

Brittany Lynn Kmush, PhD

Assistant Professor - Department of Public Health, Food Studies and Nutrition

Falk College of Sport and Human Dynamics, Syracuse University, 435C White Hall, Syracuse, New York 13244-3240, 315.443.1451, blkmush@syr.edu

Education

2016 - Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, PhD: Global Disease Epidemiology and Control. Dissertation: Risk Factors for Antibody Loss after Hepatitis E Virus Natural Infection and Vaccination (Alain B. Labrique, Advisor).

2011 - Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, ScM: Infectious Disease Epidemiology. Thesis: Hepatitis E Virus Infection and Micronutrient Deficiency in Pregnant Women from Rural Bangladesh.

2008 - University of Rochester, Rochester, NY, B.S. Biochemistry, Spanish Minor. Independent Research: Role of Maf-S in CNC-C Dependent Gene Expression in *Drosophila Melanogaster*.

Certifications

2011 - Certificate in Vaccine Science and Policy, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

2011 - Clinical Vaccine Trials and Good Clinical Practice, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

2010 - Hand Hygiene Observer, Johns Hopkins Medicine, Baltimore, MD

2010-2014 - Blood Borne Pathogens Training, Johns Hopkins Medicine, Baltimore, MD

2009-Present - Basic Human Subjects Research (CITI) Training, Johns Hopkins University School of Medicine, Baltimore, MD; Syracuse University, Syracuse, NY

Academic and Professional Positions

2016-Present, Assistant Professor, Public Health, Food Studies and Nutrition, Syracuse University, Syracuse, NY

2016, Adjunct Instructor, Public Health, Food Studies and Nutrition, Syracuse University, Syracuse, NY

2015-2016, Student Investigator, Centre for Child and Adolescent Health, International Centre for Diarrheal Disease Research, Bangladesh, Dhaka, Bangladesh

2015-2016, Student Investigator, National Institute for Diagnosis and Vaccine Development in Infectious disease, Xiamen University, Xiamen China

2010-2014, Graduate Research Assistant, Center for Human Nutrition, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

2008-2009, Laboratory Technician, Pulmonary/Critical Care Unit, University of Rochester Medical Center, Rochester, NY

Publications

Peer Reviewed Articles

In Print

Kmush BL, Zaman K, Yunus M, Saha P, Nelson KE, Labrique AB. A ten-year immunopersistence study of hepatitis E antibodies in rural Bangladesh. *American Journal of Epidemiology*. 2018 Mar 23. doi: 10.1093/aje/kwy044.

Nelson, KE, Heaney CD, **Kmush BL**. The Epidemiology and Prevention of Hepatitis E Virus Infection. *Current Epidemiology Reports*. 2017; 4:186-198.

Kmush BL, Labrique AB, Li W, Klein S, Schulze K, Shaikh S, Ali H, Engle RE, Wu L, Purcell RH, Christian P, West KP Jr., Nelson KE. The association of cytokines and micronutrients with Hepatitis E Virus infection during pregnancy in rural Bangladesh. *American Journal of Tropical Medicine and Hygiene*. 2016 Jan 6;94(1):203-11.

Press Coverage: <http://www.jhsph.edu/news/news-releases/2016/anemic-underweight-pregnant-women-at-greater-risk-for-deadly-hepatitis-e-study-suggests.html>

Heaney CD, **Kmush B**, Navas-Acien A, Francesconi K, Gossler W, Schulze K, Fairweather D, Mehra S, Nelson KE, Klein SL, Li W, Ali H, Shaikh S, Merrill RD, Wu L, West KP Jr, Christian P, Labrique AB. Arsenic exposure and hepatitis E virus infection during pregnancy. *Environmental Research*. 2015 Oct;142:273-80.

Kmush BL, Labrique AB, Dalton HR, Ahmed ZB, Ticehurst J, Heaney CD, Nelson KE, Zaman K. Two generations of “Gold Standards:” The impact of a decade in Hepatitis E virus testing innovation on population seroprevalence. *American Journal of Tropical Medicine and Hygiene*. 2015 Oct 7;93(4):714-7.

