



BSAC

Belgian Society for Advancement of Cytometry

www.cytometry-bsac.be

NEWSLETTER January 2025

New Years Wishes	2
ISAC Membership	3
Flow Cytometry Facility in the Spotlight	4 - 5
Flow Cytometric Assay Modifications: The challenge of a sufficient validation.	6 - 9
BSAC-NVC joint event 2025	10 - 11
Other Upcoming meetings	12 - 13
Annual Membership Form	14

Happy New Year!

As we embark on this new year, may your life flow smoothly with precision and clarity, just like the best flow cytometric assays.

May you "sort" through every challenge with ease, "gating" out negativity and "analyzing" every opportunity for growth and success.

Here's to a year filled with vibrant positivity, healthy results, and breakthrough discoveries—whether in the lab or in life!

Wishing you a 2025 full of bright markers, positive events and abundant opportunities.

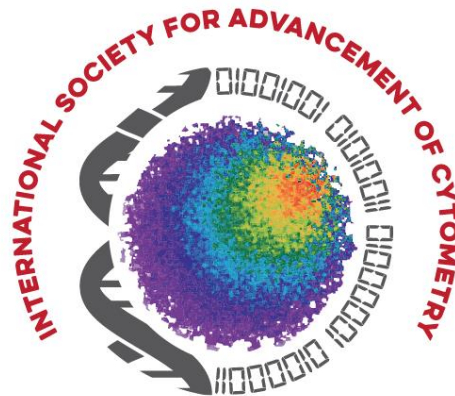


BSAC as an ISAC member

ISAC | Associated Societies

In 2024 BSAC joined the International Society for Advancement of Cytometry (ISAC) as associated society (<https://isac-net.org/page/AssociatedSocieties1>).

ISAC's Associated Societies (AS) program seeks to formally establish and strengthen the relationship between ISAC and other cytometry-focused regional, national, multi-nation and international not-for-profit Societies.



ASSOCIATED SOCIETY

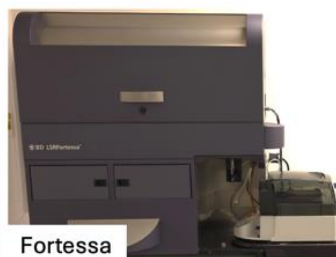
isac-net.org

VUB FLOW CYTOMETRY CORE FACILITY (FlowCore)

Flow Cytometry Facility in the Spotlight



FlowCore was established in **2018** and has since become a hub for advanced flow cytometry research at Vrije Universiteit Brussel. Our facility is equipped with a range of cutting-edge **instruments**, including Symphony A1, Symphony A3, Cytex Aurora CS3, Melody, Fortessa, FACS Aria III, and Celesta. These devices provide a wide array of capabilities, ensuring that we can meet the diverse requirements of our users.



VUB FLOW CYTOMETRY CORE FACILITY (FlowCore)

Flow Cytometry Facility in the Spotlight

Our **team** consists of an **academic director**, *Stefaan Verhulst*, one **junior expert**, *Eddy Himpe*, two **senior experts**, *Angelo Willems* and *Geert Stangé*, and an **administrative assistant**, *Jean-Marc Lazou*. Together, this dedicated group ensures the efficient operation and seamless functionality of FlowCore.

At FlowCore, we are committed to **helping researchers** leverage the full potential of this technology by offering access to the instrumentation and expert support. Our facility provides comprehensive training on flow cytometry instruments to ensure users can operate them effectively. We also assist in designing experiments and optimizing panels tailored to your specific research goals, ensuring that experiments yield reliable and reproducible results. For projects requiring cell isolation, we provide fluorescence-activated cell sorting services, enabling the precise separation of cell populations based on their unique characteristics. Additionally, our team is available to troubleshoot and provide technical support, helping you overcome any challenges you may encounter.

You can find more information about us on our **website** at flowcore.research.vub.be or reach out to us via **email** at info-flowcore@vub.be. Whether you are a seasoned researcher or new to flow cytometry, FlowCore is here to support you every step of the way. Let us help you bring clarity and precision to your cellular research.

Flow Cytometric Assay Modifications: The challenge of a sufficient validation.

Editorial by Eleni Linskens on behalf of the BSAC board.

