Encyclopedia of Behavioral Medicine

Marc D. Gellman
Editor

J. Rick Turner
Co-Editor

Encyclopedia of Behavioral Medicine

With 99 Figures and 46 Tables

Springer

Editors
Marc D. Gellman
Behavioral Medicine Research Center
Department of Psychology
University of Miami
Miami, FL, USA

J. Rick Turner
Cardiovascular Safety
Quintiles
Durham, NC, USA

ISBN 978-1-4419-1004-2 ISBN 978-1-4419-1005-9 (eBook)
DOI 10.1007/978-1-4419-1005-9
ISBN 978-1-4419-1380-7 (print and electronic bundle)
Springer New York Heidelberg Dordrecht London

Library of Congress Control Number: 2012944367

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Opening Quotations

Some of the unhealthful behaviors that make the greatest contribution to the current burden of disease are cigarette smoking, the abuse of alcohol and drugs, the overeating and underexercise that produce obesity, and Type A behavior. Unfortunately, these behaviors are stubbornly resistant to change and discouragingly subject to relapse. Thus, for behavioral scientists to promise to achieve too much too soon is to court disastrous disillusionment. But any contributions that behavioral scientists can make to reduce any of them will have highly significant implications for health.

Miller, N. E. (1983). Behavioral medicine: Symbiosis between laboratory and clinic. *Annual Reviews of Psychology*, *34*, 1–31.

As behavioral medicine researchers, we must become more directly involved in translating gains in the science of clinical and community (disease) prevention to gains in public policy. We have an unprecedented window of opportunity given the growing recognition at all levels of health care and government that clinical and community interventions that promote and support health behaviors will be essential for success in reducing the nation's most prevalent and costly heath problems and untenable health-care costs and disparities. This is the kind of opportunity that propelled the founders of our field 25 years ago, and we are better prepared than ever in our history to seize it.

Ockene, J. K., & Orleans, C. T. (2010). Behavioral medicine, prevention, and health reform: Linking evidence-based clinical and public health strategies for population health behavior change. In A. Steptoe (Ed.), *Handbook of behavioral medicine: Methods and applications* (pp. 1021–1035). New York: Springer.

The extent to which behavioral medicine can become a successful part of health care delivery systems will in large part depend upon investigators in the field being able to master clinical translational research, moving from efficacy to effectiveness with a high ratio of benefit to cost. . .. Because Behavioral Medicine has been constructed based on the understanding of relationships among behavior, psychosocial processes and sociocultural contexts, the field is well-positioned to take

a leadership role in informing future health care policies. The field of Behavioral Medicine appears to have a bright, important future.

Schneiderman, N. (2012). A personal view of behavioral medicine's future. This volume.

Foreword

Early Developments in the Field of Behavioral Medicine

At the editors' request, this Foreword provides a personal account of the early development of behavioral medicine. With many colleagues, I was fortunate to play a role in bringing together behavioral and biomedical sciences in such a way that the synergism resulting from this interaction resulted in ideas, conceptualizations, models, and ultimately interventions that were truly different from preexisting approaches to health and illness. As noted in the Preface, the contents of this encyclopedia bear witness to the manner in which behavioral medicine has matured during the past 30 years, illustrating current activities in the domains of basic research, clinical investigation and practice, and public health policy.

In 1963, I was a psychology intern in the Department of Medical Psychology at the University of Oregon Medical School (now called the Oregon Health Sciences Center). Under the guidance of Joseph Matarazzo, chair of the department, the relationship between medicine and psychology was undergoing an historic realignment. Joe had a fascinating and exciting perspective on the nature of such relationships and on psychology's potential to make those relationships mutually rewarding for both patients and practitioners. I consider myself fortunate to have been "in the right place at the right time" when a request came from the Division of Cardiothoracic Surgery for psychological and psychiatric consultation on a problem that was mystifying the surgeons.

Under the leadership of Albert Starr, surgeons were performing groundbreaking procedures known as "open heart surgery" on patients who had been incapacitated, typically for many years, by their heart conditions. These surgeries offered them the opportunity to reclaim their earlier lives as active members of society, and, in some cases, to take on roles that were denied to them since childhood. Paradoxically, following surgery, many patients, rather than expressing their gratitude for the opportunity to be "made whole again," become angry, depressed, and suicidal. With colleagues from the departments of psychology and psychiatry, we begin a search for the "underlying mental illness" that must have been uncovered by the stress of the surgery. However, rather than discovering the presence of psychiatric illness, it was found that the *absence of psychological strength* was a key factor associated with the behavioral anomalies. This finding led to the development of a program to psychologically evaluate a candidate's readiness to undergo surgery and to better prepare psychologically vulnerable candidates for the recovery experience.

My dissertation on psychological adjustment following open heart surgery led me to the Division of Psychosomatic Medicine in the Department of Psychiatry at the Johns Hopkins University School of Medicine, and to the application of psychodynamic theory to problems as diverse as diabetes, cardiovascular disease, cancer, and transgender surgery. In 1974, I accepted a position at the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) as chief of a unit that would eventually become the Behavioral Medicine Branch. The first year was *very* difficult since I was essentially the only behavioral scientist at NHLBI, and no one understood exactly what I was supposed to do and why I was there. However, I considered this to be a singular opportunity to bring the behavioral and biological sciences together, if only we could come up with a model, a theoretical framework that made sense to both groups and was scientifically viable.

Good problem-solving strategies break the overall problem down into more manageable pieces. The first was to address the lack of fundable studies in the NHLBI portfolio, which comprised a total of four regular research grants (R01s). The institute director commented to me that behavioral scientists must not be very good scientists as their applications were routinely disapproved or failed to make the funding payline. However, investigation revealed that the 25 "behavioral" applications submitted for the current round were scattered among 14 different study sections. Two issues became evident: (1) many of the behavioral applications were biologically weak and (2) the multidisciplinary expertise necessary to properly review applications that had both behavioral and biological endpoints was missing from the various study sections to which the applications had been assigned.

It became clear that two efforts were needed. First, it was necessary to make both biomedical and behavioral scientists aware of the need for a collaborative "biobehavioral" approach involving top-tier expertise in both areas when submitting grant applications. Second, it was necessary to campaign within the NIH for a study section that could provide relevant peer review for these biobehavioral applications. NIH agreed to convene an "ad hoc" temporary review group (the Behavioral Medicine Study Section) to assess whether there really was a need for such a group. Clearly there was, since 3 years later the study section was formally chartered as a standing study section.

Meanwhile, it became obvious that to develop and sustain meaningful research programs within the NIH would require organized, active, outside constituencies of scientists and clinicians who could provide peer review to all aspects of NIH program development and scientific leadership, i.e., partnerships with academic and professional societies that could provide advice and guidance were needed. With specific regard to biobehavioral research, the need for credible representation led us to Neal Miller, a behavioral scientist who was well known to, and highly respected by, the biomedically oriented Institute staff. Neal had performed landmark studies of learning and biofeedback. He was persuaded to serve as keynote speaker for the 1975 NHLBI Working Conference on Health Behavior. The 3 days of intensive deliberations between senior behavioral and biomedical scientists were

summarized and published as a proceedings to serve as the public blueprint for the Institute's future biobehavioral scientific agenda.

Along with the 1977 Yale Conference on Behavioral Medicine sponsored by NIH, this meeting set the stage for a 1978 organizational meeting hosted by David Hamburg, President of the Institute of Medicine of the National Academy of Sciences. The deliberations of this two-day gathering of highly respected biomedical and behavioral scientists gave birth to two organizations, the Society of Behavioral Medicine (SBM) and the Academy of Behavioral Medicine Research (ABMR). The founding leaderships of these organizations agreed to be complementary rather than competitive in mission and purpose, with SBM serving both scientific and professional interests of all persons interested in the field and ABMR being a small invitation-only group of distinguished senior scientists dedicated to identifying and promoting "gold standard" science in behavioral medicine. SBM created a newsletter that became the high-quality scientific and professional journal *Annals of Behavioral Medicine*, and ABMR published an annual volume, *Perspectives on Behavioral Medicine*, summarizing scientific presentations at their annual retreat meeting.

During this early developmental period, a potentially divisive issue arose among the cadre of behavioral medicine pioneers: Exactly what is meant by the term "behavioral medicine?" Agreement on a common definition of the field was clearly necessary. One contingent defined behavioral medicine primarily as "behavior modification with medical patients," while another contingent took a broader view which included the aforementioned aspect, but challenged both the behavioral and biomedical communities to join forces as "the interdisciplinary field concerned with the development and integration of behavioral and biomedical science knowledge and techniques relevant to the understanding of health and illness, and the application of this knowledge and these techniques to prevention, diagnosis, treatment and rehabilitation." The latter became the agreed-upon definition by both behavioral medicine organizations and survived intact for a decade until the founders of the International Society of Behavioral Medicine proposed in 1990 that "psychosocial" be added to "behavioral and biomedical" to better align the definition with the charters of the emerging European national and regional behavioral medicine organizations.

The underlying concepts of behavioral medicine are perhaps thousands of years old. Prior to the emergence of behavioral medicine in the mid to late 1970s, the most recent effort to capture mind-body interactions can be attributed to those engaged in research and practice of psychosomatic medicine. Primarily psychodynamically oriented psychiatrists, they began to take note of behavioral medicine, initially identifying the fledgling organizations with the first definition mentioned previously (behavior modification with medical patients) whereas their interests were principally focused upon how the principles of psychoanalysis could be applied to the treatment of somatic disorders. However, as the second definition gained traction among the rank and file of the behavioral medicine community, psychosomatic medicine scientists and practitioners were challenged to either resist or join forces with the newcomers. Over the next decade, it became clear that, while

psychoanalytic theory was intellectually provocative, it lacked the tools of modern day science to test its theories, and hence such theorizing remained in the realm of speculation. Behavioral medicine, on the other hand, took full advantage of the new monitoring instrumentation generated in large part by the U.S. space program's need for ambulatory monitoring of physiological processes via telemetry. Such instrumentation facilitated exploration in the laboratory and in real life of how variation in biological processes may be stimulated by behavioral inputs, as well as how biological processes may impact behavior. Over the next 20 years, the membership of the American Psychosomatic Society and the organization's flagship journal, *Psychosomatic Medicine*, shifted their emphasis to one indistinguishable from that of organized behavioral medicine.

During this time, biobehavioral scientific programs were beginning to develop within several institutes at NIH, and funding for biobehavioral research increased exponentially, albeit unevenly. An inter-institute Committee on Health and Behavior was formed, with Matilda White Riley from the National Institute on Aging as its first chair. This committee served in an advisory capacity to the individual institute directors as well as to the NIH director, becoming the precursor for the Office of Behavioral and Social Science Research, Office of the Director, NIH, which is now under the leadership of Robert Kaplan, past president of both SBM and ABMR.

Although research funding was increasing, another challenge became evident: Where were the *training* resources to support new entrants to the field? Typically, research training programs in the biological and biomedical sciences relied on NIH support; it became obvious that such resources needed to be developed to establish a pipeline for "biobehavioral" scientists-in-training to receive both individual and institutional support. Donald Cannon, chief of the training branch at NHLBI, the unit responsible for supporting both types of awards at NHLBI became interested in the issue, and met with senior behavioral medicine researchers who could apply for such awards based on their research programs and the resources of their institutions. Over the next 3 years, 12 institutional awards were made to support cardiovascular behavioral medicine training for both behavioral/social scientists and biomedical/biological scientists, further solidifying the scientific base for the field.

These developments within the United States were mirrored in other parts of the Western world, with emerging organizations in several European countries grappling with the relevance of the behavioral medicine concept to their perspectives on health and illness. In the mid-1980s, discussions at an SBM annual conference with international attendees resulted in an agreement to form an International Society of Behavioral Medicine (ISBM) dedicated to supporting the emergence of new as well as existing national and regional behavioral medicine organizations. Funds to support several planning meetings were provided by the Rockefeller family and the Duke University Behavioral Medicine Research Center, and the first International Congress of Behavioral Medicine took place in 1990 in Uppsala, Sweden. The International Society (members are national or regional societies rather than individuals) represented seven national and regional societies at this first

meeting. *International Journal of Behavioral Medicine* became the scientific outlet for behavioral medicine studies of international relevance. By 2012, 26 (and counting. . .) national/regional societies from every continent formed the membership of ISBM.

Finally, one important element of the behavioral medicine paradigm deserves mention, as it is illustrative of the basic conceptual infrastructure of biomedical and behavioral *integration*. Often, biomedical and behavioral scientists pose the question of treatment efficacy in terms of which is more effective, pharmacologic or behavioral treatments. Rather than "either/or," the behavioral medicine position is to determine how both treatments, perhaps in combination or in sequence, may provide a more effective treatment than either alone. Several examples come to mind, for example, smoking cessation, hypertension treatment, and cardiovascular disease prevention. Using a drug to lower blood pressure or cholesterol can provide a window of opportunity to use non-pharmacologic strategies to maintain lowered blood pressure/cholesterol, thereby reducing/eliminating reliance on the medication. Smoking cessation programs typically are more effective when both behavioral and pharmacologic treatments are combined to sustain cessation. Pharmacologic agents are typically more efficient at creating the desired effect but may have long-term side effects; behavioral treatments may be less efficient at creating change but may be more effective at sustaining conditions that have been achieved pharmacologically. The bottom line is straightforward: Rather than asking which approach is superior, use the strengths of both areas of science creatively to achieve a sustainable treatment effect that minimizes unwanted side effects and could not be attained by using either approach by itself.

In summary, I have tried to provide a few personal insights into the events leading to the formalization of behavioral medicine as a viable, vibrant perspective on the promotion of health and the prevention and treatment of disease and as the multidisciplinary inquiry into the underlying mechanisms involving brain, genes, behavior, and physiology/biology. I hope that this provides a useful historical "snapshot" as you immerse yourself in the impressive array of accomplishments chronicled in this encyclopedia.

The following Foreword by Neil Schneiderman presents a personal view of behavioral medicine's future.

Stephen M. Weiss

Foreword

A Personal View of Behavioral Medicine's Future

The field of behavioral medicine appears to have a bright, important future. That is because contemporary scholarship in behavioral medicine has been constructed upon a solid foundation consisting of basic biological and behavioral science, population-based studies, and randomized clinical trials (RCT). The edifice that is emerging derives its strength and form from its interdisciplinary structure. It derives its reach and potential for future growth from its selection of key building materials and tools including the study of etiology, pathogenesis, diagnosis, treatment, rehabilitation, prevention, health promotion and community health. Because behavioral medicine approaches to prevention, treatment, and health promotion involve important relationships among behavior, psychosocial processes, and the sociocultural context, the roof of this structure will both consist of and benefit from the support of informed patients and populations, thoughtful educated health-care providers and involved communities.

