

shade tree

CLINIC



2017 - 2018 Annual Report



Who We Are

The Shade Tree Clinic (STC) is a free health clinic run by students at Vanderbilt University School of Medicine.

Our Mission

We strive to be the primary care home for underserved individuals in Davidson County by providing comprehensive care for chronic illnesses, social services, and health education. To meet this mission, STC forms interdisciplinary teams of medical, nursing, pharmacy, and law students. These students are supervised by professionals in their fields to provide healthcare and social services free-of-charge to this community. The clinic welcomes all patients, regardless of their race, residency, gender, socioeconomic status, or religious affiliation.

Impact

Since opening, Shade Tree has provided cost-free medical, social, and pharmaceutical support to over 4,000 patients. This past year, STC was the primary medical home to approximately 400 uninsured, underserved, and homeless patients. We provided nearly 2,500 medical visits.



“ For more than a decade, the Shade Tree Clinic has afforded our students a unique learning environment where their clinical skills flourish as they provide valuable assistance to our community’s medically underserved. Participating in the Shade Tree experience offers students the unique opportunity to be responsible for a continuum of patients’ needs while they learn fundamentals of health care delivery. The experience is incredibly rewarding for everyone involved and represents the very best of Vanderbilt University School of Medicine’s mission to train future leaders in health care. ”

– **Jeff Balsler, M.D., Ph.D.**

President and CEO of Vanderbilt University Medical Center,
Dean of Vanderbilt University School of Medicine

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From the Student Directors

Dear Friends and Fellow Advocates,

Shade Tree Clinic has been providing valuable medical care to Middle Tennessee residents for 13 years since its founding in 2005. We have grown tremendously over this period, going from a walk-in clinic in a double-wide trailer to a comprehensive medical home for more than 300 patients.

Each year has brought its own unique set of challenges and successes, and this one has been no different. We successfully transitioned our clinic to the new Vanderbilt electronic medical records system with many hours and support from dedicated students and faculty. Continuing our success from last year, we have treated several more patients for Hepatitis C and are in the midst of treating several more. We concluded a project to optimize cholesterol therapy to prevent cardiovascular disease, setup our point-of-care A1c testing machine to provide better in-clinic diabetes management, and continued to push forward socially-driven initiatives at Vanderbilt.

While we are excited about the success

of Shade Tree, we would be remiss not to say that this year has truly been life-changing for both of us. Our medical directors and volunteer physicians have shown us what it means to be compassionate healthcare providers. Our classmates and colleagues have shown us the immense good that can come from teamwork and dedication. And our patients have taught us the virtue of being socially conscientious providers, the value of the patient-physician relationship, and so much more. This experience has allowed us to become better physicians and better people.

As the healthcare environment changes, we know that Shade Tree will continue to be an outpost of what clinical medicine ought to be: students, physicians, and patients coming together in a unique synergy that allows the provision of care to those who need it most while providing a setting for socially-aware medical education.

We thank you for your support and hope you will continue in this journey with us.

*Joshua Latner and Gregory Fricker
Executive Directors, Shade Tree Clinic*

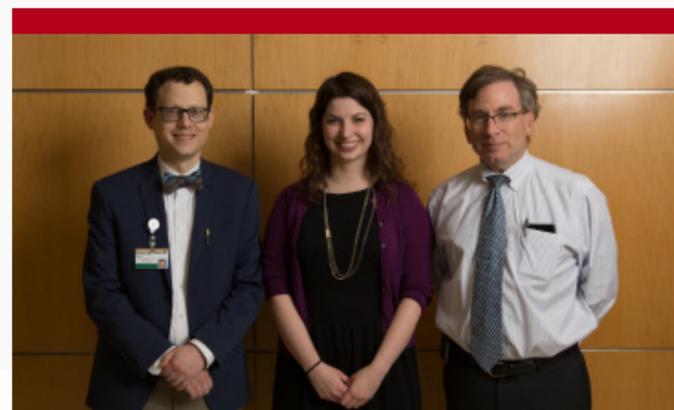
From the Medical Directors

At 7 a.m. every Friday, our favorite hour of the week begins. Twenty-five medical students, most of them in their first and second years, come together with laptops open and presentations rehearsed to discuss patients who would otherwise have no access to care. Many of these students are Patient Health Educators (PHEs), who closely follow our patients with chronic conditions such as diabetes mellitus, hypertension, congestive heart failure or chronic lung disease. Other students will discuss our non-English speaking patients, our pre-natal patients or our general medical patients. These Friday morning meetings ensure that we are doing everything possible to provide the best care for Shade Tree's panel of 400 patients. During a typical meeting, students will introduce their patients, review the most recent clinic visits and laboratory tests and when appropriate, present updated plans of care. The three of us will help our newer students with data interpretation and management plans, but they rapidly gain confidence and skill, and eventually require little intervention. Following the meeting, the students communicate the results of the tests with their patients and document everything in the electronic medical record. The 7 a.m. meetings were originally focused on laboratory tests,

to ensure that nothing "fell through the cracks." Over time, students realized that all patient events, including specialty appointments, emergency room visits and hospitalizations, benefited from review. They realized that patient care extends far beyond clinic visits and came to appreciate the social challenges patients face and the importance of coordinating care. This greatly enhances and augments the formal medical school curriculum. The Friday meetings allow us to guide our students as they provide comprehensive patient care early in their training. Many of our patients believe that the care provided at Shade Tree is the best they have ever received, and these meetings allow us to deliver on that promise. As the directors, we are inspired by the enthusiasm, compassion, dedication and intellect of our students.

Thank you for your interest in Shade Tree and what we believe is a project that will lead to improved patient care.

*Robert Miller, M.D., Michael Fowler, M.D.,
and Eleanor Weaver, M.D.
Medical Directors, Shade Tree Clinic*





Making It Happen: The Leadership

Clinic Leadership

Executive Directors: Joshua Latner and Gregory Fricker

Director of Finance: Parker Evans

Director of Operations: Nicolas Baddour

Director of Patient Health Education: Nicholas Kuhl

Directors of Dispensary: Jack Walker and John Ewing

Director of Social Work: Kelly Schuering

Medical Directors: Michael Fowler, M.D., Robert Miller, M.D., and Eleanor Weaver, M.D.

Social Worker: Shannon Jordan, L.M.S.W.

Past Executive Directors

2016-2017: Joey Starnes and Tom Klink

2015-2016: Emily Buttigieg, Whitney Muhlestein

2014-2015: Mary DeAgostino-Kelly, Justiss Kallos, Mary Van Meter, Cristin Quinn, Rafi Tamargo

2013-2014: Nick Harris, Taylor Triana

2012-2013: Bharat Kilaru, Matthew Stier

2011-2012: Allison Ferreira, Paula Marincola

2010-2011: Ben Deschner, Ravi Patel

2009-2010: Jonathan Steer, Adam Wegner

2008-2009: Meredith Albin, Alon Peltz

2007-2008: Eve Henry, Caitlin Toomey

2006-2007: Sarah Dunn, Caroline Kim

2005-2006: Dana Guyer, Sara Horvitz

2004-2005: Kristina Collins, Katie Cox

Board of Advisors

Andre Churchwell, M.D.

Neerav Desai, M.D.

Robert Dittus, M.D., M.P.H.

Josh Fessel, M.D., Ph.D.

Reid Finlayson, M.D.

Amy Fleming, M.D., M.H.P.E.