Press Coverage: <http://medicalresearch.com/hepatitis-liver-disease/new-test-suggests-hepatitis-e-may-be-widely-underestimated/19321/>

Izopet J, Labrique AB, Basnyat B, Dalton HR, **Kmush BL**, Heaney CD, Nelson KE, Saha SK, Ahmed ZB, Zaman K, Mansuy JM, Bendall R, Sauné K, Kamar N, Arjyal A, Karkey A, Dongol S, Prajapati KG, Adhikary D. Hepatitis E virus seroprevalence in three hyperendemic areas: Nepal, Bangladesh and southwest France. *Journal of Clinical Virology*. 2015 Sept;70:39-42.

Kmush BL, Nelson KE, Labrique AB. Risk factors for Hepatitis E Virus Infection and Disease. *Expert Reviews of Anti Infective Therapy*. 2015 Jan;13(1):41-53.

Rudolph KE, Lessler J, Moloney RM, **Kmush B**, Cummings DAT. Incubation periods of mosquito-borne viral infections: a systematic review. *American Journal of Tropical Medicine and Hygiene*. 2014 May;90(5):882-91.

Labrique AB, Zaman K, Hossain Z, Saha P, Yunus M, Hossain A, Ticehurst J, **Kmush B**, Nelson KE. Case Control Study of Risk Factors for Hepatitis E in Rural Bangladesh. *PLoS One*. 2013 May 13;8(5):e61351.

Kmush BL, Wierzba T, Krain L, Nelson K, Labrique AB. Epidemiology of Hepatitis E in Low and Middle Income Countries of Asia and Africa. *Seminars in Liver Disease*. 2013 Feb;33(1):15-29.

Nelson KE, **Kmush B**, Labrique AB. The epidemiology of hepatitis E virus infections in developed countries and among immunocompromised patients. *Expert Reviews of Anti Infective Therapy*. 2011 Dec;9(12):1133-48.

Lee FE, Halliley JL, Walsh EE, Moscatiello AP, **Kmush BL**, Falsey AR, Randal, TD, Kaminski DA, Miller RK, Sanz I. Circulating human antibody-secreting cells during vaccinations and respiratory viral infections are characterized by high specificity and lack of bystander effect. *Journal of Immunology*. 2011 May 1;186(9):5514-21.

Accepted or Under Review

Kmush BL, Yu H, Huang S, Zhang X, Wu T, Nelson KE, Labrique AB. Long Term Antibody Persistence after Hepatitis E Virus Infection and Vaccination in Dongtai, China. *American Journal of Tropical Medicine and Hygiene*. Under review 2018.

Schulze KJ, Mehra S, Shaikh S, Ali H, Shamim AA, Wu LSF, Mitra M, Arguello MA, **Kmush B**, Sungpuag P, Udomkesmelee E, Merrill R, Klemm RDW, Ullah B, Labrique AB, West KP Jr., Christian P. Effect of antenatal multiple micronutrient versus iron-folic acid supplementation on micronutrient status during pregnancy among women of rural Bangladesh: findings from the JiVitA-3 cluster randomized controlled trial. *The Journal of Nutrition*. Under review 2018.

Owora A, **Kmush BL**, Walia B, Sanders S. A systematic review of etiologic risk factors associated with early mortality among National Football League players. *Orthopaedic Journal of Sports Medicine*. Accepted 2018.

Book Chapters

Nelson KE, **Kmush BL**. "Viral Hepatitis E." *Scientific American Medicine*. Ed. Burakoff R. Hamilton: Decker Publishing, 2018.

Nelson KE, Labrique AB, **Kmush BL**. "Epidemiology of Genotype 1 and 2 Hepatitis E Virus Infections." *Enteric Hepatitis Viruses*. Ed. Lemon SM, Walker CM. New York: Cold Spring Harbor Laboratory Press, 2018. 243-56.

Nelson KE, **Kmush BL**. "Viral Hepatitis A." *Scientific American Medicine*. Ed. Burakoff R. Hamilton: Decker Publishing, 2018.

Non-Refereed Articles

Nelson KE, Heaney CD, Labrique AB, **Kmush BL**, Krain LJ. Hepatitis E- Prevention and treatment. *Current Opinion in Infectious Diseases*. 2016 Oct;29(5):478-85.

Labrique A, **Kmush B**. Hepatitis E: A Significant—and Preventable—Cause of Maternal Mortality. *Global Health Now*. <https://www.globalhealthnow.org/2016-03/hepatitis-e-significant-and-preventable-cause-maternal-mortality>. 2016 Mar 22.

