

Curriculum Vitae

1. Personal Information

Name: Prof. Dr. rer. med. Belay Tessema Belay
Date of Birth: April 29, 1980
Place of Birth: Finoteselam, Gojam,
Nationality: Ethiopian
Language: Amharic, English and German (B2)
Current Address: Institute of Clinical Immunology,
Medical Faculty, University of Leipzig.
Johannisallee 30, 04103 Leipzig, Germany
Tel. +491783324408, E-Mail: Belay.Belay@uni-leipzig.de or bt1488@yahoo.com



2. Education and work experience

Year	Position	Institution	City, Country
Since August 2023	Senior Scientist	Magdeburg Molecular Detections (MMD) GmbH	Magdeburg, Germany
Since Jan. 2023 – June 2023	Quality Manager and Scientific Writer	Immundiagnostik AG	Bensheim, Germany
Oct. 2022-Dec. 2022	Scientist	Medical s/p/e GmbH/ Institute of Clinical Immunology, University of Leipzig	Leipzig, Germany
June 2021- Sep 2022	Visiting Scientist (Alexander von Humboldt foundation Georg Forster Research Award Winner Research Stay)	Institute of Clinical Immunology, University of Leipzig	Leipzig, Germany
Since April 2021	Scientist	CellAir Construction (Cellgym) GmbH	Schorndorf, Germany
Since Dec. 2020.	Full Professor of Medical Microbiology and Epidemiology of Infectious Diseases	Department of Medical Microbiology, University of Gondar	Gondar, Ethiopia
Nov 2017-April 2018	Advanced Clinical Research Operations for study coordinators Trainee (Virtual and Face to Face training)	Strathmore University, Kenya; University of Siena, Italy and Faculty of Capacity Development (FCD)	Nairobi, Kenya; and University of Siena, Italy
Since Aug. 2017	Scientist/Guest Scientist/ Visiting Scientist/ Guest Scientist	Institute of Clinical Immunology and Institute of Medical Microbiology	University of Leipzig, Germany
Dec.2015-Dec.2016	Postdoctoral Fellow (TDR/WHO Clinical Research and Development fellowship program)	Foundation for Innovative New Diagnostics (FIND)	Geneva, Switzerland
July 2015-Dec. 2020.	Associate Professor of Medical Microbiology and Epidemiology of Infectious Diseases	Department of Medical Microbiology, University of Gondar	Gondar, Ethiopia
July 2012- July 2015.	Assistant Professor of Medical Microbiology and Epidemiology of Infectious Diseases	Department of Medical Microbiology, University of Gondar	Gondar, Ethiopia
June 2008 – July 2012	Doctoral (PhD) student in Medical Microbiology, Epidemiology of Infectious Diseases and Clinical Immunology (<i>Summa cum laude (Excellent) grade</i>)	Institute of Medical Microbiology, Epidemiology of Infectious Diseases and Clinical Immunology , University of Leipzig	Leipzig, Germany

April 2007 - May 2008	Lecturer	Department of Medical Laboratory Technology, University of Gondar.	Gondar, Ethiopia
Sept 2005 – April 2007	Master of Sciences (MSc) student in Tropical and Infectious Diseases	Aklilu Lemma Institute of Pathobiology, Addis Ababa University	Addis Ababa, Ethiopia
July 2004 - Aug 2005.	Assistant lecturer	Department of Medical Laboratory Technology, University of Gondar	Gondar, Ethiopia
July 2003 - June 2004	Graduate Assistant II	Department of Medical Laboratory Technology, University of Gondar	Gondar, Ethiopia
Sept.2000 – July 2003	Bachelor of Sciences (BSc) student in Medical Laboratory Technology	Department of Medical Laboratory Technology	Jimma, Ethiopia
Oct. 1998 - Aug 2000	Technical Assistant	Department of Medical Laboratory Technology, Gondar College of Medical Sciences	Gondar, Ethiopia
Sept. 1996 – Sept. 1998	Diploma Student in Laboratory Technology	Gondar College of Medical Sciences	Gondar, Ethiopia

3. Leadership experience

1. Jan. 2016 – Dec 2020. **Country (Ethiopia) Coordinator** for International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) Task Force of Young Scientists
2. Nov 2013 - Dec 2015. **Head**, School of Biomedical and Medical Laboratory Sciences, College of Medicine and Health Science, University of Gondar, Ethiopia.
3. Jan. 2013 - Jul 2017. **Coordinator**, One Health Research Consortium of University of Gondar, Ethiopia
4. Dec. 2012 – Nov. 2013. **Director**, Postgraduate Programs of University of Gondar, Ethiopia

4. Board/Council member

1. Since Feb. 2020 to date. **Research Grant Review Committee Member**, International Society for Infectious Diseases (ISID), USA.
2. Since Feb. 2020 to date. **Council Member**, International Society for Infectious Diseases (ISID), USA.
3. Since Sept. 2020 to date. **Strategic Advisory Council member**, Amhara Public Health Institute (APHI), Ethiopia.
4. Since July 2018 to date. **Clinical Review Committee (CRC) member**, Drug Resistant Tuberculosis in Amhara regional State Health Bureau, Ethiopia
5. April 2014 - Mar. 2018. **Founder and Executive Board Member** of Ethiopian Society for Microbiology, Ethiopia.
6. Jun 2014 – May 2018. **Executive Board Member** of Ethiopian Medical Laboratory Association, Ethiopia. Since May 2014 to date.
7. **Corresponding Member** of International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) Committee on Clinical Laboratory Management (C- CLM).

5. Scientific Journal Editor

1. Since Sept. 2022. **Editorial Board-Topical Advisory panel member** of International Journal of Molecular Sciences
2. Since Nov. 2020: **Associate Editor** of German Journal of Microbiology
3. Since Sept 2020: **Associate Editor** of Ethiopian Journal of Health and Biomedical Sciences
4. Sept 2014 - Dec 2018 **Editor in-Chief** of Ethiopian Journal of Laboratory Medicine

6. Awards/Honours

1. 2021: **Recognition for high contribution to science**, Ethiopian Medical Laboratory Association (EMLA), Ethiopia
2. 2020: **Georg Forster Research Award**, Alexander von Humboldt Foundation, Germany.
<https://www.humboldt-foundation.de/en/explore/newsroom/awards-for-researchers-from-developing-and-transition-countries>
3. 2020: **TDR Global Profile**, TDR/World Health Organization: Geneva, Switzerland
<https://tdr.who.int/newsroom/feature-stories/item/belay-tessema>
4. 2017: **Great achievement award in fetching Grants**: University of Gondar, Ethiopia.
5. 2016: **Young Public Health Researcher Award**: Ethiopian Public Health Association (EPHA).
<https://www.etpha.org/item/568-epha-recognizes-individuals-and-institutions.html>
6. 2015: **Clinical Research and Development Fellowship Award**: EDCTP/TDR, Geneva, Switzerland
7. 2015: **The best researcher award**: College of Medicine and Health Sciences, University of Gondar, Ethiopia.
8. 2008. **PhD scholarship Award**: German Academic Exchange Service (DAAD), Bonn, Germany
9. 2003: **The best students` research award**: Jimma University, Ethiopia.
10. 1998: **The best student award**: Gondar College of Medical Sciences, Ethiopia.