Michael Fowler, M.D.

Shannon Jordan, L.M.S.W.

Lewis Lefkowitz, M.D.

Kim Lomis, M.D.

Bonnie Miller, M.D.

Robert Miller, M.D.

Robertson Nash, Ph.D., R.N.

Allen Naftilan, M.D., Ph.D.

Al Powers, M.D.

Mavis Schorn, Ph.D., C.N.M., F.A.C.N.M.

Jeff Stovall, M.D.

Eleanor Weaver, M.D.

Lynn Webb, Ph.D.

Jule West, M.D.

Consuelo Wilkins, M.D., M.S.C.I.

Beth Ann Yakes, M.D.

Board of Directors

Tom Klink

Nicholas Harris

Josh Latner

Matt Stier

Lauren Holroyd

Rohini Chakravarthy

Lauren Matevish

Greg Fricker

Lauren Barr

Joey Starnes

Whitney Muhlestein

Meg Tebbs

Rafi Tamargo



Patient Story 1

Mr. Kelly's Story

Mr. Kelly was one of Shade Tree's first patients. In fact, he has been coming to our clinic since we were in a trailer 8 years ago. He has observed the transformation of Shade Tree as it has grown to include more patients and include more services. Over the years, Mr. Kelly has been truly impressed by the quality of care he has received. He appreciates how clinic volunteers have treated him as a person and not just as a disease. From pre-clinical students to social workers, he likes how multiple aspects of his health needs are met by a single visit to Shade Tree.

Two years ago, Mr. Kelly was diagnosed with pulmonary hypertension, a disease that has had a large impact on his life. Shade Tree has helped him deal with the mental and physical challenges of this diagnosis. In addition to receiving all his medications through Shade Tree, he is also now able to understand his disease through the help of Patient Health Educators. They have talked him through the science behind his disease as well as the rationale for why his student physicians have given him his medications. He now has clear insight into the goals and expectations when dealing with his diagnosis. He said, "It's not a lot of 'hey, take this, you have this.' They have a lot of great information that I wouldn't get otherwise."



Patient Story 2

Ms. Pearson's Story

Shade Tree Clinic's effect on patients reaches far beyond a simple diagnosis, and helps them in many areas of their lives.

Ms. Donna Pearson has been a Shade Tree patient over the past two years, having been introduced to the free clinic by a mentor following her release from prison. She had been diagnosed with hepatitis C, a viral illness that causes liver damage and can eventually progress to the point of requiring a liver transplant. Previous treatment had been unsuccessful, but when a Shade Tree attending discussed a possible curative therapy, Ms. Pearson was willing to try again.

Her attending recommended Harvoni, a medication with a demonstrated ability to eradicate the virus, with treatment consisting of a closely monitored 12-week regimen and regular blood tests. The medication costs close to \$90,000 for a treatment course, so Ms. Pearson knew it would be unattainable if not for Shade Tree. "Once again, [Shade Tree] went to bat for me and was able to hook me up through this program," Ms. Pearson said. "They took me in and provided all the medication and all the labwork." After twelve weeks of Harvoni, Ms. Pearson was successfully cured of the virus.

But that's just the beginning of what the clinic has been able to accomplish for her. "Shade Tree really treats my whole being," said Ms. Pearson. She is appreciative of her Patient Health Educator, PHE, who follows up with her outside of clinic and advocates for her to obtain the appointments she needs. She also receives nutrition information and legal support from the social work team. Moreover, after learning that her brother had died of colon cancer, her Shade Tree clinic team referred her to the hospital for screening, and a precancerous lesion was discovered and removed.

Ms. Pearson would highly recommend the clinic to anyone thinking of coming in for a visit. She believes that she has gained so much from the clinic, both in medical care and in personal knowledge. Going forward, she sees her health as a partnership between herself and her care team at Shade Tree. "They've taught me so much about my own health," she said. "Shade Tree has given me the ability to care for myself and to stay as healthy as possible."

Clinic Departments

Finance

The Shade Tree finance department primarily oversees clinic spending and pursues sources of funding. These include grants, donations, and fundraisers. Without this income, many of the amazing programs we have at Shade Tree would not exist. As part of the grant reporting process, the finance department is responsible for managing data on patient health outcomes. Through gathering and analyzing these data, we have the unique opportunity to measure the impact that Shade Tree has on our patients' health. We are able to identify strengths and areas for improvement in order to provide equitable, evidence-based care to our patients.

This fiscal year, the Finance Department has successfully obtained grants from the Boulevard Bolt and the American

Psychiatric Association. The Boulevard Bolt has supported our vaccine efforts for more than 10 years, and helps us to successfully provide hundreds of influenza, TDAP, and Pneumovax vaccines every year to both our patients and the Nashville homeless population. The APA's Helping Hands Grant will allow Shade Tree to expand its outreach and education efforts with the medical school regarding mental health, which is a major concern in our patient population.

Director of Finance: Parker Evans

Dispensary

The Shade Tree Clinic dispensary is a full-service dispensary featuring over 300 different medications, all provided to our patients free of charge. The dispensary also coordinates vaccine orders and incorporates immunizations into clinic flow. Over 40 incredible dispensary volunteers, including both medical

students and pharmacy students, process and document medication orders, and fill prescriptions for the entire Shade Tree panel. With guidance from licensed-pharmacists, we provide medication education and reconciliation to all of our patients. The dispensary department also creates detailed reports and analysis to support more accurate documentation of medication utilization and expenses. We also house a Patient-assistance Program (PAP) department which helps connect our patients to expensive new medications for free that we would otherwise be unable to provide. Finally, we have continued to take the lead on keeping STC compliant having scored extremely well on both Environment of Care surveys as well as consistently receiving perfect scores on our monthly, dispensary-focused MEDS survey.

This year has included a number of changes for the Shade Tree Dispensary. After going live with a new electronic-pharmacy dispensing system,

PharmacyRx, last year, this year we saw the clinic transition to a new electronic health records system, eStar. This brought about significant changes to our medication ordering workflow which was entirely reworked to now include students, under the supervision of attendings and dispensers-in-charge, placing medication orders in eStar for Shade Tree patients. With both our health records system and our dispensary system now entirely electronic, we have already seen how these can help us take better and more efficient care of patients. For example, we recently saw gabapentin become a C5 scheduled drug and therefore stopped carrying this in our dispensary. Utilizing both of our electronic systems, we were able to quickly and efficiently identify all patients who this would affect and develop individualized plans going forward.

Directors of Dispensary: John Ewing and Jack Walker

Operations

Operations plays a pivotal role in the essential processes that keep clinic running smoothly and excellent for our patients and volunteers. When patients arrive at clinic, the Clinic Coordinators at the front desk serve as the first point-of-contact for patients. Clinic Coordinators answer any questions patients may have and then manage the clinic flow from checking in patients, and making the relevant teams aware of the patients' needs. Our team also schedules patient appointments and tries to close the gap for patients who cannot make it to their scheduled appointments. We are also responsible for coordinating all volunteer logistics across clinic.

Operations is uniquely posed to evaluate processes of clinic flow and generate improvements that reduce patient wait, volunteer burden, and errors. This past year, in addition to working closely to ensure smooth transitions to eStar, we have cut down clinic paperwork and staff burden, helped automate outside

referrals, and implemented monthly operations reports to inform the teams about various clinic metrics including volume, meds, labs, volunteer turnout and efficiency.

