1
California Lutheran University	1
Carson-Newman College	1
Christian Brothers University	3
Jackson State University	2
Lemoyne-Owen College	1
Libscomb University	1
Middle Tennessee State University	8
Mississippi State University	1
Oakwood University	1
Rhodes College	2
Southwest Community College	1
Tennessee State University	3
University of Arkansas – Fayetteville	1
University of Georgia	1
University of Illinois – Urbana/Champaign	1
University of Memphis	10
University of Southern Mississippi	1
University of Tampa	1
University of Tennessee – Chattanooga	3
University of Tennessee – Knoxville	4
University of Virginia – Charlottesville	1
Vanderbilt University	2
Xavier University	2

Figure 1. Distribution of Students by Professional School Interest

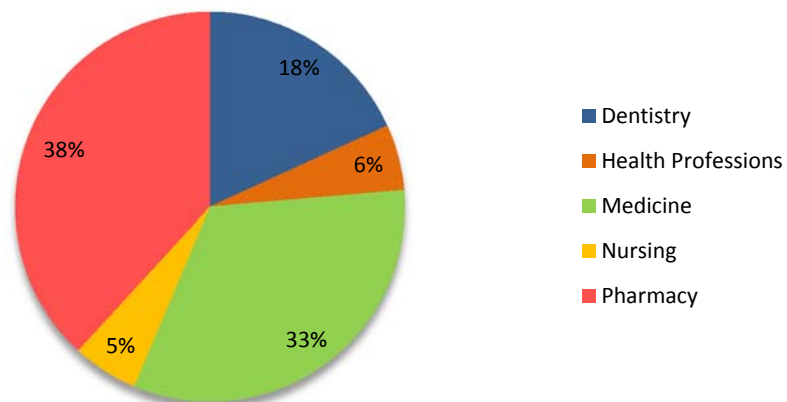
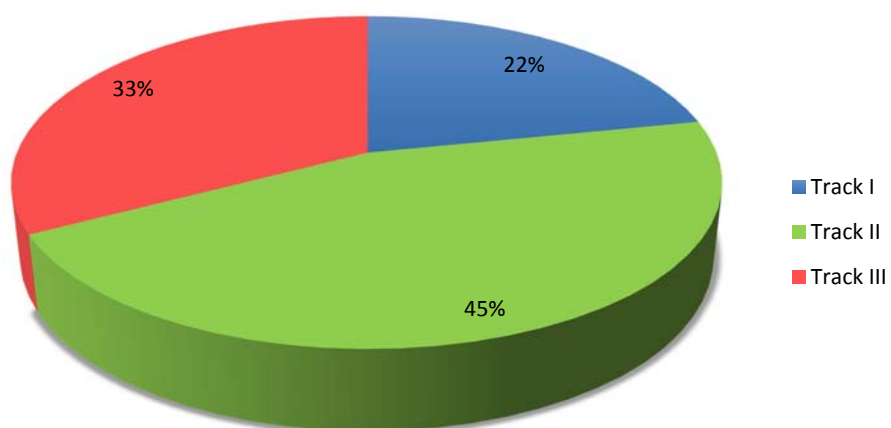


Figure 2. Distribution of Students by Track



iv.. Program Description

There are three distinct components, or tracks, of the TIP Program.

Track I

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: five (5) physicians, two (2) pharmacists, two (2) occupational therapists, one (1) dentist, one (1) physician assistant, and one (1) physical 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. On 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 conditionally accepted to UTHSC Colleges of Medicine and Pharmacy, but their eventual matriculation into these colleges requires 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 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, personal wellness, etc., but time in the schedule also allowed students the opportunity to work individually.

v. 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 two 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 LeMoyne-Owen College in the Departments of Chemistry and Physics, and one was faculty at Southwest Community College in the Department of Natural Sciences. There were twenty (20) 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, Physics, Chemistry, Organic Chemistry, Reading Comprehension, Verbal Reasoning, and Critical Thinking

Sherry Painter, Ph.D.
Associate Professor
Chemistry, PCAT/DAT Review

Daniel Osborne, Ph.D.
Assistant Professor
MCAT Review

Track III Medicine Faculty

Lorraine Albritton, Ph.D.
Professor
Molecular Biology

Charles Leffler, Ph.D.
Professor
Physiology

Bob Belland, Ph.D.
Associate Professor
Molecular Biology

Tony Marion, Ph.D.
Professor
Microbiology & Immunology

Angela Cantrell, Ph.D.
Associate Professor
Anatomy & Neurobiology

David Nutting, Ph.D.
Associate Professor
Physiology

George Cook, Ph.D.
Professor
Biochemistry

Vicki M. Park, Ph.D.
Associate Professor
Genetics

John Cox, Ph.D.
Associate Professor
Biochemistry

Pat Ryan, Ph.D.
Associate Professor & Assistant Chair
Microbiology

Ramareddy Guntaka, PhD
Professor
Biochemistry & Molecular Biology

Donald Thomason, Ph.D.
Professor & Dean of Graduate Health Sciences
Physiology

Eldridge Johnson, Ph.D.
Professor
Anatomy & Neurobiology

Michael Whitt, Ph.D.
Professor & Chair
Molecular Biology

Track III Pharmacy Faculty

John Buolamwini, Ph.D.
Professor & Vice Chair
Medicinal Chemistry

Tony Marion, Ph.D.
Professor
Microbiology & Immunology

Michael Christensen, Pharm.D.
Professor
Pharmacy Math

David Nutting, Ph.D.
Associate Professor
Physiology

George Cook, Ph.D.
Professor
Pharmacology

Pat Ryan, Ph.D.
Associate Professor & Assistant Chair
Microbiology

Lidia Gardner, Ph.D.
Associate Professor
Pharmacology

Dale Suttle, Ph.D.
Associate Professor
Pharmacology

Charles Leffler, Ph.D.
Professor
Physiology

Donald Thomason, Ph.D.
Professor & Dean of Graduate Health Sciences
Physiology

Kafait Malik, Ph.D.
Professor
Pharmacology

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 Students by Track, Discipline of Interest, and Undergraduate Institution		
<i>Name</i>	<i>Discipline</i>	<i>Undergrad Institution</i>
<i>Track I</i>		
<i>No. of Students: 12</i>		
Female Student	Dentistry	Tennessee State University
Female Student	Health Professions	University of Tennessee – Knoxville
Female Student	Medicine	Xavier University
Female Student	Medicine	University of Memphis
Male Student	Medicine	University of Tennessee – Knoxville
Female Student	Medicine	Oakwood University
Female Student	Nursing	LeMoyne-Owen College
Female Student	Nursing	University of Memphis
Female Student	Nursing	Christian Brothers University
Female Student	Pharmacy	University of Tennessee – Knoxville
Female Student	Pharmacy	Austin Peay State University
Female Student	Pharmacy	Christian Brothers University
<i>Track II</i>		
<i>No. of Students: 26</i>		
Male Student	Dentistry	Middle Tennessee State University
Female Student	Dentistry	Alcorn State University
Male Student	Dentistry	University of Memphis
Female Student	Dentistry	Middle Tennessee State University
Male Student	Dentistry	University of Tennessee – Knoxville
Male Student	Dentistry	Tennessee State University
Female Student	Dentistry	University of Tennessee – Chattanooga
Female Student	Dentistry	Carson-Newman College
Female Student	Health Professions	Rhodes College
Female Student	Health Professions	Tennessee State University
Male Student	Medicine	Southwest Tennessee Community College
Male Student	Medicine	Middle Tennessee State University
Male Student	Medicine	University of Tennessee – Chattanooga
Female Student	Medicine	Jackson State University
Male Student	Medicine	University of Arkansas – Fayetteville
Female Student	Medicine	Libscomb University
Male Student	Medicine	University of Memphis
Female Student	Medicine	Arkansas State University
Female Student	Medicine	Middle Tennessee State University
Female Student	Medicine	University of Tampa
Female Student	Pharmacy	University of Memphis
Female Student	Pharmacy	University of Memphis
Male Student	Pharmacy	Middle Tennessee State University
Male Student	Pharmacy	Christian Brothers University

Table 2. Distribution of Students by Track, Discipline of Interest, and Undergraduate Institution		
<i>Name</i>	<i>Discipline</i>	<i>Undergrad Institution</i>
<i>Track III</i>		<i>No. of Students: 18</i>
Female Student	Medicine	Vanderbilt University
Male Student	Medicine	University of Memphis
Male Student	Medicine	Vanderbilt University
Female Student	Medicine	Middle Tennessee State University
Female Student	Pharmacy	University of Memphis
Female Student	Pharmacy	University of Georgia
Female Student	Pharmacy	California Lutheran University
Female Student	Pharmacy	University of Tennessee – Chattanooga
Male Student	Pharmacy	University of Memphis
Female Student	Pharmacy	Souther Mississippi University
Female Student	Pharmacy	Mississippi State University
Female Student	Pharmacy	University of Memphis
Male Student	Pharmacy	University of Illinois – Urbana/Champaign
Female Student	Pharmacy	Jackson State University
Male Student	Pharmacy	University of Virginia – Charlottesville
Female Student	Pharmacy	Middle Tennessee State University
Male Student	Pharmacy	Middle Tennessee State University
Female Student	Pharmacy	Xavier University

vi. Program Operation

CURRICULUM

Track I

As has been mentioned, the primary objective of Track I is to provide students with an exposure to health science professions. Such experience is essential as students contemplate health professional school applications. Additionally, a number of interesting workshops were also scheduled, including but not limited to: Meet the Deans, Cultural Competence, Financial Aid, Interview Skills, and Time Management.

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 enables 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 complete 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 on-site faculty reviewing all of the appropriate subjects. Faculty were trusted to gauge weak subject areas and spend more time on those 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	9	-	-	-
General Chemistry	12	6	3	-
Biology	9	6	6	-
Organic Chemistry	9	6	6	-
Quantitative	-	12	9	-
Perceptual Ability	-	12	-	-
Verbal Reasoning	11	-	9	10
Test Review	55.5	25.25	25.25	-
Math	-	-	-	7.5
Reading Comprehension	-	9	8	-
Critical Thinking	6	-	-	-

Track III

The Track III pre-matriculation program extends an acceptance to students contingent upon their successful completion of the seven-week TIP Program that consists largely of courses that will be taken during the regular school year. These courses are taught by members of the UTHSC faculty. Students accepted to the College of Medicine had 104 hours of instructional time which consisted of the following courses: gross anatomy lectures (15), gross anatomy lab (14), biochemistry (12), physiology (29), genetics (8), molecular biology (9), microbiology (11), and immunology (6). Students accepted to the College of Pharmacy had 107 hours of instructional time which consisted of the following courses: medicinal chemistry (21), pharmacology (23), pharmacy math (17), physiology (29), microbiology (11), and immunology (6).

Additionally, both groups of students received six 1-hour wellness sessions with practicum students from the University of Memphis and six 1-hour sessions with an Educational Specialist from Student Academic Support Services.

v. Program Outcomes

STUDENT PERFORMANCE (TRACKS II & III)

Track II students were offered basic science review courses and were required to take several mock MCAT/PCAT/DAT/GRE standardized exams.

MCAT

MCAT students had exposure to practice questions and full-length tests via AAMC, as well as the material and practice tests provided by Kaplan. In all sections, students saw an average increase of two (2) points. In some instances, students' overall score increased by as much as thirteen (13) points. MCAT students saw the greatest improvement in Biological Sciences. Students' pre- and post-test scores were taken from the AAMC MCAT and are summarized in Figures 3 and 4 below.

Figure 3. Mock MCAT Pre- and Post-Test Average Comparison

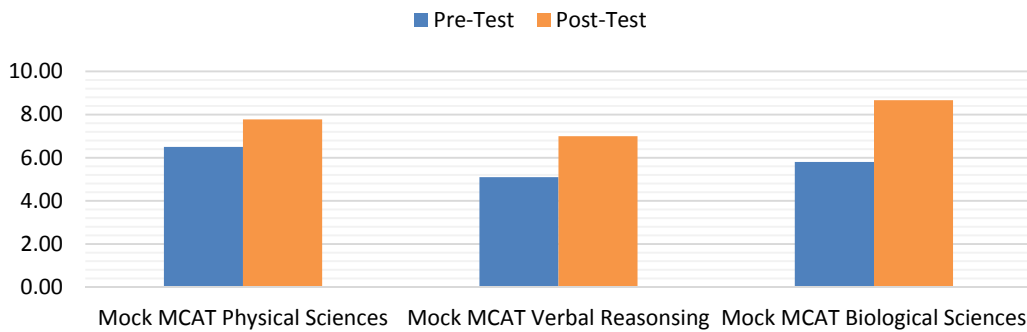
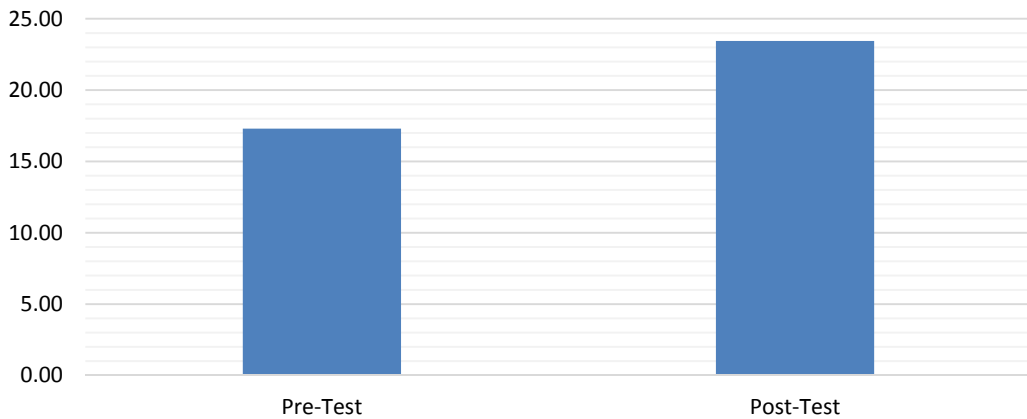


Figure 4. Mock MCAT Pre- and Post-Test Average Overall Score Comparison



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' overall score increased by as much as forty-three (43) points. PCAT students saw the greatest improvement in Quantitative Ability, but struggled with Verbal Ability. Students' pre- and post-test scores were taken from the Kaplan PCAT and are summarized in Figures 5 and 6 below. *Note: One MCAT student did not complete post-verbal and biological sciences; one MCAT student did not complete post-physical sciences.*

Figure 5. Mock PCAT Average Pre- and Post-Test Score Comparison

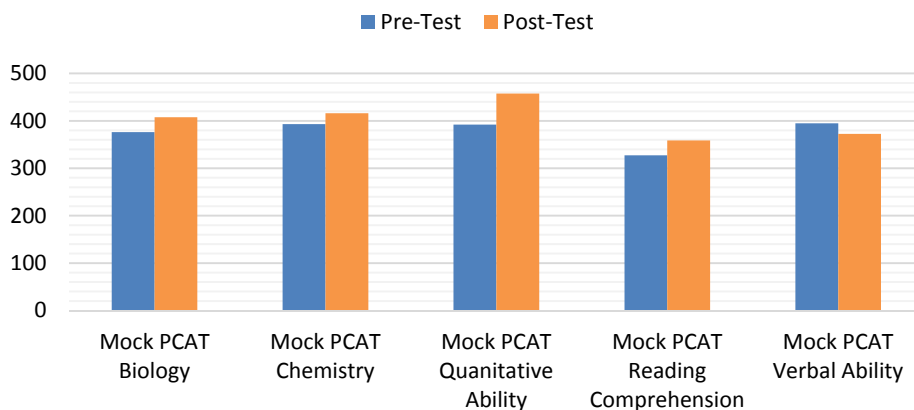
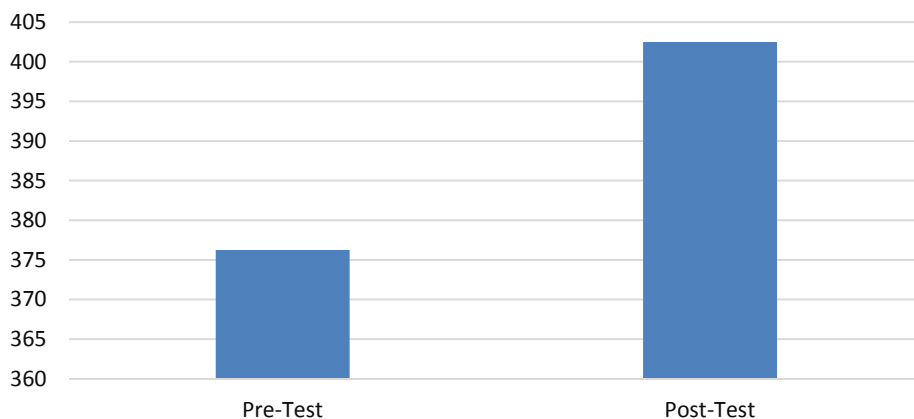


Figure 6. Mock PCAT Average Overall Score Comparison



DAT

DAT students had exposure to practice questions and full-length tests via TopScore DAT and Crack the DAT, as well as materials and practice tests provided by Kaplan. In all sections, students saw an average increase of 2.6 points. In some instances, students' overall score increased by as much as twenty-five (25) points. DAT students saw the greatest improvement in Organic Chemistry and Perceptual Ability. Students' pre- and post-test scores were taken from the Kaplan DAT and are summarized in Figures 7 and 8 below. *Note: One DAT student did not complete a post-test.*