7. Research/ Capacity building Grants

I have won 19 research and capacity building grants. Some of the grants are:

1. Co-Investigator and Co-lead of a sub-theme Diagnostics: **2018- 2022: NIH Fogarty D43 grant** for the project „Sustainable One Health Research -Training Capacity: Molecular Epidemiology of Zoonotic Foodborne and Waterborne Pathogens in Eastern Africa“
2. Principal Investigator: **2017-2018. USAID/MSH/Challenge TB Research Grant award** for the project “Investigation of the low tuberculosis case detection rate and treatment challenges in Amhara region, Ethiopia: a capture-recapture study“
3. Principal Investigator: **2017- 2019. University of Gondar Research Grant award** for the project „Utilization of Novel Diagnostics and Genotyping to improve the Diagnosis and Molecular Epidemiology of Human and Bovine Tuberculosis“
4. Co- Investigator and Coordinator: **2014/2015. Ohio State University, USA-CCTS Research grant award** for the project “ Improving the diagnosis of *M. tuberculosis* and *M. bovis*“
5. Coordinator : **2014/2015. EDCTP/MMV capacity building grant award** for the project „Building malaria research capacities in Gondar - the collaborative effort of the University of Gondar and the Medical University of Vienna“
6. Principal Investigator : **2014/2015.USAID/MSH/Heal TB research grant award** for the project “Assessment of the performance of medical laboratory professionals in Fine-Needle Aspiration Cytology to diagnosis TB Lymphadenitis“
7. Principal Investigator : **2013.USAID/MSH/Heal TB research grant award** for the project “ Improving tuberculosis case detection through Contact Investigation of Smear Positive tuberculosis patients in Amhara Region, Northwest Ethiopia, Ethiopia“
8. Co-Investigator: **2013-2014. GlaxoSmithKline(GSK) research grant award** for the project “Malaria clinical trial for the new anti-malaria drug (Tafenoquine) at the University of Gondar“.

8. Oral and Poster Presentations in the last 10 years

I have presented a total of 14 presentations, 10 oral and 4 poster presentations in international and national scientific conferences and workshops in the last 10 years. Some of my presentations are:

- 1.Oral: Detection of Intracellular *Mycobacterium tuberculosis* bacteria and its specific antigen from phagocytes of blood and sputum using Modified Microscopy and Flow Cytometry. University of Leipzig, Germany. December 19, 2019.
- 2.Oral: TB Diagnostics: Update on recent advances and future ambitions. Continious Professional Development (CPD) training workshop for Medical Laboratory Professionals in Ethiopia. Grand Hotel, BahirDar, Ethiopia. June 28- July 01, 2017

- 3.Oral: Oral: Molecular epidemiology and transmission dynamics of *Mycobacterium tuberculosis* in Northwest Ethiopia: *International Symposium for Biomedical Sciences*, Korea University College of Medicine, Seoul, South Korea; January 28- 30, 2015.
- 4.Oral; Utilization of new tools to improve diagnosis of *Mycobacterium tuberculosis* and *M. bovis* and TB control in a pastoralist community; The first IGAD Health Conference; Addis Ababa, Ethiopia; 3-6 December 2014
- 5.Oral; Molecular epidemiology and transmission dynamics of *Mycobacterium tuberculosis* in Northwest Ethiopia: New phylogenetic lineages found in Ethiopia; Conference on Infectious Diseases; Leipzig, Germany; 30 May 2012
- 6.Poster; High yield of contact investigation among household contacts of smear positive pulmonary tuberculosis patients using GeneXpert MTB/RIF in Ethiopia; 45th Union World Conference on tuberculosis and Lung Health; Barcelona, Spain; 28 October- 1 November 2014
- 7.Poster; First and second-line anti-tuberculosis drugs resistance among tuberculosis patients in Northwest Ethiopia; The 9th National TB Research Advisory Committee (TRAC) Annual Conference; Hawassa, Ethiopia; 21-24 March 2014

9. Teaching and advisership experience

I have been teaching PhD and MSc students in Medical Microbiology, and undergraduate Medical and Health science students. I taught Molecular Microbiology, General Microbiology, Medical Bacteriology, Virology, Mycology and Immunology courses for both postgraduate and undergraduate students. I have supervised 15 PhD Students' dissertations and more than 30 MSc students' research thesis.

10. WHO Policy guidance and policy update contribution/ participation

1. WHO Policy guidance. The use of molecular line probe assays for the detection of resistance to second-line anti- tuberculosis drugs. World Health Organization 2016: Geneva, Switzerland
2. WHO Policy Update: The use of molecular line probe assays for the detection of resistance to Isoniazid and Rifampicin. World Health Organization 2016: Geneva, Switzerland
3. WHO: Chest radiography in tuberculosis detection – summary of current WHO recommendations and guidance on programmatic approaches. World Health Organization 2016: Geneva, Switzerland
4. Guideline Development Group (GDG) Meeting to develop consolidated policy guidance on anti-TB drug susceptibility testing. Montreux, Switzerland ,February 29th – March 4th 2016

11. Skills

1. IVDR Quality Management and Regulatory affairs
2. Clinical research and development (clinical trial protocol development, trial coordination, and Trial Management)
3. Project management
4. Grant proposal writing and manuscript writing
5. Systematic review and Meta-analysis
6. Microbiological techniques such as microscopy, culture and drug susceptibility testing (DST)
7. Molecular biology techniques such as PCR, Sequencing and genotyping.
8. Immunological techniques such as Cell Isolation, Cell culture, Flow cytometry, ELISA and Intracellular staining
9. Parasitological techniques including malaria diagnosis (microscopy, RDT and molecular techniques)
10. Statistical analysis (Excel, SPSS, and STATA)
11. Teaching and advising /supervising PhD and MSc students and mentoring postdoc and junior Researchers.

12. Membership of Organizations/Society

1. European Society for Mycobacteriology (ESM)
2. American Society for Microbiology (ASM)
3. International Society for Infectious Diseases (ISID)
4. Ethiopian Medical Laboratory Association (EMLA) (life time Member)
5. Ethiopian Public Health Association (EPHA) (life time Member)
6. Ethiopian Society for Microbiology (ESM)

13. References

1. Prof. Dr. Brigitte König:
Institute **of** Medical Microbiology and Virology, Faculty **of Medicine**, University **of Leipzig**; 04103 Leipzig, Germany. Brigitte.Koenig@medizin.uni-leipzig.de OR koenig@mmd-web.de, Tel:+491722836195
2. **Prof. Dr.med. Ulrich Sack :**
Institute of Clinical Immunology, University of Leipzig, Johannisallee 30, D-04103 Leipzig, Germany.
Email: Ulrich.Sack@medizin.uni-leipzig.de, Tel. +49-(0)341-97-25500

14. List of publications

My name is mentioned in my publications as Belay Tessema OR Tessema B.

My electronic complete lists of publications are found in the following NCBI and Research Gate links:

https://www.researchgate.net/profile/Belay_Tessema2/publications
<https://www.ncbi.nlm.nih.gov/myncbi/1x56RQqGxahAX/bibliography/public/>

1. Engda T, **Tessema B**, Mesifin N, Nuru A, Belachew T, Moges F. Shiga toxin-producing Escherichia coli O157:H7 among diarrheic patients and their cattle in Amhara National Regional State, Ethiopia. PLoS One. 2023;18(12):e0295266. doi: 10.1371/journal.pone.0295266. eCollection 2023. PubMed PMID: 38127993; PubMed Central PMCID: PMC10734908.
2. Damtie D, Gelaw A, Wondimeneh Y, Aleka Y, Tarekegn ZS, Sack U, Vlasova AN, **Tessema B**. Evaluation of the diagnostic performance of EpiTuub® Fecal Rotavirus Antigen Rapid Test Kit in Amhara National Regional State, Ethiopia: A multi-center cross-sectional study. PLoS One. 2023;18(11):e0295170. doi: 10.1371/journal.pone.0295170. eCollection 2023. PubMed PMID: 38033097; PubMed Central PMCID: PMC10688889.
3. **Tessema B**, Haag J, Sack U, König B. The Determination of Mitochondrial Mass Is a Prerequisite for Accurate Assessment of Peripheral Blood Mononuclear Cells' Oxidative Metabolism. Int J Mol Sci. 2023 Oct 2;24(19). doi: 10.3390/ijms241914824. PubMed PMID: 37834272; PubMed Central PMCID: PMC10573504.
4. Gessner P, **Tessema B** (Shared 1st author), Scholz M, Sack U, Boldt A, Kühnapfel A, Gessner C. The influence of anti-cancer therapies on lymphocyte subpopulations of lung cancer patients. Front Immunol. 2023;14:1239097. doi: 10.3389/fimmu.2023.1239097. eCollection 2023. PubMed PMID: 37701442; PubMed Central PMCID: PMC10493868.

