#### **Carmel Salhi**

c.salhi@northeastern.edu
Northeastern University
Bouvé College of Health Sciences
Department of Health Sciences

#### **EDUCATION**

#### Harvard School of Public Health

September 2008 - May 2013

Doctor of Science, Global Health and Population Concentrations: Epidemiology; Anthropology Certificate in Women, Gender and Health

#### **Harvard School of Public Health**

September 2006 - May 2008

Master of Science, Population and International Health

University of Michigan, Ann Arbor September 2001 – May 2005

Bachelor of Science: Major in Biology, Minor in Mathematics

Bachelor of Arts: Major in Modern Middle East History

#### **ACADEMIC APPOINTMENTS**

Assistant Professor (tenure track), Department of Health Sciences

Northeastern University September 2015 to present

Research Fellow, Department of Cognitive, Linguistic & Psychological Sciences

Brown University June 2015 to August 2015

Post-doctoral Research Fellow, Developmental Medicine Center Laboratories of Cognitive Neuroscience

Harvard Medical School May 2013 to May 2015

#### **PUBLICATIONS**

Reviewed Publications, Accepted/Published

(\* Student/mentee co-author; Last authorship indicates primary mentor role)

- Salhi, C., Azrael, D., & Miller, M. (2021). Parent and adolescent reports of adolescent access to household firearms in the United States. *JAMA network* open, 4(3), e210989-e210989.
- Houston, A. R.\*, Lincoln, A., Gillespie, S.\*, Da Fonseca, T.\*, Issa, O., Ellis, H., & Salhi, C. (2021). You Have to Pay to Live: Somali Young Adult Experiences With the U.S. Health Care System. Qualitative Health Research. https://doi.org/10.1177/10497323211010159
- 3. **Salhi, C.**, Scoglio, A. A.\*, Ellis, H., Issa, O., & Lincoln, A. (2021). The relationship of pre- and post-resettlement violence exposure to mental health

- among refugees: a multi-site panel survey of Somalis in the US and Canada. Social Psychiatry and Psychiatric Epidemiology, 1-9. DOI: 10.1007/s00127-020-02010-8
- 4. **Salhi, C.**, Berrigan, J.\*, Azrael, D., Beatriz, E.\*, Barber, C., Runyan, C., & Miller, M. (2021). 'It's changed how we have these conversations': emergency department clinicians' experiences implementing firearms and other lethal suicide methods counseling for caregivers of adolescents. *International review of psychiatry*, 1-13. *DOI:* 10.1080/09540261.2020.1870938
- 5. **Salhi, C.**, Beatriz, E.\*, McBain, R., McCoy, D., Sheridan, M., & Fink, G. (2021). Physical Discipline, Deprivation, and Differential Risk of Developmental Delay Across 17 Countries. *Journal of the American Academy of Child & Adolescent Psychiatry*, *60*(2), 296-306.
- 6. Scoglio, A. A.\* & **Salhi, C.** (2021). Violence exposure and mental health among resettled refugees: a systematic review. *Trauma, Violence, & Abuse, 22*(5), 1192-1208.
- 7. **Salhi, C.**, Azrael, D., & Miller, M. (2021). Patterns of gun owner beliefs about firearm risk in relation to firearm storage: a latent class analysis using the 2019 National Firearms Survey. *Injury prevention*, 27(3), 271-276.
- 8. Lincoln, A. K., Cardeli, E.\*, Sideridis, G., **Salhi, C.,** Miller, A. B., Da Fonseca, T., ... & Ellis, B. H. (2021). Discrimination, marginalization, belonging, and mental health among Somali immigrants in North America. *American Journal of Orthopsychiatry*, *91*(2), 280.
- 9. Eyllon, M.\*, **Salhi, C.**, Griffith, J. L., & Lincoln, A. K. (2020). Exclusionary School Discipline Policies and Mental Health in a National Sample of Adolescents without Histories of Suspension or Expulsion. *Youth & Society*, 0044118X20959591.
- 10. Miller, M., **Salhi, C.**, Barber, C., Azrael, D., Beatriz, E.\*, Berrigan, J.\*, Brandspigel, S.\*, Betz, E., & Runyan, C. (2020). Changes in Firearm and Medication Storage Practices in Homes of Youths at Risk for Suicide: Results of the SAFETY Study, a Clustered, Emergency Department—Based, Multisite, Stepped-Wedge Trial. *Annals of emergency medicine*, *76*(2), 194-205.
- 11. Wertz, J.\*, Azrael, D., Berrigan, J.\*, Barber, C., Nelson, E.\*, Hemenway, D., Salhi, C., & Miller, M. (2020). A Typology of Civilians Shot and Killed by US Police: a Latent Class Analysis of Firearm Legal Intervention Homicide in the 2014–2015 National Violent Death Reporting System. *Journal of urban health*, 1-12.

