BIOGRAPHICAL SKETCH

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NAME: Aspinwall, Lisa G.

eRA COMMONS USER NAME (credential, e.g., agency login): laspinwall

POSITION TITLE: Professor of Psychology

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Stanford University, Stanford, CA	B.A.	6/1987	Psychology
University of California, Los Angeles	M.A.	6/1988	Social Psychology
University of California, Los Angeles	Ph.D.	6/1991	Social Psychology

A. Personal Statement

As a social and health psychologist, my research program examines how people understand, anticipate, and prevent or manage important negative outcomes, especially in the domain of familial cancer. I have studied people's efforts to appraise and act to reduce risks in a wide range of topic areas, including psychosocial adjustment to cancer and for the past 14 years, genetic testing for familial cancer. I jointly led the first major prospective investigation of the impact of melanoma genetic testing results on prevention and screening behaviors, and I was Co-PI for recently concluded R01CA158322-01 (the BRIGHT Project, Behavior, Risk Information, Genealogy & Health Trial), an in-depth prospective examination of the differences between responses to melanoma genetic testing and cancer risk assessment based on family history alone in a large cohort of unaffected members of melanoma-prone families. In this capacity, I have been responsible for all elements of study design, conduct, analysis, and interpretation. In addition to primary outcomes concerning both short- and long-term uptake of sun-protection and screening behaviors, there were 2 aims designed to advance our understanding of responses to genetic risk communication, namely 1) the identification of key cognitive and emotional mediators of responses to genetic testing versus cancer risk assessment based on family history alone that may account for differences in subsequent adherence to prevention and screening recommendations, and 2) the identification of demographic and individual difference moderators of responses to genetic testing. Results relevant to both of these aims will be essential to the future development of tailored approaches to communicating both risk information and management recommendations.

Understanding the impact of integrated genetic testing on people's expectations, feelings, and beliefs about the likelihood of disease, the role of genetic and behavioral contributions to disease, the value of early detection, and their ability to act on information provided by these new tests will play a key part in understanding both the uptake of new technologies designed to reduce the burden of familial cancer and how to best educate families about these new technologies to improve early detection and prevention behaviors. In collaboration with Yelena Wu and others, we have worked to extend these ideas to the counseling of high-risk children and families to promote melanoma prevention and screening behaviors among minors and to integrate them into state-of-the-art interventions to promote family decision-making about sun-protection behaviors. I have served as Dr. Wu's primary co-mentor through her K07 career development award through NCI, with this work resulting in several publications and an eHealth intervention for which we have completed a pilot.

1. Stump, T. K., Aspinwall, L. G, Drummond, D., Taber, J. M., Kohlmann, W., Champine, M., Cassidy, P. B., Petrie, T., & Leachman, S. A. (2019, in press). CDKN2A testing and genetic counseling promote reductions in objectively measured sun exposure one year later. *Genetics in Medicine.*

2. Taber, J.M., Aspinwall, L.G., Stump, T.K., Kohlmann, W., Champine, M. & Leachman, S.A. (2015). Genetic testing enhances understanding of risk information and acceptance of prevention recommendations compared to family history-based counseling alone. Journal of Behavioral Medicine, 38, 740-753. PMID: 26178773. PMCID: PMC4568160
3. Aspinwall, L.G, Stump, T.K., Taber, J.M., Drummond, D., Kohlmann, W., Champine, M., & Leachman, S.A. (2018). Genetic test reporting of *CDKN2A* provides informational and motivational benefits for managing melanoma risk. Translational Behavioral Medicine, 8(1), 29-43. PMCID: PMC6065541
4. Wu, Y. P., Nagelhout, E., Aspinwall, L. G., Boucher, K. N., Parsons, B.G., Kohlmann, W., Kaphingst K. A., Homburger S., Perkins R. D., Grossman D., Harding G., & Leachman S. A. (2018). A novel educational intervention targeting melanoma risk and prevention knowledge among children with a familial risk for melanoma. Patient Education and Counseling, 101(3), 452-459. Electronic publication, October 2017, doi: 10.1016/j.pec.2017.10.008.

