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EDUCATION

1977 B.A., University of Connecticut (Psychology)

1983 Ph.D., University of Southern California (Quantitative Psychology)

PROFESSIONAL EXPERIENCE

2020-present *Professor*, Department of Social & Behavioral Sciences and
Professor, Department of Biostatistics, School of Global Public Health
New York University

2020-present *Distinguished Professor Emeritus*, Department of Human Development & Family Studies
The Pennsylvania State University

2014-2020 *Distinguished Professor*, Department of Human Development & Family Studies
The Pennsylvania State University

2000-2020 *Professor*, Department of Statistics
The Pennsylvania State University

1994-2020 *Director*, The Methodology Center, College of Health and Human Development
The Pennsylvania State University

1994-2013 *Professor*, Department of Human Development & Family Studies
The Pennsylvania State University

1987-1993 *Assistant/Associate Professor*, J.P. Guilford Laboratory of Quantitative Psychology
Department of Psychology, University of Southern California

1983-1987 *Senior Research Associate/Assistant Research Professor*, Department of Preventive
Medicine and Institute for Health Promotion and Disease Prevention Research
University of Southern California

HONORS AND AWARDS

2020	Awarded the 2020 Valkhof Chair, Radboud University Medical Center, The Netherlands
2019	Mind the Gap lecture, Office of Disease Prevention, National Institutes of Health
2018	Fulbright Specialist grant to spend three weeks at National University of Ireland Galway
2017	Pauline Schmitt Russell Distinguished Career Award from Penn State's College of Health and Human Development
2015	Elected Fellow, Society for Prevention Research
2014	Presentation at TEDxPSU
2014	Named Distinguished Professor
2014	Elected Fellow, Society of Behavioral Medicine
2013	Mind the Gap lecture, Office of Disease Prevention, National Institutes of Health
2011	Evan G. and Helen G. Pattishall Outstanding Research Achievement Award from Penn State's College of Health and Human Development
2007-2011	President-elect and then President, Society for Prevention Research
2004	President's Award, Society for Prevention Research
2000	Penn State Faculty Scholar Medal for the Social and Behavioral Sciences
1997-2005	Selected as a Core Scientist for the Tobacco Etiology Research Network (funded by the Robert Wood Johnson Foundation)
1997	Elected Fellow, Association for Psychological Science
1996	Elected Fellow, Division 5, American Psychological Association
1995	President, Society of Multivariate Experimental Psychology
1992	USC Psychology Department Teacher of the Year
1991	USC Psychology Department Mentorship Award
1991	Society of Multivariate Experimental Psychology Award for Distinguished Early Career Contributions to Multivariate Behavioral Research
1987	Elected to Society for Multivariate Experimental Psychology

SERVICE

Editorial & Journal Review

2020-	Editorial Board, <i>Implementation Research and Practice</i>
2009-2013	Editorial Board, <i>Prevention Science</i>
2005-2008	Chair, Society for Prevention Research Publications Committee

- 1998-2005 Associate Editor, *Prevention Science*
1996-1998 Editorial Board, *Psychological Methods*
1992-1995 Associate Editor, *Multivariate Behavioral Research*
1992-1994 Associate Editor, *Journal of Educational Statistics*

Ad hoc reviewer for many journals, including *Psychometrika*, *Psychological Methods*, *Psychological Bulletin*, *Journal of Mathematical Psychology*, *Journal of Personality and Social Psychology*, *Applied Psychological Measurement*, *Journal of Consulting and Clinical Psychology*, *Computational Statistics and Data Analysis*, *Psychology and Aging*, *Biometrics*, *Statistics in Medicine*, *Journal of Research on Adolescence*, *Translational Behavioral Medicine*, *Methodological Innovations*.

Grant Proposal Review

- 1998-2013,
2016, 2018, 2019 Member, National Institute on Drug Abuse Centers Study Section
2019 Member, NIDA-NIAAA T32 Study Section
1997-1998 Member, National Institute on Drug Abuse Prevention and Epidemiology Study Section

Other Service

- 2020-2021 Member, Executive Committee, National Institute on Aging Behavioral and Social Science Research Workshops on Alzheimer's Disease and Related Dementia Prevention and Cohort Study Harmonization
2018-present Member, Scientific Committee for Smoke Free, a smoking cessation app developed by David Crane at University College, London
2017-present Member, External Advisory Committee, PREMIER T32 training grant (University of Illinois, Chicago)
2014-present Member, External Advisory Board, Monitoring the Future project (University of Michigan)
2014-present Member, International Advisory Board, Theories and Techniques of Behaviour Change Project (University College, London)
2012-present Member of Data Safety and Monitoring Board, *Evaluating New Nicotine Standard for Cigarettes*, U54DA031659, Eric Donny and Dorothy Hatsukama, PIs
2015 Established ongoing special interest group on Optimization of Behavioral and Biobehavioral Interventions in the Society of Behavioral Medicine
1997-2000, 2005-12 Member, Board of Directors, Society for Prevention Research
1996 Mission to Kazakstan, United Nations Drug Control Program
1991-1995 Member-at-large, Executive Committee, American Psychological Association, Division 5 (elected)

- 1993 Program Chair, American Psychological Association 1993 Convention, Division 5 (appointed)
- 1991-1993 Chair, Psychometric Society's Committee on Graduate Student Recruitment (appointed)

PROFESSIONAL AFFILIATIONS

American Psychological Association (Division 5) (Fellow)
Association for Psychological Science (Fellow)
College on Problems of Drug Dependence
International Society for Research on Internet Interventions
Society for Prevention Research (Fellow)
Society for Research on Nicotine and Tobacco
Society of Behavioral Medicine (Fellow)

COURSES TAUGHT

Introductory Statistics (Undergraduate)
Psychological Measurement (Undergraduate)
Methods and Statistics in Longitudinal Research (Graduate)
Analysis of Categorical Data (Graduate)
Multivariate Statistics (Graduate)
Measurement (Graduate)
Latent Class and Latent Transition Analysis (Graduate)
Optimization of Behavioral and Biobehavioral Interventions (Graduate)

GRANTS AWARDED

Federal Grants

2020-2024 Principal Investigator: *Optimization of Behavioral and Biobehavioral Interventions: Building Investigator Capacity Nationwide* (R25DA049699)
National Institute on Drug Abuse/Office of Social and Behavioral Science Research;
\$812,412

- 2014-2024 Principal Investigator of Core: *Optimized Chronic Care for Smokers: A Comparative Effectiveness Approach* (P01 CA180945; Center Director: Dr. Michael Fiore, University of Wisconsin)
National Cancer Institute; Direct costs of core: \$500,000 (approx.)
- 2016-2021 Multiple Principal Investigator (with Dr. Marya Gwadz, New York University): *Using Most to Optimize an HIV Care Continuum Intervention for Vulnerable Populations* (R01 DA040480)
National Institute on Drug Abuse; \$5,800,000; Subcontract to PSU \$766,000 (approx.)
- 2016-2020 Principal Investigator: *Prevention and Methodology Training* (T32 DA017629)
National Institute on Drug Abuse; \$2,932,141
- 2015-2020 Principal Investigator: *Center for Complex Data to Knowledge in Drug Abuse and HIV Behavioral Science* (P50 DA039838)
National Institute on Drug Abuse; \$12,891,000
- 2015-2020 Principal Investigator: *Engineering an Online STI Prevention Program* (R01 AA022931)
National Institute on Alcohol Abuse and Alcoholism; \$2,975,000.
- 2012-2018 Multiple Principal Investigator (with Dr. Bonnie Spring, Northwestern University): *Opt-In: Optimizing Intensive Intervention for Weight Loss* (R01 DK097364)
National Institute of Diabetes and Digestive and Kidney Diseases; Direct costs: \$2,500,000 (approx.)
- 2010-2015 Principal Investigator: *Center for Prevention and Treatment Methodology* (P50 DA010075)
National Institute on Drug Abuse; \$10,125,000.
- 2009-2014 Principal Investigator of Core: *A Tobacco Intervention Laboratory (Intervention Optimization Core)* (P50 CA143188; Center Directors: Drs. Michael Fiore & Timothy Baker, University of Wisconsin)
National Cancer Institute; Direct costs of core: \$450,000 (approx.)
- 2007-2011 Multiple Principal Investigator (with Dr. Daniel Rivera, Arizona State University): *Dynamical Systems and Related Engineering Approaches to Improving Behavioral Interventions* (R21 DA024266)
NIH Roadmap; \$1,114,000.
- 2005-2010 Investigator: *Prevention and Methodology Training*
National Institute on Drug Abuse; Direct costs: \$1,800,000 (approx.)
- 2005-2010 Investigator: *Drug Abuse Prevention Research Methodology Conferences* (R13 DA012122)
National Institute on Drug Abuse; Direct costs: \$125,000 (approx.)

- 2005-2010 Principal Investigator: *Center for Prevention and Treatment Methodology* (P50 DA010075)
National Institute on Drug Abuse; Direct costs: \$6,000,000 (approx.)
- 2004-2009 Principal Investigator: *Methodology for Drug Abuse Prevention Research* (K05 DA018206)
National Institute on Drug Abuse; Direct costs: \$617,000 (approx.)
- 2003-2005 Principal Investigator: *Drug Abuse Prevention Research Methodology Conferences* (R13 DA012122), National Institute on Drug Abuse; Direct costs: \$73,800 (approx.)
- 2000-2005 Principal Investigator: *Center for Prevention Methodology* (P50 DA010075)
P50, National Institute on Drug Abuse; Direct costs: \$4,400,000 (approx.)
- 1998-2003 Principal Investigator: *Drug Abuse Prevention Research Methodology Conferences* (R13 DA012122)
National Institute on Drug Abuse; Direct costs: \$150,000 (approx.)
- 1996-2000 Principal Investigator, *Center for the Study of Prevention Through Innovative Methodology* (P50 DA010075)
National Institute for Drug Abuse; Direct costs: \$2,000,000 (approx.)
- 1991-1996 Principal Investigator: *Latent Path/Latent Transition Analysis in Drug Abuse Prevention* (R01 DA004111)
Competing Continuation, National Institute on Drug Abuse; Direct costs: \$365,000 (approx.)
- 1987-1991 Principal Investigator: *Latent Path Methodology in Drug Abuse Prevention* (R01 DA004111)
National Institute on Drug Abuse; Direct costs: \$97,000 (approx.)
- 1984-1986 Principal Investigator: *Longitudinal Scaling Methodology*
National Science Foundation; Direct costs: \$80,000 (approx.)
- 1984-1986 Principal Investigator: *Longitudinal Scaling in Drug Abuse Prevention* (R23 DA003673)
National Institute on Drug Abuse; Direct costs: \$75,000 (approx.)

