

Protein production and purification partnership in Europe – P4EU



EMBL Protein Expression & Purification Core Facility

- existing since 2001
- 3.5 co-workers
- low/medium throughput
- charging fee for consumables

More info at http://www.embl.de/services/core_facilities/pepcore/index.html

Support for EMBL groups

- **Protein expression & purification**
E. coli, insect & mammalian cells
- **Biophysical characterization**
- **Consulting, information & training**

Support for external groups

- **Consulting, expression vectors, protein projects**
- **P-CUBE** (Protein Expression & Advanced Light Microscopy)

Collection of expression vectors and cell lines

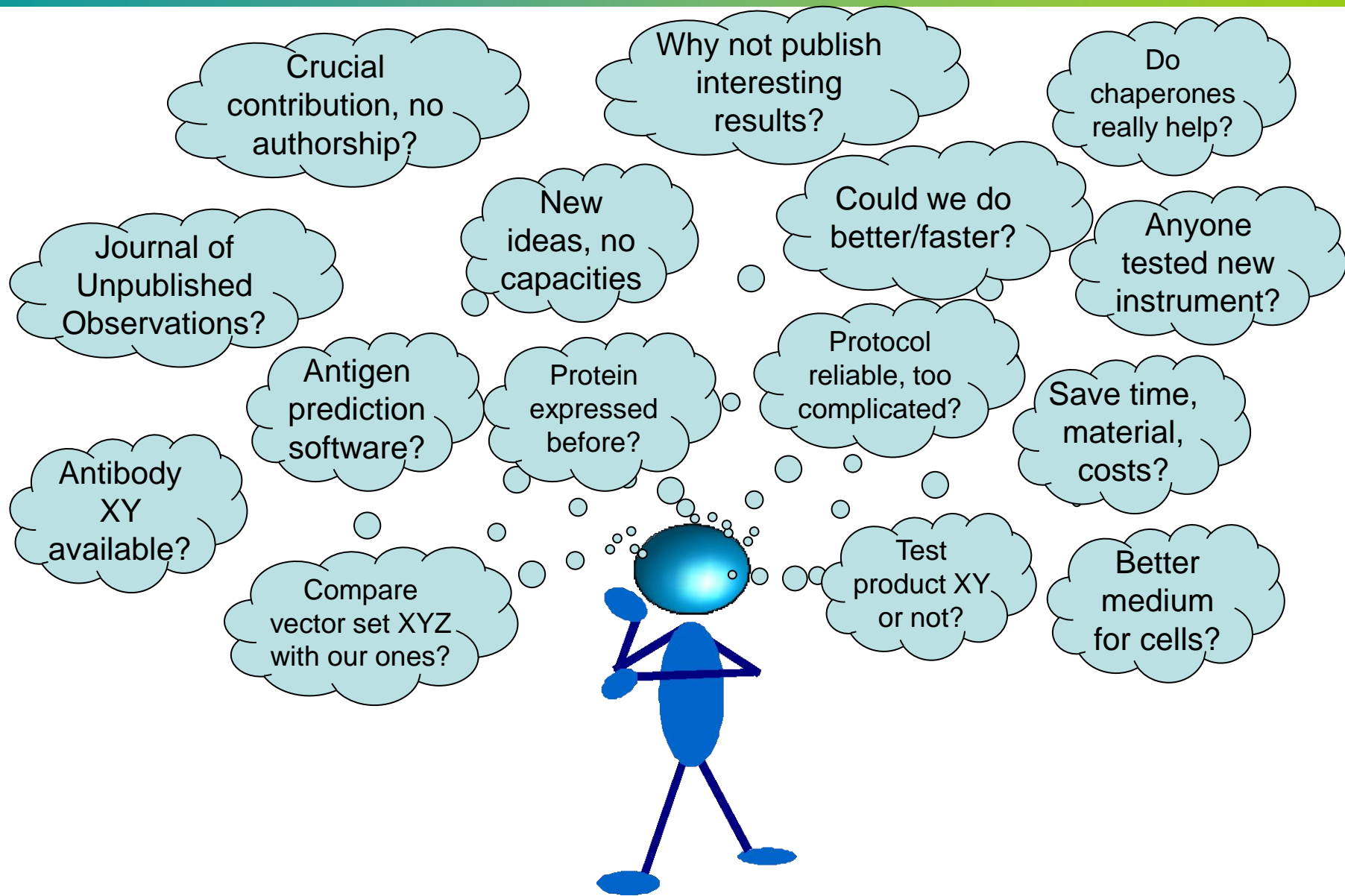
- commercial vectors (pET, pQE, pGEX,...)
- modified versions (e.g. pETM-vectors)
- *E. coli* strains and insect cell lines on stock

