The evolution of teaching health promotion
An Interview with Wes Alles, Ph.D.

Wes Alles, Senior Research Scholar in Medicine and at the Prevention Research Center, has been the Director of Stanford’s Health Improvement Program since 1989. Alles came to the Stanford Center for Research in Disease Prevention from Penn State University, where he was a tenured Associate Professor and before that, Assistant Professor at the University of New Mexico. He co-teaches HumBio 126 Promoting Health Over the Life Course with Marcia Stefanick and together, these outstanding educators seem to have found a recipe for long-term HumBio success.

HumBio 126 was developed by Alles and Stefanick in response to the demand for undergraduate courses with a medical focus that addressed timely public and community health issues. In it, students are encouraged to look at health from an “inside-out perspective” beginning with the individual, then examining the health of the family, the community and ultimately the greater society in which the individual exists. For the first assignment, Alles explained during a recent interview, students are given the task of conducting a personal health appraisal to “get a better perspective on where they may be headed in terms of their long-term health outcomes”.

Wes Alles teaches Health Promotion in HumBio 126 with Marcia Stefanick

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Wes Alles, cont’d

Through this exercise, they begin to realize that the decisions they make at this stage in their lives will likely define the path that they follow with regard to their health in later life stages. They are then asked to develop a “personal wellness plan” which addresses each of the variables on a trajectory towards maximizing their own health and well-being. As an extension of this project, students are asked to assess a family member following the same guidelines and ultimately, to create a personal wellness plan for that individual. In this way, Alles observes, students begin to experience what it feels like to provide medical care using a holistic health model. As a culmination of these layers of understanding, students are asked to think about a specific need within a community (anything from obesity prevention to drug abuse interventions) and to develop a community initiative that would apply the principles they had been practicing on a larger scale – at the community level.

It’s easy to see why this class has remained so successful with HumBio students. Alles says that while the assignments have changed little, the research that comes out of them continually evolves along with the changing health priorities of the time. Another secret to their success most certainly has to do with a commitment to excellence demonstrated by these two professors. “Marcia and I try hard to make each succeeding class better than the last one.” Alles says. “We meet to discuss what worked and what didn’t and to critically re-evaluate each of the course components.” Ultimately, Alles believes that the students need to be inspired to invest themselves in the initiatives they develop on a very personal level. “Stanford students are incredibly smart,” he says, “but there’s a difference between performing well on a test and getting to a point where the student says: ‘I can see how this is going to be an important part of my life’s work.’ When I see students becoming committed in this way, it’s such a thrill.”

Marcia Stefanick, Ph.D

Professor of Medicine at the Stanford Prevention Research Center (SPRC) and Professor of Obstetrics and Gynecology, Stanford University School of Medicine.

Stefanick’s research focuses on chronic disease prevention in both women and men. Her work on the effects of menopausal hormones on cardiovascular and other health outcomes in mostly healthy post-menopausal women has been widely disseminated both nationally and internationally. She was also the principal investigator of two large diet trials focusing on the role of a low-fat eating pattern (including increased vegetables & fruits) on preventing breast cancer (WHI) and recurrence (Women’s Healthy Eating and Living, WHEL, trial) and she conducted several medium-sized diet, exercise, and weight control trials focused on heart disease risk and body composition that have influenced national guidelines. She is currently writing a proposal for a large national trial of physical activity in older women with cardiovascular outcomes, not just risk factors. Her current passion is the study of Sex (and Gender) Differences in Human Physiology and Disease, the title of a course she teaches in Stanford’s Human Biology program, in addition to a course entitled: Current Topics and Controversies in Women’s Health. Stefanick also plays major leadership roles in Stanford’s Cardiovascular Institutes Women’s Heart Health Program and Stanford Cancer Institutes Cancer Prevention and Control Program.

Stefanick obtained her B.A. in biology from the University of Pennsylvania, Philadelphia, PA (1974), then pursued her interest in hormone and sex difference research at the Oregon Regional Primate Research Center, after which she obtained her PhD in Physiology at Stanford University, focusing on reproductive physiology and neuroendocrinology with exercise physiology as a secondary focus. Her commitment to human research directed her to a post-doctoral fellowship in Cardiovascular Disease Prevention at SPRC, which has been her academic home for nearly 30 years.
Amy Showen:
Finding inspiration on the other side of the World...

Amy Showen graduated from HumBio in 2012. During her undergraduate career, she spent six months studying in South Africa. Below are her reflections on this life-changing experience.

By Amy Showen: The Farm is an exceptional place and leaving it for—well, the farthest city in the world—is no easy task. Yet my time spent abroad with the Bing Overseas Study Program in Cape Town, South Africa, left an indelible impression on me. Being a “Capetonian”, even if only for a short time, taught me things I would not have learned if I hadn’t taken this plunge.