Director of Operations: Nic Baddour

Patient Health Education

The Patient Health Education Program was established in 2012 to improve the continuity-of-care for Shade Tree Clinic's patients with chronic diseases, including diabetes, cardiovascular disease, and respiratory conditions. Under the leadership of the Patient Health Education Program Director, a team of fourteen first-year medical student patient health educators (PHEs) serve as case managers for 115 patients who were previously enrolled in the program by the clinic's Medical Directors. Though these 115 patients represent 30% of the total clinic patient population, they characterize the subgroup of patients with multiple chronic medical conditions often complicated by disadvantaged

socioeconomic factors external to the clinical environment (e.g., immigration status, ability to travel to clinic, and employment status).

In the clinical setting, the PHEs assume an educational role. Both of Shade Tree's twice-weekly clinics are staffed by two PHEs with the requirement that one must be Spanish-speaking in order to address the clinic's growing Latino patient population. These PHEs meet with each in-clinic patient currently enrolled in the program. PHE visits often focus on the discussion of specific, patient-centered diet and exercise goals as well as the promotion of medication adherence, health maintenance, and patient autonomy in medical decision-making. In addition to their 10-15 minute visits with program patients, the PHEs also see other Shade Tree patients with newly diagnosed conditions and/or newly prescribed medications that require additional education (e.g., insulin administration).

The significance of the PHE's role as case manager is most prominent in the out-of-clinic setting. Throughout the entire calendar year, PHEs serve as the direct line-of-communication between their 7-10 assigned patients and Shade Tree Clinic. In this role, the PHEs establish a personal relationship with each of their patients as they regularly communicate laboratory results, assist in scheduling appointments, and promote continued health progress (with respect to diet and exercise goals, medication education and compliance, and triaging of acute complaints) between scheduled clinic appointments in order to minimize the utilization of emergency departments and other lapses in patient care.

*Director of Patient Health Education:
Nicholas Kuhl*

Social Work

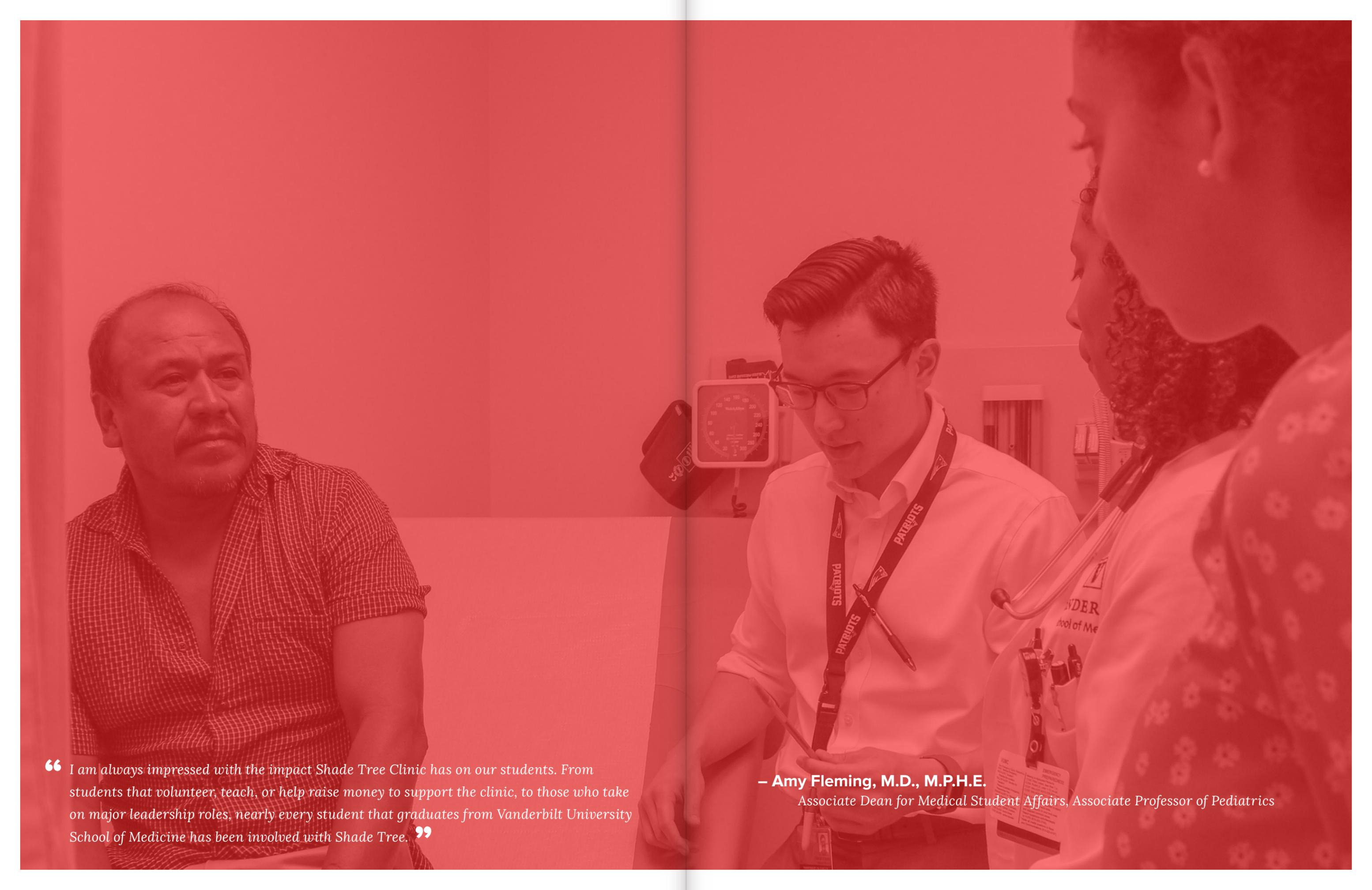
The social work department at STC was established to address the social determinants that impact the health of our patients. Student volunteers work alongside a licensed social worker to connect patients with community resources. Our database includes resources for housing, utilities assistance, employment, mental health, transportation, substance use, vision and dental needs. Patients can also receive assistance from a health insurance navigator and a licensed attorney. Members of our social work department regularly follow up with a panel of patients to provide additional support throughout application processes, resource referrals, and other processes that are difficult to navigate.

This year, the social work department helped address over 400 social needs for our patients. This includes obtaining glasses for more than 25 patients, providing more than 200 bus passes to help patients get to appointments,

providing 54 referrals for assistance from Legal Aid, and even assisting patients with obtaining denture and hearing aids! Our volunteers contributed over 1,200 in-clinic hours plus countless more following up with patients outside of clinic to ensure they were able to access the resources needed to address their needs. The department distributed over 65 turkeys, hundreds of canned goods, and >150 toys to patients and their families as a part of the Holiday Drive. In addition, volunteers organized trainings on insurance, immigration, domestic violence, mental health, and motivational interviewing. We have also worked to strengthen a partnership with local dental clinics, established legal screenings conducted by students from the Vanderbilt University School of Law, and are working on better addressing patients transportation needs through a potential Lyft partnership.

Director of Social Work: Kelly Schuering





“ I am always impressed with the impact Shade Tree Clinic has on our students. From students that volunteer, teach, or help raise money to support the clinic, to those who take on major leadership roles, nearly every student that graduates from Vanderbilt University School of Medicine has been involved with Shade Tree. ”

– Amy Fleming, M.D., M.P.H.E.