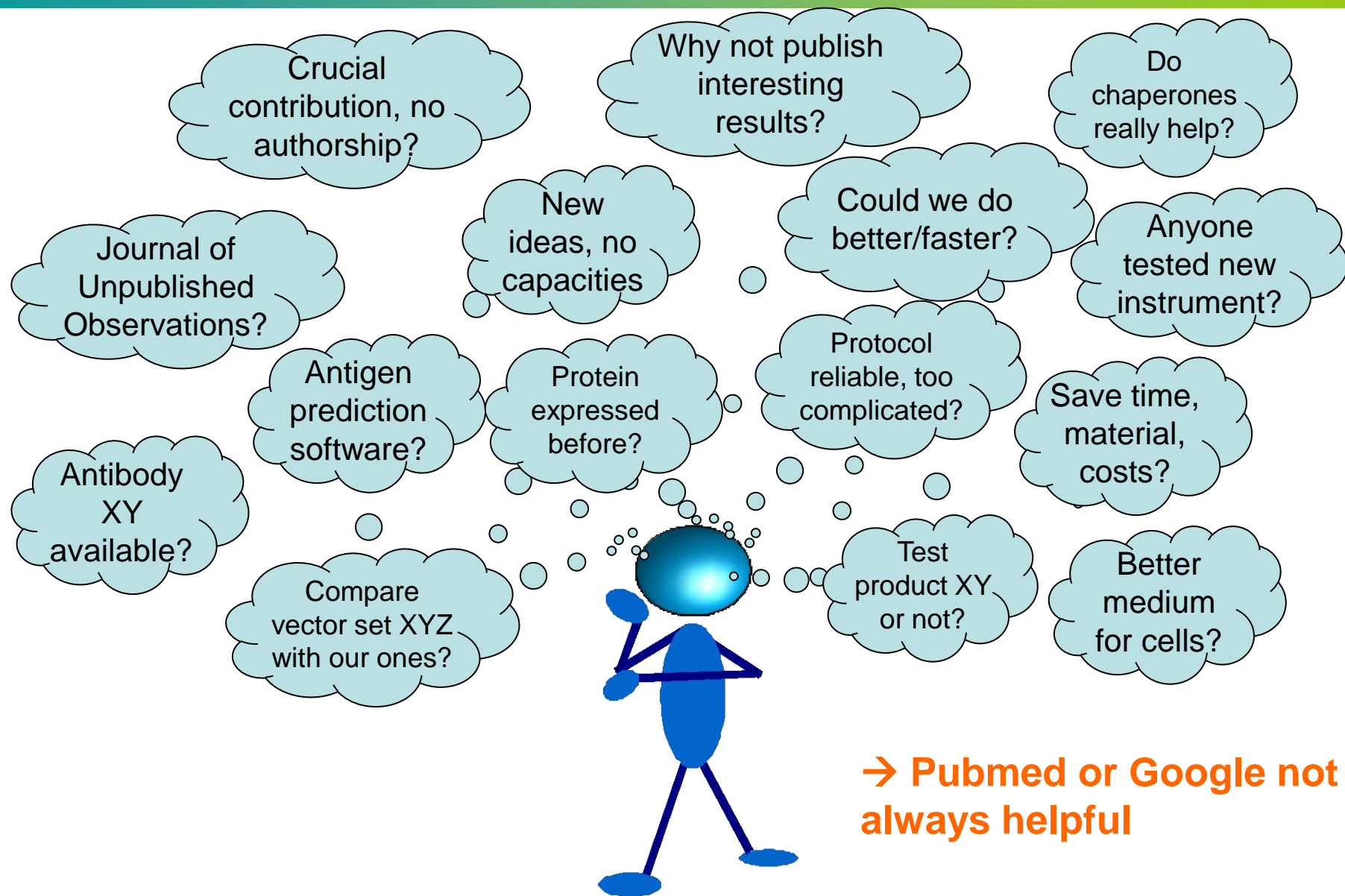
Frequently used proteins

- Proteases: His-TEV, GST-TEV, His-3C, GST-3C, His-SenP2
- Taq, Pfu, T7-RNAP, RNAsin, BirA, Cre
- LIF (mouse)

