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# 8<sup>TH</sup> IC-3RS SYMPOSIUM

## TOOLS IN ACTION: DRIVING BETTER 3RS SCIENCE



MONDAY 15 SEPTEMBER 2025  
HEALTH CAMPUS JETTE



The IC-3Rs platform could be created thanks to Mireille Aereus and the Chair Mireille Aereus for the Development of Alternative methods.

Mireille Aereus was a very friendly person with a warm heart, not only for humans, but also for animals. In 2015, she created the 'Chair Mireille Aereus for the Development of Alternative Methods' together with Vera Rogiers. As the dedicated founder of the chair, Mireille Aereus closely followed up the 3R-research of young scientists. In 2017, she helped to launch the IC-3Rs platform at the VUB.

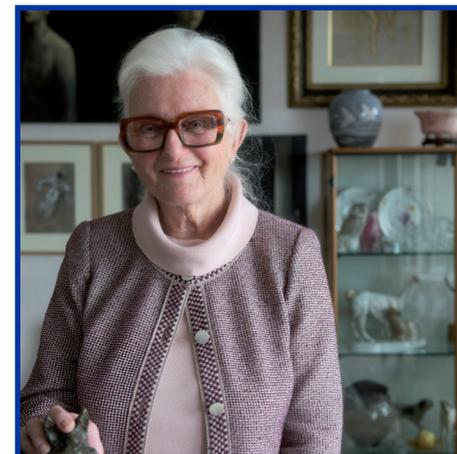
Mireille sadly left us on 30 March 2020 at the age of 86. We lost a very dear and loyal friend, and will definitely continue her life's work at the VUB. She made this possible in her last will, wherein she maintained her support for animal-free studies within the research group IVTD. Thanks to her personal engagement, the Mireille Aereus Chair and the IC-3Rs platform will continue and grow for many years to come. This beautiful gesture reflects her attitude to life.

We will all remember her exceptional kindness and generosity.

IC-3Rs can expand its activities  
thanks to the Chair Mireille Aereus  
and the generous support of the  
Brussels Region, Animal Welfare.

**General Data Protection Regulation (GDPR) note:**

All participants of the IC-3Rs Symposium may be contacted for future events. If you do not wish to be contacted, please inform us at [info@ic-3rs.org](mailto:info@ic-3rs.org).



We are happy to welcome you to the 8<sup>th</sup> Edition of the Annual Symposium of the Innovation Centre for 3R Alternative Methods: “Tools in Action: Driving Better 3Rs Science” showing 3R-examples in which theory is turned into practice.

The 2025 IC-3Rs Symposium focuses on the real-world implementation of cutting-edge technologies that are reshaping scientific research and accelerating the transition away from animal testing. From multi-organ-on-chip systems and animal-free antibodies to virtual control groups and automated pain detection systems, this edition showcases a wide array of tools that are already having a remarkable impact today.

Strong emphasis is placed on next-generation strategies that challenge traditional models and promote more ethical, efficient, human-relevant and reproducible science. Digital tools such as virtual reality and automated pain detection systems are redefining refinement practices, while advances in biotechnology are paving the way for more reliable animal-free solutions.

This Symposium serves as a dynamic platform for national and international experts to exchange ideas, foster collaboration, and explore the broader implications of these innovations for both scientific progress and animal welfare - particularly within the pharmaceutical and biotechnology sectors.

We invite you to take away new ideas and put them into action in your own laboratory - turning them into real impact.

## Sponsors



# Programme

09.00 Registration and coffee

09.45 Welcome

Vera Rogiers (VUB, Chair IC-3Rs, BE)

Moderator Axelle Cooreman (VUB, Scientific coördinator IC-3Rs)

## REPLACEMENT

10.00 Advancing Predictive Preclinical Testing Through Integrated Multi-Organ-Chip Platforms

Reyk Horland (TissUse, DE)

10.40 Next-Generation Risk Assessment: Skin Sensitization Strategies for Enhanced Feminine Product Safety

Quinten Marcelis (Procter & Gamble, BE)

11.20 Coffee break & Poster session

## REDUCTION

11.50 Reducing Animal Usage with Virtual Control Groups - The VICT3R Project

Thomas Steger-Hartmann (Bayer, DE)