B. Positions and Honors

Positions and Employment

1991-2000	Assistant to Associate Professor, Department of Psychology, University of Maryland
2000-2013	Associate Professor, Department of Psychology, University of Utah
2013-present	Professor, Department of Psychology, University of Utah
2015-2018	Chair, Department of Psychology, University of Utah

Honors and Prizes (selected)

Firestone Medal for Excellence in Research, Stanford University, 1987
National Science Foundation Graduate Fellowship, 1987-1991
NIMH Health Psychology Research Trainee, UCLA, 1989-1990
Sigma Xi Outstanding Graduate Science Student Award, UCLA, 1991
Excellence in Teaching Award, College of Behavioral and Social Sciences, U. of Maryland, 1995
Templeton Positive Psychology Prize ($50,000), John Templeton Foundation and APA, 2000
College of Social & Behavioral Science Superior Teaching Award, University of Utah, 2013
Irwin Altman Outstanding Psychology Faculty Award, University of Utah, 2017

Professional Experience (selected)

Review Panel, NCI, Centers of Excellence in Cancer Communications Research (CECCR I. & II.) 2001, 2008
Review Panel, National Institute on Aging, Special Emphasis Panel on Subjective Well-Being, 2011
Review Panel, Center for Scientific Review, NIH, OppNet Basic Research on Self-Regulation (R21), 2011
Panelist, Integrative Graduate Education and Research Traineeship (IGERT) program, NSF, 2004
Panelist, National Science Foundation, 2014-15, 2016

Fellow, American Psychological Association (APA)
Fellow, Association for Psychological Science (APS)
Fellow, Society for Experimental Social Psychology (SESP)
Fellow, Society for Personality and Social Psychology (SPSP)
Member, Huntsman Cancer Inst, Cancer Control and Population Sciences program, 2011-present

Director, Social Psychology Ph.D. Program, University of Utah, 2010-2013, 2014-15
Member, Cancer Clinical Investigations Committee, Huntsman Cancer Institute, 2005-2006
Member, Institutional Review Board, University of Utah, 2001-2002, 2008-2010
Oversight Committee, Genetic Counseling Shared Resource, Huntsman Cancer Inst., 2008-2013, 2016-pres.
Steering Committee, Cancer Control and Population Sciences, Huntsman Cancer Institute, 2008-2013
GenoMEL (Melanoma Genetics Consortium), Health Psychology Group, 2006-present

Associate Editor, *Motivation and Emotion*, 1999-2002
Editorial Boards (past): *Health Psychology, Motivation and Emotion, Psychological Science*
Editorial Boards (current): *Journal of Applied Social Psychology; Psychology and Health*

C. Contribution to Science

1. **Proactive coping related to health.** My research program focuses on the social-cognitive processes involved in representing potential future events and outcomes and, most importantly, how people's beliefs,

feelings, and expectations about the nature and modifiability of such outcomes are related to actions undertaken to prevent or detect problems early in their course, a process termed *proactive coping* (Aspinwall & Taylor, 1997). My writings on proactive coping and self-regulatory processes have been used to develop interventions in multiple areas, including diabetes management, psychological adaptation to climate change, and optimal aging, as well as to inform social psychological studies of how members of stigmatized groups proactively anticipate and manage discrimination. The study of future-oriented thinking, self-regulation and health affords an opportunity to understand how people may proactively utilize new predictive and diagnostic technologies to manage both potential and actual threats to health.

a. Aspinwall, L.G. & Taylor, S.E. (1997). A stitch in time: Self-regulation and proactive coping. Psychological Bulletin, 121(3), 417-436. PMCID: not applicable
b. Aspinwall, L.G. (2005). The psychology of future-oriented thinking: From achievement to proactive coping, adaptation, and aging. Motivation and Emotion, 29(4), 203-235. PMCID: not applicable

2. **Prospective impact of melanoma genetic risk communication.** Advances in personalized medicine, specifically predictive genetic testing, provide the opportunity to learn in advance about major health risks one is likely to face. For most hereditary cancers, the main recommendation following a positive test result is either accelerated screening or prophylactic surgery. In contrast, for melanoma, an aggressive and deadly form of skin cancer, genetic vulnerability (the highly penetrant *p16* mutation, which confers a 76% lifetime risk to US residents) is thought to interact with personal behavior (UVR exposure) to influence disease risk. Our studies were the first to prospectively examine the impact of melanoma genetic testing on prevention and screening behavior and psychological outcomes with sufficient sample size to distinguish patterns of response by both mutation status (positive vs. negative) and melanoma history (*affected* family members with a diagnosis of melanoma vs. *unaffected* family members who do not yet have a melanoma diagnosis). Overall, unaffected family members who received a positive melanoma genetic test result subsequently improved their prevention and screening behaviors to the same high level of adherence demonstrated by family members who had been diagnosed with the disease. These gains were sustained at a two-year follow-up, with multiple benefits and no increases in psychological distress reported. These findings have therefore been influential in the development of international melanoma genetic testing guidelines.