Let us begin with population-based studies. During the second half of the twentieth century, epidemiological studies described important associations between traditional risk factors on the one hand and morbidity and mortality on the other, but elucidated relatively few of the variables mediating these associations. In my own area of cardiovascular disease (CVD) research, considerable attention has now focused upon obesity, inflammation, insulin resistance, oxidative stress, and hemostatic mechanisms as potential mediators. In this respect, traditional large-scale multicenter population-based studies have done a better job of describing the association between traditional risk factors (abnormal lipids, hypertension, smoking, diabetes, age) and CVD and their putative mediators than they have in describing the associations between biobehavioral, psychosocial, and sociocultural risk factors and CVD, and their mediators. However, this is now beginning to be addressed in such National Institute of Health (NIH) multicenter studies as the Hispanic Community Health Study/Study of Latinos (HCHS/SOL), Coronary Risk Development in Young Adults (CARDIA), and Multi-Ethnic Study of Atherosclerosis (MESA). Some of these studies are employing such preclinical measures of disease as carotid intimal-medial wall thickness and plaque by ultrasonography and coronary artery calcium by computed tomography to examine the progression of disease processes relating risk factors and CVD.

The examination of preclinical markers of disease as mediators between biobehavioral, psychosocial, and sociocultural risk factors on the one hand and chronic diseases on the other has been facilitated by the availability of

commercial assays. These assays have permitted the study of biomarkers involved in preclinical disease processes including adhesion molecules, pro-inflammatory cytokines, and oxidative stress in both animal and human studies. We can expect that many further advances will be made in the development of commercially available research methods and that they will increase our understanding of relationships among biobehavioral, psychosocial, and sociocultural risk factors and the pathophysiology of CVD, cancer, and other chronic diseases.

Although a wide range of epidemiological studies have called attention to potentially modifiable risk factors, and most chronic disease risk factors are modifiable (Yusuf et al., 2004), it should be recognized that chronic disease outcomes are the result of the joint effects of risk genes, the environment, and behavior upon these risk factors. One can therefore expect that on the basis of genomic analyses, future studies will begin to identify the extent to which particular individuals are vulnerable to specific risk factors and diseases and may be candidates for targeted behavioral as well as pharmacological interventions. Thus, in the coming era of personalized or tailored medicine, we may expect that behavioral medicine research will play an important role both in understanding the antecedents of disease that interact with genomic predispositions and in selecting appropriate treatment interventions.

The future for behavioral medicine science playing an essential role in population-based observational studies appears to be inevitable. This will occur because both the fields of behavioral medicine and epidemiology have expanded their horizons based upon important scientific findings. Early epidemiological studies focused upon hygiene and infectious diseases. By the middle of the twentieth century, epidemiological studies were examining the prevalence of multiple risk factors (e.g., smoking, dyslipidemia, hypertension) and disease outcomes (e.g., coronary heart disease [CHD], stroke, cancers). However, more recent multicenter observational studies have increasingly identified behavioral, psychosocial, and sociocultural variables as potential risk factors for chronic diseases. Thus, future multicenter observational studies will likely include demographic (e.g., racial/ethnic background, sex, socioeconomic status, neighborhood environments), psychosocial (e.g., temperament and personality, marital and work stressors, social support), lifestyle (e.g., medication adherence, diet, sleep, physical activity, smoking), biomarkers (e.g., immune, inflammatory, hemostatic, imaging), and genomic factors that influence disease outcomes. An important trend that is likely to increase in the future is the development of consortia of population-based studies (e.g., Population of Architecture using Genomics and Epidemiology: PAGE) whose purpose is to investigate mature genetic variants associated with complex diseases in large diverse populations. Such consortium studies are each beginning to include well over 100,000 participants. Perhaps most importantly the constituent studies and the consortia will be able to follow participants over the course of many years, providing important incidence data that will allow us to examine the specific causal variables influencing the course of disease. This represents an important opportunity for behavioral medicine scientists.

Traditional observational studies have often reported findings using odds ratios, which provide estimates (with confidence interval) for the relationship between binary variables. Such studies have also permitted assessment of the effects of other variables on specific relationships using regression analyses. More recently, scientific interest in understanding the role of potential mediators of relationship between risk factors and disease outcomes has increasingly led to the use of analytic techniques such as structural equation modeling including path analysis, which until now have mostly been used in the social sciences. We can expect that a dramatic improvement in our understanding of the mediators between risk factors and disease outcomes will occur in the coming years.

The completion of the Human Genome Project in 2003 led to an increased interest in gene-environment interactions within the behavioral medicine research community. Such interactions occur when genetic factors affect measured phenotypes differentially, for example, when men with the E4 allele of the apolipoprotein E gene (APOE) were shown to have an increased smoking related risk for CHD events (Humphries et al., 2001). Other studies have shown that the interaction of the alpha 2ß-adrenergic receptor polymorphism with job strain is related to elevated blood pressure (Ohlin et al., 2007), and several other studies have related gene polymorphisms with cardiovascular reactivity to mental challenge. Most behavioral studies that have examined gene-environment interactions have been carried out on relatively small samples, but it appears inevitable that a large number of high-quality, well-powered, gene-environment studies of direct relevance to behavioral medicine will be initiated during the next few years.

In addition to the structural genomics exemplified in gene-environment interaction studies, functional genomic studies are also likely to become of increasing interest to behavioral medicine investigators. Briefly, functional genomics focuses on the basics of protein synthesis, which is how genes are "switched on" to provide messenger RNA (mRNA). Francis Crick, who along with James Watson discovered the structure of the DNA molecule, originally thought that each gene, consisting of a particular DNA sequence, codes for one specific mRNA molecule that in turn codes for a specific protein (Crick, 1970). Subsequently, it became evident that after being transcribed, most mRNA molecules undergo an editing process with some segments being spliced out. In this way, a gene can lead to more than one type of mRNA molecule and consequently more than one type of protein. Thus human cells, which each contain about 25,000 genes, are able to synthesize more than 100,000 different proteins.

Epigenetics refers to the altering of gene function without changes in the DNA sequence. This can occur either by methylation of the DNA itself or by remodeling of the chromatin structure in which the DNA is packaged. Because of these processes, in utero exposure to nutrition or social factors can cause permanent modification of gene expression patterns that may lead to increased risk of mental disorders, diabetes, cancer, or cardiovascular diseases (Jirtle & Skinner, 2007). As an example of how social exposure in early life can have long-duration epigenetic and phenotypic influences, Meaney and Szyf (2005) showed that neonatal rodents who received high

levels of postpartum nurturing revealed diminished cortisol responses to stressful experiences when they reached adulthood. Such studies are providing a strong basis for future epigenetic behavioral medicine research.

The important advances made by observational and mechanistic studies relevant to behavioral medicine research are paralleled by a few RCT that have provided evidence that behavioral interventions aimed at modifying lifestyle or psychosocial variables can help prevent morbidity and/or mortality in high-risk populations. Thus, for example, the Diabetes Prevention Program trial (Knowler et al., 2002) in the United States and the Finnish Diabetes Prevention Trial (Tuomilehto et al., 2001) each observed that lifestyle interventions targeting weight loss and an increase in physical activity can reduce the incidence of diabetes in prediabetic patients. Based upon the success of these trials, the NIH has sponsored Look AHEAD (Action for Health in Diabetes), an RCT that is scheduled to last for 11.5 years. This trial is specifically examining whether an intensive lifestyle intervention similar to that used in the Diabetes Prevention Program can prevent major CVD events in obese participants with type 2 diabetes. Whereas the diabetes prevention projects and the Look AHEAD trial are essential for establishing that lifestyle interventions can prevent type 2 diabetes and reduce CVD risk in diabetic patients, subsequent investigation will be needed for us to learn how such interventions can be applied to clinical practice.

Although psychosocial-behavioral RCT conducted upon patients following major adverse coronary events (e.g., myocardial infarction) have yielded both positive and null results, the three major trials that have reported positive results share important similarities that differentiate them from the studies reporting null results (Friedman et al., 1986; Gulliksson et al., 2011; Orth-Gomér et al., 2009). Thus, the participants in the three major RCT reporting positive results all received group-based cognitive behavior therapy that included, in addition to cognitive behavior therapy, relaxation training and attention to lifestyle problems. The interventions all included up to 20 sessions over a year or more and used therapists specifically trained to use behavior change techniques in order to conduct behavioral interventions with cardiac patients. Treatment began at least several months after the CHD event and patients were followed up for an average of 4.5–7.8 years. Although the trials yielding positive results each studied between 237 and 862 participants, the size of each study was insufficient to permit assessment of the efficacy of specific intervention components, the role of potential biological mediators or the applicability of the intervention to populations differing in terms of important demographic characteristics. Thus there is still a need to replicate and amplify the results of the previously successful trials in rigorous, large-scale, multicenter RCT that can identify the demographic, psychosocial, and lifestyle variables that influence specific behavioral and biological determinants of risk.

In the future, evidence-based medicine will play an ever-increasing role in clinical health care. The extent to which behavioral medicine can become a successful part of health-care delivery systems will in large part depend upon investigators in the field being able to master clinical translational

research, moving from efficacy to effectiveness with a high ratio of benefit to cost. Thus, for example, the Diabetes Prevention Program (Knowler et al., 2002) showed that in high-risk patients, a lifestyle intervention reduced the incidence of diabetes significantly better than a pharmacological intervention and that both interventions were superior to a placebo condition. However, the lifestyle intervention was labor intensive and required considerable effort to get participants to maintain improvement. In contrast, maintaining adherence to taking a pill once daily may pose a less daunting task. However, recent advances in web-based intervention research may level the playing field. Thus, automatic e-mail reminders, phone or e-mail based consultations with a health-care professional, interaction with web-based programs, and the instant availability of important specially tailored information on an interactive website can all help patient adherence. To the extent that weight loss programs that involve diet and exercise do more than only decrease the risk of type 2 diabetes but also improve other aspects of CVD risk, such programs are particularly valuable in terms of health promotion.

The RCT that decreased morbidity or mortality rate in CHD patients each required 20 or more group-based sessions (Friedman et al., 1986; Gulliksson et al., 2011; Orth-Gomér et al., 2009). When amortized over the length of the 4.5–7.8 year follow-up period, however, the cost compares favorably with that of most drugs also used in treatment. Participating in 20 or more sessions also poses a personal cost and some hardship for many people. However, the implementation of interactive web-based group sessions using both sound and video could obviate the need for most face-to-face meetings and allow interpersonal interactions to continue over long periods of time. It therefore seems apparent that the rapid advances taking place in science and practice during the internet era will prove helpful in making behavioral medicine an important ingredient of future health-care systems.

Future health-care systems could be strengthened by well-informed patients and by health-care providers who are grounded in behavioral medicine concepts as well as clinical medicine. Attention to the human and health-influencing aspects of neighborhoods (i.e., the built environment) are also important and dependent on informed public policy. Because Behavioral Medicine has been constructed based on the understanding of relationships among behavior, psychosocial processes, and sociocultural contexts, the field is well positioned to take a leadership role in informing future health-care policies. The field of behavioral medicine appears to have a bright, important future.

Neil Schneiderman

References

Crick, F. (1970). Central dogma of molecular biology. *Nature*, *227*, 561–563. PMID: 4913914.

Friedman, M., Thoresen, C. E., Gill, J. J., Ulmer, D., Powell, L. H., & Price, V. A., et al. (1986). Alteration of type A behavior and its effect on cardiac recurrences in post myocardial infarction patients: Summary results of the recurrent coronary prevention project. *American Heart Journal*, *112*, 653–655. PMID: 3766365.

Gulliksson, M., Burell, G., Vessby, B., Lundin, L., Toss, H., & Svärdsudd, K. (2011). Randomized controlled trial of cognitive behavioral therapy vs standard treatment to prevent recurrent cardiovascular events in patients with coronary heart disease: Secondary prevention in Uppsala primary health care project (SUPRIM). *Archives of Internal Medicine*, *171*, 134–140. PMID: 21263103.

Humphries, S. E., Talmud, P. J., Hawe, E., Bolla, M., Day, I. N., Miller, G. J. (2001). Apolipoprotein E4 and coronary heart disease in middle-aged men who smoke: a prospective study. *Lancet*, *385*, 115–119. PMID: 11463413.

Jirtle, R. L., & Skinner, M. K. (2007). Environmental epigenomics and disease susceptibility. *Nature Reviews Genetics*, *8*, 253–262. PMID: 17363974.

Knowler, W. C., Barrett-Connor, E., Fowler, S. E., Hamman, R. F., Lachin, J. M., et al., & Diabetes Prevention Program Research Group. (2002). Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *The New England Journal of Medicine*, *346*, 393–403. PMID: 11832527.

Meaney, M. J., & Szyf, M. (2005). Environmental programming of stress responses through DNA methylation life at the interface between a dynamic environment and a fixed genome. *Dialogues in Clinical Neuroscience*, *7*, 103–123. PMID: 16262207.

Ohlin, S. E., Berglund, G., Nilsson, P., & Melander, O. (2007). Job strain, decision latitude and alpha 2ß-adrenergic receptor polymorphisms significantly interact and associate with high blood pressure in men. *Journal of Hypertension*, *25*, 1613–1619. PMID: 18622236.

Orth-Gomér, K., Schneiderman, N., Wang, H., Walldin, C., Bloom, M., & Jernberg, T. (2009). Stress reduction prolongs life in women with coronary disease: The Stockholm Women's Intervention Trial for Coronary Heart Disease (SWITCHD). *Circulation: Cardiovascular Quality and Outcomes*, *2*, 25–32. PMID: 20031809.

Tuomilehto, J., Lindström, J., Eriksson, J. G., Valle, T. T., Hämäläinen, H., et al., & Finnish Diabetes Prevention Study Group. (2001). Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *The New England Journal of Medicine*, *344*, 1343–1350. PMID: 11333990.

Yusuf, S., Hawken, S., Ounpuu, S., Dans, T., Avezum, A., Lanas, F., & McQueen, M., et al. (2004). Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries: The INTERHEART study: case–control study. *Lancet*, *364*, 937–952. PMID: 15364185.

Preface

The establishment, advancement, and maturation of the field of behavioral medicine bears witness to interest among research scientists, clinicians, and policy makers in psychological, behavioral, and social influences on health and disease from the perspective of both the individual patient and global public health. It has become increasingly clear that such influences may negatively impact health and well-being and, equally importantly, that behavioral interventions may be protective and curative.

Neal Miller (1909–2002), an American psychologist and recipient of the National Medal of Science in 1964, is often credited as being the founder of behavioral medicine. He made significant contributions to our understanding of the relationship between reinforcement mechanisms and the control of autonomic behavior, and in pioneering the field of biofeedback, which is used successfully today to treat a variety of medical conditions. The original definition of behavioral medicine was developed at the Yale Conference on Behavioral Medicine and later published by Gary Schwartz and Stephen Weiss (1977):

> "Behavioral medicine" is the field concerned with the development of behavioral-science knowledge and techniques relevant to the understanding of physical health and illness, and the application of this knowledge and these techniques to diagnosis, prevention, treatment and rehabilitation.