Upon my arrival in South Africa, I was fascinated by the extremes of what I saw around me. During my first week, we explored many of Cape Town’s most beautiful places. We wandered through the romantic cobblestone streets of colorful Bo-Kaap, the historical (and culinary!) center of Cape Malay culture. We enjoyed the sun, sand, and sea (alongside penguins!) on the expansive beaches that border Cape Town’s spectacular peninsula. We wined and dined at the picturesque Groot Constantia, a vineyard estate dating back more than three centuries to the Dutch colonization of South Africa. We trekked to the top of Cape Town’s adventure sports playground, the iconic Table Mountain. Cape Town seemed to be a thriving metropolis, rivaling the celebrated European and American cities in its infrastructure, historical significance, and lively culture.

Then, a week later, we visited Cape Town’s townships for the first time, and I quickly realized that the scars of South Africa’s colonization and apartheid still run deep. The wealth of the elite suburbs contrasted starkly with the poverty of the townships around Cape Town, where the majority of the city’s residents live. In a country of immense civic activism, political affiliation remained largely typified, de facto, by race. At once, the “developed” aspects of South Africa were juxtaposed against the “underdeveloped.”

Fortunately, studying and living in Cape Town allowed me to discover that these extremes shape but do not define South Africa. From coursework and conversations with other students, I began to understand the historical basis for South Africa’s current challenges. My service-learning placement, at a child health and nutrition clinic, provided a crucial glimpse into how many South Africans imagine the future of their “rainbow nation.” I learned that there’s much in between rich and poor, black and white, good and bad; and left South Africa with a more nuanced understanding of how Capetonians themselves view their complex and dynamically changing society.

The most meaningful portion of my Cape Town experience was the community-based partnership research (CBPR) that I conducted with Women on Farms Project, which is an NGO that seeks to empower farmwomen in the Cape Winelands, and University of Cape Town’s Learning Network for Health and Human Rights. As a Human Biology major I had always been particularly interested in health disparities, and was thrilled when Women on Farms Project invited me to document farmwomen’s barriers to accessing healthcare, in order to guide development of a National Health Insurance system responsive to their needs. During our summer in the field, I was both humbled by the farmwomen’s willingness to share their stories with me and inspired by their determination to better their health care system and community. Thanks largely to HumBio’s generosity, I returned to South Africa in 2012 to present our findings at the People’s Health Assembly, after which the community incorporated our findings into a Call to Action to policymakers. The opportunity to engage in...
IN MEMORIAM - AUDREY BERNFIELD (1937-2012)

Audrey Bernfield died on November 3, 2012, at the age of 75 after a long battle with cancer. Audrey was an innovative force at several universities. At Stanford, she nurtured students in the Program in Human Biology and, in her role as Director of Undergraduate Advising, she encouraged students to discover the passions that would lead them to meaningful and satisfying careers. As Director of Enrichment Programs at Harvard Medical School, she developed programs that expanded medical students’ engagement in the world at large, and was the first non-physician elected president of the International Health Medical Education Consortium, now known as Global Health Education Consortium. She was a lifelong crusader for reproductive rights, starting as a counselor and eventually serving on the boards of several women’s health organizations, including Planned Parenthood of Boston. She also served on the boards of the Massachusetts Women’s Political Caucus; The Transition Network, an organization for professional women who are transitioning to retirement; New Georges, a New York City theatre company; and as President of the 1661 Foundation, which supports the development of young progressive leaders. Audrey earned a BA in Political Science from the University of Illinois and a Masters in Counseling Psychology from the University of Santa Clara. Her husband Merton R. Bernfield, M.D., died in 2002. Gifts in Audrey’s name may be made to the 1661 Foundation, a family foundation that supports the development of young leaders in reproductive rights and progressive causes, c/o Jim Bernfield, 90 Eighth Avenue, Suite 5B, Brooklyn, NY 11215. Listen to a recent interview with Audrey recorded in honor of the HumBio 40th in October 2011.
An Interview with Margaret Hayden:
Learning from and with her fellow students...

Can you tell us a bit about your background and how you chose HumBio as your major?
I’m from Brunswick, Maine, which is a small college town on the coast of southern Maine. When looking at colleges, I knew I wanted more diversity than what I had experienced in Maine. I wanted to go to a school where my peers would have all sorts of different backgrounds, where I could learn from them as well as with them. Stanford has more than fulfilled that desire. HumBio was actually also something that drew me to Stanford as a high school senior. I knew in high school that I was interested in health and medicine, but from an interdisciplinary perspective. As a high school student I remember reading about the HumBio Program and thinking how unique it sounded. I knew before coming to Stanford that I wanted to major in HumBio. I think the most interesting and relevant problems in society require perspectives from multiple disciplines, and HumBio is one of the few departments on campus that recognizes the importance and value of such an approach.

