

Continuous Flow Interchange of Communication and Knowledge in Biomedical University Research – FLOW

C1.1. Short term mobility of staff at UI partner



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CONTINUOUS FLOW INTERCHANGE OF COMMUNICATION AND KNOWLEDGE IN BIOMEDICAL UNIVERSITY RESEARCH "FLOW"

Working together for a green, competitive and inclusive Europe

Partners:
 - Norwegian University of Medicine and Pharmacy, Cluj-Napoca, RO
 - ILLIC (UI) LISI, Research Center for Advanced Medicine, RO
 - University of Agriculture Sciences and Veterinary Medicine, Cluj-Napoca, RO
 - University of Iceland, Reykjavik, IS
 - University of Oulu, Oulu, RO

The present project is a cooperation project meant to establish a long term partnership for good practices exchange within the medical and research education sector, at the 3rd level of study with direct impact upon the student and PhD curricula innovation, in the field of Flow Cytometry.

Improving skills and competences among staff and students/PhD students from all four partners and strengthen institutional cooperation in the field of Flow Cytometry
Results: 2 short-term joint staff training events at UI and UO and 1 common modern curricula for medical research

Modernization and digitalization of the educational offer through establishment of a research e-platform containing the updated curricula Flow Cytometry
Results: An educational research e-platform based on the common curricula for the 3rd level of study

Improving skills and knowledge among 10 PhD students from UMPH, 10 PhD students from UASVM, in the standardization of protocols for Flow Cytometry
Results: 2 short-term mobility of UMPH and UASVM PhD students for transnational learning of 5 days at UI and UO

Completion of translational learning with virtual activities by establishment of a videoconference based research consulting council at UMPH for PhD level
Results: Videoconference based common research consulting council at UMPH and UASVM that will target 40 UMPH and UASVM PhD students

Consolidation of the international cooperation between partners through joint scientific research in the field of Flow Cytometry
Results: 2 scientific articles in international recognized scientific journals and 1 multiplier event organized at BS with 100 national and international participants

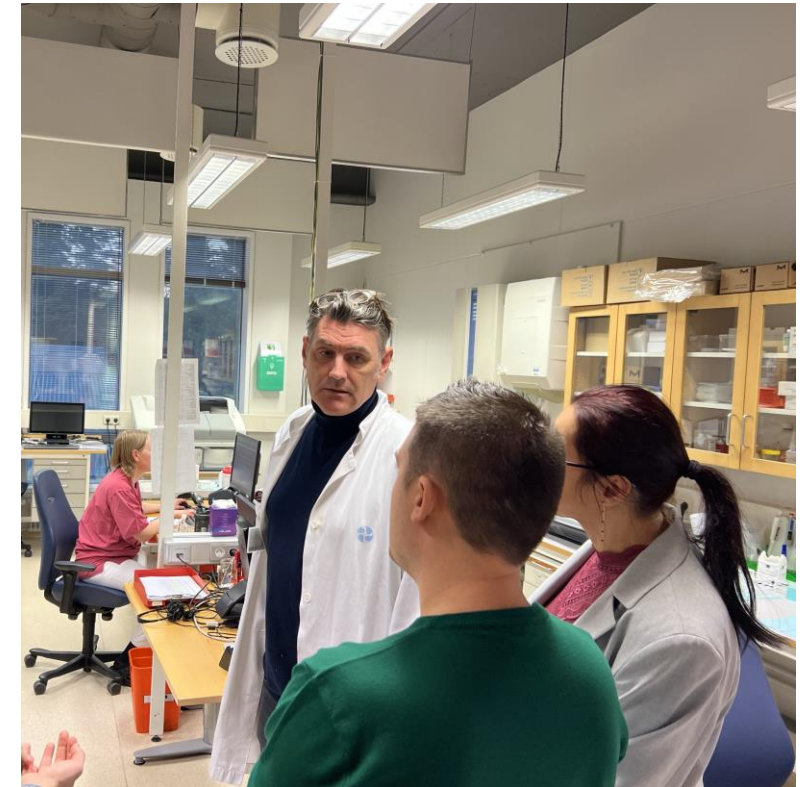
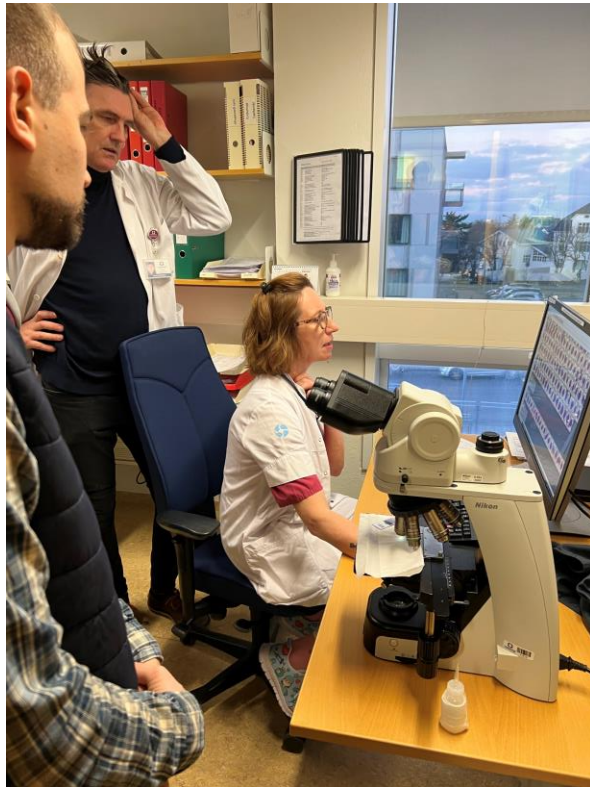
Project No. 21-COP-0034
Implementation: 01.02.2022-31.08.2022
Project budget: 135,200 EUR
Scientific Coordinator: Dr. Corina Cioba