Other Grants

- 1998 Co-Principal Investigator: *New Methods for the Analysis of Change* (Co-PI: A.G. Sayer)
Grant to hold a conference and prepare a book, American Psychological Association;
Direct costs: \$14,000. Conference held 10/12-14/98. Book published 2001.
- 1997 Principal Investigator: *Biennial Summer Institute in Longitudinal Methods*

Penn State Continuing and Distance Education Program Innovation Fund; Direct costs: \$6,913. Summer Institute held 5/19-21/97.

1989 Principal Investigator: *Best Methods for the Analysis of Change* (Co-PI: J.L. Horn) American Psychological Association; (a grant to hold a conference and prepare a book); Grant to hold a conference and prepare a book, American Psychological Association; Direct costs: \$18,559. Conference held 10/29-31/89. Book published 1991.

PUBLICATIONS

Books and Monographs

Collins, L.M. (2018). *Optimization of behavioral, biobehavioral, and biomedical interventions: The multiphase optimization strategy (MOST)*. New York: Springer.

Collins, L.M., & Kugler, K.C. (2018). *Optimization of behavioral, biobehavioral, and biomedical interventions: Advanced topics*. New York: Springer.

Collins, L.M., & Lanza, S.T. (2010). *Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences*. New York: Wiley.

Collins, L.M., & Sayer, A.G., Eds. (2001). *New methods for the analysis of change*. Washington, D.C.: American Psychological Association.

Collins, L.M., & Seitz, L.A., Eds. (1994). *Advances in data analysis for prevention intervention research*. Washington, D.C.: National Institute on Drug Abuse.

Collins, L.M., & Horn, J.L., Eds. (1991). *Best methods for the analysis of change: Recent advances, unanswered questions, future directions*. Washington, D.C.: American Psychological Association.

Special Issues of Journals

Murphy, S.A., Collins, L.M., & Rush, A.J. (2007). Special issue of *Drug and Alcohol Dependence: Customizing treatment to the patient: Adaptive treatment strategies*. Elsevier.

Collins, L.M., Flaherty, B.P., & Colby, S. (Eds.). (2002). Special issue of *Drug and Alcohol Dependence: Measurement and design issues in tobacco and drug use research*. Elsevier.

Collins, L.M., & Millsap, R.E. (1998). Special issue of *Multivariate Behavioral Research: Innovative methods for prevention research*.

Peer-Reviewed Journal Articles

Gwadz, M.V., Campos, S., Freeman, R., Cleland, C.M., Wilton, L., Sherpa, D., Ritchie, A.S., Hawkins, R.L., Allen, A., Martinez, B.Y., Dorsen, C., Collins, L.M., Hroncich, T., Cluesman, S.R., & Leonard, N.R. (In press). Black and Latinx persons living with HIV evidence risk and resilience in the context of COVID-19: A mixed-methods study of the early phase of the pandemic. *AIDS and Behavior*.

- Tanner, A.E., Guastafarro, K.M., Rulison, K., Wyrick, D.L., Milroy, J.M., Bhandari, S., Thorpe, S.Y., Ware, S., Miller, A.M., & Collins, L.M. (In press). A hybrid evaluation-optimization trial to evaluate an intervention targeting the intersection of alcohol and sex in college students and simultaneously test an additional component aimed at preventing sexual violence. *Annals of Behavioral Medicine*.
- Freeman, R., Gwadz, M.V., Wilton, L., Collins, L.M., Dorsen, C., Hawkins, R.L., Silverman, E., Martinez, B.Y., Leonard, N.R., Applegate, A., & Cluesman, S. (2020). Understanding long-term HIV survivorship among African American/Black and Latinx persons living with HIV in the United States: A qualitative exploration through the lens of symbolic violence. *International Journal for Equity in Health, 19*, 146.
- Spring, B., Pfmatter, A.F., Marchese, S.H., Stump, T., Pellegrini, C., McFadden, G., Hedeker, D., Siddique, J., Jordan, N., & Collins, L.M. (2020). A factorial experiment to optimize remotely delivered behavioral treatment for obesity: Results of the Opt-In study. *Obesity, 28*, 1652-1662. doi: 10.1002/oby.22915
- Klemperer, E.S., Mermelstein, R., Baker, T.B., Hughes, J.R., Fiore, M.C., Piper, M.E., Schlam, T.R., Jorenby, D.E., Collins, L.M., & Cook, J.W. (2020). Predictors of smoking cessation attempts and success following motivation-phase interventions among people initially unwilling to quit smoking. *Nicotine and Tobacco Research*. doi: 10.1093/ntr/ntaa051
- Wyrick, D.L., Tanner, A.E., Milroy, J., Guastafarro, K.M., Bhandari, S., Kugler, K.C., Thorpe, S., Ware, S., Miller, A., & Collins, L.M. (2020). itMatters: Optimization of an online intervention to prevent sexually transmitted infections in college students. *Journal of American College Health*. doi: 10.1080/07448481.2020.1790571
- Huffman, J.C., Millstein, R.A., Celano, C.M., Healy, B.C., Park, E.R., & Collins, L.M. (2020). Developing a psychological-behavioral intervention in cardiac patients using the multiphase optimization strategy: Lessons learned from the field. *Annals of Behavioral Medicine, 54*, 151-163. PMID: PMC7309585
- Engle, J., Mermelstein, R., Baker, T.B., Fiore, M., Smith, S.S., Schlam, T. Piper, M.E., Jorenby, D., Collins L.M., & Cook, J. (2019). Effects of motivation phase intervention components on quit attempts in smokers unwilling to quit: A factorial experiment. *Drug and Alcohol Dependence, 197*, 149-157. PMID: PMC6573018
- Freedland, K.E., King, A.C., Ambrosius, W.T., Compo, R.A., Collins, L.M., Cook, T.D., Czajkowski, S.M., Edinger, J.D., Mayo-Wilson, E., Mohr, D.C., Rebok, G.W., Stoney, C.M., Thabane, L., Treweek, S.P., Young-Hyman, D., & Riley, W.T., for the National Institutes of Health Office of Behavioral and Social Sciences Research Expert Panel on Comparator Group Selection in Behavioral and Social Science Clinical Trials. (2019). The selection of comparators for randomized controlled trials of health-related behavioral interventions: Recommendations of an NIH expert panel. *Journal of Clinical Epidemiology, 110*, 74-81. PMID: PMC6543841
- Bernstein, S.L., Dziura, J., Weiss, J., Miller, T., Vickerman, K.A., Grau, L.E., Pantaloni, M.V., Abrams, L., Collins, L.M., & Toll, B. (2018). Tobacco dependence treatment in the emergency department: A randomized trial using the multiphase optimization strategy. *Contemporary Clinical Trials, 66*, 1-8. PMID: PMC5851600

- Celano, C.M., Albanese, A., Millstein, R.A., Mastromauro, C.A., Chung, W.-J., Legler, S., Park, E.R., Healy, B.C., Collins, L.M., Januzzi, J.L., & Huffman, J.C. (2018). Optimizing a positive psychology intervention to promote health behaviors following an acute coronary syndrome: The Positive Emotions after Acute Coronary Events-III (PEACE-III) randomized factorial trial. *Psychosomatic Medicine, 80*, 526-534. PMID: PMC6023730
- Nahum-Shani, I., Dziak, J.J., & Collins, L.M. (2018). Multi-level factorial designs with experimentation-induced clustering. *Psychological Methods, 23*, 458-479. PMID: PMC5630520
- Nahum-Shani, I., Smith, S. N., Spring, B.J., Collins, L.M., Witkiewitz, K., Tewari, A., & Murphy, S. A. (2018). Just-in-time adaptive interventions (JITAs) in mobile health: Key components and design principles for ongoing health behavior support. *Annals of Behavioral Medicine, 52*, 446-452. PMID: PMC5364076
- Phillips, S.M., Cottrell, A., Lloyd, G.R., Penedo, F.J., Collins, L.M., Cella, D., Courneya, K.S., Ackermann, R.T., Siddique, J., & Spring, B. (2018). Optimization of a technology-supported physical activity intervention for breast cancer survivors: *Fit2Thrive* study protocol. *Contemporary Clinical Trials, 66*, 9-19. PMID: PMC5828903
- Piper, M.E., Cook, J.W., Schlam, T.R., Jorenby, D.E., Smith, S.S., Collins, L.M., Mermelstein, R., Fraser, D.L., Fiore, M.C., & Baker, T.B. (2018). A randomized controlled trial of an optimized smoking treatment delivered in primary care. *Annals of Behavioral Medicine, 52*, 854-864. PMID: PMC6135958
- Uwatoko, T., Luo, Y., Sakata, M., Kobayashi, D., Sakagami, Y., Takemoto, K., Collins, L.M., Watkins, E., Hollon, S.D., Wason, J., Noma, H., Horikoshi, M., Kawamura, T., Iwami, T., & Furukawa, T. (2018). Healthy Campus Trial: A multiphase optimization strategy (MOST) fully factorial trial to optimize the smartphone cognitive behavior therapy (CBT) app for mental health promotion among university students: Study protocol for a randomized controlled trial. *Trials, 19*, 353-369.
- Huffman, J.C., Albanese, A.M., Campbell, K.A., Celano, C.M., Millstein, R.A., Mastromauro, C.A., Healy, B.C., Chung, W.J., Januzzi, J.L., Collins, L.M., & Park E.R. (2017). The Positive Emotions after Acute Coronary Events (PEACE) behavioral health intervention: Design, rationale, and preliminary feasibility of a factorial design study. *Clinical Trials, 14*, 128-139. PMID: PMC5376225
- Gwadz, M.V., Collins, L.M., Cleland, C.M., Leonard, N.R., Wilton, L., Gandhi, M., Braithwaite, R.S., Perlman, D.C., Kutnick, A., & Ritchie, A.S. (2017). Using the multiphase optimization strategy (MOST) to optimize an HIV care continuum intervention for vulnerable populations: A study protocol. *BMC Public Health, 17*, 383. PMID: PMC5418718
- Baker, T.B., Smith, S.S., Bolt, D.M., Loh, W.-Y., Mermelstein, R., Fiore, M.C., Piper, M.E., & Collins, L.M. (2017). Implementing clinical research using factorial designs: A primer. *Behavior Therapy, 48*, 567-580. PMID: PMC5458623
- Piper, M.E., Schlam, T.R., Cook, J.W., Smith, S.S., Bolt, D.M., Loh, W.-Y., Mermelstein, R., Collins, L.M., Fiore, M.C., & Baker, T.B. (2017). Toward the development of precision smoking cessation treatment I: Moderator results from a factorial experiment. *Drug and Alcohol Dependence, 171*, 50-58. PMID: PMC5263119

