Brooke M. Bell

Curriculum Vitae December 2020

PERSONAL INFORMATION

Full Name: Brooke Marie Bell Place of Birth: Antioch, CA, USA

Citizenship: USA

CONTACT INFORMATION Work Address

2001 N. Soto Street, 3rd floor, 312-09 Department of Preventive Medicine University of Southern California Los Angeles, CA 90032 USA

Cell Phone: (925) 519-4741 E-mail: brooke.bell@usc.edu Website: https://brookembell.com

EDUCATION

2016 – 2021 (Exp.) Ph.D., Health Behavior Research (Preventive Medicine)

University of Southern California, Keck School of Medicine, Department of

Preventive Medicine Los Angeles, CA, USA

Advisors: Drs. Donna Spruijt-Metz, Kayla de la Haye, Thomas Valente Dissertation Title: System Dynamics of In-Home Family Eating Behavior: Insights from Intensive Longitudinal Data Using Ecological Momentary

Assessment and Wearable Sensors

2012 – 2016 B.A., Mathematics

University of Southern California, Department of Mathematics

Los Angeles, CA, USA

HONORS AND AWARDS

2019 – 2020	Social Networks & Health Fellow, Duke Network Analysis Center
2019	Rockwell Dennis Hunt Scholastic Award and Trophy, Honorable Mention,
	(\$1000), USC Graduate School
2018	Meritorious Abstract Award, Society of Behavioral Medicine
2018	Citation Abstract Award, Society of Behavioral Medicine
2018	Travel Award (\$1000), USC Graduate School
2017	Travel Award (\$1250), Course on Mathematical Sciences in Obesity
	Research, University of Alabama at Birmingham
2017	Citation Poster Award, American Psychosomatic Society
2014	Trainee, Iowa Summer Institute in Biostatistics, University of Iowa
2012 – 2016	QuestBridge Scholar, University of Southern California

RESEARCH INTERESTS

Eating behavior; chronic disease prevention; obesity; complex systems; social networks; mobile health (mHealth) technologies; health equity; food systems; food policy; climate change; sustainable behavior

RESEARCH EXPERIENCE

2020 – Present **Position**

Position: Graduate Research Assistant (20 hours/week)

Employer: Department of Preventive Medicine, Keck School of Medicine,

University of Southern California, Los Angeles, CA

Project: Leveraging Big Mobility Data to Model Food Environment Exposure and Access for Diverse Los Angeles Residents (USC Keck

School of Medicine Dean's Pilot Funding)

Duties: Data management, data analyses; manuscript writing

Supervisor: Dr. Kayla de la Haye

2016 – 2020 **Position:** Graduate Research Assistant (20 hours/week)

Employer: Department of Preventive Medicine, Keck School of Medicine,

University of Southern California, Los Angeles, CA

Project: Monitoring and Modeling Family Eating Dynamics (NSF:

1521722)

Duties: Study recruitment, project management, in-field data collection, data management, data cleaning, data analyses, manuscript writing, grant

writing, student mentorship

Supervisors: Dr. Donna Spruijt-Metz & Dr. Kayla de la Haye

2015 – 2016 **Position:** Undergraduate Research Assistant (5 hours/week)

Employer: USC mHealth Collaboratory, University of Southern California,

Los Angeles, CA

Project: Virtual Sprouts: Web-Based Gardening Games to Teach

Nutrition and Combat Obesity (NIH: R25 OD011113-05)

Duties: Data entry, managing study surveys and materials, conducting

literature reviews, data analyses **Supervisor:** Dr. Donna Spruijt-Metz

2014 – 2014 **Position:** Undergraduate Research Assistant (5 hours/week)

Employer: Real-Time Eating and Children's Health Lab, Department of Preventive Medicine, University of Southern California, Los Angeles, CA

Project: Maternal Stress and Children's Obesity Risk (NIH: R01

HL119255-02)

Duties: Study recruitment, in-field data collection, data entry

Supervisor: Dr. Genevieve F. Dunton

2014 – 2014 **Position:** Undergraduate Research Assistant (20 hours/week)