12.30 Lunch & Poster session

Moderator Joery De Kock (VUB, Vice-chair Animal Welfare Body)

13.45 Animal-free Antibodies and Where to Find Them

Esther Wenzel (Abcalis, DE)

## REFINEMENT

14.25 Groundbreaking Virtual Reality Technology: A World First in Veterinary Medicine

Dimitri Kadic (EquiTom, BE)

15.05 Coffee break

15.30 Computer Vision Based Assessment of Animal Pain

Albert Ali Salah (Universiteit Utrecht, NL)

## BELGIAN INITIATIVE

16.10 Eight years of RE-Place: what is the status of the project today?

Maude Everaert (VUB, BE)

16.25 Ceremony: Poster Award

Note that the speaker's time includes Q&A (10 mins)



# Organisers & Moderators

## Vera Rogiers

Emeritus Professor

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After many years of leading the department of *In Vitro* Toxicology and Dermato-Cosmetology (IVTD) at the Vrije Universiteit Brussel (VUB) in a successful way and teaching Toxicology and Dermato-Cosmetic Sciences, Emerita Professor Toxicology Vera Rogiers is still involved in the IVTD group as scientific collaborator. She yearly organizes 3 international courses on Cosmetics and Risk Assessment. She is the Co-founder and Director of the Innovation Centre-3Rs (IC-3Rs) at the VUB and is also involved in the scientific Chair Mireille Aereus, both with focus on replacing experimental animals by novel technologies. At the EU level, she is Co-chair of the Scientific Committee on Consumer Safety (SCCS), Chair of the Methodology Workgroup being as such responsible for the timely update of the SCCS Notes of Guidance, highly rated in the field of risk assessment. She is a member of the Mirror group of the European Partnership on Alternative Approaches to Animal Testing (EPAA). Her main research activity was and is situated in the development and promotion of *in vitro* models as an alternative to the use of experimental animals in pharmaco-toxicology. Genomark, an animal-free alternative for de-risking false positive genotoxicity results, has been developed and submitted to EURL ECVAM for validation. She has been promoter of 34 doctoral theses, is author or co-author of 430 publications in international peer reviewed scientific journals and is editor of several scientific books. She is an often-invited speaker (>400) and participated in the organization of more than 60 international congresses. She has coordinated 2 EU research projects and was partner in several FP6, FP7 EU and Horizon 2020 *in vitro* research projects. Actually, she participates in the EU project PARC and in the COST project IMPROVE. Furthermore she is Co-leader of the RE-Place project, which collects all *in vitro* methods in Belgium in one central database. Of the obtained scientific results, patents have been filed. Throughout her carrier she received six international scientific awards for her pioneering research role in *in vitro* Experimental Toxicology.

H-index = 58; 14,237 citations; <https://orcid.org/0000-0003-0635-7740>

## Tamara Vanhaecke

Professor

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Tamara Vanhaecke is Full Professor Toxicology and Head of the Department *In Vitro* Toxicology and Dermato-Cosmetology (IVTD) at the faculty of Medicine and Pharmacy of the Vrije Universiteit Brussel (VUB), that is striving for excellence in the domain of 3R alternative methods, referring to the Reduction, Replacement, Refinement of animal use in research and testing. She has a background in cell and gene biotechnology, holds a doctoral degree in experimental *in vitro* toxicology, is a European registered toxicologist and a trained chemical risk assessor. Her research is situated in the field of *in vitro* experimental toxicology with focus on the development of human stem cell-derived hepatocyte-based culture models for the detection of drug-induced liver injury and in the area of *in vitro* liver disease modelling. She also has several research collaborations with Sciensano (Belgian public institution for public and animal health) that address toxicity concerns related to e-cigarettes, food contact materials, cosmetics and feminine intimate products. She has more than 150 scientific publications in peer-reviewed journals and books, and is reviewer for several scientific journals in the field of pharmaco-toxicology, (*in vitro*) toxicology and hepatology. She has several times been invited speaker on international congresses. She is at the VUB co-holder of 3 patents and obtained 2 international research awards in the field of 3R alternative methods. She has acted as promoter of 10 doctoral theses in pharmaceutical sciences and is promoter of 11 additional PhD theses that are still ongoing. She was the VUB promoter of the European FP7 project START-UP and was involved in the FP7 SEURAT-1 projects DETECTIVE and HeMiBio, and the FP6 projects ESNATS, carcinoGenomics, Predictomics and Liintop. At the EU level, she is Member of the Scientific Committee on Consumer Safety (SCCS) and former Member of the ECVAM Validation Management Group concerning toxicokinetics and metabolism.