- Piper, M.E., Cook, J.W., Schlam, T.R., Smith, S.S., Bolt, D.M., Collins, L.M., Mermelstein, R., Fiore, M.C., & Baker, T.B. (2017). Toward the development of precision smoking cessation treatment II: Proximal effects of five smoking cessation intervention components on putative mechanisms of action. *Drug and Alcohol Dependence*, *171*, 59-65. PMID: PMC5262527
- Brown, C.H., Curran, G., Palinkas, L.A., Aarons, G., Wells, K. B., Jones, L., Collins, L.M., Duan, N., Mittman, B., Wallace, A., Tabak, R., Ducharme, L., Chambers, D., Neta, G., Wiley, T., Landsverk, J., Cheung, K., & Cruden, G. (2017). An overview of research and evaluation designs for dissemination and implementation. *Annual Review of Public Health*, *38*, 1-22. PMID: PMC5384265
- Watkins, E., Newbold, A., Tester-Jones, M., Javaid, M., Cadman, J., Collins, L.M., Graham, J., & Mostazir, M. (2016). Implementing multifactorial psychotherapy research in online virtual environments (IMPROVE-2): Study protocol for a phase III trial of the MOST randomized component selection methods for internet cognitive-behavioural therapy for depression. *BMC Psychiatry*, *16*, 345. PMID: PMC5054552
- Hekler, E.B., Michie, S., Rivera, D.E., Pavel, M., Rivera, D.E., Collins, L.M., Jimison, H.B., Garnett, C., Parral, S., & Spruijt-Metz, D. (2016). Advancing models and theories for digital behavior change interventions. *American Journal of Preventive Medicine*, *51*, 825-832. PMID: PMC5506832
- Murray, E., Hekler, E.B., Andersson, G., Collins, L.M., Doherty, A., Hollis, C., Rivera, D.E., West, R., & Wyatt, J.C. (2016). Evaluating digital health interventions: Key questions and approaches. *American Journal of Preventive Medicine*, *51*, 843-851. PMID: PMC5324832
- Serrano, K.J., Yu, M., Coa, K.I., Collins, L.M., & Atienza, A.A. (2016). Mining health app data to find more and less successful weight loss subgroups. *Journal of Medical Internet Research*, *18*, e154. PMID: PMC4925935
- Baker, T.B., Collins, L.M., Mermelstein, R., Piper, M.E., Schlam, T.R., Cook, J.W., Bolt, D.M., Smith, S.S., Jorenby, D.E., Fraser, D., Loh, W.-Y., Theobald, W., & Fiore, M.C. (2016). Enhancing the effectiveness of smoking treatment research: Conceptual bases and progress. *Addiction*, *111*, 107-116. PMID: PMC4681592 doi: 10.1111/add.13154
- Cook, J.W., Collins, L.M., Fiore, M.C., Smith, S.S., Fraser, D., Bolt, D.M., Baker, T.B., Piper, M.E., Schlam, T.R., Jorenby, D., Loh, W.-Y., & Mermelstein, R. (2016). Comparative effectiveness of motivation phase intervention components for use with smokers unwilling to quit: A factorial screening experiment. *Addiction*, *111*, 117-128. PMID: PMC4681585 doi: 10.1111/add.13161
- Schlam, T.R., Fiore, M.C., Smith, S.S., Fraser, S., Bolt, D.M., Collins, L.M., Mermelstein, R., Piper, M.E., Cook, J.W., Jorenby, D.E., Loh, W.-Y., & Baker, T.B. (2016). Comparative effectiveness of intervention components for producing long-term abstinence from smoking: A factorial screening experiment. *Addiction*, *111*, 142-155. PMID: PMC4692280 doi: 10.1111/add.13153
- Piper, M.E., Fiore, M.C., Smith, S.S., Fraser, D., Bolt, D.M., Collins, L.M., Mermelstein, R., Schlam, T.R., Cook, J.W., Jorenby, D.E., Loh, W.-Y., & Baker, T.B. (2016). Identifying effective intervention components for smoking cessation: A factorial screening experiment. *Addiction*, *111*, 129-141. PMID: PMC4699315 doi: 10.1111/add.13162

- Collins, L.M., Kugler, K.C., & Gwadz, M.V. (2016). Optimization of multicomponent behavioral and biobehavioral interventions for the prevention and treatment of HIV/AIDS. *AIDS and Behavior*, *20*, 197-214. PMID: PMC4715714 doi: 10.1007/s10461-015-1145-4.
- Faggiano, F., Allara, E., Giannotta, F., Molinar, R., Sumnall, H., Wiers, R., Michie, S., Collins, L., & Conrod, P. (2014). Europe needs a central, transparent, and evidence-based approval process for behavioural prevention interventions. *PLOS Medicine*, *11*, e1001740. PMID: PMC4188564 doi: 10.1371/journal.pmed.1001740
- Pellegrini, C.A., Hoffman, S.A., Collins, L.M., & Spring, B. (2014). Optimization of remotely delivered intensive lifestyle treatment for obesity using the multiphase optimization strategy: Opt-IN study protocol. *Contemporary Clinical Trials*, *38*, 251-259. PMID: PMC4104542. doi: 10.1016/j.cct.2014.05.007 See Pellegrini, C.A., Hoffman, S.A., Collins, L.M., & Spring, B. (2015). Corrigendum to "Optimization of remotely delivered intensive lifestyle treatment for obesity using the multiphase optimization strategy: Opt-IN study protocol." *Contemporary Clinical Trials*, *45*, 468-469.
- Collins, L.M., Dziak, J.J., Kugler, K.C., & Trail, J.B. (2014). Factorial experiments: Efficient tools for evaluation of intervention components. *American Journal of Preventive Medicine*, *47*, 498-504. PMID: PMC4171184 doi: 10.1016/j.amepre.2014.06.021
- Wyrick, D.L., Rulison, K.L., Fearnow-Kenney, M., Milroy, J.J., & Collins, L.M. (2014). Moving beyond the treatment package approach to developing behavioral interventions: Addressing questions that arose during an application of the multiphase optimization strategy (MOST). *Translational Behavioral Medicine*, *4*, 252-259. PMID: PMC4167894 doi: 10.1007/s13142-013-0247-7
- Collins, L., Trail, J., Kugler, K., Baker, T., Piper, M., & Mermelstein, R. (2014). Evaluating individual intervention components: Making decisions based on the results of a factorial screening experiment. *Translational Behavioral Medicine*, *4*, 238-251. PMID: PMC4167900 doi: 10.1007/s13142-013-0239-7
- Collins, L. M., Nahum-Shani, I., & Almirall, D. (2014). Optimization of behavioral dynamic treatment regimens based on the sequential, multiple assignment, randomized trial (SMART). *Clinical Trials*, *11*, 426-434. PMID: PMC4257903 doi: 10.1177/1740774514536795
- Trail, J.B., Collins, L.M., Rivera, D.E., Li, R., Piper, M., & Baker, T. (2014). Functional data analysis for the system identification of behavioral processes. *Psychological Methods*, *19*, 175-187. PMID: PMC4098896 doi: 10.1037/a0034035
- Timms, K.P., Rivera, D.E., Collins, L.M., & Piper, M.E. (2014). Continuous-time system identification of a smoking cessation intervention. *International Journal of Control*, *87*, 1423-1437. PMID: PMC4221858 doi: 10.1080/00207179.2013.874080
- Timms, K.P., Rivera, D.E., Collins, L.M., & Piper, M.E. (2014). A dynamical systems approach to understanding self-regulation in smoking cessation behavior change. *Nicotine and Tobacco Research*, *16*, S159-168. PMID: PMC3977628 doi: 10.1093/ntr/ntt149
- Lippold, M.A., Greenberg, M.T., & Collins, L.M. (2014). Youths' substance use and changes in parental knowledge-related behaviors during middle school: A person-oriented approach. *Journal of Youth and Adolescence*, *43*, 729-744. PMID: PMC3938985 doi: 10.1007/s10964-013-0010-x

- Lippold, M.A., Greenberg, M.T., & Collins, L.M. (2013). Parental knowledge and youth risky behavior: A person oriented approach. *Journal of Youth and Adolescence*, *42*, 1732-1744. PMCID: PMC3655137 doi: 10.1007/s10964-012-9893-1
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Manuscripts Under Review or in Preparation (authorship order and titles subject to change)

Collins, L.M., Strayhorn, J.C., & Vanness, D.J. One view of the next decade of research on behavioral and biobehavioral approaches to cancer prevention and control: Intervention optimization. Submitted to *Translational Behavioral Medicine*.

Ning, H., Cleland, C.M., Gwadz, M., Sherpa, D., Ritchie, A., Martinez, B.Y., & Collins, L.M. Understanding medical distrust among African American/Black and Latino persons living with HIV who experience serious barriers to HIV care and HIV medication use: A machine learning approach. Submitted to *SAGE Open*.

Collins, L.M., & Murphy, S.A. Intervention optimization in addiction science and the role of novel experimental designs. Submitted to *Addiction*.

Gwadz, M., Cleland, C.M., Freeman, R., Wilton, L., Collins, L.M., Hawkins, R., Ritchie, A.S., Leonard, N.R., Jonas, D., Korman, A., Cluesman, S., He, N., & Sherpa, D. Stopping, starting, and sustaining HIV antiretroviral therapy: A mixed methods retrospective exploration among African American/Black and Latinx long-term survivors of HIV in an urban context. Submitted to *BMC Public Health*.

Qian, Q., Walton, A.E., Collins, L.M., Klasnja, P., Lanza, S.T., Murphy, S., Nahum-Shani, I., Rabbi, M., Russell, M.A., Walton, M., & Yoo, H. The micro-randomized trial for developing mobile health interventions. Submitted to *Psychological Methods*.

Cook, J.W., Baker, T.B., Fiore, M.C., Collins, L.M., Piper, M.E., Schlam, T.R., Bolt, D.M., Smith, S.S., Zwaga, D., Jorenby, D., Mermelstein, R. Evaluating four motivation phase intervention components for use with smokers unwilling to quit: A factorial screening experiment. Submitted to *Addiction*.

