The Gehr team was instrumental in helping Keck Medicine of USC respond to the COVID-19 pandemic by shifting to telecare.


Gehr faculty member Susanne Hempel completed a report on resource allocation during a pandemic for the Agency for Healthcare Research and Quality.

The Gehr Center’s Todd Schneberk helped the Keck School’s Human Rights clinic achieve new heights in 2020.
# TABLE OF CONTENTS

To Our Community ................................................................. 3  
Norbert Gehr and David Goldstein ........................................... 4  
Vision and Mission ................................................................. 5  
Meet Our Team ............................................................................ 6  
Gehr Community Education Events ........................................... 8  
Educational Programs ............................................................... 9  
Health Systems Innovation ....................................................... 10  
Evidence-Based Practice Center .............................................. 12  
Research and Policy Work ....................................................... 13  
By the Numbers ......................................................................... 15
To Our Community

It has been a year like none other, both for the world at large and for the Gehr Center!

Our team has stepped up to the challenge, figuring out creative ways to contribute meaningfully to the public health response to COVID-19 through research, advocacy and innovation; continuing to advance our non-COVID-19 related work while working largely remotely; and finding creative ways to engage trainees in these efforts.

As you will see in the coming pages, our team brought the Gehr Center to new heights in 2020. Here are a few of my favorite Gehr accomplishments this year:

- Michael Cousineau directed a month-long course for third year Keck medical students on COVID-19;
- Todd Schneberk and Jeniffer Kim co-led the Keck School of Medicine COVID-19 advocacy work group;
- Veronica Pagan initiated a remote colorectal cancer screening program, involving mailed colon cancer screening cards, to USC Health Plan members;
- Carol Peden wrote a report highlighting the rapid implementation of virtual care at Keck Medicine of USC in response to the pandemic — an initiative the Gehr team was instrumental in leading;
- Susanne Hempel led a review for the Agency for Healthcare Research and Quality on resource allocation during a pandemic;
- Our team developed a COVID-19 patient self-assessment tool that has now been used by nearly 600,000 people worldwide.

We are ever-grateful to our benefactor, Mr. Norbert Gehr, and the Gehr Family Foundation, directed by Mr. David Lifschitz, whose support makes our work possible. We also keep our founder, David A. Goldstein, MD, close in our thoughts and continue to be guided by his vision. We also thank Keck Medicine of USC, which continues to fund a significant portion of our work. Finally, a big thanks to our administrative assistant, Drizelle Baluyot, who holds our team together!

Michael Hochman, MD, MPH
Gehr Center Director
Norbert Gehr

Norbert Gehr arrived in New York City from Brazil in July 1960 as a teenager, with the dream of success and a few hundred dollars. He travelled to Southern California, where he took up residency and attended Santa Ana College and UCLA. In 1965, at age 24, Mr. Gehr pursued his dream by using the modest proceeds from the sale of his car to start a small distribution business, selling industrial supplies nationwide to contractors over the phone. Through his drive, determination, hard work and perseverance, Mr. Gehr grew his business. In 1975, Mr. Gehr established his own manufacturing facility, producing extension cords and other wire and cable products. Several years later, Mr. Gehr founded Gehr International and Gehr Development, which has become a diversified multinational holding company headquartered in Los Angeles, California. In 2016, through the Gehr Family Foundation that he established, Mr. Gehr made a generous donation to Keck School of Medicine to establish the Gehr Family Center for Health Systems Science & Innovation.

David Goldstein, MD

David Goldstein, MD moved from his home state of New York in 1975 to begin a nephrology fellowship at LAC+USC Medical Center. This was the start of a lifelong career at the University of Southern California (USC) that ultimately spanned five decades. During his historic career at USC, Dr. Goldstein served as the founding Chief of the Division of General Internal Medicine; the Vice Chair for Clinical Affairs within the Department of Medicine; the Co-Director of the Pacific Center for Health Policy and Ethics; and most recently, as the Director of Primary Care for Keck Medicine of USC. Dr. Goldstein’s impact on the Keck School of Medicine, the Department of Medicine, and the USC community at large was far-reaching, and was surpassed only by the influence he had on the countless trainees and junior faculty members who were blessed to work with him during his tenure. Shortly before his retirement, and thanks to a generous donation from Mr. Norbert Gehr, Dr. Goldstein founded the Gehr Family Center for Health Systems Science and Innovation in 2016.
Vision And Mission

Vision:
We advance healthcare delivery by building collaborative relationships across our campus and the wider community. We promote high-quality, evidence-based and equitable care for all patients in our health system, the local community, nationally, and internationally.