While this definition remains the cornerstone of our interdisciplinary and integrative field, developments in many relevant subfields have advanced at rapid rates, and whole new specialties have arisen. This evolution was well exemplified by the publication in 2010 of the *Handbook of Behavioral Medicine* (Steptoe, 2010). Relevant knowledge and understanding of issues of interest in behavioral medicine is now contributed by the disciplines of and expertise from anthropology, behavioral and molecular genetics, behavioral science, biostatistics, clinical medicine, cultural studies, epidemiology, health economics, general medicine, genomics, psychiatry, psychology, physiology, public health and public health policy, and sociology, to name but a few. It was therefore considered an opportune and appropriate time to create the *Encyclopedia of Behavioral Medicine*, whose publication coincides with the 12th International Congress of Behavioral Medicine, held on August 29th to September 1st, 2012, in Budapest, with attendees representing multiple disciplines and many countries around the globe. The theme of

the meeting is "Behavioral Medicine: From Basic Science to Clinical Investigation and Public Health," the theme around which this *Encyclopedia* has been developed.

Accordingly, the *Encyclopedia* contains entries falling into three categories or domains that represent issues of interest: basic research, clinical investigation and practice, and public health and public health policy. The domain of basic research addresses the key questions of mechanisms of action, both in terms of how behavior can have a deleterious impact on health and how a change in behavior can be beneficial, either preventively or therapeutically. The domain of clinical investigation and practice translates this basic knowledge into clinical interventions on a patient-by-patient basis. Finally, the domain of public health and public health policy takes a broader view of how behavioral medicine research and interventions can impact the health of populations at the community, regional, national, and global levels. This includes addressing the system-wide/public education and advocacy/political activities that are needed to facilitate maximum benefits at the global level.

It can immediately be seen that behavioral medicine is indeed a multidisciplinary and interdisciplinary field. Researching mechanisms of action requires a detailed level of human biology, starting from the molecular genetic level and progressing from cellular to organ to whole-body study. A thorough understanding of environmental interactions with biological functioning is also necessary. The domains of basic research and clinical investigation and practice are linked by the increasingly important concept of translational medicine, that is, how to translate our mechanistic knowledge and understanding into successful clinical interventions most effectively and efficiently. The final challenge, likely the most challenging but ultimately providing the greatest benefit, is to address these interventions at the public health level.

Within these overarching categories, it is possible to group together various entries into categories of interest to individual readers or groups of readers pursuing their own research in cross-cutting areas. One example might be the impact of behavioral medicine research and interventions across the life span, that is, taking a life cycle approach. Entries in the *Encyclopedia* such as Children's Health Study, Elderly, End-of-Life Care, Geriatric Medicine, Life Span, Obesity in Children, and Successful Aging might be instructive in this case.

A second example might be looking at genetic predisposition to the deleterious impact of environmental factors and, equally of interest, to the therapeutic benefit of certain behavioral medicine interventions. Entries of interest here might be Family Studies (Genetics), Gene-Environment Interaction, Gene Expression, Genome-wide Association Study, and Twin Studies. While not always intuitively obvious, one of the most powerful ways to study the effects of environmental (behavioral) factors on a phenotype of interest (e.g., a given disease state or condition of clinical concern) is to study genetic influence on that phenotype (Plomin et al., 1997). Having done so, it is possible to remove from consideration the individual variation attributable to genetic influence and hence to focus on variation attributable to

environmental and gene-environment interaction influences. We are certain that readers will find many such groupings of entries relevant to their own interests and research.

Additional evidence of the growth of the discipline of behavioral medicine is provided by the fact that training in the field can be found in universities around the world, ensuring that the next generation of researchers and practitioners will be trained by current experts. Before going on to specialize in behavioral medicine research or clinical practice, individuals often receive their terminal degrees in disciplines such as medicine, public health, nursing, and psychology. Such diversity is a tremendous strength in this interdisciplinary field.

Like all such printed endeavors, the *Encyclopedia* proves a "snapshot in time" of its subject. Research during the past 30 years has provided the solid foundation from which future advances will be made, and it will be of great interest to all of us in behavioral medicine to follow its further development. We are grateful to Stephen Weiss for providing a Foreword entitled "Early Developments in the Field of Behavioral Medicine," which reviews important events in the discipline's evolution, and to Neil Schneiderman for providing a Foreword entitled "A Personal View of Behavioral Medicine's Future," which provides an insightful view of likely trajectories and benefits of our discipline. We hope that subsequent editions will provide additional snapshots in due course.

Miami, July 2012 Marc D. Gellman and J. Rick Turner

References

Schwartz, G., & Weiss, S. (1977). What is behavioral medicine. *Psychosomatic Medicine*, *39*(6), 377–381.

Steptoe, A. (Ed.) (2010). *Handbook of behavioral medicine: Methods and applications*. New York: Springer.

Plomin, R., DeFries, J. C., McClearn, G. E., & Rutter, M. (1997). *Behavioral genetics* (3rd ed.). New York: WH Freeman & Company.

Acknowledgments

The conceptualization, writing, and publication of the *Encyclopedia of Behavioral Medicine* occurred over a 4-year period. The idea originated with our attentive and thoughtful Senior Editor from Springer, Janice Stern. Without Janice's forward thinking this *Encyclopedia* would not have materialized, and we are deeply grateful for her vision and support throughout its development. She first approached me (MDG) at the International Congress of Behavioral Medicine held in Tokyo, in August 2008. At the time it seemed to be a formidable task, to compile all of the terms that are used in the field of behavioral medicine into an A–Z compendium. My next meeting with Janice occurred in Montreal at a Society of Behavioral Medicine meeting during spring 2009. It was at that time my co-editor (JRT) had agreed to join forces with me in this effort. We then set about creating an advisory board, comprised of leading international experts in the field of behavioral medicine, and selecting our outstanding group of associate editors. They come from various parts of the world and permit this work to be truly an international collaboration. Without their hard work and dedication to this project we would not have the *Encyclopedia of Behavioral Medicine* in the form that you see it. They assisted in the selection of the terms that are included in the *Encyclopedia* and in the selection of the authors who developed each of the entries: our sincere thanks to all of you. We are indebted to the Springer Major Reference Works team including Anil Chandy, Tina Shelton, and Meetu Lall. This is the team that kept us organized, on task, and was instrumental in so many ways in bringing the *Encyclopedia* to fruition.

My journey in the interdisciplinary field of behavioral medicine has allowed me to delve into the fields of epidemiology, medicine, neuroscience, psychology, pharmacology, physiology, and public health. Throughout this entire journey, my mentor and teacher, Neil Schneiderman, has shaped my career. From my time as an undergraduate student, through graduate school, a postdoctoral fellowship, and on to becoming a faculty member, I have been fortunate to be by Neil's side. For this, first and foremost, I would like to acknowledge and dedicate this *Encyclopedia* to him.

To my wife Jill Turner, who has been by my side throughout the development of the *Encyclopedia*, I could not have done this without your patience and support.

MDG

I moved to the United States in 1987 to join Paul Obrist's group at the University of North Carolina at Chapel Hill. I met Neil Schneiderman shortly

thereafter, and he has been a great source of personal and professional support since that time. I am delighted that Marc has dedicated the *Encyclopedia* to him. I would like to acknowledge the scientific training I received at the University of Sheffield and the University of Birmingham. My doctoral work in cardiovascular psychophysiology and cardiovascular behavioral medicine was conducted in Birmingham under the supervision of Doug Carroll, with John Hewitt providing additional guidance in the fields of Statistics and behavioral genetics.

I would also like to thank my wife Karen for her support during the preparation of the *Encyclopedia*.

JRT

About the Editors

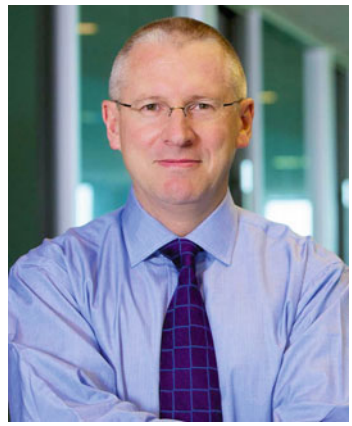
Marc D. Gellman is a Research Associate Professor of Psychology and the Associate Director of the Division of Health Psychology, Department of Psychology, University of Miami, Florida, USA. He is also Associate Director of the Behavioral Medicine Research Center and Associate Director of the Behavioral Medicine Training Program located at the Miller School of Medicine, University of Miami, where he holds a secondary appointment in the Department of Medicine. He has been a member of the faculty of the University of Miami since 1986. Dr. Gellman received all of his formal training (B.S., M.S., and Ph.D. degrees) from the University of Miami.

Since 1986, he has been continuously funded by the National Institutes of Health, primarily in the area of cardiovascular behavioral medicine. Dr. Gellman has published in a variety of journals including: *Psychosomatic Medicine*, *Health Psychology*, *Annals of Behavioral Medicine*, *Psychophysiology*, and others. Dr. Gellman currently serves on the editorial advisory board for the McGraw-Hill *Annual Editions: Drugs, Society, and Behavior*. He previously served on the editorial board of the Sage Publications scientific book series Behavioral Medicine and Health Psychology from 1997 to 2004, edited by J. Rick Turner, his co-editor for this *Encyclopedia*.

Dr. Gellman is a former board member of the International Society of Behavioral Medicine, serving as its secretary 2004–2008 and chair of the communications committee 2000–2004. From 2004 to 2006, he served as program co-chair for the International Congress of Behavioral Medicine. Dr. Gellman is a longtime board member of the Society of Behavioral

Medicine, serving in various capacities from 1996 to 2007. He continues to serve as a member of the Wisdom Council for the Society of Behavioral Medicine. Dr. Gellman is the recipient of the Distinguished Service Award from the Society of Behavioral Medicine and the Outstanding Service Award from the International Society of Behavioral Medicine. Dr. Gellman is a Fellow of the Society of Behavioral Medicine. He is also a member of the American Psychological Association, the American Psychosomatic Society, the Society of Behavioral Medicine, and the International Society of Behavioral Medicine.

In his spare time, he is an avid bicycle rider and enjoys "out of car experiences" with his wife Jill, touring numerous countries on their tandem bicycle. He is a wine aficionado, an enthusiast of rock, jazz, and reggae music, and occasionally lectures on the influence drugs have on culture, being inspired by his attendance at the historic Woodstock Music and Art Festival in 1969.



Rick Turner is Senior Scientific Director, Cardiovascular Safety, at Quintiles, a fully integrated biopharmaceutical services provider. He joined Quintiles after serving as the chairman of the Department of Clinical Research at the Campbell University School of Pharmacy. Prior to that, he was a principal clinical submissions scientist at GlaxoSmithKline, where he received awards for his work on the GlaxoSmithKline Clinical Trial Registry and in product development. He is also Senior Fellow, Center for Medicine in the Public Interest, and President and Chief Scientific Officer, Turner Medical Communications LLC.

Dr. Turner received his Ph.D. in psychophysiology and cardiovascular behavioral medicine from the University of Birmingham, United Kingdom, where he trained under Douglas Carroll. Following a postdoctoral fellowship there, he moved to the University of North Carolina at Chapel Hill to work in the laboratory of the late Paul Obrist and Kathleen Light. His work in the field of cardiovascular behavioral medicine led to 50 peer-reviewed publications and the receipt of two international research awards, the 1998 Distinguished

Scientific Award for an Early Career Contribution to Psychophysiology from the Society for Psychophysiological Research and the 1993 Early Career Award for Contributions to Psychosomatic Medicine from the American Psychosomatic Society. He is the author of the 1994 book *Cardiovascular Reactivity and Stress: Patterns of Physiological Response*, and was a coeditor of the book *Health and Behavior in Childhood and Adolescence*, which received a 2003 *American Journal of Nursing* Book of the Year Award. He became a Fellow of the Society of Behavioral Medicine in 1999.

Since entering the biopharmaceutical industry, Dr. Turner has published extensively in peer-reviewed and professional journals, and authored six books addressing methodological and statistical aspects of randomized, concurrently controlled clinical trials. He was a participant in the 2010 National Heart, Lung, and Blood Institute Clinical Trials Symposium, giving an invited presentation entitled "The Power of the Randomized, Concurrently Controlled Clinical Trial," and he travels extensively to provide clinical trial consulting services to biopharmaceutical companies worldwide and deliver presentations on drug safety topics at international scientific conferences.

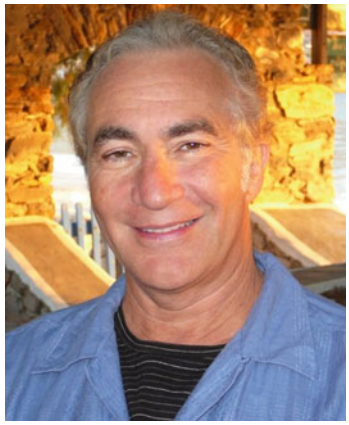
Dr. Turner is particularly interested in the development of drugs for type 2 diabetes mellitus. He has testified before two U.S. Food and Drug Administration committees, the Endocrinologic and Metabolic Drugs Advisory Committee and the Drug Safety and Risk Management Advisory Committee, and is working with both biopharmaceutical companies and regulators to expedite the development of drugs for this disease. He is also an advocate of increasing adherence to drugs for all chronic diseases, including diabetes, by greater use of knowledge and strategies developed in the field of behavioral medicine.

Dr. Turner is on the editorial board of the peer-reviewed *Journal for Clinical Studies* and is editor-in-chief of the peer-reviewed *Drug Information Journal*.