Figure 7. Mock DAT Average Pre- and Post-Test Score Comparison

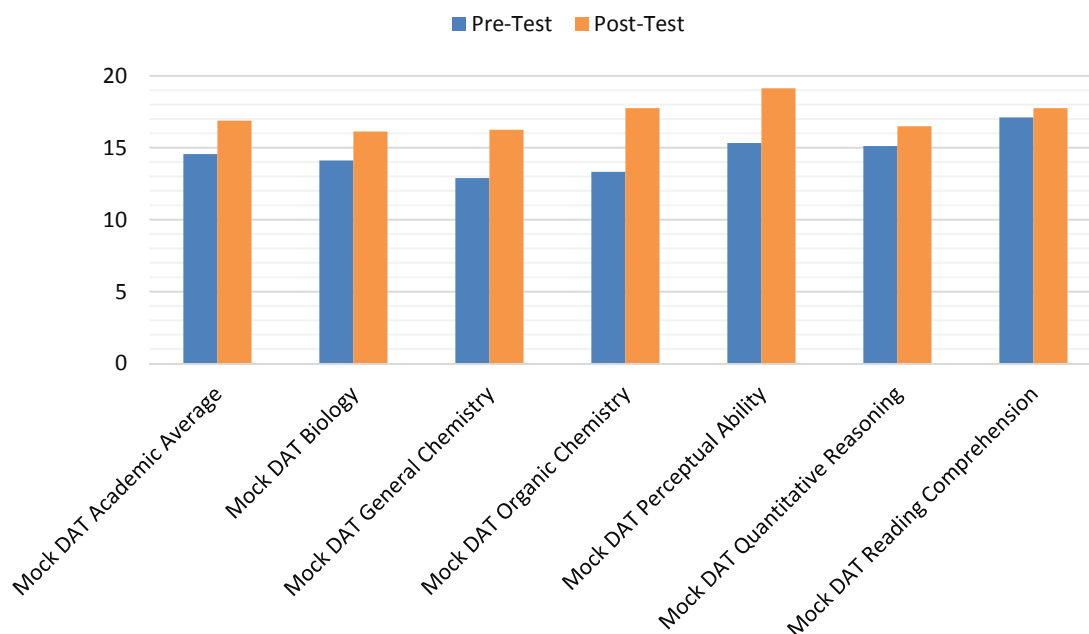
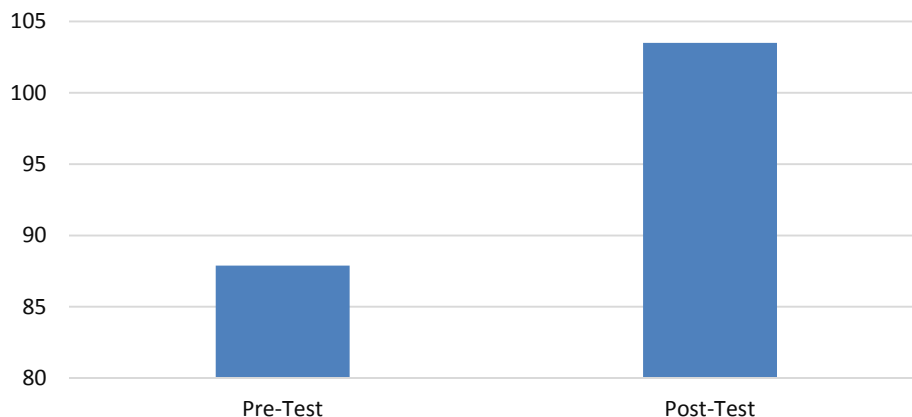


Figure 8. Mock DAT Average Composite Score Comparison



GRE

GRE students had exposure to practice questions and full-length tests via Kaplan. In all sections, students saw an average increase of four (4) points. In some instances, students' overall score increased by as much as nineteen (19) points. GRE students saw the greatest improvement in Verbal Reasoning. Students' pre- and post-test scores were taken from Kaplan and are summarized below in Figures 9 and 10.

Figure 9. Mock GRE Average Pre- and Post-Test Score Comparison

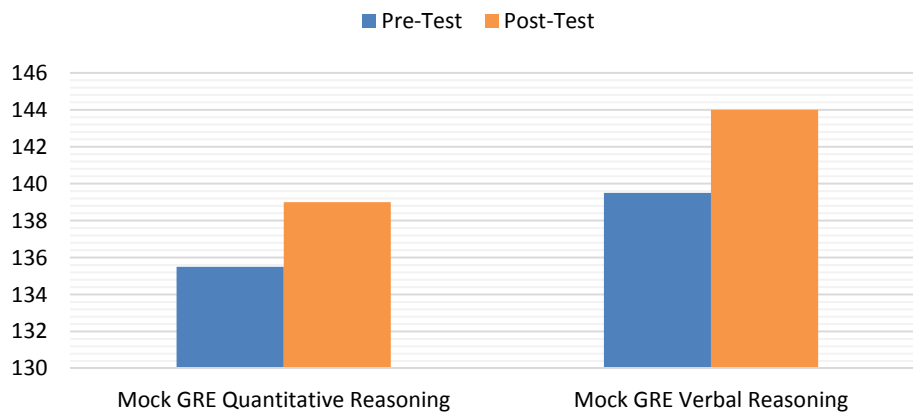
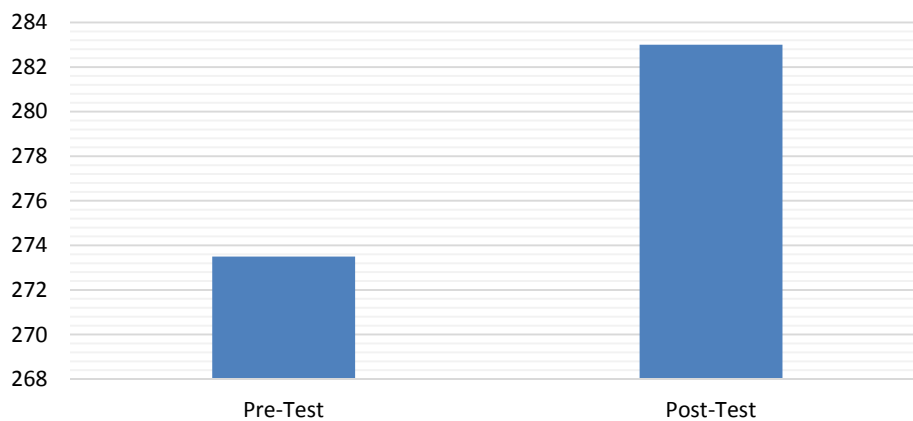


Figure 10. Mock GRE Average Overall Score Comparison



Track III

Successful performance in Track III was judged by receiving no grades less than a “C” in any course. There were 18 participants – four (4) medicine and fourteen (14) pharmacy. All College of Medicine students will be enrolling for the fall semester as members of the Class of 2018. Of the College of Pharmacy students, twelve (12) will be enrolling for the fall semester as members of the Class of 2018 and two (2) have been invited to repeat the TIP Track III Program in 2015.

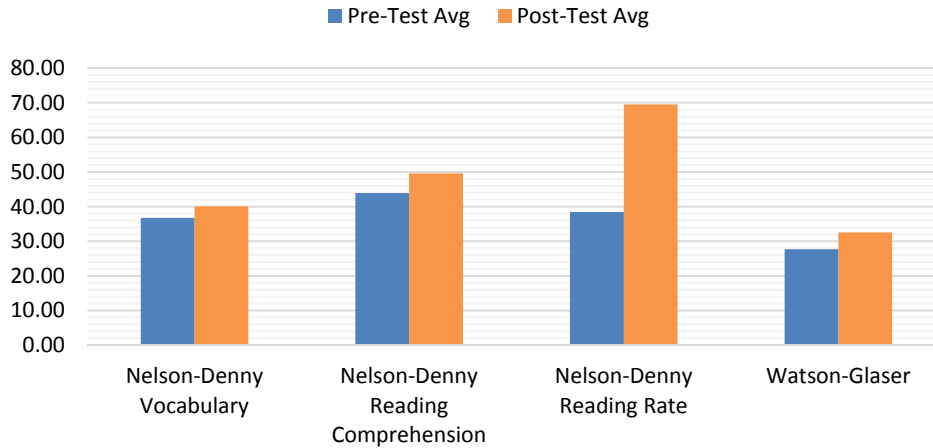
LEARNING SKILLS DEVELOPMENT

TIP 2014 Report of Pre- and Post-Assessments (Tracks II and III)

The students were administered the following pre-test assessments: The Nelson-Denny Reading Test and the Watson-Glaser Critical Thinking Appraisal. 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 40th and 99th percentiles. TIP 2014 Tracks II and III students' pre- and post-assessment performance is summarized in Figures 11-15 below.

Figure 11. Tracks II & III Pre- and Post-Test Average Score Comparison



Note: The two GRE students did not do SASS assessments.

Track II Only

Note: Five Track II students did not complete post-assessments.

Figure 12. Track II Nelson-Denny Pre- and Post-Test Score Comparison

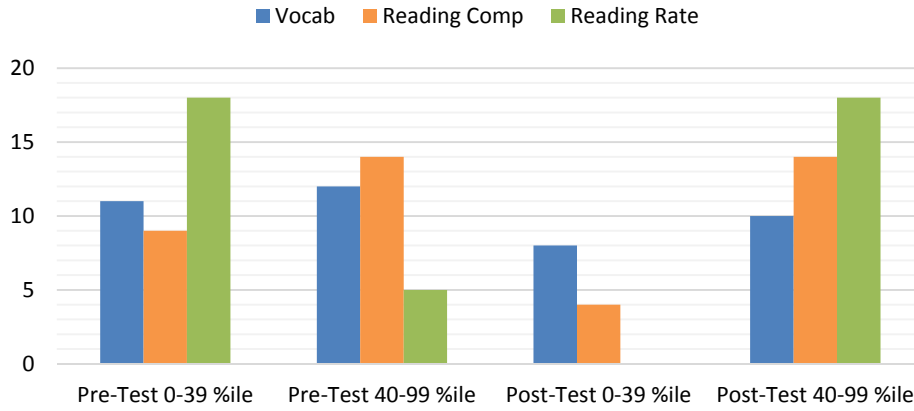
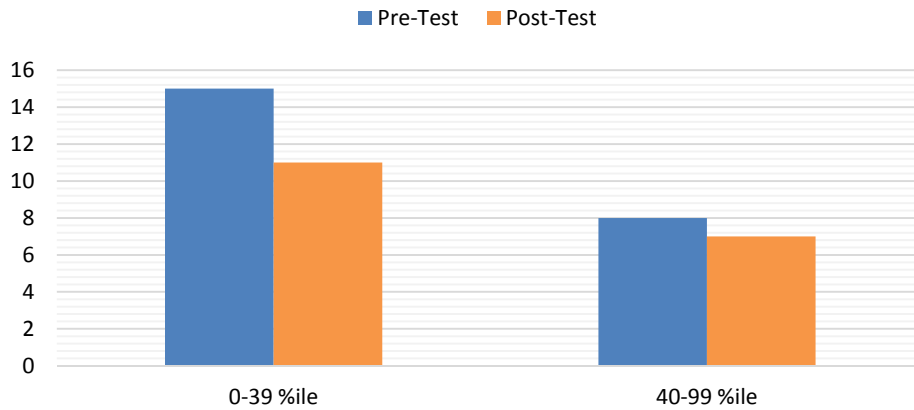


Figure 13. Track II Watson-Glaser Pre- and Post-Test Score Comparison



Track III Only

Note: Three Track III students did not complete post-assessments.

Figure 14. Track III Nelson-Denny Pre- and Post-Test Score Comparison

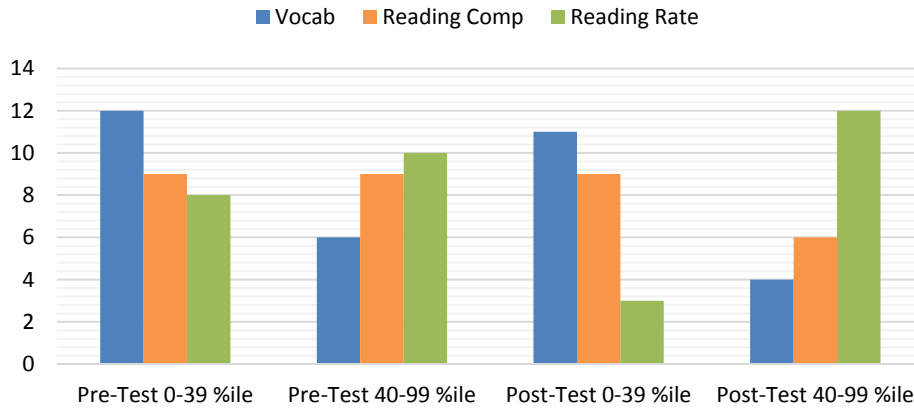
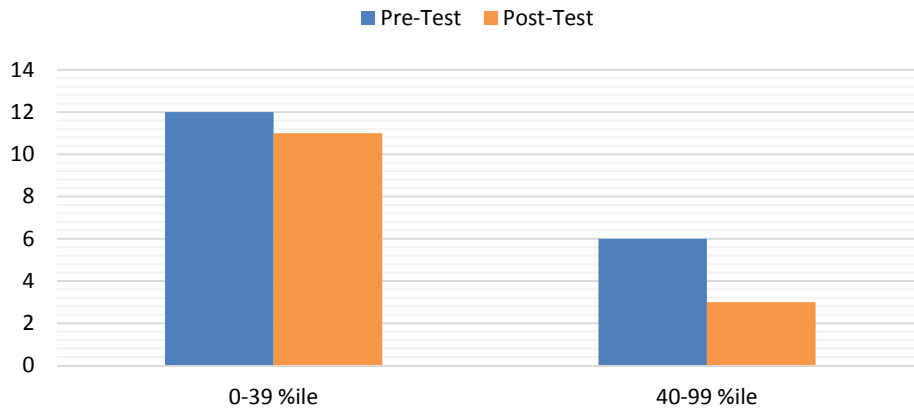


Figure 15. Track III Watson-Glaser Pre- and Post-Test Score Comparison



vi. Program Evaluations

TRACK I COURSE RATINGS

Number of students polled: 12

1. Please tell us what you found beneficial about the TIP Program.

- CPR Certification.
- This program was beneficial for me because it really exposed me to the medical field. I got to see and learn so many new and interesting things. I am so glad that I decided to do this program. It allows students to get a first-hand experience of what it will actually be like to have a career in your particular area of interest.
- The student/professional interactions Monday through Thursday we had.
- The experience and being exposed to different things inside my career field.
- I enjoyed seeing two sides of the medical field. The patient care and also the preparation of medical students' minds. We learned that we needed to be well-rounded individuals in order to really make it in this profession. I also enjoyed the group sessions with everyone from the program. It allowed us to see each other and get to know one another more through sharing our opinions and views.
- The experience I gained during my internship was very beneficial. I've acquired relationships with healthcare professionals that will really help me in the long run. I've also gained knowledge about patient/doctor relations and medicine overall.
- The shadowing experience was definitely the most beneficial part of the TIP Program. I thoroughly enjoyed shadowing a pharmacist for the past seven weeks.
- I found TIP to be beneficial due to it allowing me to have the opportunity to experience a glimpse at what exactly I would want to do in my future.
- I really enjoyed being able to shadow a doctor. I like that I was able to work hands-on with her, and I got to see what it was like being a pediatrician.
- The TIP Program helped me gain more overall knowledge about my field of study. I got to see different professors and watch them take care of patients. This experience for me made me realize that I should broaden my perspective on being more open to the different areas of nursing. This for me was beneficial.
- The TIP Program gave me the opportunity to experience dentistry in a professional setting. To shadow the different individuals that make up the office and their roles. To understand the different sections of the field and to decide whether it was the best for me or not.
- I learned a lot through my shadowing experience. It really taught me what to expect in my future field and also gave me reference opportunities for my future endeavors.

2. Please tell us about a high point in your TIP experience – a time in which you felt most engaged in your experience. Please tell us the context and your feelings at that particular moment.

- A high point would be when I had the chance to shadow an ICU pharmacist.
- The book discussions seemed to be very engaging. The moderators for the discussion really encouraged and engendered an environment which allowed for open, mature conversation. I felt as though everyone's differing

opinions were heard and respected. Also, thought-provoking questions were often asked and at times made you question your individual moral or ethical views.

- Working with my doctor and the moments I had to interact with the patients.
- I felt most engaged when I was at the health department and she would let me help her give exams to the children. I was very excited and overwhelmed when she first asked me to help, but it all went away because I enjoyed what I was doing and it was very beneficial.
- A moment where I felt really engaged in my experience was on the first day of the program. I was allowed to see a head suture being done on a man with a gash in his head. Another memorable moment/moments for me were the daily talks with my preceptor. He introduced us to so much knowledge about all types of areas besides medicine.
- My highest point during TIP was when the doctor told me to read an EKG and calculate the heart rate because that patient was going to be my patient. I felt like I was part of the team and not just an observer.
- I had the opportunity to mix a vaccine at a pharmacy one day and see the pharmacist give it to a patient. It was something I hadn't seen done before and something I didn't know that the pharmacists did also. I really enjoyed it.
- The time I was most engaged was when I shadowed a nurse practitioner at the Medplex and she gave me a lot of information and advice. Also, I was able to be more hands-on and understand exactly what some of the information she taught me.
- I really enjoyed working with Dr. Williams-Neal. She also let me be hands-on and work with the patients. So I really enjoyed just working with the patients and getting to know them. I was happy and excited that as I spent more and more time with her, I was able to explain some of the things to the patients when the doctor was otherwise busy.
- The best experience for me was when I shadowed Dr. Wendy Likes at the Medplex. She is an OB/GYN doctor and I got to see patients and see six pap smears and four anal pap smears. For me, this was a great experience to see that first hand. It is something that I find very interesting and would not mind going back to do again. This was my best shadowing experience thus far. I was most engaged because I was so interested in it. It made me very excited to learn more about anal pap and cervical pap smears.
- I was engaged in my experience at the site. The most were the moments when you have conversations with the patients and make them feel welcome and comfortable. Getting their minds of the medical procedures being done and its environment. The talking does make the patient feel less anxious or nervous.
- I was able to work hands on with some patients by directing them and assisting them with some of their exercises. This was very exciting when I knew what I was talking about.

3. Please tell us the extent to which you found the following workshops and discussions beneficial.

Answer	Very Beneficial	Beneficial	Somewhat Beneficial	Somewhat Unbeneficial	Unbeneficial
Internship Discussion	9	3	0	0	0

“The Immortal Life of Henrietta Lacks” Book Discussion	3	4	3	1	1
Financial Aid Workshop	7	4	1	0	0
Interviewing Skills Workshop w/Kamaria	7	5	0	0	0
SA Student Panel	9	3	0	0	0
Time Management	7	4	1	0	0
Team-Building Exercises	5	5	2	0	0
Cultural Competence: “Cultural Competence” w/Dustin	6	1	4	1	0
Cultural Competence: “Social/Personal Identity” w/Travis	7	2	1	2	0
Cultural Competence: “Diversity in the Workplace” w/Ashleigh	3	2	4	1	2
Cultural Competence: “Sexual Harassment” w/Kristen	5	3	3	0	1

4. What assistance could the TIP staff have provided to support your experience this summer?

- Better parking.
- Nothing. The TIP staff was unusually dedicated and caring.
- Provide transportation and weekly stipend for food.
- I think the staff provided very good assistance.
- The staff did a very good job at supporting this experience.
- Just be more approachable. It would have been nice also for us to have had a fun day, or a movie day, or something where we could get to know the people in our track and the program better.
- I feel everyone could have rotated around for maybe a day to get a broader feel of healthcare professions.
- The TIP staff was great and very helpful.
- Some assistance with making sure everyone is at an intern site that they want to be in concerning their major.
- My experience this summer was great. The TIP staff helped me through it.

