



# A NEW PRESCRIPTION FOR HEALTH AND WELLNESS

BY NICK OWCHAR

As scholars across campus tackle the complicated health challenges facing the world, the university's leadership sees a chance to create a bold new model of health and well-being research.





HELPING HEART PATIENTS TO “SEE IT COMING”: CISAT’S Chatterjee with the MyHeart app

Something was wrong. Samir Chatterjee hadn’t heard from a close friend at another institution in nearly a month. That may not seem like a very long time, but the pair talked constantly about working on projects together. His friend’s sudden silence worried him.

“He wasn’t answering any of my texts or voicemails, and it was really troubling,” recalled Chatterjee, who is the university’s Fletcher Jones Chair of Technology Design & Management in the Center for Information Systems & Technology (CISAT). “It wasn’t like him at all.”

The uneasy silence was broken—finally—when his friend’s wife called with sobering news: Her husband’s congestive heart failure had taken a sudden turn for the worse and he had been rushed to the hospital. Chatterjee was stunned. He had no idea his friend had been struggling.

“Here was a guy full of energy, full of plans,” he said. “How did it change so fast? Why didn’t he see it coming?”

Chatterjee’s friend survived, but the experience—and these questions—soon inspired him to design the MyHeart system, which includes an app and remote monitoring technology.

The MyHeart app helps patients by collecting diagnostic data and other feedback on a daily basis. That information goes to a dashboard monitored by hospital caregivers. At the first sign of trouble, they can check in with the patient and decide if something simple will work—adjusting a medication, for example—or if more drastic intervention is needed.

To fight illness and disease, says the WHO, the world needs more cross-cutting “multi-sectoral synergies”—like one finds at CGU.

“So much about healthcare today is really about helping people manage their behavior and their conditions,” said Chatterjee, “and technology can do that.”

Chatterjee’s insight reflects a much larger change taking place across the health and wellness landscape. Health and wellness have long been dominated by the physician, surgeon, and the pharmaceutical industry. Not anymore.

Today, as more organizations recognize the impact of the behavioral side of disease—the psychological wiring, habits, and lifestyle choices that influence disease management and one’s quality of life—the old physician-centric model is being forced to make room for experts outside of the medical field (like Chatterjee) with innovative solutions.

In a 2018 World Health Organization (WHO) report on the dramatic rise of cancer, diabetes, heart disease, and other chronic non-communicable diseases (NCDs), the organization called for a shift from only symptom management and treatment to the inclusion of more prevention strategies. What is needed, the report says, are more cross-cutting collaborations and “multi-sectoral synergies” to “beat NCDs and promote mental health and well-being.”

At Claremont Graduate University, the WHO’s “multi-sectoral synergies” go by another name: *transdisciplinarity*—an approach to learning that recognizes that a single discipline or profession alone cannot solve the world’s complex challenges.

For CGU President Len Jessup, such calls for collaboration to fight illness and promote well-being signal an important opportunity for the university. He and Patricia Easton, the university’s executive vice president







TARGETING THE  
BEHAVIORAL SIDE  
OF CANCER: SCGH  
Professor Jessica  
Clague DeHart.

and provost, are now exploring ways to leverage the university's foundational transdisciplinary approach to position CGU at the forefront of a whole new paradigm of health and wellness research.

That exploration includes a new initiative that could bring together many of the university's researchers and health organization partners studying illness and chronic disease to create a revolutionary new center devoted to health and wellness innovation and scalable solutions.

"This is an opportunity to produce a real, lasting impact on people's lives," Jessup said. "Today's health challenges require the kind of thinking that breaks down traditional silos and departments, which is hard for larger, slower-moving institutions to do. But CGU is small and nimble. Our philosophy of research and training was made to handle these kinds of challenges."

Chatterjee puts it another way.

"You really don't need to be a physician or a surgeon to work on health problems now," said Chatterjee, who has gone on to design apps targeting other chronic conditions such as diabetes and COPD. "If you are a technologist or have innovative ideas and can partner with someone from another discipline, there is a lot that you can do."

## Many Projects, Many Fronts

Today the university's scholars across 22 disciplines are conducting a broad range of health and wellness-related behavioral studies and research. This encompasses research through partnerships with some 300 organizations—including the City of Hope, Kaiser Permanente, Arrowhead Regional

For a selection  
of health-related  
research taking  
place at CGU,  
see the A-Z Guide  
on page 26.