Associate Editors

Mustafa al'Absi
University of Minnesota Medical School
University of Minnesota
235 School of Medicine
Duluth, MN
USA

Alan J. Christensen
Department of Psychology
The University of Iowa Spence Laboratories of Psychology
Iowa City, Iowa
USA

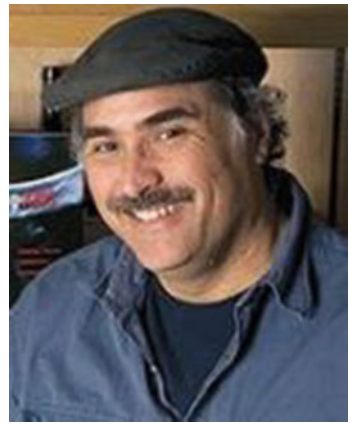


Alan M. Delamater
Department of Pediatrics
University of Miami Miller School of Medicine
Miami, FL
USA

Yori Gidron
Faculty of Medicine & Pharmacy
Free University of Brussels (VUB)
Jette
Belgium

Martica H. Hall
Department of Psychiatry
University of Pittsburgh
Pittsburgh, PA
USA

Peter A. Hall
Faculty of Applied Health Sciences
University of Waterloo
Waterloo, ON
Canada



Seth Kalichman
Department of Psychology
University of Connecticut Center for Health Intervention and Prevention
Storrs, CT
USA

Kevin Masters
Department of Psychology
University of Colorado Denver
Denver, CO
USA

Urs M. Nater
Department of Psychology
University of Marburg
Marburg
Germany

Frank J. Penedo
Feinberg School of Medicine
Northwestern University
Chicago, IL

Anna C. Phillips
Sport & Exercise Sciences
University of Birmingham
Edgbaston, Birmingham
UK

Barbara Resnick
School of Nursing
University of Maryland
Baltimore, MD
USA

Daichi Shimbo
Columbia University
New York, NY
USA

Ingrid Soderback
University Lecturer Emerita
Department of Public Health and
Caring Science
Uppsala University
Uppsala, SE
Sweden

Antti Uutela
Department for Lifestyle and Health
National Institute for Health and Welfare (THL)
Helsinki
Finland

Deborah J. Wiebe
Division of Psychology
Department of Psychiatry
University of Texas Southwestern Medical Center
Dallas, TX
USA

Kazuhiro Yoshiuchi
Department of Stress Sciences & Psychosomatic Medicine
The University of Tokyo
Bunkyo-ku, Tokyo
Japan

Advisory Board

Contributors

David B. Abrams Johns Hopkins Bloomberg School of Public Health, The Schroeder Institute for Tobacco Research and Policy Studies at Legacy, Washington, DC, USA

Howard Aizenstein Geriatric Psychiatry Neuroimaging, Western Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh, PA, USA

Tatsuo Akechi Department of Psychiatry and Cognitive-Behavioral Medicine, Graduate School of Medical Sciences, Nagoya City University, Nagoya, Aichi, Japan

Mustafa al'Absi University of Minnesota Medical School, University of Minnesota, 235 School of Medicine, Duluth, MN, USA

Melissa A. Alderfer Division of Oncology, The Children's Hospital of Philadelphia, Philadelphia, PA, USA

Sarah Aldred School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Julia Allan School of Medicine and Dentistry, University of Aberdeen, Foresterhill, Aberdeen, Scotland, UK

Peter Allebeck Department of Public Health Sciences, Karolinska Institute, Stockholm, Sweden

Josh Allen Care and Compliance Group, Inc. American Assisted Living Nurses Association, Wildomar, CA, USA

Kacie C. Allen Human Nutrition, Foods, and Exercise, Virginia Tech, Roanoke, VA, USA

Leila Anane School of Sport and Exercise Sciences, The University of Birmingham, Birmingham, UK

David E. Anderson Division of Nephrology, Department of Medicine, University of California, San Francisco, CA, USA

Giles M. Anderson School of Psychology, University of Birmingham, Edgbaston, Birmingham, UK

Norman B. Anderson American Psychological Association, Washington, DC, USA

Gerhard Andersson Department of Behavioral Sciences and Learning, Linköping University, Linköping, Sweden

Tetusya Ando Department of Psychosomatic Research, National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira-shi, Tokyo, Japan

Mike Antoni Department of Psychology, University of Miami, Sylvester Cancer Center, Miller School of Medicine, Miami, FL, USA

William Arguelles Department of Psychology, University of Miami, Coral Gables, FL, USA

Wiebke Arlt School of Sport & Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Arpo Aromaa Health and Functional Capacity, National Institute for Health and Welfare, Helsinki, Finland

Elva Arredondo Division of Health Promotion and Behavioral Sciences, San Diego State University, San Diego, CA, USA

Lisa G. Aspinwall Department of Psychology, The University of Utah, Salt Lake City, UT, USA

Kristin J. August Department of Psychology, Rutgers University, Camden, NJ, USA

Simon Bacon Department of Exercise Science, Concordia University, Montreal Behavioral Medicine Centre, Montreal, QC, Canada

Rachel N. Baek Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Jonathan Z. Bakdash Department of Psychology, University of Utah, Salt Lake City, UT, USA

Center for Human Factors in Patient Safety, VA Salt Lake City Health Care System, Salt Lake City, UT, USA

U.S. Army Research Laboratory, Aberdeen Proving Ground, MD, USA

Elizabeth Baker Department of Psychology, University of Miami, Coral Gables, FL, USA

Austin S. Baldwin Department of Psychology, Southern Methodist University, Dallas, TX, USA

Chad Barrett Department of Psychology, University of Colorado Denver, Denver, CO, USA

Abigail Batchelder Yeshiva University, Bronx, NY, USA

G. David Batty Department of Epidemiology and Public Health, University College London, London, UK

Linda C. Baumann School of Nursing, University of Wisconsin-Madison, Madison, WI, USA

Carolyn Baum School of Medicine in St Louis, Washington University, St. Louis, MO, USA

Elliott A. Beaton Department of Psychiatry and Behavioral Sciences and the M.I.N.D. Institute, University of California-Davis, Sacramento, CA, USA

C. Andres Bedoya Behavioral Medicine Service Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

Catherine Benedict Department of Psychology, University of Miami, Coral Gables, FL, USA

Ryan M. Beveridge Department of Psychology, University of Delaware, Newark, DE, USA

Stephen Birch Clinical Epidemiology and Biostatistics (CHEPA), McMaster University, Hamilton, ON, Canada

Orit Birnbaum-Weitzman Department of Psychology, University of Miami, Miami, FL, USA

James A. Blumenthal Department of Psychiatry & Behavioral Sciences, Duke University Medical Center, Durham, NC, USA

Guy Bodenmann Department of Psychology, University of Zurich, Binzmuehlestrasse, Zurich, Switzerland

Marie Boltz College of Nursing, New York University, New York, NY, USA

Susan J. Bondy Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada

Stephan Bongard Department of Psychology, Goethe-University, Frankfurt am Main, Germany

Brian Borsari Department of Veterans Affairs Medical Center, Mental Health and Behavioral Sciences Service, Providence, RI, USA

Department of Behavioral and Social Sciences, Center for Alcohol and Addiction Studies, Brown University, Providence, RI, USA

Jos A. Bosch Department of Clinical Psychology, Faculty of Social Behavioral Sciences, University of Amsterdam, The Netherlands

Kimberly Bowen Department of Psychology and Health Psychology Program, University of Utah, Salt Lake City, UT, USA

Stephanie Bowlin Department of Psychology, University of Kansas, Lawrence, KS, USA

Nicole Brandt School of Pharmacy, University of Maryland, Baltimore, MD, USA

Dana Brimmer Division of High-Consequence Pathogens and Pathology, Centers for Disease Control and Prevention, McKing Consulting Corporation, Atlanta, GA, USA

Carrie Brintz Department of Psychology, University of Miami, Coral Gables, FL, USA

J. F. Brosschot Clinical, Health and Neuro Psychology, Leiden University, Leiden, Netherlands

Jennifer L. Brown Department of Behavioral Sciences and Health Education, Emory University School of Public Health, Atlanta, GA, USA

Bonnie Bruce Division of Immunology and Rheumatology, Stanford University Department of Medicine, Palo Alto, CA, USA

Vaughn Bryant Behavioral and Social Sciences, Brown University, Providence, RI, USA

Patrícia Cardoso Buchain Occupational Therapist of the Occupational Therapy Service, Institute of Psychiatry, Hospital das Clínicas University of São Paulo Medical School, São Paulo, SP, Brazil

Ross Buck Communication Sciences and Psychology, University of Connecticut, Storrs, CT, USA

Romola S. Bucks School of Psychology, The University of Western Australia (M304), Crawley, WA, Australia

Donna C. Burdzy Department of Psychology, Bowling Green State University, Bowling Green, OH, USA

Rachel J. Burns Department of Psychology, University of Minnesota, Minneapolis, MN, USA

Victoria E. Burns School of Sport and Exercise Sciences, The University of Birmingham, Birmingham, UK

Michelle Nicole Burns Feinberg School of Medicine, Department of Preventive Medicine, Center for Behavioral Intervention Technologies, Northwestern University, Chicago, IL, USA

David Busse Department of Psychology and Social Behaviour, University of California, Irvine, Irvine, CA, USA

Natalie E. Bustillo Department of Psychology, University of Miami, Coral Gables, FL, USA

Colin D. Butler Centre for Epidemiology and Population Health, Australian National University, Canberra, ACT, Australia

Jorie Butler Department of Psychology, University of Utah, Salt Lake City, UT, USA

Melissa M. A. Buttner Department of Psychology, University of Iowa, Iowa City, IA, USA

John T. Cacioppo Department of Psychology, The University of Chicago, Chicago, IL, USA

Demetria Cain Center for Health Intervention and Prevention, University of Connecticut, Storrs, CT, USA

Matthew Calamia Department of Psychology, University of Iowa, Iowa City, IA, USA

David Cameron Department of Psychology, The University of Sheffield, Sheffield, UK

Linda D. Cameron Psychological Sciences, University of California, Merced, Merced, CA, USA

Nerissa Campbell Exercise and Health Psychology Laboratory, The University of Western Ontario, London, ON, Canada

Tavis S. Campbell Department of Psychology, University of Calgary, Calgary, AB, Canada

Rebecca Campo Huntsman Cancer Institute, University of Utah, Salt Lake City, UT, USA

Turhan Canli Department of Psychology, Stony Brook University Psychology B-214, Stony Brook, NY, USA

Elizabeth da Silva Cardoso Department of Educational Foundations & Counseling Programs, The City University of New York-Hunter College, New York, USA

Leeann Carey Melbourne Brain Centre, Heidelberg, VIC, Australia

McKenzie Carlisle Department of Psychology and Health Psychology Program, University of Utah, Salt Lake City, UT, USA

Jordan Carlson Public Health, San Diego State University, University of California San Diego, San Diego, CA, USA

Olveen Carrasquillo Division of General Medicine, Miller School of Medicine, University of Miami, Miami, FL, USA

Adriana Carrillo Department of Pediatrics, Miller School of Medicine, University of Miami, Miami, FL, USA

Linda Carroll Department of Public Health Sciences, University of Alberta, Edmonton, AB, Canada

Douglas Carroll School of Sport and Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Judith Carroll Cousins Center for Psychoneuroimmunology, University of California, Los Angeles, CA, USA

Jennifer Carter The University of Iowa, Iowa City, IA, USA

Charles Carver Department of Psychology, University of Miami, Coral Gables, FL, USA

Pedro C. Castellon Epidemiology and Public Health, Miller School of Medicine, University of Miami, Miami, FL, USA

Sherilynn F. Chan Department of Psychology, University of Miami, Coral Gables, FL, USA

Fong Chan Department of Rehabilitation Psychology and Special Education, University of Wisconsin-Madison, Madison, WI, USA

Matthieu Chansard Department of Psychiatry, The University of Texas Southwestern Medical Center at Dallas Columbia University/New York State Psychiaric Institute, Dallas, TX, USA

Stephenie Chaudoir Department of Psychology, Bradley University, Peoria, IL, USA

Margaret A. Chesney Department of Medicine & Center for Integrative Medicine, University of California, San Francisco, CA, USA

Ornit Chiba-Falek Duke University Medical Center, Durham, NC, USA

Yoichi Chida Research Department of Epidemiology & Public Health, University College London, London, UK

Michael S. Chmielewski Department of Psychology, University of Toronto, Toronto, ON, Canada

Kyung-Eun Choi Kliniken Essen Mitte, Klinik für Naturheilkunde und Integrative Medizin, Universität Duisburg-Essen, Am Deimelsberg 34a, Essen, Germany

Julie Chronister Department of Counseling, San Francisco State University, San Francisco, CA, USA

Cari J. Clark Department of Medicine, University of Minnesota, Minneapolis, MN, USA

Molly S. Clark Department of Family Medicine, University of Mississippi Medical Center, Jackson, MS, USA

Tyler Clark School of Psychology, The University of Sydney, Sydney, NSW, Australia

Benjamin L. Clarke Academic Health Center, School of Medicine-Duluth Campus, University of Minnesota, Duluth, MN, USA

Tainya C. Clarke Department of Epidemiology and Public Health, Miller School of Medicine, University of Miami, Miami, FL, USA

Lindy Clemson Ageing, Work & Health Research Unit, Faculty of Health Sciences, University of Sydney, NSW, Lidcombe, Australia

Lorenzo Cohen Department of General Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Susan E. Collins Department of Psychiatry and Behavioral Sciences, University of Washington, Harborview Medical Center, Seattle, WA, USA

Persis Commissariat Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Richard J. Contrada Department of Psychology, Rutgers, The State University of New Jersey, Piscataway, NJ, USA

Michael James Coons Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Susannah D. Copland Obstetrics and Gynecology, Division of Reproductive Endocrinology and Fertility, Duke Fertility Center, Durham, NC, USA

Quirino Cordeiro Department of Psychiatry and Psychological Medicine, Santa Casa Medical School, São Paulo, SP, Brazil

Erin Costanzo Department of Psychiatry, Carbone Cancer Center, University of Wisconsin-Madison, Madison, WI, USA

Jennifer Creek Occupational Therapist, Guisborough, North Yorkshire, UK

Matthew Cribbet Department of Psychology, University of Utah, Salt Lake City, UT, USA

Hugo Critchley Brighton and Sussex Medical School, University of Sussex, Brighton, East Sussex, UK

Crista N. Crittenden Department of Psychology, Carnegie Mellon University, Pittsburgh, PA, USA

Andrea Croom Department of Psychology, University of Texas Southwestern Medical Center, Dallas, TX, USA

Rick Crosby University of Kentucky, Lexington, KY, USA

Jennifer Cumming School of Sport and Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Cassie Cunningham College of Public Health, University of Iowa, Liberty, IA, USA

Maurizio Cutolo Department of Internal Medicine, Research Laboratories and Academic Unit of Clinical Rheumatology, University of Genova, Genova, Italy

Amber Daigre University of Miami, Miami, FL, USA

Catherine Darker Public Health & Primary Care, Trinity College, The University of Dublin, Dublin, Ireland

Karina Davidson Department of Medicine, Columbia University Medical Center, New York, NY, USA

Gary Davis Medical School Duluth, University of Minnesota, Duluth, MN, USA

Mary C. Davis Department of Psychology, Arizona State University, Tempe, AZ, USA

Karen Dawe School of Social and Community Medicine, University of Bristol, Oakfield House, Oakfield Grove, Bristol, UK

Marijke De Couck Free University of Brussels (VUB), Jette, Belgium

Maartje de Wit Medical Psychology, VU University Medical Center, Amsterdam, North Holland, The Netherlands

Justina Deary Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Scott DeBerard Department of Psychology, Utah State University, Logan, UT, USA

Joost Dekker Department of Psychiatry and Department of Rehabilitation Medicine, VU University Medical Centre, Amsterdam, The Netherlands

Alan M. Delamater Department of Pediatrics, University of Miami Miller School of Medicine, Miami, FL, USA

Kelly S. DeMartini Division of Substance Abuse, School of Medicine, Yale University, New Haven, CT, USA

Andrew DeMott Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Johan Denollet CoRPS – Center of Research on Psychology in Somatic diseases, Tilburg University, Tilburg, The Netherlands

Ellen-ge Denton Department of Medicine Center for Behavioral Cardiovascular Health, Columbia University Medical Center, New York, NY, USA

Stuart Derbyshire School of Psychology, The University of Birmingham, Edgbaston, Birmingham, UK

Martin Deschner Psychiatry, Division of Psychology, The University of Texas Southwestern Medical Center at Dallas, Dallas, TX, USA

Tamer F. Desouky Department of Psychology, The University of Texas at Arlington, Arlington, TX, USA

