

Stanford



Michaela Kiernan

Sr Res Scholar, Medicine - Med/Stanford Prevention Research Center

Bio

ACADEMIC APPOINTMENTS

- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Member, University Committee on Postdoctoral Scholars, (2009- present)

HONORS AND AWARDS

- First Independent Research Support and Transition Award (FIRST), National Institutes of Health, National Heart, Lung, and Blood Institute (1998-2004)
- Fellow, North American Association for the Study of Obesity (2001-present)
- Divisional Teaching Award, Stanford Prevention Research Center/Department of Medicine (2002, 2007, 2018)
- Outstanding Leadership Award, Office of Community Health, Stanford University School of Medicine (2007)
- Excellence in Postdoctoral Mentoring Award, Stanford University Postdoctoral Association (2009)
- Recognition Award for Extraordinary Service for the Advancement of Postdoctoral Fellows, Stanford University Postdoctoral Association (2012)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Consulting Editor, Health Psychology (2017 - present)

PROFESSIONAL EDUCATION

- Postdoctoral fellowship, Stanford Prevention Research Center , CVD Epidemiology & Prevention (1997)
- PhD, Yale University , Health/Social Psychology (1993)
- BA, Washington University in St. Louis , Psychology (1987)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

For the past 15 years, Dr. Kiernan has conducted research on behavioral weight management at the Stanford Prevention Research Center (SPRC), a Division of the Stanford University Department of Medicine. SPRC is multidisciplinary, focused on research and teaching, and dedicated to the improvement of health through the prevention and effective management of chronic disease influenced by lifestyle behaviors via randomized clinical trials, community intervention studies, and population-based surveys among diverse samples of all ages, ethnic groups, and social strata living in northern Californian communities.

Her research interests include: (1) testing tailored behavioral interventions that promote long-term lifestyle changes and weight management among subgroups at risk; and (2) developing methodological and statistical approaches that improve the design, delivery, and analysis of randomized clinical trials. The latter includes using risk

classification methods to better identify subgroups at risk, improving recruitment of ethnic minorities into clinical trials, and clarifying approaches for testing the role of moderators and mediators.

From 2001-2007, Dr. Kiernan was the Research Director of the Scholarly Concentration in Community Health at the Stanford University School of Medicine in which she advised 45+ medical students who conducted individual research projects in collaboration with local and international community health partnerships using mixed methods (qualitative and quantitative) approaches. In 2007, she returned to her primary focus on obesity research, including as PI of the Fresh Start trial (R01 CA112594) designed to test whether learning a set of novel 'stability skills' first (i.e., before losing weight) promotes better long-term maintenance of weight loss than traditional maintenance approaches.

CLINICAL TRIALS

- Behavioral Strategies for Weight Management, Not Recruiting
- Personal Genomics for Preventive Cardiology, Not Recruiting
- Promoting Healthy Weight With 'Stability Skills First', Not Recruiting
- Promoting Long-term Behavior Change to Reduce CVD Risk, Not Recruiting
- Stanford Healthy Heart Study, Not Recruiting

Teaching

COURSES

2019-20

- Methods in Community Assessment, Evaluation, and Research: CHPR 247, MED 147, MED 247 (Spr)

2018-19

- Methods in Community Assessment, Evaluation, and Research: CHPR 247, MED 147, MED 247 (Spr)

2017-18

- Methods in Community Assessment, Evaluation, and Research: CHPR 247, MED 147, MED 247 (Spr)

2016-17

- Methods in Community Assessment, Evaluation, and Research: CHPR 247, MED 147, MED 247 (Spr)