Medical Center, National Institutes for Health (NIH), and Accenture, among others—that are working directly with diverse faculty and schools.

Why is this behavioral work so important? According to a recently completed, large international twin study, genetic factors are not the major cause of NCDs worldwide. In fact, the study shows that behavioral and environmental risk factors are the *major causes*—and these can be effectively addressed by interventions like the ones now being developed across campus.

Leading the charge is the university's School of Community & Global Health (SCGH), whose faculty have a long history of addressing health through a transdisciplinary lens. Many of SCGH's faculty are among a small cadre of national and international leaders of large transdisciplinary research centers funded by the NIH.

Currently SCGH faculty are pursuing an ambitious agenda of research and outreach that touches on just about everything one can think of when it comes to wellness and health management: diabetes prevention, healthy aging, screenings for HIV and other infections in underserved populations, surviving cancer, relapse prevention, smoking cessation, as well as preventing and overcoming the major habits that lead to chronic disease.

SCGH is an obvious hub of health-related activity; another is the Division of Behavioral & Organizational Science (DBOS). Here the faculty take on tangled health issues—from depression to drug abuse—with new strategies and methodologies, while others are pushing the envelope of evaluation and positive psychology with new approaches to personal satisfaction, relationships, and the sense of purpose and meaning that affects our lives.



'A NEW KIND  
OF HUB':  
SCGH's Alan  
Stacy sees CGU  
as a 'nucleus'  
for tackling  
health research.

But SCGH and DBOS aren't the only places.

In the Division of Politics & Economics (DPE), which is known for its experts in public policy, international politics, and the intricacies of the global economy, health-related research work is now under way, too.

DPE faculty are studying factors that influence animal consumption versus a plant-based diet, the impact of hormones on employee interactions, the ominous uptick in U.S. mortality rates fueled by "diseases of despair," and what is happening to the U.S. healthcare system as the remaining Baby Boomers retire (a situation the *Wall Street Journal* predicts will result in a whopping 20% of the nation's GDP committed to healthcare alone). Much of this work has received major grant support.

Elsewhere on campus, research at the Institute of Mathematical Sciences is providing crucial support to heart surgeons and their patients with a life-threatening defect; technologists like Chatterjee and his CISAT colleagues are introducing new forms of health self-management into people's lives; and Drucker School professors are addressing the loneliness of aging Americans as well as bringing the power of Zen mindfulness to stressed-out corporate executives.

For Alan Stacy, who serves as the interim dean of SCGH, this level of activity across disciplines



HELPING  
COMMUNITIES  
IN NEED:  
Diabetes  
screenings  
in Riverside,  
California.

and fields is the key to the future of health and wellness research. He couldn't agree more with President Jessup's sense that an opportunity is presenting itself to CGU.

"I've spent my entire career in the health research field," said Stacy, who is a professor of public health with a focus on the triggers and behavior of at-risk adolescents and young adults, "and I can tell you that the best results occur when you bring together professionals from multiple fields. I really see our campus as a new kind of hub—a nucleus—for tackling problems and testing the solutions in close collaboration with our many partners in healthcare and the community."

## One Team, Under One Roof

Jessup and the university's leadership want to translate that vision of a research hub into an actual physical location on campus.

They want to bring these scholars together—along with a rotating roster of visiting researchers, doctoral students, and outside partners—to conduct their work in a single space specifically designed to create powerful synergies and collaborations among researchers and research teams.

The university is exploring several possible locations for the future home of this space, which will be a center devoted to producing research and innovations in health and general well-being.

The center will also serve as the headquarters for SCGH as well as numerous outreach efforts aimed at responding to the chronic illnesses of marginalized populations in surrounding communities, especially in the Inland Empire.

Among the potential locations for the center is the soon-to-be-available Huntley Bookstore, which was established in 1969 to serve as the central bookstore for all of the member schools of The Claremont Colleges. Located at the southeastern corner of the CGU campus, the bookstore property could be an ideal location at the heart of the colleges; another is the open lot north of the Drucker School where university graduate housing once stood.

Regardless of its future home, such a center will become a model for what is possible when experts in many disciplines band together—a message that is becoming increasingly common among major





A NEW MODEL OF COLLABORATIVE RESEARCH: The Huntley Bookstore reimagined as the university's center for health and well-being innovations.

organizations and media outlets around the world.