Associate Dean for Medical Student Affairs, Associate Professor of Pediatrics

Shade Tree Specialty Clinics

Dermatology

The dermatology clinic brings dermatologists from Vanderbilt to care for Shade Tree patients with cutaneous concerns. The clinic manages both acute and chronic conditions as well as annual skin cancer screenings for our patients. We have supplies available to biopsy lesions, obtain skin scrapings for microscopic evaluation, and perform cryotherapy on site. Any additional care, including Mohs surgery and nail biopsies, is arranged through Vanderbilt.

Directors: Jocelyn Gandelman and Laura Dellalana

Gynecology

The gynecology clinic holds a free clinic the first Tuesday of each month for uninsured and underinsured women who need an annual women's exam or require attention for more specialized complaints, such as abnormal uterine bleeding, abdominal pain, sexually transmitted diseases, vaginal infections, infertility, and breast complaints. Women are seen and examined by a team of volunteer medical students, an attending Vanderbilt Obstetrics & Gynecology physician, and

(recently added) Vanderbilt Obstetrics & Gynecology residents. All women receive birth control counseling, with options offered by our clinic free-of-charge, including oral hormonal agents, hormonal injections, and implantable devices. Patients are also kept up-to-date on their Pap smears, for which an annual "Papapalooza" event was created last year in our efforts to ensure all our female patients have up-to-date cervical cancer screening.

This year, our clinic was also fortunate to have seen the addition of a pelvic floor physical therapist to our list of service providers, allowing us to manage women with stress incontinence and pelvic floor dysfunction. For patients requiring further care, pelvic ultrasounds, colposcopies, annual mammograms, and specialty clinic visits are scheduled at the Vanderbilt Medical Center as needed.

Directors: Kelsey McNew and Kathleen Anthony

Neurology

The neurology clinic provides quality neurological services to patients who could not otherwise readily afford the

cost of care and serves a valuable role in medical student education. Patients present with a variety of neurological complaints including seizures, headaches, strokes, neuropathy, and movement disorders. We are even able to offer Botox to our patients in need. In addition to medical consultation by board-certified physicians from the Vanderbilt Departments of Neurology and Neurological Surgery, patients are referred for imaging studies and consultation at Vanderbilt University Medical Center free-of-charge.

Directors: Lindsay Klofas and Sumeeth Jonathan

Ophthalmology

The ophthalmology clinic offers comprehensive eye care to all Shade Tree patients, from patients who need a new glasses prescription to patients with advanced eye disease. In partnership with the social work office, we provide free eye glasses for our patients through the New Eyes for the Needy program. We also screen patients for glaucoma and for diabetic retinopathy, and we use a new retinal fundus camera to upload detailed retinal photos to each patient's chart. We

have also developed a strong relationship with Vanderbilt Eye Institute physicians, who donate their time and resources to see our patients that need more specialized ophthalmic care.

Directors: Katherine Sumarriva and Yuxi Zheng

Orthopedics and Physical Therapy

At the orthopaedics and physical therapy clinic, we see patients with a variety of musculoskeletal complaints. Many of our Shade Tree patients struggle with joint pain that can affect their ability to exercise, which in turn affects their overall health. Even the ability to perform simple activities like walking up the stairs or cooking meals can be difficult with injuries. Our student teams are able to evaluate both acute and chronic injuries during a clinic visit. X-rays, CT scans, and MRIs can be obtained if appropriate. We manage our patients' problems with the help of licensed physical therapists, medication, counseling, joint injections, and even surgery—all free-of-charge to the patient. The orthopaedics and physical therapy clinic also organizes an annual hand surgery day during which

Vanderbilt Orthopedic Surgeons perform cost-free surgeries for patients.

Directors: Lou Posey and Daniel Hong

Psychiatry

Shade Tree Psychiatry Night is a specialty clinic offered on the second Tuesday of every month. Staffed by attending psychiatrists, the psychiatry clinic helps provide either chronic follow up for individuals with behavioral health care needs or first time evaluation for patients with newly identified or referred behavioral health concerns. The monthly clinic provides a dedicated time and space towards the integration of primary care and behavioral health services for the patients served by Shade Tree, including expert consultation on the diagnosis of mental illness, optimization of psychoactive medication management, and identification of therapeutic needs requiring referral to other community psychiatric resources.

Directors: Joshua Cockroft, Jason Gandelman, and Amalie Chen

STEPP

The Shade Tree Early Pregnancy Program (STEPP), holds a free prenatal clinic the first Saturday of each month for uninsured and underinsured women needing prenatal care. Staffed by volunteer medical students, nursing students, and an attending Vanderbilt nurse-midwife, patients receive a primary prenatal care visit and are then

scheduled for an ultrasound and follow up appointment at a clinic in the Nashville area that provides full well-woman and prenatal services. Additionally, patients at STEPP receive assistance applying for insurance coverage for the rest of their pregnancy. The mission of STEPP is two-fold. First, STEPP strives to connect pregnant women from underserved populations with early prenatal care, community resources, prenatal education, and social resources. Second, STEPP trains future generations of medical and midwifery students to provide holistic prenatal care for underserved populations by addressing not only their physical and psychological medical needs but also their social needs.

2017-2018 Nurse-Midwifery Co-Directors: Roxanne Crittenden, Mary Flanigan

2017-2018 Medical Co-Directors: Alexandra Arambula, Shilpa Mokshagundam

2017-2018 Outreach & Programs Coordinator: Piper Hays

Weight Loss

The weight loss clinic works with many patients struggling to maintain a healthy lifestyle. Our teams work with patients to address the medical, social, and psychological barriers that are preventing their weight loss and keep close follow-up with patients to monitor their progress. With the help of physicians, students, and dietetic interns, our patients plan healthier dietary choices. They follow-up with the clinic by bringing a log of their food that is discussed with the team. Exercise and sleep health are also



addressed at every clinic visit. Our weight loss team also manages our patients' comorbid conditions and ideally lessens the severity of them through their weight loss and lifestyle changes.

Directors: Supisara Tintara and Ryan Ahmed

Rheumatology

The Shade Tree Rheumatology Clinic, recently progressed from an informal clinic to a formal clinic with dedicated clinical teams and official sub-specialty directorship. This clinic serves the Rheumatologic needs of Shade Tree's

patient panel, caring for patients including those with Rheumatoid Arthritis, Systemic Lupus Erythematosus, and severe osteoarthritis. The sub-specialty clinic has also assisted in the workup of patients with new onset or persistent joint pain and follow up for positive ANA laboratory testing. In the past year, the clinic has managed approximately 25 patients, some of whom require recurrent visits. This includes approximately 7 patients requiring long term drug monitoring while on immunomodulating agents, most commonly: methotrexate.

Director: Joceyln Gandelman

Other Services

Acute Care Coordinators

Acute Care Coordinators fill the patient health education role for patients that are not formally assigned to a PHE. They help schedule appointments, follow up lab results, and provide encouragement for patients between clinic visits as appropriate.

Coordinators: Veronica Young, Rochelle Wong, Kathleen Hiltz, and Chelsea Lawson

Laboratory Services

Laboratory Services is a newly formed department within Shade Tree that manages lab collection and immunization for patients during clinic. The department also oversees quality improvement

regarding lab draws and orders at Shade Tree. The team is led by the Lab Coordinator, whose responsibilities include training and overseeing technicians, tracking inventory and labs collected at Shade Tree, and communicating with the rest of the Shade Tree administration regarding the state of the lab. Technicians are present at every clinic and facilitate lab collection by drawing and collecting any labs requested by the clinic team (including phlebotomy and point-of-care testing) and performing vaccinations and immunizations.