Publications

PUBLICATIONS

- **Interactive group-based orientation sessions: A method to improve adherence and retention in pragmatic clinical trials.** *Contemporary clinical trials communications*
Mayhew, M., Leo, M. C., Vollmer, W. M., DeBar, L. L., Kiernan, M.
2020; 17: 100527
- **The Stanford Leisure-Time Activity Categorical Item (L-Cat): a single categorical item sensitive to physical activity changes in overweight/obese women** *INTERNATIONAL JOURNAL OF OBESITY*
Kiernan, M., Schoffman, D. E., Lee, K., Brown, S. D., Fair, J. M., Perri, M. G., Haskell, W. L.
2013; 37 (12): 1597-1602
- **Promoting Healthy Weight With "Stability Skills First": A Randomized Trial** *JOURNAL OF CONSULTING AND CLINICAL PSYCHOLOGY*
Kiernan, M., Brown, S. D., Schoffman, D. E., Lee, K., King, A. C., Taylor, C. B., Schleicher, N. C., Perri, M. G.
2013; 81 (2): 336-346
- **Innovative techniques to address retention in a behavioral weight-loss trial** *24th Annual Meeting of the Society-of-Behavioral-Medicine*
Goldberg, J. H., Kiernan, M.

OXFORD UNIV PRESS.2005: 439–47

- **Effects of a methodological infographic on research participants' knowledge, transparency, and trust.** *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*
Kiernan, M., Oppezzo, M. A., Resnicow, K., Alexander, G. L.
2018; 37 (8): 782–86
- **ATTITUDES TOWARD WEIGHING: LINKING AFFECT, BEHAVIOR, AND WEIGHT IN THE PERINATAL PERIOD**
Brown, S. D., Kiernan, M., Tsai, A., Ferrara, A.
OXFORD UNIV PRESS INC.2018: S88
- **The Relationship Between the Stanford Leisure-Time Activity Categorical Item and the Godin Leisure-Time Exercise Questionnaire Among Rural Intervention Participants of Varying Health Literacy Status.** *Journal of physical activity & health*
Kružliaková, N., Estabrooks, P. A., You, W., Hedrick, V., Porter, K., Kiernan, M., Zoellner, J.
2018; 15 (4): 269–78
- **Applying novel technologies and methods to inform the ontology of self-regulation.** *Behaviour research and therapy*
Eisenberg, I. W., Bissett, P. G., Canning, J. R., Dallery, J., Enkavi, A. Z., Whitfield-Gabrieli, S., Gonzalez, O., Green, A. I., Greene, M. A., Kiernan, M., Kim, S. J., Li, J., Lowe, et al
2018; 101: 46–57
- **The ASIBS Short Course: A unique strategy for increasing statistical competency of junior investigators in academic medicine.** *Journal of clinical and translational science*
Benn, E. K., Tu, C., Palermo, A. S., Borrell, L. N., Kiernan, M., Sandre, M., Bagiella, E.
2017; 1 (4): 235–39
- **Applying novel technologies and methods to inform the ontology of self-regulation** *Behaviour Research and Therapy*
Eisenberg, I. W., Bissett, P. G., Enkavi, A. Z., Poldrack, R. A.
2017: 46–57
- **Impact of a Genetic Risk Score for Coronary Artery Disease on Reducing Cardiovascular Risk: A Pilot Randomized Controlled Study.** *Frontiers in cardiovascular medicine*
Knowles, J. W., Zarafshar, S., Pavlovic, A., Goldstein, B. A., Tsai, S., Li, J., McConnell, M. V., Absher, D., Ashley, E. A., Kiernan, M., Ioannidis, J. P., Assimes, T. L.
2017; 4: 53
- **Putting the brakes on the "drive to eat": Pilot effects of naltrexone and reward-based eating on food cravings among obese women** *EATING BEHAVIORS*
Mason, A. E., Laraia, B., Daubenmier, J., Hecht, F. M., Lustig, R. H., Puterman, E., Adler, N., Dallman, M., Kiernan, M., Gearhardt, A. N., Epel, E. S.
2015; 19: 53-56
- **Outreach to diversify clinical trial participation: A randomized recruitment study** *CLINICAL TRIALS*
Brown, S. D., Partee, P. N., Feng, J., Quesenberry, C. P., Hedderson, M. M., Ehrlich, S. F., Kiernan, M., Ferrara, A.
2015; 12 (3): 205-211
- **Minority recruitment into clinical trials: Experimental findings and practical implications** *CONTEMPORARY CLINICAL TRIALS*
Brown, S. D., Lee, K., Schoffman, D. E., King, A. C., Crawley, L. M., Kiernan, M.
2012; 33 (4): 620-623
- **Treatment matching for obesity: identifying mediators of psychosocial and behavioral intervention components.** *International journal of obesity supplements*
Kiernan, M.
2012; 2: S23-S25
- **Randomized Trial of Personal Genomics for Preventive Cardiology Design and Challenges** *CIRCULATION-CARDIOVASCULAR GENETICS*
Knowles, J. W., Assimes, T. L., Kiernan, M., Pavlovic, A., Goldstein, B. A., Yank, V., McConnell, M. V., Absher, D., Bustamante, C., Ashley, E. A., Ioannidis, J. P.
2012; 5 (3): 368-376
- **Social Support for Healthy Behaviors: Scale Psychometrics and Prediction of Weight Loss Among Women in a Behavioral Program** *OBESITY*
Kiernan, M., Moore, S. D., Schoffman, D. E., Lee, K., King, A. C., Taylor, C. B., Kiernan, N. E., Perri, M. G.
2012; 20 (4): 756-764