5. Please tell us about any additional workshops or discussions that we should include in the TIP Program.

- Maybe a workshop outlining the admission process or a speaker directly from admissions.
- Rotations for people who want to experience other areas in their field. A workshop day where we spend the entire day with our specific college and discuss the process of getting into UTHSC and life of a graduate professional student.
- I think there should be someone from each school to interact and be on panel discussions.
- Coping with stress during undergrad.
- More financial aid and perhaps a focus on the scholarships that are also offered at UT. We talked about loans, but not about any scholarships that we could apply for. A workshop on an overall timeline of applying for professional school would be nice also. Someone from admissions (?) that could come in and talk to us about when to take the PCAT, MCAT, DAT, etc. and what to expect on the online application.
- Mock interviews.
- I don't know.
- The programs that we had were all great and very informative and useful. I think the right programs were chosen appropriately.
- Can't really think of any. Just thought everything was perfect.

6. Please tell us how your overall experience with the TIP Program could have been improved.

- If the coordinators were much more coordinated in the day's events and knowledge of what we have to do, it would be better. It would also be better if we didn't have the same types of presentations every week. It just seems like they are trying to kill time when they do that.
- The only improvement I can suggest is that the Friday sessions could be cut down a little bit. I felt like some of the sessions and talk were redundant. I did like Travis' team-building exercises though.
- I wish we had half days on Fridays to discuss what we did throughout the week instead of full days.
- My experiences could have improved if I was able to work in a pediatric hospital, and maybe go into the labor and delivery area just to get more experience in the fields I'm interested in.
- I believe that the TIP Program could be improved with rotation shadowing. I enjoyed my shadowing area, however, I know many of my fellow classmates expressed that they would want to go to other places catered to their field.
- My experience was excellent. The only thing that would have made it better is if I'd experienced different areas of medicine instead of staying with my one group the whole time.
- Organization. Everything was not as well organized as it could have been. There was a lot of confusion about the schedule, the paychecks, and the computer login. Track I never get a computer login because ours didn't work the first day. Even now, doing our surveys is taking a long time because we have to share computers with the students that go to UTK that can long onto the system. We weren't told that were tax exempt if we didn't file income taxes and many of us had to fix that later. Were give and a schedule at the beginning of the program

and almost never followed it. Also, parking at UT could have been different. When we came, it was obvious that no one had told campus police that we were going to be on campus because they were confused.

- Overall, my experience was excellent. However, I recommend that for students interested in nursing that they have the opportunity to shadow nurses in the hospital to get feel if he or she is interested in a steady or fast-paced environment.
- I enjoyed all of the experiences of the TIP Program.
- Overall, the experience for me was great. I would love to do something again like this in the near future. The only thing I must suggest is that we get to be in a hospital setting more, like for the students who want to be in the hospital with patients.
- The experience with the TIP Program could be improved by giving the students the chance to shadow the other fields apart from their own. This way the student can experience another healthcare field and then decide for themselves which they prefer the most.
- Shorter days. I enjoyed being there, but it became repetitive because I could only mostly watch.

7. Please tell us about the aspects of your shadowing experience that you found most beneficial.

- My preceptor was friendly.
- Dr. Madlock changed my views on life. He changed me as person and as a man. He was a mentor and a rare individual.
- Patient interactions.
- Being able to work with children and assist in the exams.
- Weekly sessions and seeing all of the patients. Discussing info with other pharm or med students.
- I saw many things most medical students don't get to see until they're an M3. I saw a CABBAGE, cardiac caths, a TEE, and rounds.
- I loved being able to work inside a pharmacy. It was one of the best experiences that I have had. It was very hands-on and I learned a lot about pharmacy and about people.
- Aspects of my shadowing experience I found helpful are patients, patient care, willingness to help others, and informative information from my preceptors.
- I loved working with Dr. Williams-Neal. She is a great doctor and she taught me a lot. She let me be very hands-on and taught me some doctor shorthand and some common diseases and medicines.
- Seeing first-hand some of the things that I will be doing in the near future was awesome.
- The part where I had conversation with the patients to make them feel less nervous.
- Hands-on experience.

8. Tell us about any confirmation or changes that may have occurred in your career goals and objectives based on your TIP experience. Please provide us with information regarding specific moments that contributed to your change.

- I experienced pharmacists in action and it convinced me to go ahead with my plans.
- TIP has made me realize that I AM GOING TO BE A DOCTOR. Hands down, without a doubt. This program has confirmed my career goals 100%.
- For a while I thought I was not cut out for the profession I wanted to do, but I noticed it was just a stumbling block that I had to go through to realize the passion I actually had for the career I had chosen.
- This program didn't change my career goals, it just confirmed that this is really what I want to do. By being in the health field, working with the children, and interacting with them will be the highlight of my summer.
- I understand that learning medicine and medical concepts will be my main focus in med school. However, I need to also be well-rounded in other aspects of life, such as music, art, history, and current events. This benefits me and my retaining of knowledge, but also how I can related to future patients more effectively.
- Seeing patients improved and get discharged from the hospital after weeks of being the hospital confirmed that I want to become a doctor. Although I didn't do much to the treat the patients, I felt so accomplished when their health improved. Also, because of my experience with the cardiology team, I'm more open to becoming a cardiologist again.
- I am still decided on pharmacy. I am definitely leaning more towards UTHSC now than I was before I came to this program.
- I have decided that will be sure to further my education and looking into getting a Doctorate in Nurse Practitioner due to my experience with a Nurse Practitioner.
- Before I came to TIP, I wanted to be a pediatrician. Now, I still am looking into being a pediatrician, but I also think that I would like to specialize.
- I still would like to be a neonatal nurse. I am now considering becoming more open to more fields of study though. At first I was too concerned about other areas of nursing, but TIP helped me realize that the field of nursing is so big and that I should research and be more open to trying new things.
- Before I started the program I had always had one thing on my mind and that was dentistry. I had my doubts about the field, always thought it was really the right field for me because I know whichever field you choose to do, you should love because that is something you might have to do for the rest of your life. Now as I ended the TIP program, I am completely sure of what I want based on my experience at the office. Interacting with the patients was great and all, but the most important was teaching them the proper hygiene.
- The insight that this program provided me with helped me confirm my career goals as physical therapist; however, I am open to more venues of physical therapy.

9. Please tell us your perception of the following services provided by the TIP staff.

Question	Very Effective	Effective	Ineffective	Very Ineffective
Defining responsibilities in the Student Handbook	10	2	0	0

Organizing a smooth and orderly orientation/registration process	7	4	1	0
Providing effective internship placement and experiences	9	3	0	0
Developing effective Friday sessions	2	7	2	1
Providing information helpful to the pursuit of participants' career goals	9	3	0	0
Addressing the questions and concerns of the students	8	3	1	0

10. Tell us how the services provided by the TIP staff can be improved.

Defining responsibilities in the Student Handbook

- Let us know up front in writing.
- This was good.
- The handbook was pretty straight forward.
- All the TIP participants took their responsibilities to heart and did what they were supposed to do.

Organizing a smooth and orderly orientation/registration process

- Put more thought into things that are least likely to put us to sleep.
- Have things completely done before we come up here.
- Telling students how to fill out the W9 form so no money issues arise.
- This was good.
- Time management should be taken into consideration.
- The orientation/registration procedures went smoothly.
- Put us in groups of our tracks (Track 1, 2, and 3) because we got to meet and bond with students that we didn't get to see again.

Providing effective internship placement and experiences

- This was good.
- Asking students what specific field they are interested in.
- Maybe the students will be able to switch their placement once a week, so we see a different type of study then the one they were placed.
- The intern opportunity was awesome.
- The placement was great. We all had great preceptors.

Developing effective Friday sessions

- Make a variety of programs we go through, cutting down on some of the redundant talks. Fridays are dragged out too long. I believe Fridays should go until 12 to allow for some personal down time.
- Making the individual group sessions shorter. Attention lost about after 30 minutes.
- Maybe you can only teach one Cultural Competence and use that time for something else.
- Time management, the Friday sessions should not be that long.
- The Friday sessions gave us the chance to explain what happened during our week shadowing. So it was great as it was. Everything was planned out for the day.
- It seemed like we did the same Cultural Competence section every week. Perhaps add more variety to that. Also, we didn't discuss the book after a certain point in time and that I really missed.
- Cultural Competence was too repetitive. It felt like we were being taught the same thing every time. Also, they were trying to drag it out too long which made it very boring.

Providing information helpful to the pursuit of participants' career goals.

- This was good.
- Great. All the information given was very useful.
- The TIP staff was always there to provide information when we needed it.
- Allow us more time to speak with the deans, staff, etc. of our respective colleges. I really wish I had the chance to tour the school of pharmacy like some of the students did on the first day, but everything seemed rushed.

Addressing my questions and concerns

- Some of the administration of the program didn't always have the answers right away.
- This was good.
- All of my concerns and questions were answered.
- Everything was OK here, too. All of our questions were answered.
- Sometimes the email responses are slow.

11. Please tell us the extent to which the following statements accurately describe your experiences with your preceptor.

Statement	Very True	Mostly True	Somewhat True	True	Somewhat False	Mostly False	Very False
My preceptor was a helpful resource in addressing my questions and concerns.	11	0	1	0	0	0	0
I learned new clinical skills and improved on others.	11	1	0	0	0	0	0

I acquired a better understanding of the requirements for career success.	12	0	0	0	0	0	0
I was provided an opportunity to meet new people and learned how to work with them effectively.	12	0	0	0	0	0	0
My motivation increased to perform well in academic coursework.	11	1	0	0	0	0	0
My confidence increased in the ability to take on more challenging coursework.	11	1	0	0	0	0	0
I developed a better understanding of personal goals.	12	0	0	0	0	0	0

12. Please provide specific information on how your shadowing experience could have been improved.

- Bigger hospital would have given more opportunities for shadowing variation.
- If we had rotations with other places to get an overall look at the healthcare field. For example, one day in a hospital, one day in a clinic, and rotate.
- I would have liked to be more hands-on through the whole experience and not just at the end of the program.
- Asking what specific area the student is interested in going in to and catering the shadowing sites to that student.
- It was excellent. I wouldn't change anything.
- It could have improved if I would have had the opportunity to shadow a nurse in the hospital to get a chance to see how working a fast-paced setting would feel.
- Though I loved working with Dr. Williams-Neal, I think it would have been cool if I could have switched with other medical students to see another type of doctor.
- Getting to shadow the Intensive Care Unit for babies at Le Bonheur or St. Jude.
- My shadowing experience was wonderful. I learned all I could and some more.

13. Please tell us about the aspects of your preceptor interaction that you found most beneficial.

- She was friendly.
- Dr. Madlock took time out of every day to sit and talk with us about everything from great works of literature to diabetes. We spent about three hours every day talking to him. In these sessions, we really learned a lot and they were the most beneficial part.
- Very easy to talk to and very willing to help.

- I loved that she would talk to us about everything. She was very open and responsive. She also would give us advice on different things and tell different routes we can take on our journey.
- Feeling more educated after talks with my preceptor. Also feeling like a better-rounded individual. I learned from his wisdom, knowledge, and humility. I felt safe and able to be honest with both my preceptors. They made the clinical environment very comfortable.
- One cardiologist that I followed, Dr. Khouzam, inspired me a lot. He was very patient, kind, and informative with the patients and also the residents and fellows that follow him. Regardless of what he had to do, he never rushed a patient. I find that very beneficial in maintaining a good relationship with patients.
- My preceptor was very encouraging about going to pharmacy school without making it sound easy. She let us know that pharmacy school is difficult, but we could do it.
- They all were approachable, willing to give valuable information, and how they interacted with their patients inspired me due to their passion for helping save lives and caring for people.
- She was very helpful, understanding, and patient with me as I learned how to work with her and her style.
- They were very concerned about my understanding of things and wanted me to get a good idea of what I will be getting into in the next few years.
- My preceptor took the time to explain the different procedures to me. She made sure I understood what was going on.
- Dr. Andrew Chalona's openness.

14. Please provide specific information on how your experience with your preceptor interaction could have been improved.

- She was always running around and sometimes we didn't hear and the staff would not be as open to us shadowing them like she was.
- I loved my experience. However, I would have loved to see more patients and go to more areas outside the clinic dealing with my field.
- My overall experience was great. Everyone was very informative and willing to let me observe.
- Everything was fine with my preceptors.
- There is nothing that needed to be improved with my preceptor interaction.
- Having more time.
- Everything was perfect.

15. Would you recommend the TIP Program to your peers?

Answer	Response Count	Response Percent
Yes	12	100%
No	0	0%

16. Please provide any additional information that you would like to share about your TIP experience and the TIP Program in general.

- It was fun.
- I would like to thank to the TIP staff because you guys genuinely cared and it showed.
- It was an amazing experience that I'm glad I got the opportunity to enjoy and I hope the program opens up to a lot more kids.
- Mentioning the poster presentation on the description of the program application.
- It was a great experience and I hope to continue with the TIP Program until I enter medical school.
- I really enjoyed the TIP Program. It is a great chance to confirm the career that you want in the future is actually what you want to do and to learn about UTHSC. Despite the organizational flaws, I loved doing this program.
- I really enjoyed my summer with TIP.
- I am just glad I got the opportunity to experience such, all thanks to the TIP Program. It has been the most exciting seven weeks.
- The TIP Program sometimes seemed unorganized. It was also frustrating how long it took for people to respond to important emails. There should also be a better description of the program found online because I honestly did not know what I was getting myself into. Other than that, this was a great program.

TRACK II COURSE AND PROFESSOR RATINGS

Number of students polled: 21

1. Please select the concentration that represents you.

Concentration	Response Count	Response Percent
DAT	6	29%
PCAT	3	14%
MCAT	10	48%
GRE	2	10%

2. Please tell us what you found beneficial about the TIP Program.

- The Kaplan course and in-depth class with Sherry.
- The program itself was a tremendous help. I can really say that I feel prepared to take my DAT. I enjoyed the steps you all took to give us full access to Kaplan and signing us up for the in-depth classes.
- It helped to improve my scores in each section of the PCAT.
- Crack the DAT was a very beneficial program that allowed me to have more practice and improve my PAT ability. I also enjoyed having classes and being able to learn more for the DAT using Kaplan. Also, being able to have access to the GEB and study rooms allowed me to be less distracted and more focused on studying. Also, the classes with Sherry were very important to reinforce some areas that I was probably struggling.
- Time with Dan.
- The TIP Program provided study materials. Nearly everything a pre-health professions student could need was offered and all at an easy convenience. For students that have problems buying expensive study guides and practice tests, this was incredibly beneficial. Also, meeting the Deans and being able to ask any question. After being in the TIP Program for a few weeks, I felt comfortable enough to ask questions that I was too scared to ask Dr. Covington or Jenny before. For example, what if my GPA isn't where I want it to be and what can I do? Another thing, the Student Assistants let us borrow copies of the DAT Destroyer. I liked the Kaplan class sessions, too – those taught me so many useful tricks and tips on the DAT.
- This was a great program to help prepare use for the MCAT. The resources in SASS were great!
- Many of the things in the program were very helpful. First, the Kaplan course provided us a comprehensive review and additional resources for the DAT. Crack the DAT and Sherry were also very helpful.
- Everyone cared for my success, which gave me confidence. SASS was a great resource – I absolutely loved it. Dan is the MCAT Moses. Dan is the man – stay with Dan.
- I found all of the classes and time with Dan very helpful in increasing my score to where it needs to be.
- Dan's strategies are extremely useful and helpful for the science sections of the MCAT. However, I do not think he spends adequate time training use for the verbal section. His teaching style towards content did not resonate with me very well. I feel like any type of content that Dan taught, I did not learn from that. However, his strategy and giving us the confidence to take the test dramatically increases scores!

- The TIP Program was very beneficial because it gave me many resources to study for my upcoming MCAT exam. Also, Dan, our MCAT instructor, gave us many more resources to complement those.
 - It was very helpful to me overall. I made a significant jump on my score after week 5 and I am very proud of myself. I would like to personally say thanks to those people that helped me get to where I need to be. I personally want to say thanks to those staff members, including student assistants, for giving me a great opportunity. I feel like I am one step closer to medical school and I see more hope.
 - Some, but not all, of the content exposure offered through the Kaplan program. Dr. Oz recommended some alternatives to replace Kaplan that I believe should be considered. If planned well, multiple resources can be utilized in a streamlined way – those alternatives were Berkeley materials, Princeton Review, and Examkrackers; all of the sessions with Dr. Oz; group meetings amongst the students for reviewing content assigned from Dr. Oz; PSR labs were beneficial initially, but not relevant to the type of reading required for the MCAT; built in self-study times made the schedule flexible; Student Assistants were helpful/encouraging; the pay.
 - The program was beneficial in the sense that had I not had the resources provided by my professor (content) and via Kaplan (AAMC practice exams), my studying would have been less focused considering the compressed time span I had available to study (2 months). I wouldn't have known the content areas that I was weakest in and studying on my own would have provided me with a superficial understanding of subjects that may not even be tested on the MCAT. The TIP Program proved beneficial and was well worth the application process by providing me with an alternative. I had the opportunity to learn from an MCAT expert – someone who had taken the MCAT and destroyed what is considered one of the hardest exams in life. Before knowing I had been accepted into the program, my plan was to prepare on my own, which would have been me just working x-amount of problems a day, for several weeks, out of a Princeton Review or Examkrackers book.
 - From the staff to the material available to use, this program has been very helpful. The people in charge of this program have been really supportive and understanding through the 7-week period. They truly care about our success.
 - The program was really helpful in getting me prepared for the PCAT.
 - The availability of resources was very helpful! An excellent student assistant was very organized and helped us stay on schedule.
 - Systematic study of all the courses.
 - Having constant access to Kaplan materials and practice exams!
 - I found that having verbal/math sessions, quizzes, and workshops with Kaplan was helpful in maintaining strategies for preparing for the GRE.
- 3. Please tell us about a high point in your TIP experience – a time in which you felt most engaged in your experience. Please tell us the context and your feelings at that particular moment.**
- I felt more engaged when I received the chance to meet the Deans of each school and get a feel for what each atmosphere is like.
 - Towards the end of the program I started to feel very discouraged because my scores were staying stagnant, but because my peers encouraged me, I was able to continue pushing. The decision making it takes to choose students to participate in this program must have been difficult, but I am glad that you all choose who you did.