Employer: NIH-sponsored Summer Institute for Training in Biostatistics, Holden Comprehensive Cancer Center, University of Iowa, Iowa City, IA **Project:** Assessing the Role of Patient Factors on Surgical Complication

In Pancreatic Cancer Patients

Duties: Data cleaning, data analyses

Supervisor: Dr. Brian J. Smith

WORK EXPERIENCE

2020 – Present **Position:** Research Intern (3 hours/week)

Employer: Healthy Food Procurement Unit, Division of Chronic Disease and Injury Prevention, Los Angeles County Department of Public Health,

Los Angeles, CA

Duties: Designed a research survey assessing the impact of COVID-19 on changes to eating behavior and food insecurity in Los Angeles residents; data management, data analyses, program evaluation

Supervisor: Dr. Brenda Robles

2019 – 2019 **Position:** Research Intern (5 hours/week)

Employer: FEAST (Food, Education, Access, Support, Together)

(community non-profit), Los Angeles, CA

Duties: Designed a program evaluation of FEAST's community-based

intervention

Supervisor: Amy Vu, M.P.H.

TEACHING EXPERIENCE

2020 – 2020 **Position:** Teaching Assistant (20 hours/week)

Course: PM 501: Foundations in Health Education and Promotion

Employer: Department of Preventive Medicine, Keck School of Medicine,

University of Southern California, Los Angeles, CA

Aug. 2019 **Position:** Co-Instructor / Teaching Assistant

Course: R Bootcamp – Data Analysis

Employer: Department of Preventive Medicine, Keck School of Medicine,

University of Southern California, Los Angeles, CA

PUBLICATIONS

Peer-Reviewed Journal Articles

- 9. Singleton C.R., Adeyemi O.S., Parab K.V., Roehll A.M., Flores E., Adams A.M., Quintiliani L.M., **Bell B.M.**, Dulin-Keita A. (2020). Society of Behavioral Medicine position statement: Provide funding for incentive programs to expand healthy food offerings in SNAP-authorized small food stores. *Translational Behavioral Medicine*. ibaa111. https://doi.org/10.1093/tbm/ibaa111
- 8. **Bell B.M.**, Alam R., Alshurafa N., Thomaz E., Mondol A., de la Haye K., Stankovic J.A., Lach J., Spruijt-Metz D. (2020). Automatic, Wearable-Based, In-Field Eating Detection Approaches for Public Health Research: A Scoping Review. *npj Digital Medicine*. *3*(1): 38. https://doi.org/10.1038/s41746-020-0246-2
- 7. de la Haye K., **Bell B.M.**, Salvy S.J. (2019). The role of maternal social networks on the outcomes of a home-based childhood obesity prevention pilot intervention. *Journal of Social Structure*. 20(3): 7–28. https://doi.org/10.21307/joss-2019-004
- 6. **Bell B.M.**, Spruijt-Metz D., Vega Yon G.G., Mondol A., Alam R., Ma M., Emi I., Lach J., Stankovic J.A., de la Haye K. (2019). Sensing eating mimicry among family members. *Translational Behavioral Medicine*. *9*(3): 422–430. https://doi.org/10.1093/tbm/ibz051

- 5. Dulin-Keita A., Quintiliani L.M., Buscemi J., **Bell B.M.**, Gans K.M., Yaroch A.L. (2019). Society of Behavioral Medicine position statement: Increase funding for fruit and vegetable production in Farm Bill reauthorization. *Translational Behavioral Medicine*. 9(2): 391–394. https://doi.org/10.1093/tbm/iby041
- 4. Spruijt-Metz D., Wen C.K.F., **Bell B.M.**, Intille S., Huang J.S., Baranowski T. (2018). Advances and controversies in diet and physical activity measurement in youth. *American Journal of Preventive Medicine*. *55*(4): e81–e91. https://doi.org/10.1016/j.amepre.2018.06.012
- 3. **Bell B.M.**, Cook L., Gotsis M., Lane H.C., Davis J.N., Antunez-Castillo L., Ragusa G., Spruijt-Metz D. (2018). Virtual Sprouts: A virtual gardening pilot intervention increases self-efficacy to cook and eat fruit and vegetables in minority youth. *Games for Health Journal*. 7(2): 127–135. https://doi.org/10.1089/g4h.2017.0102
- 2. Ma M., Alwan R., **Bell B.M.**, de la Haye K., Spruijt-Metz D., Lach J., Stankovic J.A. (2017). M²G: A monitor of monitoring systems with ground truth validation features for research-oriented residential applications. *International Conference on Mobile Ad Hoc and Sensor Systems*. 10–18. https://doi.org/10.1109/MASS.2017.107
- 1. Salekin A., Chen Z., Ahmed M.Y., Lach J., Spruijt-Metz D., de la Haye K., **Bell B.M.**, Stankovic J.A. (2017). Distant emotion recognition. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*. 1(3): 1–25. https://doi.org/10.1145/3130961