Mary Amanda Dew School of Medicine and Medical Center, University of Pittsburgh, Pittsburgh, PA, USA

Sally Dickerson Department of Psychology and Social Behavior, University of California, Irvine, Irvine, CA, USA

Andrea F. DiMartini School of Medicine and Medical Center, University of Pittsburgh, Pittsburgh, PA, USA

Joel E. Dimsdale Department of Psychiatry, University of California San Diego, La Jolla, CA, USA

Ding Ding Graduate School of Public Health/Department of Family Preventive Medicine, San Diego State University/University of California San Diego, San Diego, CA, USA

Beate Ditzen Division of Clinical Psychology and Psychotherapy, Department of Psychology, University of Zurich, Binzmuhlestrasse, Zurich, Switzerland

Diane Dixon Department of Psychology, University of Strathclyde, Glasgow, Scotland, UK

Susan Dorsey School of Nursing, University of Maryland, Baltimore, MD, USA

Monica Dowling Miller School of Medicine, University of Miami, Miami, FL, USA

Mark T. Drayson College of Medical and Dental Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Michelle Drerup Clinical Assistant Professor of Medicine, Sleep Disorders Center Neurological Institute, Cleveland Clinic, Cleveland, OH, USA

Frank A. Drews Department of Psychology, University of Utah, Salt Lake City, UT, USA

Center for Human Factors in Patient Safety, VA Salt Lake City Health Care System, Salt Lake City, UT, USA

Suzana Drobnjak Department of Psychology, University of Zurich, Binzmuehlestrasse, Switzerland

Alejandra Duenas School of Management, IESEG, Paris, France

Joan Duer-Hefele Columbia University, New York, NY, USA

Mariam Dum Jackson Memorial Hospital, Miami, FL, USA

Jennifer Duncan Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Valerie Earnshaw Department of Public Health, Yale University, New Haven, CT, USA

Lisa A. Eaton Center for Health, Intervention, and Prevention, University of Connecticut, New Haven, CT, USA

Moritz Thede Eckart General and Biological Psychology, Department of Psychology, University of Marburg, Marburg, Germany

Ulrike Ehlert Department of Psychology, University of Zurich, Binzmuehlestrasse, Zurich, Switzerland

Lorin Elias Department of Psychology, University of Saskatchewan, Saskatoon, SK, Canada

Helio Elkis Department and Institute of Psychiatry, University of São Paulo Medical School, São Paulo, SP, Brazil

Lee Ellington Department of Nursing, College of Nursing, University of Utah, Salt Lake City, UT, USA

Christopher G. Engeland Center for Wound Healing and Tissue Regeneration, University of Illinois, Chicago, IL, USA

Elissa S. Epel University of California, San Francisco, CA, USA

Jennifer Toller Erausquin Chronic Disease and Injury Prevention, NC Division of Public Health, Durham, NC, USA

Alexandra Erdmann Department of Psychiatry, Carbone Cancer Center, University of Wisconsin-Madison, Madison, WI, USA

Sabrina Esbitt Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Paul A. Estabrooks Translational Obesity Research Program, Virginia Tech Riverside, Roanoke, VA, USA

Susan A. Everson-Rose Department of Medicine, University of Minnesota, Minneapolis, MN, USA

Benjamin I. Felleman Seattle Pacific University, Seattle, Washington, USA

Molly Ferguson Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Cristina A. Fernandez Department of Epidemiology and Public Health, Miller School of Medicine, University of Miami, Miami, FL, USA

Tania C. T. Ferraz Alves Department and Institute of Psychiatry, University of São Paulo Medical School, São Paulo, SP, Brazil

Tiffany Field Touch Research Institute, University of Miami, School of Medicine, Mailman Center for Child Development, Miami, FL, USA

Robyn Fielder Center for Health and Behavior, Syracuse University, Syracuse, NY, USA

David J. Finitsis Department of Psychology, University of Connecticut, Storrs, CT, USA

Simona Fischbacher Klinische Psychologie und Psychotherapie, Universität Zürich, Zürich, Switzerland

Susanne Fischer Department of Psychology, Clinical Biopsychology, Philipps-University of Marburg, Marburg, Germany

Skye Fitzpatrick Department of Psychology, Ryerson University, Toronto, ON, Canada

Kelly Flannery School of Nursing, University of Maryland Baltimore, Baltimore, MD, USA

Magne Arve Flaten Department of Psychology, University of Tromsø, Tromsø, Norway

Serina Floyd Obstetrics and Gynecology, Duke Hospital, Raleigh, NC, USA

Rachel Flurie University of Maryland, Baltimore, MD, USA

Susan Folkman Department of Medicine, School of Medicine, University of California San Francisco, San Mateo, CA, USA

Katherine T. Fortenberry Department of Family and Preventative Medicine, The University of Utah, Salt Lake City, UT, USA

Andrew Fox Recovery and Wellbeing Inpatient Services, Birmingham and Solihull Mental Health NHS Trust, Birmingham, West Midlands, UK

Kristen R. Fox School of Medicine and Medical Center, University of Pittsburgh, Pittsburgh, PA, USA

Christopher France Department of Psychology, Ohio University, Athens, OH, USA

Janis L. France Department of Psychology, Ohio University, Athens, OH, USA

Anne Frankel Robert Stempel College of Public Health and Social Work, Florida International University, Miami, FL, USA

Elizabeth Franzmann Department of Otolaryngology/Division of Head and Neck, Miller School of Medicine, University of Miami, Miami, FL, USA

Fred Friedberg Psychiatry and Behavioral Sciences, Stony Brook University Medical Center, Stony Brook, NY, USA

Georita Marie Frierson Department of Psychology, Southern Methodist University, Dallas, TX, USA

Shin Fukudo Department of Behavioral Medicine, School of Medicine, Tohoku University Graduate, Aoba-ku, Sendai, Japan

Terry Fulmer Bouvé College of Health Sciences, Northeastern University, Boston, MA, USA

Jens Gaab Clinical Psychology and Psychotherapy, Department of Psychology, University of Basel, Basel, Switzerland

Amiram Gafni Department of Clinical Epidemiology and Biostatistics, Centre for Health Economics and Policy Analysis, McMaster University, Hamilton, ON, Canada

Elizabeth Galik School of Nursing, University of Maryland, Baltimore, MD, USA

Stephen Gallagher Department of Psychology, Faculty of Education & Health Sciences, University of Limerick, Castletroy, Limerick, Ireland

Steven Gambert Department of Medicine, School of Medicine, University of Maryland, Baltimore, MD, USA

Luis I. García Center for AIDS Intervention Research, Medical College of Wisconsin, Milwaukee, WI, USA

M. Kay Garcia Department of General Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Ryan Garcia University of Texas Southwestern Medical Center at Dallas, Dallas, TX, USA

Luz M. Garcini Ethnic Minority & Multicultural Health SBM SIG Co-Chair, SDSU/UCSD Joint Doctoral Program in Clinical Psychology, San Diego, CA, USA

Stephanie L. Garey Department of Clinical and Health Psychology, College of Public Health and Health Professions, University of Florida, Gainesville, FL, USA

Mariana Garza Department of Psychology, University of North Texas, Denton, TX, USA

Robert J. Gatchel Department of Psychology, College of Science, The University of Texas at Arlington, Arlington, TX, USA

Klaus Gebel School of Education, University of Newcastle, Callaghan, NSW, Australia

City Futures Research Centre, University of New South Wales, Sydney, Australia

Pamela A. Geller Department of Psychology, Drexel University Drexel University College of Medicine, Philadelphia, PA, USA

Marc D. Gellman Behavioral Medicine Research Center, Department of Psychology, University of Miami, Miami, FL, USA

Login S. George Department of Psychology, University of Connecticut, Storrs, CT, USA

William Gerin The College of Health and Human Development, University Park, PA, USA

Denis Gerstorf Institute of Psychology, Humboldt University, Berlin, Germany

Pearl Ghaemmaghami Department of Psychology, University of Zurich, Binzmuehlestrasse, Zurich, Switzerland

Yori Gidron Faculty of Medicine and Pharmacy, Free University of Brussels (VUB), Jette, Belgium

Annie T. Ginty School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Karen Glanz Schools of Medicine and Nursing, University of Pennsylvania, Philadelphia, PA, USA

Ronald Goldberg Diabetes Research Institute, University of Miami Miller School of Medicine, Miami, FL, USA

Peter M. Gollwitzer Department of Psychology, New York University, New York, NY, USA

Heather Honoré Goltz HSR&D Center of Excellence, Michael E. DeBakey VA Medical Center (MEDVAMC 152), Houston, TX, USA

Department of Social Sciences, University of Houston-Downtown, Houston, TX, USA

Carley Gomez-Meade Department of Pediatrics, Miller School of Medicine, University of Miami, Miami, FL, USA

Jeffrey S. Gonzalez Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Diabetes Research Center, Albert Einstein College of Medicine, Yeshiva University, Bronx, NY, USA

Patricia Gonzalez Institute for Behavioral and Community Health (IBACH), Graduate School of Public Health, San Diego State University, San Diego, CA, USA

Jeffrey Goodie Department of Family Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD, USA

Daniel Gorrin Department of Physical Therapy, University of Delaware, Newark, DE, USA

Elana Graber Department of Psychology, University of Delaware, Newark, DE, USA

John Grabowski Department of Psychiatry, Medical School, University of Minnesota, Minneapolis, MN, USA

Douglas A. Granger Center for Interdisciplinary Salivary Bioscience Research, School of Nursing, Bloomberg School of Public Health, and School of Medicine The Johns Hopkins University, Baltimore, MD, USA

Jessica Haberer Medicine and Center for Global Health, Massachusetts General Hospital, Harvard University, Boston, MA, USA

Tibor Hajos Medical Psychology, VU University Medical Center, Amsterdam, North Holland, The Netherlands

Chanita H. Halbert School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

Martica H. Hall Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA, USA

Judith A. Hall Department of Psychology, Northeastern University, Boston, MA, USA

Katherine S. Hall Durham VA Medical Center Geriatric Research, Education, and Clinical Center, Durham, NC, USA

Peter A. Hall Faculty of Applied Health Sciences, University of Waterloo, Waterloo, ON, Canada

Heidi Hamann Department of Psychiatry, UT Southwestern Medical Center, Dallas, TX, USA

Mark Hamer Epidemiology and Public Health, Division of Population Health, University College London, London, UK

Margaret Hammersla University of Maryland School of Nursing, Baltimore, MD, USA

Reiner Hanewinkel Institute for Therapy and Health Research, Kiel, Germany

Alyssa Haney Department of Psychiatry, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

Nelli Hankonen Department of Lifestyle and Participation, National Institute for Health and Welfare University of Helsinki, Helsinki, Finland

Kazuo Hara Department of Metabolic Diseases, Graduate School of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Samantha M. Harden Human Nutrition, Foods, and Exercise, Virginia Tech, Roanoke, VA, USA

Manjunath Harlapur Center of Behavioral Cardiovascular Health, Division of General Medicine, Columbia University, New York, NY, USA

Victoria Harms Department of Psychology, University of Saskatchewan, Saskatoon, SK, Canada

Lisa Harnack Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, Minneapolis, MN, USA

Briain O. Hartaigh School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Stacey L. Hart Department of Psychology, Ryerson University, Toronto, ON, Canada

Steven Harulow Royal College of Speech & Language Therapists, London, UK

Toshihide Hashimoto Department of Rehabilitation, Graduate School of Medicine, Gunma University, Maebashi, Gunma, Japan

Masahiro Hashizume Department of Psychosomatic Medicine, Toho University, Ota-ku, Tokyo, Japan

Brant P. Hasler Psychiatry, Western Psychiatric Institute and Clinic University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Louise C. Hawkley Department of Psychology, The University of Chicago, Chicago, IL, USA

Laura L. Hayman College of Nursing & Health Sciences, University of Massachusetts Boston, Boston, MA, USA

Jennifer Heaney School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Christine Heim Institute of Medical Psychology, Charité University Medicine Berlin, Berlin, Germany

Lois Jane Heller Department of Biomedical Sciences, University of Minnesota Medical School – Duluth, Duluth, MN, USA

Miranda Hellman Boston University, Boston, MA, USA

Kimberly M. Henderson Department of Medicine, University of Minnesota, Minneapolis, MN, USA

Whitney M. Herge Department of Psychology, University of Miami, Coral Gables, FL, USA

Patricia Cristine Heyn Department of Physical Medicine and Rehabilitation, University of Colorado Denver Anschutz Medical Campus School of Medicine, Aurora, CO, USA

Emma Hiatt Rehabilitaion Psychology and Special Education, University of Wisconsin-Madison, Madison, WI, USA

Angela M. Hicks Department of Psychology, Westminster College, Salt Lake City, UT, USA

Benjamin Hidalgo Department of Psychiatry, Medical College of Wisconsin, Milwaukee, WI, USA

Catharina Hjortsberg The Swedish Institute for Health Economics, Lund, Sweden

Clare Hocking Faculty of Health and Environmental Sciences, Auckland University of Technology, Auckland, New Zealand

Richard Hoffman Academic Health Center, School of Medicine-Duluth Campus University of Minnesota, Duluth, MN, USA

Maxine Holmqvist Clinical Health Psychology, University of Manitoba, Winnipeg, MB, Canada

Julianne Holt-Lunstad Department of Psychology, Brigham Young University, Provo, UT, USA

Emily D. Hooker Department of Psychology and Social Behavior, University of California, Irvine, Irvine, CA, USA

Stephanie Ann Hooker Department of Psychology, University of Colorado, Denver, CO, USA

Monica Webb Hooper Department of Psychology, University of Miami, Coral Gables, FL, USA

Christiane A. Hoppmann Department of Psychology, University of British Columbia, Vancouver, BC, Canada

M. Bryant Howren Department of Psychology, The University of Iowa & VA Iowa City Healthcare System, Iowa City, IA, USA

Brian M. Hughes School of Psychology, National University of Ireland, Galway, Galway, Ireland

Mann Hyung Hur Public Administration, Chung-Ang University, Seoul, Korea

Seth Hurley Department of Psychology, University of Iowa, Iowa City, IA, USA

Mustafa M. Husain Department of Psychiatry, The University of Texas Southwestern Medical Center at Dallas Columbia University/New York State Psychiaric Institute, Dallas, TX, USA

John Hustad Department of Medicine and Public Health Sciences, Penn State College of Medicine, Hershey, PA, USA

Shannon Idzik University of Maryland School of Nursing and the University of Maryland Medical Center Emergency Department, Baltimore, MD, USA

Shuji Inada Department of Stress Science and Psychosomatic Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Salvatore Insana Western Psychiatric Institute and Clinic, Pittsburgh, PA, USA

Leah Irish Department of Psychiatry, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

Makiko Ito Department of Stress Science and Psychosomatic Medicine, Graduate School of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Daisuke Ito Health Service Center, Kanazawa University, Kanazawa, Ishikawa, Japan

Satoru Iwase Department Of Palliative Medicine, The University of Tokyo Hospital, Bunkyo-ku, Tokyo, Japan