Biophysical methods

- Isothermal Titration Calorimetry (**ITC**)
- Analytical Ultracentrifugation (**AUC**)
- Dynamic Light Scattering (**DLS**)
- Spectrofluorometry (**FS, FP, FRET**)
- Circular Dichroism (**CD**)





<http://www.abrf.org/>

“The Association of Biomolecular Resource Facilities is an international society dedicated to advancing core and research biotechnology laboratories through research, communication, and education.”

ABRF The Association of Biomolecular Resource Facilities
Research • Technology
Communication • Education

Home ABRF Sponsors Contact Us Help Log In

Journal of Biomolecular Techniques | Discussion Forum | White Pages | Yellow Pages | Join ABRF

Search GO
Advanced Search

ABRF Home
About ABRF
Join ABRF
ABRF 2011 Meeting
ABRF 2010 Meeting
Research Groups

- Antibody Technology (ARG)
- DNA Sequencing (DSRG)
- Genomic Variation (GVRG)
- Glycoprotein (gPRG)
- Light Microscopy (LMRG)
- Metabolomics (MRG)
- MicroArray (MARG)
- Molecular Interactions (MIRG)
- Nucleic Acids (NARG)
- Protein Expression (PERG)**
- Protein Sequencing (PSRG)
- Proteome Informatics (PRG)

ABRF News

ABRF2011 February 19-22
JW Marriott San Antonio Hill Country
San Antonio, TX
Technologies to Enable Personalized Medicine
An International Symposium of the Association of Biomolecular Resource Facilities

Federal Spending Cuts Affect NIH, NSF, DoE and AFR!
Continuing resolution (HR 1) cuts \$1.63 billion from the NIH, \$359 million from the NSF and \$893 million from the DoE SC.
[Read More](#)

The ABRF welcomes its first Chapter - the Midwest Association of Core Directors (MWACD)
The ABRF is expanding its network! Please view the new ABRF [Chapters and Affiliates page](#) for additional information.
[Read More](#)

ABRF2011 Register now online!
Early Bird registration deadline is January 7th, 2011
Reservation deadline for discounted hotel room rates is January 27th, 2011
[Read More](#)

ABRF2011 Electron Transfer Dissociation (ETD) Workshop!
Reserve a spot for the ETD workshop given by Dr. Donald Hunt, for ABRF2011 attendees at no extra cost
[Read More](#)

Job Opening: Director Proteomics Resource Center
Proteomics Resource Center, The Rockefeller University, New York, NY
[Read More](#)

NYU is a new academic sponsor of ABRF
Academic Sponsors are vital to the future of ABRF as they can bring expertise on both technology and infrastructure. ABRF is grateful for the participation of NYU.
[Read More](#)

Job Openings: Sr. Laboratory Technician, Postdoctoral Associate, or Research Scientist
Positions at Hicks' lab in the Proteomics & Mass Spectrometry Facility at the Donald Danforth Plant Science Center - St. Louis, MO
[Read More](#)


Journal of Biomolecular

Automated DNA Extraction, Quantification, Dilution, and PCR Preparation for Genotyping by High-Resolution Melting
Genotyping by high-resolution amplicon melting uses only two PCR primers per locus and a generic, saturating DNA dye that detects heteroduplexes as well as homoduplexes. Heterozygous genotypes have a characteristic melting curve shape...[Read more](#)

Variability in Melanoma Metalloproteinase Expression Profiling
The proteolytic activities of a disintegrin and metalloproteinase (ADAM); a disintegrin and metalloproteinase with thrombospondin motifs (ADAMTS), and matrix metalloproteinase (MMP) families play important roles in normal and...[Read more](#)

Evaluation of GC-APCI/MS and GC-FID As a Complementary Platform
With a development of the

<http://www.abrf.org/>


The Association
of Biomolecular
Resource Facilities

[Home](#) | [ABRF Sponsors](#) | [Contact Us](#) | [Help](#) | [Log In](#)

Research • Technology
Communication • Education

[Journal of Biomolecular Techniques](#) | [Discussion Forum](#) | [White Pages](#) | [Yellow Pages](#) | [Join ABRF](#)

