

THE Art OF Health Promotion

ideas for improving health outcomes

EDITOR'S DESK: THE VISION AND DIRECTION ISSUE

Larry Green was a graduate research assistant at UC Berkeley in the 1960s, and reaching his office sometimes required pushing through thousands of students gathered around Sproul Plaza to listen to activists like Mario Savio demanding greater freedom of speech. Savio was a fiery speaker and Green recalls how, when Savio needed to catch his breath, he'd yell "All of those who agree, raise your hands."¹

"I sensed the demagoguery influence of getting people publically to declare what they should think," said Green, "Getting people to avow those beliefs with a public showing of hands struck me as social influence that was probably more powerful than the ideology or opinion espoused." Green would go on to write his doctoral dissertation on "status identity theory" and from there, long story short, create a body of work that distinguishes him as the most preeminent scholar in the field of health education and health promotion.

In this issue of *The Art of Health Promotion* (TAHP) we explore the direction and vision of health promotion by polling the views of editors of this journal, a rich mix of professors, practitioners, and researchers. I can think of no better way to frame a discussion about vision than speaking first with whom I consider our field's most prescient visionary. In my interview with Dr. Larry Green, you'll see that although the context in which freedom of expression is discussed has changed since Green's formative years, the fundamental tension between individual autonomy and the cultural forces that shape health has stayed much the same. An accumulating string of Equal Employment Opportunity Commission lawsuits filed against employer wellness programs speaks to the continuing struggle between balancing autonomous motiva-

tion² with the systems and process improvement thinking that Green taught nearly all of us who were formally trained in health education.

Green chaired the committee that created a consensus definition for health education, and it included the words "any combination of learning experiences designed to support *voluntary* adaptations of behaviors..." As you will see from my poll of today's visionaries, terms like empowerment and social forces land side by side. In my view, no one has better depicted the vital interactions between individual, social, cultural and educational forces than Dr. Green and his collaborator Marshall Kreuter.

As various combinations are put in place that some believe strikes the right balance between these forces, and given such is fraught with both ideology and evidence, others are sure to disagree. Mario Savio exhorted disenchanted students: "When the operation of the machine becomes so odious ... you've got to make it stop ... unless you're free, the machine will be prevented from working at all."¹ Now, 50 years later, who decides where the line is between progressive policies and odious rules? "This has to slow down," said one lawyer relating to his opinion that the wellness incentives provisions of the Affordable Care Act make health screenings nonvoluntary and result in discriminatory cost shifting.³ My ardent hope is that a future leader of Larry Green's caliber is taking this all in and, like Green, offers us less fiery rhetoric and more substantive direction. Those who agree with me, raise your hands! ☺



Mario Savio, Political Activist
Public domain photo from <http://commons.wikimedia.org/>

References

1. Savio M. "Bodies on the gears" speech [video]. Available at: <https://www.youtube.com/watch?v=PhFvZRT7Ds0>. Accessed November 1, 2014.
2. Deci EL, Terry PE. An interview with Dr. Edward Deci: codeveloper of self-determination theory. *Am J Health Promot.* 2013;27(6):TAHP-2-TAHP-7.
3. Dan Cook. Employers fight back over wellness. Benefits Pro newsletter. Available at: http://www.benefitspro.com/2014/10/30/employers-fight-back-over-wellness-litigation?eNL=5452a4de150ba0241255c754&utm_source=BenefitsProDaily&utm_medium=eNL&utm_campaign=BenefitsPro_eNLs&_LID=170215119&page=2. Accessed November 1, 2014.

In This Issue

Editor's Desk: The Vision and Direction Issue <i>Paul E. Terry, PhD</i>	1
"What's Past is Prologue": Views From Dr. Lawrence Green <i>Lawrence W. Green, DrPH and Paul E. Terry, PhD</i>	2
Purpose, Core Values, and Vision for Health Promotion <i>Paul E. Terry, PhD and the Editors of the American Journal of Health Promotion</i>	9
When Visionary Influences and Professional Tenets Are Inseparable <i>Paul E. Terry, PhD</i>	11

Paul E. Terry, PhD
Editor, *The Art of Health Promotion*
Chief Science Officer, StayWell.

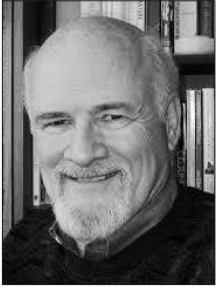
Blog your ideas and reactions at:
<http://www.healthpromotionjournal.com/blog/>

Follow me on Twitter at: <https://twitter.com/pauleterry>



“WHAT’S PAST IS PROLOGUE”: VIEWS FROM DR. LAWRENCE GREEN

Lawrence W. Green, DrPH and Paul E. Terry, PhD



I am proud to begin this vision issue with an interview with Dr. Lawrence Green, who even in “pseudoretirement” is a professor and prolific science scholar. Green is also cocreator of the PRECEDE/PROCEED planning framework, and I focused on the genesis of this health promotion planning framework because, as Shakespeare wrote: “What’s past is prologue.” As you will see in the “Purpose, Core Values and Vision for Health Promotion” article

that follows this interview, I summarize opinions from 25 experts about future directions for the field of health promotion. What I found remarkable about their wishes and prognostications was the level of fidelity our field holds for the precept that improving health requires concomitant plans for changing the social environment while supporting individuals in behavior change.

Green and Kreuter’s PRECEDE/PROCEED framework remains the seminal embodiment of that concept that social and behavioral influences are keenly interrelated. *PRECEDE* is an “educational diagnosis” meaning Predisposing, Reinforcing and Enabling Constructs in Educational Diagnosis and Evaluation. *PROCEED* is an “ecological diagnosis” meaning Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development.

In act 2 of Shakespeare’s *The Tempest*, the character Antonia suggests that if we want to understand our destiny, we need only examine what has led us to where we are now. And, I would add, who has led us here. No one has had greater fluency, ingenuity, and devotion than Larry Green in setting the dramatic stage in which the art and science of health promotion will play out its next act.

Paul Terry: In this issue of *The Art of Health Promotion*, I will be fielding vision statements from leaders in this field so I thought it fitting to first collect some thoughts from someone who I and countless others consider our field’s greatest visionary. Because the PRECEDE framework has become such a time-honored heuristic for the field of health promotion, I hope to offer our readers both a historical and an autobiographical perspective on what led up to it. As you will see as this interview unfolds, I’d like to explore what from the past is still informing what needs to happen next in the evolution of the health promotion discipline. But first, our readers likely share my interest in a personal question. When I saw you last, you seemed to be threatening more wholeheartedly than usual the idea that your retirement awaits. But your wife was giving me that “I’ll believe it when I see it” look.