- A high point was when I took the Kaplan courses online – much usage was helpful being refreshed on subjects for the test, especially via online access. It showed me that I could learn anywhere, in any way.
- The time I felt most engaged would probably be every time we met with Sherry. Being able to ask questions and be in a classroom setting greatly benefitted me. I could finally ask questions and move in a slower pace, compared to Kaplan where they moved pretty fast. Kaplan is a great program, but being able to have someone in person that teaches you in a clear manner and answer any questions that you have is a hundred times better. After every meeting with Sherry, I felt a little bit more secure each time about taking the test.
- Time with Dan.
- The Perceptual Ability section on the DAT has become a strong point of mine. At first, we were all without practice and struggling in that section. Now, I can get a 22 on that section and not have to worry – the practice tests, working with other DAT students, and talking to Tami (from Kaplan) made me much better. Also, being with the other DAT students every day has made us all really close friends. In Biology, it's very important to discuss facts and challenge each other with information. This has also become a strength and a high point. All of us are good at different sections and we can help each other if someone doesn't understand.
- Using the available resources and working with fellow classmates.
- Being with other scholars with the same determination of trying to gain admission to dental school was great.
- Kamaria was a great help to me, especially in helping me with my personal statement. She was always here and she always tried to make time her schedule to see me. She also offered to help me after TIP was over. This was great. Dan had been trying to boost my confidence and test taking skills – he was a great MCAT instructor.
- I felt most engaged every day I came here. I felt like it was a privilege to come to UT every day to prepare for the next big thing in my life. Being here every day at my dream school motivated me every day to be successful.
- I enjoyed hearing about all of the different colleges here at the University of Tennessee Health Science Center. I was able to learn more about the different programs and what to expect as an applicant to medical school.
- My highest point in the TIP Program would have to be when I started to see my score increase from the strategies and techniques Dan gave us. It made me feel as if all my studying and hard work was finally paying off.
- More time with Dan could have helped me more for sure. Kaplan was a good program to practice what I have digested that day, but I got tired easily staring at a monitor for three hours every day. Dan taught us how to engage and destroy this test with a great confidence. I had a great fear when I started this program and was easily overwhelmed by the intensity of the exam itself. However, as the weeks progressed, I learned how to take this test effectively under less stress. Overall, it helped me greatly.
- After our first full length AAMC test, Dr. Oz was preparing to take us through the Physical Sciences portion of that exam when he shared his “perspective” on the MCAT. He proceeded to tell us not to buy into the fear – the test intends to engender by recognizing the strength we possess to overcome the test through our confidence. He encouraged us to take a very frank attitude: “MCAT, you will not keep me out of medical school. You're going down.” And from there, he began to teach test-taking strategies geared at maximizing our strengths and exploiting the test's weaknesses.

- My highest point came after my lowest moment in the program. I did terrible on an AAMC practice exam one weekend. However, I consulted with my professor the following Monday and we immediately pinpointed my weaknesses. Thankfully, the professor never, at any point, made me feel incompetent or stupid. We worked on that content throughout the lectures at the following days. After that instance, I realized that the people here care about the students and not just the results – I was all in after that moment. The next practice exam, I did better. I felt that what we were doing was what was needed to improve my score – keeping it simple by strengthening my weaknesses. The thing about the MCAT is that the exam, without a doubt, will expose you. But thanks to the professor’s understanding, I was able to come back each day with a positive attitude and continue to give effort.
- Studying for the MCAT, from my understanding, is not an easy task, and most students who have ever had to take it would agree with me. However, TIP has made my experience in preparing for the MCAT easier. The teacher, the high quality resources, and the Student Assistants all have really been a true blessing and helped not just me, but all of us who have the chance to attend TIP. This program has certainly helped boost my confidence and knowledge that I needed to feel ready for the real MCAT.
- I felt really engaged when I had to take the online full length tests. It helped me to simulate the actual test conditions.
- I felt most engaged during my review session with Sherry. I was able to interact with other students and I was able to see the way they think and how they come up with answers – it is easier. I might have to incorporate those into my study skills.
- Felt very happy when the PCAT grade reached 407.
- Perhaps during my practice exams, where I felt that the Kaplan materials really allowed me to feel prepared and as if I could keep improving.
- The online class sessions.

4. Please tell us your perception of the following services provided by the TIP staff.

Question	Very Effective	Effective	Ineffective	Very Ineffective
Defining responsibilities in the Student Handbook	11	8	1	0
Organizing a smooth and orderly orientation-registration process	13	8	0	0
Addressing my questions and concerns	14	7	0	0
Providing sound curriculum to prepare for the PCAT, DAT, or MCAT	10	10	1	0
Regular review sessions with Dan or Sherry	14	6	1	0
Providing information helpful to the pursuit of my career goals in career development (i.e. Meet the Deans, personal statement, etc.)	11	8	1	0

5. Tell us how the services provided by the TIP staff can be improved.

Defining responsibilities in the Student Handbook

- Good.
- It was perfect!

Organizing a smooth and orderly orientation/registration process

- When I was applying, it was rather difficult to get in touch with people. Maybe you all can be a little more available during the application process.
- Online registration was good.
- I had a hard time with this at the beginning. I wish it was clearer on the directions.
- Rehearse the schedule to ensure works (equipment and routes the groups will take on the tour). You could also pre-assign tour groups instead of allowing groups to form as they finish paperwork. The Student Assistants could be joined with their groups from the beginning.
- Good.
- It was perfect!

Addressing my questions and concerns

- The student assistants were not very informed about what was going on.
- Identifying the student assistant(s) by addressing how we can contact for questions, cell or email address.
- The program always addressed my questions with concern.
- Good.
- It was perfect!

Providing sound curriculum to prepare for the PCAT, DAT, or MCAT

- Take out Kaplan.
- I would recommend Princeton Review, Examcrackers, and on-site teachers the next time. Watching videos for 2-3 hours was very exhausting. Future students can get more engaged with more time with a tutor and group study sessions would also be helpful.
- Get on the same page as Dan. Apparently, he does not like Kaplan.
- I liked the curriculum for the most part, except the part where we had to watch Kaplan videos on the computer for three hours. That was really a waste of time and we could have gone without that. Get rid of Kaplan.
- Get the Berkeley materials to add to the Princeton Review items. Make sure there is more than one book or maybe create a copy of the Hyperlearning MCAT Science book so that individual items out of the book can easily be pulled and copied for individuals. Since the SASS closes and there was only one book, that made it more difficult to access the materials without going to order the book personally.

- Good.
- Having a tutor like Dan for GRE students!
- There are a few things that could greatly benefit the DAT students. I believe if the students received a software to download on their own computer that would allow them to continue practicing and studying for the DAT once the program ends. If the students had access to Crack the DAT or Top Score on their own computers, it would greatly benefit them. Also, Chad's Videos are a great way to help prepare a students for the DAT.
- I feel like the schedule was geared more towards MCAT students. They had many more class sessions and specific topics covered each day. For DAT, we were scheduled for self-study or Crack the DAT practice every day. I understand it's more difficult to gain acceptance into med school, but the DAT, GRE, and PCAT are not any less important. The DATs were in the basement, in the same room a lot, doing Crack the DAT.

Regular review sessions with Dan or Sherry

- Ms. Sherry could have been a little more organized. The classes consisted of her reviewing the tests that we had taken. Seeing how I was reviewing my tests the day after I took them, reviewing them twice was not beneficial. I was hoping that she would make it more of a class and teach. It was kind of pointless for her to explain the answers if the solution to the problems were already given.
- More time.
- More of Dan would be great.
- This was extremely helpful. If it's possible to have Dan back again, then you should bring him back.
- More and longer sessions with Dan would have been beneficial. I just wished he would have showed up on time. He was always late, but he still came every day. He even stayed later than he was supposed to which was really great.
- Keep the sessions with Dan to make sure class materials and books we check out are those expected by him. Allow a couple of Track II participants from previous year (who make it to Track III) to share their stories at the beginning of the MCAT track breakout.
- Mondays, Wednesdays, and Fridays would be more efficient. Similar to how lectures are during the semester. Fatigue eventually sets in when it comes to preparing for exams.
- Concerning the MCAT, my time with Dan was really helpful to prepare me psychologically, content wise, and test taking strategies in preparation for the MCAT.
- Good.
- This could improve if we could have more sessions with them.
- More Sherry. She was great! Also, someone to do a math section. Sherry's strong point is chemistry – that's all we worked on with her. A math and bio Sherry would be great.
- Providing other teachers for other subjects like math.

Providing information helpful to the pursuit of my career goals in career development (e.g. Meet the Deans, personal statement, etc.)

- There was no help given to us, the DAT students, concerning personal statements. That is currently what I am having the most difficulty with. It is now the last week of the program and I still have not started on it. I have the things I want to say, but I just have not written them down.
 - Personal statements workshop.
 - More med school workshops.
 - Good sessions.
 - I really loved this. It was very motivating to speak with representatives.so
 - Should definitely help with the application process and writing of the personal statement.
 - Meet the Deans sessions was just “ok.” I felt like they were just being politically correct rather than just telling us the truth, which was very annoying. For example, when we asked them about the minimum MCAT score or the average MCAT score to get acceptance, they never really answered the question. They just kept saying, “We look at each individual holistically so there is no certain MCAT score we are looking for.” I do not feel that is honest or the truth for that matter. I know they have a minimum MCAT score they would like applicants to have. Also, we never had a personal statement session, but I do believe if we had one that would have been very beneficial to us.
 - I enjoyed the dean meetings, but we did not get to work on personal statements or interviewing which I think would have been very helpful.
 - Average. If we just had one day where there actual medical students already admitted into UT-Memphis. MCAT students were out of luck since we only had dental and pharmacy Student Assistants.
 - Meeting with the deans has put me one step ahead in knowing what to expect both during my application to medical schools and once into medical school.
 - Good.
 - It was perfect!
 - We needed more information about personal statements and interviews. If you could provide a mock interview or a class session that give us tips and suggestions for a personal statement, it would help us prepare more for dental school.
- 6. Describe three concrete wishes for the future of this program.**
- Extended time in the program. Personal copy of Crack the DAT. More in class lectures.
 - 1) Please make sure that there is no time delay with the pay period. We were here for nearly a month and I personally knew people who did not have any money at all. Having to pay for gas and food for nearly a month without getting paid is difficult. 2) More availability of tutors, or at least someone to teach biology. Sherry only taught general chemistry and organic. Biology is also a big section, so additional help would be beneficial. 3) A math instructor would also be beneficial. There are 40 quantitative reasoning questions so I believe additional help should be offered.

- 1. High success rates. 2. Future health professionals. 3. More tutors.
- My first wish is that this program would last longer. My second wish is that more people learn about it. My third wish is that it would gear its curriculum more on the other pre-health programs and not just focus more on the MCAT students. It seemed like the MCAT students were receiving more help than the other pre-health programs, such as the PCAT, DAT, and GRE students.
- 1) More time with Dan. 2) No Kaplan. 3) Better pay increments.
- I wish that program could be longer. Seven weeks was a long time, but I feel that we had more information than we could stuff into a month and a half. More time = more studying = being more prepared! I hope that the DAT, PCAT, and GRE students are more engaged next year. Having more class sessions with Sherry, or a Sherry who does math. Also, that they would have more than just Kaplan and Crack the DAT. Chad's Videos and other things we can do. I hope that more funding could be provided to the TIP Program and a wider knowledge of this program. I was very blessed to have accepted in to the TIP Program and learned about it from a friend. For some students, this program is the closest thing they can have to prepare for a pre-health school. Some may not have the money or the resources to apply to dental school or med school. The TIP Program gives students all of the study materials for free, offer copies of practice tests, and they you enough to cover application fees for the DAT. I wish that more disadvantaged students could have this opportunity. Thank you for everything.
- Eliminate Kaplan. More time with Dan. Better pay period timing.
- Access to Crack the DAT after program.
- 1) No Kaplan. It wasted a lot of time. 2) More time with Dan. 3) Sessions to practice more questions with each other (group study).
- My three wishes are changing to curriculum to involved less videos and more tutoring time. Also, add workshops for personal statements. And last but not least, add workshops for AMCAS applications for those who are applying to medical school the same summer they are taking the exam.
- 1) Keep Dan around. 2) Get the resources that Dan recommends. 3) Make sure Dan arrives on time. Give us ample time to know when he will not be present. Every time Dan did not make it, I was already sitting in class when I got the email.
- 1) For MCAT, find another route for resources other than Kaplan. I did not feel Kaplan was as useful as it could have been. If, in the future, you all decide to continue to utilize Kaplan, you all should have actual Kaplan instructors come on campus to teach us instead of us having to watch a video. That was absolutely horrible and not personal to our individual needs. They don't even really answer your questions, therefore, I remained confused on a lot of topics. 2) Have days where we meet with Dan all-day, not just 8:30am-11:30am. Time with him was great and very valuable. 3) Order Berkeley Review MCAT practice tests along with AAMC practice tests.
- 1) I wish they would pair up roommates so that MCAT people are in the same room. I do not know the true intention of pairing me with other people preparing for the DAT or PCAT. They obviously have a different schedules and I had some issues with my roommates early on because of this. For example, my roommate preferred group studying and started bringing in lots of students in our room and that started to interfere with my schedule. I really wish that they had paired me up with an MCAT students for a roommate so that we can

study and help each other more closely. 2) I wish we had somebody (student assistant) from medical school. We are trying to get in to medical school and wanted to ask tons of questions about the application process, but had a difficulty addressing it for this reason. More time with Dan could have been more helpful instead of doing the Kaplan course. At the end, I believe it is all about building up your confidence after all. If you can find a way to fix that it will be better overall. 3) Berkeley Review seems to be helpful to us as we start working on them later one. If we had a chance to get a hand on that earlier, I could have easily boosted an extra two points. More practice on the hard test will definitely prep us more for sure.

- Streamline the program around the MCAT content primary instructor. If Kaplan, do Kaplan; if Dan, do Dan. But set the focus so it doesn't continually shift. Take time for personal statement advice. Take time for interviewing.
 - 1) Tutors for each of the main subjects (physics, general chem, organic chem, physiology). 2) Medical students already admitted into UT-Memphis. 3) Lunch provided.
 - Personally, three things I wish for the future of this program are: The program staff to the consult with Dan for the most beneficial material to use for MCAT preparation. Though Kaplan is helpful, there are other resources known by Dan to be more beneficial. An example would be the Berkeley Review material which the PDF-format books had been provided to each one of us by Dan. These books, in my experience, have really proven to be really helpful; Allow more meeting times with Dan. This is because sessions with Dan have shown to be beneficial. For example, Dan, from time to time would have individual talks with each one of us to see what part of the exam needs more attention – something that Kaplan never did; More verbal resources and hopefully a verbal-reasoning teaching (for the MCAT students). I personally have struggled and still struggle with the verbal reasoning part of the test and I think it would have been very helpful if we had a teacher, like Dan, for the verbal. Kaplan does have sessions for the verbal reasoning, but they have shown to not be beneficial and not reflective of the verbal reasoning on the actual test.
 - Make it longer; Provide teachers for other subjects except chemistry; Provide writing classes.
 - I wish there was not individual study time. It would be a group study where students are able to collaborate on the materials. I wish there were additional resources available after the program has ended. I wish our schedule was similar to the MCAT students' where we can spend more time with a tutor.
 - 1) A biology instructor. 2) More specific exercises. 3) Writing help.
 - 1) GRE students being required to spend more time on campus for studying. 2) GRE students having a tutor similar to DAN to help with test strategy. 3) GRE students having more access to office hours of UT tutors.
 - Tutors, in-class instructors for GRE students, more days for class sessions.
- 7. Tell us what assistance you believe the TIP staff could have provided to support your academic success.**
- I believe the coherence exercise should be implemented more. I did it once and I really did not understand what the purpose of it was. Also, a follow-up of the stress management assistance. I knew many students who were stressed, but they never really told anybody. Maybe stress it a little more that you all really want to help us.
 - More assistance with reading comprehension on the PCAT.

- Providing more study materials and class sessions with Sherry would have helped a lot. However, everything else that the TIP staff provided was very helpful. The TIP staff were very helpful and friendly and I greatly appreciate everything they did for us.
- We didn't know that we could ask any TIP Student Assistant for something. We also didn't know that we could ask for copies of practice tests or other study materials. We honestly thought they were only there to take roll and check on us. Next year, the TIP program could give examples of what the Student Assistant can do to help and the study materials we have access to at the beginning. Meeting the deans was great, but maybe a second meeting would be helpful. All other SASS staff and coordinators have been fantastic. They knew our names and asked if needed anything. We just didn't know about what the student assistants could do to help us.
- I was satisfied with everything already.
- Individual assessments would be a great help!
- Personal statement workshops and assistance with AMCAS application.
- Provide assistance with the application process of medical school.
- We need someone (student assistant) from medical school that can tell us what kind of life we should expect as a student.
- Explain what the path options are after TIP II and the time table for when those options will be. For example, should TIP II students apply for the upcoming year at UT or not? What criteria would be used to decide?
- I truly thank everyone from the TIP Program for all their help and support. My thanks to Kamaria, Cynthia, Travis, not to mention the student assistants, and the rest of the staff. Thank you very much for all your help and support and please know that I truly appreciate it.
- Providing extra materials for studying for the PCAT.
- You guys have done fantastic on assisting. Thanks so much!
- Study strategies.
- They were perfect 😊
- More tutors.