Search

GO

[Advanced Search](#)

ABRF Home

About ABRF

Join ABRF

ABRF 2011 Meeting

ABRF 2010 Meeting

Research Groups

- Antibody Technology (ARG)
- DNA Sequencing (DSRG)
- Genomic Variation (GVRG)
- Glycoprotein (gPRG)
- Light Microscopy (LMRG)
- Metabolomics (MRG)
- MicroArray (MARG)
- Molecular Interactions (MIRG)
- Nucleic Acids (NARG)
- ▶ **Protein Expression (PERG)**
- Protein Sequencing (PSRG)
- Proteome Informatics (PRIG)

Protein Expression Research Group (PERG)

| [Current Members](#) | [Studies](#) | [Activities](#) | [Membership History](#) |

The mission of the Protein Expression Research Group (PERG) is (1) to educate ABRF members and scientific community on best practices in recombinant protein expression and purification, and (2) help to advance the technology in recombinant protein expression and purification as a public service for laboratories engaged in protein expression and purification. Scientific areas include eukaryotic expression (baculovirus/insect cells, and mammalian), bacterial expression, cell-free expression, construct design, protein purification (tags, increasing throughput, increasing ease), protein refolding, and cell culture.

Current Membership

[Dr. Cynthia Kinsland](#) (Chair) - *Cornell University*
[Pamela Scott Adams](#) - *Trudeau Institute*
 Dr. James W. Bryson - *Bristol-Myers Squibb Co.*
[Dr Richard J Heath](#) - *St Jude Children's Research Hospital*
 Rebecca Page - *Brown University*
 Dr. Bo Xu - *UTMB*
[Chris W Turck](#) (EB liaison) - *Max Planck Institute of Psychiatry*

Studies

- 1) Recombinant Protein Expression and Purification Study (Completed): Participants in the study were sent a plasmid containing the gene for yeast ADH. Study participants expressed this protein in bacteria and purified it using metal chelation affinity chromatography. From the data returned, it appears as if protein labs do not use a standardized protocol, however, for this protein at least, all methods of expression and purification gave active enzyme. Results were presented at ABRF 2009 in Memphis, TN.
 - [PERG ADH Expression Study](#) (542K)
- 2) PERG Survey 2007 (Completed). Slides are available summarizing the survey conducted by the ABRF Protein Expression Research Group, February-March 2007. These slides were presented at the Protein Expression Research Group presentation at ABRF 2007 at the Tampa Convention Center, Tampa, Florida.
 - [PERG Survey2007_Slides](#) (18K)

Activities

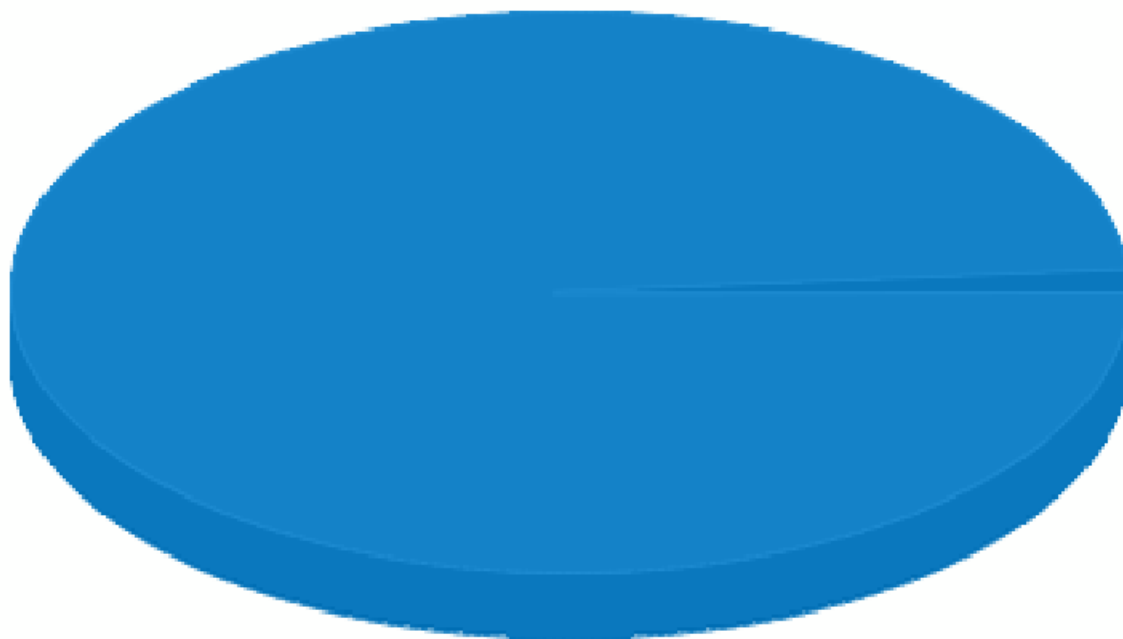
- 1) Recombinant Protein Laboratory Workshop held as a Satellite to the ABRF 2009 meeting in Memphis. This two day educational workshop provided an opportunity for participants to purify proteins from cell pellets using a variety of resins and perform several analyses to assess purity and yield. Both conventional procedures and an automated system were used. Participants also used a novel high-throughput screening approach to assess solubility conditions. Basic theory was covered during interactive discussion sessions.
 - [Solubility Scoring Sheet](#)