Flow cytometry has become an indispensable tool in both research and clinical diagnostics, providing insights into cell phenotyping, counting, and functional analyses. However, developing and validating new flow cytometric assays and coping with essential assay modifications/revisions can be challenging.

The Clinical and Laboratory Standards Institute (CLSI) released the CLSI H62 – Validation of Assays Performed by Flow Cytometry guideline in 2021, providing recommendations on the validation of flow cytometric instruments and flow cytometric assays. The CLSI H62 guidance focusses primarily on analytical method validation including the important topics of assay development, optimization, and fit-for-purpose validation for flow cytometric assays. Moreover, the CLSI H62 document also provides information on platform workflow and quality system essentials, instrument setup and standardization and even covers components of assay life-cycle management, sample result reporting and recommended practice on the examination and post-examination phase within the field of flow cytometry.¹

As described in CLSI H62, when making a validation plan for a new flow cytometric assay, the context of use of the assay must be considered, which takes into account the regulatory setting of the laboratory and the category of bioanalytical data generated in the assay, which for most flow cytometric methods will be qualitative (e.g., leukemia/lymphoma assays) or quasi/semiquantitative (most enumeration assays). When developing validation strategies for a modification of an already validated assay, the same considerations need to be applied. Prior to validation, assay modifications should be optimized during a development process, which provides evidence that the assay performance will not be adversely affected.

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The CLSI H62 document does provide some guidance on the validation strategies of assay revisions. However, the recommendations on assay modification validation often lack detailed explanation and leaves room for further clarification. Furthermore, several types of modifications, commonly performed in both research and clinical diagnostics, are not specifically addressed by the CLSI H62 guideline.





Within this regard, the International Clinical Cytometry Society (ICCS) took the initiative to gather an expert-panel to further elaborate on practical recommendations for the validation of several types of flow cytometric assay modifications. This collaboration has led to the publication of an interesting manuscript by **Monaghan S.A. et al.**²

DOI: 10.1002/cyto.b.22202

ORIGINAL ARTICLE

CLINICAL CYTOMETRY WILEY

Flow cytometry assay modifications: Recommendations for method validation based on CLSI H62 guidelines

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Editorial by Eleni Linskens on behalf of the BSAC board

This “best practices” manuscript builds further on the content of the CLSI H62 document and is intended to provide more detailed and practical guidance when modifying existing (already validated) flow cytometric assays. The manuscript provides recommendations on which parameters to include in the validation plan of several types of modifications so that accuracy and

reliability of flow cytometry assays are confirmed. In some cases, the assay modification validation can be managed through a change control process and/or a supplement to an existing validation. In other modifications, for some validation characteristics, the number of samples could be less than a full validation depending on the extent of the modification. Importantly, it is appropriate to perform validation as a new assay when a modification significantly impacts reportable results critical for the assay's intended use.

Topics discussed in this paper include changes in instrument model and/or platform technology, changes in antibodies or fluorophores (panel revisions and improvements), changes in sample collection, modifications of commercially available (in vitro diagnosis [IVD] approved) assays, changes in gating strategies and antibody reporting, and reference range changes. Examples of specific and commonly used assays are discussed to illustrate general concepts such as the use of comparability studies to reduce the load on analytic performance validation or to adopt attributes established from prior validation studies (e.g., reference ranges); or validation as a new assay (rather than assay modification) may be in order.

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The expert guidance is meant as a practical recommendation for both research and diagnostic laboratories. On behalf of the BSAC board, we are confident that this manuscript will help to perform well-thought-through and sufficiently comprehensive validations for assay modifications without the burden and extent of a full flow cytometric assay validation when appropriate.

1. (CLSI) CLSI. (2021). In (CLSI) CLSI (Ed.), Validation for assays performed by flow cytometry. Clinical Laboratory Standards Institute.
2. Monaghan, S. A., Eck, S., Bunting, S., Dong, X. X., Durso, R. J., Gonneau, C., Hays, A., Illingworth, A., League, S. C., Linskens, E., McCausland, M., McCloskey, T. W., Rolf, N., Shi, M., Wallace, P. K., Litwin, V., Kern, W., Deeb, G., Nash, V., & Olteanu, H. (2024). Flow cytometry assay modifications: Recommendations for method validation based on CLSI H62 guidelines. *Cytometry Part B: Clinical Cytometry*, 1–15. <https://doi.org/10.1002/cyto.b.22202>.