5. Shababaw A, Gelaw B, Ghanem M, Legall N, Schooley AM, Soehnlen MK, Salvador LCM, Gebreyes W, Wang SH, **Tessema B**. Molecular epidemiology and transmission dynamics of multi-drug resistant tuberculosis strains using whole genome sequencing in the Amhara region, Ethiopia. *BMC Genomics*. 2023 Jul 17;24(1):400. doi: 10.1186/s12864-023-09502-2. PubMed PMID: 37460951; PubMed Central PMCID: PMC10351181.
6. Ferede G, Tiruneh M, Abate E, Wondimeneh Y, **Tessema B** (shared last author), Lieber UG. Distribution of Dengue Virus Serotype Based on Neutralization Assay in Northwest Ethiopia. *EJHBS*: 2023; 13
7. Akalu GT, **Tessema B**, Petros B. High proportion of RR-TB and mutations conferring RR outside of the RRDR of the rpoB gene detected in GeneXpert MTB/RIF assay positive pulmonary tuberculosis cases, in Addis Ababa, Ethiopia. *PLoS One*. 2022 Dec 30;17(12):e0277145. doi: 10.1371/journal.pone.0277145. PMID: 36584037; PMCID: PMC9803184.
8. **Tessema B**, Janine R, Sack U, König B. Cellular Stress Assay in Peripheral Blood Mononuclear Cells: Factors Influencing Its Results. *Int J Mol Sci*. 2022 Oct 28;23(21):13118. doi: 10.3390/ijms232113118.
9. Wasson MK, Whitson C, Miller B, Abebe W, **Tessema B**, Emerson LE, Anantharam P, Tesfaye AB and Fairley JK. Potential drivers of leprosy infection: A case-control study of parasitic coinfection and water, sanitation, and hygiene in North Gondar, Ethiopia. *Front. Trop. Dis.* 2022; 3:934030. doi: 10.3389/fitd.2022.934030
10. Mesfin EA, Merker M, Beyene D, Tesfaye A, Shuaib YA, Addise D, **Tessema B**, Niemann S. Prediction of drug resistance by Sanger sequencing of Mycobacterium tuberculosis complex strains isolated from multidrug resistant tuberculosis suspect patients in Ethiopia. *PLoS One*. 2022 Aug 5;17(8):e0271508. doi: 10.1371/journal.pone.0271508. eCollection 2022.
11. Kyu HH, Vongpradith A, Sirota SB,...**Tessema B**,... Murray CJL. Age-sex differences in the global burden of lower respiratory infections and risk factors, 1990-2019: results from the Global Burden of Disease Study 2019. *Lancet Infect Dis*. 2022 Aug 11:S1473-3099(22)00510-2. doi: 10.1016/S1473-3099(22)00510-2.
12. **Tessema B**, Boldt A, König B, Maier M, Sack U. Flow-Cytometry Intracellular Detection and Quantification of HIV1 p24 Antigen and Immunocheckpoint Molecules in T Cells among HIV/AIDS Patients. *HIV AIDS (Auckl)*. 2022 Aug 4;14:365-379. doi: 10.2147/HIV.S374369. eCollection 2022.
13. Tilaye T, **Tessema B**, Alemu K. High asymptomatic malaria among seasonal migrant workers departing to home from malaria endemic areas in northwest Ethiopia. *Malar J*. 2022 Jun 11;21(1):184. doi: 10.1186/s12936-022-04211-9.
14. Shimekaw M, Tigabu A, **Tessema B**. Bacterial Profile, Antimicrobial Susceptibility Pattern, and Associated Risk Factors Among Patients With Wound Infections at Debre Markos Referral Hospital, Northwest, Ethiopia. *Int J Low Extrem Wounds*. 2022 Jun;21(2):182-192. doi: 10.1177/1534734620933731. Epub 2020 Jun 28. PMID: 32594808
15. Shuaib YA, Utpatel C, Kohl TA, Barilar I, Diricks M, Ashraf N, Wieler LH, Kerubo G, Mesfin EA, Diallo AB,...**Tessema B**... Merker M. Origin and Global Expansion of Mycobacterium tuberculosis Complex Lineage 3. *Genes* 2022, 13, 990. <https://doi.org/10.3390/genes13060990>
16. **Tessema B**, Sack U, König B, Serebrovska Z and Egorov E. Effects of Intermittent Hypoxia in Training Regimes and in Obstructive Sleep Apnea on Aging Biomarkers and Age-Related Diseases: A Systematic Review. *Front. Aging Neurosci*. 2022;14:878278. doi: 10.3389/fnagi.2022.878278
17. Assefa M, Tigabu A, Belachew T, **Tessema B**. Bacterial profile, antimicrobial susceptibility patterns, and associated factors of community-acquired pneumonia among adult patients in Gondar, Northwest Ethiopia: A cross-sectional study. *PLoS One*. 2022;17(2):e0262956. doi: 10.1371/journal.pone.0262956.