“Only collaboration,” a World Economic Forum article recently argues, “can solve the world’s most pressing problems. Big societal issues are rarely—if ever—resolved by a single sector.” Similarly, *Forbes* explains that collaborative “expert communities” are the key to any organization’s survival because they lead to “improved insights, driving better outcomes.”

For Easton, the growing recognition

that collaboration across disciplines can solve major problems isn’t a surprise.

“What our approach recognizes is that you need to foster collaborative knowledge to create better solutions. We teach our students to go out and create new kinds of solutions to society’s problems, whether they’re health-related or in some other area,” she explained. “The rest of the world is catching up to this, and that’s a good thing, because we’re all in this together.” ●



Johnson with Beth Zachary (MA, Executive Management, '92) at Drucker Day: “I thought, what the hell. I’ve always been interested in international health. Perhaps I can do something useful there.”

## Not Over, Just Different

BY TOM JOHNSON

When his career as a brain surgeon ended unexpectedly, Walt Johnson found a new calling as the head of a premiere World Health Organization program.

**Dr. Walter Johnson** (EMBA '10; MPH '12) says that the most important thing for doctors to remember is this: Keep on learning.

“You can’t rest on your laurels and just coast,” he said. “One hundred years ago, if you had a medical degree, you were probably the most educated guy on the block. But now that’s not true, and I think every medical student should consider getting an MBA or an MPH or some other type of advanced degree.”

It was Johnson’s own insatiable curiosity—his commitment to learning and adapting—that led to his being named head of the World Health Organization’s (WHO) Emergency and Essential Surgical Care Program in 2015 after having worked with the organization since 2012.

But the path that led him to the WHO was unexpected—someone else might even consider it tragic. Johnson’s entire professional life—from his Loma Linda Medical School days to his time as a surgeon and professor there—had been focused on academic neurosurgery, operating on patients, and teaching residents.

In 2009, everything changed. Johnson began dropping instruments and developed numbness in his right hand—the result of a

combination of a pinched nerve in the neck and carpal tunnel syndrome.

When multiple surgeries failed to correct the problem, he found himself at a professional crossroads. As serious as it was, Johnson applies a little dry humor to describe what happened next.

“There are a lot of things in medicine that you can do with numbness in your hand,” he deadpanned, “but brain surgery isn’t one of them.”

At the time, Johnson was finishing an EMBA at the Drucker School. He said the university’s School of Community & Global Health (SCGH) caught his attention.

“I really was up one of those proverbial blind alleys where you have no idea what to do next,” he recalled. “I thought, what the hell. I’ve always been interested in international health. Perhaps I can do something useful there.”

While pursuing a Master of Public Health degree at SCGH, Johnson heard a lecture about surgery and global health by Dr. Bruce Steffes, a surgeon who had spent years working in Africa. That lecture, Johnson said, changed his life.

“I experienced an epiphany,” he says. “I knew everything about academic surgery

and how to run a department, and public health was clearly the next step in putting my skill set together with something that I could carry forward.”

Johnson met Dr. Meena Cherian, then head of the WHO’s Emergency and Essential Surgical Care program (and Johnson’s predecessor), and Cherian invited him to Geneva as “a

prohibitive,” he says. “It’s not transplants, heart surgery, or brain surgery here. It’s just basic stuff that the largest number of people in a population needs—the most common diagnoses.”

Johnson says that his Drucker EMBA has helped him in his WHO role because it profoundly changed his way of thinking.

“There are a lot of things in medicine that you can do with numbness in your hand, but brain surgery isn’t one of them.”

sort of intern” to learn how the organization dealt with public health on a global scale.

“When Meena retired,” Johnson said, “the WHO called me up and said, ‘We’ve had a lot of interns who’ve been through here, but we don’t have any old guys that know about the program and could run it. Are you interested?’ ”

According to Johnson, one of the biggest challenges that he’s faced at the WHO is the mistaken notion (even within the organization) that surgery is prohibitively expensive and not as pressing as other issues.

“If you look at simple surgeries or essential ones like C-sections and hernia repairs or a broken bone that can be set, the costs aren’t

While surgeons are taught to be “lone wolves,” he explained, the EMBA taught him about management and team dynamics and has complemented his SCGH training in his WHO role.

Because the United Nations—“in its wisdom,” Johnson said—insists on mandatory retirement at 65, he has about three more years before he has to leave.

