Donor Spotlight

Susan and Herb McLaughlin, Campaign Co-Chairs for the Center for Health and Community

"I'm committed to the concept of preventive medicine," says Herb McLaughlin, a renowned architect (KMD Architects) and author, who has worked on many large healthcare projects. "So many institutions are focused on care. What I like about the CHC is its focus on prevention."

Belief in the CHC's mission led Herb and his wife Susan (a primary care nurse at the San Francisco Free Clinic) to become campaign co-chairs for the center's fundraising efforts. Through their financial contributions and their leadership, the couple is hoping to help funnel more dollars to prevention research, which is all too often ignored in the race for headline-making biological cures.

"I truly believe we need organizations like the CHC to look at illness in a broader sense," says Susan, whose work at the Free Clinic puts her in constant touch with the plight of uninsured patients. "Why is there more diabetes and obesity? What is the influence of lifestyle and stress?... What the CHC does is groundbreaking and different. It brings all this knowledge together in one place." ■
From the Director

A consistent theme across our issues of Exchange is that health is not just a function of our biological make-up. Rather, our ability to stay well, to recover from disease, or to maintain function in the face of a chronic condition is also greatly affected by our behavior, lifestyle, neighborhood and work environments, culture, emotions, and social relationships.

At the Center for Health and Community, we’ve long believed that tomorrow’s health care providers need to take social and behavioral factors into account as they help patients maximize their health. It must become an integral part of their training. Similarly, tomorrow’s researchers need a broader set of skills and knowledge than in the past to be able to study these complex forces.

It was validating when a recently released Institute of Medicine (IOM) report, entitled Improving Medical Education, reached essentially the same conclusions. In its Executive Summary, the report states: “To make measurable improvements in the health of Americans, physicians must be equipped with the knowledge and skills from the behavioral and social sciences needed to recognize, understand, and effectively respond to patients as individuals, not just to their symptoms.”

The CHC has been a leader in reforming how professional healthcare programs equip their students with the knowledge and skills referred to in the IOM report. Equally important, we are training a new generation of researchers and thought leaders who, in turn, are moving into positions of influence throughout the US healthcare system.

This issue of Exchange will give you a view of several educational initiatives in which CHC faculty are playing key roles. The young people who are emerging from these programs have a deeper understanding of the range of determinants of health. As a result, they will be better equipped to improve the health of our diverse population.

Nancy Adler
A Dramatic Shift

Over the last decade, we've made genuine progress in understanding disease and its causes.

We now know, for example, that social and behavioral factors like stress, smoking, and diet account for over half of premature deaths in this country. We also know that an aging and increasingly diverse population makes cultural gaps and miscommunications between providers and patients all too frequent occurrences— with potentially disastrous consequences for people's health.

Yet except for a few new electives here and there, most medical school curricula have largely ignored these findings, locked into a basic structure—two years of basic science, two years of clinical rotations—that they've used for the last forty years.

UCSF chose a different path. In 2001, after four years of hard work, the School of Medicine initiated an entirely new curriculum. An important feature is that social and behavioral sciences are woven throughout.

CHC faculty members were involved in the planning from the start, with Nancy Adler, director of the CHC, chairing the faculty committee that oversaw the curriculum overhaul.

"Because we have an integrated curriculum for the entire four years, we're ahead of the game," says Jessica Muller, a medical anthropologist in the Department of Family and Community Medicine who has taught in the medical school since before the curriculum changes. "Very few schools have this kind of systematic approach."

The Institute of Medicine (IOM) agrees. School of Medicine Vice-Dean David Irby, who was one of the authors of the IOM's 2004 report, *Improving Medical Education*, notes, "The study panel viewed the UCSF experience of integrating behavioral and social sciences into the curriculum as an example of best practices and a model other schools should emulate."

"In the beginning, students are focused on Mr. Danovic's emergency medical care," says Satterfield. "But as he stabilizes, psychosocial concerns begin to surface."

Over the next eight weeks, through dramatic re-enactments, online "chapters," lectures, and small groups, students learn Mr. Danovic had been drinking when he crashed the motorcycle and that he wasn't wearing a helmet. They witness conflicts with his parents and his partner and observe him develop a dependence on his pain medications. They come to see how these factors affect his recovery.

Much of the learning during this introductory "block" revolves around Mr. Danovic's case. Both the format and the content exemplify the new curriculum at the UCSF School of Medicine and highlight the essential role of social and behavioral factors in health and health care.