Guastaferrero, K., Strayhorn, J., & Collins, L.M. Optimization of multicomponent behavioral interventions to prevent child maltreatment. Submitted to *Children and Youth Services Review*.

Cleland, C.M., Gwadz, M., Collins, L.M., Wilton, W., Sherpa, D., Dorsen, C., Leonard, N.R., Cluesman, S.R., Martinez, B.Y., Ritchie, A.S., & Ayzvazyan, M. African American/Black and Latinx adults with detectable HIV viral load evidence substantial risk for polysubstance use and co-occurring mental health symptoms: A latent class analysis. Submitted to *AIDS and Behavior*.

Strayhorn, J.C., Collins, L.M., Brick, T.R., Marchese, S.H., Pfamatter, A.F., Pellegrini, C., & Spring, B. Factorial mediation: A tutorial on understanding intervention effects by conducting mediation analysis of data from a factorial optimization trial. In preparation.

SOFTWARE

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Lanza, S.T., Dziak, J.J., Huang, L., Wagner, A.T., Collins, L.M. (2014) *PROC LCA & PROC LTA users' guide (version 1.3.0)*. University Park: The Methodology Center, Penn State; 2014.

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PRESENTATIONS

Keynote and Award-Related Presentations

- Collins, L.M. (November, 2020). Building effective, efficient, affordable, and practical interventions: The multiphase optimization strategy (MOST). Annual Valkhov Chair lecture. Presented virtually at Radboud University Medical Centre, Nijmegen, The Netherlands.
- Collins, L.M. (November, 2018). Bringing health and education interventions into the 21st century. Annual Pauline Schmitt Russell lecture. Presented at the College of Health and Human Development, Penn State, University Park, PA.
- Collins, L.M. (August, 2018). A framework for optimization of behavioral and biobehavioral interventions. Master Lecture presented at the Annual Convention of the American Psychological Association, San Francisco, CA.
- Collins, L.M. (October, 2017). Increasing the impact of e/mhealth interventions: The multiphase optimization strategy (MOST). Presented at the 9th meeting of the Society for Research on Internet Interventions, Berlin, Germany.
- Collins, L.M. (October, 2015). Optimizing interventions for family health. Presented at the Annual Meeting of the Council for Advancement of Academic Nursing, Washington, DC.

- Collins, L.M. (May, 2013). Optimizing behavioral interventions: An integration of methodological perspectives from the behavioral and engineering sciences. Presented at the Modern Modeling Methods Conference, University of Connecticut, Storrs, CT.
- Collins, L.M. (March, 2012). Unpacking the black box: Engineering more potent behavioral interventions to improve public health. Annual Pattishall Lecture. Presented at the College of Health and Human Development, Penn State, University Park, PA.
- Collins, L.M. (June, 2011). Prevention in the 21st Century: Adapting engineering optimization strategies to create leaner, meaner, better interventions. Presidential Address at the Annual Meeting of the Society for Prevention Research, Washington, DC.
- Collins, L.M. (March, 2008). Building more efficacious and effective behavioral interventions: One view of the future of intervention development. Presented at the Annual Meeting of the Society of Behavioral Medicine, San Diego, CA.
- Collins, L.M. (June, 2005). eIntervention Science: Looking inside the black box with the Multiphase Optimization Strategy (MOST). Presented at Critical Issues in eHealth Conference, Bethesda, MD.
- Collins, L.M. (August, 2001). Methodological considerations in longitudinal research. Presented at the Interamerican Congress of Psychology, Santiago, Chile.

Other Invited Presentations

- Collins, L.M. (February, 2020). Introduction to the multiphase optimization strategy (MOST). Presented at the Simon Cancer Center, Indiana University, Indianapolis, IN.
- Collins, L.M. (January, 2020). Achieving effectiveness, efficiency, economy, and scalability: Optimization of behavioral and biobehavioral interventions. Presented at YU University Amsterdam, Amsterdam, The Netherlands.
- Collins, L.M. (November, 2019). A very brief introduction to the multiphase optimization strategy (MOST). Presented at the Center for Drug Use and HIV Research, College of Global Public Health, New York University, New York, NY.
- Collins, L.M. (October, 2019). Optimization of interventions: Improving effectiveness, efficiency, economy, and scalability. Presented at the Eidgenössische Technische Hochschule, Zurich, Switzerland.
- Collins, L.M. (July, 2019). Optimization of interventions: Improving effectiveness, efficiency, economy, and scalability. Presented at the Department of Applied Psychology, New York University, New York, NY.
- Collins, L.M. (April, 2019). Optimization of interventions: Improving effectiveness, efficiency, economy, and scalability. Presented at the Silver School of Social Work, New York University, New York, NY.
- Collins, L.M. (April, 2019). Optimization of prevention interventions using MOST: State of the science and future directions. Webinar presented as part of the Mind the Gap lecture series, Office of Disease Prevention, National Institutes of Health.

- Collins, L.M. (February, 2019). Introduction to the multiphase optimization strategy for building better behavioral and biobehavioral interventions. Webinar presented at the Science of Behavior Change Grand Rounds, Columbia University, New York, NY.
- Collins, L.M. (February, 2019). Optimization of interventions for effectiveness, efficiency, economy, and scalability. Presented to the Behavioral and Social Sciences Research Coordinating Committee, National Institutes of Health, Bethesda, MD.
- Collins, L.M. (December, 2018). Optimization of interventions for effectiveness, efficiency, economy, and scalability. Presented at Grand Rounds, Yale Center for Implementation Science, Yale University, New Haven, CT.
- Collins, L.M. (November, 2018). Optimization of behavioral and biobehavioral interventions. Presented at the Institute for Collaboration on Health, Intervention, and Policy (INCHIP), University of Connecticut, Storrs, CT.
- Collins, L.M. (September, 2018). Research design for optimization of interventions to prevent opioid use disorder. Presented at Preventing Opioid Use Disorder in Older Adolescents and Young Adults: Expert Panel Planning Meeting, National Institute on Drug Abuse, Bethesda, MD.
- Collins, L.M. (May, 2018). An introduction to design of optimization trials. Presented at the International Behavioral Trials Network, Montreal, Province of Quebec, Canada.
- Collins, L.M. (April, 2018). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at the Royal College of Surgeons in Ireland, Dublin, Ireland.
- Collins, L.M. (April, 2018). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at the Department of Psychology, National University of Ireland Galway, Galway, Ireland.
- Collins, L.M. (April, 2018). Introduction to the multiphase optimization strategy (MOST) and the factorial experiment. Presented at the Annual Meeting of the Society of Behavioral Medicine, New Orleans, LA.
- Collins, L.M. (February, 2018). Introduction to the multiphase optimization strategy (MOST) for building better behavioral and biobehavioral interventions. Presented at Children's Hospital of Pennsylvania, Philadelphia, PA.
- Collins, L.M. (February, 2018). Why conduct a factorial optimization trial? Webinar sponsored by the Prevention Science and Methodology Group.
- Collins, L.M. (January, 2018). Introduction to optimization of behavioral and biobehavioral interventions. Webinar sponsored by the Society of Behavioral Medicine.
- Collins, L.M. (December, 2017). Introduction to the multiphase optimization strategy (MOST) for developing more effective, efficient, economical, and scalable behavioral interventions. Presented at the Institute for Policy Research, Northwestern University, Evanston, IL.
- Collins, L.M. (November, 2017). Introduction to the multiphase optimization strategy (MOST) for development of behavioral, biobehavioral, and biomedical interventions. Webinar sponsored by The Methodology Center.

- Collins, L.M. (September, 2017). The multiphase optimization strategy (MOST) for building behavioral and biobehavioral interventions. Presented at the Center for Tobacco Research and Intervention, University of Wisconsin, Madison, WI.
- Collins, L.M. (July, 2017). Introduction to the multiphase optimization strategy (MOST) for development of behavioral and biobehavioral interventions. Presented at the University of Erlangen-Nuremberg, Erlangen, Germany.
- Collins, L.M. (June, 2017). Translational methodological research: The Methodology Center. Presented at the Annual Meeting of the Society for Prevention Research, Washington, DC.
- Collins, L.M. (April, 2017). The multiphase optimization strategy (MOST). Presented at Turning the Tide: A New Generation of Public Health Interventions, Columbia University, New York, NY.
- Collins, L.M. (April, 2017). Comparators in treatment development studies. Presented at Comparator Group Selection in Behavioral and Social Science Clinical Trials, Office of Behavioral and Social Science Research, National Institutes of Health, Bethesda, MD.
- Collins, L.M. (March, 2017). Toward more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Presented at the Penn State CTSI Biostatistics, Epidemiology, and Research Design Speaker Series, University Park, PA.
- Collins, L.M. (February, 2017). An introduction to the multiphase optimization strategy (MOST). Presented at the Centre for Evidence-Based Intervention, University of Oxford, Oxford, England.
- Collins, L.M. (January, 2017). An introduction to the multiphase optimization strategy (MOST). Presented at the Bench to Bedside and Beyond (B3) Seminar Series, Penn State Clinical and Translational Science Institute, Penn State, University Park, PA
- Collins, L.M. (September, 2016). The multiphase optimization strategy (MOST) for developing more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Presented at the Research Methodology Center, Ohio State University, Columbus, OH.
- Collins, L.M. (April, 2016). Toward more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Presented at the Fred Hutchinson Cancer Center, Seattle, WA.
- Collins, L.M. (March, 2016). A brief introduction to the multiphase optimization strategy (MOST) for developing behavioral and biobehavioral interventions. Presented at Wake Forest School of Medicine, Winston-Salem, NC.
- Collins, L.M. (November, 2015). A culture of innovation in design and analysis: The Methodology Center. Presented at the Division of Epidemiology, Prevention, and Services Research Seminar, National Institute on Drug Abuse, Bethesda, MD.
- Collins, L.M. (December, 2014). Introduction to the Multiphase Optimization Strategy (MOST). Presented at the Institute of Educational Sciences, Washington, DC.
- Collins, L.M. (September, 2014). Testing program components using the multiphase optimization strategy (MOST). Presented at What Works, Under What Circumstances, and How? Methods for Unpacking the "Black Box" of Programs and Policies, Washington, DC.
- Collins, L.M. (June, 2014). Unpacking the black box: Engineering behavioral interventions using the multiphase optimization strategy (MOST). Presented at Grand Rounds, HIV Center for Clinical and Behavioral Studies, Columbia University, NY, NY.

