



UNIUNEA EUROPEANĂ



GVERNUL ROMÂNIEI
MINISTERUL MUNCII, FAMILIEI
ȘI PROTECȚIEI SOCIALE
AMPOSDRU



Fondul Social European
POSDRU 2007-2013



Instrumente Structurale
2007-2013



MINISTERUL
EDUCAȚIEI
CERCETĂRII
TINERETULUI
ȘI SPORTULUI

OIPOSDRU



UMFT

Universitatea de
Medicină și Farmacie
„Victor Babeș”
din Timișoara

Investește în oameni!

POSDRU

One PhD – A Tale of Two Cities

Dorina Gheorgheosu, PhD student
Department of Pathophysiology

First steps

- Admission to Doctoral School – Thesis topic:

***Mechanistic Insights into Antitumor Effect
of Betulinic Acid***

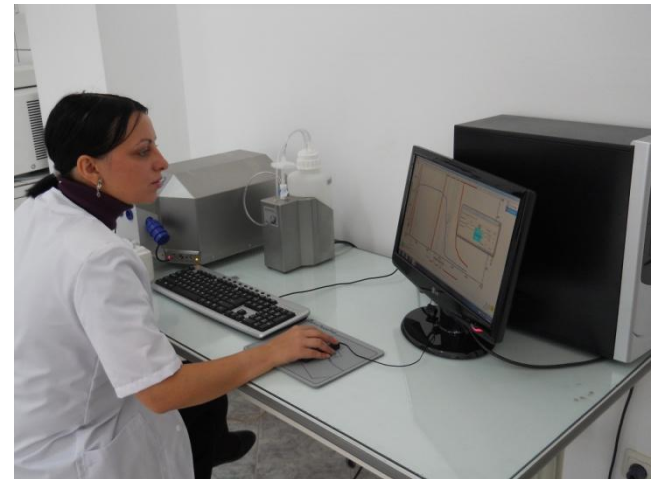
PhD coordinator: Prof. Dr. Danina Muntean

- Accepted in the PhD fellowship POSDRU program code 88/1.5/S/63117 - 2010

Training to acquire research skills - 2010

➤ **Short Term Scientific Mission within the COST Program, Action FA0602 „*Bioactive food components, mitochondrial function and health*” in Department of Physiology, Laboratory for Mitochondria Study, Wenner-Gren Institute, Stockholm, 5 wks mobility – mitochondria isolation, classic respirometry, ROS production measurements**

➤ **Training within the Pathophysiology Department, University of Medicine and Pharmacy, Timisoara – high resolution respirometry in isolated mitochondria**



Assist. Prof. Oana M. Duicu, MD

Training to acquire research skills – 2011/2012



Biochemie

Institut für Biochemie I
Direktor: Prof. Dr. Bernhard Brüne

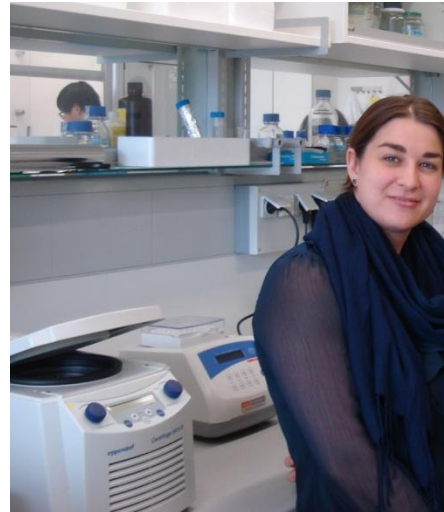


Supervisor

Training to acquire research skills – 2011/2012

Co-supervisor:

Dr. Michaela Jung

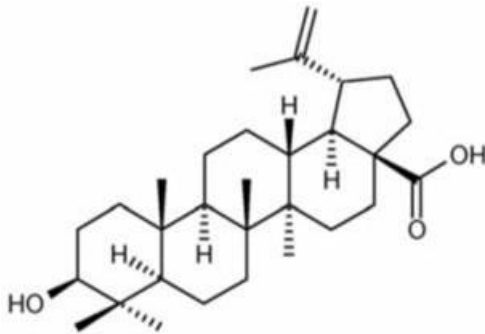


Training to acquire research skills – Frankfurt

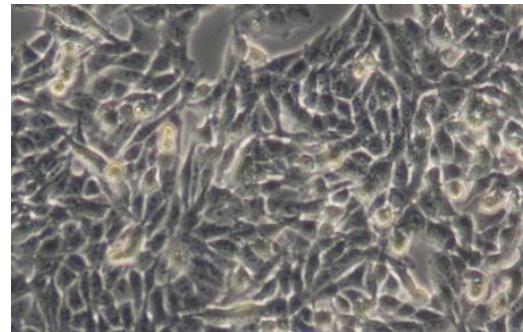
Project:

Betulinic acid effects on cancer cell migration and invasion

- the study was developed on melanoma cancer cell line



Chemical structure of BA -
3 β , hydroxy-lup-20(29)-en-
28-oic acid



Human melanoma cancer cell line

What did I learn in Frankfurt?

Techniques and methods:

- ✓ *Cell culture*
- ✓ *RNA extraction*
- ✓ *qRT – PCR*
- ✓ *Western Blot*
- ✓ *Flow Cytometry*
- ✓ *Immunofluorescence*
- ✓ *Transient transfection*
- ✓ *Cell migration and invasion*
- ✓ *Scratch assay*
- ✓ *Cell proliferation*

Achievements

- ***Gain of knowledge***
- ***Self-trust***
- ***New trustful friends***
- ***A door opened for further cooperation with an outstanding research group led by Professor Bruene***
- ***and.....***

PhD in *Co-tutelle*



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COOPERATION AGREEMENT

BETWEEN

**"Victor Babeș" UNIVERSITY OF MEDICINE AND PHARMACY
TIMISOARA, ROMANIA**

AND

**GOETHE UNIVERSITY FRANKFURT AM MAIN, GERMANY
INSTITUTE OF BIOCHEMISTRY I**

FOR A

PhD THESIS IN MEDICINE AND SCIENCE

PhD student, **Elena-Dorina GHEORGHEOSU**, enrolled at the PhD School of "Victor Babeș" University of Medicine and Pharmacy Timisoara, Romania in *November, 2009*, in the field of *Medicine, specialty Normal & Pathological Physiology*.

Coordinators of the PhD thesis are:

Coordinator:

Danina M. Muntean, MD, PhD, PharmD, Professor of Pathophysiology, Department of Functional Sciences, "Victor Babeș" University of Medicine and Pharmacy Timișoara, Romania

Co-Supervisor:

Bernhard Bruene, PhD, Professor of Biochemistry and Director of the Institute of Biochemistry I, Goethe University Frankfurt am Main, Germany

Acknowledgements

Prof. Simona Dragan

Prof. Danina Muntean

Assoc.Prof. Cristina Dehelean

Prof. Bernhard Bruene

Dr. Michaela Jung