a. Aspinwall, L.G., Taber, J.M., Leaf, S.L., Kohlmann, W. & Leachman, S.A. (2013). Genetic testing for hereditary melanoma and pancreatic cancer: A longitudinal study of psychological outcome. Psycho-Oncology, 22(2), 276-289. PMID: 23382133 PMCID: not available
b. Aspinwall, L.G., Taber, J.M., Leaf, S.L., Kohlmann, W. & Leachman, S.A. (2013). Melanoma genetic counseling and test reporting improve screening adherence among unaffected carriers 2 years later. Cancer Epidemiology, Biomarkers & Prevention, 22(10), 1687-1697. PMCID: PMC3837428
c. Aspinwall, L.G., Taber, J.M., Kohlmann, W., Leaf, S.L. & Leachman, S.A. (2014). Unaffected family members report improvements in daily routine sun protection 2 years following melanoma genetic testing. Genetics in Medicine, 16, 846-853. PMCID: PMC4209010
d. Aspinwall, L.G, Stump, T.K., Taber, J.M., Drummond, D., Kohlmann, W., Champine, M., & Leachman, S.A. (2018). Genetic test reporting of *CDKN2A* provides informational and motivational benefits for managing melanoma risk. Translational Behavioral Medicine, 8(1), 29-43. PMCID: PMC6065541

3. **Impact of genetic explanations on beliefs about health and health behaviors.** As more diseases are identified for which genetic vulnerability interacts with individual behavior and/or environmental exposure, it will become increasingly important to study how people understand and manage aspects of their disease risk that are amenable to personal control and, in particular, how genetic explanations for disease risk and other outcomes influence perceptions of personal agency and responsibility. I have examined this question in diverse settings, including medicine and law. As suggested above, members of high-risk families have the opportunity to proactively manage their melanoma risk by reducing UVR exposure; however, studies using hypothetical scenarios with different stated genetic contributions to disease (e.g., levels of genetic penetrance, characterization of a mutation as a "dominant gene") suggest that people may reach fatalistic conclusions about genetic vulnerability that reduce motivation to engage in disease prevention behaviors. Thus, we assessed the impact of melanoma genetic test reporting on control beliefs, cancer fatalism, and other important outcomes. In contrast to concerns about genetic determinism and corresponding fatalism with respect to prevention, our findings suggested that unaffected carriers generally reported increases in perceived control over the development of melanoma and decreased belief that the development of disease was inevitable (Aspinwall et al., 2015). Further, we found that loss frames may be especially motivating to people

at high risk as they do not wish to lose their opportunity to manage the part of their risk that may be amenable to behavioral control (Taber & Aspinwall, 2015). Finally, in both the domains of medicine and law, genetic explanations may carry particular weight, motivating acceptance of risk information and corresponding management recommendations (Taber et al., 2015) and influencing judicial reasoning about responsibility, punishment, and recidivism in complex ways (Aspinwall, Brown, & Tabery, 2012).

a. Aspinwall, L.G., Brown, T.R., & Tabery, J. (2012). The double-edged sword: Does biomechanism increase or decrease judges' sentencing of psychopaths? Science, 337(6096), 846-849. PMCID: not available
b. Aspinwall, L.G., Stump, T.K., Taber, J.M., Kohlmann, W., Leaf, S.L. & Leachman, S.A. (2015). Impact of melanoma genetic test reporting on perceived control over melanoma prevention. Journal of Behavioral Medicine, 38, 754-765. PMCID: PMC4568125
c. Taber, J.M. Aspinwall, L.G., Stump, T.K., Kohlmann, W., Champine, M. & Leachman, S.A. (2015). Genetic testing enhances understanding of risk information and acceptance of prevention recommendations compared to family history-based counseling alone. Journal of Behavioral Medicine, 38, 740-753. PMID: 26178773. PMCID: PMC4568160
d. Taber, J.M. & Aspinwall, L.G. (2015). Framing recommendations to promote prevention behaviors among people at high risk: A simulation study of responses to melanoma genetic test reporting. Journal of Genetic Counseling, 24, 771-782. PMCID: not available

4. **Melanoma prevention in at-risk children.** Because melanoma risk results from cumulative sun exposure, as well as sunburns, it represents an important point of intervention, particularly for children and adolescents. With colleagues at HCI, we have developed a series of family-focused interventions to understand barriers to child sun protection and to develop novel means with which to educate families about genetic risk and prevention. This work leverages our team's expertise in understanding health cognitions related to perceived risk and its management with expertise on family-focused interventions to promote medical adherence in children and adolescents.