- Collins, L.M. (June, 2014). Unpacking the black box: Engineering behavioral interventions using the multiphase optimization strategy (MOST). Presented at the Department of Population Health, Langone Medical Center, New York University, NY, NY.
- Collins, L.M. (April, 2014). A very brief introduction to the multiphase optimization strategy (MOST). Presented at the College of Family and Consumer Sciences, University of Georgia, Athens, GA.
- Collins, L.M. (March, 2014). Reducing smoking deaths: Is it rocket science? Presented at TEDxPSU, University Park, PA.
- Collins, L.M. (December, 2013). Unpacking the black box: Engineering more potent behavioral interventions using the multiphase optimization strategy (MOST). Presented at Department of Public Health Sciences Grand Rounds, University of Miami, Miami, FL.
- Collins, L.M. (November, 2013). Unpacking the black box: Engineering more potent behavioral interventions using the Multiphase Optimization Strategy (MOST). Presented at the European Society for Prevention Research conference, Paris, France.
- Collins, L.M. (November, 2013). Raising the bar: Engineering optimized behavioral interventions for increased public health impact. Presented at Presented at the *Workshop on the Prevention of Obesity in Infancy and Early Childhood*, Bethesda, MD.
- Collins, L.M. (October, 2013). A brief introduction to optimization of adaptive behavioral interventions: MOST and SMART. Presented at the EARLY Adaptive Intervention Webinar.
- Collins, L.M. (September, 2013). Dynamic interventions: Opportunities and challenges. Presented at *Big D.A.T.A. (Data And Theory Advancement) Workshop*, Bethesda, MD.
- Collins, L.M. (September, 2013). Introduction to the Multiphase Optimization Strategy (MOST). Presented at *The Future of HIV Prevention and Treatment: Integrating Innovative Methods with Intervention Science*, Bethesda, MD.
- Collins, L.M. (September, 2013). How optimizing behavioral interventions will help advance the national HIV/AIDS strategy. Presented at *The Future of HIV Prevention and Treatment: Integrating Innovative Methods with Intervention Science*, Bethesda, MD.
- Collins, L.M. (June, 2013). Unpacking the black box: Engineering more potent behavioral interventions using the Multiphase Optimization Strategy (MOST). Presented at the MD Anderson Cancer Center, University of Texas, Houston, TX.
- Collins, L.M. (June, 2013). The Multiphase Optimization Strategy (MOST) for building more efficient and effective behavioral interventions. Presented at the Osher Center for Integrative Medicine, University of California, San Francisco, CA.
- Collins, L.M., Nahum-Shani, I., & Almirall, D. (April, 2013). SMART: An integral part of the Multiphase Optimization Strategy (MOST). Presented at the 6th Annual Conference on Statistical Issues in Clinical Trials, University of Pennsylvania, Philadelphia, PA.
- Collins, L.M. (March, 2013). Raising the bar: Engineering optimized behavioral interventions for increased public health impact. Presented at the Mind the Gap lecture series, National Institutes of Health, Bethesda, MD.

- Collins, L.M. (January, 2013). Unpacking the black box: Engineering more potent behavioral interventions using the Multiphase Optimization Strategy (MOST). Presented at the BSRF Journal Club Series, University of Kentucky, Lexington, KY.
- Collins, L.M. (December, 2012). Improving intervention design and development: The Multiphase Optimization Strategy (MOST). Presented at Physical Activity and Disease Prevention: Identifying Research Priorities, Office of Disease Prevention, National Institutes of Health, Bethesda, MD.
- Collins, L.M. (December, 2012). Unpacking the black box: The Multiphase Optimization Strategy (MOST) for building more potent behavioral interventions. Presented at the Wednesday Workshop Series, Institute for Public Health and Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL.
- Collins, L.M. (October, 2012). Unpacking the black box: Engineering more potent preventive interventions using the Multiphase Optimization Strategy (MOST). Presented at the Division of Epidemiology, Services, and Prevention Research, National Institute on Drug Abuse, Bethesda, MD.
- Collins, L.M. (October, 2012). Optimizing family intervention programs: The Multiphase Optimization Strategy. Presented at the 20th Annual Symposium on Family Issues, Penn State.
- Collins, L.M., Caldwell, L.L., Smith, E.A., Graham, J.W., Lai, M., Wegner, L., Vergnani, T., Matthews, C., & Jacobs, J. (September, 2012). Implementation fidelity in a drug abuse and HIV prevention program in South Africa: Taking an experimental approach to establish what works. Presented at the International Congress of Behavioral Medicine, Budapest, Hungary.
- Collins, L.M., Dziak, J.J., & Nahum-Shani, I. (July, 2012). Fractional factorial experiments and cluster randomization: An integration of engineering research methods and educational research methods. Presented at the Institute of Mathematical Statistics Asia-Pacific Rim Meeting, Tskuba, Japan.
- Collins, L.M. (July, 2012). Integrating ideas from statistics and engineering into behavioral intervention science. Presented at the Guanghua School of Management, Peking University, Beijing, China.
- Collins, L.M. (June, 2012). The Multiphase Optimization Strategy (MOST) for engineering better behavioral and educational interventions. Presented at the Institute for Policy Research, Northwestern University, Evanston, IL.
- Collins, L.M. (March, 2012). The Multiphase Optimization Strategy (MOST) for engineering better behavioral interventions. Presented at MDRC, New York, NY.
- Collins, L.M. (December, 2011). The Multiphase Optimization Strategy (MOST) for engineering better behavioral interventions. Presented at the Center for Technology and Behavioral Health, Dartmouth Psychiatric Research Center, Dartmouth University.
- Collins, L.M. (November, 2011). The Multiphase Optimization Strategy (MOST) for engineering better behavioral interventions. Presented at the School of Social Work, Columbia University, New York, NY.
- Collins, L.M. (October, 2011). Building more efficient and effective behavioral interventions. Presented at Psychiatry Grand Rounds, Memorial-Sloan Kettering Cancer Center, New York, NY.

- Collins, L.M. (August, 2011). The Multiphase Optimization Strategy (MOST): Building highly efficacious, effective, and efficient interventions to improve minority health. Presented at the National Hispanic Science Network Meeting, Miami, FL.
- Collins, L.M. (August, 2011). Study design II: Introduction. Presented at the mHealth Evidence Workshop, Bethesda, MD.
- Collins, L.M., Dziak, J.J., & Nahum-Shani, I. (April, 2011). Factorial experimental designs in multilevel situations. Presented at the Annual Meeting of the Society of Behavioral Medicine, Washington, DC.
- Collins, L.M. (April, 2011). Efficient designs for examining the effects of individual intervention components. Presented at *From Discovery to Public Health Impact: New Approaches to Developing, Testing & Optimizing Behavioral Interventions*, a preconference workshop at the Annual Meeting of the Society of Behavioral Medicine, Washington, DC.
- Collins, L.M. (February, 2011). Blending psychology and engineering to build better behavioral interventions. Presented at Psychology: Transforming Science and Practice (50th Anniversary Celebration for URI Department of Psychology). University of Rhode Island, Kingston, RI.
- Collins, L.M. (January, 2011). The Multiphase Optimization Strategy (MOST) for engineering better behavioral interventions. Presented at the Department of Preventive Medicine, Northwestern University Medical School, Chicago, IL.
- Collins, L.M. (December, 2010). Efficient experimental designs for examining the effects of individual intervention components. Presented at Translating Ideas into Interventions: The Process of Developing Behavioral Interventions. Bethesda, MD.
- Collins, L.M. (October, 2010). The Multiphase Optimization Strategy (MOST) for building behavioral interventions. Presented at Online Social Networks and Smoking Cessation: Strategic Research Opportunities, Washington, DC.
- Collins, L.M. (August, 2010). Behavioral interventions should first test individual components and then evolve to integrated interventions (debate format). Presented at Controversies in Clinical Trials, a preconference symposium held at the International Congress of Behavioral Medicine, Washington, DC.
- Collins, L.M. (June, 2010). The Multiphase Optimization Strategy (MOST) for Building Optimized Behavioral Interventions. Presented at Behavioral Intervention Optimization: Capitalizing on Engineering, Computer Science, and Technology, Bethesda, MD.
- Collins, L.M. (June, 2010). Building better behavioral interventions: The Multiphase Optimization Strategy (MOST). Presented at Albert Einstein College of Medicine, New York, NY.
- Collins, L.M. (April, 2010). Engineering better behavioral interventions. Presented at the Department of Public Health Education, University of North Carolina, Greensboro, NC.
- Collins, L.M. (March, 2010). Building better behavioral interventions: Engineering-inspired approaches. Presented at the Center for Behavioral and Preventive Medicine, Brown University, Providence, RI.

- Collins, L.M. (February, 2010). Building better multicomponent interventions for prevention and treatment of disease. Presented at the Center for Infectious Disease Dynamics, The Pennsylvania State University, University Park, PA.
- Collins, L.M., Coffman, D.L., Lanza, S.T., Li, R., Murphy, S.A. (October, 2009). The Penn State Methodology Center: Bringing the power of innovative methods to bear on drug abuse. Presented at the Division of Epidemiology, Services, and Prevention Research Seminar, National Institute on Drug Abuse, Bethesda, MD.
- Collins, L.M. (October, 2009). Reflections on methodology. Presented at Facilitating Interdisciplinary Research: Methodological and Technological Innovation in the Behavioral and Social Sciences, Bethesda, MD.
- Collins, L.M. (March, 2009). Building better behavioral interventions: Engineering-inspired approaches. Presented at the Department of Family Studies, Miami University of Ohio, Oxford, OH.
- Collins, L.M. (March, 2009). Building better behavioral interventions: Engineering-inspired approaches. Presented at the Department of Psychology, Arizona State University, Tempe, AZ.
- Collins, L.M. (October, 2008). The optimization cycle approach to building better behavioral interventions. Presented at the Department of Psychiatry, University of Cincinnati, Cincinnati, OH.
- Collins, L.M. (October, 2008). The optimization cycle approach to building better behavioral interventions. Presented at the Institute of Applied Health Sciences, College of Life Sciences and Medicine, University of Aberdeen, Aberdeen, Scotland.
- Collins, L.M. (September, 2008). The optimization cycle approach to building better behavioral interventions. Presented at the Center for Tobacco Research and Intervention, Department of Psychiatry, University of Wisconsin, Madison, WI.
- Collins, L.M. (June, 2008). Building more efficacious and effective behavioral interventions using the optimization cycle approach. Presented at the National Institutes of Health Summer Institute on Randomized Clinical Trials, Airlie, VA.
- Collins, L.M. (April, 2008). The optimization cycle approach to building better behavioral interventions. Presented at Department of Psychiatry, Yale University, West Haven, CT.
- Collins, L.M. (March, 2008). Building better behavioral interventions: One view of the future of intervention development. Presented at New York University, New York, NY.
- Collins, L.M. (February, 2008). Building more efficacious and effective behavioral interventions. Presented at the Cancer Prevention Research Center, University of Rhode Island, Kingston, RI.
- Collins, L.M. (February, 2008). Building more efficacious and effective behavioral interventions: One view of the future of intervention development. Presented at the Yale Child Study Center, Yale University, New Haven, CT.
- Collins, L.M. (November, 2007). New strategies for building more potent behavioral interventions. Presented at the Carolina Consortium on Human Development, University of North Carolina, Chapel Hill, NC.

