

Rebecca Stebbins, PhD MSPH

Postdoctoral Research Associate

Education	PhD in Epidemiology University of North Carolina at Chapel Hill Dissertation: Life Course Psychosocial Stressors, Immune Function, Infection, and Cognitive Decline & Dementia. Committee: Allison E. Aiello (Chair), Y. Claire Yang, Joanna "Asia" Maselko, Brenda L. Plassman, Jessie K. Edwards	December 2020
	MSPH in Epidemiology University of North Carolina at Chapel Hill Master's Thesis: The Effectiveness of Community Bed Net Use on Malaria Parasitemia Among Children Under 5 in Liberia. Readers: Steve Meshnick, Michael Emch	August 2017
	AB in Biology Dartmouth College Minor: International Studies	June 2011
Research Experience	Postdoctoral Research Associate Carolina Population Center University of North Carolina at Chapel Hill	December 2020 – present
	Graduate Research Assistant Department of Epidemiology University of North Carolina at Chapel Hill Research: health disparities, life course psychosocial stressors, immunosenescence, pathogen burden, cognitive decline & dementia. Mentors: Allison E. Aiello, Y. Claire Yang	August 2014 – December 2020
	EpiScholar Intern Public Health – Seattle & King County, Seattle, WA Research: identification of geographic clusters of and social and spatial risk factors for both under-immunization and un-immunization. Mentors: Meghan Munn, Libby Page	Summer 2015
	Research Study Assistant Boston University Goldman School of Dental Medicine, Boston, MA Assisted on a dental public health study investigating the effect of motivational interviews, between dental health advocates and caregivers of children, on oral health of children ages 0-5	March 2013 – July 2014
	Research Assistant & Laboratory Technician Dartmouth Medical School Research: isolation of GOS2 protein in E. coli. Techniques used: protein purification, FPLC, western blot, SDS-PAGE, bacterial transformation, bacterial cell culture, aseptic technique, gel electrophoresis, and made buffers, media, gels, and other stocks. Mentor: Dean Madden	June 2009 – June 2010
	HHMI Fellow Dartmouth-Hitchcock Medical Center Paul K. Richter and Evalyn E. Cook Richter Memorial Fund Research Grantee Women in Science Project Intern Research: aging and transport of precursors to NAD ⁺ in yeast. Techniques used: PCR, gel electrophoresis, NAD ⁺ assay, DNA and NAD ⁺ extraction, transformations. Mentors: Peter Belenky, Charles Brenner	Fall 2008 Summer 2008 Winter/Spring 2008
Teaching Experience	Graduate Teaching Assistant University of North Carolina Gillings School of Global Public Health EPID 826: Instructors: Allison Aiello & Chantel Martin <ul style="list-style-type: none">monitored and participated in class discussions; managed student teams; advised students in face-to-face meetings, telephone conferences, or email; evaluated student performance (based on pre-determined criteria) and assisted with grading; prepared class discussion questions	Fall 2018
	EPID 600: Instructors: Karin Yeatts & Lorraine Alexander <ul style="list-style-type: none">gave weekly mini-lectures and lead exercises and discussions; monitored and participated in class discussions; managed student teams; advised students through face-	Fall 2017

- to-face meetings, telephone conferences, or email
- evaluated student performance (based on pre-determined criteria) and assisted with exams and grading

Undergraduate Teaching Assistant | Dartmouth College | Biology Department

Fall 2010

- assisted with preparation and execution of laboratory exercises for the Microbiology course and aided current students by acting as a resource and guide in and out of the laboratory