Future plans may include teaching some classes at CGU, but whatever the future foretells, Johnson doesn’t seem overly concerned. Adaptation has become second nature to him, and he’s determined to continue following his own advice and keep on learning. ●





# Faculty Health Research

## An A-Z Guide of Selected Highlights

### Alzheimer's, Dementia, and Memory

Could lifestyle factors like diet and exercise prevent people from developing cognitive impairment and dementia later in life? SCGH's **Nicole Gatto** is working with researchers from Loma Linda University to study this question in the Adventist Health Study-2, a large cohort of Seventh-Day Adventists in the U.S. and Canada, about half of whom consume vegetarian diets. The team is administering neuropsychological tests to look at whether dietary patterns in previous decades have an effect on current cognitive function. "Foods in our diets are things that we encounter multiple times a day for years and can be changed," she says, explaining that dietary recommendations are a potential cost-effective approach to disease prevention.

### Animal Advocacy and Plant-Based Diets

Would people eat less meat if they really understood the living conditions and treatment of animals on factory farms? With support from the Open Philanthropy Project, DPE's **Joshua Tasoff** is testing how grassroots-level communications about animal advocacy and the benefits of plant-based diets influence consumer's meat consumption. The second project in a long research agenda, Tasoff's work couldn't be more timely as plant-based options continue to grow in restaurants and supermarkets.

### KEY

**CISAT:** Center for Information Systems & Technology

**DBOS:** Division of Behavioral & Organizational Sciences

**DPE:** Division of Politics & Economics

**DSM:** Drucker School of Management

**IMS:** Institute of Mathematical Sciences

**SAH:** School of Arts & Humanities

**SCGH:** School of Community & Global Health

**SES:** School of Educational Studies



### Cancer—Prevention and Survivorship

Most illnesses, SCGH's **Jessica Clague DeHart** will tell you, are intertwined. "When you study cancer, you're really also studying obesity, aging, and other related factors," she explains. With ten years at the City of Hope as a trained molecular epidemiologist, DeHart today is partnering with them to look at trans-disciplinary interventions that address the complex knot of factors behind some cancer diagnoses. Her research also addresses quality of life and the collateral damage that follows successful treatment for many cancer survivors. The hardest question they often face is "Treatment is done, they told me the cancer is gone ... now what?" DeHart is involved in several programs to help survivors and their caregivers develop better health behaviors and self-care after treatments end "to help them not just survive, but thrive," she said.

### Care for the Caregivers

When our loved ones develop chronic illnesses, a family member often elects to take care of them. That isn't easy. Caregiving is a demanding, 24-7 situation, but who will make sure that these caregivers are coping with the stress and responsibility? With DBOS's **Saeideh Heshmati**, SCGH's **Jessica Clague DeHart**, and DBOS student **Lawrence Chan**, Professor **Stewart Donaldson** is developing a new program of research to study the well-being of caregivers as well as healthcare providers who are assisting patients with cancer and other chronic diseases.

### Diabetes—Prevention and Management

**Jay Orr** and **Andy Johnson**, both SCGH faculty members, will tell you that even though diet and physical activity changes are critical to the well-being of diabetics, many don't pay attention to these protocols until they've developed problems. Their research and training efforts are helping health programs and county agencies in

the region to learn about and implement evidence-based interventions and train students in these practices. SCGH's **Bin Xie** also culturally tailors interventions to diverse underserved populations and is testing new interventions derived from compelling existing research.

### Depression

As the director of the Depression & Persuasion Research Lab and co-director of the Institute for Health Psychology & Prevention Science, DBOS's **Jason Siegel** has served as the principal investigator for more than \$2.6 million in grant funding since 2014. Siegel is now conducting research on persuasive strategies and methodologies to increase help-seeking among people with depression and to reduce the stigma often associated with it. A recent publication (with student **Tara Muschetto** as lead author) indicates that informing people about the often temporary nature of depression influences their willingness to support depressed loved ones. Siegel also recently completed work with Hospital Corporation of America, with students **Brendon Ellis** and **Anne Brafford**, to examine burn-out and depression among doctors.

### 'Diseases of Despair'

The life expectancies of working-class Americans are falling. Why? The Centers for Disease Control and Prevention point to the rise of "diseases of despair"—drug abuse, alcoholism, and suicide—as socio-economic opportunities have declined for many. To bridge the gap between how politics and policy might influence public health and halt this ominous trend, DPE's **Javier Rodriguez** is collaborating with University of Michigan colleagues on a major 5-year study of its underlying causes. The study will produce results to reframe policy discussions and address this unsettling drop in mortality rates. He and his team also recently co-authored "Weathering, Drugs, and Whack-a-Mole: Fundamental and Proximate



BRINGING PUBLIC HEALTH TRAINING TO MONGOLIA: SCGH's Nicole Gatto.