Karen Jacobs Occupational Therapy, College of Health and Rehabilitation Science, Sargent College, Boston University, Boston, MA, USA

Farrah Jacquez Department of Psychology, University of Cincinnati, Cincinnati, OH, USA

Lana Jago Department of Psychology, The University of Auckland, Auckland, New Zealand

Denise Janicki-Deverts Department of Psychology, Carnegie Mellon University, Pittsburgh, PA, USA

Kate L. Jansen Department of Family Medicine, University of Mississippi Medical Center, Jackson, MS, USA

Imke Janssen Department of Preventive Medicine, Rush University Medical Center, Chicago, IL, USA

Elissa Jelalian Department of Psychiatry, Rhode Island Hospital, Brown Medical School, Providence, RI, USA

Chad D. Jensen Department of Psychology, Brigham Young University, Provo, UT, USA

Jason Jent Department of Pediatrics, Mailman Center for Child Development, University of Miami, Miami, FL, USA

Stefanie De Jesus Exercise and Health Psychology Laboratory, The University of Western Ontario, London, ON, Canada

Rong Jiang Department of Psychiatry and Behavioral Sciences, Duke University, Durham, NC, USA

Alvin Jin Department of Psychology, University of South Florida College of Arts & Sciences, Tampa, FL, USA

Jillian A. Johnson Department of Psychology, University of Calgary, Calgary, AB, Canada

Debra Johnson Department of Psychology, University of Iowa, Iowa City, IA, USA

Sara B. Johnson School of Medicine and Bloomberg School of Public Health, Johns Hopkins School of Medicine, Baltimore, MD, USA

Marie Johnston School of Medicine and Dentistry, University of Aberdeen, Aberdeen, Scotland, UK

Derek Johnston School of Psychology, University of Aberdeen, Aberdeen, Scotland, UK

Phil Jones School of Geography, Earth & Environmental Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Randall Steven Jorgensen Department of Psychology, Syracuse University, Syracuse, NY, USA

Vanessa Juth Department of Psychology and Social Behavior, University of California, Irvine, Irvine, CA, USA

Yoshinobu Kanda Division of Hematology, Saitama Medical Center, Jichi Medical University, Omiya-ku, Saitama, Japan

Afton N. Kapuscinski Psychology Department, Syracuse University, Syracuse, NY, USA

Alyssa Karel School of Nursing, University of Wisconsin-Madison, Madison, WI, USA

Mardís Karlsdóttir Department of Psychology, The University of Iceland School of Health Sciences, Reykjavík, Iceland

Yoko Katayori Department of Behavioral Medicine, Graduate School of Medicine, Tohoku University, Aoba-ku, Sendai, Japan

Erin E. Kauffman Department of Psychology, University of North Texas, Denton, TX, USA

Francine Kaufman Medtronic, Northridge, CA, USA

Peter Kaufmann Division of Prevention & Population Sciences, National Heart, Lung, and Blood Institute Clinical Applications and Prevention Branch, Bethesda, MD, USA

Jussi Kauhanen Institute of Public Health and Clinical Nutrition, University of Eastern Finland, Kuopio, Finland

Ulrike Kübler Department of Psychology, University of Zurich, Binzmuehlestrasse, Zurich, Switzerland

Quinn D. Kellerman Department of Psychology, University of Iowa, Iowa City, IA, USA

Riyad Khanfer School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Falk Kiefer Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim, Baden-Württemberg, Germany

Hiroe Kikuchi Department of Psychosomatic Research, National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan

Kristin Kilbourn Department of Psychology, University of Colorado Denver, Denver, CO, USA

Tereza Killianova Free University of Brussels (VUB), Jette, Belgium

Youngmee Kim Department of Psychology, University of Miami, Coral Gables, Miami, FL, USA

Pamela S. King Pediatric Prevention Research Center, Department of Pediatrics, Wayne State University School of Medicine, Detroit, MI, USA

Megan Kirouac Department of Psychiatry and Behavioral Sciences, University of Washington, Harborview Medical Center, Seattle, WA, USA

Clemens Kirschbaum Chair of Biopsychology, Technische Universität Dresden, Dresden, Saxony, Germany

Mika Kivimaki Epidemiology & Public Health, University College London, London, WC1E 6BT, UK

Maria Kleinstäuber Department of Clinical Psychology and Psychotherapy, Johannes Gutenberg-University of Mainz, Mainz, Germany

Wendy Kliewer Department of Psychology, Virginia Commonwealth University, Richmond, VA, USA

Christopher Kline Department of Psychiatry, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

Matthew T. Knauf Department of Psychology, College of Science, The University of Texas at Arlington, Arlington, TX, USA

Carolyn Korbel The Neurobehavioral Clinic and Counseling Center, Lake Forest, CA, USA

Emily Kothe School of Psychology, University of Sydney, Sydney, NSW, Australia

Michael Kotlyar Department of Experimental and Clinical Pharmacology, College of Pharmacy, University of Minnesota, Minneapolis, MN, USA

Marc A. Kowalkouski HSR&D Center of Excellence, Michael E. DeBakey VA Medical Center (MEDVAMC 152), Houston, TX, USA

Tara Kraft Department of Psychology, University of Kansas, Lawrence, KS, USA

Kurt Kroenke Department of Medicine, Indiana University, Regenstrief Institute, VA HSR&D Center for Implementing Evidence-Based Practice, Indianapolis, IN, USA

Stefan Krumm University of Muenster, Muenster, Germany

Laura D. Kubzansky Department of Society, Human Development, and Health, Harvard School of Public Health, Boston, MA, USA

Brigitte M. Kudielka Department of Medical Psychology & Psychological Diagnostics, University of Regensburg, Regensburg, Germany

Masayoshi Kumagai Department of Metabolic Diseases, Graduate School of Medicine The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Keiki Kumano Department of Cell Therapy and Transplantation Medicine, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Yoshihiko Kunisato Department of Psychiatry and Neurosciences, Hiroshima University, Minami-ku, Hiroshima, Japan

Elyse Kupperman Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Seppo Laaksonen University of Helsinki, Helsinki, Finland

Lara LaCaille Department of Psychology, University of Minnesota Duluth, Duluth, MN, USA

Rick LaCaille Psychology Department, University of Minnesota Duluth, Duluth, MN, USA

Laura H. Lacritz Department of Psychology, The University of Texas Southwestern Medical Center at Dallas, Dallas, TX, USA

Karl-Heinz Ladwig Institut für Epidemiologie, Neuherberg, Germany

Annette M. La Greca Department of Psychology, University of Miami, Coral Gables, FL, USA

Ryan R. Landoll Department of Psychology, University of Miami, Coral Gables, FL, USA

Tanja Lange Department of Neuroendocrinology, University of Luebeck, Lübeck, Germany

Jost Langhorst Kliniken Essen Mitte, Klinik für Naturheilkunde und Integrative Medizin, Universität Duisburg-Essen, Am Deimelsberg 34a, Essen, Germany

David Latini Scott Department of Urology, Baylor College of Medicine, Houston, TX, USA

Kim Lavoie Department of Psychology, University of Québec at Montreal (UQAM); Montreal Behavioural Medicine Centre, Montréal, QC, Canada

Division of Chest Medicine, Hôpital du Sacré-Coeur de Montréal; Research Centre, Montreal Heart Institute, Montréal, QC, Canada

Hannah G. Lawman Department of Psychology, University of South Carolina, Columbia, SC, USA

David J. Lee Department of Epidemiology and Public Health, Miller School of Medicine, University of Miami, Miami, FL, USA

Simon J. Craddock Lee Department of Clinical Sciences, The University of Texas Southwestern Medical Center, Dallas, TX, USA

Carter A. Lennon Department of Psychology, University of Connecticut, Center for Health, Intervention & Prevention, Storrs, CT, USA

Wen B. Leong Diabetes and Endocrinology, University of Birmingham, Heart of England NHS Foundation Trust, Birmingham, West Midlands, UK

Stephen J. Lepore Department of Public Health, Temple University, Philadelphia, PA, USA

Bonnie S. LeRoy Department of Genetics Cell Biology and Development, University of Minnesota, Minneapolis, MN, USA

Yvonne Leung Department of Psychosocial Oncology and Palliative Care, Princess Margaret Hospital, University Health Network/ University of Toronto, Toronto, ON, Canada

Bonnie Levin Department of Neurology, University of Miami Medical Center, Miami, FL, USA

Bingshuo Li University of Minnesota Medical School, University of Minnesota, 235 School of Medicine, Duluth, MN, USA

Roselind Lieb Department of Psychology, Division of Clinical Psychology and Epidemiology, Basel, Switzerland

Julia R. Van Liew Department of Psychology, University of Iowa, Iowa City, IA, USA

Jane Limmer Obstetrics and Gynecology, Duke Hospital, Durham, NC, USA

Bernt Lindahl Occupational and Environmental Medicine, Department of Public Health and Clinical Medicine, Umeå University, Umeå, Sweden

Martin Lindström Department of Clinical Sciences in Malmö, Lund University, Malmö, Sweden

Megan R. Lipe Department of Clinical Health and Psychology, University of Florida, College of Public Health and Health Professions, Gainesville, FL, USA

Steven E. Lipshultz Department of Pediatrics, Epidemiology and Public Health, and Medicine (Oncology), Leonard M. Miller School of Medicine University of Miami Holtz Children's Hospital of the University of Miami-Jackson Memorial Medical Center Batchelor Children's Research Institute Mailman Center for Child Development University of Miami Sylvester Comprehensive Cancer Center, Miami, FL, USA

Cecilia W. P. Li-Tsang Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Kowloon, Hong Kong, China

Maria Magdalena Llabre Department of Psychology, University of Miami, Coral Gables, FL, USA

Valerie G. Loehr Department of Psychology, Southern Methodist University, Dallas, TX, USA

Joanna Long School of Sport and Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Kristin A. Long Department of Psychology, University of Pittsburgh, Pittsburgh, PA, USA

Sana Loue Department of Epidemiology & Biostatistics, Case Western Reserve University, School of Medicine, Cleveland, OH, USA

William Lovallo Department of Psychiatry and Behavioral Sciences, University of Oklahoma Health Sciences Center Veterans Affairs Medical Center, Oklahoma City, OK, USA

Travis Lovejoy Mental Health & Clinical Neurosciences Division, Portland Veterans Affairs Medical Center, Portland, OR, USA

Tana M. Luger Department of Psychology, University of Iowa, Iowa City, IA, USA

Mark A. Lumley Department of Psychology, Wayne State University, Detroit, MI, USA

M. Kathleen B. Lustyk School of Psychology, Family, and Community, Seattle Pacific University, University of Washington, Seattle, WA, USA

Faith S. Luyster School of Nursing, University of Pittsburgh, Pittsburgh, PA, USA

Kristin L. MacGregor Department of Psychology, Syracuse University, Syracuse, NY, USA

Anna MacKinnon Department of Psychology, McGill University, Montreal, QC, Canada

Shannon Madore Department of Psychology, University of Colorado Denver, Denver, CO, USA

Elizabeth A. Majka Department of Psychology, The University of Chicago, Chicago, IL, USA

Neena Malik Department of Pediatrics, Miller School of Medicine, University of Miami, Miami, FL, USA

Jamil A. Malik National Institute of Psychology, Quaid-i-Azam University/ VU University Amsterdam, Islamabad, Pakistan

Elizabeth M. Maloney Formerly of the Viral and Rickettsial Division, Centers for Disease Control and Prevention, Atlanta, GA, USA

Tsipora Mankovsky Department of Psychology, McGill University, Montreal, QC, Canada

Amy Jo Marcano-Reik Department of Bioethics, Cleveland Clinic, Cleveland, OH, USA

Center for Genetic Research Ethics and Law, Case Western Reserve University, Cleveland, OH, USA

Kristen K. Marciel Department of Psychology, University of Miami, Coral Gables, FL, USA

Judy A. Marciel Perioperative Services, East Tennessee Children's Hospital, Knoxville, TN, USA

Erin N. Marcus Division of General Internal Medicine, University of Miami, Miller School of Medicine, Miami, FL, USA

Seth A. Margolis Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Michela (Micky) Marinelli Department of Cellular and Molecular Pharmacology, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Jacqueline Markowitz Boston University, Boston, MA, USA

G. Alan Marlatt University of Washington, Seattle, Washington, USA

David G. Marrero Diabetes Translational Research Center, Indiana University School of Medicine, Indianapolis, IN, USA

Meghan L. Marsac The Center for Injury Prevention and Research, The Children's Hospital of Philadelphia, Philadelphia, PA, USA

Alexandra Martin Friedrich-Alexander University Erlangen-Nürnberg; University Hospital, Erlangen, Germany

Alexandra Martini de Oliveira Institute of Psychiatry – Hospital das Clínicas University of São Paulo Medical School, São Paulo, SP, Brazil

Kevin S. Masters Department of Psychology, University of Colorado, Denver, CO, USA

Della Matheson Diabetes Research Institute, Miller School of Medicine, University of Miami, Miami, FL, USA

Yoshinobu Matsuda National Hospital Organization, Kinki-Chuo Chest Medical Center, Sakai shi, Osaka, Japan

Hiromichi Matsuoka Department of Psychocomatic Medicine, Kinki University Faculty of Medicine, Osakasayama, Osaka, Japan

Yutaka Matsuyama Department of Biostatistics, School of Public Health, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Sonia Matwin Department of Psychiatry, Harvard Medical School, Boston, MA, USA

Alfred L. McAlister Behavioral Sciences, University of Texas School of Public Health, Austin, TX, USA

Lisa M. McAndrew Department of Veterans Affairs, NJ Healthcare System, East Orange, NJ, USA

Jeanette McCarthy Community and Family Medicine, Duke University Medical Center, Durham, NC, USA

Shawn McClintock Department of Psychiatry, The University of Texas Southwestern Medical Center at Dallas Columbia University/New York State Psychiaric Institute, Dallas, TX, USA

Lance M. McCracken Psychology Department, Institute of Psychiatry, King's College London, London, UK

James A. McCubbin Department of Psychology, Clemson University, Clemson, SC, USA

Bonnie McGregor Fred Hutchinson Cancer Research Center, Seattle, WA, USA

Brooke McInroy The University of Iowa, Iowa City, IA, USA

David McIntyre School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Tara McMullen Doctoral Program in Gerontology, University of Maryland Baltimore and Baltimore County, Baltimore, MD, USA

Marcia D. McNutt Department of Psychology, University of Miami, Coral Gables, FL, USA

Tamar Mendelson Mental Health, Johns Hopkins Bloomberg School of Public Health Johns Hopkins University, Baltimore, MD, USA

Luigi Meneghini Diabetes Research Institute, University of Miami, Miami, FL, USA

Melissa Merrick Division of Violence Prevention, Centers for Disease Control & Prevention, Atlanta, GA, USA

Sarah Messiah Department of Pediatrics, University of Miami, Miami, FL, USA

Miriam A. Mestre Division of Pediatric Clinical Research Department of Pediatrics, Leonard M. Miller School of Medicine University of Miami, Miami, FL, USA