Peer-reviewed Articles

- Noppert, G.A., Feinstein, L.F., Dowd, J.B., **Stebbins, R.C.**, Zang, E., Needham, B., Simanek, A., & Aiello, A.E. (2020) Pathogen Burden and Leukocyte Telomere Length in the United States. *Immunity & Aging*. [in press]
- Stebbins, R.C.**, Noppert, G. A., Yang, Y. C., Dowd, J. B., Simanek, A., & Aiello, A. E. (2020). Immune Response to Cytomegalovirus and Cognition in the Health and Retirement Study. *American Journal of Epidemiology*. [in press]
- Noppert, G.A., **Stebbins, R.C.**, Dowd, J.B., Hummer, B. & Aiello, A.E. (2020). Life course socioeconomic disadvantage and immune system aging. *The Journals of Gerontology: Series B*
- Stebbins, R. C.**, Noppert, G., Aiello, A., Cordoba, E., Ward, J., & Feinstein, L. (2019). Persistent socioeconomic and racial and ethnic disparities in pathogen burden in the United States, 1999–2014. *Epidemiology and Infection*, 147, E301.
- Stebbins, R. C.**, Emch, M., & Meshnick, S. (2018) The effectiveness of community bed net use on malaria parasitemia among children under 5 in Liberia. *American Journal of Tropical Medicine & Hygiene*.
- Jernigan, E. G., Strassle, P. D., **Stebbins, R. C.**, Meyer, R. E., & Nelson, J. S. (2017). Effect of concomitant birth defects and genetic anomalies on infant mortality in Tetralogy of Fallot. *Birth Defects Research Part A: Clinical and Molecular Teratology*.
- Nelson, J. S., **Stebbins, R. C.**, Strassle, P. D., & Meyer, R. E. (2016). Geographic distribution of live births with Tetralogy of Fallot in North Carolina 2003 to 2012. *Birth Defects Research Part A: Clinical and Molecular Teratology*, 106(11), 881–887.
- Feinstein, L., Douglas, C. E., **Stebbins, R. C.**, Pawelec, G., Simanek, A. M., & Aiello, A. E. (2016). Does cytomegalovirus infection contribute to socioeconomic disparities in all-cause mortality?. *Mechanisms of ageing and development*, 158, 53–61.
- Belenky, P., **Stebbins, R.**, Bogan, K. L., Evans, C. R., & Brenner, C. (2011). Nrt1 and Tna1-independent export of NAD⁺ precursor vitamins promotes NAD⁺ homeostasis and allows engineering of vitamin production. *PLoS One*, 6(5), e19710.
- Gazzaniga, F., **Stebbins, R.**, Chang, S. Z., McPeck, M. A., & Brenner, C. (2009). Microbial NAD metabolism: lessons from comparative genomics. *Microbiology and molecular biology reviews*, 73(3), 529–541.

In progress:

- Reason, M., Yang, Y.C., Aiello, A.E., Belsky, D.W., Harris, K.M., Plassman, B.L., **Stebbins, R.C.** Cognitive Functioning and Socioeconomic Status across the Early Life Course. [Under Review]
- Stebbins, R.C.**, Yang, Y.C., Plassman, B.L., Edwards, J.K., Noppert, G.N., Haan, M.N., & Aiello, A.E. Immune Function, Cortisol, and Cognitive Decline & Incident Dementia in an Aging Latino Population. [Under Review]

Book Chapters

- Aiello, A. E., Simanek, A. M., **Stebbins R. C.**, & Dowd, J. B. (2017) Psychosocial Influences on Infectious Disease. *The Routledge International Handbook of Psychosocial Epidemiology*. Routledge.

