

Marie Nancy Séraphin

Research Assistant Professor
Division of Infectious Diseases and Global Medicine
Department of Medicine
College of Medicine
University of Florida

2055 Mowry Road, Suite 250
Gainesville FL, 32611
352-273-9584 (Tel)
352-273-9275 (Fax)
nseraphin@ufl.edu

Education

- 08/2016 PhD, Epidemiology
University of Florida (Gainesville, FL)
Advisor: J. Glenn Morris, Jr.
- 01/2010 MPH, Epidemiology and Global Health
Boston University School of Public Health (Boston, MA)
- 12/2007 BA, Biology and Sociology
University of Miami (Coral Gables, FL)
- 04/2005 AA, Biology
Magna Cum Laude with Distinction
Miami Dade College, The Honors Program (Miami, FL)

Positions

- 02/2019 – present Research Assistant Professor
- 08/2016 – 02/2019 Postdoctoral Research Associate
Division of Infectious Diseases and Global Medicine
Emerging Pathogens Institute
University of Florida (Gainesville, FL)
- 08/2017 – 12/2017 Adjunct Lecturer
Department of Epidemiology
University of Florida (Gainesville, FL)
- 08/2013 – 08/2016 Graduate Research Assistant
Division of Infectious Diseases and Global Medicine
Emerging Pathogens Institute
University of Florida (Gainesville, FL)
- 01/2012 – 06/2014 Graduate Research Assistant
Department of Epidemiology
University of Florida (Gainesville, FL)
- 01/2010 – 05/2012 Monitoring and Evaluation Officer
St. Boniface Hospital (Fond des Blancs, Haiti)
Health Equity International (Newton, MA)

Funding

- 07/2021 – 06/2026 NIH/NIAID K01AI153544 (PI: Séraphin)
Linking within- and between-host dynamics in tracking recent
Mycobacterium tuberculosis transmission
Role: Principal Investigator

- 07/2021 – 06/2022 UF-CTSI Precision Public Health Pilot Grant (PI: Séraphin)
The within- and between-host dynamics of *Mycobacterium tuberculosis*
Role: Principal Investigator
- 09/2011 – 09/2021 DHHS/CDC Contract # 200-2011-41272 (PI: Michael Lauzardo)
The Tuberculosis Epidemiologic Studies Consortium II (TBSC-II)
Role: co-Principal Investigator
- 06/2018 – 06/2020 UF-CTSI KL2TR001429 (PI: Thomas Pearson)
Anti-Tuberculosis drug pharmacokinetics: the role of the gut microbiome
Role: Principal Investigator/Trainee
- 07/2017 – 06/2018 UF-CTSI Pilot funding (PI: Séraphin)
Post-immigration return trips and tuberculosis disease risk among persons
of Haitian descent in Florida
Role: Principal Investigator