The Beginning

At the UCSF School of Medicine, the shift began in earnest in 1997, when visionary administrative leadership and a pioneering group of faculty began the push for change.

A generous grant from The California Endowment allowed CHC faculty to develop a cross-cutting curriculum in "culture and behavior", one of eight broad themes running across all four years.

An "Essential Core" replaced the first two years of basic science with
courses taught in eight integrated blocks over 16 months. A CHC faculty member is part of the design and administration of each block. Cases within the block – like Mr. Danovic – illustrate the ways in which biological, social, and behavioral sciences interact in a patient’s health and health care. Social and behavioral science (SBS) electives are also available.

Beyond the Essential Core

But it’s when they see social and behavioral issues in action in their clinical rotations that many students begin to truly appreciate their importance.

“Though we’ve made a lot of progress opening attitudes and building a knowledge base,” says Satterfield, “we’ve really just started with the skill-building process of facilitating behavior change (such as helping patients stop smoking). It’s something we hope to integrate more into our clinical clerkships.”

Those clerkships occur during stage two, The Clinical Core. A clerkship in Family and Community Medicine is one where the social and behavioral sciences play a particularly prominent role. The Clinical Core also includes four weeks of intersessions, a time for students to reflect on, consolidate, and integrate what they have learned.

During the third and final phase of the new curriculum, Advanced Studies, students can choose an Area of Concentration (AOC). While social and behavioral sciences are part of many of the six current AOCs, they are most prominent in The Humanities and Social Sciences in Medicine, an AOC dominated by literature, anthropology, and student writing.

The Sensitive Issues of Race and Culture

One particularly challenging issue has been incorporating learning about race and ethnicity. How much of a role, for example, does Joe Danovic’s ethnicity play in his health behaviors and his health care?

To help address this challenge, the curriculum encourages “cultural humility,” the awareness that physicians’ assumptions derive from their own cultural perspective. This approach, championed by pediatrician Melanie Tervalon (who helped establish the culture and behavior theme), fosters openness to exploring and incorporating the perspectives and values of the patient.

“The key is to stress that everyone is an individual within a cultural context – and to guard against the tendency to stereotype,” says Muller. She notes that the curriculum includes one cautionary case where a group of residents with the best of intentions make incorrect assumptions about a patient’s cultural belief in voodoo, offending the patient and making it more difficult to deliver the care.

“We teach a set of core foundational concepts and skills, giving students some broad questions that help them understand who their individual patient is,” Muller continues. Students can then use this knowledge in their interactions with patients.

Nursing as a Model

While the medical school is currently the most visible example at UCSF of the shift towards integrating more SBS, the other three schools have also undergone change.

In some ways, the School of Nursing has led the charge; pioneers like sociologist Virginia Olesen helped create a department of social and behavioral sciences there over thirty years ago.

Patricia Benner, current chair of the department notes that nurses have recognized the need for social and behavioral science since the end of World War II. “So many of the practice and research questions in nursing – health promotion, managing chronic illness, education, and recovery – are geared toward social and behavioral issues,” she says.

A look at the curriculum for masters specialties and doctoral programs at the UCSF School of Nursing reveals SBS content laced prominently through nearly every one. “You can’t engage in the caring practices of nursing without understanding things like human development, stress and coping, or health care disparities,” says Benner.
Training Researchers and Clinicians, Fostering Thought Leaders

Along with training health professionals, the CHC is a national leader in training the next generation of researchers. These scholars will have a more complex understanding of health and health care than previous students. Programs associated with the CHC span doctoral and post-doctoral programs as well as interdisciplinary fellowships and professional training.

The Robert Wood Johnson Health and Society Scholars

Michelle McMurry spent the past year as the staff person in charge of health care for Senator Joseph Lieberman of Connecticut. This year, she became a Robert Wood Johnson (RWJ) Health and Society Scholar at UCSF.

Open to scholars from any discipline, the program is a nationwide effort housed at six prominent universities. At UCSF, the CHC trains these scholars in partnership with the UC Berkeley School of Public Health. (Nancy Adler is one of the program’s directors.) Together, they expand students’ understanding of the intersection of context, biology, and behavior on determinants of health.

After an undergraduate education in biochemistry at Harvard and a PhD from Duke in molecular immunology, McMurry, the first African-American to graduate from the Duke PhD program, found herself increasingly interested in health disparities. “I saw that scientists weren’t objective and began to wonder: What was determining research priorities?”