Lawrence (Larry) Green: Yes, and she continues to do that good-naturedly. But I’m somewhere now between pseudoretirement and semiretirement. I’ve definitely cut down on my hours at the university and am making more time to do things at home that are not strictly work related. And my wife and I love traveling together when we can.

I’ve heard it said that one way to get a good glimpse at influential events is not to attempt a chronological rendition but rather

to just pick a point in time. So my questions are intended to have us stay focused early in your career for a while and see whether, as we broaden from that point in time, we can connect the elements that led to your vision for this field. Let’s go mentally back to when you were writing your *Health Program Planning* book. It was first published in 1979 and evolved to its fourth edition in 2005. Can you reflect on your influencers at that time? What was going on the field that prompted you to write that book?

I first launched the model inauspiciously with an article I published in 1974, not expecting it to become a book. And, as evidence of what was influencing me, the article was entitled “Toward Cost-Benefit Evaluations of Health Education.” It was toward the end of my assistant professorship and I was about to be promoted to associate professor at Johns Hopkins. This was even before the term *health promotion* was being used. What was really influencing me most was how economists were making judgments about the relative value and worth of different interventions on the basis of their cost-effectiveness or cost-benefit potential.

So I set about to lay out a framework, which later came to be known by the acronym PRECEDE, that would allow us to trace the determinants and the outcomes related to health and education in economic terms.

Why be concerned about the economics of health education rather than other merits?

What got me to that point, I think, was working for 2 years in Bangladesh in family planning and seeing the dramatic contrast between Western and developing countries in what people considered were the real determinants of health. I spent 10 years as a student, including 2 years as a faculty member, at Berkeley during the 1960s. It was a period when Berkeley was best known for its upheaval and the free speech movement. There were also all the protests against the Vietnam War. So during this developmental period in my life, I was in the midst of tremendous questioning of societal values. One of the questions behind all this was how we spend our money as a society.

And so I think all of these things converged, Paul, on a notion I had that health education was one of the strategies that could help reconcile some of these competing notions. I suppose it is a rather grand landscape on which to place myself as I was developing the model. But it was these competing interests and approaches that were behind our search for understanding. Like many around me, I was deciding what was important and what was worth supporting and looking for ways to influence what needs to happen to help our country and for our country to help the world.

Both the economic questions and value proposition for health education are telling in that these are still being debated. Was the challenge in answering such questions related to whether or not health education worked in improving health? I too recall real skepticism early in my career, especially among physicians, about whether patient education had any role to play in whether or not patients were going to get better.

Some Key Positions Held by Dr. Lawrence Green

- Assistant Dean; Founding Head, Division of Health Education; Assistant Professor to Full Professor of Health Services Administration, Population Dynamics, and Behavioral Sciences, School of Public Health, The Johns Hopkins University.
- Director, U.S. Office of Health Information, Health Promotion, Physical Fitness and Sports Medicine, in the DHHS Office of the Assistant Secretary of Health.
- Director, Center for Health Promotion Research and Development (a World Health Organization Collaborating Center), University of Texas Health Science Center at Houston; Professor, Department of Family Practice and Community Medicine, Medical School; Professor of Behavioral Sciences, School of Public Health, Houston, Texas.
- Vice President, Henry J. Kaiser Family Foundation; Director of the Health Promotion Programs.
- Director, Institute of Health Promotion Research, Faculty of Graduate Studies; Professor and Head, Division of Preventive Medicine and Health Promotion, Department of Health Care and Epidemiology, Faculty of Medicine, University of British Columbia, Vancouver, British Columbia, Canada.
- Director, Office of Science & Extramural Research; Associate Director for Prevention Research and Academic Partnerships, Public Health Practice Program Office, Distinguished Fellow/Visiting Scientist, Centers for Disease Control and Prevention, Atlanta, Georgia.
- Professor, Department of Epidemiology & Biostatistics, School of Medicine & Helen Diller Comprehensive Cancer Center & Center for Tobacco Research & Education, University of California at San Francisco.

Yes, there was very little that we could lean on as solid evidence, and that's where going to Johns Hopkins from Berkeley gave me the opportunity to immerse myself more in the medical care side of the equation. At Berkeley I was primarily schooled in community development, community organization, and community engagement, whereas at Hopkins there was this push for rationalizing the role of patient education in the context of medical care. My first study there was on asthma, and we were able to demonstrate how a patient education intervention could reduce subsequent visits to the emergency room by approximately 50% over an 18-week period.

Do you recall any ambivalence or conflict around moving from a community planner to someone researching outcomes related to individual patients?

I didn't experience any conflict in Baltimore, because that's where everybody in public health at Johns Hopkins seemed to be focused. Whereas when I went back to visit my friends or give a lecture at Berkeley, they were very suspicious of what had become of the wandering prodigal son.

Was that geographic variation, or political ideology, or was it just cultural or professional academic differences?

I think it was all three but particularly the cultural differences between Berkeley and Johns Hopkins as schools of public health at that time.

Well, that's such an interesting backdrop because PRECEDE obviously deals with both individual and societal influences. It is such a brilliant model in the way it weaves social determinants with policy enablers and accounts for behaviors, values, and beliefs. How much did the concepts you introduced in the articles change before you wrote the book? How were these experiences you were having as you moved around informing the planning model?

The article was published in what was then called *Health Education Monographs*, later *Health Education Quarterly*, now *Health Education & Behavior*. And that 1974 cost-benefit analysis article did present the first rendition of the PRECEDE model. I can't say that there are any real differences between that rendition and what came out in the first edition of the book in 1980. I was teaching from the model for 7 years or so because I had framed the whole health education graduate degree program at Hopkins around the model.

I had something to hang each lesson on as to how the model fit with the larger picture of health and what students were going to have to do to change health education practice when they graduated. And, again, that was influenced by certain philosophical underpinnings from my work in Bangladesh, and by my graduate studies in Berkeley in the 1960s where we were reading Saul Alinsky, among others, who many regard as the father of a radical brand of community organizing, and following our professor Dorothy Nyswander, who insisted in the Alinsky tradition that you need to "start where the people are." Dorothy Nyswander was one of the mothers of health education in schools in public health.

Nyswander taught that you don't start with communication or community organizational methods, but rather start with an analysis of what the population wants or needs. And there were



plenty of psychological theories about wants and needs from my professors like Nyswander and William Griffiths, who were both psychologists. So psychological theory tended to dominate my thinking and influence the early research that I did and the articles that I leaned on.

And what's the connection between those community organizing influences and your immersion into theories of psychology and individual behavior?

Dorothy Bird Nyswander. The Mother of Health Education. En.wikipedia/public domain. http://en.wikipedia.org/wiki/Dorothy_Nyswander. Accessed November 1, 2014.

