

## **ERNDIM Training Grant Report**

Biochemical Genetics Laboratory, Medical Genetics Clinic, University Children`s Hospital is only centre, performing biochemical screening for IEM in Latvia. As most of new EU countries, we don`t have training programme for Biochemists in IEM.

Since 2005 our laboratory participated in DPT scheme and since 2006 in qualitative organic acid analysis scheme provided by ERNDIM. Our scores for performance and interpretation let us to evaluate weak points of our laboratory. We still need improvement of analytical performance and training on organic acid spectra interpretation as well.

In August of 2008 we received new GC/MS machine. Previous we had GC for organic acid analysis. New machine certainly is improvement for analytical performance in organic acid analysis and could offer a possibility to introduce new diagnostic methods such as creatine transporter defect metabolites detection and VLFCA analysis. On this point we expect to improve diagnostic service for IEM in Latvia.

With ERNDIM Training Grant support from May 4, 2009 till May 15, 2009 I had the opportunity to visit Academic Medical Center, Laboratory Genetic Metabolic Diseases in Amsterdam, The Netherlands.

The aim of my visit was to get introduction on analytical procedures and interpretation of results for creatine transporter defect and VLFCA analysis for GC/MS with purpose to introduce these methods in our laboratory in nearest future and improve knowledge of organic acid GC/MS spectra interpretation.

During my two weeks long visit in laboratory under guidance of Dr. R. Duran I got practical training on analytical methods and results interpretation. I had the opportunity to discuss analytical problems of methods already known in our laboratory (orotic acid detection and GAG`s electrophoresis) to participate into discussion of patients results interpretation.

The expertise gained from this training is very valuable for improving of IEM diagnostic in our laboratory and country in general.

I would like to thank Dr. R. Duran for kind welcome in laboratory, for time and patience spent for my training. Many thanks for all laboratory staff members for teaching me analytical techniques and provided advices.

I am grateful to ERNDIM for financial support to carry out this training.

Sincerely,  
Zanda Daneberga  
Medical Genetic Clinic  
University Children`s Hospital,  
Riga, Latvia