18. Tessema B, Sack U, Serebrovska Z, König B and Egorov E . Effects of Hyperoxia on Aging Biomarkers: A Systematic Review. *Front. Aging.* 2022;2:783144.doi: 10.3389/fragi.2021.783144
19. Ledesma JR, Ma J, Vongpradith A, ... **Tessema B**,...Kyu HH. Global, regional, and national sex differences in the global burden of tuberculosis by HIV status, 1990-2019: results from the Global Burden of Disease Study 2019. *Lancet Infect Dis.* 2022 Feb;22(2):222-241. doi: 10.1016/S1473-3099(21)00449-7. Epub 2021 Sep 23. PubMed PMID: 34563275; PubMed Central PMCID: PMC8799634.
20. Getie B, Ayalew G, Amsalu A, Ferede G, Yismaw G, **Tessema B**. Seroprevalence and Associated Factors of Hepatitis B and C Virus Among Pulmonary Tuberculosis Patients Attending Health Facilities in Gondar Town, Northwest Ethiopia. *Infect Drug Resist.* 2021;14:3599-3608. doi: 10.2147/IDR.S327503. eCollection 2021. PubMed PMID:
21. Melku M, Ambachew S, Enawgaw B, Abebe M, Abebe Z, Deressa T, Damtie D, Biadgo B, **Tessema B**, Geremew D, Kebede A, Woldu B, Teklu T, Shiferaw E. Sero-epidemiology and associated factors of HIV, HBV, HCV and syphilis among blood donors in Ethiopia: a systematic review and meta-analysis. *BMC Infect Dis.* 2021 Aug 9;21(1):778. doi: 10.1186/s12879-021-06505-w. PubMed PMID: 34372772; PubMed Central PMCID: PMC8351159.
22. Yigzaw WB, Torrelles JB, Wang SH, **Tessema B**. Magnitude of Phenotypic and MTBDRplus Line Probe Assay First-Line Anti-Tuberculosis Drug Resistance Among Tuberculosis Patients; Northwest Ethiopia. *Infect Drug Resist.* 2021;14:497-505. doi: 10.2147/IDR.S292058.
23. Sharew B, Moges F, Yismaw G, Mihret A, Abebe W, Fentaw S, **Tessema B**. Serotype Distribution of *Streptococcus pneumoniae* Isolates Causing Invasive and Non-Invasive Infections Using Whole-Genome Sequencing in Ethiopia. *Infect Drug Resist.* 2021;14:787-794. doi: 10.2147/IDR.S293578. eCollection 2021. PubMed PMID: 33688213; PubMed Central PMCID: PMC7936710.
24. Wondimeneh Y, Tiruneh M, Ferede G, **Tessema B**. Diagnostic performance of SD Bioline immunochromatography test for the detection of rubella specific IgM and IgG antibodies in resource limited settings. *Ethiop. J. Health Biomed Sci., Sept. 2021. Vol.11, No.1.*
25. Sartorius B, VanderHeide JD, Yang M,.. **Tessema B**, ...Dwyer-Lindgren L. Subnational mapping of HIV incidence and mortality among individuals aged 15-49 years in sub-Saharan Africa, 2000-18: a modelling study. *Lancet HIV.* 2021 Jun;8(6):e363-e375. doi: 10.1016/S2352-3018(21)00051-5.
26. Ferede G, Tiruneh M, Abate E, Wondimeneh Y, Gadisa E, Howe R, Aseffa A, **Tessema B**. Evaluation of the Performance of the SD Bioline Dengue Rapid Test for the Detection of Anti-Dengue IgM Antibody in Northwest Ethiopia. *Ethiop. J. Health Biomed Sci., Sept. 2021. Vol.11, No.1.*
27. Tilaye T, **Tessema B**, Alemu K. Malaria Infection is High at Transit and Destination Phases Among Seasonal Migrant Workers in Development Corridors of Northwest Ethiopia: A Repeated Cross-Sectional Study. *Res Rep Trop Med.* 2021;12:107-121. doi: 10.2147/RRTM.S306001.
28. Yigzaw WB, Torrelles JB, Wang SH, **Tessema B**. Accuracy on diagnostic performance of point of care LIODetect® tb-st rapid test for the diagnosis of PTB in northwest Ethiopia. *Ethiop. J. Health Biomed Sci., Sept. 2021. Vol.11, No.1.*
29. Taye S, Tigabu Z, Damtie D, Yismaw G, Moodley C, Nicol MP, **Tessema B**, Gelaw B, Moges F. Pertussis among patients with clinically compatible illness in the Amhara Regional State, Ethiopia. *Int J Infect Dis.* 2021 May;106:421-428. doi: 10.1016/j.ijid.2021.03.073. Epub 2021 Mar 29. PubMed PMID: 33794378.

30. Abebe M, Eshetie S, **Tessema B**. Prevalence of sexually transmitted infections among cervical cancer suspected women at University of Gondar Comprehensive Specialized Hospital, North-west Ethiopia. BMC Infect Dis. 2021 Apr 23;21(1):378. doi: 10.1186/s12879-021-06074-y.
31. Sharew B, Moges F, Yismaw G, Abebe W, Fentaw S, Vestrheim D, **Tessema B**. Antimicrobial resistance profile and multidrug resistance patterns of *Streptococcus pneumoniae* isolates from patients suspected of pneumococcal infections in Ethiopia. Ann Clin Microbiol Antimicrob. 2021 Apr 20;20(1):26. doi: 10.1186/s12941-021-00432-z.
32. Tadese ND, Gebremedhi EZ, Moges F, Borana BM, Marami LM, Sarba EJ, Abebe H, Kelbesa KA, Atalel D, **Tessema B**. Occurrence and Antibiotic Resistance Patterns of *Escherichia coli* O157:H7 in Raw Beef and Hygienic Practices in Abattoir and Retailer Shops in Ambo Town, Ethiopia. Vet Med Int. 2021;2021:8846592. doi: 10.1155/2021/8846592. eCollection 2021. PubMed PMID: 33868629; PubMed Central PMCID: PMC8032542.
33. **Tessema B**, Lippmann N, Knüpfer M, Sack U, König B. Antibiotic Resistance Patterns of Bacterial Isolates from Neonatal Sepsis Patients at University Hospital of Leipzig, Germany. Antibiotics 2021, 10, x. <https://doi.org/10.3390/xxxxx>
34. Sbarra AN, Rolfe S, Nguyen JQ,... **Tessema B**, ... Mosser JF. Mapping routine measles vaccination in low- and middle-income countries. Nature. 2021 Jan; 589 (7842):415-419. doi:10.1038/s41586-020-03043-4.
35. **Tessema B**, Lippmann N, Willenberg A, Knüpfer M, Sack U, König B. The Diagnostic Performance of Interleukin-6 and C-Reactive Protein for Early Identification of Neonatal Sepsis. Diagnostics. 2020 Nov 20;10(11). doi: 10.3390/diagnostics10110978. PubMed PMID: 33233806; PubMed Central PMCID: PMC7699903.
36. Taye S, **Tessema B**, Gelaw B, Moges F. 2020. Assessment of Pertussis Vaccine Protective Effectiveness in Children in the Amhara Regional State, Ethiopia, Int J Microbiol. 2020 Oct 13;2020:8845835. doi: 10.1155/2020/8845835. eCollection 2020.
37. Kirsten E Wiens, Paulina A Lindstedt,..**Tessema B**,.. Robert C Reiner Jr. Mapping geographical inequalities in oral rehydration therapy coverage in low-income and middle-income countries, 2000-17. Lancet Glob Health. 2020 Aug;8(8):e1038-e1060. doi: 10.1016/S2214-109X(20)30230-8. PubMed PMID: 32710861; PubMed Central PMCID: PMC7388204.
38. Shimekaw M, Tigabu A, **Tessema B**. Bacterial Profile, Antimicrobial Susceptibility Pattern, and Associated Risk Factors Among Patients With Wound Infections at Debre Markos Referral Hospital, Northwest, Ethiopia. Int J Low Extrem Wounds. 2020 Jun 28;:1534734620933731. doi: 10.1177/1534734620933731. [Epub ahead of print] PubMed PMID: 32594808.
39. Geremew D, Melku M, Endalamaw A, Woldu B, Fasil A, Negash M, Baynes HW, Geremew H, Teklu T, Deressa T, **Tessema B**, Sack U. Tuberculosis and its association with CD4+ T cell count among adult HIV positive patients in Ethiopian settings: a systematic review and meta-analysis. BMC Infect Dis. 2020 May 7;20(1):325. doi: 10.1186/s12879-020-05040-4. PubMed PMID: 32380957; PubMed Central PMCID: PMC7204319.
40. Gizachew M, Tiruneh M, Moges F, Adefris M, Tigabu Z, **Tessema B**. Proportion of *Streptococcus agalactiae* vertical transmission and associated risk factors among Ethiopian mother-newborn dyads, Northwest Ethiopia. Sci Rep. 2020 Feb 26;10(1):3477. doi: 10.1038/s41598-020-60447-y. PubMed PMID: 32103109; PubMed Central PMCID: PMC7044167.
41. Gizachew M, Tiruneh M, Moges F, Adefris M, Tigabu Z, **Tessema B**. Molecular characterization of *Streptococcus agalactiae* isolated from pregnant women and newborns at the University of Gondar