"The life expectancies of working-class Americans are falling. Why? The Centers for Disease Control and Prevention point to the rise of 'diseases of despair.'"

Causes of Widening Educational Inequity in U.S. Life Expectancy by Sex and Race, 1990-2015" in the *Journal of Health and Social Behavior*.

### Drug Addiction—Prevention Strategies

DBOS's **William Crano** wants to eradicate drug addiction the way a gardener eradicates weeds: at the root. For Crano, a social psychologist seeking better prevention strategies to address the behavioral triggers of addiction, too much drug-abuse funding skips past prevention efforts and goes straight to the rehab stage. Crano is helping health professionals in the U.S. and abroad to create better prevention strategies to catch non-drug users, especially adolescents, before they start. "Kids are taking huge chances with drugs and don't have any idea what they're doing," said Crano, who involves parents in the persuasion process. He serves as advisor to the UN Office on Drugs and Crime, Vienna: Commission on Narcotic Drugs; and as an advisor to the U.S. State Department, Colombo Plan: Training and Certifying Drug Prevention Professionals in Southeast Asia and the Middle East.

### Food—Security, Consumption, Sustainability

SAH's **JoAnna Poblete** addresses health and well-being in terms of how federal policy affects indigenous communities, particularly in food security, consumption, environmental justice, and sustainability. An associate professor of history, she is the author of a forthcoming book on the impact of global tuna consumption on U.S. federal and international fishing regulations, as well as native fishing subsistence and sustainability in the unincorporated territory of American Samoa. She is also focused on the environmental and communal impact (including health outcomes) of one of the world's largest oil refineries on people in the unincorporated territory of St. Croix in the U.S. Virgin Islands. Her goal is to provide foundational historical information for more effective, equitable, future policy-making in this area.







## Habits That Lead to Disease

Teams of SCGH researchers investigate the root causes of the health habits and behaviors that lead to most major chronic diseases. Behaviors and problems that have been (or are being) studied include smoking, alcohol, and drug abuse (**Paula Palmer, Bin Xie, Alan Stacy**), diet and obesity (**Kim Reynolds and Bin Xie**), and physical activity (**Jessica Clague Dehart**).

## Healthcare Policy

Is the U.S. headed for a healthcare apocalypse? DPE's **Deborah Freund** is keeping a close watch as principal investigator on several grants and projects. Freund's research includes projects on the Affordable Care Act, state health policy, Medicaid and Medicaid managed care, and the health outcomes for knee replacements (the highest-volume surgery that the Medicare program pays for). A former CGU president, Freund is one of the earliest scholars of the Medicaid program and has authored legislation for the Australian government that resulted in their plan for controlling pharmaceutical costs and which drugs to cover on their national formulary. Freund's past and present board involvement includes Excellus Blue Cross Blue Shield, Cedars-Sinai and San Antonio Regional hospitals, and the Children's Hospital of Los Angeles. She draws on her network to bring healthcare's major players to campus for events such as the recent "Obamacare, Trumpcare, and the Inland Empire: What Could Happen Next?" featuring Inland Empire Health Plan CEO Dr. Brad Gilbert, Parktree Community Health Center CEO Ellen Silver, and Arrowhead Regional Medical Center Medical Director Dr. Richard Pitts.

## Healthy Aging

SCGH's **Paula Palmer, Nicole Gatto**, and **Alan Stacy** are exploring ways to help older people stay healthy and live independently for as long as possible. That includes new methods to enhance compensatory safety habits and skills

"In our hyper-digitized age, we can't take important behavioral cues, especially about our relationships, for granted."

Saeideh Heshmati



among those with beginning phases of memory decline to prevent falls and other injuries. These new methods could be combined with user-friendly home technology developed by CISAT's **Samir Chatterjee** to enhance safety and protect frail bones. A relatively new area of healthy aging research focuses on resilience, an important predictor of successful aging. With funding from the Fletcher Jones Foundation, Palmer is studying differences between low- and high-resilient Pacific Islander older adults by "departing from a 'deficit' model common in aging research," she explains. "Instead, we are focusing on an individual's assets and strengths to better understand what determines resilience and inform future research in this area."