- Collins, L.M. (October, 2007). Building more potent interventions to prevent drug abuse: Some new directions. Presented at Le Colloque International Toxicomanies Hépatites Sida (THS) 8, Biarritz, France.
- Collins, L.M. (October, 2007). Methodology for empirical research in obesity: Issues and new directions. Presented at Beyond Individual Behavior: Multidimensional Research in Obesity Linking Biology to Society, Arlington, VA.
- Collins, L.M. (August, 2007). The obesity prevention/treatment field's stake in innovative methodological research. Presented at the Working Group on Future Research Directions in Childhood Obesity Prevention and Treatment, Bethesda, MD.
- Collins, L.M. (April, 2007). Introduction to the Multiphase Optimization Strategy (MOST): An empirical framework for increasing the effects of evidence-based behavioral medicine. Presented at the Penn State Diabetes Center Research Retreat, Penn State, University Park, PA.
- Collins, L.M. (April, 2007). New approaches for building and evaluating behavioral interventions. Presented at the Center for Excellence in Cancer Communication Research, University of Pennsylvania, Philadelphia, PA.
- Collins, L.M. (March, 2007). New strategies for building more potent behavioral interventions. Presented at the Annual Meeting of the American Academy of Health Behavior, Savannah, Georgia.
- Collins, L.M. (March, 2007). New strategies for building and evaluating behavioral interventions. Presented at Deakin University, Melbourne, Australia.
- Collins, L.M. (March, 2007). The Multiphase Optimization Strategy (MOST) for building and evaluating behavioral interventions. Presented at the Clinical Epidemiology and Biostatistics Unit, University of Melbourne, Melbourne, Australia.
- Collins, L.M. (December, 2006). The Multiphase Optimization Strategy for empirical intervention development. Presented at the Department of Psychology, University of Hong Kong.
- Collins, L.M. (October, 2006). The Multiphase Optimization Strategy for empirical development of behavioral interventions. Presented at the Department of Biobehavioral Health, Penn State University, University Park, PA.
- Collins, L.M. (October, 2006). A multi-phase approach for building, optimizing, and evaluating behavioral interventions. Presented at the Department of Public Health, Oregon State University, Corvallis, OR.
- Collins, L.M. (September, 2006). The Multiphase Optimization Strategy for building and evaluating behavioral interventions. Presented at the Center for Injury Research and Prevention, Children's Hospital, University of Pennsylvania, Philadelphia, PA.
- Collins, L.M. (August, 2006). Analysis of longitudinal data: The integration of theoretical model, temporal design, and statistical model. Presented at the CALDAR Summer Institute, Los Angeles, CA.
- Collins, L.M. (August, 2006). Overview of methodological challenges in prevention and treatment research. Presented at the Office of Behavioral and Social Science Research Methodology and Technology Summit, Bethesda, MD.

- Collins, L.M. (June, 2006). The Multiphase Optimization Strategy for building and evaluating adaptive interventions. Presented at the New Clinical Drug Evaluation Unit (NCDEU) Meeting, Boca Raton, FL.
- Collins, L.M. & Lanza, S.T. (June, 2006). Introduction to latent class and latent transition analysis. Presented at the International Developmental Sciences Institute, Penn State, University Park, PA.
- Collins, L.M. (December, 2005). The Multiphase Optimization Strategy (MOST) for optimizing and evaluating behavioral interventions. Presented at the School of Public Health, University of North Carolina, Chapel Hill, NC.
- Collins, L.M. (November, 2005). Methodological research in an interdisciplinary context. Presented at the University of South Carolina, Columbia, SC.
- Collins, L.M. (October, 2005). The Multiphase Optimization Strategy (MOST): An extension of randomized clinical trials. Presented at the Statistics Department Colloquium Series, Penn State, University Park, PA.
- Collins, L.M. (August, 2005). Introduction to methodological research at Penn State. Presented at the University of the Western Cape, Cape Town, South Africa.
- Collins, L.M. (June, 2005). Developing and evaluating behavioral interventions using MOST. Presented at the Annual Meetings of the College on Problems of Drug Dependence, Orlando, FL.
- Collins, L.M. (April, 2005). The Multiphase Optimization Strategy (MOST) for development and evaluation of behavioral interventions. Presented at the University of Michigan, Ann Arbor, MI.
- Collins, L.M. (April, 2005). Introduction to latent transition analysis (LTA). Presented at Case Western Reserve University, Cleveland, OH.
- Collins, L.M. (February, 2005). The Multiphase Optimization Strategy (MOST) for behavioral intervention development. Presented at the University of Pennsylvania, Philadelphia, PA.
- Collins, L.M. (February, 2005). The Multiphase Optimization Strategy (MOST). Presented at Rutgers University, New Brunswick, NJ.
- Collins, L.M. (December, 2004). Methodological considerations in longitudinal behavioral research. Presented at the EXPORT conference, University of Puerto Rico, San Juan, PR.
- Collins, L.M. (November, 2004). The Multiphase Optimization Strategy (MOST) for drug abuse prevention and treatment research. Presented at National Development and Research Institute, New York, NY.
- Collins, L.M., Flaherty, B.P., & Tang, Z. (July, 2004). Associative latent transition analysis (ALTA). Presented at the biennial meetings of the Society of Multivariate Analysis in the Behavioral Sciences, Jena, Germany.
- Collins, L.M. (June, 2004). The Multiphase Optimization Strategy (MOST). Presented at the University of Puerto Rico Medical School, San Juan, PR.
- Flay, B.R., & Collins, L.M. (December, 2003). School-based risk reduction trials: Some methodological considerations. Presented at the Campbell Place Based Briefing Conference, Rockefeller Foundation, New York, NY.

- Collins, L.M. (June 2003). Latent transition analysis for analyzing stage development. Presented at the Annual Developmental Sciences Institute, Uppsala, Sweden.
- Collins, L.M. (October, 2002). Latent transition analysis: Some new results using data augmentation. Presented at the RAND Corporation, Santa Monica, CA.
- Collins, L.M., Tang, Z., & Flaherty, B.P. (August, 2002). Two-sequence latent transition models. Presented at the Joint Statistical Meetings, New York, NY.
- Collins, L.M. (August, 2001). Latent Transition Analysis: Some new results using data augmentation. Presented at the American Psychological Association Convention, San Francisco, CA.
- Collins, L.M. (August, 2001). Latent Transition Analysis. Presented at the Department of Psychology, Pontificia Universidad Católica de Chile.
- Collins, L.M. (April, 2001). Important methodological issues in biomedical research. Presented at the School of Social Work Trainees' Seminar, University of Washington.
- Collins, L.M., Schafer, J.L., Lanza, S., & Flaherty, B.P. (April, 2001). Latent transition analysis: Some new results using data augmentation. Presented at the Social Work Colloquium Series, University of Washington.
- Collins, L.M. (January, 2001). Important methodological issues in biomedical research. Presented at the Psychology Department, University of Miami.
- Collins, L.M., Schafer, J.L., Lanza, S., & Flaherty, B.P. (January, 2001). Latent transition analysis: Some new results using data augmentation. Presented at the Quantitative Methods and Measurement Colloquium Series, University of California, Santa Barbara.
- Collins, L.M. (November, 2000). Important methodological issues in drug abuse research. Presented at the Addictions Research Center, University of Pennsylvania.
- Collins, L.M. (April, 2000). A new look at mediation. Presented at the Organizational Psychology Colloquium Series, Department of Psychology, Penn State.
- Collins, L.M. (March, 2000). An introduction to latent class and latent transition analysis with WinLTA (1 day workshop). Presented at the University of Houston, Houston, TX.
- Collins, L.M., Hyatt, S.L., & Flaherty, B.P. (October, 1999). Latent transition analysis: A method for estimating and testing stage-sequential models in longitudinal contingency tables. Presented at Measuring Change in Complex Social Systems: Best Practices and State-of-the-Art Developments for Measuring Change in Organizations, College Park, MD.
- Collins, L.M. (July, 1999). Testing latent class and latent transition models with WinLTA (One-day workshop). Presented at the Psychology Department at Ege University, Izmir, Turkey.
- Collins, L.M. (October, 1998). Measurement reliability for static and dynamic categorical latent variables. Presented at New Methods for the Analysis of Change, State College, PA.
- Collins, L.M. (June, 1998). Using latent transition analysis to examine the gateway hypothesis. Presented at Stages and Pathways of Involvement in Drug Use: Examining the Gateway Hypothesis, Los Angeles, CA.
- Collins, L.M. (May, 1998). Using latent transition analysis in developmental work. Presented at the Developmental Science Institute, Chapel Hill, NC.