I've written recently about how schools of public health got hijacked in a way. They were, I think, misdirected in how they built up the social

sciences mainly by hiring psychologists rather than sociologists or anthropologists. We leaned too heavily on psychological theories related to individual wants and needs and what determines those at the intrapersonal level, so we didn't really develop much of a public health science of sociological influences. Len Syme and Beryl Roberts came to our rescue at Berkeley. Another thing that worried me as a student was that we were being told about methods of intervention, communication methods, organizational methods, and community organization in particular, but we weren't being told how to decide which of these methods to use on which problems. What emerged was health education students, trained over several decades, going into the field and using whichever method they felt most skilled or comfortable with.

“When we have assessed social needs or quality of life we can work backwards from there to assess how health problems might be contributing to those social needs.”

So the PRECEDE model became an antidote to that tendency and an approach to planning that started with deciding on the right methods. I offered PRECEDE as the alternative: start with a needs assessment, and use a needs assessment at the level of social needs rather than health needs. And when we have assessed social needs or quality of life we can work backwards from there to assess how health problems might be contributing to those social needs. And from there we can determine what behavioral and environmental problems or issues might be contributing to the health problems and so forth as we work backwards through the causal chain.

There was one paper in particular, a monograph by Ronald Anderson, that most influenced the initial PRECEDE model. He was a sociologist then at the University of Chicago, now he's at the UCLA School of Public Health in a sort of semiretired phase also. His model was on social influences on health and he's the one who coined the terms *predisposing* and *enabling*. His third influence was *need*; I thought that need is what resulted from the health problem more than influenced it.

I replaced need with reinforcing factors because this was a point in time when the kinds of needs that we were dealing with increasingly were behaviors that had to be sustained over time. And so reinforcement, I decided, was probably our biggest challenge for the years ahead with respect to controlling chronic disease.

Such were decisions that held up superbly in research that followed. As you recall your time developing the framework, was it incremental and iterative or did you sit down one day and crank it out? I'm asking, in part, as it informs our findings on the “vision and direction” article that follows this interview.

Well, I think it was incremental. I had insights from the asthma and hypertension studies we carried out in patient and family education in the outpatient clinics at Johns Hopkins. As we designed the interventions we leaned back on the theory and the research

that would guide the interventions. We considered the predisposing, enabling, and reinforcing factors that needed to change, and I would reflect on what we were learning and tweak things in the model before it was published as a textbook. I was still a pretty “green” Green, surrounded by students and faculty, most of whom were older than I, bringing a wide range of experiences in fields of medicine, nursing, and health promotion application. This was then called the Johns Hopkins University School of Hygiene and Public Health; it's now the Bloomberg School of Public Health. This challenged me to make my representation of the model relevant to wider applications than my own experience held.

Marshall Kreuter joined us in 1978 as a midcareer postdoctoral fellow by way of an NIH [National Institutes of Health] fellowship. He had been a full professor at the University of Utah and, as someone who had devoted more of his time to teaching than to research, he convinced me that the model represented an important teaching tool. We joined with other faculty to develop the textbook about how to use the model in planning and evaluation.

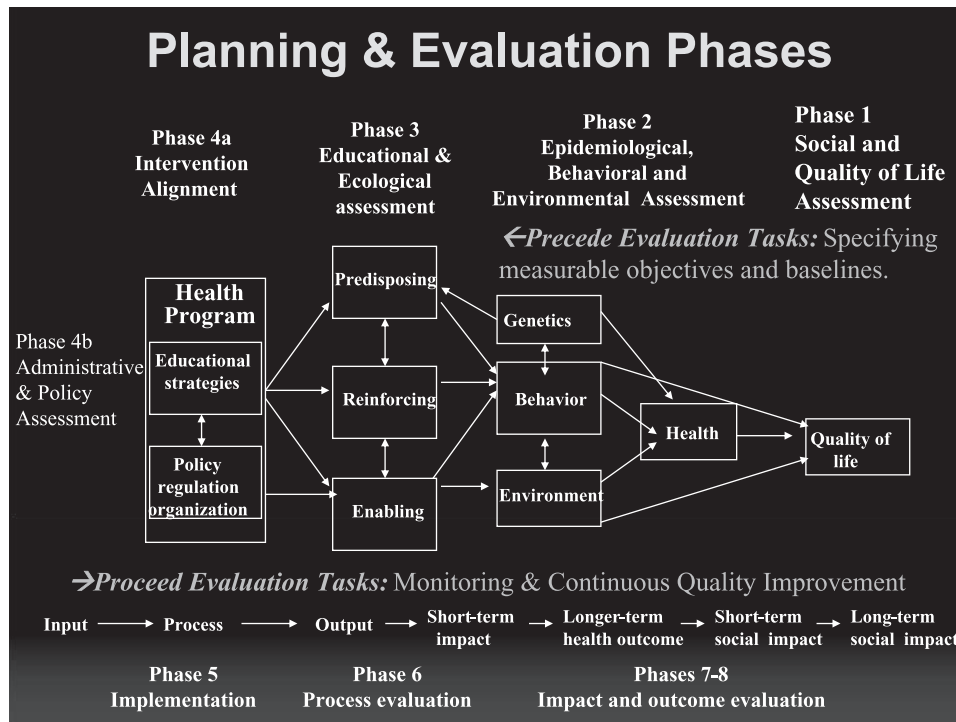
Indulge me and describe your physical surroundings as you drafted the seminal textbook for the health promotion field.

You know, to be honest, most of the more memorable time was at my home with one of my daughters bouncing on one knee as I wrote chapters by hand on notepads on the other knee, and only later got them organized onto typewriters. I needed to read a lot but my children were very young and I wanted to play with them before they went to sleep so it was a mixture of play and work. And at the office I was surrounded by students and my collaborators dropping in. Then I'd need to rush off to give a lecture for a large class of medical students and nurses. I used my preparation for the lectures as an opportunity to develop some of the ideas more didactically for the classroom and ultimately for the book.

So you're a new dad with young kids and your students, who had more years of training than you had, are coming and going. Any particular attitudes you recall having about the profession and the evolution of the field at the time?

Yes. One feeling I remember recurring over the 10 years at Hopkins, but most particularly during the early years, was that I felt that I had an advantage over a lot of other health educators in academia because of having spent 2 years in Bangladesh. Plus I had put in some time in a local health department as well as the state health department and some time in a federal agency as a salaried trainee who had responsibilities to develop programs. Most of the professors at other schools of public health and departments of health education were people who had gone straight from their doctoral degrees into academic positions. So I was trying to make sure that what I did with my research had immediate relevance to practitioners. I devoted a lot of time to understanding what practitioners needed and what mistake they were making in the way they were going about the practice.

“If we want more evidence-based practice, we need more practice-based evidence.” It's the moniker on one of your Web sites



(<http://www.lgreen.net/authors/lwgreen.htm>) and, per your CV, it's a presentation you've given worldwide and more than any other.