- Comprehensive Specialized Hospital, Northwest Ethiopia. *BMC Infect Dis.* 2020 Jan 13;20(1):35. doi: 10.1186/s12879-020-4776-7.
42. Damtie D, Melku M, **Tessema B**, Vlasova AN. Prevalence and Genetic Diversity of Rotaviruses among under-Five Children in Ethiopia: A Systematic Review and Meta-Analysis. *Viruses.* 2020 Jan 3;12(1). pii: E62. doi: 10.3390/v12010062.
43. Admas A, Gelaw B, **Tessema B**, Worku A, Melese A. Proportion of bacterial isolates, their antimicrobial susceptibility profile and factors associated with puerperal sepsis among post-partum/aborted women at a referral Hospital in Bahir Dar, Northwest Ethiopia. *Antimicrob Resist Infect Control.* 2020 Jan 13;9(1):14. doi: 10.1186/s13756-019-0676-2.
44. Graetz N, Woyczynski L, Wilson KF,...**Tessema B**....Hay SI. Mapping disparities in education across low- and middle-income countries. *Nature.* 2019 Dec 25;. doi: 10.1038/s41586-019-1872-1.
45. Shibabaw A, Gelaw B, Kelley HV, Tesfaye E, Balada-Llasat JM, Evans CA, Torrelles JB,, Wang SH, **Tessema B**. MDR/XDR-TB Colour Test for drug susceptibility testing of Mycobacterium tuberculosis, Northwest Ethiopia. *Int J Infect Dis.* 2019 Nov 2. pii: S1201-9712(19)30435-7. doi: 10.1016/j.ijid.2019.10.041.
46. Troeger CE, Khalil IA, Blacker BF,..**Tessema B**... Reiner RC. Quantifying risks and interventions that have affected the burden of diarrhoea among children younger than 5 years: an analysis of the Global Burden of Disease Study 2017. *Lancet Infect Dis.* 2019 Oct 30. pii: S1473-3099(19)30401-3. doi: 10.1016/S1473-3099(19)30401-3.
47. Troeger CE, Khalil IA, Blacker BF,... **Tessema B**.... Reiner R. Quantifying risks and interventions that have affected the burden of lower respiratory infections among children younger than 5 years: an analysis for the Global Burden of Disease Study 2017. *Lancet Infect Dis.* 2019 Oct 30. pii: S1473-3099(19)30410-4. doi: 10.1016/S1473-3099(19)30410-4.
48. Ameha Z , Tadesse S, Assefa A, **Tessema B**. Prevalence and associated factors of Hepatitis C virus and human immunodeficiency virus infections among voluntary counseling and testing clients attending private health facilities in Bahir Dar city, North West Ethiopia 2014. *BMC Res Notes.* 2019 Oct 25;12(1):693. doi: 10.1186/s13104-019-4727-9
49. Stanaway JD, Parisi A, Sarkar K, ...**Tessema B**... Crump JA. The global burden of non-typhoidal salmonella invasive disease: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet Infect Dis.* 2019 Sep 24. pii: S1473-3099(19)30418-9. doi: 10.1016/S1473-3099(19)30418-9.
50. Getie M, Abebe W, **Tessema B**. Prevalence of enteric bacteria and their antimicrobial susceptibility patterns among food handlers in Gondar Town, Northwest Ethiopia. *Antimicrobial Resistance and Infection Control.* *Antimicrob Resist Infect Control.* 2019 Jul 8;8:111. doi: 10.1186/s13756-019-0566-7. eCollection 2019
51. Geremew D, Endalamaw A, Negash M, Eshetie S, **Tessema B**. The protective effect of isoniazid preventive therapy on tuberculosis incidence among HIV positive patients receiving ART in Ethiopian settings: a meta-analysis. *BMC Infect Dis.* 2019 May 10;19(1):405. doi: 10.1186/s12879-019-4031-2.
52. Gizachew M, Tiruneh M, Moges F, **Tessema B**. Streptococcus agalactiae maternal colonization, antibiotic resistance and serotype profiles in Africa: a meta-analysis. *Ann Clin Microbiol Antimicrob.* 2019 Mar 28;18(1):14. doi: 10.1186/s12941-019-0313-1. Review.

53. Shibabaw A, Gelaw B, Kelley H, Balada-Llasat JM, Evans C, Wang SH, Torrelles JB, **Tessema B**. Accuracy of the color plate micro-colony detection for the diagnosis of Mycobacterium tuberculosis complex in Northwest Ethiopia. *Tuberculosis* 114 (2019) 54–60.
54. Gizachew M, Tiruneh M, Moges F, Adefris M, Tigabu Z, **Tessema B**. Streptococcus agalactiae from Ethiopian pregnant women; prevalence, associated factors and antimicrobial resistance: alarming for prophylaxis. *Ann Clin Microbiol Antimicrob*. 2019 Jan 19;18(1):3. doi: 10.1186/s12941-019-0303-3.
55. Dailey PJ, Osborn J, Ashley EA, Baron EJ, Dance DAB, Fusco D, Fanello C, Manabe YC, Mokomane M, Newton PN, **Tessema B**, Isaacs C, Dittrich S. Defining System Requirements for Simplified Blood Culture to Enable Widespread Use in Resource-Limited Settings. *Diagnostics (Basel)*. 2019 Jan 11;9(1). pii: E10. doi: 10.3390/diagnostics9010010.
56. Troeger CE, Blacker BF, Khalil IA, ..**Tessema B**, ... Reiner RC. Mortality, morbidity, and hospitalisations due to influenza lower respiratory tract infections, 2017: an analysis for the Global Burden of Disease Study 2017. *Lancet Respir Med*. 2019 Jan;7(1):69-89. doi: 10.1016/S2213-2600(18)30496-X. Epub 2018 Dec 12.
57. Ayele G, **Tessema B**, Amsalu A, Ferede G, Yismaw G. Prevalence and associated factors of treatment failure among HIV/AIDS patients on HAART attending University of Gondar Referral Hospital Northwest Ethiopia. *BMC Immunol*. 2018 Dec 17;19(1):37. doi: 10.1186/s12865-018-0278-4.
58. Gizachew M, Tiruneh M, Moges F, Adefris M, Tigabu Z, **Tessema B**. Newborn colonization and antibiotic susceptibility patterns of Streptococcus agalactiae at the University of Gondar Referral Hospital, Northwest Ethiopia. *BMC Pediatr*. 2018 Nov 30;18(1):378. doi: 10.1186/s12887-018-1350-1.
59. Ferede G, Tiruneh M, Abate E, Wondimeneh Y, Gadisa E, Howe R, Aseffa A, **Tessema B**. A study of clinical, hematological, and biochemical profiles of patients with dengue viral infections in Northwest Ethiopia: implications for patient management. *BMC Infect Dis*. 2018 Dec 4;18(1):616. doi: 10.1186/s12879-018-3557-z.
60. Wondimeneh Y, Tiruneh M, Ferede G, Denekew K, Admassu F, **Tessema B**. Hospital based surveillance of congenital rubella syndrome cases in the pre-vaccine era in Amhara Regional State, Ethiopia: A base line information for the country. *PLoS One*. 2018 Nov 12;13(11):e0207095. doi: 10.1371/journal.pone.0207095. eCollection 2018.
61. Wondimeneh Y, Tiruneh M, Ferede G, Abera B, Workineh M, Birhanie M, **Tessema B**. Rubella virus infections and immune status among pregnant women before the introduction of rubella vaccine in Amhara Regional State, Ethiopia. *Int J Infect Dis*. 2018 Nov;76:14-22. doi: 10.1016/j.ijid.2018.07.024. Epub 2018 Aug 28.
62. Shibabaw A, Gelaw B, Wang SH, **Tessema B**. Time to sputum smear and culture conversions in multidrug resistant tuberculosis at University of Gondar Hospital, Northwest Ethiopia. *PLoS One*. 2018 Jun 26;13(6):e0198080. doi: 10.1371/journal.pone.0198080. eCollection 2018.
63. Fullman N, Yearwood J, Abay SM, ..**Tessema B**,... Lozano R. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet*. 2018 Jun 2;391(10136):2236-2271. doi: 10.1016/S0140-6736(18)30994-2. Epub 2018 Jun 1.
64. Mesfin EA, Beyene D, Tesfaye A, Admasu A, Addise D, Amare M, Dagne B, Yaregal Z, Tesfaye E, **Tessema B**. Drug-resistance patterns of Mycobacterium tuberculosis strains and associated risk factors among multi drug-resistant tuberculosis suspected patients from Ethiopia. *PLoS One*. 2018 Jun 4;13(6):e0197737. doi: 10.1371/journal.pone.0197737. eCollection 2018.