Manuscripts Under Review

- 2. Mondol A., **Bell B.M.**, Ma M., Alam R., Emi I.A., Preum S.M., de la Haye K., Spruijt-Metz D., Lach J., Stankovic J.A. MFED: A System for Monitoring Family Eating Dynamics. Submitted.
- 1. **Bell B.M.**, Spruijt-Metz D., Naya C.H., Lane C.J., Wen C.K.F., Davis J.N., Weigensberg M.J. The mediating role of emotional eating in the relationship between perceived stress and dietary intake quality in Hispanic/Latino adolescents. Under Revision.

Manuscripts in Preparation

- 2. **Bell B.M.**, Mondol A., Alam R., Ma M., Emi I., Preum S.M., de la Haye K., Lach J., Stankovic J.A., Spruijt-Metz D. Investigating the validity and feasibility of the Monitoring and Modeling Family Eating Dynamics (M2FED) system to detect family eating behavior in context (Dissertation Study 1). In preparation.
- 1. Flórez K.R., **Bell B.M.**, de la Haye K. Unraveling the relationship between food insecurity, acculturation, and diet quality in Mexican Americans: What is the role of social networks? In preparation.

Book Chapters

 Wen C.K.F., Bell B.M., Spruijt-Metz D. (2016) Mobile Health Strategies for Pediatric Obesity Prevention and Interventions. Childhood Obesity: Causes, Consequences and Intervention Approaches (M. Goran). CRC Press. pp. 431-441. https://doi.org/10.1201/9781315370958

Health Policy Briefs

- 2. Singleton C., Adeyemi O., Parab K., Roehll A., Flores E., Adams A., Quintiliani L.M., **Bell B.M.**, Dulin A. (2020). SBM position statement: Provide funding for incentive programs to expand healthy food offerings in SNAP-authorized small food stores. Society of Behavioral Medicine Policy Brief (available at https://www.sbm.org/advocacy/policy-positions)
- 1. Dulin-Keita A., Quintiliani L., Buscemi J., **Bell B.M.**, Gans K., Yaroch A. (2017). SBM supports increasing funding allocations for fruit and vegetable production in the reauthorization of The Farm Bill. Society of Behavioral Medicine Policy Brief (available at https://www.sbm.org/advocacy/policy-positions)