That curiosity led to a series of Washington-based positions and fellowships, including her work with Senator Lieberman. During that time, among other things McMurry helped craft proposals about investing in health care research and tracking how those investments affect disease and disease prevention.

“The RWJ program gives me an opportunity to take a step back and explore these types of issues in greater detail,” says McMurry. Her research will look at how we are determining the allocation of bioscience research funding, both public and private. “Who is deciding and how can neglected populations have a voice?” she says. She hopes her training will eventually position her to influence policy from academia, government service, or both.

“By focusing on the determinants of health, on health disparities, and on developing and further defining the field of population health the RWJ fellows add an enormous amount to everything we do here and have a nationwide impact,” says Hal Luft the Program’s associate director.

Adolescent Medicine

The Division of Adolescent Medicine is another example of the type of interdisciplinary training CHC faculty members provide.

“Adolescence is a time of unusually rapid change,” says Charles Irwin, the division’s director. “Rapid change biologically, rapid cognitive changes, and rapid changes in the social environment.”

Using an interdisciplinary approach that acknowledges this complexity, the division incorporates behavioral and anthropological experts, educational specialists, and a strong policy component to train pre-doctoral students and post-doctoral fellows in programs that range from medicine and nursing to social work and psychology.

“Our goal is to train the next generation of leaders,” says Irwin. “There just aren’t a tremendous number of people who have expertise in this field.”

In addition to joining the UCSF faculty, fellows have gone on to teach, conduct research, and/or run adolescent medicine programs at some of the country’s most prominent medical schools, including Johns Hopkins, UCLA, Georgetown, and the University of North...
Carolina at Chapel Hill. Others run adolescent medicine programs at Kaiser Permanente facilities throughout California. Finally, some have moved into public health positions, including serving as Medical Director for Special Programs for Youth for the city and county of San Francisco.

**Social and Behavioral Science at the School of Nursing**

As noted earlier, the social and behavioral sciences have long been a core component at the School of Nursing, one of its four main departments of instruction and research. Since its inception, the department has offered a PhD in sociology. More recently it added a PhD and masters programs in health policy. Students in the health policy program have completed residencies that range from working on legislation for House Democratic Leader Nancy Pelosi to working on projects for the World Health Organization.

“So much of our attention in the health care system has been on providing individuals with health care, but too little has been on population and community health,” says Department Chair Benner. “Those are the areas where the social and behavioral sciences can take the lead.”

**The Institute for Health Policy Studies**

“One of the ways we differ from most other post-doctoral programs is that we are much more eclectic. Our fellows (currently 18) have a wide range of expertise that they can bring to bear on a health policy problem,” says Hal Luft, director of the Institute for Health Policy Studies (IHPS). Founded in 1972, the IHPS believes that health policy researchers must understand the health arena and social and behavioral disciplines.

“At the IHPS, we do policy with both large and small ‘p’,” says Luft. Large “P” means legislative policy, while small “p” refers to clinical policy within provider settings. Current projects include studies of managed care, treatments for rheumatoid arthritis, the relationship between poverty and health needs, substance abuse, tobacco policy, and tribal health concerns.

The IHPS has faculty or graduates with appointments in three of the four schools at UCSF and graduates teach at universities across the country. Some have moved on to high-ranking positions in state governments or work as senior staff members at foundations that include the Robert Wood Johnson Foundation and California Healthcare Foundation.

**Anthropology and History**

Begun in 1983 as the first such doctoral program in the country, “Health psychology looks at the intersection of psychological principles and medicine that put people at risk for disease,” says Director Nancy Adler.
Over time, the program evolved into a post-doctoral program supported by NIH. It currently has six fellows, specializing in two areas: risk behaviors, and the mind-body interaction between stress and disease.

In addition to joining the UCSF faculty, graduates of this program now are on the faculty at Harvard, Oxford, George Washington University, and Brown. Others serve in government positions at NIH and the Centers for Disease Control. A recent fellow, Elissa Epel, has joined the UCSF faculty, and examines the links between stress, eating, and obesity.

**Educating Practicing Physicians**

As awareness has increased of the role of SBS in disease and disease prevention, practicing clinicians have sought ways to educate themselves about these “new” issues. Members of the CHC play an instrumental role in re-training these professionals.