Well, it will probably be on my tombstone. I came up with that phrase while I was at the CDC [Centers for Disease Control and Prevention] heading the Office of Science and Extramural Research. And what I was trying to do there was to make the research that CDC funded fundamentally distinct and of added value to that which NIH was producing, given they had much larger budgets. And the thing that keeps me going, and not relaxing more, is the sense that we're on the cusp of really getting NIH to make a substantial commitment of support to translational research, which is what they prefer to call it. That is, how do we take the findings from more basic applied research and put it in the field and test its relevance and applicability to different settings?

As I think about the 1960s decade influences that informed your vision, some of it feels "back to the future." Worries about Russia, hostages, terrorism, and individual freedoms were as top-of-mind then as now. So let me press further still on what influenced the development of PRECEDE. What else served as a backdrop for how it then became so popular in training future leaders for the field?

Well, much as I probably tried to avoid them, the protests at Berkeley were all around me and going on constantly. The movement had one somewhat perverse influence in me. Even though I shared their disagreement with the policies against which they were protesting, I bridled against some of the demagoguery of their methods of protest. I was a research assistant during many of those years and I had an office at one end of campus and I lived at the other end so I constantly had to work

my way through the crowds. As I crossed Sproul Plaza, I would pause and listen to Mario Savio giving one of his speeches. He would come to a point where he needed to catch his breath so he would ask, "All of those who agree, raise your hands." I'd look around and I noticed how this demagoguery really influenced people. He was telling people what they should think and then getting them to avow those beliefs with a public showing of hands. Who dared not raise their hand? It struck me that social influences on beliefs were more powerful than the specific ideology or argument that people thought were the fundamental grounding of beliefs.

So I wrote my dissertation on a status identity theory that I developed and researched to explain the preventive health behavior of mothers of young children. And, as I rewind the historical sociopolitical context of the Vietnam War and the free speech movement, it showed me how the way people developed and incorporated their beliefs during that time led me to a more critical examination of the literature about the role of social influences on health beliefs and health behavior.

I'm still committed to find ways to get more of that influence into our literature. For example, the article about hijacking I mentioned. I took issue with the schools of public health having invested so heavily in psychologists as their main source of behavioral sciences rather than sociologists and anthropologists because it meant that schools of public health devoted most of the first 20 years of their teaching of behavioral sciences (1960s to 1980s) on health beliefs and health behavior rather than on social-environmental influences on health behavior.

Very interesting, given how many of the experts I query about a vision for the field proclaim that we still come up short in health

equity because of environmental and social barriers. Your first book represented a major milestone in a field trying to rationalize health promotion as a discipline. What other key milestones happened to create a vision for the field at a time when health promotion was a new idea and the word wellness had only just arrived?

Because I was in Baltimore when working on the *Health Program Planning* model, I was near Washington, D.C., and was often being called on to consult with federal agencies and congressmen. I got involved with Senator Kennedy, who led the charge on the development of the Health Promotion Act, which was passed in 1975. It started out as the Health Education Act, but Kennedy and other members of Congress wisely concluded that if it had the term “health education” in it, it was probably destined to be referred to an education committee and would stand little chance of survival there because education had a lot of other higher priorities than health. So they changed the name to the Health Information And Health Promotion Act. And it then got referred to a health committee. That was the first real volley fired in the use of the term *health promotion*, which then led to the creation of the Office of Health Information and Health Promotion. I was hired as the first director of that office in 1979, on leave from Johns Hopkins.

Another key milestone was the creation of the Office of Disease Prevention and Health Promotion under the Assistant Secretary of Health, which also encompassed the Office of Health Information. As the first director of the office, I worked for Mike McGinnis, then Deputy Assistant Secretary for Disease Prevention and Health Promotion, in the launch of the first Surgeon General’s Report on Health Promotion and Disease Prevention—the “Healthy People” Report—and the first decennial Health Objectives for the Nation for 1990 (<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001462.htm>). These gave “health promotion” social-behavioral determinants one-third of the action, or about one-third of the objectives, with another third on “health protection” or environmental determinants, and a third on health services and medical care.

Most people point to the 1986 Ottawa Charter as the first major turning point in encompassing and expanding health education under this broader umbrella of health promotion. But I’m convinced that most of these political and organizational initiatives in the U.S. predated the Ottawa Charter by more than 10 years with the “Health Information and Health Promotion Act of 1975,” and with the earlier teaching of health education based on community organization and community development models.

Once a vision for health promotion was underway in the U.S., were there any explicit events that tied your work with Kennedy and Congress to the Ottawa Charter?

After the act was passed in the U.S. and the Office of Health Information and Health Promotion was established, Canada was beginning to develop a national health behavior survey and we were developing one in Washington in the late ’70s so we met in

Ottawa to see if we could get agreement on some common measures, indicators, or uses so that we would have comparability across the borders. Irving Rootman was the head of the health promotion survey in Canada at that point and I was head of our federal unit so we gathered some staff from our national centers for statistics and the people who would be responsible for the surveys and got some agreement on the measurement of health promotion indicators.

Canada hosted the 1986 Ottawa Charter gathering, which was the first international conference on health promotion, but WHO [World Health Organization] was the sponsor. Ilona Kickbusch was the one who really led the charge in drafting and forging the Ottawa Charter.

Another visionary whose ideas were gaining attention during the 1970s was Halbert Dunn. His book *High Level Wellness* also created inertia for the field of wellness.

Yes. I was actually very fascinated with his work even before I got to the government in 1979, but especially while I was in the federal government, because for one thing he had the credibility of having worked for the U.S. Office of Vital Statistics. I used him as a touchstone and referred to his concepts as I was trying

to defend some of the parallel issues in health promotion, including using his term *high-level wellness*. Although wellness was not a term that most people in government were comfortable with, I was able to make some headway with those notions. Dunn was a big influence on me when I was developing the PRECEDE model and putting a social diagnosis or a quality-of-life diagnosis at the beginning of the model before you do the epidemiological diagnosis of the health problem. We need to know what people want and need from their broader life perspective without starting with the health question.

And I also hear echoes of Nyswander?

Yes, exactly. Their ideas offered a real convergence for my planning concepts.

I have an interview with Dr. Donald Ardell in queue for this section of the journal. He brought Dunn’s ideas to the masses given what a prolific writer and wellness champion he became. And, like you, he’s an abject failure in retirement. But really an abnormal success as it relates to his astounding fitness and continued productivity.

Yes. I was following Don. I subscribed to his wellness newsletter and I met him at conferences, most memorably at the National Wellness Institute’s conference in Stevens Point, Wisconsin. We corresponded occasionally and I tried to incorporate some of his thoughts in my reflections on health promotion as I went along. But I have to say, Paul, and you probably had dealt with this perceptual struggle too, that the people who were promoting a wellness approach to health promotion were having dif-

“Well, that phrase, ‘If we want more evidence-based practice, we need more practice-based evidence,’ will probably be on my tombstone.”

