

# Newsletter

[www.cytometry.be](http://www.cytometry.be)

**Belgische Vereniging voor Analytische Cytologie  
Association Belge de Cytologie Analytique**



## Autumn 2009

Board Members : SARAH BAATOUT *President*, BERNARD CHATELAIN, CHRISTIAN DEMANET, PIETER DE SCHOUWER, BERNARD HUSSON, PETER MEEUS, JAN PHILIPPE, NICOLE SCHAAF-LAFONTAINE, DIRK VAN BOCKSTAELE.

Editeur responsable / Verantwoordelijke uitgever :  
Pr. Nicole Schaaf-Lafontaine, ULg, Hematology Lab, +6 Tour 2 C.H.U. Sart-Tilman, 4000 Liège

Phone office: 04/366.82.60 / Phone secr: 04/366.75.36

E-mail: [Nicole.Schaaf@chu.ulg.ac.be](mailto:Nicole.Schaaf@chu.ulg.ac.be)



## **CONTENTS**

- 1. Report of 13<sup>th</sup> BVAC/ABCA annual meeting**
- 2. The winner : Short summary**
- 3. Changed bylaws at the 13<sup>th</sup> annual meeting**
- 4. Board renewal**
- 5. Report of the « Mol Meeting »**
- 6. Forthcoming meetings / events**
- 7. ISAC Strategic Plan Update**



## **Summary report of 13<sup>th</sup> BVAC/ABCA annual meeting: “Intracellular Cytometry: what’s inside ?”**

The meeting was organized in ‘Chateau de Colonster’ in Liège, a very nice location in the vicinity of the University of Liège.

The subject of the meeting was ‘Intracellular Cytometry: what’s inside ?’, a subject that could be approached from several points of view.

The first presentation by Mr. Luc Dirix from the Sint Augustinus Ziekenhuis, Wilrijk dealt with several reimbursement strategies of new cancer drugs. He stressed the importance of diagnostic tests, which enable clinicians to diversify a population into subpopulations of responders and non-responders to a particular group of drugs. This helps to establish a personal therapy for every individual. The costs of diagnostic tests are limited compared to the costs of ‘general’ treatment of patients.

The second speaker was Mr. Jacques van Dongen from the Erasmus MC, Rotterdam. He presented the results of an analysis performed by several labs grouped in the EuroFlow Consortium concerning flowcytometric detection of fusion proteins for the classification of leukaemia. He explained the use of an immunobead assay to detect fusion proteins and compared the results with those obtained by other methods like FISH and PCR.

After the coffee break, Dr. Maikel Peppelenbosch talked about the kinome. His research group found that despite the existence of lots of different eukaryotic kinases, the amount of substrates is only limited to about 170 different proteins.

The last speaker of the morning was Dr. Jean-Christophe Renaud. His talk was about the role of Jak kinase overexpression in tumoral transformation.

During lunch, the participants could visit the poster presentation consisting of twelve different posters about very diverse subjects. One of these posters would be selected for the price of best poster presentation in the afternoon.

The afternoon sessions started with a short overview of the financial and organisational aspects of the BVAC/ABCA followed by six ten-minutes presentations about several subjects. In the first presentation Annick Daniëls tried to answer the question if cardiac stem cells are a new potential tool for cardiac repair. Barbara Denys evaluated different methods for sensitive JAK2V617F detection in the second presentation. Nathalie Cools told us about the multiparametric detection of T cell response following DC vaccination and the results of a phase I clinical trial performed in Antwerp. The fourth presentation given by Natasja Van Gasse was about the evaluation of the cytodiff monoclonal antibody cocktail. Khalil Abou-El-Ardat presented the results of a study where they tried to assess the influence of external X-irradiation on the proliferation of two papillary thyroid carcinoma cell lines. The last short presentation given by Francois Mullier was about the contribution of the platelet microparticles assay to type II HIT. All six presentators did their very best to give a nice and comprehensive overview of their research. After these six presentations, all participants could vote for their favourite oral presentation and poster presentation. Our patience was tested as the results of this voting were given only after the presentations of the two last speakers of the day: Dr. Alain Chariot, who gave a presentation of IKK-related kinases and the link between innate immunity and cancer and last but not least, Dr. Rudi Hendriks who could tell us everything about the role of transcription factor Gata 3 in thymocytes and T-helper cells.