- **Practices Associated with Weight Loss Versus Weight-Loss Maintenance Results of a National Survey** *AMERICAN JOURNAL OF PREVENTIVE MEDICINE*
Sciamanna, C. N., Kiernan, M., Rolls, B. J., Boan, J., Stuckey, H., Kephart, D., Miller, C. K., Jensen, G., Hartmann, T. J., Loken, E., Hwang, K. O., Williams, R. J., Clark, et al
2011; 41 (2): 159-166
- **Outcome expectations and realizations as predictors of weight regain among dieters** *EATING BEHAVIORS*
Moore, S. D., King, A. C., Kiernan, M., Gardner, C. D.
2011; 12 (1): 60-63
- **The Jade Ribbon Campaign: A Model Program for Community Outreach and Education to Prevent Liver Cancer in Asian Americans** *JOURNAL OF IMMIGRANT AND MINORITY HEALTH*
Chao, S. D., Chang, E. T., Le, P. V., Prapong, W., Kiernan, M., So, S. K.
2009; 11 (4): 281-290
- **How and why criteria defining moderators and mediators differ between the Baron & Kenny and MacArthur approaches** *HEALTH PSYCHOLOGY*
Kraemer, H. C., Kiernan, M., Essex, M., Kupfer, D. J.
2008; 27 (2): S101-S108
- **Concerns about infertility risks among pediatric oncology patients and their parents** *PEDIATRIC BLOOD & CANCER*
Oosterhuis, B. E., Goodwin, T., Kiernan, M., Hudson, M. M., Dahl, G. V.
2008; 50 (1): 85-89
- **Use of a community mobile health van to increase early access to prenatal care** *MATERNAL AND CHILD HEALTH JOURNAL*
Edgerley, L. P., El-Sayed, Y. Y., Druzin, M. L., Kiernan, M., Daniels, K. I.
2007; 11 (3): 235-239
- **Image-guided robotic radiosurgery for spinal metastases** *RADIOTHERAPY AND ONCOLOGY*
Gibbs, I. C., Kamnerdsupaphon, P., Ryu, M., Dodd, R., Kiernan, M., Change, S. D., Adler, J. R.
2007; 82 (2): 185-190
- **Attitudes and practices of pediatric oncology providers regarding fertility issues** *PEDIATRIC BLOOD & CANCER*
Goodwin, T., Oosterhuis, B. E., Kiernan, M., Hudson, M. A., Dahl, G. V.
2007; 48 (1): 80-85
- **Characteristics of pediatric patients at risk of poor emergency department aftercare** *ACADEMIC EMERGENCY MEDICINE*
Wang, N. E., Kiernan, M., Golzari, M., Gisondi, M. A.
2006; 13 (8): 840-847
- **Sentinel lymph node biopsy for cutaneous melanoma - The Stanford experience, 1997-2004** *ARCHIVES OF DERMATOLOGY*
Berk, D. R., Johnson, D. L., Uzieblo, A., Kiernan, M., Swetter, S. M.
2005; 141 (8): 1016-1022
- **Is a Web survey as effective as a mail survey? A field experiment among computer users** *AMERICAN JOURNAL OF EVALUATION*
Kiernan, N. E., Kiernan, M., Oyler, M. A., Gilles, C.
2005; 26 (2): 245-252
- **Physical activity as a nonpharmacological treatment for depression: A review** *Complementary Health Practice Review*
Phillips WT, Kiernan M, King AC
2003; 8: 139-152
- **Men gain additional psychological benefits by adding exercise to a weight-loss program** *OBESITY RESEARCH*
Kiernan, M., King, A. C., Stefanick, M. L., Killen, J. D.
2001; 9 (12): 770-777
- **Is parental control over children's eating associated with childhood obesity? Results from a population-based sample of third graders** *OBESITY RESEARCH*
Robinson, T. N., Kiernan, M., Matheson, D. M., Haydel, K. F.
2001; 9 (5): 306-312