Elizabeth Mezick Department of Psychology, University of Pittsburgh, Pittsburgh, PA, USA

Kathleen Michael School of Nursing, University of Maryland, Baltimore, MD, USA

Susan Michie University College London, London, UK

Eleanor Miles Department of Psychology, The University of Sheffield, Western Bank, Sheffield, UK

Donna Miller Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, MD, USA

Robert Miller Chair of Biopsychology, Technische Universität Dresden, Dresden, Saxony, Germany

Tracie L. Miller Department of Pediatrics and Epidemiology and Public Health Division of Pediatric Clinical Research Department of Pediatrics, Leonard M. Miller School of Medicine University of Miami Holtz Children's Hospital of the University of Miami-Jackson Memorial Medical Center Batchelor Children's Research Institute University of Miami Sylvester Comprehensive Cancer Center, Miami, FL, USA

Rachel Millstein SDSU/UCSD Joint Doctoral Program in Clinical Psychology, University of California, San Diego/San Diego State University, San Diego, CA, USA

Faisal Mir School of Sport & Exercise Sciences, University of Birmingham, Edgbaston, BHAM, UK

Akihisa Mitani Department of Respiratory Medicine, Mitsui Memorial Hospital, Chiyoda-ku, Tokyo, Japan

Laura A. Mitchell Department of Psychology, School of Life Sciences, Glasgow Caledonian University, Glasgow, Scotland, UK

Jason W. Mitchell Center for AIDS Intervention Research, Medical College of Wisconsin, Milwaukee, WI, USA

Koji Miyazaki Department of Hematology, Kitasato University School of Medicine, Sagamihara, Kanagawa, Japan

Marilyn Moffat Department of Physical Therapy, New York University, New York, NY, USA

David C. Mohr Feinberg School of Medicine, Department of Preventive Medicine, Center for Behavioral Intervention Technologies, Northwestern University, Chicago, IL, USA

Kristine M. Molina Department of Psychology, University of Miami, Miami, FL, USA

Arlen C. Moller Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Ivan Molton Department of Rehabilitation Medicine, University of Washington, Seattle, WA, USA

Jane Monaco Department of Biostatistics, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Karla Espinosa de los Monteros Clinical Psychology, SDSU/UCSD Joint Doctoral Program in Clinical Psychology, San Diego, CA, USA

Pablo A. Mora Department of Psychology, The University of Texas at Arlington, Arlington, TX, USA

Theresa A. Morgan Alpert Medical School of Brown University, Department of Psychiatry, Brown University, Providence, RI, USA

Matthis Morgenstern Institute for Therapy and Health Research, Kiel, Germany

Chica Mori Department Of Palliative Medicine, The University of Tokyo Hospital, Bunkyo-ku, Tokyo, Japan

Yoshiya Moriguchi Department of Psychophysiology, National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan

Alexandre Morizio Department of Exercise Science, Concordia University, Montreal Behavioral Medicine Centre, Montreal, QC, Canada

Eleshia J. P. Morrison Department of Psychology, Ethnic Minority & Multicultural Health SBM SIG Chair, The Ohio State University, Columbus, OH, USA

Anett Mueller Department of Psychology, State University of New York at Stony Brook, Stony Brook, NY, USA

Matthew Muldoon Department of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

Barbara Mullan Centre for Medical Psychology & Evidence-based Decision-making, University of Sydney, Sydney, NSW, Australia

Tomohiko Muratsubaki Department of Behavioral Medicine, School of Medicine, Tohoku University Graduate, Aoba-ku, Sendai, Japan

Seema Mutti School of Public Health & Health Systems, University of Waterloo, Waterloo, ON, Canada

Yoko Nagai Brighton and Sussex Medical School, University of Sussex, Brighton, East Sussex, UK

Eun-Shim Nahm School of Nursing, University of Maryland, Baltimore, MD, USA

Motohiro Nakajima University of Minnesota Medical School, University of Minnesota, 235 School of Medicine, Duluth, MN, USA

Misuzu Nakashima Hizen Psychiatric Center, Yoshinogari, Kanzaki, Saga, Japan

Benjamin H. Natelson Department of Pain Medicine & Palliative Care, Beth Israel Medical Center and Albert Einstein College of Medicine, Bronx, NY, USA

Urs M. Nater Department of Psychology, University of Marburg, Marburg, Germany

Astrid Nehlig U666, INSERM, Faculty of Medicine, University of Strasbourg, Strasbourg, France

Alexandra Nelson Drexel University Department of Psychology UNC – Chapel Hill Department of Psychiatry, Chapel Hill, NC, USA

Ashley Nelson Department of Psychiatry, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI, USA

Kimberly Nelson Department of Psychology, University of Washington, Seattle, WA, USA

Jonathan Newman Columbia University, New York, NY, USA

Sarah J. Newman Duke University, Durham, NC, USA

Darren Nickel Physical Medicine & Rehabilitation, University of Saskatchewan, Saskatoon, SK, Canada

Nicole Nisly Department of Internal Medicine, University of Iowa, Iowa City, IA, USA

Karen Niven Manchester Business School, The University of Manchester, Manchester, UK

Kyle R. Noll Department of Physical Medicine & Rehabilitation, Baylor College of Medicine, Houston, TX, USA

Wynne E. Norton Department of Health Behavior, School of Public Health, University of Alabama at Birmingham, Birmingham, AL, USA

Kathryn Noth Illinois Institute of Technology, College of Psychology, Chicago, IL, USA

Lindsay Oberleitner Department of Psychology, Wayne State University, Detroit, MI, USA

Eoin O'Brien The Conway Institute, University College Dublin, Belfield, Dublin, Ireland

Julianne O'Daniel Illumina, Inc, San Diego, CA, USA

Gabriele Oettingen Department of Psychology, New York University, New York, NY, USA

Michael O'Hara Department of Psychology, University of Iowa, Iowa City, IA, USA

Ken Ohashi Department of General Internal Medicine, National Cancer Center Hospital, Chuo-ku, Tokyo, Japan

Keisuke Ohta Department of Metabolic Diseases, Graduate School of Medicine The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Michele L. Okun Sleep Medicine Institute and Department of Psychiatry, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

Toru Okuyama Division of Psycho-oncology and Palliative Care, Nagoya City University Hospital, Nagoya, Aichi, Japan

Ellinor K. Olander Applied Research Centre in Health and Lifestyle Interventions, Coventry University, Coventry, West Midlands, UK

Brian Oldenburg Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, VIC, Australia

Sheina Orbell Department of Psychology, University of Essex, Colchester, Essex, UK

C. Tracy Orleans Robert Wood Johnson Foundation, Princeton, NJ, USA

Kristina Orth-Gomér Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden

Patricia Osborne Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Kenneth J. Ottenbacher Division of Rehabilitation Sciences, University of Texas Medical Branch, Galveston, TX, USA

Margaret E. Ottenbacher Institute for Translational Sciences, University of Texas Medical Branch, Galveston, TX, USA

Nicole Overstreet Social Psychology, University of Connecticut, Storrs, CT, USA

Jan R. Oyebode School of Psychology, The University of Birmingham, Edgbaston, Birmingham, UK

Gozde Ozakinci Lecturer in Health Psychology, School of Medicine, University of St Andrews, St Andrews, Scotland, UK

Debbie Palmer Department of Psychology, University of Wisconsin-Stevens Point, Stevens Point, WI, USA

Steven C. Palmer Abramson Cancer Center, University of Pennsylvania, Philadelphia, PA, USA

Kenneth Pargament Department of Psychology, Bowling Green State University, Bowling Green, OH, USA

Crystal L. Park Department of Psychology, University of Connecticut, Storrs, CT, USA

Alyssa Parker UTSW Health Systems, South western Medical Center, Dallas, TX, USA

Seema M. Patidar Department of Clinical and Health Psychology, University of Florida, Gainesville, FL, USA

Anna Maria Patino-Fernandez Department of Pediatrics, University of Miami, Miami, FL, USA

David Pearson School of Psychology, University of Aberdeen, Aberdeen, UK

Hollie B. Pellosmaa Department of Psychology , The University of Texas at Arlington, Arlington, TX, USA

Jennifer Pellowski Department of Psychology, University of Connecticut, Storrs, CT, USA

Frank J. Penedo Department of Medical Social Sciences & Lurie Comprehensive Cancer Center, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Watcharaporn Pengchit Faculty of Psychology, Chulalongkorn University, Bangkok, Thailand

Donald Penzien Head Pain Center, University of Mississippi Medical Center, Jackson, MS, USA

Deidre Pereira Department of Clinical and Health Psychology, University of Florida, College of Public Health and Health Professions, Gainesville, FL, USA

Edward L. Perkins Biomedical Sciences, Mercer University School of Medicine, Savannah, GA, USA

Richard Peter Institute of Epidemiology and Medical Biometry, University of Ulm, Ulm, Germany

Anna C. Phillips Sport & Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Alex Pictor Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Bernardine M. Pinto Centers for Behavioral and Preventive Medicine, Brown University, Providence, RI, USA

Sarah Piper Institute of Metabolic Science, Addenbrookes Hospital, Metabolic Research Laboratories, University of Cambridge, Cambridge, UK

Alefiyah Z. Pishori Department of Psychology, University of Connecticut, Storrs, CT, USA

Helene J. Polatajko Department of Occupational Science and Occupational Therapy, Graduate Department of Rehabilitation Science Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada

Lynda H. Powell Department of Preventive Medicine, Rush University Medical Center, Chicago, IL, USA

Harry Prapavessis University of Western Ontario, London, ON, Canada

Aric A. Prather Center for Health and Community, University of California, San Francisco, CA, USA

Courtney C. Prather Department of Psychology, University of North Texas, Denton, TX, USA

Sarah D. Pressman Department of Psychology, University of Kansas, Lawrence, KS, USA

James O. Prochaska Clinical and Health Psychology, University of Rhode Island, Kingston, RI, USA

Elizabeth R. Pulgaron Department of Pediatrics, University of Miami, Miami, FL, USA

Naum Purits Stockholm, Sweden

Pekka Puska National Institute for Health and Welfare (THL), Helsinki, Finland

Conny W. E. M. Quaedflieg Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, MD, The Netherlands

Whitney Raglin Department of Psychology, University of Cincinnati, Cincinnati, OH, USA

Jeanetta Rains Center for Sleep Evaluation, Elliot Hospital, Manchester, NH, USA

Amelie Ramirez Department of Epidemiology & Biostatistics, The University of Texas Health Science Center at San Antonio, San Antonio, TX, USA

Ashley K. Randall Family Studies & Human Development, University of Arizona, Tucson, AZ, USA

Sheah Rarback Department of Pediatrics, University of Miami, Miami, FL, USA

Holly Rau Department of Psychology, University of Utah, Salt Lake City, UT, USA

Maija Reblin College of Nursing, University of Utah, Salt Lake City, UT, USA

Gabriela Reed Psychiatry, Children's Medical Center, UT Southwestern Medical Center, Dallas, TX, USA

William Reeves Office of Surveillance, Epidemiology and Laboratory Services Centers for Disease Control and Prevention, Atlanta, GA, USA

Emily W. Reid (Deceased) Department of Psychology, Drexel University, Philadelphia, PA, USA

Ulf-Dietrich Reips Faculty of Engineering; Faculty of Education and Psychology, Universidad de Deusto, Bilbao, Spain

IKERBASQUE, Basque Foundation for Science, Bilbao, Spain

Anthony Remaud Elisabeth Bruyere Research Institute, University of Ottawa, Ottawa, ON, Canada

Laboratory "Motricité, Interactions, Performance", University of Nantes, Nantes, France

Kirsten Rene Department of Psychology, Brandeis University, Waltham, MA, USA

Barbara Resnick School of Nursing, University of Maryland, Baltimore, MD, USA

Spencer M. Richard Department of Psychology, Utah State University, Logan, UT, USA

Michael Richter Department of Psychology, University of Geneva, Geneva, Switzerland

Nina Rieckmann Berlin School of Public Health, Charité Universitätsmedizin, Berlin, Germany

Winfried Rief Department of Clinical Psychology and Psychotherapy, Philipps University of Marburg, Gutenbergstr, Marburg, Germany

Kristen Riley Department of Psychology, University of Connecticut, Storrs, CT, USA

Deborah Rinehart Denver Health and Hospital Authority, Denver, CO, USA

Lynnee Roane School of Nursing, University of Maryland, Baltimore, MD, USA

Denise de Ybarra Rodríguez Department of Psychology, University of Miami, Coral Gables, FL, USA

Laura Rodriguez-Murillo Department of Psychiatry, Columbia University Medical Center, New York, NY, USA

Osvaldo Rodriguez Miami VA Healthcare System, Miami, FL, USA

Kathryn A. Roecklein Department of Psychology, University of Pittsburgh, Pittsburgh, PA, USA

Megan Roehrig Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Nicolas Rohleder Department of Psychology, Brandeis University, Waltham, MA, USA

Karen S. Rook Department of Psychology & Social Behavior, University of California Irvine, Irvine, CA, USA

Jed E. Rose Department of Psychiatry, Duke Center for Nicotine & Smoking Cessation Research, Durham, NC, USA

Leah Rosenberg Department of Medicine, School of Medicine, Duke University, Durham, NC, USA

Debra Roter Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

Alexander J. Rothman Department of Psychology, University of Minnesota, Minneapolis, MN, USA

Eric Roy Department of Kinesiology, University of Waterloo, Waterloo, ON, Canada

Rachel S. Rubinstein Department of Psychology, Rutgers, The State University of New Jersey, Piscataway, NJ, USA

John Ruiz Department of Psychology, University of North Texas, Denton, TX, USA

Stephanie Russell Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

John Ryan Department of Psychiatry, Western Psychiatric Institute and Clinic, University of Pittsburgh, Pittsburgh, PA, USA

Valerie Sabol School of Nursing, Duke University, Durham, NC, USA

Rany M. Salem Broad Institute, Cambridge, MA, USA

Kristen Salomon Department of Psychology, University of South Florida College of Arts & Sciences, Tampa, FL, USA

Janine Sanchez Department of Pediatrics, University of Miami, Miami, FL, USA

Lee Sanders Center for Health Policy and Primary Care Outcomes Research, Stanford University, Stanford, CA, USA

Timothy S. Sannes Department of Clinical and Health Psychology, College of Clinical Health and Health Professions, University of Florida, Gainesville, FL, USA

Amy F. Sato Department of Psychology, Kent State University, Kent, OH, USA

Eve Saucier Department of Psychology, Brandeis University, Waltham, MA, USA

Shekhar Saxena Department of Mental Health and Substance Abuse, World Health Organization, Geneva 27, Switzerland

Chris Dunkel Schetter Department of Psychology, UCLA, Los Angeles, CA, USA

Wolff Schlotz Institute of Experimental Psychology, University of Regensburg, Regensburg, Germany

Havah Schneider Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Neil Schneiderman Department of Psychology, Behavioral Medicine Research Center, University of Miami, Coral Gables, FL, USA

Beth Schroeder University of Delaware, Newark, DE, USA

James W. Schroeder Genetics and Molecular Biology Program, Emory University, Atlanta, GA, USA