And then... there was the announcement of the award winners for most favourite oral presentation and most favourite poster presentation. The winner of the first was the author of this article, Annick Daniëls from the laboratory of Experimental Hematology of the Virga Jesse Hospital in Hasselt, who was nicely surprised with this proof of appreciation and of course €500 is nice to get. The winner of the best poster was Zhe Li from the laboratory of Experimental Immunology and Gastroenterology of the University of Leuven, who presented a poster about the long term kinetical monitoring of Foxp3 T-cells as a novel approach to study mechanisms of anti-TNF therapy in Crohn's Disease and ulcerative colitis. He too was nicely surprised and was very happy with the award of €150. The meeting was closed and after a farewell drink, everybody went home after a very interesting and instructive meeting.

### **Short summary of research topics**

#### **Laboratory of Experimental Hematology, Virga Jesse Hospital, Hasselt**

Cardiovascular diseases like acute myocardial infarction and cardiomyopathy result in an irreversible loss of cardiomyocytes by apoptosis and necrosis. The current therapy for these diseases is not adequate enough, since mortality remains very high. Cardiac repair via injection of stem cells is a promising therapy. In previous years, several clinical studies using bone marrow stem cells were undertaken to explore the possibilities of stem cell therapy. Unfortunately, cardiac recovery and replacement of scar tissue was minimal. Therefore further research is necessary to obtain a stem cell that is capable of differentiation down the cardiac lineage. Recently, the existence of such a stem cell was described. These stem cells can be readily isolated from the heart.

Our research group explores the ability of bone marrow derived stem cells, more specific hematopoietic and mesenchymal stem cells and of cardiac stem cells to differentiate into cardiomyocytes. For this purpose different techniques are used either on their own or in combination: flowcytometry, flow sorting, immunofluorescence, RT-PCR, monocultures and co-cultures with neonatal rat cardiomyocytes. The ultimate aim is to be able to expand a particular stem cell type that is able to differentiate into fully functional cardiomyocytes and to use it as a tool for cardiac repair in a clinical setting.

Another part of our research focuses on endothelial progenitor cells (EPC's). These cells are able to differentiate into mature endothelial cells and therefore, they may contribute to revascularization and re-endothelialization. EPC's can be mobilized from the bone marrow to peripheral blood by several factors like physical exercise. Moreover, the quantity of EPC's present in peripheral blood can give information on the course of various diseases like cardiovascular disorders. We have two studies running where we compare the presence of EPC's in peripheral blood of several groups of patients with cardiovascular disease before and after different training schemes.



## General assembly

### **Adaptation of the bylaws (in Art. 8) Accepted by the BVAC/ABCA General assembly**

The function of vice-president is replaced by “president-elect”, with the same duties as before

In addition, the president-elect becomes president of the board in the next period.

Every two years the president is replaced by the president-elect and 4-8 new board members are elected by the ordinary members by secret ballot.

Among each other the board chooses a president-elect, a secretary and a treasurer.

### **Next general assembly 13 November 2009, 13:30, Elzenveld, Antwerpen**

## Board renewal

At the deadline of 1 October 2009, nine members where candidate for membership of the board. As the board consists of nine members, elections are not necessary.

The new board:

Sarah Baatout (SCK-CEN, Mol)  
Christian Demanet (UZ Brussel)  
Barbara Denys (UZ Gent)  
Winnok De Vos (UGent)  
Pieter De Schouwer (ZNA, Antwerpen)  
Bernard Husson (Hôpital de Jolimont)  
Anne Kornreich (CHU Mons)  
Nicole Schaaf-Lafontaine (CHU Liège)  
Dirk Van Bockstaele (Esoterix, Mechelen)

Congratulations to all.



## **Molecular Biology and Cytometry Course, Mol, 7-8 may 2009**

This meeting in the pleasant surroundings of the Club House of SCK-CEN in Mol was a big success with 130 participants from different scientific and clinical fields.

In the mornings, several plenary and parallel sessions in a packed auditorium reviewed the latest techniques in microbiology, hemato-oncology and cell biology. Molecular biology, image- and flow cytometry were covered, comparing respective strengths and weaknesses, as well as possible pitfalls related to specific methods.