8. Please tell us the extent to which the following statements accurately describe your experiences with your preceptor.

Statement	Very True	Mostly True	Somewhat True	True	Somewhat False	Mostly False	Very False
My preceptor was a helpful resource in addressing my questions and concerns.	1	0	1	0	0	0	0
I learned new clinical skills and improved on others.	0	1	1	0	0	0	0

I acquired a better understanding of the requirements for career success.	1	1	0	0	0	0	0
I was provided an opportunity to meet new people and learned how to work with them effectively.	1	1	0	0	0	0	0
My motivation increased to perform well in academic coursework.	1	1	0	0	0	0	0
My confidence increased in the ability to take on more challenging course work.	2	0	0	0	0	0	0
I developed a better understanding of personal career goals.	2	0	0	0	0	0	0

9. Please tell us about the aspects of your shadowing experiences that you found most beneficial.

- I gained a truer sense of purpose for my chosen field. I also got very close to my preceptor and other clinic members, who helped me rediscover my passions for what I want to do and who will serve as long-lasting relationships.
- Being able to observe upper level extremities and how each patient is handled and treated for their hand, back, or shoulder wounds.

10. Please provide specific information on how your shadowing experiences could have been improved.

- Perhaps if there had been more to do during clinic!
- Communication and having a good, not partially written, reference letter after having completed 68 hours of shadowing and doing the best that I knew how to do with no prior knowledge of shadowing in a hand therapy clinic.

11. Please tell us about the aspects of your preceptor interaction that you found beneficial.

- He was very honest and treated me as a friend and equal versus just a student. This aided in my learning and in feeling closer to him.
- My new found knowledge of modality use and hand therapy techniques.

12. Please provided specific information on how your experiences with your preceptor interaction could have been improved.

- N/A
- Understanding, communication, an open-minded preceptor to uncomfortable situations, reliability of the preceptor to explain her expectations of an observation student.

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

	Very Prepared	Prepared	Somewhat Prepared	Very Unprepared
PCAT	2	2	0	0

MCAT	2	5	3	0
DAT	0	2	3	0
GRE	0	2	0	0

14. Tell me what could have been to make you feel more prepared to take the PCAT, MCAT, DAT, or GRE?

- I would have liked more time.
- I believe you all have done everything you can that we needed to succeed. It was up to us to reach out and grasp it. Also, you all can make it be known of the additional books and resources there are that we can utilize. Also, our student assistant could have been a little more helpful. He was saying he could get us things, but did not really tell us what was available.
- Having more practice and time to study. If the program would have lasted longer or started earlier, we could have had more time to study and have access to many of the resources that the SASS provides.
- More practice tests that were more similar to the MCAT as it is now.
- 1) A longer program; 2) Other studying materials (in addition to Crack the DAT and Kaplan). You have to buy Chad's Videos – providing a subscription to these would be great. And more outside practice tests.
- More time with Dan, better practice exam resources, a better way to prepare us for the Verbal section.
- Time is key to studying and getting to study all the materials in time.
- If I had the Berkeley exams and more time with Dan.
- If you had a combination of test preparation, such as Princeton, Berkeley, and Examcrackers, just to get a better perception of the MCAT. The more diversity you have in resources, the better your score.
- Provide food to the students, so that we feel more encouraged to stay on campus.
- I wish the TIP Program was a bit longer – at least for TIP II MCAT. It would have been more beneficial if we had at least two more weeks of the program to spend more time with Dan and to practice utilizing his techniques for the test. I think the program for MCAT should be at least two months long.
- If it was clearer where our learning focus was to come from – whether Kaplan or Dr. Oz. Eventually, it was settled, but the anxiety that played out to the students could have been avoided.
- More time within the program – didn't realize how fast the entire experience would go. Maybe two more weeks.
- Prepare us for writing section.
- Additional resources after the program ended might be very beneficial. I would rather have group collaboration than self-study time.
- More practice.
- Tutoring!
- Studying more.

15. Please tell us to what extent you found the following classes/sessions beneficial (select N/A if it didn't apply to your Track).

Class/Session	Very Beneficial	Beneficial	Not Beneficial	Detrimental	N/A
General Chemistry	5	12	0	0	4
Organic Chemistry	5	12	0	0	4
Biology	5	11	3	0	5
Physics	1	7	0	0	13
MCAT Review Sessions	9	1	0	0	11
PCAT/DAT Review Sessions	6	3	0	0	12
GRE Math	0	2	0	0	19
GRE Verbal	1	1	0	0	19

16. Please provide us with specific feedback on how the following classes/sessions can be improved (answer for those that apply to your Track).

General Chemistry

- Less test review.
- No more videos. In-class lessons would be fine.
- Maybe get what Dan recommends? Although, I did enjoy the fact that Kaplan had videos for us to watch and a particular study plan, which Dan did not necessarily provide. If I just had Dan and no Kaplan, I would have no idea what content to study on a daily basis.
- Shorter lecture.
- We might need an actual short lecture on the material rather than just simply going over the test.

Organic Chemistry

- No more videos. In-class lessons would be fine.
- Maybe get what Dan recommends?
- Shorter lecture.
- We might need an actual short lecture on the material rather than just simply going over the test.

Biology

- Offer a class to assist with biology.
- No more videos. In-class lessons would be fine.
- Maybe get what Dan recommends?
- Shorter lecture.
- Review sessions with a tutor.
- We need a Sherry for this section!

Physics

- No more videos. In-class lessons would be fine.
- Maybe get what Dan recommends?
- Shorter lecture.

MCAT Review Sessions

- Make sure Dan is here on time.
- Have someone who teaches verbal. I also did not learn much content from Dan.
- Keep them and discuss what resources the students should have beforehand.
- Dan being on time.
- More of Dan would be great.
- More and longer class time.
- Dan is the best!

PCAT/DAT Review Sessions

- She can be very beneficial if she was able to be slightly more prepared.
- We need a Sherry for bio and math!

GRE Math

- More times a week and an in-person tutor.
- In-class instructor.

GRE Verbal

- More times a week and an in-person tutor.
- In-class instructor.

17. Please tell to what extent you found the following workshops beneficial.

Workshop	Very Beneficial	Beneficial	Not Beneficial	Detrimental	N/A
Perfectionism	4	14	2	0	1
Time Management	5	14	1	0	1
Learning Skills and Goal Setting	2	16	2	0	1
Test Anxiety	5	14	1	0	1
Note Taking	2	14	3	0	2
Test Taking	3	14	2	0	2
Meet the Deans	11	9	0	0	1
Heartmath	4	12	4	0	1
PSR Lab	1	11	7	1	1

18. Please provide us with specific feedback on how the following workshops can be improved.

Perfectionism

- N/A

Time Management

- Make schedule for students.

Learning Skills and Goal Setting

- N/A

Test Anxiety

- More info.

Note Taking

- Didn't go over it.

Test Taking

- N/A

Meet the Deans

- More than once.
- Would have like a second meeting.
- Mock interview with the Deans, maybe?!

Heartmath

- I wish there were more devices that can be loaned out to the students.

PSR Lab

- More complex passages.
- Only give PSR lab in the first few weeks. I found it unnecessary to do it again and again if your reading skill has reached its optimum.
- Pointless.
- Some of the stories are very interesting. Hence, we have scored a lot better. It might not be accurate.

19. Please tell us about any additional workshops that we should include in the TIP Program.

- Chad's Videos, Top Score, Q-Vault, and DAT Bootcamp.
- Personal statement workshops.
- Personal statement workshops, not just a packet. Set times in the schedule for Chad's Videos, DAT Bootcamp, and other resources (in addition to Kaplan and Crack the DAT).
- How to write a letter of intent.
- Include verbal sessions and not with Kaplan!
- Personal statement workshops and AMCAS application workshops.
- Writing a personal statement, creating a CV, and a workshop to prepare us for medical school application!

- Mindbender was better than PSR in my opinion. I also wish somebody would look over our personal statement for medical school applications. We had to make an appointment for that and majority of the time it conflicted with our schedule of the day.
- Class on how to acquire volunteer opportunities for medical exposure.
- Finances and budgeting.
- A mock interview, have meeting to work on an individual study plan.
- Writing.
- Stress management for GRE students.

20. 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?

Answer	Response Count	Response Percent
Yes	21	100%
No	0	0%

21. Please choose the reasons you would choose to attend another institution? Choose as many that apply.

Reason	Response Count	Response Percent
Negative experience or perception of UTHSC	0	0%
Financial aid	0	0%
Diversity of students/faculty (i.e. HBCU)	0	0%
Location	0	0%
Size of institution	0	0%
Supportive academic environment	0	0%
Other	0	0%

22. Would you recommend the TIP Program to your peers interested in the health field?

Answer	Response Count	Response Percent
Yes	21	100%
No	0	0%

23. For what reason(s) would you recommend the TIP Program to your peers interested in the health field?

- It improved my study habits and enhanced my reading skills. Also, I was able to focus on what was important.
- The support I felt in this program was extremely beneficial. It is good to see a program supporting those who are undeserved and underprivileged.
- Good preparation for the entrance exam.
- It is a great program that allows you to prepare for any pre-professional test and get paid at the same time! You also get the opportunity to meet many of the staff and students.
- Helps prepare for the MCAT.

- This was the best thing that could have happened to me (for my future dental career). TIP is there to help you more than you could even imagine. They offer you all the resources you need and even pay you (and provide housing) so that you can start your success in your future career as a pre-health professional.
- The resources and people that are always willing to help.
- It is great, filled with helpful resources.
- It is a great opportunity for everybody interesting in the health field. I am looking forward to getting accepted into Track III Medicine.
- Overall, it is a good program and I think it's beneficial to those disadvantaged students who don't really get opportunities like this on their own, like shadowing and test preparation.
- It truly helps prepare for the MCAT! From TIP I, I have heard that their passion for the field has grown through the experience. From TIP III, I have heard that they really like the fact that they feel more prepared for the fall.
- It is excellent MCAT prep and it introduces you to the atmosphere of UT if you are interested in attending here for graduate school.
- The exposure to Dan was helpful in identifying my weaknesses and forming a plan for doing better on the MCAT.
- Experience is invaluable. After going through the program, I'd say that the application process was worth it because being exposed to the campus facilities and interacting with students who were pursuing the same path has proved to be an eye opener.
- TIP has helped me a lot to be prepared for the MCAT mentally and knowledge-based.
- Organized test preparation and broaden social network!
- Helpful and familiar with UT.
- It is vital in understanding the environment you wish to spend your career in.
- The knowledge, hands on experience, and the opportunities.

24. For what reason(s) would you not recommend the TIP Program to your peers interested in the health field?

- N/A

25. Please provide any additional information that you would like to share about your TIP experience and the TIP Program in general.

- Great experience.
- My other TA was very helpful. She was one of the few that was constantly checking on us to make sure we had everything we needed. I am grateful for the entire TIP Program. Although some days I did not want to get up and study, I did not want to let those invested in my future down. Thank you.
- I love being in the TIP Program. This is my third time doing it and I've enjoyed every second of it. I loved meeting the staff and other students who are going through the same process as me. I am very thankful for the whole TIP staff and for everything that they did for me and for allowing me to be part of this program again. I

have been at UTHSC so much that I am very comfortable with the school and the city. I will never forget about all of my TIP experiences and all the friends I made here at the TIP Program.

- Thank your for accepting me. I really needed this program. I feel like this program was and still is my only chance at helping me gain acceptance into dental school. Without this program, I would not have been prepared to take the DAT or increase my scores. I didn't have the money for study materials, or the knowledge about where to start studying. I also needed to talk to Dr. Covington and Jenny about my specific concerns about how I look as an applicant – TIP gave me that opportunity. I would really like to repeat the program to help prepare me better. I really hope I can do this again.
- It was a great program, offering more than I expected.
- I really enjoyed the program overall and it was very helpful.
- Great help. Everybody wanted to help us as much as they can!
- I feel the same way I do about TIP like I felt last year. I've had a great time and made lots of friends. I feel very happy to have been picked to be part of this program.
- TIP Program gets an A-. Overall, it was a great experience, but there is always room for improvement. No complaints.
- TIP is simply one of the best programs out there for people who feel like they need help in getting ready for any pre-professional exam.
- The information about reading program.
- I am so grateful for this experience and enjoyed it so much! Thank you to everyone who helped!
- It was an eye-opening, yet worthy, experience.

TRACK III COURSE AND PROFESSOR RATINGS

Number of students polled: 17

1. Please select the concentration that represents you.

Concentration	Response Count	Response Percent
Medicine	4	24%
Pharmacy	13	76%

2. Please tell us what you found beneficial about the TIP Program.

- The TIP Program has helped with exposure to the curriculum and expectations of professional school. The time has been beneficial to fine-tune my study habits and planning for immediate use in the fall. I also feel that the resources provided by the SASS have been extremely beneficial to my success. The tutoring sessions, textbook resources, and support is highly appreciated.
- The staff in the SASS was helpful and provided useful resources for our course.
- Having student assistants was very beneficial. The advice we got from them was invaluable. Tutoring sessions were also very useful in our success!
- TIP 3 was wonderful because I got to learn some medicinal chemistry, which I am very interested in. It also helped me get an understanding of how disciplined a student has to be in order to be successful in professional school.
- The ability to access professors.
- TIP prepares you for pharmacy school.
- Throughout this program, I was able to get a feel of how pharmacy school is going to be this fall. I was able to figure out how I will need to study and other methods that will help me be very successful in pharmacy school.
- I like that we are getting a head start and getting early exposure to the material.
- It prepared me for a higher level of learning. I am more equipped for pharmacy school.
- I found it very beneficial to be able to take medical school course work ahead of time in order to better prepare myself for the fall. It was great getting to know the professors and learning the material.
- The preparation for the program. The volume of work allowed me to see what pharmacy school is all about. The student assistants helped with notes and class preparation as well. They are the best!! Keep it up.
- It was beneficial for me to have pre-exposure to the kind of information that will be taught during the first year of pharmacy school.
- I definitely learned how to study for exams and how to better prepare myself for a full day of class and studying. Also, I learned how to take notes in class.
- I like the early exposure to the material that I would be taking as a pharmacy student.
- The amount of free time that we had to study was helpful. The resources that we had access to were very beneficial as well.

- Learning new information!
 - The TAs for the TIP Program were very beneficial.
3. **Please tell us a high point in your TIP experience – a time in which you felt most engaged in your experience. Please tell us the context and your feelings at that particular moment.**
- A high point in my TIP experience would be during anatomy lab during the last week of lecture. It was the culmination of what we had studied so far and therefore, it was a high point to be able to integrate the info learned and also be able to apply real world situations. The translation to the real world and clear understanding of how the different parts of the leg function together made me appreciate the long hours in class and lab, and therefore look forward to the upcoming semester.
 - A high point with my experience was with the anatomy professors. We were able to get a lot of individual attention from Dr. Cantrell and Dr. Johnson and they were always willing to help us out. The experience with them was great because we were able to get insight from them on how to handle certain parts of the material.
 - I felt most engaged in anatomy lab. It was a direct correlation with what we'll be doing our first semester and felt like a rite of passage. When I was taking the anatomy final, I felt like all of my hard work paid off and I was elated.
 - My high point in TIP was when I passed all of my midterms. That really gave me confidence to keep going and do the best I could do in all of my subjects.
 - The overall experience was nice.
 - A high point was when I received a good grade back. I felt very good and glad that I can actually learn the material.
 - I really enjoyed med chem. It was very engaging and helped me connect my learning to the real world.
 - The anatomy lab was probably the high point of my TIP experience. I got to do something I've never done before and learn so much at the same time.
 - A very high point was in endocrinology class. Dr. Nutting is very engaging, and for him to actively have us participate is wonderful and it helps us retain what we learned. I felt encourage and confident on test day!
 - I love the pharmacy math class and calculations applying the problems to real-life scenarios that pharmacists deal with in hospital-pharmacy settings.
 - After midterms was the high point because that's when I got to see my studying and effort paying off. It also boosted my confidence going forward.
 - I felt the most engaged during the week of finals. It was hitting me that this course is pretty intense and that I had to conquer this week to make it through. I felt extremely drained but I was also proud that I got through it and I was very proud of most of my test grades.
 - In class, learning, is when I felt the most excited. The teachers were very knowledgeable and patient.
 - The study groups were the high point of my TIP experience. The tutors were very well versed in their respective fields and they made an effort to engage us in the session.

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

- No change in my career goals. But the experience has definitely validated my decision to pursue medicine. The courses incorporated clinical and real world situations to the lessons in microbiology, molecular biology, etc. This is a far cry from the undergraduate world and even graduate school in my case where you only learn theories and established dogma. The application ties everything nicely and has made me even more encouraged and hopeful for the future.
- My goals and educational ambitions have not changed.
- It validated my goal to become a physician.
- I don't have any changes in my educational/career goals. I still want to be a pharmacist.
- No change in career goals.
- It taught me how to study and handle excessive stress.
- I currently don't have any career or educational goal changes.
- So far, there hasn't been a change.
- I am more confident about going to pharmacy school now.
- I now have interest in pharmaceuticals within hospital settings (ie. pediatrics).
- Now I am even more excited about pharmacy school.
- This program has opened my eyes to a new way of studying. In undergrad, I was able to get away with cramming sometimes, but this program helped me realize that if you study material every day, there is no need to cram. My grades have been a lot better practicing this method.
- Pharmacy math confirmed my interest in clinical pediatrics.
- TIP Program taught me what my academic strengths and weaknesses are and how I could address them in the future.

5. Tell me what assistance the TIP staff could have provided to support your academic success?

- I feel that the TIP staff was very helpful in my academic success.
- The only thing that I would suggest that needs to be changed is the organization with the schedules. One thing that I think most of the students found unaccommodating was the middle of the week schedule changes.
- It would have been useful to have Educational Specialist meetings and other SASS check-in meetings on our schedule. It was very frustrating to have an hour-long session added the day before or the day of the session. I feel like I spent most of the hour going over how I needed to push back all of my plans (especially studying) by an hour. This meant that a session meant to boost our confidence and help us learn how to take tests was actually adding to my stress. And on top of that, I was not paying attention to the useful information like I might have been if the meeting had been incorporated into my plans for the day. Luckily, none of these meetings interfered with a doctor appointment, car maintenance, or other need for me to be off campus, but it could have potentially been a problem. I appreciate all the help provided by SASS, but if something is scheduled less than 24 hours before then it should be optional.