## Axelle Cooreman

Scientific coördinator IC-3Rs  
Guest Professor  
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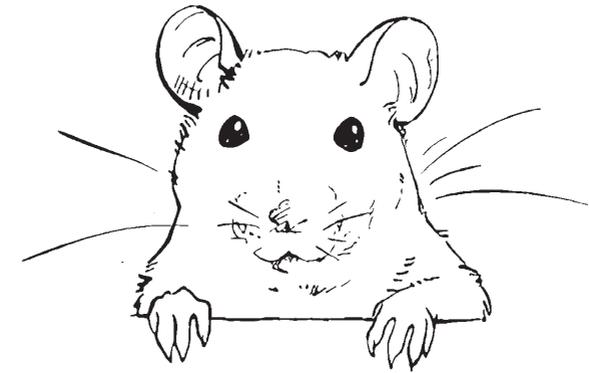
Axelle Cooreman studied Pharmaceutical Sciences at the Vrije Universiteit Brussel (VUB). In 2023, she completed a joint PhD from the Vrije Universiteit Brussel and KU Leuven, focusing her research on identifying novel biomarkers for drug-induced cholestasis using various liver *in vitro* models. Since then, she is actively involved in the daily management of the Innovation Centre 3Rs (IC-3Rs), which is committed to advance innovative technologies to replace the use of experimental animals. She also currently lectures cosmetology in the Master of Pharmaceutical Care at the Vrije Universiteit Brussel.

## Joery De Kock

Professor  
Vice-chair Animal Welfare Body  
*In Vitro* Toxicology and Dermato-  
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Joery De Kock graduated in 2006 as Pharmacist from the Vrije Universiteit Brussel (VUB) and obtained his PhD in Pharmaceutical Sciences in May 2012 under the mentorship of Prof. Vera Rogiers. During his PhD, he managed for the first time to differentiate so-called human skin-derived precursor cells (hSKP) into hepatic cells. These hSKP-derived hepatic cells (hSKP-HPC) have provided a solid basis for multiple successful follow-up PhD projects over the last years. He is since 2017 a full-time professor affiliated to the Faculty of Medicine and Pharmacy at the research group of *In Vitro* Toxicology and Dermato-Cosmetology (IVTD) and was previously a postdoctoral research fellow of the Research Foundation Flanders (FWO) from 2012 until 2017. From 2016 to 2018, he was a visiting researcher at the Institute of Biotechnology of the RWTH Aachen University in Germany. During this period he acquired expertise in state-of-the-art directed protein evolution technology. His ongoing research uniquely combines gene and stem cell therapy with directed protein evolution technology in order to develop next generation medicines to cure inborn errors of liver metabolism.



# Speakers

# Reyk Horland

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Reyk studied biotechnology with a focus on medical biotechnology. He received his doctorate degree (summa cum laude) in biotechnology from the Technische Universität Berlin. Early in his career, his research activities focused on adult human stem cells and their application in cell therapies. During his stay at the Department of Medical Biotechnology at TU Berlin he broadened his research activities toward the development of complex 3D tissue models for substance testing.

In 2010, Dr. Horland joined the “Multi-Organ-Chip” project which was awarded funding by the highly prestigious GO-BIO grant of the German Federal Ministry of Education and Research (BMBF). His research responsibilities focused on various aspects of tissue engineering, e.g. *in vitro* blood vessels for drug screening.

Between 2012 and 2015, Reyk was responsible for all Business Development activities of TissUse GmbH, a spin-off company dedicated to commercializing the results of the GO-BIO “Multi-Organ-Chip” project. There he succeeded in acquiring clients from pharma and cosmetics industry as early adopters of the technology while further developing and strengthening the contract service panel of TissUse. He devised and supervised TissUse HUMIMIC product launch campaign, introducing one of the first Organ-on-a-Chip products to the market in 2014.

