

NEW FRONTIERS IN LIFESTYLE INTERVENTION

Opportunities to Transform Societal Health through Inter-Professional Collaboration

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Guest Speakers

Saturday, April 21, 2018 Phoenix Biomedical Campus 425 N. 5th Street Phoenix, AZ

Angela Bryan, PHD

Professor of Psychology & Neuroscience Associate Editor, *Annals of Behavioral Medicine* Department of Psychology & Neuroscience University of Colorado Boulder



**FROM BEHAVIOR TO BIOLOGY AND BACK AGAIN: LINKAGES BETWEEN
PHYSICAL ACTIVITY, NEUROCOGNITION, AND GENOMICS**

Lack of health behavior and engagement in risk behavior account for a staggering 40% of premature deaths in the United States, and approximately 75% of all current healthcare costs in the United States (\$1.5 trillion) are spent to ameliorate diseases and health problems that are preventable by behavior change. Though the association of health and risk behavior to disease states is clear, the mechanistic linkages between the two are not completely understood. This presentation will cover two projects that use innovative transdisciplinary research methodologies to explore the impact of physical activity on epigenetic changes associated with cancer risk among mid-life women and on neurocognitive function among older adults.

Dr. Angela Bryan is a Professor in the Department of Psychology and Neuroscience at the University of Colorado Boulder. Her research uses biopsychosocial models of health behavior to design, implement, and evaluate theory-based behavior change interventions to improve preventative health behavior. This work involves using functional magnetic resonance imaging (fMRI) and DNA collection to test key genetic and neurocognitive moderators of intervention effects and examine theory-based linkages between biological, behavioral, and social factors.

Sam Pappas, MD

Pappas Health
Tysons Corner, VA



LOOKING UNDER THE HOOD - ESSENTIAL LAB WORK FOR OPTIMAL HEALTH

Regular lab testing is a simple yet powerful strategy to help one proactively take charge of their current and future health and wellness. A well-chosen comprehensive profile of blood tests can easily be drawn, is usually covered by insurance, and can thoroughly assess one's overall state of health. Furthermore, increasing studies are showing that such labs can detect silent warning signals that predate the development of serious illnesses such as diabetes, cardiovascular disease, and metabolic disorders. Armed with this vital knowledge, patients can plan and execute a proactive strategy to help one achieve and maintain good health and optimal function.

Dr. Sam Pappas is a board-certified physician in Internal Medicine who seeks to integrate the best aspects of holistic health and traditional medicine. He completed medical school at Pennsylvania State College of Medicine and training (including a year as Chief Resident) at Case Western Reserve University/University Hospital in Cleveland, Ohio. He has been in practice for 20 years in a variety of positions including roles as a clinician, educator, and private practice physician. He is a member of the Institute of Functional Medicine (IFM), the American Academy of Anti-Aging Medicine (A4M), and Metabolic Medical Institute (MMI). He has been selected as a Top Doctor in the Washingtonian Magazine, Northern Virginia Magazine, and Washington Consumers Checkbook. Dr. Pappas has been called the "The Dr. Oz of Arlington" by the Mothers of Northern Arlington support group. He is a native of New Jersey, fluent in Greek, and is married with three children. He lives in Northern Virginia and has his own practice, Pappas Health, in Tysons Corner, VA.

Carol S. Johnston, PhD, RD

Professor
Associate Director, Nutrition Program
College of Health Solutions
Arizona State University



DIETARY SUPPLEMENTS: WHICH ARE THE MUST-HAVES?

The global market for dietary supplements is nearly 125 billion dollars due to consumers' desires to improve nutrition amid hectic lifestyles, advancing age, and diagnoses of chronic disease. Marketers claim their supplements will lower risk of chronic disease, slow the aging process, promote strength and vigor, improve nutritional status...and improve nearly any other concern a consumer may have. While some of the claims have withstood scientific evaluation, many have not. This talk will focus on nutrient supplements that have robust scientific support, they are the *Must-Haves* in the supplement world.

Dr. Carol S. Johnston is Professor and Associate Director of the Nutrition Program in the College of Health Solutions at Arizona State University. She received her BS in nutrition from the University of Michigan, Ann Arbor and her MS in nutrition and PhD in biological sciences from the University of Texas, Austin. She teaches both undergraduate and graduate courses and has an active research program. She has published about 120 research articles and book chapters, and she is often quoted in popular magazines reporting nutrition news. She is an expert in vitamin C metabolism, the medicinal use of vinegar, high protein/low carbohydrate diets for weight loss, and vegetarian diets. She currently chairs the Institutional Review Board at ASU and holds an elected position on an Expert Committee of the U.S. Pharmacopoeia in Washington DC. She has been recognized on multiple occasions for her teaching excellence at ASU, and she has received several national awards from the American College of Nutrition for her professional and academic accomplishments.