Save the date!

“Flow across borders”

25 & 26 November 2025, Antwerp (BE)

Joint congress

Dutch Society for Cytometry (NVC),

SKML-section IMCD

&

Belgian Society for the Advancement of Cytometry (BSAC)



The ultimate conference for flow cytometry analysis and quality in the BeNeLux!

BSAC-NVC Joint event 2025: Travel Grants

The BSAC board will grant 2 travel grants to the 2 best submitted abstracts.

Start and deadline date to be announced!

Application requirements:

- To be a BSAC member
- To have a submitted and accepted abstract
- To be less than 36 years
- Registration fee and one overnight stay will be compensated.
- Applications should be submitted together with the abstract (deadline will be announced).
The different applications will be reviewed and the BSAC Board will decide which grants will be awarded.

After the meeting:

- Certificate of attendance
- Copy of all invoices/tickets of your overnight stay

Other upcoming conferences and meetings in 2025

- 7–8 Feb 2025** 40th General Annual Meeting of the Belgian Hematology Society (BHS), Brussels.
<https://www.bhs.be/en/events/40th-general-annual-meeting-of-the-belgian-hematology-society-2025>
- 19-21 Feb 2025** 1st EuroFlow Winter Course: Advances Course on MRD-analysis, Prague, Czech Republic.
<https://euroflow.org/education/winter-course/>
- 3-10 March 2025** Virtual Flow Cytometry Data Analysis Course (RMS).
<https://www.rms.org.uk/rms-event-calendar/2025-events/virtual-flow-cytometry-data-analysis-course-2025.html>
- 28-29 March 2025** 3rd German EuroFlow Educational Symposium and Workshop, Rostock, Germany.
<https://euroflow.org/education/3rd-german-euroflow-educational-workshop/>
- 7-11 April 2025** Computational Cytometry Summer School – VIB Ghent, Belgium.
<https://www.vibconferences.be/events/computational-cytometry-summer-school>
- 7-9 May 2025** XXXVIIIth International Symposium on Technical Innovations in Laboratory Hematology (ISLH), Halifax, Nova Scotia, Canada.
<https://www.islh.org/2025/>
- 18-22 May 2025** EuroMedLab 2025, Brussels, Belgium.
26th IFCC-EFLM Congress of Clinical Chemistry and Laboratory Medicine.
49th Annual Meeting of the Royal Belgian Society of Laboratory Medicine.
<https://www.euromedlab2025brussels.org/>

Other upcoming conferences and meetings in 2025

31 May – 4 June 2025	38th annual Congress of the International Society for the Advancement of Cytometry (ISAC) - CYTO Denver, USA. https://www.cytoconference.org/
12-15 June 2025	EHA 2025 Congress, Milan, Italy. https://ehaweb.org/congress/eha2025-congress/
23-27 June 2025	2 nd EuroFlow Summer school, Salamanca, Spain.
17-20 Sep 2025	European Society for Clinical Cell Analysis (ESCCA), Montpellier, France. https://www.escca.eu/escca2025
26-30 Sep 2025	ICCS Annual Meeting – Philadelphia, USA. https://www.cytometry.org/web/index.php
10-14 Nov 2025	Hands-on flow cytometry: learning by doing! – EMBL Course. Heidelberg, Germany. https://www.embl.org/about/info/course-and-conference-office/events/
25-26 Nov 2025	NVC-BSAC joint event, Antwerp, Belgium. (See pages 10-11) https://cytometry-bsac.be/

Annual membership form 2025

As every year, we appreciate your membership to our society. BSAC members will get a discount for the next BSAC event in 2025, a joint meeting with the Dutch NVC partners.

Last name:

First name:

E-mail address:

Institution:

Department:

City + code:Country:

Telephone No:

RIZIV/INAMI number:

- Profit full membership € 50.00
- Non-profit full membership € 25.00
- In training or student € 0.00 (copy of the student card mandatory)

PLEASE SEND THIS DOCUMENT TO THE SOCIETY: info@cytometry-bsac.be

Address payment to the BSAC account 001-2653141-73 (bic:gebabebb; iban:be27 0012 6531 4173. Please mention « BSAC membership 2024 » and your name on the transfer.