65. Ferede G, Tiruneh M, Abate E, Wondimeneh Y, Damtie D, Gadisa E, Howe R, Aseffa A, **Tessema B.** A serologic study of dengue in northwest Ethiopia: Suggesting preventive and control measures. *PLoS Negl Trop Dis.* 2018 May 31;12(5):e0006430. doi: 10.1371/journal.pntd.0006430. eCollection 2018 May.
66. Ferede G, Tiruneh M, Abate E, Kassa WJ, Wondimeneh Y, Damtie D, **Tessema B..** Distribution and larval breeding habitats of Aedes mosquito species in residential areas of Northwest Ethiopia. *Epidemiol Health.* 2018 Apr 23;40:e2018015. doi: 10.4178/epih.e2018015. eCollection 2018.
67. Mesfin EA, Beyene D , Tesfaye A , Addise D , Amare M , Dagne B, Tesfaye E ,Yaregal Z, **Tessema B.** Evaluation of GeneXpert MTB/RIF® Molecular Assay Using Urine Specimen for Diagnosis of Active Pulmonary Tuberculosis from Sputum Scarce Patients in Ethiopia. *J Diagn Tech Biomed Anal.* 2018; 7:1.
68. Hiruy N, Melese M, Habte D, Jerene D, Gashu Z, Alem G, Jemal I, **Tessema B,** Belayneh B, Suarez PG. Comparison in the yield of tuberculosis among contacts of multidrug-resistant and drug-sensitive tuberculosis patients in Ethiopia using GeneXpert as a primary diagnostic test. *Int J Infect Dis.* 2018 Jun;71:4-8. doi: 10.1016/j.ijid.2018.03.011. Epub 2018 Mar 17.
69. Kyu HH, Maddison ER, Henry NJ, ...**Tessema B.,** Murray CJ. The global burden of tuberculosis: results from the Global Burden of Disease Study 2015. *Lancet Infect Dis.* 2018 Mar;18(3):261-284. doi: 10.1016/S1473-3099(17)30703-X. Epub 2017 Dec 7.
70. El Bcheraoui C, Wang H, Charara R,...,**Tessema B,....** Mokdad AH. Trends in HIV/AIDS morbidity and mortality in Eastern Mediterranean countries, 1990-2015: findings from the Global Burden of Disease 2015 study. *Int J Public Health.* 2018 May;63(Suppl 1):123-136. doi: 10.1007/s00038-017-1023-0. Epub 2017 Aug 3.
71. Lozano R, Fullman N, Abate D, ..., **Tessema B,...** Murray CJL. Measuring progress from 1990 to 2017 and projecting attainment to 2030 of the health-related Sustainable Development Goals for 195 countries and territories: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* 2018 Nov 10;392(10159):2091-2138. doi: 10.1016/S0140-6736(18)32281-5. Epub 2018 Nov 8.
72. Murray CJL, Callender CSKH, Kulikoff XR,..., **Tessema B,...** Lim SS. Population and fertility by age and sex for 195 countries and territories, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* 2018 Nov 10;392(10159):1995-2051. doi: 10.1016/S0140-6736(18)32278-5. Epub 2018 Nov 8.
73. Stanaway JD, Afshin A, Gakidou E,.. **Tessema B,..** Murray CJL. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017Lancet. 2018 Nov 10;392(10159):1923-1994. doi: 10.1016/S0140-6736(18)32225-6. Epub 2018 Nov 8.
74. Roth GA, Abate D, Abate KH,...,**Tessema B,....** Murray CJL. Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980-2017: a systematic analysis for the Global Burden of Disease Study 201. *Lancet.* 2018 Nov 10;392(10159):1736-1788. doi: 10.1016/S0140-6736(18)32203-7. Epub 2018 Nov 8
75. Dicker D, Nguyen G, Abate D,...,**Tessema B, ...**, Murray CJL. Global, regional, and national age-sex-specific mortality and life expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* 2018 Nov 10;392(10159):1684-1735. doi: 10.1016/S0140-6736(18)31891-9. Epub 2018 Nov 8.
76. Kyu HH, Abate D, Abate KH,...,**Tessema B,..**, Murray CJL. Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* 2018 Nov 10;392(10159):1859-1922. doi: 10.1016/S0140-6736(18)32335-3.

77. Miotto P, **Tessema B**, Tagiani E, Chindelevitch L, Starks AM, Emerson C, Hanna D, Kim PS, Liwski R, Zignol M, Gilpin C, Niemann S, Denkinger CM, Fleming J, Warren RM, Crook D, Posey J, Gagneux S, Hoffner S, Rodrigues C, Comas I, Engelthaler DM, Murray M, Alland D, Rigouts L, Lange C, Dheda K, Hasan R, Ranganathan UDK, McNerney R, Ezewudo M, Cirillo DM, Schito M, Köser CU, Rodwell TC. A standardized method for interpreting the association between mutations and phenotypic drug-resistance in *Mycobacterium tuberculosis*. Eur Respir J. 2017 Dec 28;50(6). pii: 1701354. doi: 10.1183/13993003.01354-2017. Print 2017 Dec.
78. Ahmad Khan F, Pande T, **Tessema B**, Song R, Benedetti A, Pai M, Lönnroth K, Denkinger CM. Computer-aided reading of tuberculosis chest radiography: moving the research agenda forward to inform policy. Eur Respir J. 2017 Jul 13;50(1). pii: 1700953. doi: 10.1183/13993003.00953-2017.
79. **Tessema B**, Moges F, Habte D, Hiruy N, Yismaw S, Melkieneh K, Kassie Y, Girma B, Melese M, Suarez PG. Vitamin D deficiency among smear positive pulmonary tuberculosis patients and their tuberculosis negative household contacts in Northwest Ethiopia: a case-control study. Ann Clin Microbiol Antimicrob. 2017 May 11;16(1):36. doi: 10.1186/s12941-017-0211-3.
80. Eshetie S, Gizachew M, Dagnaw M, Kumera G, Woldie H, Ambaw F, **Tessema B**, Moges F. Multidrug resistant tuberculosis in Ethiopian settings and its association with previous history of anti-tuberculosis treatment: a systematic review and meta-analysis. BMC Infect Dis. 2017 Mar 20;17(1):219. 20
81. **Tessema B**, Nabeta P, Valli, E, Albertini A, Collantes J, Huu Lan N, Romancenco E, Tukavdze N, Denkinger CM, Dolinger DL. FIND Tuberculosis Strain Bank: a resource for researchers and developers working on tests to detect *Mycobacterium tuberculosis* and related drug resistance. J Clin Microbiol. 2017 Apr;55(4):1066-1073.
82. Derseh D, Moges F, **Tessema B**. Smear positive pulmonary tuberculosis and associated risk factors among tuberculosis suspects attending spiritual holy water sites in Northwest Ethiopia. BMC Infect Dis. 2017 Jan 26;17(1):100.
83. Gakidou E, Afshin A, Abajobir AA, ..., **Tessema B**..., Murray CJL. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2017 Sep 16;390(10100):1345-1422. doi: 10.1016/S0140-6736(17)32366-8.
84. Hay SI, Abajobir AA, Abate KH..., **Tessema B**..., Murray CJL. Global, regional, and national disability-adjusted life-years (DALYs) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016, Lancet. 2017 Sep 16;390(10100):1260-1344. doi: 10.1016/S0140-6736(17)32130-X.
85. Vos T, Abajobir AA, Abate KH,..., **Tessema B**..., Murray CJL. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2017 Sep 16;390(10100):1211-1259. doi: 10.1016/S0140-6736(17)32154-2.
86. Wang H, Abajobir AA, Abate KH, ..., **Tessema B**..., Murray CJL. Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2017 Sep 16;390(10100):1084-1150. doi: 10.1016/S0140-6736(17)31833-0.
87. Gebrecherkos T, Gelaw B, **Tessema B**. Smear positive pulmonary tuberculosis and HIV co-infection in prison settings of North Gondar Zone, Northwest Ethiopia. BMC Public Health. 2016 Oct 18;16(1):1091