- 12. Sheridan, M. A., Shi, F., Miller, A. B., **Salhi, C.**, & McLaughlin, K. A. (2020). Network structure reveals clusters of associations between childhood adversities and development outcomes. *Developmental science*, *23*(5), e12934.
- 13. Beatriz, E.\*, & **Salhi, C.** (2019). Child discipline in low-and middle-income countries: Socioeconomic disparities at the household-and country-level. *Child abuse & neglect*, *94*, 104023.
- 14. Amso, D., **Salhi, C.**, & Badre, D. (2019). The relationship between cognitive enrichment and cognitive control: A systematic investigation of environmental influences on development through socioeconomic status. *Developmental psychobiology*, *61*(2), 159-178.
- 15. Cuartas, J.\*, McCoy, D. C., Rey-Guerra, C.\*, Britto, P. R., Beatriz, E.\*, & Salhi, C. (2019). Early childhood exposure to non-violent discipline and physical and psychological aggression in low-and middle-income countries: national, regional, and global prevalence estimates. *Child abuse & neglect*, 92, 93-105.
- 16. Beatriz, E. D.\*, Molnar, B. E., Griffith, J. L., & **Salhi, C.** (2018). Urban-rural disparity and urban population growth: A multilevel analysis of under-5 mortality in 30 sub-Saharan African countries. *Health & place*, *52*, 196-204.
- 17. Azrael, D., Cohen, J.\*, **Salhi, C.**, & Miller, M. (2018). Firearm storage in gunowning households with children: results of a 2015 national survey. *Journal of urban health*, *95*(3), 295-304.
- 18. McCoy, D. C., **Salhi, C.**, Yoshikawa, H., Black, M., Britto, P., & Fink, G. (2018). Home-and center-based learning opportunities for preschoolers in low-and middle-income countries. *Children and Youth Services Review*, 88, 44-56.
- 19. Beatriz, E. D.\*, **Salhi, C.**, Griffith, J. L., & Molnar, B. E. (2018). Urbanicity matters in self-reported child maltreatment prevalence: Findings from a nationally representative study. *Child abuse & neglect*, *79*, 371-383.
- 20. Tallon, L. A.\*, Manjourides, J., Pun, V. C., **Salhi, C.**, & Suh, H. (2017). Cognitive impacts of ambient air pollution in the National Social Health and Aging Project (NSHAP) cohort. *Environment international*, *104*, 102-109.
- 21. Puffer, E. S., Annan, J., Sim, A. L.\*, **Salhi, C.**, & Betancourt, T. S. (2017). The impact of a family skills training intervention among Burmese migrant families in Thailand: a randomized controlled trial. *PloS one*, *12*(3), e0172611.