“With the Ottawa Charter, the health promotion community has initiated the third public health revolution and heralded a new public health, which considers health ‘a resource for living,’ places it firmly within the context of everyday life and has empowerment at its very core.”

—Dr. Ilona Kickbusch, <http://www.ilonakickbusch.com/kickbusch/health-promotion/index.php>



ficulty getting traction with the official federal agencies. I always felt an affinity but also had to exercise some caution in using the term wellness.

Same for me, when I was in training in the late 1970s wellness had a fluffy, nonscientific connotation. Don can be quite a gadfly and sometimes harkens Savio’s “raise your hands if you believe” approach.

Yes. I think there was some element of that. And like Savio, he was a very bright guy with enthusiastic followers. I really enjoyed reading his stuff and for many he’s a wellness hero. Maybe I just didn’t articulate wellness well enough because as much as I was able early to use some of Halbert Dunn’s concepts, I didn’t get much traction in using the term wellness. The ideas were more readily embraced by industry with the development of health promotion programs in worksites and you and others really were able to run with that very effectively, which, in some ways, took the pressure off me in my work in government. Even though I was more on the fringe of the wellness movement I was able to put some emphasis on worksite health promotion. I helped with Rebecca Parkinson’s book on workplace wellness.¹ I later met Michael O’Donnell and contributed to the first edition of his book on worksite wellness.²

The vision for the field changes depending on the lens you look through. Having spoken often at all the conferences, you’ve seen the revival like atmosphere of the National Wellness Institute compared to, say, the more staid academic approach of the American Public Health Association. And, of course, you’ve been generous contributing to this Journal’s The Art and Science of Health Promotion conference and many academic health centers. How have these different lenses affected your vision?

The health promotion conference that Michael O’Donnell has held now for 25 years has been a kind of a rallying point. Not quite as evangelical perhaps as the Sproul Plaza experience I reflected on at Berkeley, but certainly with an element of that kind of religious fervor. He’s got a loyal entourage that supports him and I’m among them and I respond whenever called upon. Michael has done a terrific job, with your help and many others, in putting a more scientific stamp on the whole framework and I applaud it. He’s defined health promotion in his own way and has gained considerable consensus for his definition.

A Venn diagram with several circles comes to my mind as I think of the overlaps between the conferences and the academic centers that I want to encourage and to have continued communication and interactions. The American Public Health Association is the central circle for me as I was trained in the school of public health with its epidemiologists, biostatisticians,

and environmental health and public health nursing experts. I see the wellness dimension of health promotion is one of the circles that works off of that central circle and health education is another, because my major professional touchstone continues to be the Society for Public Health Education. These circles all interrelate and people ought to lay the emphasis on their careers in different ways, and these organizations give them an outlet to do so. My initial degrees were in public health education so I continue to honor those roots.

In your book *Health Promotion Planning*, you also published a definition of that health education that I committed to memory and have used often. It came out of a WHO consensus panel you led in 1998. The original definition was that programs should be “designed to facilitate behaviors conducive to health.” My recollection is that you got pushback from the public health community, who thought it too individual centric, and you later changed it from “behaviors” conducive to health to “actions” conducive to health. Do I have the history correct and, if so, was the vision at the time moving from individual to community action?

Yes, and those changes happened over the series of four editions of the book because as the terrain was changing we needed to change the focus to keep up with a changing vision. And, in some cases, we hoped to lead it. But yes, I think you’ve found one particular change of words that is a very good example of how we always thought of behavior as social behavior and the behavior of populations, and the word “actions” encompass that more visibly as well as the need to give more space to capturing changes in policy and organizational actions.

Changing policies can be controversial. At one juncture in your career you personally became a case in point that policy action and individual actions can get mired in political and ideological differences.

Well, yes, a major contribution of the World Health Organization to the emergence of health promotion in the early 2000s was the leadership from Geneva on global tobacco control and their convening of the Framework Convention on Tobacco Control to develop an international treaty on it. I was heading the Office of Smoking and Health at CDC at that time and was asked by the Clinton administration to represent CDC on the U.S. delegation to the negotiations in Geneva. During the first round of negotiations, we put forward before a set of relatively progressive U.S. positions on the many dimensions of tobacco control. Then President George W. Bush was elected shortly before the second round of negotiations. Our delegation dutifully went to Geneva, but with some uncertainty about where the White House stood

on the positions we had put forth at the previous meeting. We arrived in our hotel to a barrage of cables from Washington instructing us to reverse many of our positions. I felt sufficiently humiliated by the stances we were now told to take that I pleaded with the chair of the U.S. delegation to let me leave Geneva a day early. I returned to Atlanta and told the director of my center at CDC that I would resign my position with the Office on Smoking and Health so that someone in a less conflicted position with the White House could represent CDC in this seat on the U.S. delegation.

Even though your vision has long been of a field that encompasses social, not just individual, behavior, we're still not aligning that theory with practice. You know about Dr. Shelley Golden's excellent research on where the field has been because she and her coauthor Dr. Jo Anne Earp won the Lawrence W. Green Paper of the Year Award for "Social Ecological Approaches to Individuals and Their Contexts: Twenty Years of Health Education and Behavior Health Promotion Interventions," which was published in the journal *Health Education & Behavior*. They did a systematic review of over 150 research papers and found that most interventions focus on individuals rather than institutions or policies. Why the chasm?

The first reason for the gap is that most of research they reviewed is funded by NIH, which has criteria for peer review that drives the focus to the individual level. It's a reductionist model that persists because of their roots in biological and biomedical sciences. To get funding for a significantly robust study you're most likely to have been funded by NIH. And to get funded by NIH, you need to have criterion variables of impact that are measurable at the individual level. That keeps driving the researchers, however interested they may be in community level or multilevel interventions, toward individual measurements. That's also what gets published, because editors are imbued with the same criteria and the same demand for randomized controlled trials, which usually require sufficient n's randomizing individuals rather than organizations or communities. That's what drove me to coin that phrase about practice based research when I was director of science and extramural research at CDC.