88. Semunigus T, **Tessema B**, Eshetie S, Moges F. Smear positive pulmonary tuberculosis and associated factors among homeless individuals in Dessie and Debre Birhan towns, Northeast Ethiopia. *Ann Clin Microbiol Antimicrob.* 2016 Aug 31;15(1):50. doi: 10.1186/s12941-016-0165-x.
89. Habte D, Melese M, Hiruy N, Gashu Z, Jerene D, Moges F, Yifru S, Girma B, Kassie Y, Haile YK, Suarez PG, **Tessema B**. The additional yield of GeneXpert MTB/RIF test in the diagnosis of pulmonary tuberculosis among household contacts of smear positive TB cases. *Int J Infect Dis.* 2016 Aug;49:179-84. doi: 10.1016/j.ijid.2016.07.002. Epub 2016 Jul 8.
90. Alebachew G, Teka B, Endris E, Shiferaw Y, **Tessema B**. Etiologic Agents of Bacterial Sepsis and Their Antibiotic Susceptibility Patterns among Patients Living with Human Immunodeficiency Virus at Gondar University Teaching Hospital, Northwest Ethiopia. *Biomed Res Int.* 2016;2016:5371875. doi: 10.1155/2016/5371875. Epub 2016 May 23.
91. Tarekegne D, Jemal M, Atanaw T, Ebabu A, Endris M, Moges F, **Tessema B**, Deressa T. Prevalence of human immunodeficiency virus infection in a cohort of tuberculosis patients at Metema Hospital, Northwest Ethiopia: a 3 years retrospective study. *BMC Res Notes.* 2016 Mar 29; 9:192. doi: 10.1186/s13104-016-2004-8.
92. Fanosie A, Gelaw B, **Tessema B**, Tesfay W, Admasu A, Yitayew G. *Mycobacterium tuberculosis* complex and HIV co-infection among extra pulmonary tuberculosis suspected cases at University of Gondar hospital, Northwest Ethiopia. *PLoS One.* 2016 Mar 7;11(3):e0150646. doi: 10.1371/journal.pone.0150646. eCollection 2016..
93. Mekonnen F, **Tessema B**, Moges F., Gelaw A., Eshetie S, Kumera G. Multidrug resistant tuberculosis: prevalence and risk factors in districts of metema and west armachiho, Northwest Ethiopia. *BMC Infect Dis.* 2015 Oct 26;15:461. doi: 10.1186/s12879-015-1202-7.
94. **Tessema B**. Building Laboratory Medicine Capacity: a key for effective health care system. *Editorial. Ethiopian Journal of Laboratory Medicine, 2015:* 1:4-5
95. Moges B, Amare B, Yismaw G, Workineh M, Alemu S, Mekonnen D, Diro E, **Tessema B**, Kassu A. High prevalence of tuberculosis among university students in Northwest Ethiopia: A retrospective study. *BMC Public Health,* 2015;15:15. DOI 10.1186/s12889-015-1378-1
96. Jemal M, Tarekegne D, Atanaw T, Ebabu A, Endris M, **Tessema B**, Moges F, Deressa T. Treatment Outcomes of Tuberculosis Patients in Metema Hospital, Northwest Ethiopia: A Four Years Retrospective Study. *Mycobact Dis* 2015, 5:4. DOI: 10.4172/2161-1068.1000190
97. Gedle D, Endris M, **Tessema B**, Eshetie S, Ewunetu T, Feyera F, Kumera G. Middle East Respiratory Syndrome Coronavirus: Current Status and Future Implications. *J Med Microbiol Diagn* 4:200. doi: 10.4172/2161-0703.1000200
98. Alemayehu M, **Tessema B**, Birhan W, Belyhun Y. Assessment of *Mycobacterium tuberculosis*-Intestinal Helminths Co-infection among Suspected Pulmonary Tuberculosis Patients in Gondar University Hospital and Gondar Poly Clinic, North West Ethiopia. *J Microbiol Biochem Technol,* 2014: 6: 179-184.
99. Biadglegne F, **Tessema B**, Sack U, Rodloff A. C. Drug resistance of *Mycobacterium tuberculosis* isolates from Tuberculosis lymphadenitis patients in Ethiopia. *Indian J Med Res,* 2014: 140; 116-122
100. Moges F, Endris M, Mulu A, **Tessema B**, Belyhun Y, Shiferaw Y, Hiruy K, Unakal C, Kassu A. The growing challenges of bacterial drug resistance in Ethiopia. *J Global Antimicrob Resist,* 2014: <http://dx.doi.org/10.1016/j.jgar.2014.02.004>