In 2015, Dr. Horland was promoted to senior management of TissUse as VP of Business Development. Under his leadership, the company has seen a remarkable annual sales growth rate utilizing its hybrid business model approach of offering customized services and highly innovative products to clients worldwide.

Dr. Horland was appointed CEO of TissUse in October 2020. His business network includes leading pharmaceutical and consumer product companies as well as regulatory authorities and outstanding research institutions worldwide.

## Advancing Predictive Preclinical Testing Through Integrated Multi-Organ-Chip Platforms

### Dr. Reyk Horland

Microphysiological systems (MPS) are sophisticated *in vitro* models engineered to replicate the structural and functional characteristics of human organs or tissues. These systems typically include multiple cell types organized in a way that mirrors their native spatial and functional arrangement in the body. In particular, integrated microfluidic MPS have proven to be valuable research tools for simulating organ-level functions, helping to establish more predictive and reliable preclinical assays.

Recently, the adoption of MPS in industrial applications has gained significant momentum, driven by increasing support from regulatory authorities and funding agencies advocating for the implementation of New Approach Methodologies (NAMs).

The first part of the presentation will highlight practical examples of established MPS technologies, including single-organ chips and systems integrating two or four interconnected organ models. At the core of these systems is a versatile microfluidic Multi-Organ-Chip (MOC) platform—roughly the size of a microscope slide—which integrates a micro-pump and facilitates the functional connection of multiple organ equivalents.

The discussion will also address key considerations for ensuring long-term system performance and enabling broader industrial use, such as platform design, reliable tissue sourcing, and maintaining stable tissue homeostasis on-chip. The second part of the presentation will offer a forward-looking perspective on how the integration of automated MOC-based assays with AI-driven predictive tools can significantly accelerate drug development while reducing associated costs and timelines. ■

# Quinten Marcelis

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Quinten Marcelis is currently a Toxicologist at Procter & Gamble, having joined the company in 2024. In this role within the Global Product Stewardship team, he has global responsibility for human safety of Hard Surface Cleaners, including products such as Mr. Propre and Viakal. He is also an active member of the P&G Contact Dermatitis Team, working to ensure the safety of P&G's product portfolio.

Prior to this position, Quinten completed a PhD at VUB, at the *In Vitro* Toxicology-Dermatocosmetology Department. His research, conducted in collaboration with Sciensano, centered on developing a generic safety assessment strategy for feminine intimate products. This work addressed critical needs from both consumers, industry and regulators regarding chemicals in menstrual hygiene products.

Quinten has presented his PhD research at various (inter)national conferences and poster sessions, contributing to the dialogue on safety assessment methodologies.

## Next-Generation Risk Assessment: Skin Sensitization Strategies for Enhanced Feminine Product Safety

### Quinten Marcelis

As public concern over harmful chemicals in women's intimate products rises, effective and ethical safety assessments are crucial. In this presentation, Next-Generation Risk Assessment (NGRA) approaches are introduced, highlighting how they align with the 3Rs - Replacement, Reduction, and Refinement - in assessing skin sensitization risks associated with fragrances in menstrual products.

Central to the NGRA framework is its exposure-led, hypothesis-driven nature, integrating *in silico*, *in chemico*, and *in vitro* approaches. This innovative methodology addresses the need for effective risk assessments without relying on newly generated animal data, a challenge that also presents an opportunity to increase the acceptance of non-animal data in safety decision-making.

In this presentation, we will outline the adverse outcome pathway (AOP) for skin sensitization, highlighting the biological mechanisms involved. This foundational knowledge is crucial for understanding the development of New Approach Methodologies (NAMs). We will showcase examples of fragrance allergens tested using NAMs, such as the Direct Peptide Reactivity Assay (DPRA) and KeratinoSens™, illustrating how these methods minimize reliance on animal testing.

Additionally, the presentation will integrate hazard and exposure assessments within a Quantitative Risk Assessment (QRA) framework to evaluate risks posed by fragrance allergens in scented menstrual hygiene products. The methodologies employed will be detailed, and case studies will be reviewed to illustrate how these findings contribute to the development of safer products. ■

# Thomas Steger-Hartmann

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Dr. Thomas Steger-Hartmann (VP) led the department Investigational Toxicology and subsequently the *In Vitro* Safety Subcluster at Bayer AG, Pharmaceuticals, Germany until September 2024. Thomas has more than 29 years of experience in the field of preclinical assessment of pharmaceuticals. He is a trained biologist with a diploma from the University of Freiburg i.Br., an M.Sc. degree from the University of Michigan and a PhD from the University of Freiburg i.Br., Germany. He is a Eurotox registered toxicologist.