This year, the department has begun aggregating data on labs drawn each month, allowing the clinic's administration to gain insight into what type of labs are collected at Shade Tree, and identifying ways to reduce waste and unnecessary tests. We have cooperated with the vaccination initiative to help provide dozens of pneumonia and Tdap vaccines to senior patients. We have also partnered with students both within and outside of the School of Medicine to develop quality improvement initiatives.

Lab Coordinator: Sonal Walia

Patient Assistance Program

The STC Patient Assistance Program (PAP) team works with patients and collaborates with other STC teams to provide certain free medications to eligible patients who cannot afford them, which includes a majority of uninsured patients seen at STC. Our efforts are vital to the sustainability of the clinic and to the access and quality of health care we provide to our patient population. Pfizer, Johnson & Johnson, Merck, GlaxoSmithKline, AstraZeneca, Gilead, and Sanofi are among the many pharmaceutical companies that offer PAP programs that benefit our patients. In clinic, PAP student volunteers assist patients in applying for various medications, most commonly inhalers and insulins, which are relatively expensive i.e. \$200-300 for a 1-month supply. Behind the scenes, the Vanderbilt Pharmacy PAP team helps us to keep track of application statuses and refills. In addition to the commonly used medications mentioned above, we are able to give some patients

infected with chronic Hepatitis C free treatment with Harvoni, a ground-breaking retroviral therapy with over 90% cure rate but with a notoriously high cost (up to \$90,000 for a full 12-week course). Other costly specialty medications we have been able to provide through PAP include Truvada, Creon, Botox, Victoza, Canasa, and Uceris. Currently, over 100 patients at STC are enrolled in one or multiple PAP programs, and since we launched the Harvoni initiative in 2016, 9 of 9 patients who have completed treatment have undetectable viral loads. The PAP team has a tremendous impact on reducing the cost of the dispensary and providing access to much needed medications to the socioeconomically disadvantaged in Nashville.

Coordinator: Eileen Shiuan

Research Department

The research department sets research priorities for STC and oversees students completing quality improvement projects for the clinic.

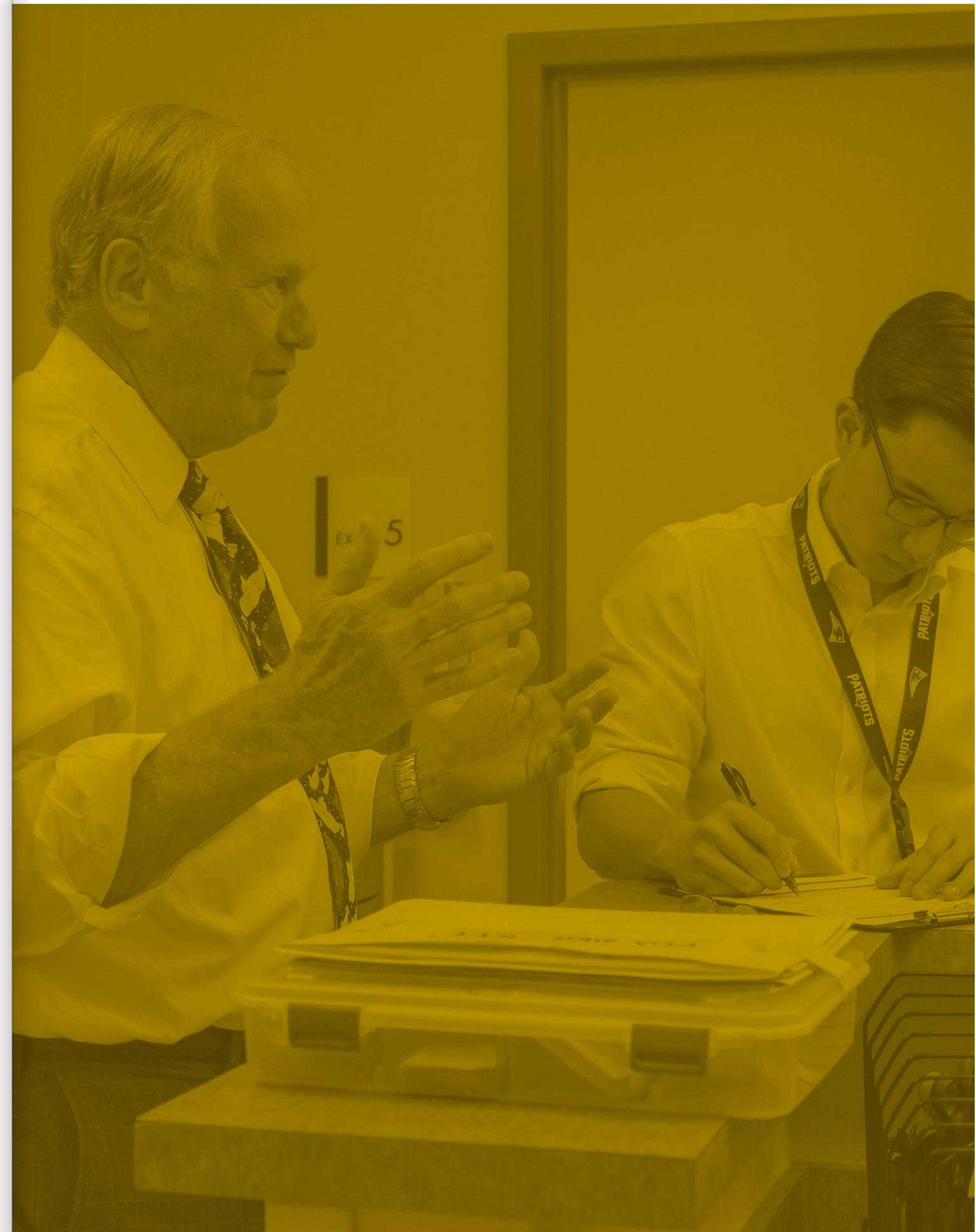
Coordinator: Camillo Bermudez

Spanish Services

Spanish Services is responsible for recruiting, training, and scheduling Spanish interpreters to work at clinic for Tuesday, Saturday morning, and Saturday afternoon shifts. Our responsibilities during clinic consist of interpreting during clinic visits and during other required tasks such as social work and dispensary interactions. Outside of clinic, first-year VMS interpreters are responsible for calling patients a day before clinic to remind them of their appointment or reschedule as necessary. The body of interpreters consists of medical students, graduate students, undergraduates, and alumnae. Medical students and nursing students are recruited at the beginning of every year. Graduate students come in on an ad hoc basis. Most undergraduates come from a class taught by Lori Catanzaro named "Spanish in the Medical Profession." In this class, undergraduates are required to volunteer 4 hours a week or every other week depending on the number of

interpreters during the academic period. All other interpreters are required to interpret at least 2-4 times every 2 months. Interpreters sign up on their own and are able to exchange shifts as needed. Before interpreters volunteer for the first time, they are screened to ensure Spanish proficiency. In terms of new projects, Spanish Services is working on creating a formalized Spanish proficiency written exam. Furthermore, there is a great need for making calls to Spanish speaking Shade Tree patients by various teams and Specialty clinics at Shade Tree. A new system will be developed this semester so interpreters can help with these additional calls during down time in clinic.

