

CURRICULUM VITAE: Professor ANNA MARIA MANDALAKAS, MD, PhD

Personal Information

Full Name: Anna Maria Mandalakas
Citizenship: United States

Education

Case Western Reserve University 1986-1990 BA Medical Anthropology
Cleveland, Ohio, USA

Hahnemann University SOM 1990-1994 Doctor of Medicine
Philadelphia, Pennsylvania, USA

Case Western Reserve University 1997-2000 Masters of Epidemiology
Cleveland, Ohio, USA

Thesis: Factors Mediating the Transmission and Development of Tuberculosis in Pediatric Household Contacts – Kampala, Uganda

Stellenbosch University 2010-2015 Doctor of Philosophy
Stellenbosch, W Cape, South Africa

Thesis: A conceptual framework for childhood tuberculosis within which to study the impact of a preventive therapy programs in high burden communities

Rainbow Babies & Children's Hospital 1997-2000 International Child Health Fellowship
Case Western Reserve University 1995-1997 Pediatric Residency
Cleveland, Ohio 1994-1997 Pediatric Internship

Academic Appointments

Current Faculty Positions

Baylor College of Medicine, Houston, Texas

Professor of Pediatrics 2018 - present
Member of the National School of Tropical Medicine 2012 - present
Associate Professor of Pediatrics 2012 - 2018

Texas Children's Hospital

Chief, Section of Global and Immigrant Health 2015 - present
Director, Global Tuberculosis Program 2012 – present

University of Texas School of Public Health, Houston, Texas

Adjunct Professor, Epidemiology 2018 - present

Research Center Borstel, Leibniz Lung Center, Borstel, Germany

Guest Professor, Clinical Infectious Diseases; Leibniz Chair 2022 - present

Previous Faculty Positions

Case Western Reserve University SOM, Cleveland, Ohio

Associate Professor of Pediatrics, Global Health & Diseases, 2009 - 2011
and Epidemiology & Biostatistics

Assistant Professor of Pediatrics, Global Health & Diseases, 2004 – 2009
and Epidemiology & Biostatistics

Instructor of Pediatrics 2000 – 2004

Stellenbosch University, Tygerberg, South Africa

Associate Professor Extraordinary in Paediatrics and Child Health 2009 - 2013

Other Experiences & Advanced Training

Fulbright Senior Scholar to South Africa 2010 - 2011
Sponsored by the United States Department of State

Mentored Clinical Research Career Development Award (K23) 2001 - 2006
Sponsored by the US National Institutes of Health

Honors and Awards

Clara Southmayd Ludlow Medal, American Society of Tropical Med	2022
Leibnitz Chair, Research Center Borstel, Germany	2022
Table Talk, Houston Women's Leadership Forum	2022
Pediatric Academic Society membership	2020
100 Woman Leaders in Global Health, Graduate Institute Geneva	2014
Burtris Burr Breese Award, Pediatric Infectious Disease Society	2009
Tenure, Case Western Reserve University	2009
NIH – Pediatric Loan Repayment	2001-2006
Triad Advocate of the Year, Adoption Network Cleveland	2003
APA, Young Investigator Award (Association funds)	2001
APA, Young Investigator Award (AHRQ funds)	2001

Current Signature Projects

<u>Fogarty International Center</u> (D43TW012274)	2022 – 2027
• INSIGHT: Integrated Networks of Scholars in Global Health Research Training	
• Role: Baylor PI (overall PI: Charurat); Annual Directs: 287K Baylor/ 1 million total	
<u>Fogarty International Center</u> (1 D43 TW011547)	2021 – 2026
• Siyakhula: Growing HIV/TB Research Knowledge for Growing Healthy Kids in Eswatini	
• Role PI: Anna Mandalakas; Annual Directs: 280K	
<u>US Center for Disease Control</u> (1 U01GH002278-01-00)	2020 – 2025
• Closing TB GAPs - for PLHIV: TB Guidance for Adaptable Patient-Centered Service	
• Role PI: Anna Mandalakas; Annual Directs: 692K	
<u>National Institute of Health</u> (R01 AI137527)	2019 – 2024
• Quantifiable stool-based TB PCR to Improve Diagnostics and Treatment Monitoring	
• Role PI: Anna Mandalakas; Annual Directs: 520K	

Key Indicators Cumulative IF (lifetime): >2400 H-index (Google Scholar): 32

Signature Publications (*of >135 publications, 3 books, 9 chapter*)