Thomas was deputy leader of two European Innovative Medicines Initiative (IMI) projects (eTox and eTransafe) which focussed on data science approaches for preclinical safety assessment. Since September 2024 Thomas leads a new consortium under the Innovative Health Initiative (IHI) for the advancement of virtual control groups with the name VICT3R ("VICTER"), contributing to the reduction of animal use in safety studies.

## Reducing Animal Usage with Virtual Control Groups - The VICT3R Project

Thomas Steger-Hartmann

The European IHI project VICT3R aims to significantly reduce the use of animals in nonclinical drug safety evaluations by replacing concurrent control groups (CCGs) with Virtual Control Groups (VCGs). This public-private partnership involves 33 industrial, SME, and academic partners. Additionally, communications with regulators such as EMA, FDA or PMDA and other important organizations such as JPMA have begun aiming to achieve global consensus on important points in VCG implementation for regulatory decisions. Data from past experiments with CCGs will be used to create VCGs that match study specific criteria either by filtering or by AI generation. Although preliminary evaluations show the feasibility of VCGs, scientific challenges remain, such as data collection, key variable identification, and compliance with Good Laboratory Practice (GLP).

From 2024 to 2028, VICT3R will focus on developing:

- A large database of high-quality, standardized data from control animals used in systemic toxicity studies with practices that are accepted for GLP use by regulators.
- Collecting digital histopathological images and linking them to alphanumerical data.
- Computational tools to support data characterization and quality control.
- Statistical and AI-based workflows to create VCGs,
- Performance test results of retrospective and prospective studies comparing VCGs with CCGs.

A successful implementation of the VCG concept would constitute a major contribution to the reduction of animal use in toxicology studies, especially in the context of regulatory acceptability for future decisions. ■

# Esther Wenzel

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Dr. Esther Wenzel is COO and Co-Founder of Abcalis GmbH, a biotechnology spin-off from TU Braunschweig specializing in the production of fully animal-free antibodies using phage display. She holds a PhD in Biotechnology and brings over two decades of experience in diagnostic test development, cell culture, and innovative animal-free techniques, including 3D cell cultures and spheroids as alternatives to animal tissue.

Since the early 2000s, Dr. Wenzel has been committed to advancing non-animal methods in biomedical research. In 2016, she developed fully human, animal-free antibodies against diphtheria toxin, currently under FDA review as a replacement for equine serum therapeutics. She co-invented Multiclonal Antibodies, a standardized, animal-free alternative to polyclonal antibodies, and established high-throughput platforms for functional antibody testing.

To bring these innovations to market, Dr. Wenzel co-founded Abcalis GmbH in 2019. The company has received multiple awards for its work, including the 1st ECEAE prize for Animal-free Antibodies, the Lower Saxony Innovation Award and the Braunschweig Start-up Award. Beyond product development, Dr. Wenzel also offers consulting services to help laboratories transition to animal-origin-free research — supporting ethical, scalable, and reproducible scientific solutions.

## Animal-free Antibodies and Where to Find Them

Esther Wenzel

One of the most underestimated aspects of the 3Rs is the use of common laboratory reagents, such as antibodies, which cause the death of millions of animals worldwide every year. Today's life sciences would be unrecognizable without the millions of available research antibody products. There are > 3.5 million antibody-based products on the market, > 99% of which are animal-derived (polyclonal, monoclonal, recombinant), while <1% are animal-free antibodies. However, methods of development and production vary widely in their impact on animal-welfare.

This presentation will provide a practical, user-focused overview of the current landscape of available antibodies, highlighting their types and specific applications in research. Researchers today have access to a wide range of antibodies, including monoclonal, polyclonal, and recombinant formats, each suited to different experimental needs. Advances in antibody engineering and validation have also improved specificity, reproducibility, and ethical sourcing.