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Landspítali – University Hospital Reykjavik, Biomedical Center, Department of Laboratory Hematology
Monday, November 28th, 2022

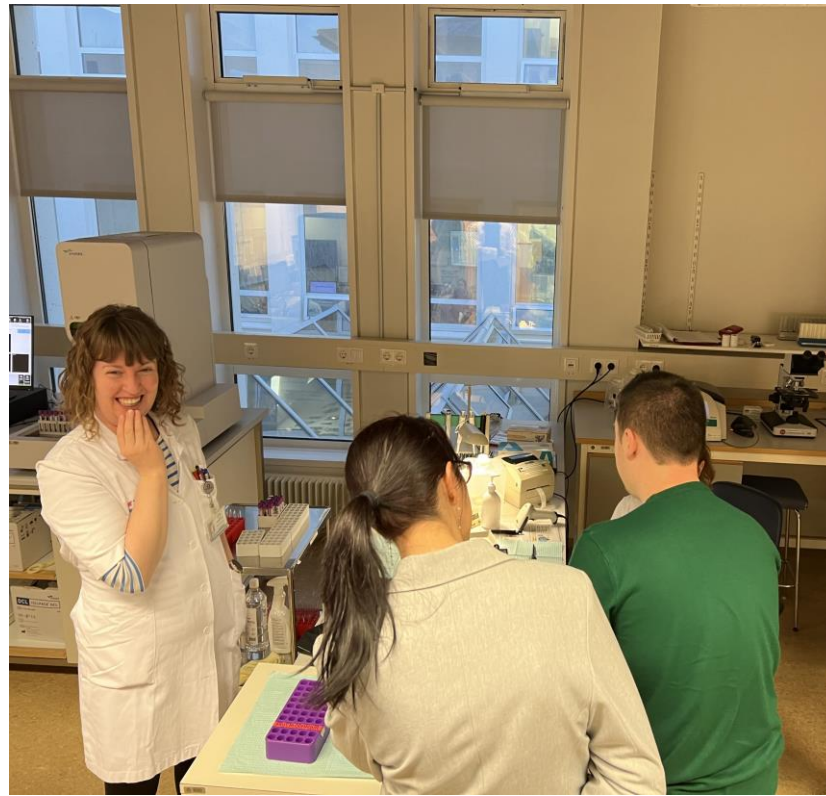
Flow cytometry in biomedical research: Protocols used by Romanian and Icelandic partners with professional input from the experts from University of Iceland