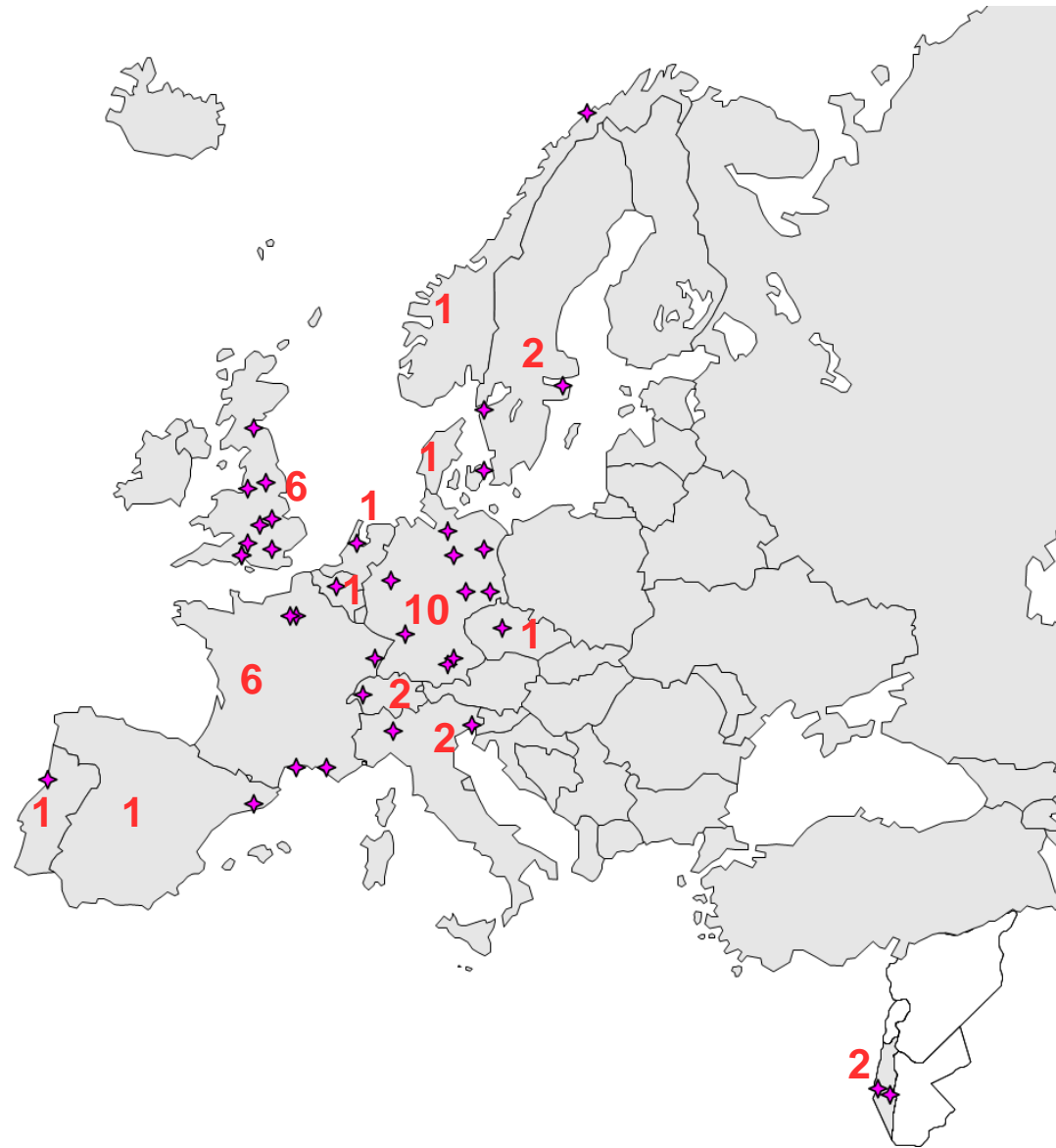
- **No similar association or network in Europe?**
- **No need for such a network?**
- **~30 facilities contacted (Feb 2010)**
- **Positive response**
- **First meeting of organizing committee (May 2010)**
 - **Survey to identify needs**
 - **Collect ideas for tasks of network**