Coordinator: Camillo Bermudez



Our Clinic

400+ patients

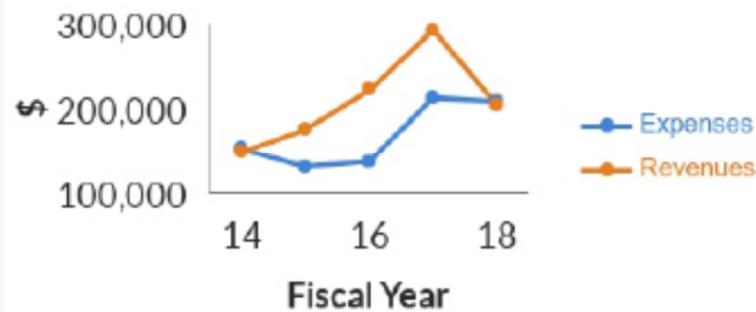
2500 appointments

80% Primary care
20% Specialty clinics



- ↓
- Neurology
 - Gynecology
 - Ophthalmology
 - Orthopedics and Physical Therapy
 - Psychiatry
 - Rheumatology
 - Dermatology
 - Shade Tree Early Pregnancy Program
 - Weight Loss

Financial Trends

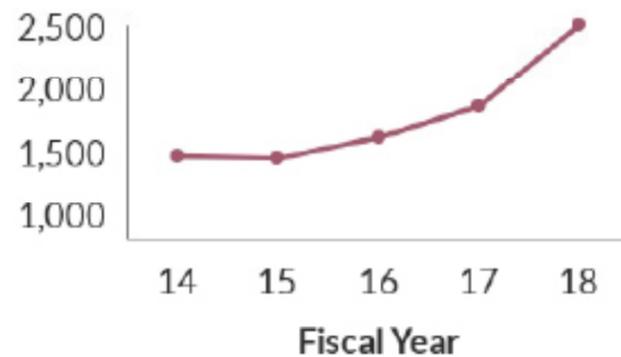


Our Patients



Average age: 51
32% diabetes
47% hypertension

Patient Visits



46% non-English

Languages Spoken

Albanian	Khmer
Arabic	Japanese
Bengali	Kurdish-Badini
Chinese-Mandarin	Russian
Dinka	Spanish
English	Urdu
Hindi	Vietnamese

Grant Support

The Boulevard Bolt

This past year, our clinic was awarded \$23,000 by the Boulevard Bolt to continue our vaccine outreach program. Through this support, our clinic was able to organize ten vaccination events in the community, during which we provided 547 influenza immunizations to people experiencing homelessness in Nashville. To date, Shade Tree has administered 7,335 flu vaccines with the support of the Boulevard Bolt.

Helping Hands

Shade Tree Clinic was recently awarded a \$5,000 grant from the Helping Hands Grants Program of the American Psychiatric Association Foundation. With

the support of this grant we will work to improve mental health amongst our patients through the following efforts:

1. Developing and conducting a culturally sensitive mental health training for ~40 clinical staff and volunteers to increase knowledge of and comfort with addressing mental health concerns
2. Expanding screening efforts for depression and substance abuse with the goal of screening the entire panel this year
3. Addressing transportation barriers to mental health care by offering free Lyft rides to psychiatry and counseling appointments.

Shade Tree Benefit Concert

The Shade Tree Benefit Concert is hosted annually by the Blair School of Music to raise funds for the clinic's operating expenses. The concert took place on September 2, 2017 in Ingram Hall. This year featured performances by the

Nashville Sinfonietta, Tucker Biddlecombe and his choir, and the Vanderbilt Music Academie Ensemble. Admission is free, and donations are collected at the door for Shade Tree Clinic. This year's event raised \$2,200.



Shade Tree Trot

The Shade Tree Trot is an annual event which serves to increase awareness of the Shade Tree Clinic throughout the community and to raise funds to support the Clinic's operating expenses. The 2018 Trot was held on April 21st, 2018, and raised \$26,000 for the clinic. The Trot continues to grow each year and is quickly becoming one of the premier 5k events in Nashville, catering to students and families alike. Each participant receives a race T-shirt, official race timing, and access to the festivities taking place before and after the race: food trucks, live music, free food, a bounce house, and several other activities.

The 2018 Shade Tree Trot was also the first year the event incorporated a

broader spirit of service, with service events occurring at three other sites as well. One group of volunteers sorted food at the Second Harvest Food Bank, another partnered with Earth Matters to help plant gardens, and a third group worked to restore the Shade Tree Clinic community garden on the Salvation Army Property. Approximately fifty students participated across the three events, and other students volunteered a full day in the clinic after running the morning Trot race.

All proceeds from the event were donated directly to the Shade Tree Clinic.

Directors: Steph Hadley & Ben Campbell



Shade Tree Benefit Dinner and Auction

The Shade Tree Benefit Dinner and Silent Auction was founded in 2013 with two goals in mind: first, to enhance Shade Tree Clinic's visibility within the Vanderbilt community, especially among members not consistently reached by the Shade Tree Trot; and second, to serve as a sister fundraiser to the Shade Tree Trot. Now in its sixth year, the benefit has succeeded in both of its chief aims while continuing to grow in size, scope, and fundraising efforts.

The 2018 dinner and auction was one of the largest and most successful to date, with around 300 attendees coming out to celebrate and support the Shade Tree

clinic. Peds tickets, March Madness tickets, and a guitar signed by both Faith Hill and Tim McGraw were among some of this year's big ticket items. With the generous support of our sponsors, individual donations, and guests, this year's event raised over \$70,000. 100% of the proceeds from the event were donated directly to the clinic and patients in need. In addition, the Dinner and Trot received an anonymous donation of \$50,000.

Director: Lauren Slesur

Publications

Shade Tree Clinic is one of the few student-run clinics in the country to feature a fully functioning dispensary that is able to provide the vast majority of medications to our patients at their clinic visit free-of-charge. The innovative system that allows this to happen was published in the journal *Informatics for Health and Social Care*.

Rosenbaum BP, Patel SG, Guyer DL, Dunn SR, Herceg ME, Knox CK, Miller RF. The pharmaceutical management system at Shade Tree Family Clinic: a medical student-run free clinic's experience. Informatics for health & social care. 2008 Sep;33(3). 151-7.

Shade Tree's innovative model of providing access to prenatal care to underinsured and uninsured patients was published in the *Journal of Midwifery and Women's Health*.

Danhausen K, Joshi D, Quirk S, Miller R, Fowler M, Schorn MN. Facilitating access to prenatal care through an interprofessional student-run free clinic. Journal of midwifery & women's health. 60(3). 267-73.

Our Patient Health Educator model was shown to improve clinical outcomes for patients with diabetes as measured by improved hemoglobin A1c. This was published in *Academic Medicine*, the premier medical education journal.

Gorrindo P, Peltz A, Ladner TR, Reddy I, Miller BM, Miller RF, Fowler MJ. Medical students as health educators at a student-run free clinic: improving the clinical outcomes of diabetic patients. Academic medicine : Journal of the Association of American Medical Colleges. 2014 Apr;89(4). 625-31.

Presentations

Our students presented projects at several national conferences this year. Poster presentations are included below.

Mayberry L. "Information, Motivation, & Behavioral Skills Barriers to Adherence among Adults with Diabetes in Safety-Net Clinics." Society of Behavioral Medicine, San Diego, March 2017.