Acknowledgements

Schulze, KJ, Christian P, Wu LSF, Arguello M, Cui Hongjie, Nanayakkara-Bind A, Stewart CP, Khatri SK, LeClecq A, West KP Jr. Micronutrient Deficiencies Are Common in 6- to 8-Year-Old Children of Rural Nepal, with Prevalence Estimates Modestly Affected by Inflammation. *The Journal of Nutrition*. 2014 June 1;144(6):979-87.

Signatory

Basnyat B, Dalton HR, Kamar N, Rein DB, Labrique A, Farrar J, Piot P. Nepali earthquakes and the risk of an epidemic of hepatitis E. *Lancet*. 2015 Jun 16.
Press Coverage: <http://www.jhsph.edu/news/news-releases/2015/experts-risk-of-hepatitis-e-outbreak-very-high-in-earthquake-ravaged-nepal.html>

Grant Funding

External Funding

Determinants of Immunological Persistence of Hepatitis E Virus Antibodies

Labrique AB (Principal Investigator), Kmush B (Student Investigator)
Bill and Melinda Gates Foundation
2014-2016

Arsenic and other metals: association with cytokine dysregulation and risk of Hepatitis E infection in pregnant women

Heaney CD (Principal Investigator), Kmush B (Graduate Research Assistant)
National Institute of Environmental Health Sciences
2012-2013

Hepatitis E: A Landscape Analysis of the Epidemiology and Control of an Emerging Pathogen

Labrique AB. (Principal Investigator), Kmush B (Graduate Research Assistant)
Bill and Melinda Gates Foundation
2012

Incidence and natural history of hepatitis E virus in pregnant Bangladeshi women

Labrique AB. (Principal Investigator), Kmush B (Student Investigator)
National Institute of Allergy and Infectious Diseases/National Institutes of Health

Epidemiology of Hepatitis E Virus infections in Rural Bangladesh

Nelson KE (Principal Investigator), Kmush B (Graduate Research Assistant)
National Institute of Allergy and Infectious Diseases/National Institutes of Health
2003-2007

Internal Funding

A Logistic Regression Analysis of Reported Concussion Risk among NCAA FBS Football Players

Kmush B (Principal Investigator)
Syracuse University Falk College Seed Grant
2018-2019 (\$4,666 total direct costs)

Cause of Death, Longevity, and career statistical characteristics among former NFL players: An empirical analysis using categorical and survival models

Sanders S. (Principal Investigator), Kmush B (Co-Investigator)
Syracuse University CUSE Innovative and Interdisciplinary Research Grant
2018-2020

Incidence of and Risk Factors for Early Mortality among National Football league Players, 1922-Present

Kmush B. (Principal Investigator)
Syracuse University Falk College Seed Grant
2017-2018 (\$7,500 total direct costs)

Correlates of Longevity among Former NCAA Football Players

Sanders S. (Principal Investigator), Kmush B (Co-Investigator)
Syracuse University Sport and Human Development Institute Seed Grant
2017-2018

Moderating Effects of Physiological and Socio-behavioral Characteristics on the SU Football Team Injuries and Performance: A Pilot Cohort Study

Owora A (Principal Investigator), Kmush B (Co-Investigator)
Syracuse University Falk College Seed Grant
2017-2018

Honors and Fellowships

Thesis Research Publication Award of the Department of International Health, Johns Hopkins Bloomberg School of Public Health (2018)
Delta Omega Honorary Society in Public Health Induction (2017)
Procter & Gamble Fellowship, Johns Hopkins School of Public Health (2016-2016) (2013-2014)
The Clements-Mann Fellowship Fund in Vaccine Sciences, Johns Hopkins School of Public Health (2015-2016)
Student Conference Fund Winner, Graduate Student Organization, Johns Hopkins School of Public Health (2015)
The David and Elinor Bodian Scholarship, Johns Hopkins School of Public Health (2014-2015)
Nancy Stephens Student Award, Johns Hopkins School of Public Health (2014-2015)
Student Employee of the Year Nominee, Johns Hopkins University (2014)
International Health Alumni Award, Johns Hopkins School of Public Health (2013-2014)
Departmental Tuition Scholarship, Johns Hopkins School of Public Health (2012-2016)
Master's Tuition Scholarship, Johns Hopkins School of Public Health (2010-2011)
Golden Key International Honour Society (2007)
National Society of Collegiate Scholars (2007)
Dean's List, University of Rochester (2004-2008)
Rush Rhees Scholarship, University of Rochester (2004-2008)
Shirley Rashap Memorial Scholarship (2004)
Steven M. Rothbard Foundation Scholarship (2004)
Helen Doran Philanthropic Scholarship Award (2004)
Edward J. Bloustein Distinguished Scholar (2004)