Do you see any benefit in organizing a network of protein expression facilities in Europe?

■ Yes (35)

100%





Your ideas for the tasks of a protein facilities network

- **Contact experts in the field for troubleshooting**
- **Share expertise**
- **Exchange materials & protocols (e.g. database of proteins, protocols)**
- **Evaluate/develop new tools & technologies**
- **Establish standards**
- **Benchmarking**
- **Enable Collaboration between users**
- **Access by users of other facilities (if permitted)**
- **Enable access of own users to other facilities**
- **Training of staff/users**
- **Courses, Workshops for staff & users**

<http://www.embl.org/elmi/>



European Light Microscopy Initiative

The 3 Major Aims of ELMI:

Promote biological imaging as a fundamental tool for basic and applied research in the life sciences

Assist scientists working in the life sciences to fully exploit the power of biological imaging by improving the transfer of knowledge

Promote awareness of the potential of modern imaging techniques for biotechnology with particular emphasis on pharmaceutical applications

... communication network
... field of light microscopy
... equipment.

Aims of ELMI

Jobs

News

Meetings

Courses/Workshops

Want to join us ?

Steering Committee

... currently have
members in 33 different
countries. Click on the
flags to see who we are!

[Austria](#) [Australia](#) [Belgium](#) [Bulgaria](#) [Canada](#) [Croatia](#) [Czech Republic](#) [Denmark](#) [Estonia](#) [Finland](#) [France](#) [Germany](#)
[Greece](#) [Hungary](#) [Ireland](#) [Israel](#) [Italy](#) [Luxembourg](#) [The Netherlands](#) [Norway](#) [Poland](#) [Portugal](#) [Romania](#) [Russia](#) [Spain](#)
[Singapore](#) [Slovenia](#) [Sweden](#) [Switzerland](#) [Turkey](#) [Ukraine](#) [United Kingdom](#) [USA](#)


<http://euroflownet.ning.com/main>




Hüseyin Besir Sign Out Search European Cytometry 🔍

- MAIN
 - MY PAGE
 - INVITE
 - MEMBERS
 - GROUPS
 - FORUM
 - EVENTS
 - NEWS
 - RESOURCES
 - BLOGS
 - EDUCATION
- VIDEOS


Welcome to European Cytometry Network, Hüseyin Besir!
Here are a few things you can do right now...



[Invite colleagues](#)



[Add Profile Photo](#)



[Add Content](#)

Hüseyin Besir

- Sign Out
- ✉ Inbox
- 🔔 Alerts
- 👤 Colleagues - Invite
- ⚙ Settings

Quick Add... ▾

Events

February 2011

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Last Month Next Month

- Latest Activity**
- 

[Helene Dujardin](#) replied to [Derek Davies's](#) discussion '[FlowJo Question\(s\)](#)' in the group [FlowJo Users](#)


5 hours ago

“ Hi Derek, if you send the file to support@celeza.ch, I will have a look and post the answer here if I find out why! Helene ”
- 

[Ann Atzberger](#) replied to [Gelo de la Cruz's](#) discussion '[post-sort viability of cells](#)'

5 hours ago
- “ No, but it is of interest. I generally use a 100um nozzle to

Videos



[VenturiOne Demonstrati](#)
Added by [Gillian Byrne](#)



[chromocyte](#)

How would/could you contribute to the activities of such a network?