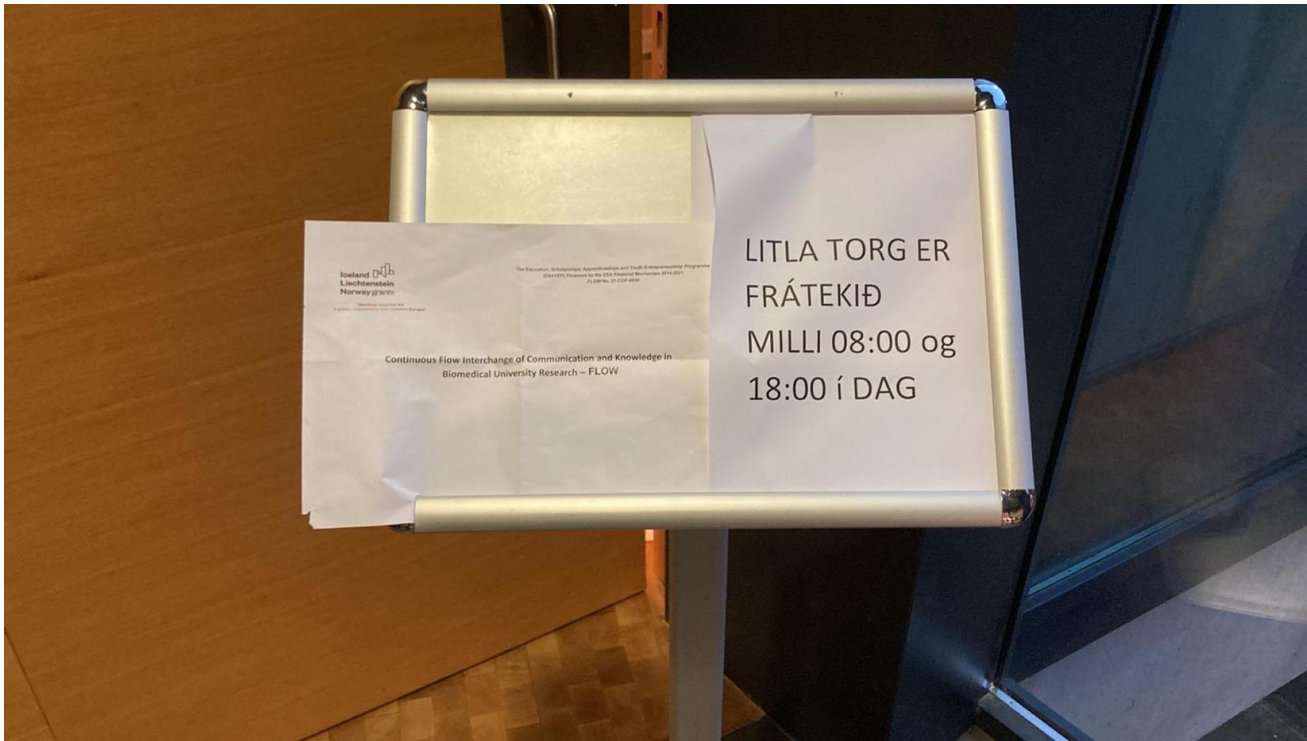
Dr. Jon Thor Bergthorsson and Dr. Ásdís Elva Aðalsteinsdóttir



Landspítali – University Hospital Reykjavik, Biomedical Center
Tuesday, November 29th, 2022

Establishment of common protocols, exchange of good practice models in flow cytometry research;
drafting of joint scientific articles to be published
Dr. Katrin Birna Pétursdóttir and Dr. Dr. Siggeir Fannar Brynjólfsson