- TIP did an excellent job, and as of this moment I cannot think of any additional assistance that could have been provided for us.
- Set tutoring sessions for students.
- The TIP staff could have provided us with stable tutors throughout the program; meaning there should have been assigned days and times where tutoring would have taken place. I also think that the TIP staff could have given us better schedules because they were all over the place at times and were constantly being changed in short notice.
- Tutoring already set up would have been a plus, especially small group tutoring. The respiratory portion definitely was not a good course for the pharmacy students.
- Provide more stable tutors and restructure the curriculum. For example, instruction should be completed at least three days before finals.
- Being more on point with getting us the notes on time. There were a few times when we didn't have those notes.
- The TIP staff assisted in class preparation, exam preparation, and stress relief exercises.
- Nothing more. All doors were open if someone needed help. Very helpful programs (ie. SASS).
- They were all pretty much available when they needed to be.
- The student assistant provided VERY helpful practice questions for the tests. I also loved the review sessions, especially for respiratory.
- The TIP staff went over and beyond to help me excel throughout the entire TIP Program.
- I think the staff did an overall good job.
- Tutors, study guides, etc.

6. Describe three concrete wishes for the future of this program.

- 1) Avoid scheduling of extracurricular activities the week before a test. 2) Also avoid scheduling new items the day of, but rather, give a few days' notice to any change in the schedule. 3) Provide assessments done on the first day before lunch rather than at the end of the day. It was very hard to concentrate after such a long day.
- 1) More organization with weekly schedules. 2) More available TAs for Track III Medicine.
- Schedule ALL Educational Specialist meetings, practicum sessions, check-in meetings, and feed-back sessions prior to the start of the program (if changes are made, they should be at least 48 hours ahead of time). If possible, one student assistant who is in class with us consistently (for an entire week at a time, alternating, or one at the beginning and one at the end, maybe?) There should be less Educational Specialists meetings on test-taking (I felt like the first two or three sessions were okay, but after that it was something I had either incorporated and been using or was not going to use at all).
- My wishes for the future of this program is that it lead to a more successful representation of minorities in the health care field. I also would not mind seeing an option of a research experience being available. In addition to

this, I also feel that our SASS appointments should be scheduled at times when they don't conflict with our classes.

- 1) Better communication between organizers. 2) Coursework equal to given time.
- Have better professors. Schedule the exams according to level of difficulty. MORE tutors and help!
- I think that the program should be structured around how pharmacy school really is – meaning, we take classes that we will be seeing in the fall. I think the program should be organized better with time especially with scheduling classes during test week, which honestly isn't practical because we spent more time cramming the material instead of trying to learn for understanding and remembrance.
- I wish that the communication between the students and the staff was better. Improve the way grades are posted – that caused a lot of us to panic. I also wish that courses are not still being given during the test week.
- 1) Less mandatory SASS programs. 2) Fewer gaps between classes. 3) BRING BACK PETTY CASH!
- Sorry, more than 3 – 1) Make sure the student has fulfilled all courses before TIP starts. 2) Don't make the two most stressful finals on the same day. 3) Don't expect students to survive without pay for four weeks. 4) SASS should always be in the morning!!! 5) Understand that we are under a lot of pressure and stress so sometimes allow us to breathe. 6) Most importantly, encourage us!
- Better organization of the classes. More time allowed for students to study for exams (not having classes/meetings during exam weeks). More funding for those who had to stop working to keep up with the pace of the program while still having to pay bills, etc.
- 1) I don't feel that grading pharmacy students on a physiology class they won't have to take again was fair. 2) They should survey prior students and see which classes were harder so that future students won't have to take two of the hardest exams (in my case, pharmacology and pharmacy math) on the same day. 3) I wish the professors had a deadline for when they had to have the exams graded and submitted. It wasn't a major issue, but if I knew when to expect them by, I wouldn't be constantly checking my email and Blackboard and getting nervous.
- 1) After midterms, the classes should be 8-5. This will prevent so much stress during the week of final exams. I think it would be beneficial not to have classes during the week of finals. 2) It is my personal opinion that pharmacy math and pharmacology are two of the hardest pharmacy classes in the TIP Program. It should be avoided having both of these exams on the same day. 3) Meeting with the Educational Specialists should be avoided during class time. Being in class is very important. Missing just a small period in class can result in a lot of missed information. These meetings are very helpful, but they be scheduled outside of class time.
- A better schedule lay out, mandatory tutoring sessions, and snacks
- 1) Less SASS appointments. 2) Less Educational Specialist appointments.

7. Please tell us your perception of the following services provided by the TIP staff.

Question	Strongly Agree	Agree	Disagree	Strongly Disagree
The online Student Handbook was clear and helpful.	3	12	2	0
Program orientation/registration process was smooth and orderly.	3	12	2	0
SASS was a helpful resource in addressing my questions and concerns.	10	7	0	0
Faculty/Director/TIP staff was sensitive and responsive to my needs and concerns.	7	10	0	0
Student Assistants were available and helpful.	6	7	3	1
I fully understood my responsibilities in the summer program.	10	6	1	0
My summer experience was enjoyable and beneficial.	6	10	0	1
Overall, the program provided information that will be helpful in the pursuit of my career goals.	10	7	0	0

8. Please tell us your perception of the helpfulness provided by faculty. MEDICINE ONLY.

Name	Very Helpful	Helpful	Somewhat Helpful	Not Helpful
Dr. Cantrell – Anatomy	4	0	0	0
Dr. Johnson – Anatomy	4	0	0	0
Dr. Thomason – Physiology	2	2	0	0
Dr. Cox – Biochemistry	0	3	0	0
Dr. Ryan – Microbiology	3	0	1	0
Dr. Guntaka – Molecular Biology	2	0	2	0
Dr. Marion – Immunology	3	0	1	0
Dr. Park – Genetics	4	0	0	0
Dr. Leffler – Physiology	0	2	0	1
Dr. Belland – Molecular Biology	1	2	1	0
Dr. Albritton	3	1	0	0

9. Please tell us your perception of the teaching quality provided by faculty. MEDICINE ONLY.

Name	Very Good	Good	Poor
Dr. Cantrell – Anatomy	4	0	0
Dr. Johnson – Anatomy	3	1	0
Dr. Thomason – Physiology	2	2	0
Dr. Cox – Biochemistry	0	3	1
Dr. Ryan – Microbiology	2	2	0
Dr. Guntaka – Molecular Biology	1	3	0
Dr. Marion – Immunology	2	2	0
Dr. Park – Genetics	4	0	0

Dr. Leffler – Physiology	0	1	2
Dr. Belland – Molecular Biology	0	4	0
Dr. Albritton	4	0	0

10. Please tell us your perception of the helpfulness provided by faculty. PHARMACY ONLY.

Name	Very Helpful	Helpful	Somewhat Helpful	Not Helpful
Dr. Thomason – Physiology	3	7	3	0
Dr. Christensen – Pharmacy Math	4	5	4	0
Dr. Buolamwini – Medicinal Chemistry	11	2	0	0
Dr. Cook – Pharmacology	5	6	2	0
Dr. Ryan – Microbiology	4	9	0	0
Dr. Malik – Pharmacology	11	2	0	0
Dr. Marion – Immunology	7	4	2	0
Dr. Leffler – Physiology	0	0	2	9
Dr. Nutting – Physiology	5	6	1	0
Dr. Gardner – Pharmacology	2	2	3	0

11. Please tell us your perception of the teaching quality provided by faculty.

Name	Very Good	Good	Poor
Dr. Thomason – Physiology	7	6	0
Dr. Christensen – Pharmacy Math	2	8	3
Dr. Buolamwini – Medicinal Chemistry	11	2	0
Dr. Cook – Pharmacology	4	9	0
Dr. Ryan – Microbiology	7	6	0
Dr. Malik – Pharmacology	11	2	0
Dr. Marion – Immunology	8	5	0
Dr. Leffler – Physiology	1	1	3
Dr. Nutting – Physiology	6	6	1
Dr. Gardner – Pharmacology	1	2	8

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

- I found Dr. Cantrell to be an exceptional instructor because she not only genuinely cares about the success of her students, but has the student in mind when she lectures. She understands that we are not experts in the course and therefore, thinks ahead to what would cause confusion for someone experiencing the material for the first time. Dr. Albritton’s enthusiasm for her craft is obvious and contagious. Her class model also facilitated learning in a more interesting fashion. Dr. Leffler was engaging and thorough in his instruction.
- Dr. Cantrell and Dr. Johnson seemed like they really cared for the success of the students. When we would cover topics with them, they would ask questions and then go back over those topics to ensure that got the concepts. I also like the fact that we were able to learn from them actively in lab and see how to properly dissect our cadavers. Having a 2:1 student teacher ratio really allowed us to develop lab skills and obtain strategies for learning the material at hand. I also thought Dr. Park and Dr. Albritton were extremely helpful and willing to go out of their way to answer questions or setup review sessions.
- Dr. Cantrell went above and beyond in terms of lectures and lab. I felt like I knew exactly what I needed to be doing to be successful from day 1. She also incorporated time in class to address any questions or difficult concepts in depth. Dr. Park also made the expectations very clear in what we needed to know. She also supplied

practice questions and incorporated TBL sessions which will prepare us tremendously for the fall. Although I've had it explained, it's very nice to have done one before. Dr. Thomason also seemed intent on making sure that everyone had the concepts and allowed us to ask questions before class to clarify any questions about the previous day's material. He pulled up the slides as well or would draw something on the board to make sure that everyone was on the same page. Dr. Albritton is passionate about what she is teaching and makes you excited about it, too! I would have loved to have more than one lecture with her.

- Dr. Nutting, Dr. Buolamwini, Dr. Thomason, and Dr. Marion were all very good teachers. They explained the information clearly and broke it down in a way that we, as students, could absorb it.
- Buolamwini was excellent in explaining medicinal chemistry in the short amount of time given.
- Drs. Buolamwini and Nutting kept my attention the most. Most of the professor simply read off the slides.
- I found Dr. Buolamwini and Dr. Malik were the most exceptional because they took the time out to really get to know us. They were also very engaged in their lectures and tried to make them as interactive as possible. They related to us a lot more than the other professors.
- Dr. Buolamwini because he takes things very slow and makes sure you learn.
- Dr. Buolamwini, Dr. Thomason, Dr. Marion, Dr. Malik, and somewhat Dr. Christensen – most provided extra practice, study guides, and made sure students understood the lectures. They were effective in presenting the materials.
- Dr. Cantrell was probably the best – she just made anatomy interesting and fun.
- Dr. Christensen, Dr. Malik, and Dr. Nutting were exceptional because they applied the teaching to real-life. They also were quite humorous during teaching which kept my attention.
- Dr. Nutting, Dr. Buolamwini, and Dr. Malik stood out to me because they all seemed passionate about teaching, their respective fields, and the students. They had the students' best interests at heart and you could tell in their tone while teaching. They also all seemed excited to teach and shared interesting real-life experiences that helped put things into a better perspective.
- I loved Dr. Malik because he was straight to the point and understood that our schedule was very tight.
- Dr. Buolamwini did an amazing job teaching medicinal chemistry. He found ways to tie in physiology and pharmacology, this included terminology as well as mechanism of actions. This helped me in the other courses.
- Dr. Christensen because he gave examples and worked with the students.
- Dr. Thomason was engaging, as was Dr. Nutting.

13. Please tell us the perception of the following tutor services provided by the TIP Program.

Question	Very Good	Good	Fair	Poor	Very Poor
Availability of tutors	7	5	1	3	1
Quality of tutors	8	7	2	0	0
Amount of tutoring time	8	6	1	2	0
Overall tutoring	9	5	2	1	0

14. Tell us how the tutoring services provided by the TIP Program could have been improved.

- I have no complaints about the tutoring services. They were very helpful.
- The tutors were exceptional as tutors and were vital in helping me to be successful in the program. I do not have any suggestions for improvement.
- Tutoring services were AMAZING! I liked that we had such great numbers and one was fantastic. The only thing I would suggest is making more clones of him since he was the only tutor and we took up so much of his time.
- The tutoring services, overall, did a good job helping us with our classes. I have no suggestions for improvements.
- More tutoring sessions already set up would be helpful.
- Tutoring should always be available. There are more tutors for medicine than pharmacy. Also, TIP students should be able to receive individual tutoring since the group is so small.
- I think tutoring should have been scheduled ahead of time and had a specific time throughout the day when tutors were here and set up.
- They could be set up when students get here.
- The guys were very exceptional. There should be set times for students to attend after classes.
- Maybe getting the tutors copies of what we are doing in class at the time so they can prep ahead of time.
- Not every course had a tutor.
- The tutors were, overall, amazing. I could reach them at any time by phone or email.
- More than one tutor would be beneficial.

15. Please tell us to what extent you found the following workshops beneficial.

Workshop	Very Beneficial	Beneficial	Not Beneficial	Detrimental
PSR Lab	3	8	6	0
Perfectionism	4	9	4	0
Time Management	4	13	0	0
Learning Skills and Goal Setting	4	10	3	0
Test Anxiety	6	9	2	0
Note Taking	4	10	3	0
Test Taking	5	12	0	0
Heartmath	6	9	2	0
Meet the Deans	5	7	3	2
Question group sessions w/Educational Specialists	2	9	4	2
Assessment evaluation w/Educational Specialists	3	8	3	2
Meeting w/practicum students	3	10	3	1

16. Please provide us with specific feedback on how the following workshops can be improved.

PSR Lab

- I'm not sure what this is.
- Not do it.
- Not needed.

Perfectionism

- Good.
- I loved the energy and I could identify with some of the material.
- Shorter, more specific.
- I don't think it needs improving.
- Not needed.

Time Management

- Good.
- Shorter, more specific.
- It should be more interactive.
- OK.

Learning Skills and Goal Setting

- Good.
- Shorter, more specific.
- OK.
- Great.

Test Anxiety

- Good.
- OK.
- Good quality.

Note Taking

- Good quality.

Test Taking

- Good.

Heartmath

- No improvement needed.

- Nothing to change – it was great!
- We should get to do this more often.
- OK.

Meet the Deans

- Great.
- It was geared completely towards TIP II participants. Since it was right before exams and I got nothing out of it, it was a waste of time. TIP III students should meet separately with the deans so that way we can at least do some networking.
- No improvement needed.
- I don't think Track III should have to attend because we were already accepted into the program and the entire program was centered on admissions to school.
- We didn't actually meet the dean.
- Not needed.

Question group sessions w/Educational Specialists

- Good. However, sometimes questions would not be reflective of topics we covered in class.
- They're only beneficial for the first two at the beginning of the program. Aside from the scheduling issues, having them every week is not advantageous. You're either using it or you're not.
- Not beneficial.
- At first they were beneficial, but after a while they became redundant because we did the same thing every week.
- I feel like this should only be done at the beginning of the program.
- Not needed.
- Needs improvement.

Assessment evaluation w/Educational Specialists

- Good.
- I didn't really get any information that I did not already have the first day. It didn't really help or hurt.
- More specific.
- These should only be done at the beginning.
- Not needed.

Meeting w/practicum students

- Good. However, they would sometimes be poorly scheduled.

- It was nice checking in with someone outside of SASS and I liked that it was informal.
- I enjoyed them, but I think the later it got in the program, the more time we needed to study.
- Decrease frequency.
- All the stress talk and hearing other students talk about stress made me think about it.

17. Would you recommend the TIP Program to your peers interested in medicine or pharmacy?

Answer	Response Count	Response Percent
Yes	14	82%
No	3	18%

18. For what reason(s) would you recommend the TIP Program to your peers interested in medicine or pharmacy?

- The TIP Program creates an environment for equally motivated students to pursue their goals. Because everyone is highly motivated, it also pushes one to be his/her best. Additionally, the amount of resources provided are scarce and therefore very valuable.
- I think the TIP Program has allowed me to identify my strengths and weaknesses. I think this program would be beneficial for any student starting pharmacy or medical school. One of the big things is that you get to know your professors and learn what works and what doesn't work for certain courses.
- I think that it is a great introduction to work load and skills needed for medical school.
- I would recommend the TIP Program because it really helps us get our brains "in shape" for the curriculum in med/pharm school.
- If they want to get into pharmacy school or medical school, these this a good way to get started early.
- It gives them an insight of what the program entails and to better prepare them for their future endeavors in pursuing those fields.
- Because it gives you an edge over others that are going to entered medical school, and you get a taste of what medical school is really like.
- TIP curriculum prepares the ideal student of what the MD/PharmD program would resemble.
- I would only recommend it to them if they wanted to get a feel of how the information would be during first year of pharmacy or if they wanted to get ahead without receiving course credit.
- Honestly, it's the only thing standing between you and entering a great school – do whatever you have to do to get in.
- It's a good eye opener of what to expect as a pharmacy/medicine student.
- Overall, TIP will help prepare interested students for the medical and pharmacy programs. It will show you if you have any weaknesses, and where you may need improvements.
- A good experience for the material of the entrance classes.

19. For what reason(s) would you not recommend the TIP Program to your peers interested in medicine or pharmacy?

- I don't think TIP itself is a bad program because it gives minorities a chance to be exposed to the healthcare fields and a preview of how the medical field will be. But, I do think the structure of the program could be changed. We are literally cramming a semester's worth of material for five classes, which is way more than you could take in summer school. Especially for the pharmacy students, classes like physiology, microbiology, and immunology took away from our pharmacy classes that were more related to our field. I also think that it puts a lot of stress on you because the program is on a pass/fail basis and sometimes it is a determinant of how someone will perform in school. I think the program was more about endurance rather than preparation.
- I do think the program is beneficial, but I'm not sure how my friends would be able to handle the stress.
- The TIP Program is a contingency requirement. I would not recommend that someone volunteer for the TIP Program unless they felt that they would not get into the College of Pharmacy/Medicine without it.

20. Please provide any additional information that you would like to share about your TIP experience and the TIP Program in general.

- I loved the program! The only thing that I would change is scheduling issues that added to our stress and could easily be avoided (I think?). Thanks so much for everything!
- Through TIP, I have connected with many med/pharm students that have helped and inspired me to keep pursuing a career in pharmacy.
- The program is stressful and can use some help. However, nothing is perfect and I think it's a great opportunity for students to get a second chance at admission into pharmacy school.
- Most of my classmates were helpful.
- Overall, I am forever grateful for the experience that I had. It showed me that I can do the work and I look forward to getting even closer to my goals.