Presentations and Workshops

Presentations at Professional Meetings

Macfarlane S, Polhemus, M, **Kmush BL** (panelist), Leydet B. "Addressing infectious challenges to public health-from problem identification to treatment," New York State Biotechnology Symposium, May 2017, Syracuse, NY.

Kmush BL (chair), Nelson KE, Aggarwal R, Gurley E, Digilio L. "Strategies to Control Hepatitis E Virus, an emerging global pathogen," The 65th Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 13-17, 2016, Atlanta, GA.

Nelson KE, Labrique AB, **Kmush BL**, Aggarwal R, Dalton H, Kamar, N, Shih J, Wierzba T, "Hepatitis E Virus: A Neglected Cause of Vaccine-Preventable Mortality." The 63rd Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 2014, New Orleans, LA.

Kmush B (presenter), Heaney C, Navas-Acien A, Nelson K, West KP, Merrill R, Christian P, Schulze K, Shaikh S, Ali H, Francesconi K, Goessler W, Labrique A. The role of micronutrients in susceptibility to hepatotropic infections in low resource settings: a novel framework. International Vitamin Conference; May 10-12 2014; Washington, DC.

Labrique AB, Klein S, **Kmush B (presenter)**, Ali H, Engle R, Schulze K, et al. Immunologic dysregulation and micronutrient deficiencies associated with risk of intrapartum hepatitis E infections in pregnant Bangladeshi women. *Experimental Biology*; April 2012; San Diego, CA.

Presentations at Professional Meetings-Posters

Kmush BL (presenter), Neupane A, Mendez-Rodriguez CF, Dobens C, Iqbal M, Larsen DA. The association between community-level sanitation access and anemia in women age 15-49 years. American Society of Tropical Medicine and Hygiene. New Orleans, LA. November 2018.

Kmush BL (presenter), Ehrlich J, Owora A, Walia B, Sanders S. Preliminary Analysis of the Association between Mortality and Position among National Football League Players. Chronic Traumatic Encephalopathy Conference. Boston, MA. October 24-25, 2018. (in development).

Kmush BL (presenter), Abbott M, Lupone C, Heydari N, Cueva C, Beltran E, Polhemus M, Endy T, Stewart-Ibarra AM. Seroprevalence of Hepatitis E Virus in Machala, Ecuador. The International Symposium for Viral Hepatitis and Liver Disease, June 14-17, 2018; Toronto, Canada.

Kmush, BL (presenter), Shaikh S, Mehra S, Ali H, Nelson KE, West KP, Labrique AB. Low Prevalence of Antibody Persistence 6-15 years after Hepatitis E Virus Infection among Pregnant Women in Northern Bangladesh. The 66th Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 5-8, 2017: Baltimore, MD.

Kmush, BL (presenter), Wu, T, Aziz AB, Yu H, Nelson KE, Shih JWK, Zaman K, Labrique AB. Risk Factors for Antibody Loss after Hepatitis E Virus Natural Infection or Vaccination: Results of a Multi-site Cohort Study. The 65th Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 13-17, 2016: Atlanta, GA.

Kmush BL (presenter), Labrique AB, Dalton HR, Ahmed ZB, Ticehurst J, Heaney CD, Nelson KE, Zaman K. Two generations of "Gold Standards." The impact of a decade in Hepatitis E virus testing innovation on population seroprevalence. The International Symposium for Viral Hepatitis and Liver Disease, June 26-28, 2015; Berlin, Germany.