The talk will then explore current strategies for identifying and utilizing animal-free antibodies. A key resource in this context is the newly developed Recombinant Antibodies & Mimetics Database, which serves as a comprehensive platform for finding and evaluating animal-free antibodies. The database offers a range of search and filtering tools that help users assess the extent to which animal-derived components were involved in the development and production of a given antibody, providing greater transparency regarding its origin. These functionalities, as well as example use cases, will be demonstrated and discussed in the talk.

In addition, a small sensitization of which products and reagents in the daily laboratory routine may contain materials of animal origin. ■

# Dimitri Kadic

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dimitri@equitom.be



Dimitri graduated as a veterinarian from the University of Ghent, Belgium in 2014.

After completing an internship program in Germany (Tierklinik Lüsche) and another one in the UK (Newmarket Equine Hospital), he started his 3 year residency program in Equine Surgery at the University of Montreal, Canada in 2017.

He successfully completed the specialty training requirements and examination and got certified as a Diplomate of the American College of Veterinary Surgeons (ACVS) in 2021 and shortly after got the certification of the European College of Veterinary Surgeons (ECVS).

Dimitri reinforces the surgical team of Equitom Equine Clinic since August 2020 and is responsible for the internship program.

## Groundbreaking Virtual Reality Technology: A World First in Veterinary Medicine

Dimitri Kadic

Equitom Equine Clinic in Lummen, internationally known as the “clinic of the last hope,” is the first equine clinic in the world to apply Virtual Reality (VR) in surgery and medical treatments.

### How does it work?

CT or MRI scans are transformed into detailed 3D models of the horse’s anatomy. These are integrated into a VR platform, allowing surgeons to virtually explore the body, plan procedures, and practice techniques without any risk to the patient.

### Key benefits of VR in equine medicine:

- Improved preparation: Surgeons can simulate surgeries in advance.
- Greater precision: Virtual overlays guide complex or minimally invasive procedures.
- Remote collaboration: Experts can join a shared virtual operating room from anywhere.
- Fewer errors: Training in VR enhances skills and reduces complications.
- Education & communication: Students practice safely; owners gain clearer insights into their horse’s treatment.

### Collaboration

This innovation is made possible through a partnership with Specto Medical, a Swiss MedTech company specializing in advanced imaging and VR visualization.

### Conclusion

With VR, Equitom takes equine surgery to the next level: safer, more precise, and with better outcomes for the horse. ■

# Albert Ali Salah

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Albert Ali Salah is a professor and chair of Social and Affective Computing at the Information and Computing Sciences Department of Utrecht Univ. He obtained his PhD in 2007 from Bogazici University, and worked at CWI, University of Amsterdam, Nagoya University, and Bogazici University, before initiating the Social and Affective Computing group at Utrecht. His research is broad, but mainly uses pattern recognition and machine learning for computer analysis of human behavior. He is a member of the AI and Animal Welfare Lab at Utrecht University, which is a collaboration between ICS and Veterinary Sciences. He currently serves in the Steering Boards of ACM ICMI and IEEE FG conferences, as an associate editor of journals Pattern Recognition and Int. Journal on Human-Computer Studies, and as VP Conferences for the IEEE Biometrics Council. He is a Senior Member of IEEE and ACM.

## Computer Vision Based Assessment of Animal Pain

Albert Ali Salah

Abstract: Rapid progress in computer based automation approaches creates new opportunities and challenges for animal wellbeing. On the one hand, innovative applications are being implemented to assist pet owners, people who work with animals, veterinarians, and for tasks that require monitoring of animals in different settings. On the other hand, we see challenges similar to those in automatic human behavior analysis, where automation may cause us to lose the human touch, and ethical issues and risks ensue from the potential usage of such applications, both in the short and in the long run. In this talk, I would like to draw parallels between computer based human and non-human animal behavior analysis, providing examples from our interdisciplinary work in equine and canine pain estimation, as well as other work at the AI and Animal Wellbeing Laboratory at Utrecht University, to raise a number of issues and to discuss both technical and humanity challenges of the field. ■

# Maude Everaert

Scientific Collaborator RE-Place  
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After completing a Master's degree in Biomedical Sciences at the University of Mons and gaining initial experience in clinical trials at the Military Hospital in Brussels, Maude Everaert joined the Vrije Universiteit Brussel (VUB) in 2022 within the *In Vitro* Toxicology and Dermato-Cosmetology (IVTD) Department.