Posters & Presentations

15. **Stebbins, R.C.**, Yang, Y.C., Maselko, J., Plassman, B.L., Edwards, J.K., & Aiello, A.E. "Lifecourse Experiences of Traumatic Events and Cognitive Decline over 10 years in the Health and Retirement Study." 2020 IAPHS Conference, 30 September – 2 October 2020.
14. **Stebbins, R.C.**, Yang, Y.C., Plassman, B.L., Edwards, J.K., & Aiello, A.E. "Markers of Peripheral Immunosenescence and Cognitive Decline over 10 years in the Sacramento Area Latino Study of Aging." 2020 Meeting of the Society for Epidemiological Research.
13. Reason, M., Yang, Y.C., Aiello, A.E., Belsky, D.W., Curran, P., **Stebbins, R.**, Plassman, B.L., & Harris, K.M. "Measuring Global Cognition in a Pooled Sample Using Modified Non-linear Factor Analysis." Annual Meetings of the American Sociological Association, San Francisco, CA., August 2020. (Cancelled due to COVID-19.)
12. Noppert, G*, **Stebbins, R.C.***, and Aiello, A.E. "The Aging Immune System: Educational Attainment, Cytomegalovirus, and Cognition in the Health and Retirement Study." 2020 PAA Biomarker Network Meeting, 22 April 2020. (Cancelled due to COVID-19.)
11. **Stebbins, R.C.**, Noppert, G., Yang, Y.C., and Aiello, A.E. "Recent Stressful Life Events, Lifetime Trauma, and Cognitive Decline in the Health and Retirement Study." Poster presented at the 2019 Meeting of the Society for Epidemiological Research. Minneapolis, MN, 19 June – 21 June 2019.
10. Noppert, G., **Stebbins, R.C.**, Dowd, J.B., and Aiello, A.E. "Life Course Social Disadvantage and the Aging Immune System: Findings from the Health and Retirement Study." Poster presented at the 2019 Meeting of the Society for Epidemiological Research. Minneapolis, MN, 19 June – 21 June 2019.
9. **Stebbins, R.C.**, Noppert, G., Yang, Y.C., Haan, M., and Aiello, A.E. "Persistent Pathogens and Cognitive Decline over 10 Years Among an Elderly Latino Cohort." Poster presented at the GSA 2018 Annual Scientific Meeting, Boston, MA, 14 November – 18 November 2018.
8. **Stebbins, R.C.** "Psychosocial stressors and cognitive decline: theory, mechanisms, and early results from the Health and Retirement Study." Social Epidemiology Seminar. University of North Carolina – Chapel Hill. 31 October 2018.
7. **Stebbins, R.C.**, Noppert, G., and Aiello, A.E. "Pathogen Burden as a Marker of Health Disparities." 2018 IAPHS Conference. Washington, D.C. 5 October 2018.
6. **Stebbins, R.C.**, Noppert, G., Cordoba, E., Ward, J., Feinstein, L., Dowd, J.B., & Aiello, A.E. "Persistent disparities in pathogen burden in the U.S., 1999 – 2014." 2018 Meeting of the Society for Epidemiological Research. Baltimore, MD. 20 June 2018.
5. **Stebbins, R.C.**, Noppert, G., Cordoba, E., Ward, J., Feinstein, L., Aiello, A.E. "Persistent disparities in pathogen burden in the U.S., 1999 – 2014." Social Epidemiology Seminar. University of North Carolina – Chapel Hill. 1 November 2017.
4. Jernigan EG, Strassle PD, **Stebbins RC**, Meyer RE, Nelson JS. "Effect of concomitant birth defects and genetic anomalies on infant mortality in Tetralogy of Fallot." Poster presented at the 2017 Joint Conference on Advances in Pediatric Cardiovascular Disease Management, Ann Arbor, MI, 29 September - 1 October 2017.
3. **Stebbins, R.C.** "The Effectiveness of Community Bed Net Use on Malaria Parasitemia Among Children Under 5 in Liberia." Department of Epidemiology Master's Presentation. University of North Carolina – Chapel Hill. 28 March 2017.
2. **Stebbins, R.C.** "Socioeconomic Disparities and Persistent Infections in the Detroit Neighborhood Health Study." Social Epidemiology Seminar. University of North Carolina – Chapel Hill. 31 March 2016.
1. **Stebbins, R.C.** "Geographic Clusters of Under-immunization in King County, WA." EpiScholars Final Presentations. Public Health – Seattle & King County. 14 August 2015.

Awards	2020 SER Student & Postdoc Travel Scholarship - \$400	Summer 2020
	Departmental Travel Award, Ann Cynthia Price Endowed Fund for Student Travel - \$500	Summer 2019
	GSA Health Sciences Travel Award - \$250	Fall 2018
	Graduate & Professional Student Federation Travel Award - \$400	Spring 2018
Other Public Health Experience	Temporary Activity M&E Assistant MEASURE Evaluation Responsibilities: organized project implementation data and reports from the MIS; performed data entry, cleaning, and quality checks in the MIS to ensure up-to-date and accurate project information	July – September 2017
	Water Brigades Program Advisor/Program Developer Global Brigades – Ghana Coordinated groups of up to 35 volunteers, managed team of logistics staff, inspired group discussions, and encouraged and guided student discussions in rural Ghanaian communities; developed new program initiatives for volunteers including infrastructural water projects and educational initiatives in communities	December 2011 – October 2012
Professional Activities	Ad hoc Reviewer	
	<ul style="list-style-type: none"> Journal of the American Geriatrics Society British Medical Journal Open 	
	Member Interdisciplinary Association for Population Health Sciences	
	Member Society for Epidemiologic Research	
	Member Gerontological Society of America	
Skills	Software: SAS, R, ArcGIS, SatScan, GeoDa, MS Office Suite, MSAccess, Quicken, WordPress, Social Media platforms	
	Languages: English (native), Spanish (intermediate), Italian (beginner), German (beginner)	
	International study/volunteer/work experience in Ecuador, Spain, Italy, and Ghana	