- 101.**Birhanie M, **Tessema B**, Ferede G, Endris M, Enawgaw,B. Malaria, typhoid fever and their co-infection among febrile patients at a rural health center in Northwest Ethiopia: a cross sectional study. *Advances in Medicine*, .2014: 10:1-8. DOI: 10.1155/2014/531074
- 102.**Ferede G, Worku A, Getaneh A, Ahmed A, Haile T., Abdu Y, **Tessema B**, Wondimeneh Y, Alemu A. Prevalence of malaria from blood smears examination: A seven year retrospective study from Metema Hospital, Northwest Ethiopia. *Malaria Research and Treatment*, 2013: <http://dx.doi.org/10.1155/2013/704730>.
- 103.**Alemu A, Fuehrer H.P, Getnet G, **Tessema B**, Noedl.H. Plasmodium ovale curtisi and Plasmodium ovale wallikeri in north-west Ethiopia. *Malaria Journal*, 2013: 12:346
- 104.**Biadglegne F, **Tessema B**, Rodloff A.C, Sack U: Magnitude of Gene Mutations Conferring Drug Resistance in *Mycobacterium Tuberculosis* Isolates from Lymph Node Aspirates in Ethiopia. *International Journal of Medical Sciences*, .2013: 1589-1594.
- 105.**Moges B, Amare B, Asfaw F, Mulu A, **Tessema B**, Afework K.. High prevalence and poor treatment outcome of tuberculosis in North Gondar Zone Prison, Northwest Ethiopia. *International Journal of Medicine and Medical Sciences*, 2013: 425-429
- 106.**Biadglegne F, Tesfaye W. Anagaw B, **Tessema B**, Debebe T, Anagaw B, Mulu A, Sack U, Rodloff A.C. Tuberculosis Lymphadenitis in Ethiopia. *Japan Journal of Infectious Diseases*, 2013: 263-268.
- 107.****Tessema B**, Beer J, Merker M, Emmrich F, Sack U, Rodloff A, Niemann N. Molecular epidemiology and transmission dynamics of *Mycobacterium tuberculosis* in Northwest Ethiopia: New phylogenetic lineages found in Ethiopia. *BMC Infectious Diseases*, 2013:13:131.
- 108.**Biadglegne F, Anagaw B, Anagaw B, Tesfaye W, **Tessema B**, Sack U, Rodloff A.C. Tuberculosis Lymphadenitis in Northwest Ethiopia: Implications for Public Health. *Journal of Medical Microbiology*, 2013: 18-24.
- 109.**Biadglegne F, Anagaw B, Debebe T, Anagaw B, Tesfaye W, **Tessema B**, Rodloff,A.C., Sack U. Tuberculosis lymphadenitis and its treatment outcome in Felege Hiwot Referral Hospital, Northwest Ethiopia: a retrospective study. *International Journal of Biological and Medical Research*, 201: 2942-2947
- 110.**Biadglegne F, Rodloff A.C, Debebe T, Anagaw B, **Tessema B**, Sack U. A retrospective study on the outcomes of tuberculosis treatment in Felege Hiwot Referral Hospital, Northwest Ethiopia. *Int. Journal of Medicine and Medical Sciences*, 2013: 86-92
- 111.****Tessema B**, Beer J, Emmrich F, Sack U, Rodloff A.C. Analysis of gene mutations associated with isoniazid, rifampicin and ethambutol resistance among *Mycobacterium tuberculosis* isolates from Ethiopia. *BMC Infectious Diseases*, 2012: 12: 37.
- 112.**Anagaw B, Mulu A, Abate E, Anagaw B, **Tessema B**, Gelaw A, Alemayehu M., Belyhun Y, Biadglegne F, Schön T. Improved Detection of Acid-Fast Bacilli in Sputum by the bleach-concentration technique – a study from Gondar University Teaching Hospital, Northwest Ethiopia. *Ethiopian Medical Journal*, 2012: 349-354
- 113.****Tessema B**, Beer J, Emmrich F, Sack U, Rodloff A.C. First and second-line anti-tuberculosis drugs resistance among tuberculosis patients in Northwest Ethiopia. *International Journal of Tuberculosis and Lung Diseases*, 2012: 16:1-7.
- 114.**Biadglegn F, Anagaw B, **Tessema B**, Getachew A, Andargie G, Abera B, Belyhun Y, Mulu A. Voluntary HIV Counseling and Testing Service in Northwest Ethiopia: The cases of counselor's perception, client's satisfaction and in-service observation. *Ethiopian Medical Journal*, 2011: 169-177.

- 115.** **Tessema B**, Beer J, Emmrich F, Sack U, Rodloff A.C. Rate of recovery of *Mycobacterium tuberculosis* from frozen acid-fast-bacillus smear-positive sputum samples subjected to long term storage in Northwest Ethiopia. Journal of Clinical Microbiology, 2011: 2557-2561.
- 116.** **Tessema B**, Yismaw G, Kassu K, Amsalu A, Mulu A, Emmrich F, Sack U. Seroprevalence of HIV, HBV, HCV and syphilis infections among blood donors at Gondar University Teaching Hospital, Northwest Ethiopia: declining trends over a period of five years. BMC Infectious Diseases, 2010: 111.
- 117.** **Tessema B**, Biadglegne F, Mulu A, Getachew A, Emmrich F, Sack U. Magnitude and determinants of nonadherence and nonreadiness to highly active antiretroviral therapy among people living with HIV/AIDS in Northwest Ethiopia. A cross - sectional study. AIDS Res Ther. 2010; 7: 2.
- 118.** Biadglegne F, Belyhun Y, **Tessema B**. Sero-prevalence of human immunodeficiency virus (HIV) among voluntary counseling and testing (VCT) clients in Burie Health Center, west Gojjam, Ethiopia. Ethiop Medical Journal, 2010: 149-156.
- 119.** **Tessema B**, Muche A, Bekele A, Reissig D, Emmrich F, Sack U. Treatment outcome of tuberculosis patients at Gondar University Teaching Hospital, Northwest Ethiopia. A five--year retrospective study. BMC Public Health, 2009: 371.
- 120.** Biadglegne F, **Tessema B**, Kibret M, Abera B, Huruy K, Anagaw A, Mulu. Physicochemical and bacteriological quality of bottled drinking water in three sites of Amhara regional state, Ethiopia. Ethiopian Medical Journal, 2009: 277-284.
- 121.** Yismaw G, **Tessema B**, Mulu A, Tiruneh M. The in vitro assessment of antibacterial effect of papaya seed extract against bacterial pathogens isolated from urine, wound and stool. Ethiopian Medical Journal, 2008: 71-77.
- 122.** Kassu A, Yabutani T, Mulu A, **Tessema B**, Ota F. Serum Zinc, Copper, Selenium, Calcium, and Magnesium Levels in Pregnant and Non-Pregnant Women in Gondar, Northwest Ethiopia. Biological Trace Element Research, 2008: 97-106.
- 123.** **Tessema B**, Mulu A, Kassu A, Yismaw G. Predominant isolates of urinary tract pathogens and their antimicrobial susceptibility patterns in Gondar university Teaching Hospital, Northwest Ethiopia. Ethiopian Medical Journal, 2007: 61-69.
- 124.** Mulu A, Kassu A, **Tessema B**, Wondimkun Y, Ota F. Seroprevalence of syphilis and HIV-1 in pregnancy, University of Gondar teaching Hospital. Japan Journal of Infectious Diseases, 193-195.
- 125.** **Tessema B**, Mulu A, Kassu A. Antibacterial effects of Garlic on bacterial isolates from wound. Ethiopian Medical Journal, 2007: 123-138.
- 126.** Mulu A. **Tessema B**, Moges F, Kassu. A: Pattern and Multiple drug resistance of bacterial isolates from wound in Gondar University Teaching Hospital, Northwest Ethiopia. Ethiopian Medical Journal, 2006: 125-131.
- 127.** Mulu A, **Tessema B**, Kassu A: Antibacterial activity of Honey produced by Honeybees (*Apis Mellifera*) on Bacterial species isolated from wound Infection, Gondar University Teaching Hospital, Northwest Ethiopia. Ethiopian Pharmaceutical Journal, 2006: 23:1-6.
- 128.** **Tessema B**, Mulu A, Derbie F: Assessment of the Antibacterial Activity of the crude preparation of garlic on some food bone pathogens. Ethiopian Journal of Health Sciences, 2005: 39-48.
- 129.** Mulu,A, Kassu A, **Tessema B**. Bacterial isolates of Cerebro spinal fluid and their Sensitivity pattern in Gondar University Teaching Hospital, Northwest. *Ethiopia*. Ethiopian Journal of Health Development, 2005:160-164.

- 130.** Mulu M, **Tessema** B, Derbie F. In vitro assessment of the antimicrobial potential of Honey on some common Human Pathogens. *Ethiopian Journal of Health Development*, 2004: 107-111.
- 131.** Kebede Y, Abula T, Ayele B, Feleke A, Degu G, kifle A, Alebachew Z, Mekonen E, **Tessema B**. Module on substance abuse for the Ethiopian Health Center Team . Gondar University in collaboration with the Ethiopia Public Health Training Initiative, the Carter Center: Ethiopia Ministry of Health, and the Ethiopia Ministry of Education. 2005. <https://www.cartercenter.org/resources/> pdfs/ health/ephti/library/modules/degree/mod_substance_abuse_final.pdf