Livia Knoll and Rohini Chakravarthy. "Addressing Patient's Mental Health Needs at a Student-Run Free Clinic." Society of Student Run Free Clinics, Omaha, February 2018.

Karina Mendoza and Tanya Marvi. "Improving HIV Screening at a Medical-Student Run Free Clinic Through Electronic Medical Record-Driven Provider Guidance." Society of General Internal Medicine, Denver, April 2018.

Physicians

Allen Naftilan
Eleanor Weaver
Michael Fowler
Robert Miller
Tony Ross
Allen Naftilan
Billy Sullivan
Bradley Richmond
Brian Drolet
Cecelia Theobald
Daniel Cottrell
David Slosky
George Bodzioc
Gisella Carranza
Leon
James Powers
Jennifer Green

Lauren Hartman
Mark Wigger
Michael Fowler
Michelle Griffith
Mona Mashayekhi
Neerav Desai
Paula Smith
Pierre Massion
Robert Cronin
Robert Miller
Roy Zent
S. Trent Rosenbloom
Shailja Shah
Tyler Reese
Wes Ely
Howard Fuchs
John Cleek
John Sergent

Dispensary Staff

Pious Patel
Alex Silver
Eileen Shiuan
Debbie Xie
Alissa Cutrone
Jennifer Huang
Julian Genkins
Henry Quach
Katie Prendergast
Laura Dellalana
Catherine Xie
Lauren Holroyd
Alan Makhoul
Bronson Wessinger
Claire Lo

Michelle Weyhaupt
Sneha Lingam
Lucas Wollenman
Ashley Riner
Azur Priode
Hannah Gipson
Jeewar Kokoy
Keaton Gaffney
Alec Sain
Dylan Knox
Heir Jordan
Jillyan Harlan
Sam Slaughter
Camille Wang
Chandler

Patient Health Educators

Manasa Bhatta
Marc Blatt
Arrush Choudhary
Eamon Doyle
Tita Gonzalez Pena
Saif Hamdan
Steven Houtschilt
Alice Liao
Cooper March
Eva Niklinska
Daniel Pereira
Philip Wilson
Megan Wright
Raymond Zhou

Clinic Coordinators

Camille Wang
Chandler

“ Medical schools across the country are trying to incorporate more content about health systems science. The Shade Tree Clinic offers our students a unique site to consider, and improve, the design of healthcare systems as they provide essential care for patients in need. I admire our students for their steadfast investment in our community. ”

-Kim Lomis, M.D., Associate Dean for Undergraduate Medical Education

John Newman
Josh Fessel
Josh Peterson
Jule West
Kathleene
Wooldridge
Kaylin Craig
Kevin Hageman
Krista Suojanen

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Tony Ross
Megan Mitchell
Samuel Trump
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Caroline Erickson

David Arteaga
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Jacob Schultz
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Tanner McArdle
Zack Williams
Colin White-Dzuro
Mark Xu

Montgomery
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Anne Walker
Mark Naguib
Nowrin Chowdhury
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Sushmitha Divakar
Joyce Huang
Sophie Zhao

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Mollie Limb
Anne Coogan
Hannah Kay
Annie Apple
Peety Kaur
Maddie Harris

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Jessica Zic
Sanjana Salwi
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Maggie Grau
Natalie Bennett

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Sneha Lingam
Eileen Shiuan
Michelle Weyhaupt
Colin White-Dzuro
Lucas Wollenman
Catherine Xie
Mark Xu

Spanish Services Volunteers

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Alexandra Verzella
Allison Lake
Allison Thayer
Ana Torres
Annika Gunderson
Anthony Rios
Anthony Rios
Autumn Greenfield
Britt Hatcher
Bry King

Claire Posey
Clara Wang
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Daniella Thillemann
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Lauren Lambert
Madeline Meloy
Mae Wimbiscus
Maria Loaiza Bonilla
Max Carter
Myriam Shehata
Natalia Garza
Nick Rosenthal
Nicole Kloosterman
Phoebe Ahn
Priyanka Kadari
Santiago Angaramo
Sofia Shirley
Sumanth
Chennareddy
Tess Batchelder
Thomas Perez
Yongseok (Sam) Cho

Shade Tree Trot Committee

Parker Evans
Saad Rehman
Grant MacKinnon
Max Roeske
Jennifer Huang
Joey Elsagr
Ben Li

Alice Liao
Hannah Phelps
Eva Niklinska
Raymond Zhou
Colin White-Dzuro
Dan Hong
Steph Hart
Saif Hamdan
Claire Lo
Lex Erath
Sanjana Salwi
CeCe Gu

Shade Tree Benefit Dinner and Auction Committee

Catherine Xie
Mark Naguib
Ann Walker
Kianna Jackson
Michelle York

Medical Student Clinical Volunteers

Abirami Thiyagarajan
Adam Daily
Alex Tinianow
Andre Morales
Anne Sun
Aseel Alsouqi
Benjamin Reisman
Bianca Martinez
Brian Palmisano
Bridget Collins

Christopher Peek
Dago Estevez
Daniel Balikov
Daniel Hong
Daniel Kashima
Daniel Markwalter
Daniel Sack
Daniel Wolfson
David Liu
David Suh
David Wu
Donald Wright
Efi Akam
Emily Long
Eriny Hanna
Gautam Rangavajla
Giulia Porcari
Hannah Phelps
Henry Quach
India Reddy
Jason Gandelman
Jean-Nicolas Gallant
Jennifer Marvin
Jessica Kaczmarek
Jia Liu
Jillian Berkman
Jocelyn Gandelman
Joseph Ebersole
Joseph Starnes
Joseph Wick
Joshua Cockcroft
Joshua Corriveau
Julian Genkins
Kaitlin Geck
Kaitlyn Weeber

Karina Mendoza
Katherine Sumarriva
Kathleen Hiltz
Katy Anthony
Kelly Schuering
Kelsey McNew
Laura Dellalana
Lauren Barr
Lillian Juttukonda
Lindsay Klofas
Maria Grig
Marie Kitano
Mark Xu
Matt Stier
Matthew De Niar
Matthew Madden
Matthew Villaume
Matthew Wleklinski
Meg Tebbs
MeganS hroder
Merla Hubler
Michael Ahlers
Michael Litt
Michael Raddatz
Mohammed Shwetar
Nicholas Kuhl
Nicolas Baddour
Nikhil Chavali
Patrick Wu
Paul Loeser
Pedro Teixeira
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Ritwik Bhatia
Rochelle Wong
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 Tunmise Olowojoba
 Veronica Young
 Vishesh Jain
 William French

Bronson Wessinger
 Camille Wang
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 Caroline Maguire
 Carolyn Ahlers
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 Hannah Kay
 Heidi Carpenter
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 Jeremy Hatcher
 Jessa Fogel
 Jessica Trinkl
 Jessica Zic
 Juan Colazo
 Karampreet Kaur
 Kaustav Shah
 Kyle Langford
 Lee Jaclyn
 Lex Erath
 Louisa Anne Walker
 Lydia McKeithan
 Manasa Bhatta
 Margaret Grau
 Marie Kitano