Summer
Research
Programs

2014

Annual Report

III. Summer Research Programs

i. Program Overview

The Summer Research Program is an eight-week, hands-on laboratory-based program offered by the College of Graduate Health Sciences (CGHS) at the University of Tennessee Health Science Center. The goal of the program is to serve as a conduit for increasing enrollment of talented prospective U.S. students in the various graduate programs offered by CGHS. Two programs were offered this summer, namely, the Summer Research Scholars (SRS) program and the Summer Undergraduate Research Fellowship (SURF) program. The SRS program was funded by the CGHS. SURF was sponsored by Dr. Rennolds Ostrom.

A total of sixteen (16) undergraduate students participated in the program this summer, of which twelve (12) enrolled in the SRS program and four (4) in the SURF program. The female to male ratio was 3:1. Seven (7) students attended Tennessee institutions. The students were assigned faculty mentors who provided them with hands-on biomedical research experience. Table 1 below provides the student participants, program of participation, classification, mentor, and the department in which they conducted their research experience.

ii. Program Participants

Table 1. Distribution of Students by Program, Institution, Classification, Mentor, and Department of Placement					
Student	Program	Undergraduate Institution	Classification	UTHSC Faculty Mentor	Department
Female Student	SRS	Christian Brothers University	Senior	Dr. Frank Park	Pharmaceutical Sciences
Female Student	SRS	Union University	Junior	Dr. Charles Leffler	Physiology
Female Student	SRS	University of Alabama	Sophomore	Dr. Larry Reiter	Neurology
Male Student	SRS	University of Tennessee – Knoxville	Senior	Dr. Michio Kurosu	Pharmaceutical Sciences
Male Student	SRS	Brown University	Junior	Dr. Robert Williams	Anatomy & Neurobiology
Female Student	SURF	Michigan State University	Senior	Dr. Kafait U. Malik	Pharmacology
Female Student	SRS	Northwestern University	Sophomore	Dr. Junling Wang	Clinical Pharmacy
Female Student	SURF	Colorado State University	Junior	Dr. Marshall Elam	Pharmacology
Female Student	SRS	Fisk University	Junior	Dr. Subhash Chauhan	Pharmaceutical Sciences
Female Student	SRS	Xavier University	Sophomore	Dr. Stephania Cormier	Pediatrics
Male Student	SRS	University of Tennessee – Knoxville	Junior	Dr. Adebowale Adebisi	Physiology
Female Student	SRS	Freed-Hardeman University	Senior	Dr. Andrzej Slominski	Pathology
Female Student	SRS	Tennessee State University	Senior	Dr. Hassan Almoazen	Pharmaceutical Sciences
Female Student	SURF	University of Alabama – Birmingham	Sophomore	Dr. Fuming Zhou	Pharmacology
Female Student	SRS	Emory University	Junior	Dr. Zhoahui Wu	Pathology
Male Student	SRS	Brigham Young University	Senior	Dr. Edwards Park	Pharmacology

iii. Program Evaluation

STUDENT PROGRAM AND PRECEPTOR EVALUATION

Number of students polled: 11

1. What activities, if any, would you say contributed to the success of the program?

Activity	Response Count	Response Percent
Meet the Deans	82%	9
Tips on Podium Presentation Workshop	45%	4
Orientation	64%	7
Abstract Writing Workshop	55%	7
Abstract Assignment	73%	8
HCP Closing Program	55%	6
Final Oral Presentations	82%	9

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

- Have a separate closing program for SRS without the other programs.
- Abstract due a week later to allow wrapping up of research; have a separate closing program for SRS (TIP was the only program truly represented).
- For the Meet the Deans session, perhaps allot time for students to speak to multiple deans if desired.
- I thought they were all really helpful.
- The campus tour during orientation could have been much better.
- I believe all of these greatly contributed to the program! I would even suggest have more of these during the beginning of the summer when lab work might be slow, and so we can get to know our peers better. During orientation, when I went to go meet my mentors, they seemed surprised to see me. I think better communication between the mentors and the program would be helpful. I truly enjoyed the HCP Closing Program, however, I would have liked to see the program directors there. I have no complaints for the other sessions and I benefitted a great deal from the information presented there.
- HCP seemed geared toward the TIP Program and the non-TIP students felt a little forgotten. The SURF students were not recognized. Encourage taking pictures during the SRS programs earlier in the summer so they could have more pictures in the slideshow.
- I think the Meet the Deans sessions was the most interesting. However, I would have liked to have more time for such a program where we could have toured the respective schools and maybe heard from current med students, pharm students, etc.

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

- I enjoyed the program very much. I do, however, like working with people more, but the program helped make my decision.
- It gave me an opportunity to see the real aspects of concepts I have learned in the past./
- The program definitely spurred my interest in research and it has allowed me to work not only with renowned PhD's, but also with PhD students which is definitely valuable since I plan on pursuing an MD/PhD.

- Although I had a good experience, it has confirmed for me that I do not want to do research as a career, at least in the academic sense. I have, however, learned a lot about aspects of the job that I enjoy, such as the hands-on aspect.
- Through working with my mentor and the team, I was able to experience all aspects of research, including attending meetings, editing manuscripts, and various other activities.
- It was fun to be able to take a concept and actually carry it out on the bench. Furthermore, seeing that concept come to fruition was great.
- Being a part of the research process for the first time definitely opened my mind to a career I never seriously considered pursuing.
- I was not doing research on something I was completely passionate about, so I can't say I enjoyed the full aspects of researching. However, I think once I find a passion in something, I will be able to have the dedication to research as my mentors did in the lab.
- I have never experienced knowing something that no else in the world knows. I found this to be an amazing feeling. I also have not worked in a lab before and enjoyed learning how PIs run experiments to get results by a deadline.
- I was interested in pursuing research before this program. However, this program opened my eyes to more medical research which I found very interesting. Currently, I think I would like to pursue an MD-PhD program.

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

- The workshops.
- There weren't many opportunities to talk with the other students except at the beginning of the program and the end.
- Facebook, regular meetings, etc.
- There wasn't much chance for this, except for those of us that are out of state staying at U of M.
- Through orientation initially, but especially the workshops where we got to meet as a group.
- Weekly lab meetings were really good for that.
- At the HCP closing program, I had the chance to talk to other SRS students. Also, another student was in the lab down the hall from me, so we got to talk to each other frequently.
- The sessions and living with one of the students helped me develop relationships.
- The seminars helped me network.
- Actually, there wasn't much of this in this program at all which I feel was a major downfall. I would have liked to have more programs where we could meet more TIP students and maybe current med, pharm, and dental students. My roommate (who was another SRS participant) and I sat around bored most weekends because we didn't know anybody in Memphis, and I would have very much liked to meet more students in this program. I mentioned this with the other SRS students and they also agreed that they wished we had more programs just

for socializing and meeting other program participants otherwise this program becomes very unattractive just because your time in Memphis be very boring.

- 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?

- Give students more chances to get to know one another.
- Brown bag lunches (students share a PowerPoint on themselves) or just scheduled lunches together, period.
- More sessions, at least in the beginning, would be beneficial.
- I didn't get to know a majority of the students. We are all separated in labs and I only saw these students about four times this summer in all. Each seminar, I would get to know one or two a little better and would have liked to have more time with them. In the future, there needs to be more seminars/lunches to get all the students together.
- Tours to med school, pharm school, dental school, etc. More small social events for SRS and TIP students (and med and pharm students) to all meet each other and make new friends in a new city for the summer.

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

- Learning techniques.
- Getting to learn many new things that I would never have known before.
- Lab meetings, chart-making, data analysis, and the blissful feeling of knowing your work is contributing to a greater missions.
- Working hands-on in a lab/becoming familiar with new subject matter.
- Learning from my mentor. She took me along to her meetings and various events so I felt like it was a very immersive experience.
- I liked the one-on-one time with my PI. I learned a lot from him.
- The people I worked with were wonderful. Everyone was happy to help in any way that they could. I loved having my own project. It made me feel like I was an important, helpful member of the lab.
- The research was very interesting. I also truly enjoyed the city of Memphis – it has a lot of offer and I can see myself back here for a career to help serve the medically underrepresented populations! This program offered a lot and I am so grateful for this opportunity. Keep doing what you're doing!

- I enjoyed my lab coworkers most. They were the nicest people and we ate lunch together multiples times in the week. They were patient and answered any questions I had. They even showed me things they were working on that my project was not on.
- I did variations of medical and pharmaceutical research that I was not aware of before so I am very glad that I got research experience in new areas. I also think the things I learned in the lab will help me in my classes at school because of what I have learned about biochemistry.

7. How could we have enhanced your lab experience?

- Make it less stressful by informing the mentors that we have less experiences than graduate students and need more help learning the basic concepts and skills.
- More chance to connect with students/multiple students in one lab, if possible.
- A weekly workshop where different professors teach you a new technique would be amazing!
- I don't think my lab experience could have been any better.
- I think you really have to be careful about which labs you place students. I would NOT recommend my lab (Dr. Chauhan) for any first time student researches. They gave me tasks to do and sent me in the lab with very little help, and expected I could get all the work done on my own. I appreciated the challenge, but I still expected more help along the way with my experiences, and if I had been a first time researches in the lab, it truly would have been too much to handle.
- Have the students make an outline of what they will do over the summer within the first two weeks and send it in. This will allow them and the mentors to pinpoint early on what the student's project and all future steps in their experiment will be.
- I think you should do an exit interview of how students felt about their lab experience and mentor because I had a lot of issues with my mentor which made me dislike my lab very much just because he was far too demanding and I didn't understand what he wanted from me. I worked several hours of overtime each week to please him. On the other hand, my roommate (who was also an SRS participant) said he did almost nothing every day. He said he mainly sat at desk and read some material about the research, but rarely got to participate in any real research or learn any new practices.

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

- Basic lab procedure (pipetting, measuring, etc.)
- Have more opportunities to stay connected with the others in the program. Let students have a chance to choose their own mentors.
- All of the current activities in addition to an outside/fun activity. I find it easier to connect with people when we go on a trip together, so perhaps a road trip to a fun place could help students within the program get to know each other on a more personal basis.
- Some sort of professional development workshop.
- The workshops were very helpful, especially the one on podium presentations.
- All of the activities were good, but adding the one I mentioned above could help.

- I would keep all of the activities in place, and maybe add some professional development sessions and one day a fun outdoor picnic! Also, maybe progress meetings once every two weeks so we can meet with the program directors and inform them of how lab is going, just to touch base.
- Perhaps on Fridays the students could do team building activities to help break the ice faster. Also, allow more personal time with Meet the Deans. Not all questions were answered because so many students were present at this event.
- I feel that was already covered in the above questions. All programs currently in use were helpful. Would like have seen more laid back social activities to meet other students and also tour the colleges. Maybe plan a day to tour Memphis museums or something on a Saturday that all TIP and SRS students can attend so we can all meet each other and see more of Memphis.

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

- Opportunities to share experiences in the lab throughout the program.
- Have students provide updates on what they are working on.
- Getting the students involved with writing so they'll work on that once the eight weeks are up.
- Show students what they are really getting themselves into using pictures of student activities from previous years.
- Not many Tennessee students are aware of this program, or any of the UTHSC programs. The programs at UTHSC need better advertisement to get the word out. I know that if students were to know, more applications would be sent in.
- Advertise better. I only learned about this program because I spoke with the Dean of the College of Graduate Health Sciences at a Health Fair at my school, and he told me about it and gave me a pamphlet. And I told some of other pre-health friends at school to apply as well. But there was minimal information online and it was not advertised very well.

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

- Student logs/opportunities to give mini presentations at lunches with students.
- Send out mass emails or have a shared document online.
- The biggest thing is to improve the campus tour. That is crucial because it shapes the students' initial feelings about the school and the program itself.
- Send out notifications to universities in Tennessee, or wherever you wish to recruit, about the program. The universities should put the programs in their newsletters, especially Tennessee schools. The SRS Programs needs a better description on the webpage as well. Many students do not apply because they do not realize there is a salary (college students rely on the summer to make money to pay for books).

11. Additional comments and suggestions.

- I love SRS!
- Thank you for the opportunity!

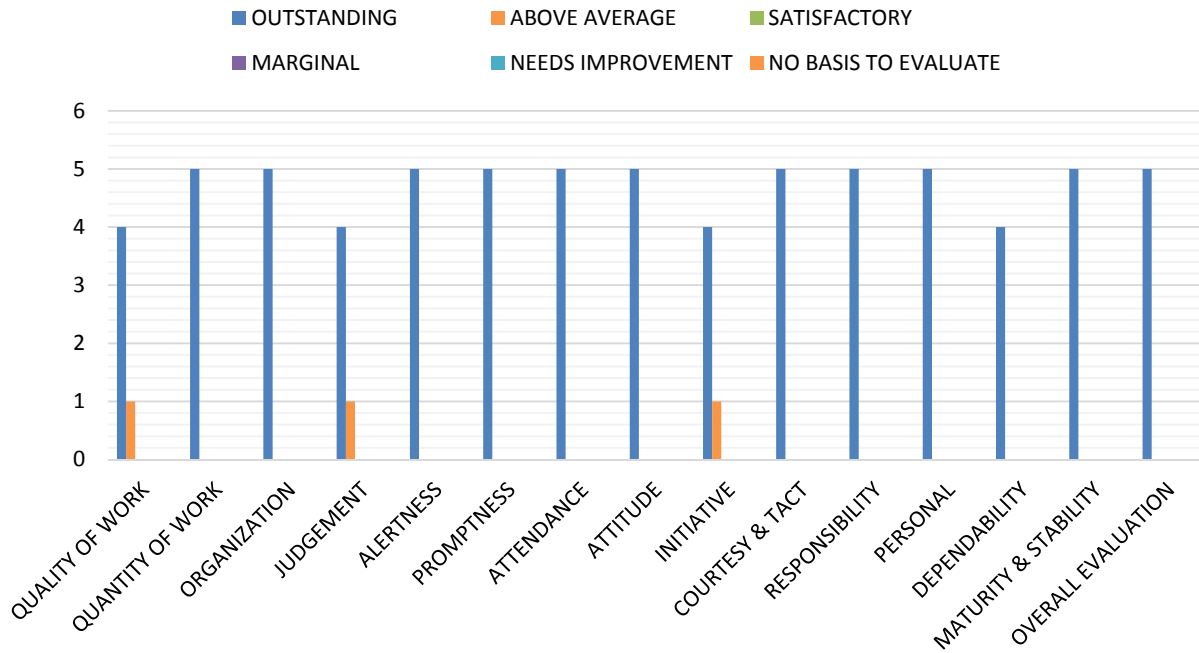
- It would be nice to make sure mentors know when we will be arriving to meet them on orientation day so they are prepared to meet us and fill out any forms.
- Thank you!
- This program is the best thing I could have done with my summer and I plan to reapply.

PRECEPTOR STUDENT EVALUATION

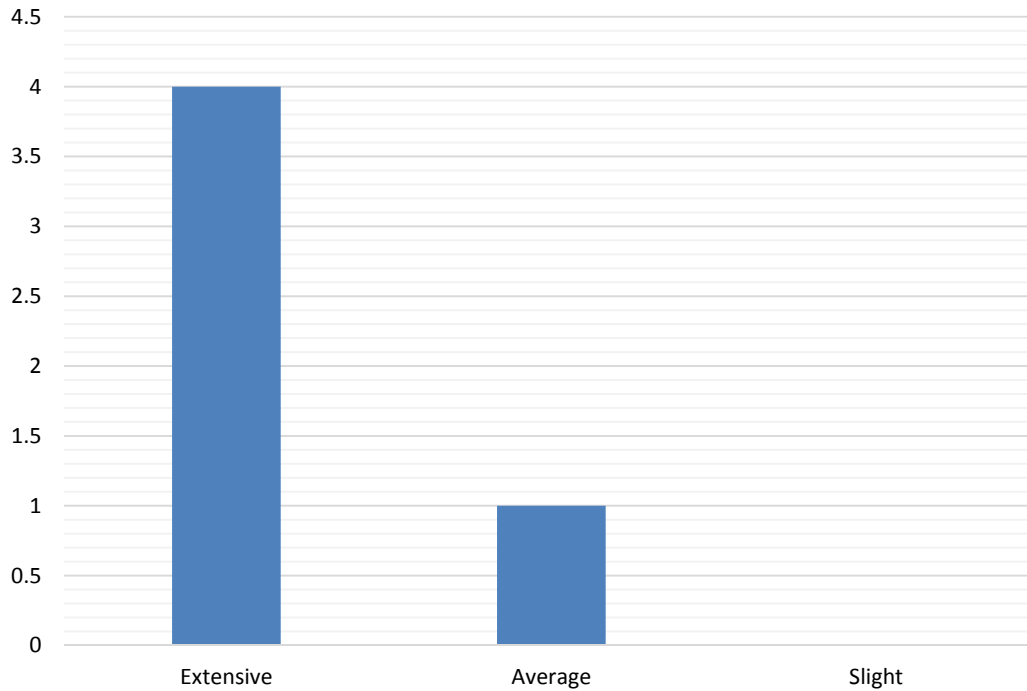
Number of preceptors polled: 5

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

	Outstanding	Above Average	Satisfactory	Marginal	Needs Improvement
QUALITY OF WORK - effective, neat, accurate	4	1	0	0	0
QUANTITY OF WORK - effective completion of volume of work under normal conditions	5	0	0	0	0
ORGANIZATION - proper planning of work: knowing priorities	5	0	0	0	0
JUDGEMENT - ability to alert you to problems and important matters	4	1	0	0	0
ALERTNESS - ability to learn and understand; flexibility for mastering new routines and work methods; grasping and retaining instructions	5	0	0	0	0
PROMPTNESS - observation of lab hours, lunch hours and breaks	5	0	0	0	0
ATTENDANCE	5	0	0	0	0
ATTITUDE - behavior regarding total work situation; follows established office procedures	5	0	0	0	0
INITIATIVE - self-starter in obtaining work objectives	4	1	0	0	0
COURTESY & TACT - relations with other employers	5	0	0	0	0
RESPONSIBILITY - works independently without direct supervision	5	0	0	0	0
PERSONAL - uses time effectively; limits personal phone calls; appropriate personal grooming and attire	5	0	0	0	0
DEPENDABILITY - reliability to see a project through to conclusion	4	0	0	0	0
MATURITY AND STABILITY - ability to withstand pressure in crisis situation	5	0	0	0	0
OVERALL EVALUATION of intern's performance	5	0	0	0	0



2. Degree of contact with intern:



iv. Preceptor Recommendations for Summer Research Scholars 2014

- This is a great program with great students. Glad to be involved as mentor.