- **Do logistic regression and signal detection identify different subgroups at risk? Implications for the design of tailored interventions** *PSYCHOLOGICAL METHODS*
Kiernan, M., Kraemer, H. C., Winkleby, M. A., King, A. C., Taylor, C. B.
2001; 6 (1): 35-48
- **Methodologic issues in measuring physical activity and physical fitness when evaluating the role of dietary supplements for physically active people** *Workshop on Role of Dietary Supplements for Physically Active People*
Haskell, W. L., Kiernan, M.
AMER SOC CLINICAL NUTRITION.2000: 541S-550S
- **Identifying patients for weight-loss treatment - An empirical evaluation of the NHLBI obesity education initiative expert panel treatment recommendations** *ARCHIVES OF INTERNAL MEDICINE*
Kiernan, M., Winkleby, M. A.
2000; 160 (14): 2169-2176
- **Using direct mail to recruit hispanic adults into a dietary intervention: An experimental study** *ANNALS OF BEHAVIORAL MEDICINE*
Kiernan, M., Phillips, K., Fair, J. M., King, A. C.
2000; 22 (1): 89-93
- **The effects of marital transitions on changes in physical activity: Results from a 10-year community study** *ANNALS OF BEHAVIORAL MEDICINE*
King, A. C., Kiernan, M., Ahn, D. K., Wilcox, S.
1998; 20 (2): 64-69
- **Characteristics of successful and unsuccessful dieters: An application of signal detection methodology** *ANNALS OF BEHAVIORAL MEDICINE*
Kiernan, M., King, A. C., Kraemer, H. C., Stefanick, M. L., Killen, J. D.
1998; 20 (1): 1-6
- **Can we identify who will adhere to long-term physical activity? Signal detection methodology as a potential aid to clinical decision making** *HEALTH PSYCHOLOGY*
King, A. C., Kiernan, M., Oman, R. F., Kraemer, H. C., Hull, M., Ahn, D.
1997; 16 (4): 380-389
- **RELATION OF LEVEL OF EXERCISE, AGE, AND WEIGHT-CYCLING HISTORY TO WEIGHT AND EATING CONCERNS IN MALE AND FEMALE RUNNERS** *HEALTH PSYCHOLOGY*
Kiernan, M., Rodin, J., Brownell, K. D., Wilmore, J. H., Crandall, C.
1992; 11 (6): 418-421