There is going to be a special issue of *Health Education & Behavior* that Jo Anne Earp and Lisa Lieberman are coediting that builds on Golden's review. I'm coauthor of a paper in that issue that traces two great public health promotion success stories that played a big role in tobacco control and automobile injury control. We know public health research, epidemiological research, and social epidemiological research on tobacco control and on injury control have been able to leverage successes at the local level. These studies demonstrate what can be accomplished with state laws and federal laws that have denormalized driving poorly, driving under the influence of alcohol, or driving without seat restraints. We also have demonstrated this in relation to tobacco use in public places. So I think a case can be made that is more reassuring than Golden and Earp's review. And, you know, we can point the finger at NIH but in fact we are the peer reviewers so we should also look at our own behavior. ☺

Select Short List of Honors Bestowed on Larry Green

- Tribute of friends and donors, establishing the Lawrence W. Green Scholarship Award at the School of Public Health, University of California at Berkeley.
- Doyen Jacques Periset Medal (for body of writing on research and practice), International Union for Health Promotion and Education (Paris).
- Alumnus of the Year Award, University of California School of Public Health, Berkeley.
- American Public Health Association Award for Excellence.
- University of Newcastle Vice Chancellor's Best Practices Research Scholar Award, Faculty of Medicine.
- John P. McGovern Award, University of Texas Health Sciences Center at Houston.
- Health Promotion and Education Advocacy Award, Centers for Disease Control and the Association of State and Territorial Directors of Health Promotion and Public Health Education.
- Healthtrac (Fries) Foundation Public Health Education Prize.
- Elected Fellow and Recipient of First Scholar Laureate Award, American Academy of Health Behavior
- Special Service Award, Centers for Disease Control and Prevention, for "outstanding leadership as Acting Director of the Office on Smoking and Health."
- Health Education Hall of Fame Award, Philadelphia.
- Honorario Presidente, Fundacion para Educacion de Salud, Madrid, Spain.
- Tribute of Society for Public Health Education, naming the award for the annual best paper in the journal *Health Education & Behavior* the Lawrence W. Green Award, from November 2004.
- Mayhew Derryberry Award for Behavioral and Social Science Contributions to Health Education, American Public Health Association Public Health Education and Health Promotion Section.
- Honorary Doctor of Science degree conferred by University of Waterloo, Ontario, Canada.
- Elected to the Institute of Medicine, National Academies.

Lawrence W. Green is Professor, Department of Epidemiology & Biostatistics, School of Medicine & Helen Diller Comprehensive Cancer Center & Center for Tobacco Research & Education at the University of California at San Francisco

References

1. Parkinson RS. *Managing Health Promotion in the Workplace: Guidelines for Implementation and Evaluation*. Palo Alto, Calif: Mayfield Publishing Co; 1982.
2. O'Donnell MP. *Health Promotion in the Workplace*. New York, NY: John Wiley and Sons; 1984.

PURPOSE, CORE VALUES, AND VISION FOR HEALTH PROMOTION



Paul E. Terry, PhD and the Editors From the American Journal of Health Promotion

According to Lewis Carroll, “If you don’t know where you’re going, any road will get you there.” It is said that Queen Victoria so loved Carroll’s *Alice in Wonderland* tale that she asked that he dedicate his next book to her. She was surprised to receive a scholarly book on mathematics. As you will see in my interview with Dr. Larry Green in this issue of *The Art of Health Promotion*, creating a vision for health promotion was mostly derived from disciplined and quantitative science, but oftentimes it was also fanciful and serendipitous. For this article I invited the editors from this journal to reflect on their vision for the field of health promotion. Twenty-five experts shared their ideas anonymously. Collectively, they represent backgrounds in academe, health promotion practice, and research.

When I wanted to feature a best case of creative visioning for our field, I turned to Dr. Green as an exemplary leader who transposed his ideas for the field of health promotion into a cohesive planning framework. To guide the process of asking other leaders in the field for their visions for health promotion, I turned to a framework developed by Jim Collins, one of the county’s most successful business scholars, who is also a prolific writer and speaker. On his Web site, Collins suggests his framework is best used in conjunction with his book *Built to Last: Successful Habits of Visionary Companies*.

I sent this journal’s editors the vision exercises that Collins makes publicly available on his Web site (see: <http://www.jimcollins.com/tools/vision-framework.pdf>). His exercises start with expressions of core values, then move to opinions about core purpose and, finally, ask about big audacious goals. Much of Collins’ work is with companies or organizations, but for this exercise, I modified his questions to relate to the values, purpose, and vision for the field of health promotion. The following are the three questions to which this journal’s editors responded. I provide some observations after each question about where these visionaries come together and reflect on those ideas that stand apart.

Question One:

What core values should guide the health promotion profession? Write words or phrases that capture our purpose, something you’re professionally committed to, values that inspire and that are true ideals. (There is a “test” of your core values in the Collin’s framework.)

Editor’s comment: As is apparent from the “wordItOut” word cloud below that I created from our experts’ opinions, the health promotion profession holds evidence and evidence-based approaches to health promotion to be a core value. At the same time ethics, justice, and fairness are also guiding our work. And it stands to reason that the word integrity is repeated often because, in the context of this exercise, it means that we are a profession that knows what we stand for and we stay true to our values.

- Social justice, kindness, transformation
- Health equality. Empowerment. Participation.
- Improve health and quality of life, reduce health inequalities, and reduce health care costs including indirect costs.
- The implementation of evidence-based health promotion approaches to benefit the overall mental, cognitive, social, and

physical health and well-being of all population groups.

- Evidence trumps assumption. Communities of all kinds (professional, nonprofessional, identity defined, geographically defined) possess knowledge and expertise essential to the success of health promotion.
- Adding years to life and adding life to years. A family and community focus; no one is an island. Share personal and public responsibility; empowerment for all.
- Fairness, integrity, honesty, concern for others, belief in the possibilities of the human spirit, and collectiveness.
- Equity and justice.
- Social, justice, excellence, Pono (putting things right).
- Start where people are. First, do no harm. Attend to and eliminate inequalities and disparities. Embed individually focused solutions in broader environmental strategies to avoid victim blaming and setting people up to fail.

To read additional Core Values submitted by editor respondents, visit this journal’s Web site and click on our blog: <http://healthpromotionjournal.com/blog/>

Question Two:

Write a brief sentence on the core purpose of the field of health promotion. Describe why you find your statement personally inspiring, authentic, and/or valid for years to come. Does this purpose help you decide what activities not to pursue?

Editor’s comment: Interpreting the word cloud I created from the purpose statements for question two is an exercise in trying to extract meaning from density. That alone suggests to me that we want to do it all as a profession and, indeed, promoting health is nothing if not complex. What such density behind our purpose also suggests is we are a profession that, at least in aspiration, seeks to have far-reaching influence on people, their environments and behaviors, and the social determinants of same. In short, sign us up to change the world.

- To promote social justice as it relates to health through transformative experiences based on kindness. I would like to highlight the “transformative” nature of our work because I would like to contrast it against current health promotion with a strong emphasis on “management.”
- Health promotion helps individuals understand their bodies, both wellness and illness, and the actions they must take to remain healthy. This is inspiring because it speaks to empowerment at both the individual and societal level.
- The core purpose of the health promotion field is to ensure that policy and practices across all sectors, not just the health sector, benefit and do no harm to the overall health and well-being of all population groups. Examples of this include working with climate change experts in promoting active travel, or working with urban planners to design livable neighborhoods that support healthy eating and physical activity.
- Our main purpose is to empower people to stay healthy and happy while respecting their individuality. It is not sufficient to address only some behavioral issues such as diet or physical activity. Human behavior involves deep issues that must be studied so that we may help people live better.