a. Wu, Y. P., Parsons, B. G., Aspinwall, L. G., Hay, J. L, Boucher, K. M., Caputo, H., Mooney, R., Grossman, D., & Leachman, S. A. (2019). Parent and child perspectives on perceived barriers to child sun protection and their association with sun protection strategies among children of melanoma survivors. *Pediatric Dermatology, 36*, 317-323.
b. Wu, Y.P., Aspinwall, L.G., Nagelhout, E. Kohlmann, W., Kaphingst, K.A., Homberger, S., Perkins, R.D., Grossman, D., Harding, G., Cassidy, P., & Leachman, S.A. (2018). Development of an educational program integrating concepts of genetic risk and preventive strategies for children with a family history of melanoma. Journal of Cancer Education, 33(4), 774-781. Electronic publication, November 26, 2016. doi:10.1007/s13187-016-1144-9
c. Stump, T. K., Aspinwall, L.G., Kohlmann, W., Champine, M., Hauglid, J., Wu, Y., Scott, E., Cassidy, P., Leachman, S.A. (2018). Genetic test-reporting of melanoma risk in minors may improve sun protection without inducing distress. *Journal of Genetic Counseling,* https://doi.org/10.1007/s10897-017-0185-5.
d. Wu, Y.P., Aspinwall, L.G., Conn, B.M., Stump, T.K., Grahmann, B., & Leachman, S.A. (2016). A systematic review of interventions to improve adherence to melanoma preventive behaviors for individuals at elevated risk. Preventive Medicine, 88, 153-167.

5. **Understanding positive beliefs and health: Implications for cancer prevention and survivorship.** Career-long interests related to the proactive management of negative events and information are a) how positive thoughts and feelings, such as optimism and positive mood, are related to the processing of health risks, and b) the multiple pathways through which positive thoughts and feelings may be related to physical health outcomes. My work has demonstrated that many different positive beliefs (dispositional optimism, experimentally induced self-affirmation opportunities) enhance both attention to and unbiased processing of information about threats to health and well-being, and this work has been used to inform successful interventions (see Armitage, Harris, & Arden, 2011, *Health Psychology*, for a clinical trial using our self-affirmation manipulation to reduce alcohol consumption). My work has been specifically impactful in identifying pervasive assumptions about positive states and how they work (e.g., the mistaken belief that they promote a blithe inattention to -- or even active disregard of -- important negative information) that play a role in how both scientists and laypeople think about these topics and their implications for intervention.

a. Aspinwall, L.G. & Brunhart, S.M. (1996). Distinguishing optimism from denial: Optimistic beliefs predict attention to health threats. Personality and Social Psychology Bulletin, 22(10), 993-1003. PMCID: not applicable
b. Reed, M.B. & Aspinwall, L.G. (1998). Self-affirmation reduces biased processing of health-risk information. Motivation and Emotion, 22(2), 99-132. [Journal special issue] PMCID: not applicable
c. Aspinwall, L.G. & MacNamara, A. (2005). Taking positive changes seriously: Toward a positive psychology of cancer survivorship and resilience. Cancer, 104(11 Suppl), 2549-2556. PMCID: not applicable
d. Aspinwall, L.G. & Tedeschi, R.G. (2010). The value of Positive Psychology for Health Psychology: Progress and pitfalls in examining the relation of positive phenomena to health. Annals of Behavioral Medicine, 39(1), 4-15. PMCID: not available

Complete List of Published Work in MyBibliography:
https://www.ncbi.nlm.nih.gov/myncbi/1BGgxoYvXLkkk/bibliography/public/

D. Research Support

Ongoing Research Support

National Cancer Institute K07 CA196985 08/01/15-07/31/20
Translational approaches to melanoma prevention in children at high genetic risk
The goals of this grant are to receive training and mentorship on genetic risk communication and to design and pilot test a family-based intervention to improve adherence to melanoma preventive behaviors in high-risk children.
Role: Primary co-mentor for grant recipient, Dr. Yelena Wu

Completed Research Support

National Cancer Institute, 1R01CA158322-01 April 8, 2011-March 30, 2018
Impact of melanoma genetic testing on health cognitions and prevention behaviors. The focus of this project was to determine the effect of melanoma genetic testing vs. counseling based on family history alone on objective measurements of photoprotection and screening compliance. Role: Co-Principal Investigator

Pending Support:

Source of Funds: National Institutes of Health (NIH)
Grant Number: 1P01CA225518-01A1
Title of Program Project Grant: Multigenetic Mechanisms of Cancer Predisposition: Towards Their Clinical Application
Project Title: Project 3: Randomized Study of Added Value of Integrated Genetic Testing on Colonoscopy Uptake
Dates of Proposed Project: 09/01/2019-08/31/2024
Total PPG Direct Costs: $9,249,676
Person Months: 0.36 calendar months per year for 5 years
Project Goals: The goal of Project 3 of this PPG is to conduct a randomized study of the added value of integrated genetic testing on colonoscopy uptake among first-degree relatives as they age into eligibility for CRC screening.
Overlap: None