Workshop: Applications of flow cytometry in biomedical research

Wednesday, November 30th, 2022

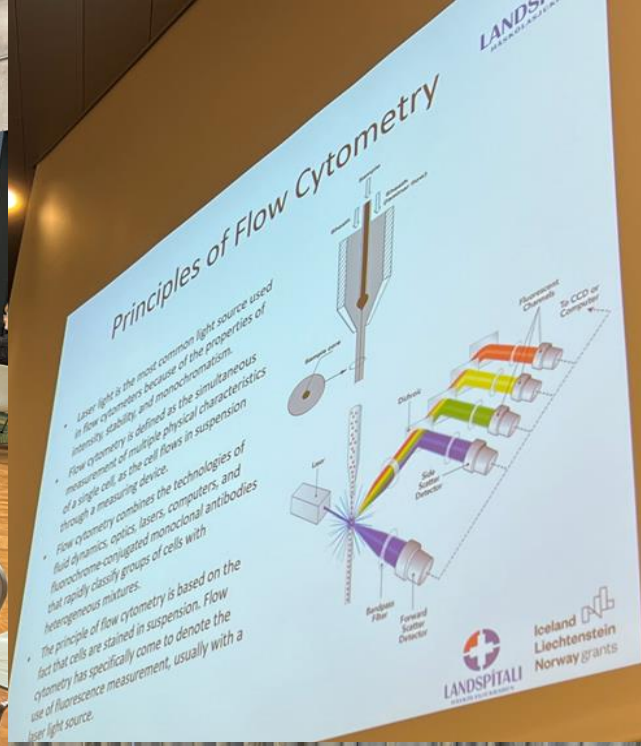


No	Name speaker	Presentation	Project	Hour
1	Jon Thor Bergthorsson	Flow Cytometry 10 color panels for hematology	FLOW	8.00 - 9.00
2	Katrin Birna Pétursdóttir	Flow Cytometry for hematology	FLOW	9.00 - 9.30
		Coffee Break		9.30 – 10.00
3	Bumbea Horia	Clinical applications of Flow Cytometry	FLOW	10.00 – 11.00
4	Cenariu Mihai	Evaluation of sperm quality by flow cytometry	FLOW	11.00 - 11.30
5	Stiufiuc Rares	Plasmonic nanoparticles with applications in medicine	FLOW	11.30 - 12.30
		Lunch Break		12.30 – 13.00
	ERASMUS OFFICE	Informal meeting and discussions at the Erasmus office, conclusions, paperwork	FLOW	13.00 - 15.00



Nr.	Numele și prenumele	Staff member UMF Cluj
1	Cenariu Diana-Maria	Staff
2	Bumbea Horia	Staff
3	Țigu Adrian Bogdan	Staff
4	Știuțiu Gabriela Fabiola	Staff
5	Moldovan Cristian Silviu	Staff
6	Dima Delia	Staff
7	Rus Ioana Codruța	Staff
8	Moldovan Alin Iulian	Staff

Nr.	Numele și prenumele	Staff member USAMV CLUJ
1	Cenariu Mihai-Cosmin	Staff
2	Mihalca Andrei-Daniel	Staff
3	Tăbăran Alexandru-Flaviu	Staff
4	Beteg Florin-Ioan	Staff
5	Pall Eموke	Staff
6	Rugină Dumitrița-Olivia	Staff
7	Borzan Mihai-Marian	Staff
8	Oros Simona-Nicoleta	Staff



LANDSPÍTALI ÍSLANDS
Iceland Liechtenstein Norway grants

Working together for a green, competitive and inclusive Europe*

CONTINUOUS FLOW INTERCHANGE OF COMMUNICATION AND KNOWLEDGE IN BIOMEDICAL UNIVERSITY RESEARCH "FLOW"

UMPH: University of Medicine and Pharmacy, Cluj-Napoca
 MEDICUTUMS: Research Center for Advanced Medicine, RO
 University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, RO
 University of Iceland, Reykjavik, IS
 University of Oulu, Oulu, NO

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Project No.: 21-COP-034
 Implementation: 01.08.2021 - 31.07.2022
 Project budget: 135.200,00 EUR
 Beneficiary: Cluj-Napoca University of Medicine and Pharmacy

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Dr. Jon Thor Bergthorsson



Flow cytometry

- Traditional flow cytometry was invented in the sixties (Coulter, Göhde)
- A powerful technique for mapping surface and intracellular protein expression via fluoro-chrome labelled antibodies
- Other cell properties, DNA dyes, fluoroprobes, Fluorescent proteins
- Hydrodynamic system with lasers for excitation, filters and PMT detection of specific emission wavelengths.
- Single cell resolution!!
- Enormous improvements in recent years with respect to development of new fluoro-chromes and instruments equipped with more lasers and increased range of detectors

LANDS





Dr. Katrin Birna Pétursdóttir

Flow Cytometry for hematology
Protocols and Technical aspects



Dr. Mihai Cenariu – USAMV Cluj-Napoca
Evaluation of sperm quality by flow cytometry



Dr. Horia Bumbea – President of the Romanian Flow Cytometry Association

Clinical applications of Flow Cytometry



Dr. Rareş Ştiufiuc

Plasmonic nanoparticles with applications in medicine