## Healthy Tech

The day after CISAT's **Samir Chatterjee** learned about his friend's heart problems (see main story), he received a call from the chief cardiac nurse of Loma Linda University Health's heart clinic. With a steady flow of these patients returning to the hospital shortly after being discharged, she asked Chatterjee to help her devise a way to remotely monitor their symptoms and help them manage their conditions. The MyHeart app was born out of this request as well as Chatterjee's experience with his friend. Since then, he and his doctoral student lab members have gone on to create eight apps. His current project involves an NIH-funded study of a group of American men with Type 2 diabetes and their use of the MAn Up (Men Are United) app to track their condition.

## Hepatitis, HIV/AIDS, and Other Screenings

Easily accessed populations are not receiving enough help, and scalable interventions need to be developed and tested in places where there are many high-risk individuals. SCGH develops and tests scalable interventions for use in community program sites with individuals at risk for hepatitis, HIV, and other infections. One example is an intervention delivered over electronic devices (laptops, tablets, or cell phones) developed by SCGH's **Alan Stacy** that can substantially increase screenings and cut the likelihood that infections will spread.

## Independent Living

To cope with loneliness and isolation among the elderly, DSM's **Hovig Tchalian** is testing out Microsoft Kinect technology with the elderly residents of Mt. San Antonio Gardens in Claremont. The technology has a gesture-sensing feature (it was originally created for Xbox game consoles) that enables a resident to view and manage family photos and videos on their TV monitors with simple sweeps and gestures of the hand. What Tchalian and his students discovered is that such technologies create a deeper sense of connectedness while promoting independence and self-empowerment in test participants.

## Love Medicine

Most people agree that love is important; but, when considering love, is everyone picturing the same thing? DBOS's **Saeideh Heshmati** brings together cognitive psychometric modeling, wearable monitors, and other tools to consider answers to that question. The results of a recent study conducted by Heshmati and colleagues tested nearly 500 American adults on their understanding and definition of love. Each participant was given 60 different everyday life scenarios to judge and was asked whether they would judge those as indicators of love or not. Small gestures matter—whether it's a child snuggling up to her parent or a dog greeting its master, such small moments significantly influence our daily understanding of well-being and self-worth. What does she hope to accomplish with this research? The rules of communication have been radically affected by social media, and in our hyper-digitized age, she says, "we can't take important behavioral cues, especially about our relationships, for granted."

## Mathematics of Heart Failure

More than 40 years ago, the Fontan procedure was first used to help infants who, due to a birth defect, were born with only a single functional ventricle of the heart. The procedure compensates for the lack of a second ventricle chamber but also puts tremendous pressure on the sole functioning one, which often causes heart failure that won't be detected in time. IMS's **Marina Chugunova** is collaborating with Toronto General Hospital as well as colleagues at the University of Toronto and the Ukraine Academy of Science to mathematically model blood pressure distribution after the surgical procedure. Their efforts will provide doctors with data on blood pressure to detect the onset of heart failure in time for a life-saving intervention. The project is ongoing and includes a current study of some 350 patients. Chugunova and her collaborators recently published their



OBAMACARE AND TRUMPCARE IN THE INLAND EMPIRE: (from left) Brad Gilbert, Ellen Silver, and Richard Pitts at a recent event organized by CGU Professor Deborah Freund.

first article about this research—"Use of Mathematical Modeling to Study Pressure Regimes in Normal and Fontan Blood Flow Circulations"—in *Mathematics-in-Industry Case Studies*.

## Mindfulness and Managing Oneself

DSM's **Jeremy Hunter** helps executives in the practice of applying the principles of mindfulness for today's distracted and frenetic business environments. His courses "The Executive Mind" and the "Practice of Self-Management" help leaders take more effective action in the face of accelerated change while also taking better care of themselves. Recently, his interest in fusing the managing of an executive's inner environment with their outer organizational environment has resulted in the creation of a new course co-taught with DSM's **Vijay Sathe** for MBA students—"Finding Clarity." Furthermore, he has a multi-year commitment to developing Japanese social innovators who must manage themselves while also addressing pressing social challenges.

## Neurodegenerative Disorders—Elderly Populations

The U.S. population is aging, and it is anticipated that the number of older adults who develop Alzheimer's disease and Parkinson's disease will increase in the coming decades. SCGH's **Nicole Gatto** conducts epidemiologic research on major cohorts of people studied over time and in case-control studies to

understand the factors that increase the risk of neurodegenerative disorders or to protect people from developing them.