Publications

1. Ayoya MA, Ngnie-Teta I, **Séraphin MN**, Mamadoulaibou A, Boldon E, Saint-Fleur JE, Koo L, Bernard S. Prevalence and Risk Factors of Anemia among Children 6-59 Months Old in Haiti. *Anemia*. 2013;2013:502968. PMID: PMC3608103
2. Chapman HJ, Phillips SA, Hosford JL, **Séraphin MN**, Lauzardo M. Is the Beijing strain of *Mycobacterium tuberculosis* associated with cavitary lung disease? *Infect Genet Evol J Mol Epidemiol Evol Genet Infect Dis*. 2015 Jul;33:1–5. PMID: 25891279
3. **Séraphin MN**, Lauzardo M. *Mycobacterium tuberculosis* complex transmission is not associated with recent immigration (≤ 5 years) in Florida. *Infect Genet Evol J Mol Epidemiol Evol Genet Infect Dis*. 2015 Dec;36:547–551. PMID: 26325684
4. **Séraphin MN**, Ngnie-Teta I, Ayoya MA, Khan MR, Striley CW, Boldon E, Mamadoulaibou A, Saint-Fleur JE, Koo L, Clermont M. Determinants of institutional delivery among women of childbearing age in rural Haiti. *Matern Child Health J*. 2015 Jun;19(6):1400–1407. PMID: 25418752
5. **Séraphin MN**, Lauzardo M, Doggett RT, Zabala J, Morris JG, Blackburn JK. Spatiotemporal Clustering of *Mycobacterium tuberculosis* Complex Genotypes in Florida: Genetic Diversity Segregated by Country of Birth. *PloS One*. 2016;11(4):e0153575. PMID: PMC4836742
6. **Séraphin MN**, Xinguang C, Ayoya MA, Ngnie-Teta I, Boldon E, Mamadoulaibou A, Saint-Fleur JE, Pierre I. Childhood anemia in Rural Haiti: the potential role of community health workers. *Glob Health Res Policy*. 2017;2:3. PMID: PMC5683206
7. **Séraphin MN**, Doggett R, Johnston L, Zabala J, Gerace AM, Lauzardo M. Association between *Mycobacterium tuberculosis* lineage and site of disease in Florida, 2009-2015. *Infect Genet Evol J Mol Epidemiol Evol Genet Infect Dis*. 2017;55:366–371. PMID: 28993293
8. Munro-Rojas D, Fernandez-Morales E, Zarrabal-Meza J, Martínez-Cazares MT, Parissi-Crivelli A, Fuentes-Domínguez J, **Séraphin MN**, Lauzardo M, González-Y-Merchand JA, Rivera-Gutierrez S, Zenteno-Cuevas R. Genetic diversity of drug and multidrug-

resistant Mycobacterium tuberculosis circulating in Veracruz, Mexico. PloS One. 2018;13(3):e0193626. PMID: PMC5854261

9. Scheidell JD, Beau De Rochars VM, **Séraphin MN**, Hobbs MM, Morris JG, Célestin JP, Cottler LB, Khan MR. Socioeconomic Vulnerability and Sexually Transmitted Infection Among Pregnant Haitian Women. Sex Transm Dis. 2018 Sep;45(9):626–631. PMID: PMC6086731
10. **Séraphin MN**, Didelot X, Nolan DJ, May JR, Khan MSR, Murray ER, Salemi M, Morris JG, Lauzardo M. Genomic Investigation of a Mycobacterium tuberculosis Outbreak Involving Prison and Community Cases in Florida, United States. Am J Trop Med Hyg. 2018 Oct;99(4):867–874. PMID: PMC6159577
11. **Séraphin MN**, Hsu H, Chapman HJ, de Andrade Bezerra JL, Johnston L, Yang Y, Lauzardo M. Timing of treatment interruption among latently infected tuberculosis cases treated with a nine-month course of daily isoniazid: findings from a time to event analysis. BMC Public Health. 2019 Sep 3;19(1):1214. PMID: 31481046
12. **Séraphin MN**, Norman A, Rasmussen EM, Gerace AM, Chiribau CB, Rowlinson M-C, Lillebaek T, Lauzardo M. Direct transmission of within-host Mycobacterium tuberculosis diversity to secondary cases can lead to variable between-host heterogeneity without de novo mutation: A genomic investigation. EBioMedicine. 2019 Aug 13; PMID: 31420303
13. Asare-Baah M, **Séraphin MN**, Salmon LAT, Lauzardo M. Effect of mixed strain infections on clinical and epidemiological features of tuberculosis in Florida. Infect Genet Evol J Mol Epidemiol Evol Genet Infect Dis. 2021 Jan;87:104659. PMID: PMC7855629

(As part of TBESC – Role Site Principal Investigator)