- 22. Annan, J., Sim, A.\*, Puffer, E. S., **Salhi, C.**, & Betancourt, T. S. (2017). Improving mental health outcomes of Burmese migrant and displaced children in Thailand: A community-based randomized controlled trial of a parenting and family skills intervention. *Prevention Science*, *18*(7), 793-803.
- 23. Jeong, J.\*, McCoy, D. C., Yousafzai, A. K., **Salhi, C.**, & Fink, G. (2016). Paternal stimulation and early child development in low-and middle-income countries. *Pediatrics*, *138*(4).
- 24. McBain, R. K., **Salhi, C.**, Hann, K., Salomon, J. A., Kim, J. J., & Betancourt, T. S. (2016). Costs and cost-effectiveness of a mental health intervention for war-affected young persons: decision analysis based on a randomized controlled trial. *Health Policy and Planning*, *31*(4), 415-424.
- 25. McBain, R. K., **Salhi, C.**, Hann, K., Kellie, J., Kamara, A., Salomon, J. A., ... & Betancourt, T. S. (2015). Improving outcomes for caregivers through treatment of young people affected by war: a randomized controlled trial in Sierra Leone. *Bulletin of the World Health Organization*, 93, 834-841.
- 26. Salhi, B., **Salhi, C.**, Stettner, E., & Shayne, P. (2015). The Effects of Gender on the Evaluation of Faculty in Emergency Medicine: 835. *Academic Emergency Medicine*, 22.
- 27. Ramanadhan, S., **Salhi, C.**, Achille, E., Baril, N., D'Entremont, K., Grullon, M., ... & Viswanath, K. (2012). Addressing cancer disparities via community network mobilization and intersectoral partnerships: a social network analysis. *PloS one*, *7*(2), e32130.
- 28. Betancourt, T. S., **Salhi, C.**, Buka, S., Leaning, J., Dunn, G., & Earls, F. (2012). Connectedness, social support and internalising emotional and behavioural problems in adolescents displaced by the Chechen conflict. *Disasters*, *36*(4), 635-655.
- 29. McBain, R., **Salhi, C.**, Morris, J. E., Salomon, J. A., & Betancourt, T. S. (2012). Disease burden and mental health system capacity: WHO Atlas study of 117 low-and middle-income countries. *The British Journal of Psychiatry*, 201(6), 444-450.
- 30. Smith, V. C., SteelFisher, G. K., **Salhi, C.**, & Shen, L. Y. (2012). Coping with the neonatal intensive care unit experience: parents' strategies and views of staff support. *The Journal of perinatal & neonatal nursing*, *26*(4), 343-352.
- 31. Fan, V.Y., **Salhi, C.**, & Lin, S.C. (2010). A new law for allocation of donor organs in Israel; Correspondence. *The Lancet*, Volume 376, Issue 9737, pp: 231

#### **GRANTS**

#### External Funding (Awarded)

The National Collaborative on Gun Violence Research. Determinants of How Firearms Are Stored in Households with Children: Implications for Interventions to Reduce Firearm Mortality. (\$481,261)

PI: Matthew Miller.

Co-I: Carmel Salhi; 12% FTE (July 1, 2019 - June 30, 2021)

### NIMHD R21. Exploring Pathways Among Discrimination and Health Among Somali Young Adults. (\$260,588)

Co-PI: Alisa Lincoln, Heidi Ellis

Co-I: Carmel Salhi; 13% FTE (September 2017-August 2019)

# American Foundation for Suicide Prevention: An ED-based Randomized Clinical Trial of Lethal Means Counseling for Parents of At-Risk Youth.

(\$1,478,000)

PI: Matthew Miller

Co-I: Carmel Salhi; 28% FTE (October 2016-December 2019)

## Harvard Weatherhead Center Incubation Grant: Community Participation and the Performance of Primary Health Care Providers in Morocco. (\$30,000.

Project Costs Only)

Pl's: Melani Cammett, Ellen Lust, Carmel Salhi. (January 1, 2016-December 31, 2016.)

### NIMH R01: Role of Experience in Development of Cognitive Control and Frontal Cortex

PI's: David Badre, Dima Amso

Sub-contract PI: Carmel Salhi; 17% FTE (September 2015-August 2016)

#### Internal Funding (Awarded)

Northeastern University Advancing Health Equity Pilot Research Program: How do Parents of Children Admitted to the Emergency Department for a Mental Health Crisis View of the Role of Clinicians Around Firearm Safety? \$1,500 Project Costs Only.

PI: Carmel Salhi. (June 2021-May 2022)

## Institute on Health Equity and Social Justice Research Pilot Grant: Health and Healthcare of Syrian Refugees in Lebanon. \$7,500. Project Costs Only.

PI: Carmel Salhi. (June 2018-May 2020)

### Northeastern University Humanities Center Faculty in Residence Fellowship

Faculty fellow: Carmel Salhi; 17% FTE (September 2017-May 2018)

Harvard Catalyst Pilot Grant: Iragi Refugee Family Study. \$25,000. Project Costs

Only.