## Obesity

This condition is a widespread international problem impacting onset and management of many disease threats. Yet few prevention programs have been developed and select subgroups (e.g., ethnic minorities) are at substantially elevated risk for obesity. SCGH's **Kim Reynolds** conducts studies on the causes of the problem, develops prevention interventions for obesity, and has led a large federally-funded project that tests interventions tailored to minority adolescents. SCGH's **Bin Xie** also works intensively on the obesity epidemic.

## Organ Donation

Many people believe in the virtues of donating their organs, but why don't more sign up? As the principal investigator for a grant from the Human Resources and Services Administration, DBOS's **Jason Siegel** is leading a team (including colleague **Eusebio Alvaro**, grad students, and project partners in New Mexico) to answer that question. They are testing out a persuasive campaign in the Motor Vehicle Departments of New Mexico with a combination of videos, posters, and other visual advertisements drawing on Professor **William Crano's** Vested Interest Theory as well as Siegel's prior experiences with media and social psychological theorizing.





When this latest research concludes, Siegel hopes to have a better idea about what kinds of messaging works best to encourage people to tap into selfless behaviors and boost donor registration rates. “I love this kind of work,” he says, “because it can save lives in a way that no one really thinks about.”

### Peak Performance and Sports

Professor **Stewart Donaldson** is conducting several studies on health and well-being in his Positive Organizational Psychology Lab and Positive Sports & Peak Performance Psychology Lab. Also involved are the Los Angeles Dodgers Foundation and former world champion pro surfer **Shaun Tomson**, who is an actor, former CEO, author of positive psychology-related books, and now a facilitator in developing research for the positive sports lab. Several studies are also being designed to focus on a deeper understanding of health and well-being as they relate to peak athletic and team performance.

### Planning—Preparing and Conducting Interventions

If they are to be successful on a large scale, solutions to health problems require extensive planning. As co-editor, SCGH’s **Darleen Peterson** is producing the new edition of a classic textbook in the field, *Health Program Planning*. This book provides extensive guidance relevant to all health interventions conducted by SCGH, its community partners, and other institutions. It is invaluable to students and researchers alike who need to understand the big picture of how to plan and conduct large-scale health interventions.

### Purpose and Meaning

Go into any bookstore, and you’ll see plenty of books about finding one’s purpose in life. But most of these are based on one person’s musings, which may not be particularly helpful. What can science tell us about purpose? What can empirical studies tell us about the benefits of leading a life of purpose? DBOS’s

“The latest science on well-being and human flourishing not only helps enhance personal well-being but also improves the lives of disadvantaged populations.”



**Kendall Cotton Bronk** is addressing these questions with her Adolescent Moral Development Lab. Bronk is exploring how various factors affect how young people see themselves and their futures. Recent work includes her creation of the Our Purpose Toolkit for teens and other interventions to improve teen outlooks described in “An integrative intervention for cultivating gratitude among adolescents and young adults” in the *Journal of Positive Psychology*. Bronk also serves as principal investigator for “Family Purpose in the 21st Century: Understanding and Fostering Family Purpose for Ultra High Net Worth Families.”

### Quality of Life

Twenty years ago, **Mihaly Csikszentmihalyi** and **Jeanne Nakamura** founded the Quality of Life Research Center (QLRC) for a simple reason: So much research identifies what’s wrong with the world, but what about the things that are right? The founding of the QLRC paved the way for Csikszentmihalyi and Nakamura to start the university’s graduate programs in Positive Psychology. The Center has conducted research on its own and in collaboration with other institutions on the nature of “good work” in professional life, studies on social innovation, volunteering, well-being in the second half of life, and much more. As Csikszentmihalyi moved to emeritus status with DBOS at the end of the 2018-19 academic year while still keeping his involvement in the QLRC, Nakamura will become the *de facto* director of the Center and carry forward its legacy of pre-eminence in the field of positive psychology.

### School of Community & Global Health

Along with a slate of cutting-edge master’s and doctoral degrees blending theory with practice—including a hands-on practicum that puts public health doctoral students alongside practitioners earlier than in similar programs outside of CGU—the SCGH faculty are champions of what Interim Dean **Alan Stacy** calls “translational science.” The term refers to an approach that takes untapped pivotal research findings and develops them in innovative new ways. (Note: Some—but not all—of this faculty’s work is highlighted in this index.) Working with partner organizations including Kaiser Permanente, City of Hope, Arrowhead Regional Medical Center, and the National Institutes for Health, among many others, SCGH is conducting a wide array of outreach and studies to create the next wave of prevention strategies.