Marie-Louise Schult Karolinska Institute, Department of Clinical Sciences, Department of Neurobiology, Care Sciences and Society, The Rehabilitation Medicine, University Clinic Danderyd Hospital, Stockholm, Sweden

Ingrid Söderback Department of Public Health and Caring Science, Uppsala University, Uppsala, Sweden

M. Di Katie Sebastiano Kinesiology, University of Waterloo, Waterloo, ON, Canada

Sabrina Segal Department of Neurobiology and Behavior, University of California, Irvine, CA, USA

Theresa Senn Center for Health and Behavior, Syracuse University, Syracuse, NY, USA

Jonathan A. Shaffer Department of Medicine/Division of General Medicine, Columbia University Medical Center, New York, NY, USA

Peter A. Shapiro Department of Psychiatry, Columbia University, New York, NY, USA

Leigh A. Sharma Department of Psychology, University of Iowa, Kenosha, WI, USA

Marianne Shaughnessy School of Nursing, University of Maryland, Baltimore, MD, USA

Christopher Shaw Institute of Sport, Exercise and Active Living, Victoria University, Melbourne, Australia

Tamara Goldman Sher The Family Institute at Northwestern University, Evanston, IL, USA

Simon Sherry Department of Psychology, Dalhousie University, Halifax, NS, Canada

Vivek Shetty Oral & Maxillofacial Surgery, University of California, Los Angeles, CA, USA

Akihito Shimazu Department of Mental Health, Graduate School of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Daichi Shimbo Center for Behavioral Cardiovascular Health, Columbia University, New York, NY, USA

Erica Shreck Yeshiva University, Bronx, NY, USA

Koseki Shunsuke Department of School Education, Aichi University of Education, Kariya-shi, Aichi, Japan

Johannes Siegrist Department of Medical Sociology, University of Duesseldorf, Düsseldorf, Germany

Matthew A. Simonson Institute for Behavioural Genetics, Boulder, CO, USA

Kit Sinclair Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Kowloon, Hong Kong, China

Abanish Singh Duke University Medical Center, Durham, NC, USA

Bengt H. Sjölund University of Southern Denmark, Odense, DK, Denmark

Michelle Skinner Department of Psychology, University of Utah, Salt Lake City, UT, USA

Celette Sugg Skinner Clinical Sciences, The University of Texas Southwestern Medical Center at Dallas Harold C. Simmons Cancer Center, Dallas, TX, USA

Tom Smeets Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, MD, The Netherlands

Alicia K. Smith Psychiatry & Behavioral Sciences, Emory University SOM, Atlanta, GA, USA

Barbara Smith School of Nursing, University of Maryland, Baltimore, MD, USA

Lauren Smith Department of Psychology, University of North Texas, Denton, TX, USA

Timothy W. Smith Department of Psychology, University of Utah, Salt Lake City, UT, USA

Howard Sollins Attorneys at Law, Ober, Kaler, Grimes & Shriver, Baltimore, MD, USA

Colin L. Soskolne Department of Public Health Services, School of Public Health, University of Alberta, Edmonton, AB, Canada

Ana Victoria Soto Medicine – Residency Program, Columbia University Medical Center, New York, NY, USA

Mary Spiers Department of Psychology, Drexel University, Philadelphia, PA, USA

Kevin S. Spink College of Kinesiology, University of Saskatchewan, Saskatoon, SK, Canada

Bonnie Spring Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Sara Mijares St. George Department of Psychology, University of South Carolina, Columbia, SC, USA

Tobias Stalder Chair of Biopsychology, Technische Universität Dresden, Dresden, Saxony, Germany

Annette L. Stanton Department of Psychology, University of California, Los Angeles, CA, USA

Shannon L. Stark Department of Psychology, Arizona State University, Tempe, AZ, USA

Adrienne Stauder Institute of Behavioural Sciences, Semmelweis University Budapest, Budapest, Hungary

Michael E. Stefanek Research and Collaborative Research, Indiana University, Bloomington, IN, USA

Jeremy Steglitz Department of Psychiatry and Behavioral Sciences, Clinical Psychology Division, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Nikola Stenzel Department of Clinical Psychology and Psychotherapy, Philipps University of Marburg, Marburg, Germany

Jana Strahler Clinical Biopsychology, Department of Psychology, University of Marburg, Marburg, Germany

Deborah M. Stringer Department of Psychology, University of Iowa, Iowa City, IA, USA

Victoria Anne Sublette School of Public Health, University of Sydney, Sydney, NSW, Australia

Alyson Sularz Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Michael J. L. Sullivan Department of Psychology, McGill University, Montreal, QC, Canada

Shin-ichi Suzuki Faculty of Human Sciences, Graduate School of Human Sciences, Waseda University, Tokorozawa-shi, Saitama, Japan

Catherine Sykes World Confederation for Physical Therapy, Victoria Charity Centre, London, UK

Sefik Tagay Department of Psychosomatic Medicine and Psychotherapy, University of Duisburg-Essen, Essen, North Rhine-Westphalia, Germany

Shahrad Taheri University of Birmingham, Heart of England NHS Foundation Trust, Birmingham, UK

Misato Takada Department of Health Economics and Epidemiology Research, School of Public Health, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Yuko Takei Faculty of Medicine, University of Miyazaki Hospital, Miyazaki-shi, Japan

Yoshiyuki Takimoto Department of Stress Science and Psychosomatic Medicine, Graduate School of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Yukari Tanaka Department of Behavioral Medicine, Graduate School of Medicine, Tohoku University, Aoba-ku, Sendai, Japan

Molly L. Tanenbaum Clinical Psychology, Health Emphasis, Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY, USA

Asuka Tanoue Advanced Research Center for Human Science, Waseda University, Tokorozawa, Saitama, Japan

Robert N. Taylor Department of Obstetrics and Gynecology, Wake Forest School of Medicine, Winston-Salem, NC, USA

Cortney J. Taylor Department of Psychology, University of Miami, Coral Gables, FL, USA

Marc Taylor Department 163, Behavioral Sciences & Epidemiology, Naval Health Research Center, San Diego, CA, USA

Julian F. Thayer Department of Psychology, The Ohio State University, Columbus, OH, USA

Töres Theorell Stress Research Institute, Stockholm University, Stockholm, Sweden

G. Neil Thomas Department of Public Health, University of Birmingham, Edgbaston, Birmingham, UK

Roland Thomeé Department of Rehabilitation Medicine, Sahlgrenska University Hospital, Öjersjö, Göteborg, Sweden

Rebecca C. Thurston Department of Psychiatry, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

Warren Tierney Department of Psychology, Faculty of Education & Health Sciences, University of Limerick, Castletroy, Limerick, Ireland

Jasmin Tiro Department of Clinical Sciences, The University of Texas Southwestern Medical Center, Dallas, TX, USA

Emil C. Toescu Division of Medical Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Fumiharu Togo Graduate School of Education, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Akihiro Tokoro Department of Psychosomatic Medicine, National Hospital Organization, Kinki-Chuo Chest Medical Center, Sakai Osaka, Japan

A. Janet Tomiyama Rutgers University, NJ, USA

Hansel Tookes Epidemiology and Public Health, Miller School of Medicine, University of Miami, Miami, FL, USA

George J. Trachte Academic Health Center, School of Medicine-Duluth Campus, University of Minnesota, Duluth, MN, USA

Lara Traeger Behavioral Medicine Service, Massachusetts General Hospital/Harvard Medical School, Boston, MA, USA

Vincent Tran University of Texas, Southwestern Medical Center, Dallas, TX, USA

Wendy Troxel Psychiatry and Psychology, University of Pittsburgh, Pittsburgh, PA, USA

Emiko Tsuchiya Department of Behavioral Medicine, Graduate School of Medicine, Tohoku University, Aoba-ku, Sendai, Japan

Viana Turcios-Cotto Department of Psychology, University of Connecticut, Storrs, CT, USA

Barbara Turner The University of Texas Health Science Center at San Antonio, San Antonio, TX, USA

J. Rick Turner Cardiovascular Safety, Quintiles, Durham, NC, USA

James Turner School of Cancer Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Bert N. Uchino Department of Psychology and Health Psychology Program, University of Utah, Salt Lake City, UT, USA

C. Renn Upchurch Sweeney VA Salt Lake City Healthcare System, Salt Lake City, UT, USA

Jane Upton School of Sport and Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Antti Uutela Department for Lifestyle and Health, National Institute for Health and Welfare (THL), Helsinki, Finland

Mark Vander Weg Department of Internal Medicine, The University of Iowa and Iowa City VA Health Care System, Iowa City, IA, USA

Kavita Vedhara Institute of Work, Health and Organisations, University of Nottingham, Nottingham, UK

Bart Verkuil Clinical, Health and Neuro Psychology, Leiden University, Leiden, Netherlands

Andrea C. Villanti Johns Hopkins Bloomberg School of Public Health, The Schroeder Institute for Tobacco Research and Policy Studies at Legacy, Washington, DC, USA

Ana Vitlic School of Sport & Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Adriana Dias Barbosa Vizzotto Occupational Therapist of the Occupational Therapy Service, Institute of Psychiatry, Hospital das Clínicas University of São Paulo Medical School, São Paulo, SP, Brazil

John P. Vuchetich Department of Psychiatry, University of Minnesota School of Medicine, Minneapolis, MN, USA

Amy Wachholtz Department of Psychiatry, University of Massachusetts Medical School, Worcester, MA, USA

Anton J. M. Wagenmakers School of Sport and Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Andrea Wallace College of Nursing, University of Iowa, Iowa City, IA, USA

Margaret Wallhagen Department of Physiological Nursing, University of California San Francisco School of Nursing, San Francisco, CA, USA

Melissa Walls Biobehavioral Health & Population Sciences, University of Minnesota Medical School – Duluth, Duluth, MN, USA

Kenneth Wallston School of Nursing, Vanderbilt University, Nashville, TN, USA

Jenny T. Wang Department of Medical Psychology, Duke University, Durham, NC, USA

Andrew J. Wawrzyniak School of Nursing & Health Studies, University of Miami, Coral Gables, FL, USA

Thomas Webb Department of Psychology, The University of Sheffield, Sheffield, UK

Stephen M. Weiss Department of Psychiatry and Behavioral Sciences, Miller School of Medicine, University of Miami, Miami, FL, USA

Jennifer Wessel Public Health, School of Medicine, Indiana University, Indianapolis, IN, USA

William Whang Division of Cardiology, Columbia University Medical Center, New York, NY, USA

Anthony J. Wheeler Department of Psychology, Utah State University, Logan, UT, USA

Angela White Department of Psychology, University of Connecticut, Storrs, CT, USA

Timothy Whittaker The International Register of Herbalists & Homeopaths, Cinderford, Glos., UK

Timothy H. Wideman Department of Psychology, McGill University, Montreal, QC, Canada

Deborah J. Wiebe Division of Psychology, Department of Psychiatry, Southwestern Medical Center, University of Texas, Dallas, TX, USA

Friedrich Wieser Department of Gynecology and Obstetrics, Emory University School of Medicine, Atlanta, GA, USA

Diana Wile Department of Pediatrics, University of Miami, Miami, FL, USA

James D. Wilkinson Department of Pediatrics and Epidemiology and Public Health Division of Pediatric Clinical Research Department of Pediatrics, Leonard M. Miller School of Medicine University of Miami Holtz Children's Hospital of the University of Miami-Jackson Memorial Medical Center Batchelor Children's Research Institute University of Miami Sylvester Comprehensive Cancer Center, Miami, FL, USA

Redford B. Williams Department of Psychiatry and Behavioral Sciences, Division of Behavioral Medicine, Duke University, Durham, NC, USA

Virginia P. Williams Williams LifeSkills, Inc., Durham, NC, USA

Paula Williams Department of Psychology, University of Utah, Salt Lake City, UT, USA

Dawn Wilson Department of Psychology, University of South Carolina, Columbia, SC, USA

Oliver J. Wilson School of Sport and Exercise Sciences, University of Birmingham, Edgbaston, Birmingham, UK

Kelly Winter Epidemiology, Florida International University, Miami, FL, USA

Katie Witkiewitz University of New Mexico, Albuquerque, New Mexico, USA

Michael Witthöft Psychologisches Institut Abteilung Klinische Psychologie und Psychotherapie, Johannes Gutenberg Universität Mainz, Mainz, Germany

Jutta M. Wolf Department of Psychology, Brandeis University, Waltham, MA, USA

Oliver T. Wolf Department of Cognitive Psychology, Ruhr-Universität Bochum, Bochum, Germany

Timothy Wolf Department of Occupational Therapy and Neurology, Program in Occupational Therapy, St. Louis, MO, USA

Patricia Woltz School of Nursing, University of Maryland, Baltimore, MD, USA

Patricia M. Wong Department of Psychology, University of Pittsburgh, Pittsburgh, PA, USA

Cara Wong School of Psychology, University of Sydney, Sydney, NSW, Australia

Jennifer Wortmann Department of Psychology, University of Connecticut, Storrs, CT, USA

Rex A. Wright College of Arts and Sciences, Department of Psychology, University of North Texas, Denton, TX, USA

Ellen Wuest Boston University, Boston, MA, USA

Naoya Yahagi Department of Metabolic Diseases, Graduate School of Medicine The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Yu Yamada Department of Psychosomatic Medicine, Kyushu University, Fukuoka, Japan

Yoshiharu Yamamoto Educational Physiology Laboratory, Graduate School of Education The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Betina R. Yanez Department of Psychology, University of California, Los Angeles, CA, USA

Samantha Yard Department of Psychology, University of Washington, Seattle, WA, USA

M. Taghi Yasamy Department of Mental Health and Substance Abuse, World Health Organization, Geneva 27, Switzerland

Siqin Ye Division of Cardiology, Columbia University Medical Center, New York, NY, USA

Jason S. Yeh Obstetrics and Gynecology, Division of Reproductive Endocrinology and Fertility, Duke University Medical Center, Durham, NC, USA

Ilona S. Yim Department of Psychology and Social Behaviour, University of California, Irvine, Irvine, CA, USA

Deborah Lee Young-Hyman Department of Pediatrics, Georgia Prevention Institute Georgia Health Sciences Universtiy, Augusta, GA, USA

Lauren Zagorski Department of Psychology, The University of Iowa, Iowa City, IA, USA

Ydwine Zanstra The Amsterdam University College, Amsterdam, The Netherlands

Jet Veldhuijzen van Zanten School of Sport and Exercise Sciences, The University of Birmingham, Edgbaston, Birmingham, UK

Alex Zautra Department of Psychology, Arizona State University, Tempe, AZ, USA

Chris Zehr Department of Health Studies and Gerontology, University of Waterloo, Waterloo, ON, Canada

Kristin A. Zernicke Department of Psychology, University of Calgary, Calgary, AB, Canada

Emily Zielinski-Gutierrez Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, Ft. Collins, CO, USA

Sheryl Zimmerman School of Social Work, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Tanja Zimmermann Department of Clinical Psychology, Psychotherapy and Diagnostics, University of Braunschweig, Braunschweig, Germany