- Collins, L.M. (May, 1998). An introduction to latent transition analysis with WinLTA (1 and ½ day workshop). Presented at Summer Institute on Longitudinal Methods, State College, PA.
- Collins, L.M. (April, 1998). Latent transition analysis. Presented at the Centers for Disease Control, Atlanta, GA.
- Collins, L.M. (February, 1998). A practical introduction to using latent transition analysis in developmental research. Presented at the Biennial Meetings of the Society for Research on Adolescence, San Diego, CA.
- Collins, L.M., Hyatt, S.L., & Graham, J.W. (February, 1998). Perceived parental permissiveness as a risk factor for substance use onset: An example of Latent Transition Analysis. Presented at the Population Research Institute, Pennsylvania State University.
- Collins, L.M., Hyatt, S.L., & Graham, J.W. (February, 1998). Perceived parental permissiveness as a risk factor for substance use onset: An example of Latent Transition Analysis. Presented at the Institute for Social Research, University of Michigan, Ann Arbor, MI.
- Collins, L.M. (December, 1997). Using Latent Transition Analysis to estimate and test stage-sequential models of development. Presented at the University of Wisconsin, Madison, WI.
- Collins, L.M. (October, 1997). Research-based prevention programming. Presented at Understanding Drug Abuse and Addiction: A Community Town Meeting. Philadelphia, PA.
- Collins, L.M., Graham, J.W., & Flaherty, B.R. (September, 1997). Mediation as intra-individual change. Presented at the 6th European Conference on Assessment, Lisbon, Portugal.
- Collins, L.M., Hyatt, S.L., & Graham, J.W. (July, 1997). LTA as a way of testing models of stage-sequential development in longitudinal data. Presented at the Conference on Developmental Methods, University of Nuremberg, Nuremberg, Germany.
- Collins, L.M., Hyatt, S.L., & Graham, J.W. (July, 1997). LTA as a way of testing models of stage-sequential development in longitudinal data. Presented at the University of Jena, Jena, Germany.
- Collins, L.M., Hyatt, S.L., & Graham, J.W. (June, 1997). LTA as a way of testing models of stage-sequential development in longitudinal data. Presented at Practical Approaches to Longitudinal and Multi-Group Data, Max Plank Institute for Human Development, Berlin, Germany.
- Collins, L.M. (June, 1997). Effective measurement methods and data analytic techniques for assessing change over time. Prevention Research Working Group Lunch Time Conversation Series, National Institute on Drug Abuse, Rockville, MD.
- Collins, L.M., & Flaherty, B.P. (April, 1997). Using latent transition analysis to analyze data from prevention trials. Presented at Design and Analysis of Prevention Trials for the Future, Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD.
- Collins, L.M., Graham, J.W., & Rousculp, S.S. (March, 1997). An introduction to latent transition analysis. Presented at the Department of Biostatistics, Yale University, New Haven, CT.
- Collins, L.M., Graham, J.W., & Flaherty, B.R. (February, 1997). Using latent transition analysis to assess mediation: Back to basics. Presented at the Department of Psychology, New York University, New York, NY.

- Collins, L.M., Graham, J.W., & Flaherty, B.R. (November, 1996). Using latent transition analysis to assess mediation: Back to basics. Presented at the Thurstone Laboratory of Quantitative Psychology, University of North Carolina, Chapel Hill.
- Collins, L.M., Graham, J.W., & Flaherty, B.R. (October, 1996). Using latent transition analysis to assess mediation: Back to basics. Presented at the Annual Meetings of the Society of Multivariate Experimental Psychology, Evanston, IL. (Presidential address).
- Collins, L.M. (August, 1996). Latent transition analysis: Modeling stage-sequential development. Presented at the XIVth Biennial Meetings of the International Society for the Study of Behavioral Development, Quebec City, Canada.
- Collins, L.M. (May, 1996). Latent transition analysis and its applications in prevention research. Presented at the Prevention Methodology Conference, Phoenix, AZ.
- Collins, L.M. (May, 1996). Building program strength and accountability through research (expert panelist). Presented at Forging New Prevention Partnerships for Youth and Families, Metropolitan Washington Council of Governments, National Press Club, Washington, DC.
- Collins, L.M. (May, 1996). Latent transition analysis and its applications in developmental research. Presented at the University of Kansas, Lawrence, KS.
- Collins, L.M., & Shanahan, M.J. (January, 1996). Methodological issues in family-based prevention research. Presented at the National Institute on Drug Abuse Meetings on Family-Based Prevention, Gaithersburg, MD.
- Collins, L.M., & Tracy, A.J. (July, 1995). Identifiability and stability of complex latent transition models involving multiple occasions of measurement and second-order processes. Presented at the European Meetings of the Psychometric Society, Leiden, Holland.
- Collins, L.M., Graham, J.W., Rousculp, S.S., & Hansen, W.B. (December, 1994). Caffeine as a marker for early substance use onset: An illustration of latent transition analysis. Presented at the Department of Statistics, Pennsylvania State University, University Park, PA.
- Collins, L.M., Graham, J.W., Rousculp, S.S., & Hansen, W.B. (November, 1994). Caffeine as a marker for early substance use onset: An illustration of latent transition analysis. Presented at the Department of Mental Hygiene, Johns Hopkins University, Baltimore, MD.
- Collins, L.M. (August, 1994). Longitudinal research: Where we've been and where we're headed. Presented at the Annual Convention of the American Psychological Association, Los Angeles, CA.
- Collins, L.M. (June, 1994). Methodological issues in prevention research. Presented at the Annual Meetings of the Society for Prevention Research, Palm Beach, FL.
- Collins, L.M. (May, 1994). Methodology and prevention research: A symbiotic relationship. Presented at the NIDA Workshop for New Investigators, New York, NY.
- Collins, L.M., Graham, J.W., Rousculp, S.S., & Hansen, W.B. (February, 1994). Does caffeine play a role in early substance use onset? An illustration of latent transition analysis. Presented at the NIAAA Working Group on Quantitative Methods for Alcohol Abuse Prevention, Washington, D.C.

- Collins, L.M. (October, 1993). Measurement and analysis of dynamic latent variables in gerontology research. Presented at the School of Gerontology, University of Southern California, Los Angeles, CA.
- Collins, L.M., Fidler, P.L., & Wugalter, S.E. (May, 1993). Estimation in latent class and latent transition models: Conceptual and technical issues. Presented at the Conference on Categorical Variables in Developmental Research, The Pennsylvania State University, State College, PA.
- Collins, L.M. (April, 1993). Measurement and analysis of dynamic latent variables. Presented at the Department of Human Development and Family Studies, The Pennsylvania State University, State College, PA.
- Collins, L.M., & Johnston, M.V. (March, 1993). Measurement and analysis of change in psychiatry research. Presented at the annual meetings of the Association of Academic Psychiatrists, Albuquerque, NM.
- Collins, L.M. (March, 1993). Introduction to latent class and latent transition models. Presented at the Department of Psychology, Arizona State University, Tempe, AZ.
- Collins, L.M. (October, 1992). Cattell Award Address: Goodness-of-fit for sparse latent class models: problems and solutions. Presented at the Annual Meetings of the Society for Multivariate Experimental Psychology, Cape Cod, MA.
- Collins, L.M. (September, 1992). Some design, measurement, and analysis pitfalls in drug abuse prevention research and how to avoid them: Let your model be your guide. Presented at the National Institute on Drug Abuse (NIDA) Technical Review: Scientific Methods for Prevention Intervention Research.
- Collins, L.M. (September, 1992). Measurement and analysis of dynamic variables: Latent transition analysis. Presented at the National Institute on Drug Abuse (NIDA) Technical Review: Advances in Data Analysis for Prevention Intervention Research, Bethesda, MD.
- Collins, L.M. (May, 1992). Latent transition analysis: Models for categorical longitudinal data. Presented at the Department of Psychology, University of Rhode Island, Kingston, Rhode Island.
- Collins, L.M. (May, 1992). Latent transition analysis: Models for categorical longitudinal data. Presented at the Department of Statistics, University of California, Riverside.
- Collins, L.M. (June, 1991). Analyzing and understanding patterns of change: Where are we headed? Presented at the Assessment Forum of the American Association for Higher Education, San Francisco, CA.
- Collins, L.M. (March, 1992). Measurement issues in longitudinal research. Presented at the University of Southern California School of Social Work.
- Collins, L.M. (July, 1991). Measurement issues in longitudinal research. Presented at the Center for Health Studies, Group Health Cooperative of Puget Sound, Seattle, WA.
- Collins, L.M. (December, 1990). Measurement issues in longitudinal research. Presented at the Department of Psychology, California State University, Fullerton.
- Collins, L.M. (June, 1990). Measurement of individual growth: Applications to assessment. Presented at the Assessment Forum of the American Association for Higher Education, Washington, D.C.

Collins, L.M. (May, 1986). Agreement between retrospective and concurrent reports. Presented at a conference on cognitive models and survey methods sponsored by the Social Science Research Council, at the Center for Advanced Study in the Behavioral Sciences, Stanford University, Palo Alto, California.

Collins, L.M. (April, 1985). Recent developments in longitudinal measurement. Presented at the Department of Psychology, University of Rhode Island, Kingston, Rhode Island.

Workshops and Trainings

Collins, L.M. (February, 2020). An extended introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at Indiana University Center for Health Services and Outcomes Research, Indianapolis, IN.

Collins, L.M. & Bernstein, S. (December, 2019). Introduction to the multiphase optimization strategy (MOST). Presented at the 12th Annual Conference on the Science of Dissemination and Implementation in Health, Arlington, VA.

Collins, L.M. (October, 2019). Introduction to the multiphase optimization strategy (MOST). Presented at the University of Zurich, Zurich, Switzerland.

Collins, L.M. (June, 2019). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at Centre for Child and Adolescent Mental Health Eastern and Southern Norway (RBUP Oslo), Oslo, Norway.

Collins, L.M., & Guastaferrero, K. (May, 2019). Optimization of behavioral and biobehavioral interventions. 5-day training sponsored by the National Institutes of Health Office of Behavioral and Social Science Research, Bethesda, MD.

Collins, L.M. (March, 2019). Introduction to the multiphase optimization strategy (MOST). Presented at the Annual Meeting of the Society of Behavioral Medicine, Washington, DC.

Collins, L.M. (February, 2019). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at the 10th meeting of the International Society for Research on Internet Interventions, Auckland, New Zealand.

Collins, L.M. (February, 2019). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at the University of Otago, Dunedin, New Zealand.

Collins, L.M. (May, 2018). Optimization of behavioral and biobehavioral interventions. 5-day training sponsored by the National Institutes of Health Office of Behavioral and Social Science Research, Bethesda, MD.

Collins, L.M. (April, 2018). Optimization of behavioral and biobehavioral interventions. Presented at the National University of Ireland Galway, Galway, Ireland.

Collins, L.M. (February, 2018). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Presented at the Annual Meeting of the Society for Research on Nicotine and Tobacco, Baltimore, MD.