Mission
We support multidisciplinary efforts to improve quality outcomes by accelerating the adoption of high-value and equitable healthcare through science, advocacy and education:

Delivery Science: We aim to facilitate implementation of evidence-based practices by bridging the gap between science and real-world healthcare delivery and evaluating these efforts in real-world settings.

Evidence Based Advocacy: We promote the translation of science into healthcare delivery and policy reform by disseminating strategies for improving patient care.

Education: We educate providers, policy makers and students in health systems science, and mentor future leaders. We also create a network of individuals who are interested in exchanging ideas about healthcare delivery.

Learning Health System: We support continuous quality improvement and system innovation at Keck Medicine of USC by providing thought leadership, scholarly guidance and technical support.

Guiding Principles:

- Our interventions are evidence-based and aimed at improving the health of all populations, particularly vulnerable individuals, families and communities.
- Our innovations are sustainable in real-world settings.
- Efforts decrease disparities in the quality, accessibility and efficiency of care.
- Studies aim to maximize generalizability.
- Projects engage the Los Angeles community.
- Gehr faculty, affiliates and trainees are scholarly partners in researching and solving complex medical cases and are policy advocates.
- Our work is additive to the global health databases; supporting knowledge, processes, and policies that will improve health globally.
Meet Our Team

Michael Hochman, MD, MPH
Director

Sonali Saluja, MD, MPH

Barbara Turner, MD

Michael Cousineau, DrPH

Rusha Modi, MD, MPH

Albert Farias, PhD

Cameron Kaplan, PhD

Susanne Hempel, PhD

Todd Schneberk, MD

USC Gehr Family Center for Health Systems Science and Innovation
Keck Medicine of USC
Meet Our Team

Carol Peden, MD, MPH

Alissa Maier, MPH

Veronica Pagán, MA, MPH

Jeniffer Kim, PhD, MPH

Lourdes Montano
Program and Grants Administrator

Drizelle Baluyot
Administrative Assistant

Aneesah Motala
Program Administrator

USC Gehr Family Center for Health Systems Science and Innovation
Keck Medicine of USC
“As a layperson devoted to improving communication between the medical and nonmedical worlds, it was my great pleasure and honor to speak at the Gehr Center as part of the David A. Goldstein lecture series. What I did not expect was that delivering the lecture and sharing a wonderful meal with my hosts and colleagues would lead to fruitful further collaboration, including co-writing a patient-facing article for STAT, offering clinically valid guidance in common sense language to lay people in the chaotic early days of the coronavirus pandemic. It was an unexpected blessing, and a window into the collaborative, innovative, ethically grounded and beneficent work of the Gehr center.”

- Katy Butler

Nicole Lurie, MD, MSPH
COVID-19 Preparedness and Response: Then and Now

David Katz, MD, MPH
Maintaining Perspective Through a Pandemic: The Case for Total Harm Minimization

James Schultz, MD, MBA
Not Losing Sight of Hypertension Hiding In Plain Sight While Pivoting to COVID-19

Katy Butler
The Dream of a Common Language

Nichole Lurie, MD, MSPH
COVID-19 Preparedness and Response: Then and Now

David Katz, MD, MPH
Maintaining Perspective Through a Pandemic: The Case for Total Harm Minimization

James Schultz, MD, MBA
Not Losing Sight of Hypertension Hiding In Plain Sight While Pivoting to COVID-19

Katy Butler
The Dream of a Common Language

11 million people with uncontrolled hypertension don’t know they have it and are not being treated.

Home BP Telemonitoring and Pharmacist on the Care Team to Improve Hypertension Control
1 Hour

Undiagnosed Hypertension: Hiding In Plain Sight
2 Hours

“Being an Affiliate Member of the Gehr Center offers an invaluable opportunity for personal academic advancement ... members' diverse perspectives create a rich sounding board that serves to both amplify and sharpen your work, and the Gehr Team offers unparalleled opportunities to collaborate with partners from disparate fields but similar research interests.”

- José Luis González, MD
The Gehr Student Innovators Program

This summer, the Gehr team sponsored and ran the fifth annual program for health professional students. As part of the 6-week program, each student develops a health systems science project under the mentorship of a Gehr faculty member. Students also receive health systems science didactics and learn about pathways for healthcare leadership. We had 14 students participate (12 USC medical and graduate students, and two undergraduate from the SCS Noonan Scholars program for high-achieving students from disadvantaged backgrounds). Though this year was entirely virtual, students still gave the program rave reviews!