Izopet J, Labrique AB, Basnyat B, Dalton HR, **Kmush BL (presenter)**, Heaney CD, Nelson KE, Saha SK, Ahmed ZB, Zaman K, Mansuy JM, Bendall R, Sauné K, Kamar N, Arjyal A, Karkey A, Dongol S, Prajapati KG, Adhikary D. Hepatitis E virus seroprevalence in three hyperendemic areas: Nepal, Bangladesh and southwest France. The International Symposium for Viral Hepatitis and Liver Disease, June 26-28, 2015; Berlin, Germany.

Labrique AB, Heaney CD, **Kmush B (presenter)**, Nelson K. A novel framework for understanding susceptibility to hepatotropic infections in low resource settings. The Liver Meeting: The 64th Annual Meeting of the American Association for the Study of Liver Diseases, November 1-5, 2013; Washington, DC.

Kmush B (presenter), Labrique AB, Klein S, Li W, Ali H, Engle RE, et al. Seroincidence of intrapartum hepatitis E virus infections and micronutrient status in pregnant Bangladeshi women between 2001 and 2010. Proceedings of Hepatitis E in the United States: An NIH research workshop, March 26, 2012; Bethesda, MD.

Labrique AB, Klein S, **Kmush B**, Ali H, Engle RE, Schulze K, et al. Hepatitis E, pigs and pregnancy: Recognizing the global threat of an emerging pathogen. Proceedings of Hepatitis E in the United States: An NIH research workshop, March 26, 2012; Bethesda, MD.

Labrique AB, Klein SA, **Kmush B**, Ali H, Engle RE, Schulze K, West KP, Jr., Purcell RH, Nelson KE. Hepatitis E, Pigs and Pregnancy: Recognizing the global threat of an emerging pathogen. 2nd Xiamen Winter Symposium: Major Infectious Viral Diseases in Asia, 2012; Xiamen, China.

Labrique AB, **Kmush B (presenter)**, Klein S, Schulze K, Ali H, Engle RE, et al. In: Immune function and micronutrient status of pregnant women infected by hepatitis E virus in Bangladesh between 2001 and 2010. 60th Annual meeting of the American Society of Tropical Medicine and Hygiene, December 4-8, 2011; Philadelphia, PA.

Labrique AB, Klein SA, **Kmush B**, Ali H, Engle RE, Schulze K, West KP, Jr., Purcell RH, Nelson KE. Hepatitis E: New threats of an emerging disease. The Liver Meeting (AASLD), 2011; San Francisco, CA.

Labrique AB, **Kmush B**, Engle RE, Schulze K, West K, Purcell R, Nelson K. Incidence of intrapartum hepatitis E virus infections in two large prospective cohorts of pregnant Bangladeshi women between 2001 and 2010. Infectious Diseases Society of America Annual Meeting, 2011; Boston, MA.

Labrique AB, **Kmush B (presenter)**, Engle RE, Schulze K, West KP Jr., Purcell RH, Nelson KE. Seroincidence of intrapartum hepatitis E virus infections declines in pregnant Bangladeshi women between 2001 and 2010. 3rd North American Congress of Epidemiology, June 21-24, 2011; Montreal, Canada.

Labrique AB, **Kmush B**, Ali H, Engle RE, Schulze K, West KP Jr., Purcell RH, Nelson KE. Seroincidence of intrapartum hepatitis E virus infections in pregnant Bangladeshi women between 2001 and 2010. 2011 DMID International Research in Infectious Diseases (IRID) Annual Meeting, May 31-June 2, 2011; Bethesda, MD.

Lee, F. E., Halliley, J. L., Falsey, A. R., Feng, C., **Kmush, B.**, Walsh, E. E., Sanz, I. Novel method for diagnosing microbial infections with a blood antibody secreting cell assay: The "MicroBspot". 12Th Annual Upstate NY Immunology Conference, October 2009; Bolton Landing, NY.

University and Community Presentations

Kmush B. Hepatitis E Virus: A neglected and under-estimated cause of maternal mortality. Upstate University Ob/Gyn Grand Rounds; October 5, 2018. Syracuse, New York.

Kmush B. Using video recording to enhance student learning. Summer Institute for Technology Enhanced Teaching and Learning. Syracuse University. May 22 and June 9, 2018. Syracuse, NY.