PI: Carmel Salhi, September 2010 - May 2011

#### HONORS AND DISTINCTIONS

#### **Faculty Scholar**

Institute for Health Equity and Social Justice Research, Northeastern University, September 2018-May 2020

#### **Humanities Center Faculty in Residence**

Northeastern University, September 2017-April 2018

#### **Global Health Department Award**

Global Health and Population, Harvard School of Public Health, September 2010-May 2011

#### Julius B. Richmond Fellowship

Center on the Developing Child, Harvard University, September 2009 - June 2010

#### Taplin Fellowship

Harvard School of Public Health, September 2008 - July 2010

#### **PRESENTATIONS**

(\* Student/mentee presenter; Last authorship indicates primary mentor role)

Arielle Scoglio\*, **Carmel Salhi.** (*Oral Presentation*). A Systematic Review of Violence and Resettled Refugee's Mental Health. American Public Health Association Annual Conference. October 24, 2020.

Magdalena Pankowska\*, **Carmel Salhi**, Aderonke Ilegbusi\*, Michael Williams\*, Danielle F. Haley. (*Oral Presentation*) Availability of HIV and Hepatitis C testing at drug and alcohol treatment facilities offering medications for opioid use disorder. American Public Health Association Annual Meeting. October 24, 2020.

**Carmel Salhi,** Deb Azrael, Matthew J. Miller. (*Oral Presentation*) Parent and child report of adolescent access to loaded firearms: Results from a nationally representative survey. Firearm Safety Among Children Annual Symposium. FACTS Consortium. Virtual Conference. September 23, 2020.

**Carmel Salhi.** (*Invited Oral Presentation*). Using Mixed Methods and Multiple Informants in Research on Adolescent Mental Health. RAND. April 2020. Boston, MA. <u>CANCELLED DUE TO COVID-19</u>

**Carmel Salhi.** (*Invited Oral Presentation*). Medication and Firearm Safety Counseling in Pediatric Emergency Departments: Using Mixed Methods Across

Multiple Informants. Boston College School of Social Work. April 2020. Boston, MA. *CANCELLED DUE TO COVID-19* 

**Carmel Salhi**. (*Invited Oral Presentation*). Parent and Adolescent Report of Adolescent Household Firearm Access: A Nationally Representative Survey. Northeastern University Gun Violence Prevention Conference. April 2020. Boston, MA. *CANCELLED DUE TO COVID-19* 

**Carmel Salhi**, Deborah Azrael, Elizabeth Beatriz, Catherine Barber, Carol Runyan, Marian Betz, Sara Brandspigel, Matthew Miller. (*Oral Presentation*). Medication and Firearm Safety Counseling in Pediatric Emergency Departments: A Controlled Trial. SRCD Biennial Meeting. March 2020. San Diego, CA. <u>CANCELLED DUE TO COVID-19</u>

**Carmel Salhi**, Deborah Azrael, Matthew Miller. (*Oral Presentation*). Parent and Adolescent Report of Adolescent Household Firearm Access: A Nationally Representative Survey, SRCD Biennial Meeting. March 2020. San Diego, CA. *CANCELLED DUE TO COVID-19* 

**Carmel Salhi**, Matthew Miller. (*Invited Plenary Session*). An ED-based Approach to Reducing Youth Suicide: Rationale for and Preliminary Findings from a Multi-site Trial. Emory School of Medicine Grand Rounds. December 2019. Atlanta, Georgia.

Jorge Cuartas Ricaurte\*, Dana McCoy, Maria Rey Guerra, Pia Britto, Elizabeth Beatriz, **Carmel Salhi.** (*Oral Presentation*) Early Childhood Exposure to Non-Violent Discipline and Physical and Psychological Aggression in Low- and Middle-Income Countries, SRCD Biennial Meeting. March 2019. Baltimore, MD.

**Carmel Salhi**, Lauren Hudak, Matthew Miller, Deborah Azrael, Bisan Salhi. (*Oral Presentation*). "Reliability of Suicide Assessments between Emergency Department Nurses." Society of Academic Emergency Medicine Annual Meeting. May 2019. Las Vegas, NV.