14. Stout JE, Wu Y, Ho CS, Pettit AC, Feng P-J, Katz DJ, Ghosh S, Venkatappa T, Luo R, Tuberculosis Epidemiologic Studies Consortium. Evaluating latent tuberculosis infection diagnostics using latent class analysis. Thorax. 2018;73(11):1062–1070. PMID: 29982223
15. Ahmed A, Feng P-JI, Gaensbauer JT, Reves RR, Khurana R, Salcedo K, Punnoose R, Katz DJ, TUBERCULOSIS EPIDEMIOLOGIC STUDIES CONSORTIUM. Interferon- γ Release Assays in Children <15 Years of Age. Pediatrics. 2020;145(1). PMID: 31892518
16. Pettit AC, Stout JE, Belknap R, Benson CA, **Séraphin MN**, Lauzardo M, Horne DJ, Garfein RS, Maruri F, Ho CS, Tuberculosis Epidemiologic Studies Consortium (TBESC). Optimal testing choice and diagnostic strategies for latent tuberculosis infection among U.S.-born people living with HIV. Clin Infect Dis Off Publ Infect Dis Soc Am. 2020 Aug 6; PMID: 32761083
17. Ho CS, Feng P-JI, Narita M, Stout JE, Chen M, Pascopella L, Garfein R, Reves R, Katz DJ, Tuberculosis Epidemiologic Studies Consortium. Comparison of three tests for latent tuberculosis infection in high-risk people in the USA: an observational cohort study. Lancet Infect Dis. 2021 Sep 6;S1473-3099(21)00145–6. PMID: 34499863

(Non-Refereed Publications)

18. **Séraphin MN.** Behavioral adaptation of *Anopheles funestus* to long-lasting insecticide-treated nets. *J Infect Dis.* 2013 Apr;207(7):1184. PMID: 23307935
19. **Séraphin MN.** Cotrimoxazole as a potential effect modifier of the association between vitamin D status and risk of opportunistic infection among HIV-infected Tanzanian adults. *J Infect Dis.* 2013 May 15;207(10):1623. PMID: 23440473

Presentations

Oral Presentations

1. **Séraphin MN,** Doggett R, Johnston L, Zabala J, Lauzardo M. Population Structure and Clinical Presentation of Pediatric *Mycobacterium tuberculosis* in Florida, 2009-2016. Oral Presentation at the 38th Annual Congress of the European Society of Mycobacteriology, June 25-28, 2017.
2. **Séraphin MN,** May RJ, Khan M, Nolan DJ, Morris JG, Salemi M, Lauzardo M. Whole Genome Sequencing of *Mycobacterium tuberculosis* for the Investigation of a Tuberculosis Outbreak Involving Prison and Community Cases in Florida, USA. Oral Presentation at the 37th Annual Congress of the European Society of Mycobacteriology, July 3-6, 2016.
3. **Séraphin MN,** Abernathy AM, Doggett RT, Morris JG, Lauzardo M. Description of the Population Structure and Genetic Diversity of *M. tuberculosis* among Patients of Haitian Origin Living in Florida. Oral Presentation at the 64th Annual Meeting of the American Society of Tropical Medicine and Hygiene, October 25-29, 2015.

Poster Presentations

4. **Séraphin MN,** Bellot JR, Ukhanova M, Saulsberry G, Peloquin C, Morris, Jr. JG, and Mai V. Longitudinal profiling of the gut microbiome during and after rifamycin-based therapy for latent tuberculosis infection. Poster presentation Translational Science 2021.
5. **Séraphin MN,** Ashkin D, Johnston L, Rowlinson MC, Ashe D, Lauzardo M. Anti-tuberculosis treatment initiation within seven days of respiratory sample collection: the utility of the nucleic acid amplification test (NAAT) compared to acid-fast smear microscopy. Poster presentation at the 40th Annual Congress of the European Society of Mycobacteriology, 30 June – 3 July 2019.
6. **Séraphin MN,** Rasmussen EM, Norman A, Gerace A, Lillebaek T, Lauzardo M. Intra-host Genetic Variability of *Mycobacterium tuberculosis* in a patient with pansusceptible tuberculosis. Poster presentation at the 39th Annual Congress of the European Society of Mycobacteriology, July 1-4, 2018.
7. **Séraphin MN,** Lauzardo M, Doggett RT, Zabala J, Morris JG, Blackburn JK. Spatiotemporal Clustering of *Mycobacterium tuberculosis* Complex Genotypes in Florida: Evidence for Transmission Segregated by Country of Origin. Poster presentation at the Fifth International Conference on Infectious Disease Dynamics, Clearwater, FL, December 1-4, 2015.