In the afternoon we had 28 different workshops in small groups (max. 8 people), which were very fruitful.

Most presentations and course notes are available on the [cytometry.be](http://cytometry.be) website.

The success of this course confirms the need for collaboration between molecular biologists and cytometrists in science and diagnostics and calls for a more in the next years.

Thank you to the organisers, the speakers and the workshop teachers. Also many thanks to the local organisers at the SCK-CEN, especially Sarah Baatout and Els Van Musscher : the organisation was really top class.



## Upcoming meetings / events

12-13 november 2009, Antwerp (Elzenveld)

**BVAC/ABCA and NVC joint annual conference**

[www.cytometry.be](http://www.cytometry.be)

15 december 2009 (afternoon), Monasterium Poortackere, Ghent

**First scientific MolecularDiagnostics.be meeting**

[www.moleculardiagnosics.be](http://www.moleculardiagnosics.be)

28-29 january 2010, Ghent (ICC)

**Advances in Genomics 2010**

[www.advances-in-genomics.org](http://www.advances-in-genomics.org)

8-12 may 2010, Seattle, Washington, USA.

**CYTO 2010 the XXV International Congress of the International ISAC**

[www.cytoconference.org](http://www.cytoconference.org)

25-26 november 2009, Saint-Malo, France

**Journées Thématiques AFC 2009**

[www.alphavisa.com/afc2009/sommaire.php](http://www.alphavisa.com/afc2009/sommaire.php)



**First Scientific Meeting MolecularDiagnostics.be  
15<sup>th</sup> December 2009**

## **REGISTRATION FORM**

Please fill out this form (one form per participant) and send it back, before 1<sup>st</sup> December 2009, to [registration@moleculardiagnosics.be](mailto:registration@moleculardiagnosics.be)

Family name :  
First name :  
University / Company :  
Address :  
City :  
Postal Code :  
Country :  
Telephone :  
Fax :  
E-mail :

Before 1<sup>st</sup> December 2009, a payment of 20 € should be made by banktransfer to account number 613-5513331-73, Björn de Rijke

Please state "MolecularDiagnostics.be Meeting 2009" and name of participant.



# Journées Thématiques AFC

Saint-Malo  
Palais des Congrès "Le Grand Large"

25 et 26 novembre 2009

## Association Française de Cytométrie

### Programme prévisionnel

#### Mercredi 25 novembre 2009

09h00-10h30	Tri cellulaire <sup>(1)</sup>	Exploration de la transduction du signal par cytométrie <sup>(2)</sup>	Imagerie des radeaux lipidiques <sup>(3)</sup>
10h30-11h30	Pause et exposition <sup>(6)</sup>		
11h30 -12h30	Tri cellulaire <sup>(1)</sup>	Exploration de la transduction du signal par cytométrie <sup>(2)</sup>	Imagerie des radeaux lipidiques <sup>(3)</sup>
12h30-14h30	Déjeuner <sup>(5)</sup> et exposition <sup>(6)</sup>		
14h30-16h00	Tri cellulaire <sup>(1)</sup>	Exploration de la transduction du signal par cytométrie <sup>(2)</sup>	Imagerie des radeaux lipidiques <sup>(3)</sup>
16h00-16h30	Pause et exposition <sup>(6)</sup>		
16h30-17h30	Conférence transversale : Attila Tarnok / ed.Cytometry <sup>(1)</sup>		
17h30-18h30	Assemblée générale AFC <sup>(1)</sup>		
19h30	Dîner des JT		

#### Jeudi 26 novembre 2009

09h00- 10h30		Microbiologie <sup>(3)</sup>	Plates-formes <sup>(2)</sup>	Cycle cellulaire <sup>(1)</sup>
10h30-11h30	Pause et exposition <sup>(6)</sup>			
11h30 -12h30	Analyse multicouleurs <sup>(3)</sup>	Microbiologie <sup>(4)</sup>	Plates-formes <sup>(2)</sup>	Cycle cellulaire <sup>(1)</sup>
12h30-14h30	Déjeuner <sup>(5)</sup> et exposition <sup>(6)</sup>			
14h30-17h00	Analyse multicouleurs <sup>(3)</sup>		Biologie végétale/ océanographie <sup>(2)</sup>	Cycle cellulaire <sup>(1)</sup>
17h00	Fin des Journées Thématiques			