Michael Cole, Rama Salhi, **Carmel Salhi**, Joel Purkiss, Hani Stoklosa, Daphne Morri. (*Workshop*). "Questions about Questions? Designing Surveys for Research and Education That Reviewers Won't Ridicule." Society of Academic Emergency Medicine Annual Meeting. May 2019. Las Vegas, NV.

Jorge Cuartas Ricaurte\*, Dana McCoy, Maria Rey Guerra, Pia Britto, Elizabeth Beatriz, **Carmel Salhi**. (*Panel Presentation*) "Early Childhood Exposure to Non-Violent Discipline and Physical and Psychological Aggression in Low- and Middle-Income Countries." *Society for Research on Child Development Biennial Meeting*. March 2019. Baltimore, MD.

Margaret Sheridan, Feng Shi\*, Adam Miller, **Carmel Salhi**, Katie McLaughlin. (*Panel Presentation*) "Using network structure to better understand associations between

adversities and child development outcomes." Society for Research on Child Development Biennial Meeting. March 2019. Baltimore, MD.

**Carmel Salhi**. (*Panel Presentation*) "Parenting practices and differential developmental delay across 17 countries." *DEVSEC Society for Research on Child Development Special Topic Meeting*. Phoenix, AZ. October 2018.

Corey Covell\*, **Carmel Salhi**. (*Poster*) Analysis of Employment, Median Income, and Minimum Wage as Predictors of Academic Achievement. *RISE: 2018, Northeastern University*. Boston, MA. April, 2018.

Elizabeth Beatriz\*, Beth Molnar, John Griffith, **Carmel Salhi**. (*Poster*) "Urbanrural disparity in the context of urban population growth:

A multilevel analysis of under-five mortality in 30 sub-Saharan African Countries". *American Public Health Association Annual Meeting*. Atlanta, GA. November 2017.

Elizabeth Beatriz\*, **Carmel Salhi**, John Griffith, Beth Molnar. (*Poster*) "Urbanrural disparities in childhood experiences of maltreatment: Findings from a nationally representative study". *American Public Health Association Annual Meeting*. Atlanta, GA. November 2017.

Elizabeth Beatriz\*, Beth Molnar, John Griffith, **Carmel Salhi**. (*Oral Presentation*) Urban-Rural disparity in the context of urban population growth: A multilevel analysis of under-five mortality in 30 sub-Saharan African countries. *14th International Conference on Urban Health*. September 2017.

**Carmel Salhi**. (*Panel Presentation*) Ecological approaches to intervention development for vulnerable and displaced populations in low resource/ high conflict settings across the globe. *Society for Community Research and Action Biennial Conference*. June 2017.

**Carmel Salhi**, David Badre, Dima Amso. (*Panel Presentation*) The Unique Role of Cognitive Enrichment in the Development of Rule-Guided Behavior. *Society for Research in Child Development Biennial Meeting*, April 8, 2017.

Bisan Salhi\*, **Carmel Salhi**, Edward Stettner, Philip Shayne. (*Oral Presentation*) The Effects of Gender on the Evaluation of Faculty in Emergency Medicine. Society for Academic Emergency Medicine. May 12, 2015.

**Carmel Salhi**, Christopher Blattman, Julian Jamison, Margaret Sheridan. (*Panel Presentation*) Adversity and Cognitive Functioning Among Marginalized Youth: The Effects of Acute and Early Adversity in Liberian Males. *Society for Research in Child Development 2015 Biennial Meeting*. March 20, 2015

**Carmel Salhi**. (*Oral Presentation*) Consequences of War and Comorbidity among Refugees. *American Anthropological Association Annual Conference*, December 2, 2014.

**Carmel Salhi**. (*Oral Presentation*) Iraqi Refugee Families: Linking Challenges in Employment and Mental Health. *Worcester Legislators and Researchers Breakfast*. December 6, 2013.

**Carmel Salhi**. (*Poster*) Sources of Re-traumatization and Resilience among Iraqi Refugees. *Global Health and Population* @50 Symposium. April 25, 2013.

**Carmel Salhi**. (*Poster*) Mental health of resettled Iraqi youth: Implications of shifting family dynamics. *Community Engagement and Research Symposium. University of Massachusetts Medical School.* November 30, 2012.