SCIENTIFIC PRESENTATIONS

National and International Presentations

- 7. de la Haye K., **Bell B.M.**, Flórez K.R., (2020, July). Unraveling the relationship between food insecurity, acculturation, and diet quality in Mexican Americans: What is the role of social networks? *XL Sunbelt Conference of the International Network for Social Network Analysis*. Paris, France.
- 6. Spruijt-Metz D., de la Haye K., **Bell B.M.**, Mondol A., Ma M., Alam R., Lach J., Stankovic J., (2020, April). Monitoring and Modeling Family Eating Dynamics in Real Time Using Mobile Health Technologies. *41*st Annual Meeting of the Society of Behavioral Medicine. San Francisco, CA, USA.
- 5. **Bell B.M.**, Albertoni N., Vega Yon G.G., Valente T.W., (2019, June). Comparison of country-level network exposures on the adoption of multiple United Nations treaties. *XXXIX Sunbelt Conference of the International Network for Social Network Analysis*. Montréal, Québec, Canada.
- 4. **Bell B.M.**, Alam R., Stankovic J.A., Lach J., Spruijt-Metz D., (2019, March). A Review of Wearable-Based Eating Detection Approaches for Obesity Prevention and Treatment. Behavioral Informatics and Technology SIG Preview, a.k.a. Tech Madness, Society of Behavioral Medicine's Annual Meeting. Washington, D.C., USA.
- 3. **Bell B.M.**, Spruijt-Metz D., de la Haye K., (2018, July). Lightning Talk: Introducing a Novel Big Data Collection Tool M2FED. *9th International Conference on Complex Systems Workshop on Food Complexity and Nutrition*. Boston, MA, USA.
- 2. **Bell B.M.**, Salvy S.J., de la Haye K., (2018, June). Social Network Influences in the Childhood Obesity Prevention at Home (COPE) Program. *XXXVIII Sunbelt Conference of the International Network for Social Network Analysis*. Utrecht, Netherlands.
- 1. **Bell B.M.,** Spruijt-Metz D., Mondol A.S., Alam R., Stankovic J.A., Lach J., de la Haye K., (2018, April). Monitoring and Modeling Family Eating Dynamics (M2FED): A sensor system to detect dietary mimicry in families. *39th Annual Meeting of the Society of Behavioral Medicine*. New Orleans, LA, USA.

Poster Presentations

- 10. de la Haye K., **Bell B.M.**, Flórez K.R., (2020, November). Acculturation and Diet Quality in Mexican Americans: What Is The Role Of Social Networks? To be presented: *Annual Meeting of The Obesity Society*. Online.
- 9. **Bell B.M.**, Mondol A., Ma M., Alam R., Emi I., de la Haye K., Lach J., Stankovic J.A., Spruijt-Metz D., (2020, April). Evaluating the impact of time, demographic, and social effects on compliance to eating event-triggered EMA surveys in families. *41*st Annual Meeting of the Society of Behavioral Medicine. San Francisco, CA, USA.
- 8. **Bell B.M.**, Alam R., Alshurafa N., Thomaz E., Mondol A., de la Haye K., Stankovic J.A., Lach J., Spruijt-Metz D., (2020, February). Automatic, Wearable-Based, In-Field Eating Detection Approaches for Obesity Research: A Scoping Review. 7th Annual USC Diabetes & Obesity Research Institute (DORI) Annual Symposium. Los Angeles, CA, USA.
- 7. de la Haye K., **Bell B.M.**, Vega Yon G.G., Mondol A.S., Alam R., Ma M., Emi I., Lach J., Stankovic J.A., Spruijt-Metz D., (2019, July). Detecting Eating Mimicry in Families. 5th International Conference on Computational Social Science. Amsterdam, Netherlands.
- 6. **Bell B.M.**, Alam R., Stankovic J.A., Lach J., Spruijt-Metz D., (2019, March). A Review of Wearable-Based Eating Detection Approaches for Obesity Prevention and Treatment. *40th Annual Meeting of the Society of Behavioral Medicine*. Washington, D.C., USA.
- 5. Spruijt-Metz D., Stankovic J.A., Lach J., de la Haye K., **Bell B.M.**, Salekin A., Chen Z., Ahmed M.Y., Alam R., Rayo J., Mondol A.S., Ma M., Preum S.M., Emi I., (2017, April). Monitoring and Modeling Family Eating Dynamics. *mHealth Connect 2017*. Stanford, CA, USA.
- 4. Stankovic J.A., Spruijt-Metz D., Lach J., de la Haye K., **Bell B.M.**, Salekin A., Chen Z., Ahmed M.Y., Alam R., Rayo J., Mondol A.S., Ma M., Preum S.M., Emi I., (2017, March). Monitoring and Modeling Family Eating Dynamics. *NSF Smart and Connected Health Principal Investigators Meeting*. Boston, MA, USA.
- 3. **Bell B.M.,** Cook L., Gotsis M., Lane H.C., Davis J., Antunez-Castillo L., Ragusa G., Spruijt-Metz D., (2017, March). Virtual Sprouts: A virtual gardening pilot intervention increases self-efficacy to cook and eat fruits and vegetables in minority youth. 38th Annual Meeting of the Society of Behavioral Medicine. San Diego, CA, USA.
- 2. Rayo J., **Bell B.M.**, Ahmed M.Y., de la Haye K., Lach J., Stankovic J.A., Spruijt-Metz D., (2017, March). Monitoring and Modeling Family Eating Dynamics (M2FED): A system that detects family eating behaviors and moods in the home environment. *75th Annual Conference of the American Psychosomatic Society*. Sevilla, Spain.
- 1. **Bell B.M.,** Cook L., Gotsis M., Lane H.C., Davis J., Antunez-Castillo L., Ragusa G., Spruijt-Metz D., (2017, February). Virtual Sprouts: A virtual gardening pilot intervention increases self-efficacy to cook and eat fruits and vegetables in minority youth. 4th Annual USC Diabetes & Obesity Research Institute (DORI) Annual Symposium. Los Angeles, CA, USA.