### Smoking Cessation and Drug Abuse Interventions

Smoking is still a major cause of heart disease and cancer in the U.S. and around the world. SCGH’s **Paula Palmer** develops and tests smoking cessation programs for underserved minority groups such as Pacific Islanders and some Asian groups that have not received tailored, evidence-based programs.

Recently, Palmer led a federally-funded project to test these interventions, in close collaboration with community groups. SCGH’s **Javad Fadardi** and **Alan Stacy** develop and test mobile applications to help prevent relapse in people who are in programs for smoking cessation and alcohol and drug abuse. They recently submitted a grant proposal to use these procedures to focus on the opioid epidemic, in collaboration with CISAT’s **Samir Chatterjee**, DPE’s **Gregory DeAngelo**, and more than a dozen community drug abuse programs in the Los Angeles region.

### Stress and Children’s Health

Stress is an inevitable part of modern life that affects everyone. Family life, peers, and social networks can be major sources of stress especially for children and adolescents. SCGH’s **Bin Xie** studies the effects of high levels of stress in childhood and adolescence on cardiovascular health and obesity. He conducts longitudinal data analysis to increase our understanding of the complex mechanisms of chronic stress exposure and its dynamic influence on these major health issues.

### Suicide Prevention and Mental Health

Suicide rates have increased at alarming rates in some communities and among adolescents. SCGH’s **Jay Orr**, in collaboration with Riverside County’s Community Translational Research Institute, is vigorously promoting the implementation of suicide prevention and mental health resources in local schools.

### Sun Safety

There are only a few widespread sun safety programs even though skin cancers are highly prevalent worldwide and intervention is needed, particularly in youth who need to learn good sun safety habits. SCGH’s **Kim Reynolds** develops and tests school- and family-based interventions on a large scale in many schools and school districts in Califor-



COMMITTING TO A POSITIVE WAVE: World champion surfer Shaun Tomson is developing research for the Positive Sports Lab.

nia and Colorado. He has conducted several federally-funded studies to test the best ways to achieve school district policy change “to deal with this urgent risk factor and reduce cancer risk.”

### Teacher Well-Being

“If I don’t take care of myself, how can I expect to take care of my students?” That’s the question that inspired Teacher Education adjunct professor and SES doctoral student **Andre ChenFeng** to create a workshop for Teacher Ed students preparing to enter the classroom. According to national estimates, some 25 to 30 percent of teachers will leave the profession in the first five years because of stress and burnout. ChenFeng has drawn on his experiences studying with DSM’s **Jeremy Hunter** and DBOS’s **Jeffrey Yip** to create the workshop, which he unveiled this semester for 50 students and 15 faculty members. A former LAUSD math teacher in Koreatown, ChenFeng knows how overwhelming a teacher’s first years can be. Not only does his workshop offer practical daily tips—the need for a good evening routine or staying hydrated throughout the day—but also the importance of creating rituals to develop one’s sense of self-compassion and finding a still-point in the midst of a hectic day.

### Well-Being and Social Justice

The latest science on well-being and human flourishing not only helps enhance personal well-being but also improves the lives of disadvantaged populations experiencing a range of so-

cial injustice. Supported by a generous gift from trustee **Mashi Rahmani**, and in collaboration with professors **Saeideh Heshmati** and **Robert Klitgaard**, DBOS’s **Stewart Donaldson** is creating a new program of research to study how positive work and community environments that foster the well-being of all members may lower the prevalence of discrimination, harassment, and a range of other social, organizational, and community injustices.

### Zak—Oxytocin Studies

Why is this University of Pennsylvania-trained economist taking blood samples? Because DPE’s **Paul Zak** is a pioneer in neuroeconomics, that’s why. Neuroeconomics is a field that examines organizational and economic behaviors through the lens of brain processes and biological functions. With the university’s support, Zak established the Center for Neuroeconomics Studies and has logged countless research hours resulting in some 13,000 scholarly citations. Today he is working with his doctoral students on projects about neural diversity and how people interact with robots. A 10-year research program on the neuroscience of high-performance organizations is now winding down and has resulted in his book, *Trust Factor: The Science of Creating High-Performance Companies*. Zak’s lab is developing new projects to understand how people flourish and cope with the rapid pace of information flows, distributed work teams, and daily stress. ●