Can you tell us about your Area of Concentration and how you chose it?
My area of concentration is “The Art and Ethics of Patient Care.” I’m interested in the doctor-patient relationship and its moral significance - the way that relationship, outside of the scientific part of medicine, can provide care and help to alleviate suffering. I wrote in my proposal of study that I wanted to understand how to best address the concerns of my future patients - not only their diseases, but their broader concerns about what really matters in their lives. I see that as part of the art of care. I also wrote about how I wanted to develop a way of thinking on how to provide care when resources (both human and material) are limited, and human suffering occurs at unbelievable magnitudes. I’ve still got a lot of learning to do, but my area of concentration gave me the time to explore these aspects of medicine and care that might otherwise go unnoticed in the typical premedical curriculum.

How did this lead to your Honors research and your Rhodes Scholarship?
While beginning to take classes for my area of concentration, the ethical side of things really grabbed me and I decided to pursue honors in the Ethics and Society department, rather than in HumBio. My HumBio background still informs my work on my thesis, but I’m interested in different ways of thinking about and explaining mental illness - and the ways these theories relate to broader ideas about what it means to be human - ideas of intention, autonomy, and moral responsibility. I still need to work out the details of my argument, but I see myself defending the view that we need a more sophisticated explanation of mental illness, one that can admit and recognize illness and disease without sacrificing the moral worth or personal responsibility of the patient. I think having an interdisciplinary background - having grounding in biology and the social sciences from HumBio, but also these interests in ethics and philosophy, made me an appealing candidate during the Rhodes application process.

What are your plans/goals/dreams for the future?
I’m planning on studying for a two year masters degree in Medical Anthropology at Oxford. After that, I think, I want to earn a doctorate in anthropology (either continuing in the UK or returning to the states) and go to medical school. I must admit that amount of school still intimidates me a little bit, but I do see myself in the future as an anthropologist and a doctor. I wrote in my personal statement for the Rhodes that “I see myself as a physician-scholar; caring for patients while also pursuing a research agenda grounded in anthropological methods, exploring conceptualizations of health and illness, and constantly challenging the status quo presented by biomedicine. My scholarship will inform my patient care, and vice versa.” But I also know I want a life full of family and friends, so learning how to create some balance will be important to me. In any case, I am incredibly excited about this wonderful, wonderful opportunity. I can’t wait to see what the future holds.
HumBio is Proud to Announce Firestone Medal Winners for Undergraduate Research: Vanessa Dang, Amy Showen and Jacqueline To


Vanessa Dang (HB ’12) also wins the Donald M. Kennedy Award for her work: "Investigating the Mechanisms of Regression in Renal Carcinoma upon MYC Inactivation." Dean Felsher, Oncology, and Paul Fisher, Neurology.

Congratulations, Perri Smith (HB’14), winner of the American Diabetes Association Minority Undergraduate Research award which will support her research on gestational diabetes in Asian Americans, with PAMFRI’s Latha Palaniappan, M.D., M.S.

Congratulations Rhodes Winners Margaret Hayden and Rachel Kolb!
Margaret Hayden, (HB ‘13) a HumBio senior, and Rachel Kolb (HB minor, ’12), a current Masters candidate in English were named Rhodes Scholars-elect this year. Hayden and Kolb, both outstanding scholars, were deeply surprised that they were selected for this prestigious award. They advise future applicants not to rule themselves out and to apply even if they do not believe they have a chance. Both scholars-elect highlighted their high school teachers for their roles in the success. Hayden, whose honors thesis is on “The Ethical Implications of Biological Conceptions of Mental Illness and Personhood,” plans to study medical anthropology at Oxford, and Kolb, an avid equestrian, plans to study contemporary English literature and dreams of writing a novel in the future. Click here to read the full story.

Nathan Selden, M.D., Ph.D. (HB ’86)
Campagna Chair of Pediatric Neurosurgery and Professor in the Department of Neurological Surgery, has been awarded the Parker Palmer Courage to Teach Award from the Accreditation Council for Graduate Medical Education. The annual award recognizes 10 program directors nationally for excellence in teaching and mentoring. As a leader in neurosurgery, Dr. Selden is involved in the education of neurosurgeons in Oregon and across North America. His accomplishments are truly a model of professional commitment to medical education, and he deserves our admiration for the time and energy he has devoted to improving the education of future physicians and surgeons. Read more here.