- The core purpose of the field of health promotion is to allow people and communities to harness the skills, knowledge, and power to achieve the healthiest possible future.
- The purpose of health is to make life better. So the purpose of health promotion is to promote the capacity to get more out of life.
- The purpose of health promotion is to insure the best possible health outcomes for the greatest possible number of people through a diverse, knowledgeable, collaborative workforce.
- The core purpose of health promotion is to have a society free of preventable disease and a citizenry that aspires to take action on improving their health through education and behavioral modification within a supportive environment.

To read additional Core Purpose statements submitted by editor respondents, visit this journal's Web site and click on our blog: <http://healthpromotionjournal.com/blog/>

Question Three

Write a *vision statement* about the field of health promotion 15 years from now. This “big audacious” goal is something that stimulates change and represents progress.

Editor's comment: Taking our expert editors' ideas in sum, they convey a vision of a future where the health promotion profession has had a measurable and beneficial impact on the health and well-being of the world. Most striking for me is our professional advocacy for inclusiveness and the need for our field to make greater gains in reducing health disparities nationally and globally.

- The field of health promotion develops, tests, and advances strategies based on theories and best practices to ensure that ALL individuals have the tools and resources they need to live healthy and productive lives. The field unites the best available approaches that focus on change in individuals, families, institutions, communities, and social and public policy, while providing evidence and strategies to reduce or eliminate practices that undermine individual and community strategies to promote health.
- Health promotion becomes part of the culture/social norm where, regardless of relationships (e.g., employer and employee, health plan and the covered, friends, family, pastors and

congregants), people care about their own health and others' and they are skilled to practice self-care and engage in helping others' health improvement effort. These skills should be learned in households, schools, community organizations, worksites, and so on.

- Health promotion is to make population healthier and active, and to build supportive environments and societies through identification of health determinants, multi-strategies, and intersector collaboration.
- This could be framed around the O'Donnell SAMSO model. For example, an ambitious goal would be that every individual in our nation would be provided opportunity to achieve their optimal level of personal health and well-being within 15 years. Opportunity could be defined in terms of level of support that makes healthy change reasonably likely. We might also want to think in terms of this level of opportunity being provided at the community level, i.e., every community in the nation is committed to providing opportunity to its members to achieve their optimal state of wellness. We might also set a funding goal that would make this feasible, e.g., funding for wellness will be at least 10% of that for health care.
- To increase the implementation of cost-effective health promotion programs in the workplace, school, and neighborhood by at least 25% in the next 10 years.
- That health promotion is fully integrated across sectors so that health and well-being are key priorities across sectors other than health.



- I think we must change our mental model and look for innovation to increase the efficiency of our programs and activities and improve outcomes. So, research, adoption, and diffusion of innovative technologies are needed. We need to focus on the complex system of health, human behavior, and social determinants of health and try to scale up innovative approaches that are scientifically based and cost-effective.
- The purpose of health promotion is to assure the conditions under which people can be healthy through creating healthy environments at multiple levels of the environment, including individual skills, knowledge, and values; interpersonal relationships; organizational settings and cultures; and public policy, culture, and the physical environment.

To read additional Big Vision statements submitted by editor respondents, visit this journal's Web site and click on our blog: <http://healthpromotionjournal.com/blog/>

WHEN VISIONARY INFLUENCES AND PROFESSIONAL TENETS ARE INSEPARABLE

Paul E. Terry, PhD



At one of this journal's annual conferences I hosted a session on "A Vision for Health Promotion" with Larry Green and Ken Pelletier. To make things challenging for two of our field's greatest thinkers, I asked Green to present himself as



Greek philosopher Aristotle and Pelletier to play the role of German philosopher Friedrich Nietzsche. Our meeting room was at a resplendent Lake Tahoe lodge that happened to include a dais complete with a back stage and it was unclear to me why Larry asked to stay back there during introductions. That is, until at just the right moment in my introduction of him as the renowned Aristotle, Green threw the curtains apart with a flourish and, chin held high, strode out wearing a striking white toga. Actually, it was a

bedsheet he borrowed from his hotel room, but it certainly produced the intended effect. Our audience was delighted. Their amusement inexorably turned to awe as Green and Pelletier stayed in character for the next hour, orating on all manner of contemporary issues while quoting liberally from their respective namesakes.

In this issue of *The Art of Health Promotion*, I reveled in another such professional highlight as I edited an in-depth interview with Dr. Green. I featured our field's most visionary leader as a deliberate backdrop to a visioning exercise I also present in this issue that captures the views of many other of our field's top experts. Larry wrote this to me after the interview: "I hope what we have jointly forged here, with this provocative and logical sequence of questions and probes, offers the themes and strands of a story about the field as much as about me." It's a pithy proposition because we work in a field where the biographies of our leaders and the forces that shape their visions are inseparable from the very tenets that guide the direction of our work.

As you will notice in Green's interview, he chronically circles back to what seemed to me to be an inexhaustible preoccupation with unmet social needs. Green, like his mentors, was forever "looking for ways to influence what needs to happen to help our country and for our country to help the world." And, not coincidentally, when I ran a word cloud on the answers from our experts on the "core values" that guide the field, the word integrity popped out. We are a profession bent on changing the world for the better, in no small part because we have been led by visionaries like Green who hold Aristotelian views connecting

the mechanics of the work of health promotion to morality and probity.

One of my first jobs was as a college men's gymnastics coach and health education instructor. Coaching is results-based work with win/loss records being obvious success indicators. Years later I served as the chief executive for two different health organizations. These were also results-driven jobs where helping to create a vision was included in my duties. Dozens of financial and other performance metrics serve as success markers in any sector, but if one has truly been indoctrinated into principles of health promotion and disease prevention, such measures are primarily a means to the greater end of advancing health. Great college coaches, regardless of their win/loss records, are wired for inspiring the best in student athletes. Health promotion professionals, influenced by leaders like Green, as is evidenced by the vision statements of other leaders in this issue of *The Art of Health Promotion* (TAHP), hold solving health problems as our *raison d'être*. Still, one paradox of working in prevention is that the results of our work are ultimately unknown and unknowable. I wrote about this conundrum, one that is not unique to public health, in a 2003 special issue of this journal on "A New Vision for Health Promotion."^{1,2}

Surpassing Our Masters

It is a joy to work in a profession where doing well involves doing good, but it is also disconcerting that much of our vision language remains stilted and vague on deliverables, especially those related to changes in public policies and culture.