1. Sibandze DB, Kay A, Dreyer V, Sikhondze W, Dlamini Q, DiNardo A, Mtetwa G, Lukhele B, Vambe D, Lange C, Glenn Dlamini M, Ness T, Mejia R, Kalsdorf B, Heyckendorf J, Kuhns M, Maurer FP, Dlamini S, Maphalala G, Niemann S, **Mandalakas A**. Rapid molecular diagnostics of tuberculosis resistance by targeted stool sequencing. *Genome Med.* 2022 May 19;14(1):52. PMID: 35585607
2. DiNardo AR, Gandhi T, Heyckendorf J, Grimm SL, Rajapakshe K, Nishiguchi T, Reimann M, Kirchner HL, Kahari J, Dlamini Q, Lange C, Goldmann T, Marwitz S; DZIF-TB cohort study group, Abhimanyu, Cirillo JD, Kaufmann SH, Netea MG, van Crevel R, **Mandalakas AM***, Coarfa C*. Gene expression signatures identify biologically and clinically distinct tuberculosis endotypes. *Eur Respir J.* 2022 Feb 15:2102263. Online ahead of print. PMID: 35169026
3. Lange C, Aaby P, Behr MA, Donald PR, Kaufmann SHE, Netea MG, **Mandalakas AM**. 100 years of *Mycobacterium bovis* bacille Calmette-Guérin. *Lancet Infect Dis.* 2022 Jan;22(1):e2-e12. Epub 2021 Sep 7. PMID: 34506734
4. Kay AW, Sandoval M, Mtetwa G, Mkhabela M, Ndlovu B, Devezin T, Sikhondze W, Vambe D, Sibanda J, Dube GS, Stevens RH, Lukhele B, **Mandalakas AM**. Vikela Ekhasya: a novel, community-based, tuberculosis contact management program in a high burden setting. *Clin Inf Dis.* 2022 May 3;74(9):1631-1638. PMID: 34302733
5. Vonasek B, Ness T, Takwoingi Y, Kay AW, van Wyk SS, Ouellette L, Marais BJ, Steingart KR, **Mandalakas AM**. Screening tests for active pulmonary tuberculosis in children. *Cochrane Database Syst Rev.* 2021 Jun 28;6(6):CD013693. PMID: 34180536

6. **Mandalakas AM**, Hesselning AC, Kay A, Du Preez K, Martinez L, Ronge L, DiNardo A, Lange C, Kirchner HL. Tuberculosis prevention in children: a prospective community-based study in South Africa. *Eur Respir J*. 2021 Apr 22;57(4):2003028. PMID: 33122339
7. Vonasek B, Kay A, Devezin T, Bacha JM, Kazembe P, Dhillon D, Dlamini S, Haq H, Thahane L, Simon K, Matshaba M, Sanders J, Minde M, Wanless S, Nyasulu P, **Mandalakas AM**. Tuberculosis symptom screening for children and adolescents living with HIV in six high HIV/TB burden countries in Africa. *AIDS*. 2021 Jan 1;35(1):73-79. PMID: 33048868.
8. **Mandalakas AM**, Kay A, Bacha JM, Devezin T, Golin R, Simon KR, Dhillon D, DiNardo A, Matshaba M, Sanders J, Thahane L, Amuge PM, Ahmed S, Sekadde MP, Fida NG, Lukhele D, Chidah N, Damba D, Mhango J, Chodota M, Matsoso M, Kayabu A, Wanless S, Schutze GE. Tuberculosis among Children and Adolescents at HIV Treatment Centers in Sub-Saharan Africa. *Emerg Infect Dis*. 2020 Dec; 26(12):2933-43. PMID 33219815
9. **Mandalakas AM**, Hesselning AC, Kay A, Du Preez K, Martinez L, Ronge L, DiNardo A, Lange C, Kirchner HL. Tuberculosis prevention in children: A prospective community based study in South Africa. *Eur Respir J*. 2020 Oct 29:2003028. PMID: 33122339
10. Kay AW, González Fernández L, Takwoingi Y, Eisenhut M, Detjen AK, Steingart KR, **Mandalakas AM**. Xpert MTB/RIF and Xpert MTB/RIF Ultra assays for active tuberculosis and rifampicin resistance in children. *Cochrane Database Syst Rev*. 2020 Aug 27;8(8):CD013359. doi: 10.1002/14651858.CD013359.pub2. PMID: 32853411
11. DiNardo A, Rajapakshe K, Nishiguchi T, Mtetwa G, Grimm SL, Dlamini Q, Kahari J, Mahapatra S, Kay AW, Maphalala G, Mace EM, Makedonas G, Cirillo JD, Netea M, van Crevel R, Coarfa C, **Mandalakas AM**. DNA hyper-methylation during Tuberculosis dampens host immune responsiveness. *J Clin Invest*. 2020 Mar 3. pii: 134622. doi: 10.1172/JCI134622. [Epub ahead of print] PMID:32125282
12. Detjen AK, DiNardo AR, Leyden J, Steingart KR, Menzies D, Schiller I, Dendukuri N, **Mandalakas AM**. *Xpert MTB/RIF assay for the diagnosis of pulmonary tuberculosis in children: a systematic review and meta-analysis*. *The Lancet Respiratory Medicine*. 2015 Mar 23. PubMed PMID: 25812968.
13. **Mandalakas AM**, Kirchner HL, Walzl G, Gie RP, Schaaf HS, Cotton MF, Grewal HM, Hesselning AC. *Optimizing the Detection of Recent Tuberculosis Infection in Children in a High Tuberculosis-HIV Burden Setting*. *American journal of respiratory and critical care medicine*. 2015 Apr 1;191(7):820-30. PubMed PMID: 25622087.
14. **Mandalakas AM**, van Wyk S, Kirchner HL, Walzl G, Cotton M, Rabie H, Kriel B, Gie RP, Schaaf HS, Hesselning AC. *Detecting TB Infection in HIV-infected Children: a study of diagnostic accuracy, confounding and interaction*. *Pediatr Infect Dis J*. 2013 Mar;32(3):e111-8. PMID: 23190784
15. **Mandalakas AM**, Hesselning AC, Gie RP, Schaaf HS, Marais BJ, Sinanovic E. *Modeling the cost-effectiveness of strategies to prevent tuberculosis in child contacts in a high-burden setting*. *Thorax*. 2013 Mar;68(3):247-55. PMID: 22717944
16. **Mandalakas AM**, Kirchner HL, Lombard CL, Walzl G, Grewal HMS, Gie RP, Hesselning AC. *Well Quantified Tuberculosis Exposure is a Reliable Surrogate Measure of Tuberculosis Infection in Children*. *International Journal of Tuberculosis and Lung Disease*. 2012 Aug;16(8):1033-9. PMID: 22692027