- Collins, L.M. (November, 2017). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions. Presented at the Penn State Hershey Medical School, Hershey, PA.
- Collins, L.M. (October, 2017). Increasing the impact of e/mhealth interventions: The multiphase optimization strategy (MOST). Presented at the 9th meeting of the International Society for Research on Internet Interventions, Berlin, Germany.
- Collins, L.M. (September, 2017). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Presented at the University of South Carolina, Columbia, SC.
- Collins, L.M. (June, 2017). Introduction to the multiphase optimization strategy (MOST) for behavioral intervention research. Workshop presented at the Annual Meeting of the College on Problems of Drug Dependence, Montreal, Canada.
- Collins, L.M. (May, 2017). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Workshop presented at the Annual Meeting of the Society for Prevention Research, Washington, DC.
- Collins, L.M. (May, 2017). Introduction to the multiphase optimization strategy (MOST). Presented at the Chicago Chapter of the American Statistical Association Spring Workshop: New Experimental Approaches to Designing Effective Multi-Component Interventions, Chicago, IL.
- Collins, L.M. (March, 2017). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Workshop presented at the Annual Meeting of the Society of Behavioral Medicine, San Diego, CA.
- Collins, L.M. (March, 2017). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Workshop presented at the Annual Meeting of the Society for Research on Nicotine and Tobacco, Florence, Italy.
- Collins, L.M. (October, 2016). An introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and sustainable preventive interventions. Workshop presented at the Seventh European Society for Prevention Research Members' Meeting, Berlin, Germany.
- Collins, L.M., & Almirall, D. (September, 2016). Training on optimization of behavioral and biobehavioral interventions. Workshop sponsored by the National Institutes of Health Office of Behavioral and Social Science Research, National Cancer Institute Building, Gaithersburg, MD.
- Collins, L.M. (May, 2016). Optimization of behavioral and biobehavioral interventions. 5-day training sponsored by the National Institutes of Health Office of Behavioral and Social Science Research, Bethesda, MD.
- Collins, L.M. (May, 2016). Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions. Workshop presented at the International Behavioural Trials Network, Montreal, Canada.

- Collins, L.M. (March, 2016). Introduction to the multiphase optimization strategy (MOST). Preconference workshop presented at the Annual Meeting of the Society of Behavioral Medicine, Washington, DC.
- Collins, L.M. (December, 2015). Introduction to the multiphase optimization strategy (MOST). Workshop presented at the Annual Principal Investigators' Meeting, Institute of Educational Sciences, Washington, DC.
- Collins, L.M. (December, 2015). Introduction to the multiphase optimization strategy (MOST). Workshop presented at A Taste of Methodology, Penn State, University Park, PA.
- Collins, L.M. (November, 2015). This year you will write your first grant proposal. Presented at the College of Health and Human Development, Penn State, University Park, PA.
- Collins, L.M. (September, 2015). Workshop on the multiphase optimization strategy (MOST). Presented at Ulster University, Belfast, Ireland.
- Collins, L.M. (October, 2014). Optimising behavioural interventions. Wolfson mind brain behaviour cluster workshop. Presented at Oxford University, Oxford, United Kingdom.
- Collins, L.M. (October, 2014). Optimising behavioural interventions – The MOST model and understanding effective prevention programme components. Preconference workshop at the European Society for Prevention Research, Palma de Majorca, Majorca, Spain.
- Collins, L.M. (July, 2013). The Multiphase Optimization Strategy (MOST). Workshop presented at University College, London, United Kingdom.
- Collins, L.M. (July, 2013). The Multiphase Optimization Strategy (MOST). Workshop presented at the University of Exeter, Exeter, United Kingdom.
- Collins, L.M. (June, 2013). The Multiphase Optimization Strategy (MOST). Workshop presented at the MD Anderson Cancer Center, University of Texas, Houston, TX.
- Collins, L.M. (April, 2012). Workshop on the Multiphase Optimization Strategy. Presented at the Annual Meeting of the Society of Behavioral Medicine, New Orleans, LA.
- Collins, L.M. (May, 2012). Introduction to the multiphase optimization strategy (MOST). Workshop presented at A Taste of Methodology, Penn State, University Park, PA.
- Collins, L.M. (September, 2011). The multiphase optimization strategy (MOST). Workshop presented at The Methodology Center Summer Institute, Penn State, University Park, PA.
- Collins, L.M. (April, 2011). Seminar on the Multiphase Optimization Strategy. Presented at the Annual Meeting of the Society of Behavioral Medicine, Washington, DC.
- Collins, L.M., Lanza, S.T., & Bray, B.C. (October, 2008). Workshop on latent class and latent transition analysis. Presented at the Center for Drug Abuse Research Translation, University of Kentucky, Lexington, KY.
- Collins, L.M., Lanza, S.T., & Bray, B.C. (September, 2008). Masterclass: Latent class analysis for cross-sectional and longitudinal data. Workshop presented at the Department of Mathematics and Statistics Postgraduate Statistics Centre of Lancaster University and the Economic and Social Research Council National Centre for Research Methods, Lancaster, United Kingdom.

Collins, L.M., Lanza, S.T., & Bray, B.C. (February, 2007). Workshop on latent class and latent transition analysis. Presented at the University of Cologne, Cologne, Germany.

Selected Conference Presentations

- Collins, L.M. (June, 2015). Using the multiphase optimization strategy (MOST) to develop an effective and scalable weight loss intervention. Presented at the Annual Meeting of the International Society of Behavioral Nutrition and Physical Activity, Edinburgh, Scotland.
- Collins, L.M. (April, 2015). The multiphase optimization strategy (MOST): Toward more effective, efficient, and scalable behavioral interventions. Presented at the Annual Meeting of the Society of Behavioral Medicine, San Antonio, TX.
- Collins, L.M. (June, 2012). Introduction to the Multiphase Optimization Strategy (MOST). Presented at the Annual Meeting of the Society for Prevention Research, Washington, DC.
- Collins, L.M. (December, 2006). An empirical framework for increasing the effectiveness of evidence-based behavioral interventions. Presented at the Asia Pacific Evidence-Based Medicine conference, Hong Kong.
- Collins, L.M. (May, 2006). Fractional factorial designs for intervention research. Presented at the annual meeting of the Society for Prevention Research, San Antonio, TX.
- Collins, L.M. (March, 2006). The Multiphase Optimization Strategy for building, optimizing, and evaluating behavioral interventions. Presented at the Joint Meeting on Adolescent Treatment Effectiveness, Baltimore, MD.
- Collins, L.M., Murphy, S.A., & Nair, V.N. (February, 2004). Using sequential experimentation to develop multi-component interventions. Presented at the Prevention Research Center Colloquium Series, Penn State.
- Collins, L.M., Murphy, S.A., & Nair, V. (June, 2003). Sequential experimentation: Some ideas from engineering useful in prevention science. Presented at the Annual Meetings of the Society for Prevention Research, Washington, DC.
- Collins, L.M. (October, 2002). Two-sequence latent transition analysis. Presented at the Society for Multivariate Experimental Psychology meetings, Charlottesville, VA.
- Collins, L.M., Schafer, J.L., Hyatt, S.L., & Flaherty, B.P. (July, 2000). A demonstration of WinLTA. Presented at the biennial meetings of the Society for Multivariate Applications in the Behavioral Sciences, London, England.
- Collins, L.M., Schafer, J.L., Graham, J.W., & Kam, C.-M. (July, 2000). A comparison of FIML and MI approaches to missing data: Why bother with multiple imputation? Presented at the biennial meetings of the Society for Multivariate Applications in the Behavioral Sciences, London, England.
- Collins, L.M., Schafer, J.L., Hyatt, S.L., & Flaherty, B.P. (July, 1999). Using data augmentation in latent class models for longitudinal data: Estimation, standard errors and hypothesis tests involving combinations of parameters. Presented at the European Meetings of the Psychometric Society, Lueneberg, Germany.

- Collins, L.M., Hyatt, S.L., Flaherty, B.F., Schafer, J.L., & Hames, K. (June, 1999). A demonstration of WinLTA 2.0. Presented at the Annual Meetings of the Society for Prevention Research, New Orleans, LA.
- Collins, L.M. (October, 1997). A demonstration of WinLTA. Presented at the Annual Meetings of the Society for Multivariate Experimental Psychology, Scottsdale, AZ.
- Collins, L.M. (May, 1997). New developments in the LTA software. Presented at the Annual Meetings of the Society for Prevention Research, Baltimore, MD.
- Collins, L.M. (June, 1996). Methodological considerations in longitudinal research. Presented at the Annual Meetings of the Society for Prevention Research, San Juan, Puerto Rico.
- Collins, L.M., Fidler, P.L., & Wugalter, S.E. (October, 1993). Parameter estimation in latent class models with sparse data. Presented at the Annual Meetings of the Society for Multivariate Experimental Psychology, San Pedro, California.
- Collins, L.M. (August, 1993). Measurement in longitudinal research: Trying to hit a moving target. Presented at the Annual Convention of the American Psychological Association, Toronto, Ontario, Canada.
- Collins, L.M. (October, 1991). A general axiomatic measurement model for longitudinal developmental data. Presented at the Annual Meeting of the Society for Multivariate Experimental Psychology, Albuquerque, New Mexico; a revised version presented at the Annual Meeting of the American Psychological Society, June 1992.
- Collins, L.M., Graham, J.W., Pan, J., Wugalter, S.E., & Hansen, W.B. (July, 1991). Crossvalidation of latent class models and of group differences. Presented at the European Meetings of the Psychometric Society, Trier, Germany.
- Collins, L.M., Chung, N.K., & Wugalter, S.E. (July, 1990). Two applications of latent path theory. Presented at the annual meetings of the Psychometric Society, Princeton, N.J.
- Collins, L.M. (October, 1989). Measurement in the context of longitudinal research. Presented at Best Methods for the Analysis of Change, Los Angeles, California.
- Collins, L.M., Chung, N.-K., & Wugalter, S.E. (July, 1989). Recent developments in latent Markov models. Presented at the annual meetings of the Psychometric Society, Los Angeles, CA.
- Collins, L.M., & McGuigan, K.A. (November, 1988). Assessing dependency among observations. Presented at the meetings of the Society for Multivariate Experimental Psychology, Charlottesville, Virginia.
- Collins, L.M. (August, 1988). Latent path theory: Measuring qualitative dynamic constructs. Presented at World Congress of Psychology, Sydney, Australia.
- Collins, L.M. (June, 1988). Latent path theory. Presented at the meetings of the Psychometric Society, Los Angeles, California.
- Collins, L.M. (October, 1987). Dynamic constructs and their measurement. Presented at the meetings of the Society for Multivariate Experimental Psychology, Vancouver, British Columbia, Canada.

Collins, L.M., Graham, J.W., & McGuigan, K.A. (June, 1987). An adjustment to the ANOVA when subjects must be assigned to treatment in intact groups. Presented at the meetings of the Psychometric Society, Montreal, Quebec, Canada.

Collins, L.M., Dent, C.W., & Cliff, N. (June, 1986). LGCLUS: An exploratory procedure for finding longitudinal Guttman scales. Presented at the annual meetings of the Psychometric Society, Toronto, Ontario, Canada.