Mark Naguib
 Mark Xu
 Mary Forch
 Matthew Nettles
 Matthews Lan
 Meredith Huszagh
 Michelle Weyhaupt
 Michelle York
 Mollie Limb
 Morgan Flynn
 Natalie Bennett
 Nathan Samora
 Noah Harrison
 Nowrin Chowdhury
 Pauleatha Diggs
 Peter Bryant
 Philip Wilson
 Pooja Santapuram
 Rachel Chang
 Sai Rajagopalan
 Saif Hamdan
 Sanjana Salwi
 Sarah Brown
 Simone Herzberg
 Sneha Lingam
 Somto Ukwuani
 Steven Houtschilt
 Steven Scaglione
 Sushmitha Divakar
 Sydney Stark
 Tavia Gonzalez Pena
 Thomas Day
 Victoria Lawson
 William Furuyama
 Xuanyi Li

Medical Student Pre-clinical Volunteers

Alan Makhoul
 Alexander Silver
 Allyson Wolf
 Alyssa Davis
 Alyssa Schlotman
 Amany Alshibli
 Andrew Rees
 Anne Walker
 Annie Apple
 Arrush Choudhary
 Benjamin Osher
 Briana Halle

Nursing Student Clinical Volunteers

Yongxu Huang
 Zachary Feldman
 Zijun Zhao
 Agnes Jo
 Alexa Proctor
 Drew Herbert
 Jerald Westendorf

Nursing Student Pre-clinical Volunteers

Abigail Sanders
 Agnes Jo
 Anna Harty
 Breanna Baraff
 Mary Ann Enriquez
 McKenna Bagan
 Megan Lewis
 Megan Mobley
 Meredith Donahue
 Molly Corn
 S.M. Gray
 Savannah Carroll
 Susannah Spero
 Tara McDermott
 Tara Roeder

Nutrition Planners

Brooke Capritto
 Denison Katie

Eileen Mahoney
 Emilie Winder
 Emily Berg
 Emily Murray
 Grace Bennett
 Grace Farone
 Haleigh Hemond
 Morgan Hurst
 Natalya Hope
 Richardson
 Patience Ergish

“Shade Tree serves so many essential functions for our students and our medical school. Shade Tree teaches that holistic caring goes beyond the examining room to include social, legal and behavioral services, that outstanding care is possible in resource constrained environments, that caring for systems is a professional obligation, and that their efforts as students really do make a difference.”

-Bonnie Miller, M.D., Associate Vice Chancellor for Health Affairs, Senior Associate Dean for Health Sciences Education

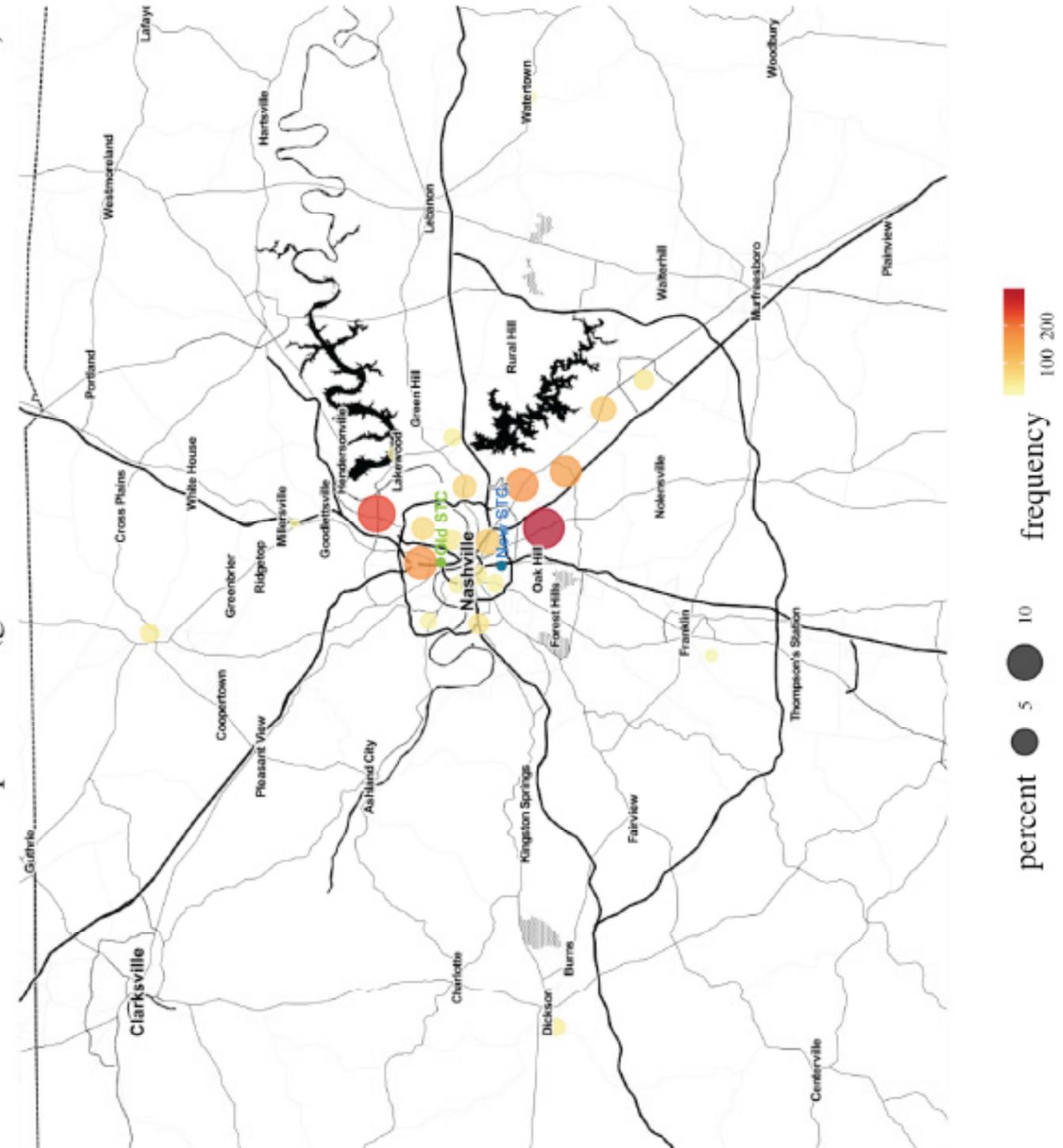


Welcome to our New Location

After 6 years holding clinic at Neighborhood Health on Dickerson Pike, Shade Tree Clinic has moved to a new location as of September 2018. The new location is housed within the Vanderbilt Nurse-Midwives Melrose location on 8th Ave South. Given its proximity to Nolensville Pike, the new location is more accessible to many of our patients. Many volunteers assisted with the process of moving equipment to the new location. The new location is more spacious and has a more open floor plan. Moreover, there are separate rooms dedicated as a work room and a social work room.

We sincerely thank Neighborhood Health for allowing us to use their facility for the past 6 years. And we appreciate the warm welcome from the Vanderbilt Nurse-Midwives Melrose location. Shade Tree Clinic is excited to continue providing high-quality, accessible care in this new location. Look for more details to come on the new location in the 2018-2019 Annual Report.

Shade Tree Patient Zip Codes (greater than 1% of all scheduled visits)





shade tree
CLINIC

**2410 Franklin Pike
Nashville, TN 37204
Phone: 615.422.5262**

**Shade Tree Clinic Hours:
Tuesday 6pm-9pm
Saturday 12pm-4pm
www.shadetreeclinik.org**

Photography by Maria Lee Beninati

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