

## CURRICULUM VITAE

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## PUBLICATIONS

1. **Eden Ephraim**, Agnes Odenyo and Mogessie Ashenafi (2005). Isolation and characterization of tannin-degrading/hydrolyzing bacteria from faecal samples of dikdik, camel and gazelle *Animal Feed Science and Technology* 118, 243-253.
2. **Eden Ephraim**, Agnes Odenyo and Mogessie Ashenafi (2005). Screening for tannin degradation from rumen and faecal samples of wild and domestic ruminants in Ethiopia. *World Journal of Microbiology and Biotechnology* 21, 803-809.
3. **Eden Ephraim** and Mogessie Ashenafi (2005). Behaviour of *Salmonella typhimurium* DT 104 during the fermentation and storage of siljo, a traditional Ethiopian fermented legume product. *World Journal of Microbiology and Biotechnology* 21, 1259-1265.
4. Mekonnen Tsegaye, **Eden Ephraim** and Mogessie Ashenafi (2004). Behaviour of *Escherichia coli* O157:H7 during the fermentation of Datta and Awaze, traditional Ethiopian fermented condiments, and its survival during product storage at ambient and refrigeration temperatures *Food Microbiology* 21, 743-751.
5. Girum Tadesse, Mogessie Ashenafi and **Eden Ephraim** (2005). Survival of *E. coli* O157:H7, *Staphylococcus aureus*, *Shigella flexneri* and *Salmonella* spp. in Borde and Shamita, traditional Ethiopian fermented beverages. *Food Control* 16, 189-196.
6. Girum Tadesse, **Eden Ephraim** and Mogessie Ashenafi (2005). Assessment of the antimicrobial activity of lactic acid bacteria isolated from Borde and Shamita, traditional Ethiopian fermented beverages, on some food-borne pathogens and effect of growth medium on the inhibitory activity *Internet Journal of Food Safety* 5, 13-20.
7. Abebe Animut, Yalemtehay Mekonnen, Damte Shimelis and **Eden Ephraim** (2009). Febrile illnesses of different etiology among outpatients in four health centers in Northwestern Ethiopia. *Japanese Journal of Infectious Diseases* 62, 107-110.
8. Zhanyong Wei, Michael Burwinkel, Christiane Palissa<sup>1</sup>, **Eden Ephraim** and Michael F. G. Schmidt. 2009. Zinc salts protect from the damage induced by porcine transmissible gastroenteritis 1 coronavirus in vitro. *Submitted*

9. **Eden Ephraim**, Christiane Palissa, Zhanyong Wei, Simon Ortwin and Michael F.G. Schmidt. Antiviral effects of the probiotic *Enterococcus faecium* SF68. *To be submitted*
10. **Eden Ephraim**, Christoph Gabler, Christoph Holder, Ralf Einspanier, Simon Ortwin and Michael F. G Schmidt. The probiotic *Enterococcus faecium* SF68 modulates the immune system of piglets during *Salmonella* infection. *To be Submitted*
11. **Eden Ephraim**, Michael Burwinkel, Christiane Palissa, Zhanyong Wei, Simon Ortwin Monika Sachtleben, Johanna Plendl Sabine Hammer, Armin Saalmüller and Michael F.G. Schmidt. Characterization of two permanent cell lines selected from porcine intestinal epithelium and assessment of their susceptibility to infection with Transmissible Gastroenteritis Virus (TGEV). *To be submitted*

#### PAPERS PRESENTATION

**Jan., 2008:** *In vivo* and *in vitro* evaluation of the probiotic effect of *Enterococcus faecium* NCIMB 10415, Institute of Immunology and Molecular Biology, Veterinary Faculty of Free University of Berlin, Germany.

**Oct., 2006:** In vitro degradation of tannin by bacteria isolated from the faecal samples of dikdik, at the conference "Sustainable Animal Health through Eubiosis - Relevance for Man", Ascona, Monte Verità, Switzerland.

**Sept., 2004:** Immune-enhancement by using potential probiotic bacteria. IPB Seminar, Institute of Pathobiology, AAU, Ethiopia.

**May, 2002:** Isolation and characterization of bacteria degrading tannins in the rumen of African animals. International Livestock Research Institute, Debre Zeit, Ethiopia.

**April, 2001:** The use of membrane phospholipids and denaturing gel electrophoresis (DGGE) techniques for characterizing bacterial communities, Department of Biology, Addis Ababa University, Ethiopia.

**Dec., 2000:** Biological wastewater treatment processes. International Women's University, Hannover, Germany.

**Nov., 1999:** Candidosis, as an opportunistic disease often manifested in HIV patients. Department of Biology, Addis Ababa University, Ethiopia.

## **PROFESSIONAL MEMBERSHIP**

1. Feb. 2004-Dec. 2005: Member of the Executive Committee and Secretary of the Biological Society of Ethiopia, Addis Ababa, University.
2. July, 2000-todate: Member of the International Women's University, IFU, Hannover, Germany.
3. Feb., 2001-Todate: Member of the Institute for Women's Policy Research, USA.
4. Jan., 2004-todate: Member of the American Society for Microbiology

## **AREAS OF COMPETENCY**

1. Identification of plant compounds using chromatographic techniques such as HPLC, TLC, GC and GLC
2. Isolation and cultivation of anaerobic microorganisms
3. Isolation and purification of cells from tissues of animals
4. Cell culture including studies involving infection of cell cultures with microorganisms including viruses and virus titer determination
5. Fluorescence microscopy and electron microscopy (TEM)
6. Magnetic cell sorting
7. Identification and quantification of immune cells using Flow Cytometer (Facs Scan)
8. ELISA and Ellispot
9. Primer designing (Primer 3 and Primer 5 Programs)
10. Isolation of eukaryotic RNA, synthesis of cDNA and Polymerase Chain Reaction, PCR
11. Isolation of bacterial DNA
12. RT PCR and Real-time PCR
13. Restriction Fragment Length Polymorphism, RFLP, for characterization of microorganisms
14. Denaturing gel gradient Electrophoresis (DGGE) for characterization of mixed population of microorganisms
15. Basic computer skills (word processing, Excel, Power Point, Harvard Graphics and internet)

## INTERNATIONAL TRAVEL

July, 2000 - Oct., 2000: Traveled to Germany for a three months project in biological wastewater treatment processes at the [International Women's University](#), Hannover.

Dec., 2005 - to date: staying in Germany for a PhD program at [Freie Universität Berlin, Veterinary Medicine Faculty, Institute of Immunology and Molecular Biology](#)

Oct., 2006: Ascona, Monte Verità, Switzerland, attended the conference "[Sustainable Animal Health through Eubiosis - Relevance for Man](#)", where I gave a presentation

Dec. 22 – Jan 7: Visited Howard University, Departments of Biology at Howard University and Department of Microbiology, College of Medicine, Howard University, Washington DC, USA

Short visits to France, the Netherlands, Turkey, Denmark, Norway and Sweden