Teaching

University of Florida College of Public Health and Health Professions

Guest Lectures

PHC 3440: Global Public Health (Spring, 2018 – 2020)

Lecture Title: Tuberculosis Epidemiology – a Global Perspective

Instructor

PHC 6001: Principles of Epidemiology (Fall, 2017)

Guest Lectures

PHC 6517: Public Health Concepts in Infectious Diseases (Fall, 2016 – 2020)

Lecture Title: Molecular Epidemiology of Tuberculosis

Teaching Assistant

PHC 6000: Epidemiology Methods I (Spring, 2016)

Co-Instructor

PHC 6001: Principles of Epidemiology (online asynchronous, Fall, 2015)

PHC 4101: Public Health Concepts (Fall, 2014)

PHC 6001: Principles of Epidemiology (Fall, 2013)

Mentorship Roles (Since 08/2016)

Mentoring or Advising of degree candidates

Student	Year	Degree	Major	Role
M Asare-Baah	2020 – 2024	PhD	Epidemiology	Research Advisor

Research mentor for scholarly research projects

Student	Year	Topic	Publications
M Asare-Baah	2019 – 2020	<i>Mycobacterium tuberculosis</i> mixed strain infection and association with tuberculosis mortality in Florida	MPH thesis Pub #13
L Laytner	2019	Understanding livestock ownership, dietary diversity, and animal source food consumption, and the environmental and spatial determinants of nutrition status in children under five in rural southern Haiti	PhD dissertation
A Gerace	2017 – 2018	In-host microevolution of <i>Mycobacterium tuberculosis</i>	MS thesis Pub # 12
H Hsu	2017 – 2018	The epidemiology of latent tuberculosis infection	MPH thesis Pub # 11

Service to the Profession

Memberships

European Society of Mycobacteriology 2016 – present
Society for Epidemiologic Research 2018 – present
American Society of Tropical Medicine and Hygiene 2017 – present
American Society for Microbiology 2021 – present
Association for Clinical and Translational Science,
Biostatistics, Epidemiology, and Research Design (BERD) 2020 - present

Peer Reviewer

BMC Pregnancy and Childbirth
BMC Microbiology
Clinical Infectious Diseases
The International Journal of Tuberculosis and Lung Disease
PeerJ
PLOS ONE
Virulence
BMC Research Notes (Associate Editor)
NIAID (Grant Applications)

Professional Service and Leadership

Miami-Dade College, The Honors College Alumni Advisory Committee	2021 – present
Southern Sudan Healthcare Organization (SSHCO), Public Health Advisor	2020 – 2021
University Multicultural Mentor Program (UMMP)	2019 – present

Honors and Awards

07/2021	Southern Conference Visiting Faculty Travel Grant
07/2019 – 06/2022	NIH/NIAID Loan Repayment Award, Clinical Research
11/2018	Global Fellow Program Award, UF Office of Global Research Engagement (OGRE)
07/2018	Best Poster Prize, 39 th Annual Congress of the European Society of Mycobacteriology
06/2017	Maximizing Access to Research Careers (MARC) Program Travel Award
2016	Most Outstanding Research Award, Department of Medicine Research Day
2016	Clinic on Meaningful Modeling of Epidemiologic Data, Travel Grant
2015	American Society of Tropical Medicine and Hygiene, Global Health Student Travel Award
2013 – 2016	Epidemiology Department Chair's Travel Award, University of Florida
2013	Outstanding Research Award, University of Florida College of Public Health and Health Professions Research Fair

Certifications

07/2021	UF Certificate in Multicultural Mentoring
12/2020	UF Team Science Academy
06/2019	NIH Principles of Clinical Pharmacology

Other Skills and Experiences

Programming: R, SAS, Mplus, Python (intermediate)

Languages: Haitian Creole, French, Spanish, Italian, Portuguese (beginner)

Field Epidemiology

- Leogane, Haiti (2013 – 2014): Helped translate protocols, questionnaires, and consent forms from English to Haitian Creole; helped hire and train Haitian nationals in the responsible conduct of research; coordinated data collection and processing of urine and vaginal swabs for a cross-sectional study of sexually transmitted infections in Haitian pregnant women (pub # 9).

- Fond des Blancs, Haiti (2011): Hired, trained, and supervised Haitian nationals for a baseline survey in preparation for the implementation of a UNICEF-funded project to improve maternal-child health outcomes in Southern Haiti (pub # 1,4 and 6).