Megan Petrov, PhD

Assistant Professor, College of Nursing & Health Innovation
Early Faculty Fellow, Southwest Interdisciplinary Research Center
Arizona State University



ENHANCING POPULATION HEALTH, REDUCING HEALTH INEQUITIES,
AND PREVENTING CHRONIC DISEASE: SLEEP, ONE OF THE MOST IGNORED
LIFESTYLE BEHAVIORS

Insufficient, disturbed, or disordered sleep are non-traditional risk factors for many of the leading causes of death, disability, pain, and lower quality of life in the U.S. across the lifespan. However, sleep is less often appreciated, evaluated, and treated even though it is an essential vital sign of overall wellness, and often works synergistically with multiple other lifestyle behaviors such as physical activity and diet. In this talk we will discuss the potential role of sleep as an early indicator of chronic disease development, its contribution to health inequities, and explore novel technologies, emerging interventions, and care models that incorporate sleep to improve population health.

Dr. Megan E. Petrov is an assistant professor within the College of Nursing & Health Innovation at Arizona State University. She received her doctoral degree from the University of Alabama in clinical psychology. Across her academic and clinical career she has been engaged in the pursuit of promoting sleep health, excellence in interdisciplinary sleep-related research, and the prevention of chronic disease associated with disordered and disturbed sleep processes. Her portfolio of work consists of three major arms: (1) evaluating the interactions between sleep and biopsychosocial factors on the development of chronic disease across the lifespan among vulnerable populations; (2) identifying and reducing sleep health inequities; and (3) adapting and creating behavioral sleep medicine interventions and identifying predictors of treatment success and adherence. Dr. Petrov's research is supported by funds from the National Institutes of Health, Department of Veterans Affairs, and the American Sleep Medicine Foundation.

Jennifer Gamboa, PT, DPT, OCS

President, Body Dynamics
Center for Sustainable Health
Falls Church, VA



AVOIDING THE WELLNESS “FASTBALL”: CULTIVATING HEALTH AND MITIGATING RISK WITHOUT BREAKING THE BANK

Given escalating costs of managing chronic diseases, improving population health is a key ingredient of Triple Aim. For many years, there has not been consistent and cohesive approach to integrating health promotion into medicine, or to collaborating across complimentary industries (fitness, health club, health care, nutrition, etc). Health promotion is a behavioral social science that focuses on strategies to improve health knowledge, attitudes, skills and behavior. Lifestyle medicine is emerging as the link between health promotion and medicine. Practitioners across multiple industries must develop new practice and business competencies to be effective providers of lifestyle intervention in primary, secondary, and tertiary environments. Actionable, accountable, outcomes-driven health promotion and prevention cannot be executed effectively with silo'd industries, operations, or practitioners. This lecture will detail the structure, collaborations, and strategies required for developing inter-professional interventions that are cost effective and user driven.

Dr. Gamboa is founder and CEO of Body Dynamics, Inc – Center for Sustainable Health in Falls Church, VA. Dr. Gamboa has been practicing for over 20 years, and is a Board Certified Orthopaedic Clinical Specialist with advanced manual therapy training. Dr. Gamboa, and her practice have been at the forefront of developing integrated, actionable and accountable interprofessional teams and plans of care to restore, maintain, and enhance physical well-being. Early on, she developed a web-based program, FitTEST Solutions™ to streamline the ability to conduct evidence-based fitness physicals and detailed exercise prescription, which is currently in use in multiple practices and academic programs across the country. More recently, she is the cofounder of Sustainable Health Index, which is an health promotion and primary prevention IT platform that assesses risk and delivers user-driven health literacy campaigns to large populations. Dr. Gamboa has consulted with multiple employers for on-site clinic development to reduce healthcare costs and improve health of employees, and has implemented a Move2Health pilot project at a local safety net clinic using volunteer physical activity counselors as the primary point of contact. In 2015, Dr. Gamboa was appointed to direct the University of Montana's Lifestyle Intervention Health Certificate Program. She has participated in APTA's Strategic Thinking Initiative, served as Chairperson for APTA's Taskforce on Vision 2020, and served on APTA's Taskforce on the Physical Therapist's Role in Health Promotion, Prevention, and Wellness. Dr. Gamboa has lectured extensively on alternative practice models; fitness, wellness, and health promotion; and best practices for exercise prescription to modify disease risk.