“*The many didactic sessions on different topics regarding health systems science was invaluable and unique to this program.*” - Brenda Gutierrez, second year Keck medical student

“I liked the combination of lectures and self-directed learning. It felt effective, and efficient, and I felt like I learned so much more than I anticipated even though very little of it felt like work.” - Kratika Mishra, second year Keck medical student

The Gehr-Schaeffer Health Policy Educational Series

In partnership with faculty from the USC Schaeffer Center, Gehr faculty developed a 20-hour health policy curriculum taught longitudinally to Keck Medical Students during their first three years of medical school. The curriculum aims to provide students with health policy essentials for a career in medicine. Gehr faculty member Sonali Saluja, MD, MPH, directs the series.

“The Health Systems Science curriculum has provided my peers and me comprehensive insight into how macro-system factors influence healthcare delivery and impact the patients we see. This timely insight given ongoing debates on healthcare reform has inspired and facilitated research projects, translated into advocacy, and made us better prepared to enter an evolving profession.” - Neal Nathan, third year Keck medical student

The Keck Health Policy Selective

Gehr faculty collectively teach a 6-session selective course in advanced health policy for second year Keck medical students with an interest in health policy.

“The final project was very helpful and fun, it helped me think through implications of health policies for a topic relevant to our current times!” - PPM student
Since the merger of the Center for Health Systems Innovation (CHSI) and the Gehr Center, our team continues to be involved with improving care delivery within the Keck Medicine of USC Health System — including Keck Medical Center, which is listed among the U.S. News and World Reports’ 2020—2021 Best Hospitals Honor Roll. Below are some ongoing partnered projects involving Keck Medicine of USC.

**USC Perioperative Brain Health Initiative**

This initiative aims to develop a multidisciplinary pathway for older surgical patients at risk for perioperative neurocognitive disorders, while also increasing knowledge of this common complication. In the last year, the initiative evolved to utilize telehealth to screen and optimize patients at risk for cognitive dysfunction prior to surgery. Key members of our team contributed to a publication describing the initiative: Beyond Cognitive Screening: Establishing an Interprofessional Perioperative Brain Health Initiative. *Journal of the American Geriatrics Society, 68*(10), 2359–2364.

**KeckNeuroConnect**

KeckNeuroConnect is a web-based platform to build a community of providers who share knowledge and best practices, develop a network of primary and specialty providers that “share” in patient care and that facilitate the transition of patients between Keck and community providers. This pilot initiative engaged 5 spoke sites and demonstrated financial viability for the Department of Neurology. Based on the success of the pilot, the health system has approved the expanded use of this platform involving additional departments and spoke sites.

**Colorectal Cancer Screening**

This initiative aims to improve colorectal cancer screening rates for USC Health Plan members, comprised of employees and their families. The main focus this year was on our mailing pilot, which allowed eligible patients to test themselves at home, maintaining patient safety and comfort during the COVID-19 pandemic. The first phase of the pilot resulted in a 33% return rate — better than the literature notes for mailing programs. USC Health Plan will expand the program to all eligible members in 2021.
Hypertension

Our team partnered with Keck Medicine of USC to design and implement a Hypertension Program for USC Health Plan members, free of charge. In a pilot involving 100 patients with suboptimal blood pressure control, a team of pharmacists and occupational therapists helped almost 60% achieve their blood pressure goal.

Enhanced Recovery After Surgery (ERAS)

Enhanced Recovery After Surgery (ERAS) is a care pathway to enhance patient readiness for surgery. The program is led by Keck faculty from specialties such as Anesthesia. The Gehr team has supported this initiative through quality analytics and project management. An ERAS implementation manuscript is currently underway.

IHI Leadership Alliance—OVID

The Gehr Center team helped bring Keck Medicine of USC into the Institute for Healthcare Improvement’s Leadership Alliance. The Keck team was particularly active in the Office Visit is A Dinosaur (OVID) workgroup, which provided guidance to Keck Medicine of USC as it transitioned from traditional in person visits to televisits during the COVID-19 pandemic.
In the last year the Southern California Evidence Review Center, a Gehr Center partner led by Susanne Hempel, PhD., (program manager Aneesa Motala) has led numerous review projects, including those listed here.