<sup>(1)</sup> Salle Lamennais 4 + 5 - Niveau 3

<sup>(2)</sup> Salle Lamennais 1 - Niveau 3

<sup>(3)</sup> Salle Lamennais 2 - Niveau 3

<sup>(4)</sup> Salle Lamennais 3 - Niveau 3

<sup>(5)</sup> Rotonde Jacques Cartier - Niveau 1 (restauration)

<sup>(6)</sup> Espace du Grand Large - Niveau 1  
(exposition, pauses café et accueil)

### Association Française de Cytométrie

Association Française de Cytométrie - BP 155 - Villard Bonnot - 38191 Brignoud Cedex - France  
Courriel : [contact@afcytometrie.fr](mailto:contact@afcytometrie.fr) - Site web : <http://www.afcytometrie.fr>



# First Scientific Meeting MolecularDiagnostics.be

Monasterium Poortackere, Ghent  
15th December 2009

- 13h00 Registration and Coffee**
- 13h50 Welcome**  
*M. Sc. Marijke Raymaekers, Virga Jesse Hospital, Hasselt*
- 14h00 A cure for cancer!? Tyrosine kinases, its inhibitors and cellular resistance**  
*Prof. Dr. Peter Vandenberghe, Center for Human Genetics, UZLeuven*
- 14h40 Specific considerations for the use of molecular diagnostic tools in transplant recipients**  
*Dr. Elizaveta Padalko, Laboratory of Virology, UZGent*
- 15h00 Next generation sequencing: the Ghent-experience with Roche/454 and Illumina Technology**  
*Prof. Dr. Paul Coucke, Laboratory of Molecular Genetics, UZGent*
- 15h20 Coffee break**
- 16h00 Pandemic Mexican novel A/H1N1-2009 swine flu**  
*Prof. Dr. Marc Van Ranst, Dpt. of Laboratory Medicine, UZLeuven*
- 16h40 Interlaboratory standardisation of real-time PCR: the European EUTOS initiative for BCR/ABL quantification**  
*Dr. Hakim El Housni, Dpt. of Medical Genetics, Erasme Hospital, Brussels*  
*Prof. Dr. Nancy Boeckx, Dpt. of Laboratory Medicine, UZLeuven*
- 17h00 Molecular detection and identification of respiratory viruses**  
*Dr. Björn De Rijke, AZ Sint Lucas, Ghent*
- 17h20 Accreditation: the day after**  
*M. Sc. Marijke Raymaekers, Virga Jesse Hospital, Hasselt*
- 17h40 MolecularDiagnostics.be**  
*Dr. Friedel Nollet, AZ Sint-Jan Brugge-Oostende AV*
- 18h00 Goodbye drink**

The meeting is intended for all persons involved in molecular diagnostics (lab technicians, molecular biologists, clinical biologists, ...) and is limited to 150 participants. Accreditation for this meeting has been applied for at the RIZIV/ENAMI institute.

**Gold Sponsor: NOVARTIS**

Silver sponsors: Abbott, Applied Biosystems, Biomérieux, Cepheid, Innogenetics, Lucron, Qiagen, Roche, Siemens, Westburg

Register before 1st December 2009:

send registration form to [registration@moleculardiagnosics.be](mailto:registration@moleculardiagnosics.be), pay 20€ by banktransfer on 613-5513331-73  
Info and registration form at [www.moleculardiagnosics.be](http://www.moleculardiagnosics.be)

## **ISAC Strategic Plan Update July 2009**

In May 2005, under the leadership of then-President Maria Pallavicini and coordination by Paul Smith (current President-Elect), ISAC Council undertook a Strategic Planning process to identify strategic focus areas (initiatives) and develop action plans to implement them. The Strategic Plan was to be implemented over a 5 year period, and implementation has been a major priority under subsequent Presidents J. Paul Robinson and Robert F. Murphy. Meetings of the ISAC Council to review progress on the plan have been held on a regular basis since then. The most recent such meeting took place in May 2009 in Bethesda, MD. The Council met to review the Strategic Plan, evaluate progress made to date, amend action plans to meet current membership needs, and create new initiatives where necessary.