Barbara Morgan (HB’73), one of the few Teacher Astronauts, was featured in Stanford’s Historical Society “Stanford Women in Space” co-sponsored by The Stanford Alumni Association and Stanford Continuing Studies. Barbara Morgan along with Eileen Collins, MX ’86, Ellen Ochoa, MS ’81, PhD ’85 discussed their experiences in space with moderator Scott Hubbard, Consulting Professor of Aeronautics and Astronautics. Morgan was one of the very few Teacher Astronauts to attempt and successfully complete a Shuttle journey after the ill-fated Challenger disaster that took the life of the initial Teacher Astronaut Christa McAuliffe.
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The Glove ‘better than steroids’
The temperature-regulation research of Stanford biologists H. Craig Heller, Lorry Lokey Business Wire Professor, and Dennis Grahn has led to a device that rapidly cools body temperature, greatly improves exercise recovery, and could help explain why muscles get tired. The rapid thermal exchange device, nicknamed ‘the glove,’ creates a vacuum to draw blood to the surface of the palms. Cold circulating water cools the blood, which returns to the heart and rapidly lowers the body’s core temperature.
For the full story in the Stanford Report (8/29/12) click here and watch Prof. Heller and The Glove on Youtube.

Accelerometers, gyrometers, helmets and concussions?
49ers fans – recognize this man? If you see too much of him on T.V., that’s not good for the players…. HumBio alum Daniel Garza, MD, (HB ’91), Assistant Professor of Orthopaedic Surgery and Surgery (Emergency Medicine) at the Stanford University Medical Center and 49ers’ medical director, teaches HB 139 Sports Medicine and HB 133, Human Physiology. Using special equipment, he measures the impact of blocks and tackles via pressure sensors worn by some of the players in their uniforms. The players also wear wireless transmitters, which send information about the force and location of hits to laptop computers on the sidelines. If Garza is on the field long enough for you to see him on the game broadcast, it means life is rough for the players. Read more here.

A HumBio Shout Out to Don Barr who was promoted in the Fall of 2012 to Professor (Teaching) in the Department of Pediatrics. Barr has been teaching health care policy courses in Human Biology since 1994. In addition to his recent promotion, Barr’s accomplishments include: winning the Undergraduate Teaching Award; Stanford University Phi Beta Kappa (2010); the Miriam Aaron Roland Prize, Haas Center for Public Service; Stanford University (2006); the Tall Tree Award – Professional of the Year; Palo Alto Chamber of Commerce (2006); the Human Relations Award, County of Santa Clara (2006); and the Lloyd W. Dinkelspiel Award for Distinctive Contribution to Undergraduate Education, Stanford University (2003).

HumBio welcomes John Lynham as the Visiting Lokey Professor for Spring 2013. Lynham is Assistant Professor in the Economics Department at the University of Hawaii in Manoa and will teach HB 111M: Marine Resource Economics and Conservation. This course covers the economic and ecological frameworks to understand the causes of and potential solutions to marine resource degradation. Lynham’s focus in this course is on conservation marine biodiversity and ecosystem-based management, including applications such as commercial and recreational fisheries, marine reserves and offshore energy production.
Last year, I began experimenting with some online course content for a class I'd been teaching in traditional lecture format for the past four years. I was in two minds. One part of me wanted to evolve, improve and keep up with changing times. Another feared I'd be giving up something I have always treasured: the magic of a good lecture. I was afraid of losing the incredible feeling, that I've experienced both as a student and as a teacher, of connecting with others through the effective exchange of knowledge and ideas. I admit it: I have a love-hate relationship with change. (I usually hate it at first and love it after it's happened.) In general, I'm afraid of trying to fix that which isn't broken... Not surprisingly, one “flipped-classroom” later, I've found that incorporating these new teaching techniques facilitates a new kind of magic by potentially broadening the scope of educational connections and facilitating even more effective face-to-face sessions. I am learning from my teaching – learning that perhaps, the best way to grow is to embrace change without leaving behind the valuable lessons of the past because ultimately, in the words of Heraclitus, “The only thing that is constant is change.”

Please send comments to: madam@stanford.edu

IN RETROSPECT

HumBio co-sponsors the Right Honorable Helen Clark talk

In November, Helen Clark, former Prime Minister of New Zealand and current United Nations Development Programme Administrator spoke to a full house at the Geo Corner (think HumBio Core!) about Climate Change & Poverty Alleviation. Listen to her interview on Stanford's Green Grid radio here.

The Stanford Historical Society celebrated Human Biology at 40 this past fall with founder/faculty panelists: Paul Ehrlich, Sandy Dornbusch, Shirley Feldman, Herant Katchadourian, Don Kennedy, Carol Boggs, Bing Director of Human Biology emerita moderated a lively discussion. If you missed this gathering of legendary Human Biology founders/