Sunita Mutha is a general internist at Mount Zion Hospital, who also conducts research at the Center for Health Professions. In 2000, she and her colleague Melissa Welch delivered several provider workshops in the Bay Area on cultural competency.

“From our (workshops), we realized we needed a centralized resource that any organization that saw the need could use,” says Mutha. They, along with colleague Carol Allen, spent two years developing a modular curriculum (“Toward Culturally Competent Care”) that organizations can adapt to their own specific needs. When published in 2002, it was the first comprehensive written curriculum of its kind. It is widely used nationwide.

Since then, cultural competency has gained in prominence and Mutha and her colleagues now run workshops across the country that “train the trainers.” Typically, they offer two weekend workshops per year to prepare clinical educators to teach the knowledge and communication skills needed for providing culturally competent health care.

**More Work to Be Done**

In mid-2004, The Carnegie Foundation for the Advancement of Teaching began a historic review of teaching and learning in medical and nursing education. UCSF School of Medicine faculty Molly Cooke and Vice-Dean Irby co-direct the medical study, with UCSF School of Nursing faculty Patricia Benner directing the nursing study.

The physician study will examine the challenges medical schools face in preparing physicians for practice, as well as the distinctive curricula, pedagogies and assessment practices that the schools use to address these challenges. Cooke, Irby, and their colleagues expect the study will shed light on innovative curricular structures, promising teaching methods and thoughtful approaches to assessment. They also expect to critique inadequate educational practices and deliver a series of recommendations for strengthening clinical education.

For nursing, Benner and her colleagues will examine the evolving professional goals, basic practices of teaching and learning, and assessment practices in the education of nurses. “How do we teach students to be with patients who are suffering?” asks Benner. “How is compassion learned?”

The study, which in part will examine how nurses learn professional ethics, comes against a backdrop of cynicism about all professions after
The social and behavioral sciences have been called

“the antibiotics of the 21st century”

the damage done by recent corporate accounting scandals. “We are looking for a way to blend scientific and social integrity,” says Benner.

The studies are exciting developments, but they also reveal that despite substantial progress many challenges remain in integrating the social and behavioral sciences into health professionals’ curriculum.

**Hurdles**

Evaluation is one such challenge. “Assessing student competencies in SBS doesn’t lend itself to multiple choice questions,” says Muller. Unfortunately, if questions don’t turn up on key standardized exams, such as the US Medical Licensing Exam, programs are less inclined to make changes and students are less focused on learning about SBS.

Still, Muller sees progress. The California Practice Exam (CPX), tests students on their interviewing and diagnostic skills, and now incorporates issues of cultural competence.

Faculty development is a second major concern. A January 2004 article in *Academic Medicine* (co-authored by Satterfield, Linda Minteness, Tervalon, and Adler) noted, “Joint faculty development and coauthoring of clinical teaching cases may facilitate a common language and understanding.” The IOM report also recommended a series of incentives to help faculty accommodate to the new content and new teaching methods.

A third issue is the structure of academic institutions. At a pure health sciences campus like UCSF there is no dean specifically assigned to SBS, so there are few protected SBS resources. The majority of SBS faculty members are grant-supported and receive no compensation for teaching.

At the same time, the fact that SBS faculty members work *inside* a health sciences campus facilitated the integration achieved in the School of Medicine’s curriculum. At a campus that has a separate arts and science faculty, healthcare departments often find it difficult to get faculty interested in teaching health professionals.

Finally, skepticism remains about the value of SBS in treatment settings and the validity of its science, despite the explosion of rigorous studies in recent years.

“My answer,” says Mutha, “is to frame this as a quality improvement issue. If there is a miscommunication between patient and provider about a drug therapy, that’s a serious patient safety concern that can have a huge effect on any organization.”

**The Future**

In her office, Jessica Muller has a quote from former School of Medicine Dean Haile Debas calling the social and behavioral sciences “the antibiotics of the 21st century.” If he was right, then even more dramatic change is on the way.

Yet Satterfield, who acknowledges the heightened energy and interest in these issues, says, “Because of the funding barriers – the NIH often puts SBS on the back burner – I fear we may have a backseat for some time to come.”

Adler agrees that might be the case for the short term. “But in the long run, given health care costs, we will have to turn to improving prevention and better understanding patient behaviors. Thankfully, the science to do that is getting more sophisticated, with the data more compelling,” she says.

As these trends converge, perhaps SBS will, finally, take its rightful place in the training of all healthcare professionals.