Over the past four years ISAC has accomplished many of the goals outlined in the 2005 Plan. Currently, progress on each of the Strategic Initiatives is reviewed on a rotating basis via monthly Council conference calls. Summarized below are the accomplishments and amendments to the original Plan resulting from ISAC Council's activities over the past 4 years. Moving these initiatives forward would not be possible without the dedication and commitment of ISAC's volunteer Council, Advisors, Standing Committee and Task Force members.

### **Journal**

The Journal has been successfully relaunched under the leadership of Dr. Attila Tarnok, Editor in Chief and Wiley Publishing.

#### **Major Accomplishments:**

- o The Journal's Impact Factor (currently 3.259) is at its highest point since 1994.
- o The quality of Journal articles has increased
- o Article submissions and rejection rates are up
- o Turnaround times for editorial reviews is significantly down
- o The January 2009 edition focusing on stem cells is one of the 25 most downloaded editions in the history of the Journal
- o The Journal has expanded its focus on Image Cytometry with over half of the Journal's submissions now in the field of Image Cytometry
- o ISAC has applied to have the Journal listed in the ISI Microscopy category
- o Wiley and ISAC are planning for several special editions of the Journal including issues to highlight CYTO 2010, the 30<sup>th</sup> Year Anniversary edition in June 2010 and new virtual editions

### **Organization**

- o ISAC employs a full-time Executive Director who helps in accomplishing the Strategic Plan Initiatives, serves as the liaison between the Congress Organizing Committee and meetings management team
- o Beginning in 2010 ISAC will move to annual International Congresses. The brand "CYTO" will be used to increase recognition of the meetings (e.g., CYTO 2011).
- o As a result of moving to annual Congresses the Council approved a motion to appoint Congress Chairs beginning with the 2011 Congress to relieve the President-Elect of planning activities for two successive annual Congresses. A Call for

Congress Chair nominations will be distributed to members and posted to the web site this summer

- Moving to Annual Congresses impacts the length-of-term for Executive and Council members as defined in the current ISAC Constitution and Bylaws. As a result, the wording of the Society Bylaws and Constitution will require amendment(s) to accurately define the correct term length. A membership vote will be required to approve the necessary changes.
- The Society will also develop new strategies for moving the Society forward beyond the current 5 year Strategic Plan

### **Membership**

- ISAC has implemented several successful programs to encourage and retain international emerging leaders to join ISAC. These programs include reduced costs for student members and a sliding scale based on individual economic environment for membership;
  - In 2007 ISAC ended the year with over 1750 members, which was the highest number of members during a non-Congress year
  - In 2008 ISAC ended the year with over 1850 members, which was an all-time high for ISAC membership
- In the future ISAC will be advertising in related scientific journals and revamping the Scholar's Program

### **Collaboration**

- In March, ISAC released a revised CLIA Manual in conjunction with our colleagues at the Clinical Cytometry Society. It is available online for members of both societies at no cost .
- On October 15, 2009 there will be a Joint Meeting of ISAC, CCS and ESCCA in Jacksonville, Florida. Please visit [www.isac-net.org](http://www.isac-net.org) for more information
- J. Paul Robinson, Past-President is the Communications Committee Chair for the American Institute for Medical and Biological Engineering (AIMBE).
- ISAC will continue to work with CCS and ESCCA to collaborate on additional meetings and education programs
- ISAC is pursuing relationships with other associations that have common interests

### **Educatio**

- The ISAC Education Committee is creating an Education Resource Calendar and Educational Materials Repository for members only access
  - ISAC will be adding web casts from several 2008 PreCongress Courses to the Repository

### **Standards**

- In April ISAC released Flow Cytometry Standards 3.1 and an updated FlowCAP Project for member review and comments
- The newly created Image Cytometry Metadata Standards Taskforce will focus on helping the image cytometry community make the best use of information regarding cell experiments and to enable interoperability of cell image data
- ISAC is recruiting volunteers for a Equivalent Reference Fluorophore Intensity Standards Taskforce, which will evaluate the usefulness of Equivalent Reference Fluorophore (ERF) units for the calibration of fluorescence intensity measurements

ISAC has appropriated funds to begin work on IEEE Standards