PROFESSIONAL SOCIETY MEMBERSHIPS

2018 – Present International Network for Social Network Analysis (INSNA)

2018 – Present American Public Health Association (APHA)

2017 – Present Society of Behavioral Medicine (SBM)

SERVICE

Professional Service

2020 – Present Member, SBM Presidential Working Group on Climate Change, Behavior

Change, and Health

2020 – Present Co-Founder, Network of Diverse Scholars in Social Network Analysis

2019 – Present Committee Member, SBM Health Policy Committee

Ad Hoc Manuscript Peer Review

2020 – Present IEEE Journal of Biomedical and Health Informatics
2020 – Present ACM Transactions on Computing for Healthcare

2019 – Present Evaluation & the Health Professions

2019 – Present BioMed Central Pediatrics

2018 – Present Translational Behavioral Medicine

Ad Hoc Abstract Peer Review

Society of Behavioral Medicine

Department Service

2020 - Present	Co-Founder, Department of Preventive Medicine's Anti-Racism Council
2020 - Present	Founder/Facilitator, Racism & Public Health: Departmental Book Club
2018 – 2019	President, Health Behavior Research Student Association

2017 – 2018 Chair of External Affairs, Health Behavior Research Student Association

University Service

2020 – Present	Member, Health Justice Inter-Professional Education Working Group
2019 – 2020	Ad Hoc Member, USC Presidential Sustainability Working Group
2019 – 2020	Member, USC Joint Student Task Force on Sustainability
2018 – 2020	Committee Member, USC Volunteerism Partnership Committee
2018 - Present	Director of Community Service, USC Graduate Student Government
2018 - Present	Committee Member, USC Office of Sustainability Steering Committee
2018 - Present	Member, USC Alliance for Civic Engagement

Community Service

2020 – Present	Volunteer, Food/grocery distribution centers, East/South Los Angeles
Mar. 2020	Co-Organizer, East LA Area Community Organizations Showcase
2019 – 2020	Guest Presenter (Health Careers), Los Angeles middle and high schools
Oct. 2019	Co-Organizer, STEM Day of Discovery, USC Keck School of Medicine
Oct. 2018	Organizer, Voter Registration Drive, Lincoln Heights Farmers Market
2017 – 2018	Volunteer, Los Angeles Food Policy Council
2013 – 2014	Mathematics Tutor, Teach for Los Angeles
2013 – 2013	Mathematics Teaching Assistant, USC Joint Educational Project

MENTORSHIP

Undergraduate Students

Daisy Gonzalez, Jessica Rayo (CSU Long Beach), Mia Villarosa, Grace Do, Megri Kartounian, Jessica Myers, Anna Satterfield, Jean Hyon, Ricardo Sifontes (CSU Northridge), Rebecca Braganca, Cynthia Li, Sharyse Watanobe, Kara Hur, Yun Bao

Graduate Students

Matt Shi (M.S.), Ibrahim Adamu (M.P.H.)