Summer
Science
Institute

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Report



IV. SUMMER SCIENCE INSTITUTE

i. Summary of Program

UT's Summer Science Institute (SSI) 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, dental, nursing, and dental hygiene labs, DNA experiments, 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 7-10 hours of community service. Students made snack treats for the families at FedExFamilyHouse 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 had the opportunity to volunteer at the Mid-South Food Bank where they sorted and packed enough food boxes to serve nearly 3,000 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, the Southern College of Optometry, The Shelby County Health Department, the Region One Health Center and the Methodist Le Bonheur 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 St. Jude Medical Research Center, 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 Le Bonheur 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/>

Shelby County Health Department

The Division of Health Services both for the City of Memphis and Shelby County government to promote public health practices that safeguard and improve the quality of life for approximately 900,000 residents of Shelby

County. The SSI students toured and heard from Facilitators of the following departments environmental health (such as quality air and water), epidemiology, health education, maternal and child health, school health, healthy start initiative, restaurant and food service establishment permit fee schedules (state and local levels), HIV/STDs.

Regional One Health, Memphis

Regional One Health - healthcare system committed to providing compassionate care and exceptional services to improve the health and well-being of this community. Regional One Health is home to Centers of Excellence in Trauma, Burn, High-Risk Obstetrics and Neonatal Intensive Care and full family of services including an extended care hospital, rehabilitation hospital, outpatient surgery center, primary care services, and more. Regional One Health is an acute care hospital providing the Mid-South with the highest quality healthcare. From the highly specialized care provided in the event of an emergency to the quality care provided for elective procedures and inpatient stays during illness. Residents of Memphis and the surrounding area have these highly specialized services right in their own backyard that patients from throughout the region depend on for care. It is one of the largest medical and surgical teaching sites for the University of Tennessee Health Science Center. The SSI students toured and heard from Nurses, Physicians and Facilitators of the Burn Center, Emergency Care, Acute & Extended Care and Surgery Unit.

Southern College of Optometry

SCO was founded in 1932 right here in Memphis, Tennessee. SCO embraces the idea that optometry is a service-oriented profession. Their students represent a large cross-section of demographics and regional areas of SCO and its clinical presence also have meaning for the greater Memphis community. More than 60,000 patient encounters are recorded each year at The Eye Center. These patients rely upon quality vision care overseen by nearly 60 faculty members. Our students benefit from hands-on learning as they accompany faculty on community outreach initiatives at school vision screenings and regional health care settings. The SSI students had the opportunity to tour the facility and talk with enrolled students, faculty and staff. The SSI students had an opportunity to see patient exams and were able to observe how SCO's students use the state of the art equipment for patients. SCO is one of the largest and most clinically advanced vision and eye care centers in the country.

Forensic Laboratory (CSI)

At the CSI Lab, Duckworth Pathology Group, students observed [body] fluids, blood-plasma, and other chemicals placed in test tubes. Some of these test tubes were stained with dyes and placed in a centrifuge for approximately 15-30 minutes. Others were used as a control to provide a comparison. Next, each specimen was placed under a microscope for live student viewing.

Duckworth Pathology Group provides medical laboratory services for patients and physicians, independent laboratories, and medical research and education institution settings. Duckworth Laboratories offers an extensive menu of diagnostic and consultative services provided by subspecialty trained physicians through the region.

Additional Workshops: Social Media (the dangers of: Facebook, Vines, Yik Yak, Twitter, Instagram, Vine, etc.), **Interviewing and Resume Writing** (a great marketing tool for them to start as early as possible), **The Art of Chess** (research has indicated the benefits of students who learned chess to include increased reading comprehension, better problem solving skills, and even high scores on standardized reading tests and it improved their academic performance overall), **Financial Aid** (equipping high school students with proper tools for great access and opportunity for achieving higher education), and **Deadly Diseases** – HIV/AIDS/STDs, etc.

Speakers: Modern Medicine (the overall health and wellness of patients with treatment & prevention) , (Child Psychiatry - Bias & Stereotyping in Medicine), Meteorology - “How Weather Affects Our Lives”, the Human Knot (focused on team-building, problem solving skills and non-verbal communication), Medicine and Career Planning as early as possible, Nuclear Medicine, Nuclear Pharmacy, and many more.

STAFF

Elise Moore

STUDENT ASSISTANTS

Female Student – University of Tennessee College of Pharmacy

Female Student – University of Tennessee College of Pharmacy

ii. Program Participants

Student Name	Session	Interest	Classification	School	School District
Female Student	I	Research	Senior	White Station High School	Shelby
Female Student	I	Dentistry	Junior	White Station High School	Shelby
Female Student	II	Optometry	Senior	Central High School	Shelby
Female Student	I	Medicine	Junior	St. Benedict at Auburndale	Independent
Male Student	I	Unknown	Junior	Germantown High School	Shelby
Male Student	I	Biomedical Engineering	Junior	Houston High School	Shelby
Male Student	I	Pharmacy	Senior	Brighton High School	Tipton
Male Student	II	Dentistry	Junior	Germantown High School	Shelby
Female Student	II	Medicine	Senior	Memphis Business Academy High School	Shelby
Male Student	I	Forensic Science	Junior	Bolton High School	Shelby
Female Student	I	Pharmacy	Senior	Ridgeway High School	Shelby
Female Student	II	Sports Medicine	Senior	Covington High School	Tipton
Female Student	II	Medicine	Senior	Ridgeway High School	Shelby
Female Student	I	Pediatrics	Senior	White Station High School	Shelby
Male Student	II	Medicine	Junior	Craigmont High School	Shelby
Male Student	I	Medicine	Junior	Central High School	Shelby
Female Student	I	Unknown	Senior	Cordova High School	Shelby
Female Student	II	Medicine	Junior	Houston High School	Shelby
Male Student	I	Sports Medicine	Sophomore	St. George's Independent School	Independent
Male Student	II	Computer Engineering	Senior	Memphis Academy of Health Sciences	Shelby
Male Student	II	Engineering	Junior	Memphis Academy of Health Sciences	Shelby
Female Student	II	Pediatric Nursing	Senior	Whitehaven High School	Shelby
Male Student	I	Medicine	Junior	Arlington High School	Shelby

iii. Program Evaluation

SSI PROGRAM EVALUATION

Number of students polled: 16

1. When did you participate in the Summer Science Institute (SSI) Program?

Answer	Response Count	Response Percent
1 st Session: June 16-27	8	50%
2 nd Session: July 7-18	8	50%

2. Please choose the answer that best reflects the level of interest you have in a science-related career.

Answer	Response Count	Response Percent
Very High	12	75%
High	3	19%
Moderate	1	6%
Low	0	0%
No interest at all	0	0%

3. Please tell us what area of science interests you the most.

Answer	Response Count	Response Percent
Biology	7	44%
Chemistry	1	6%
Health Sciences	6	38%
Engineering	2	13%
Physics	0	0%
Geology	0	0%
Environmental Science	0	0%
Zoology	0	0%
Research	0	0%

4. Please tell us the area of science you plan to work.

Answer	Response Count	Response Percent
Medicine	8	50%
Pharmacy	3	19%
Dentistry	1	6%
Nursing	2	13%
Allied Health	0	0%
Engineering	1	6%
Research	0	0%
I do not plan to work in the field of science.	1	6%

5. Tell us what heightens your decision to not work in the field of science.

- From what I saw, medical school takes a lot of time and dedication. I would rather not spend most of my early 20s still in school instead of starting on my career/life.

6. As a participant in SSI, I have increased my current knowledge in the health sciences.

Answer	Response Count	Response Percent
Yes	14	100%
No	0	0%

7. Please tell us what you found most beneficial about the SSI Program.

- All the tours and speakers.
- The SSI Program gave me insight into the many fields of health science.
- Seeing how everything works and hearing about the careers and different colleges from actual students and professors.
- The most beneficial thing about the program was being introduced to many new professions and careers. Being able to ask important questions and talk to people who actually have a career in the field of my interest was very beneficial.
- We were able to experience many different fields in healthcare and learn the process it takes to making those goals. We were introduced to many ways to getting funds for schooling as well as ways to get there and how to be ahead now.
- What was beneficial about the program to me was when we went to the nursing department of UTHSC and learning to do hands-on things like giving shots, looking at our veins, and even listening to the simulator's chest.
- I had tons of exposure to various occupations in the health sciences.
- There was so much information about health Sciences and all of the field trips were beneficial. I know the importance of check-ups, the seven different components – I really needed to know this if I want to obtain a degree in the health sciences. I am truly glad that UT in Memphis, Tennessee held the SSI Program. It was very informative, powerful, and I look forward to doing more next year. I wish the program could have been for a whole month. There was so much to learn within those two weeks.
- Visiting the Southern College of Optometry.
- Learning about the different careers in the medical field.
- I found that there is a world of opportunities in the health and science field. In the program, I visited the pharmacy lab and had the privilege of speaking with other pharmacists which allowed me to make my career decision much easier.
- The most beneficial aspect of the program was how much we actually learned about specific careers.
- The exposure!
- The most beneficial part of the SSI Program was the exposure to different things in the field of our choice or similar.

8. Please tell us how your overall experience with the SSI Program could have been improved.

- Perhaps more fun activities, like the Art of Chess Day.
- N/A – well organized and very informative.
- My overall experience at SSI was amazing. I have never attended any camp that provided so many opportunities to see and discover different areas of the medical field. All the speakers that came in to speak to us were very helpful and had great advice for those of us who wanted to work in the medical field. From

explaining to us how to start preparing for our desired career in high school to giving us tips and motivational quotes, I can truly say that I am glad that I attended this great program.

- I was only disappointed that we did have down time that we could have gone and done something else.
- Well, it was awesome. I wish it was longer.
- If you could have the chance to experience a specific occupation of your choosing to see if it truly interests you.
- I had the best experiences with the SSI Program. Please keep my name on the list for any future programs. My life will never be the same. Thank you for having me this summer.
- Everything was great. No improvement needed.
- The overall experience was great. The only thing I would have changed is the way the participants interacted with each other. My other suggesting is that during the little down time provided, have games and activities for the participants to engage in.
- I would have liked if we could have explored more career options.
- I feel like they covered all of the necessary information that would benefit us, but I feel as if they skipped a step. All of the participants of SSI are in high school and the main focus was graduate school when we are focusing on undergrad right now.

9. Please rate your experience with the SSI staff.

Name	Extremely Satisfied	Satisfied	Somewhat Satisfied	Somewhat Unsatisfied	Unsatisfied	Extremely Unsatisfied
Ms. Elise Moore	10	4				
Ms. Luella Jones	9	5				
Ms. Megan Lowe	10	4				

10. Tell us what assistance the SSI staff could have provided to support your overall experience this summer.

- None. They were great.
- The SSI staff were often able to explain their own career choices and tell us their own personal experiences in their field of work.
- They did everything and more by giving us personal accounts and support to reach our goals.
- Nothing they already provided us with. A lot of knowledge.
- Nothing really. They did what they could to help us experience as much as possible.
- Everyone was so nice, helpful, polite, and kind. Excellent staff and they work well together.
- Snacks.
- They did awesome. Nothing to change.
- The staff was great. I felt that I could talk to them about anything and they would give me an honest answer, especially pertaining to our careers. They were very encouraging and phenomenal individuals.

- They did great. I don't see anything they could have done better.
- I feel like they did a great job. Any question I had, they were there to answer it and if they were unable to answer it, they found someone who could.

11. If you participated in a team building activity (The Human Knot), what did you take away from this experience?

- Teamwork.
- Teamwork and communication is key.
- That even though you're not the one in charge, you can still observe what is going on and discover ways to improve the team's efficiency.
- A "get to know you" icebreaker. Involves close physical proximity. Can be used as a name game. Helps a group learn about how to work together. Understanding of communication, leadership, problem solving, teamwork, and trust.
- I learned that although you may not like everyone, there is always something good in them that you are fond of. The activities helped me to see that.
- OK.
- When working as a team, there can only be one leader. If everyone leads, who will follow?

12. Please rate your perception of the experiences with the SSI speakers.

Answer	Response Count	Response Percent
Extremely Beneficial	10	71%
Beneficial	3	21%
Somewhat Beneficial	1	7%
Somewhat Unbeneficial	0	0%
Unbeneficial	0	0%
Extremely Unbeneficial	0	0%

13. Please tell us about what you found most beneficial about the SSI speakers throughout your two weeks in the program.

- N/A

14. Please tell us about what you found not as beneficial about the SSI speakers throughout your two weeks in the program.

- N/A

15. Were your expectations for the SSI Program met?

Answer	Response Count	Response Percent
Yes	14	100%
No	0	0%

16. Please tell us how your expectations for the SSI Program were met.

- It was very informative.
- I expected to learn a lot about the fields of health science.

- To learn more about health professions.
- It was very informative and it had everything well planned out. It also had great speakers to come speak to us.
- I was able to learn about different fields and talk to healthcare professionals who had done it all before. I definitely realized some goals I had set for myself.
- I was hoping to learn something about the health science field, I learned more than that.
- I expected us to do tours and experience multiples occupations from 1st person source and we did that.
- My confidence level in science has reached an all-time high. I will go school and study extra hard now. Everything life has to deal with health. I look forward to pursuing my degree in the health science medical field now.
- Hands-on experience.
- Great.
- I initially though that I would be introduced to different speakers and talk about careers in the health and science field. The program did just that and more. We visited different centers and had additional speakers.
- I expected to learn a lot from this and that is exactly what happened. It may have even exceeded my expectations.
- Yes.
- Coming into this program I expected long, boring lectures, but to my surprise it was the exact opposite. There were countless hands-on activities and intriguing speakers that I learned a lot from.

17. Tell us how your expectations for the SSI Program were not met.

- N/A

18. Please tell us about a high point in your SSI experience – a time in which you felt most engaged in your experience.

- The time at St. Jude was nice.
- When we were getting CPR trained, I felt like this could make a huge difference in someone's life. I felt important and worthy of saving someone's life.
- With the simulators, when it was an emergency.
- When the group went to the pharmacy lab and actually got to make everyday things like Chapstick and lotion from scratch. I had never done anything like that and I feel like that was such a great experience.
- My high point was talking to Ms. Luella and Ms. Megan about their routs to where they are today.
- I felt most engaged during CPR training.
- During the tour of APEC. They had many interesting simulations for us to experiment with.

- The field trips showed many areas of health science. I love my classmates, different speakers, and Mrs. Moore and staff members.
- When we volunteered at the food bank.
- Everything.
- I felt most engaged when I went to the pharmacy lab. I definitely gained a different perspective and now I'm sure that is what I want to do in the future.
- When we participated in simulations is when I felt the most engaged and interested.
- Lab exposure.
- One high point from my SSI experience was visiting the nursing lab, which was a room full of simulators in hospital beds. The instructor treated us as if we were nursing students and she shared different experiences with us about her career. We got to perform CPR on a simulator and give insulin shots. We also practices on a computer that nurses take their test on. Not only was the experience educational, it was fun.

19. Would you recommend SSI to a peer or sibling?

Answer	Response Count	Response Percent
Yes	14	100%
No	0	0%

20. Please tell us why you would recommend SSI to a peer or sibling.

- It gave information about possible careers.
- It gives you a great opportunity to explore the different aspects of the health science field.
- Because it was a wonderful experience and I got a lot of information that was very helpful.
- I would want a friend to experience the same things I experienced.
- The experience opens doors that many people never considered as a career choice in the first place.
- Because I want them to get the experience I had.
- It is fun and you experience a lot in a short period of time.
- Only serious inquiries, I recommend. This program is too valuable to have students that are not serious about health science.
- Because it opens your eyes to many science and healthcare fields that you were unaware about.
- So that they may learn more about the medical field.
- You have a different outlook on the careers after the program and you gain respect for them. That's great in itself.
- I would recommend the program because it helped me decide what I really want to do in the future and what I need to do to get there.

- I would recommend this program to anyone, even if they are no interested in health science. I came in unsure of the field I wanted to go into, but with all of the exposure to the different fields, you can determine if this is what you want to do with your life or not, which I think is really beneficial. It saves you time and it makes it easier for you to set goals.

21. Please tell us why you would not recommend the SSI Program to a peer or sibling.

- N/A

22. The SSI Program is currently a two-week program. Ideally, please tell us how long you believe the program should last.

Answer	Response Count	Response Percent
1 week (I believe the program should be shorter)	1	8%
2 weeks (keep the way it currently is)	7	54%
3 weeks or more (I believe the program should be longer)	5	38%

23. Please explain your ideal length of the program.

- It was enough time to get everything we had planned done.
- One week seems like enough time.
- I think the program was at a reasonable length already.
- We would be able to learn more with a longer program and travel to more buildings.
- It should be three weeks.
- Probably just two or three weeks. I wish I had more time to experience other things, but I don't want to cut out that much of my summer.
- The program could for the whole "summer" because it is so critical to have a productive "life."
- Two weeks.
- More fun to keep it longer.
- It definitely shouldn't be shorter. There wouldn't be enough time to grasp an understanding of everything. If it were longer, I believe participants would become less focused. The program was an appropriate time length.
- I would have preferred three weeks because if were there longer, we could have learned even more.
- One week and a half.

24. Please tell us your preferred time for daily SSI activities.

Answer	Response Count	Response Percent
8am-3pm (current time)	4	31%
8am-2pm	2	15%
9am-2pm	3	23%
9am-3pm	1	8%
9am-4pm	2	15%
Pam-5pm	1	8%
10am-4pm	0	0%

25. Would you have preferred a workshop on ACT/SAT preparation during the SSI Program?

Answer	Response Count	Response Percent
Yes	10	77%
No	3	23%

26. Please provide any additional information that you would like share about your SSI experience and the SSI Program in general.

- It helped me decide which careers I could see myself doing in the future.
- I loved this program and would definitely come to it again.
- Great time and I hope others will be able to gain as much from this experience as I have.
- We had fun, and I am glad it wasn't many kids who came because it was better that way.
- I just love this program and thank you UT.
- It was an overall amazing experience.