- CARE COORDINATION ACROSS HEALTHCARE SYSTEMS
- EVALUATION OF PULMONARY NODULES
- QUALITY INDICATORS FOR HIGH NEED PATIENT
- RESOURCE ALLOCATION AND PANDEMIC RESPONSE
- TOPICAL TREATMENTS FOR ATOPIC DERMATITIS
- EXPERT PANEL HIGH NEED PATIENTS
- DISPARITIES AND BARRIERS FOR PEDIATRIC CANCER SURVIVORSHIP CARE
- LANDSCAPE REVIEW OF GENE THERAPY
- TOPIC BRIEF INFANTILE EPILEPSY
- DO WOMEN AND MEN RESPOND DIFFERENTLY TO ALCOHOL USE DISORDER TREATMENT?
- SAFETY OF VACCINES
- EVIDENCE-BASED QUALITY IMPROVEMENT
- RADIATION THERAPY FOR BRAIN METASTASES

More information on the Southern California Evidence Review center can be found here:
**RESEARCH AND POLICY WORK**

**Left:** An analysis led by Cameron Kaplan found that allowing “tobacco surcharges” was associated with lower health insurance enrollment among smokers, effectively reducing access to health care for a group with high needs.

**Right:** Two medical students mentored by Todd Schneberk completed a study on the harms to asylum seekers from the Migrant Protection Protocols policy, which identified risks and threats to the health of this population while remaining in Mexico.

**Governance (Who is in control?)**

**Right:** Sonali Saluja and Cameron Kaplan received funding from the WM Keck Foundation to study disparities in Los Angeles County during the COVID-19 pandemic. They conducted a survey of 2000 residents of Los Angeles County at the end of 2020 to learn more about race and income based disparities in vaccine hesitancy, COVID-19 testing and access to care.

**Left:** Michael Cousineau facilitated a class on COVID-19 for 186 Keck medical students. He coordinated with over 55 faculty and community representatives in putting together a 4 week class on the pandemic. Students organized projects and participated in virtual discussions. The class was well received by students and faculty alike.

**Right:** Jeniffer Kim analyzed and submitted an academic article for the Keck Street Medicine project which is doing great work for unsheltered homeless.

**Left:** Albert Farias was a co-investigator for the Prostate Cancer Comparative Outcomes of New Conceptual Paradigms and Treatment (PC CONCEPT) study, which aims to develop a national cohort of men diagnosed with low and intermediate risk prostate cancer to compare the rate of adverse events and quality of life among four prostate cancer treatments.

“It has been a rewarding experience learning about the team’s efforts and sharing their success with the academic world.”

**pcori**

Patient-Centered Outcomes Research Institute

Prostate Cancer Comparative Outcomes of New Conceptual Paradigms for Treatment (PC CONCEPT)
RESEARCH AND POLICY WORK

**Left:** Carol Peden is a senior editor who worked on the fourth edition of the Royal College of Anaesthetists, Quality Improvement Compendium, which is freely downloadable and used not only in the UK but around the world.

**Right:** Very soon after the pandemic began, Michael Hochman partnered with Akido Labs to develop an online patient self-assessment tool to help triage patients before they arrived at the hospital. The tool has had nearly 600,000 unique users from across the globe and is available in English and Spanish.

**Left:** Susanne Hempel published a report for the Agency for Healthcare Research and Quality describing best practices for allocating resources during a public health crisis.

**Right:** Mental health care for USC students transitioned rapidly during the pandemic to telehealth visits. Barbara Turner conducted a qualitative study with her summer fellowship student, providing unique insights into the challenges and opportunities of virtual mental health care.

"This is the first transition to a population health program at Keck and it will be a novel multi-disciplinary collaboration on campus."

**Right:** In September, Alissa Maier led a training for 86 Community Health Workers (CHWs) and healthcare administrators on integrating CHWs into care teams to help identify those with elevated blood pressure, and to help patients make the necessary lifestyle changes to manage their chronic conditions.

**Left:** The creation of a formal colorectal cancer screening program at Keck has been a key focus for Rusha Modi and Veronica Pagan this year. The project included the acquisition of a new piece of equipment to read Fecal I Test (FIT) kits which allowed Keck to launch a screening initiative of eligible USC Health Plan members via mail, achieving a 33% return rate.
BY THE NUMBERS

46 Peer Reviewed Articles
38 Perspectives and Blog Articles

54 Mentees
16 Affiliates

44 Lectures on Campus
34 Lectures Off Campus

40 Quotes in the News

The 2020-2021 Gehr budget totaled $2.5 million, of which $1 million comes from the Gehr Family Foundation, approximately $500,000 comes from a contract with Keck Medicine of USC, and the remainder from grants and contracts to Gehr faculty.
USC Gehr Family Center for Health Systems Science and Innovation
Keck Medicine of USC

USC Gehr Family Center for Health Systems Science & Innovation
2020 Zonal Avenue, IRD 318
Los Angeles, CA 90033
323-409-3823
gehrcenter.usc.edu