Signature Lectures (past 5 years)

- International**
- 2022 May TBnet Academy, Annual TB Advanced Course, Georgia, Keynote, Speaker/Faculty
 - 2022 Mar ESCMID, Annual TB Advanced Course, The Netherlands, Child TB, Speaker
 - 2021 June European Advanced Course on TB, Borstel, Germany, Child TB, Keynote Speaker
 - 2020 Jan International TB Training Course, Windhoek, Namibia, Child TB, Faculty/Speaker

2019 Mar The Nordic TB Conference, Umea, Sweden, Child TB, Keynote Speaker
 2018 May Visiting Professor Series, Borstel TB Centre, Borstel, Germany, Speaker
 2018 Feb International TB Training Course, Windhoek, Namibia, Child TB, Faculty/Speaker
 2017 Jun McGill Wiselburg Symposium in Respiratory Medicine, Montreal, Child TB, Speaker
 2017 Mar Ministry of Health Colombia, National TB Training, Bogota, Course Co-director

United States 2022 Oct IDWeek, IDSA/ESPID Annual Debate, Washington, DC, Plenary Speaker
 2019 Oct IDWeek, Meet the Expert, Child TB, Washington, DC, Speaker
 2109 Oct IDWeek, Pre-meeting Workshop, TB Diagnostics, Washington, DC, Speaker
 2019 Feb St. Jude's/PIDS Pediatric Infectious Disease Research Conf, Memphis, Speaker

Visiting Professorships

Research Center Borstel, Leibniz Lung Center Germany, Visiting Professor	2021 June
Fulbright Senior Scholar to South Africa	2010 - 2011
Romanian Challenge Appeal, Consulting epidemiologist and physician	1999 Sep
Hospital of Charity, Ulaan-baatar, Mongolia, Volunteer physician	1998 July
International Rescue Committee, Rwanda, Volunteer physician	1996 Dec
Indian Health Service, Shiprock, New Mexico, Volunteer physician	1996 Feb

Contributions to Health and Science Policy

Vonasek B, Ness T, Takwoingi Y, Kay AK, van Wyk S, Ouellette L, Marais BJ, Steingart K, **Mandalakas AM**. Screening Tests for Active Tuberculosis in Children. WHO EXPERT GROUP MEETING, SYSTEMATIC SCREENING FOR ACTIVE TUBERCULOSIS- PRINCIPLES AND RECOMMENDATIONS. GENEVA, JULY 2020.

Kay AK, Gonzalez Fernandez L, Takwoingi Y, Esienhut M, Vu RD, Steingart K, **Mandalakas AM**. Xpert MTB/RIF and Xpert MTB/RIF Ultra assays for active tuberculosis and rifampicin resistance in children. WHO EXPERT GROUP MEETING, USE OF XPRT MTB/RIF IN TB CONTROL IN LOW AND MIDDLE-INCOME SETTINGS. GENEVA, 1-6 DECEMBER 2019.

Detjen AK, DiNardo AR, Leyden J, Steingart KR, Menzies D, Schiller I, Dendukuri N, **Mandalakas AM**. Xpert MTB/RIF for the Diagnosis of Pulmonary Tuberculosis, Peripheral Lymph Node TB and TB Meningitis in Children. WHO EXPERT GROUP MEETING, USE OF XPRT MTB/RIF IN TB CONTROL IN LOW AND MIDDLE-INCOME SETTINGS. VEYRIER-DU-LAC, 20-21 MAY 2013.

Mandalakas A, Detjen AK, Benedetti A, Menzies D. Interferon-gamma release Assays for the diagnosis of LTBI and active TB in children – A systematic review and meta analysis. WHO EXPERT GROUP MEETING, USE OF INTERFERON-GAMMA RELEASE ASSAYS (IGRAs) IN TB CONTROL IN LOW AND MIDDLE-INCOME SETTINGS. GENEVA, 20-21 JULY 2010