Aristotle lectured about the "golden mean," arguing that we need to avoid extremes. In my interview with Dr. Green, we discussed Shelley Golden and Jo Anne Earp's systematic review of over 150 research papers showing that most interventions of the past decades focus on individuals rather than institutions or policies.³ Their paper won the Lawrence W. Green Paper of the Year Award from the journal *Health Education & Behavior*. I asked Golden why, in spite of such a lucid model as Green's, our profession still tilts so far toward individuals and their health habits. "I think many of us focus on individuals because we are passionate about people. Many of us chose health promotion because we have experienced or witnessed health-related issues in our own lives and the lives of people we care about." Golden is a clinical assistant professor at the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill. She further offered that "we believe people should be able to take control of their lives and their health, and we often have the privilege of



working with individuals and groups dedicated to social justice and empowerment of people.”

As much as Green’s imprimatur graces Golden’s research, I was glad to hear his opinion that “a case can be made that is more reassuring.” He said this in reference to two “great public health promotion success stories” he is presently writing about that show the links between epidemiological research and community health changes resulting from state and federal laws inspired by the research. And my correspondence with Golden affirms that she too believes we can become less one-sided. “We need to bring this facet of our background (our belief in individual empowerment) to discussions of policy and environmental change to ultimately balance individual and social responsibility for health.”

I thought there could be no one better than Golden to explain how Green’s work could help all of us better apply Aristotle’s golden mean to health promotion. Said Golden: “Dr. Green’s work epitomizes the balance of individual agency and structural factors. In his writing on ecological models,⁴ he reminds us that health promotion is a broad field that recognizes health as complex and socially and individually determined. He teaches that population health is modifiable if we are willing to understand problems sufficiently, assess the resources and limitations of our working environment, and partner in meaningful ways with the people whose health we aim to improve.” For a recent compelling example of someone putting his personal stake in the ground to change public policy, read Michael O’Donnell’s article about his strategy and commitment to changing tobacco policies at his workplace and influencing culture wherever else he goes.⁵

Golden’s impressive research, along with her thoughtful answers here and those of the 25 other contributors to this vision

issue for TAHP, remind me of a quote from Leonardo da Vinci: “Poor is the pupil who does not surpass his [or her] master.” Given Larry Green is a consummate teacher, I expect he shares my hope that da Vinci was right. I’m optimistic about how Golden and O’Donnell and countless others are destined for building on Green’s work in a way that honors his admonishment at the end of the above interview. That is, if we are to improve our capacity to influence policies, then first we need to look at our own behavior. ☺



Shelley Golden, PhD,
MPH, UNC Chapel Hill

References

1. Terry PE. Leadership and achieving a vision—how does a profession lead a nation? *Am J Health Promot.* 2003;18:162–167.
2. Terry PE. Creating a new vision for health promotion: taking a profession to a new level of effectiveness in improving health. *Am J Health Promot.* 2003;18:143–145.
3. Golden SD, Earp JA., Social ecological approaches to individuals and their contexts: twenty years of health education & behavior health promotion interventions. *Health Educ Behav.* 2012;39:364–372.
4. Green LW, Kreuter MW. Evidence hierarchies versus synergistic interventions. *Am J Public Health.* 2010;100:1824–1825. Comment on: A framework for public health action: the health impact pyramid. *Am J Public Health.* 2010.
5. O’Donnell MP. Why do we allow smokers to assault the people we love? Secondhand smoke, benzene, myelodysplastic syndrome, immunosuppression, and the Americans with Disabilities Act. *Am J Health Promot.* 2014;29(2):v–viii. Available at: <http://healthpromotionjournal.com/blog/?p=326>. Accessed November 11, 2014.

EDITOR IN CHIEF
Michael P. O'Donnell, PhD, MBA, MPH

ASSOCIATE EDITORS IN CHIEF
Jennifer E. Taylor, PhD
Jennie Jacobs Kronenfeld, PhD
Kwame Owusu-Edusei Jr., PhD*
Kerry J. Redican, MPH, PhD, CHES

AMERICAN JOURNAL *of* *Health Promotion*

The Wisdom of Practice and the Rigor of Research



"The American Journal of Health Promotion provides a forum for that rare commodity — practical and intellectual exchange between researchers and practitioners."

Kenneth E. Warner, PhD

Dean and Avedis Donabedian Distinguished University Professor of Public Health School of Public Health, University of Michigan

"The contents of the American Journal of Health Promotion are timely, relevant, and most important, written and reviewed by the most respected researchers in our field."

David R. Anderson, PhD, LP

Senior Vice President & Chief Health Officer, StayWell Health Management

onlineFirst

Be the first to know.

Available exclusively to ONLINE SUBSCRIBERS



The *American Journal of Health Promotion* is now publishing all articles online, ahead of print. Articles are available as a PDF document for download as soon as they have completed the review process. This means you can access the very latest papers in the field of health promotion – in some cases up to a year before they appear in print.

Subscribe Today.

6 Issues/Year

ISSN 0890-1171 (PRINT)
ISSN 2168-6602 (ONLINE)

Subscribe Online at www.HealthPromotionJournal.com
CUSTOMER SERVICE (US only) or 785-865-9402

ANNUAL SUBSCRIPTION RATES (Effective 1-1-2015 through 12-31-2015)

SUBSCRIPTION	USA	CANADA/MEXICO	OTHER COUNTRIES
Individual Print & Online*	\$145	\$154	\$163
Institutional Print Only**	\$191	\$200	\$209
Tier 1: Institutional Print & Online	\$373	\$382	\$391
Institutional Online Only	\$373	\$373	\$373
Tier 2: Institutional Print & Online	\$477	\$486	\$495
Institutional Online Only	\$477	\$477	\$477
Tier 3: Institutional Print & Online	\$581	\$590	\$599
Institutional Online Only	\$581	\$581	\$581
University w/Archive Posting Privileges***	\$895	\$904	\$913

*Individual Subscriptions must be set up in the name of a single individual and mailed to a residential address.

** Print subscriptions are one print copy per issue. For multi-site institutions wishing to have a copy sent to each location, additional subscriptions are required.

Tier 1 — Most Employers and Corporations except Health Organizations, Libraries and Schools

Tier 2 — Health Organizations including Hospitals, Clinics, Health Promotion Providers, Insurance Companies and Voluntary Health Agencies

Tier 3 — Libraries, Colleges and Universities

*****University w.Archive Posting Privileges** — Allows an unlimited number of faculty, students and staff to post an unlimited number of typeset accepted manuscripts on the school's internal archive website. Includes print and online.

*Kwame Owusu-Edusei, Jr. is serving in his personal capacity. The views expressed are his own and do not necessarily represent the views of the Centers for Disease Control and Prevention or the United States Government.