**Carmel Salhi**, Pratima Patil, et al. (*joint first authorship*) (*Oral Presentation*) Assessing a novel mobile mammography intervention in a medically underserved community: A community-based participatory approach. *American Public Health Association 138th annual meeting*. November 8th, 2010.

**Carmel Salhi**, Pratima Patil. (*Poster*) India and AIDS Orphans: The Question of Orphanages and Community-Based Care. *Harvard University Center for AIDS Research Conference*. June 24, 2009.

#### **TEACHING**

Introduction to Epidemiology—Dialogue of Civilizations in Seville, Spain (PHTH 4202; Undergraduate, Newly Developed). Summer 2022.

Socioeconomic Status in Social Epidemiology—Asynchronous Course in Social Epidemiology Certificate (Graduate, Newly Developed). Spring 2022

Introduction to College (Undergraduate). Fall 2021 (18 students)

Global Health (PHTH 5230; Undergraduate and Graduate). Spring 2021 (22 students).

Social Epidemiology (PHTH 6224; Graduate; Newly Developed). Fall 2015 (5 students), Fall 2016 (10 students), Fall 2017 (5 students), Fall 2018 (10 students), Fall 2019 (5 students), Fall 2020 (6 students), Fall 2021 (3 students).

Global Perspectives on Discrimination & Health (PHTH 4120; Undergraduate; Newly Developed). Spring 2017 (27 students), Fall 2017 (19 students), Fall 2020 (19 students), Fall 2021 (19 students).

Race, Ethnicity and Health (PHTH 5120; Undergraduate). Spring 2016 (26 students).

Field Research Methods in Humanitarian Crisis (Lecturer; Graduate). Harvard School of Public Health. Spring 2015 (33 students).

Applied Qualitative Methods for Global Health Research (Head Teaching Assistant; Graduate). Harvard School of Public Health. Spring semester, 2009 - 2012.

#### **ADVISING**

#### Dissertation Committee Member (Completion Date):

Lindsay Tallon (May 2017); Elizabeth Beatriz (December 2017); Mara Eyllon (August 2018); Sonia Alves (May 2021); Ashley Houston (2019-present)

#### Doctoral Student Advising (Academic Years of Mentorship):

Renee Wurth (Dissertation Proposal Committee, AY 2017-18); Megan Zelinsky (AY 2017-18); Michael Williams (Dissertation Proposal Committee, AY 2020-21)

#### Master's Thesis Committee Member (Completion Date):

Magdalena Pankowska (April 2020); Meredith Pineau (August 2017); Fadi Youkhana (April 2017)

#### Masters' Student Advising (Academic Years of Mentorship):

Donna Appiah (AY 2018-19); Hayley Geiselman (AY's 2017-19); Christine Luong (AY's 2017-19); Rebecca Shanks (AY's 2017-19); Hao Trieu (AY's 2017-19); Marina Atlas (AY's 2017-19); Jennifer Pamphile (AY's 2017-19); Natasha Martinez (AY's 2016-19); Candice Quarella (AY 2016-17); Leslie Fowle (AY's 2015-19); D'Janapha Fortune (AY's 2015-18); Elisa Tristan-Cheever (AY's 2015-17)

#### **Undergraduate Capstone Adviser:**

Corey Covell (March 2018)

#### SERVICE

#### Departmental Service

Chair Search Committee, AY 2021-22

PhD Committee, Lead on Epidemiology Comprehensive Exam, AY 2018-19

Faculty Search Committee, AY 2016-17

PhD Committee, Admissions, AY 2015-present

Global Health Minor Committee, AY 2015-present

#### College Service

Tier 1 Grant Reviewer, Spring 2018, Spring 2019, Spring 2021.

Phonathon Undergraduate Recruitment, Fall 2015, Fall 2016, Fall 2017

Health Sciences Welcome Day, November 2015.

#### **University Service**

Commencement, Spring 2018.

#### Service to Discipline/Profession

Reviewer for Pediatrics, Social Psychiatry & Psychiatric Epidemiology, Qualitative Health Research, Child Abuse & Neglect, Injury Epidemiology, Social Science &

Medicine, Journal of Rural Mental Health

Pro bono methodological consultant for International Rescue Committee, UNICEF, and HOME Project