Educational Contributions

Courses Taught

Undergraduate Courses

Syracuse University, Syracuse, NY
Epidemiology (HTW 401), 2016-Present

Graduate Courses

Syracuse University, Syracuse, NY
Research Methods in Public Health (HTW 621), 2017-Present
Research Proposal Development (HTW 622), 2018-Present,
Ethical Issues in Public Health (HTW 623), 2018-Present.

Student Supervision

Falk Student Research Celebration Undergraduate Research Poster Winners (2017): A Neupane, CF
Mendez Rodriguez, C Dobens, M Iqbal. Maternal Anemia & Community Level Sanitation.

Andrew Perry, Justin Thierry, Taylor Spillane

Master Thesis Committees

Taylor Spillane (Primary Mentor)
Thesis Title: Hepatitis E virus seroprevalence and risk factors in Machala Ecuador (December 2018)

Ivan Castro (Committee Member)
Thesis Title: Spatial Clustering of Vacant Properties in Syracuse, NY: A source of background Lead (Pb) Exposure (May 2018)

MPH Practicum Supervisor

Alicia Reyes

Guest Lectures

HTW668 Applied Epidemiology in Global Health (September 2018), Syracuse University Falk College of Sport and Human Dynamics, Syracuse, NY

Lecture Title: Hepatitis E Virus: A neglected and under-estimated cause of maternal mortality

EHS 250 Foundations of Environmental Health (September 2018), State University of New York, College of Environmental Science and Forestry, Syracuse, NY

Lecture Title: Hepatitis E Virus: A neglected and under-estimated cause of maternal mortality

PAS 515 Counseling and Public Health (July 2018), Le Moyne College, Syracuse, NY

Lecture Title: Epidemiology

HTW463/663 Global Health (February 2017), Syracuse University Falk College of Sport and Human Dynamics, Syracuse, NY

Lecture Title: Maternal Mortality

National Institute for Diagnosis and Vaccine Development in Infectious diseases, School of Public Health, Xiamen University, Xiamen, China. (April 2015)

Lecture Title: The Epidemiology of Hepatitis E Virus.

Training

Workshops

Summer Institute for Technology-Enhanced Teaching and Learning (2017), Syracuse University, Syracuse, NY

Group Learning Techniques (2017), Syracuse University, Syracuse, NY

Making Epi fun for Undergrads (2017), Syracuse University, Syracuse, NY

Classroom Assessment Techniques Workshop (2016), Syracuse University, Syracuse, NY

Creating & Delivering Accessible PowerPoint Presentations Workshop (2016), Syracuse University, Syracuse, NY

Teaching Assistantships

PH.223.705.81 Clinical Vaccine Trials and Good Clinical Practice (online course) (2012-2014), Johns Hopkins School of Public Health, Baltimore, MD

PH.223.663 Infectious Diseases and Child Survival (2013), Johns Hopkins School of Public Health, Baltimore, MD

PH.223.662.81 Vaccine Development and Application (online course) (2011), Johns Hopkins School of Public Health, Baltimore, MD

PH.223.662 Vaccine Development and Application (2010-2011), Johns Hopkins School of Public Health, Baltimore, MD

Professional Service

Ad Hoc Reviewer

American Journal of Tropical Medicine and Hygiene
Emerging Infectious Diseases
Epidemiology and Infection
Jones & Bartlett Learning
Journal of Clinical Virology
Journal of Epidemiology and Global Health
Human Immunology

Leadership and Society Membership

Member, American Society of Tropical Medicine and Hygiene. (2016-Present)
Student Representative, Global Disease Epidemiology and Control Faculty Retreat. (2013)
Member, JHU Hepatitis E Research Group. (2012-2016)
Executive Planning Student Committee, Consortium of Universities for Global Health. (2012-2013)
Member, International Health Student Group. (2011-2016)
Member, Epidemiology Student Organization. (2009-2011)

Community Service

Youth and Adult Group Leader, Ambassador and Volunteer, Appalachia Service Project, Various locations throughout Central Appalachia, 2007-2007, 2011-Present.

Bell Choir, Fayetteville United Methodist Church, Fayetteville, NY (2015-2016)

Vacation Bible School, Immaculate Conception Parish, Fayetteville, NY. (2015)

Students Teaching And Reaching Students (STARS), Baltimore, MD. (2009-2011)

Flower City Soccer League, Rochester, NY. (2008-2009)