She works as a scientist on the RE-Place Project, which aims to centralize Belgian expertise in alternative methods to animal testing in a central database. Her responsibilities include expanding and maintaining the database, updating the project website, and engaging with the Belgian scientific community through events and outreach to increase the visibility of the project.

## Eight years of RE-Place: what is the status of the project today?

### Maude Everaert

New Approach Methodologies (NAMs) including *in vitro*, *in chemico* or *in silico* methods play a pivotal role in the ultimate replacement of animal testing. Despite their promising potential, the expertise on NAMs remains highly fragmented, and due to the rapid evolution in the field, it is challenging to access relevant, reliable and up-to-date information on their use.

In Belgium, the RE-Place project, coordinated by Sciensano and the Vrije Universiteit Brussel, addresses this challenge by gathering the Belgian expertise on NAMs in one central database available via [www.re-place.be](http://www.re-place.be). This open-access database also links these NAMs to the names of experts and institutes where the methods have been developed and/or are currently applied.

In August 2025, the database contained over 310 methods submitted by 192 experts from 34 Belgian organizations including academia, industry, contract research organisations, and (public) scientific institutions. This growing network of contributors showcases diversity in different fields (e.g. toxicology, tissue engineering, veterinary science) and method technologies (e.g. organoids, stem cells, *in silico*). However, this represents only a small fraction of the available expertise in Belgium. To create a more comprehensive and representative resource, Belgian researchers participating to the IC3Rs symposium are strongly encouraged to contribute their knowledge to the RE-Place database.

Beyond its primary role as a database, RE-Place also serves as a knowledge-sharing platform. RE-Place promotes Belgian NAM expertise and disseminates relevant information through newsletters, webinars, and social media. These efforts make RE-Place a valuable resource for scientists and other stakeholders to find information, reducing duplication of efforts, and building trust in NAMs. ■

You can submit your method directly via:





# Poster presentations

Download all Abstracts of the following posters by scanning this QR-code



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\* not eligible for the Poster competition



#	Presenting author	Affiliation	Country	Title
1	Lorna Marchandise	VUB	Belgium	INVESTIGATION OF LIVER DEVELOPMENTAL TOXICITY INDUCED BY THYROID HORMONE DISRUPTORS USING <i>IN VITRO</i> AND <i>IN VIVO</i> MODELS
2	Lieslot Mus	UGent	Belgium	PDXGHENT CORE FACILITY: EMPOWERING PRECISION CANCER MODELS
3	Marth Stinckens	VUB	Belgium	HEPATIC PROFILING OF FORWARD PROGRAMMED HUMAN SKIN-DERIVED PRECURSOR CELLS USING A MULTI-OMICS APPROACH
4	Bieke Bekaert	UAntwerp	Belgium	EFFICIENT EVALUATION OF THERAPEUTIC COMPOUNDS FOR CHARCOT-MARIE-TOOTH DISEASE USING PATIENT-DERIVED NEUROMUSCULAR ORGANIDS
5	Fien Meeus	VUB	Belgium	PRECLINICAL DEVELOPMENT AND SELECTION OF HER2-TARGETING NANO-BODY-BASED CAR-T CELLS FOR THE TREATMENT OF SOLID TUMORS.
6	Ami Toulehohoun	UCL	Belgium	INTESTINAL ORGANIDS AS A MODEL FOR SMALL INTESTINAL EPITHELIUM ALTERATIONS IN ALCOHOL USE DISORDER (AUD)
7	Qiuyang Chen	VUB	Belgium	MICRORNA-146A IN EXTRACELLULAR VESICLES FROM OBESE ADIPOCYTES TRIGGER HEPATIC INFLAMMATION
8	Valerie Uytterhoeven*	KU Leuven	Belgium	HUMAN-SPECIFIC ANTISENSE OLIGONUCLEOTIDE TARGETING SYNAPTOGYRIN-3 RESCUES NETWORK ACTIVITY DEFECTS IN TAUOPATHY IPSC-DERIVED NEURONS
9	Taisiia Schevchenko	VUB	Belgium	<i>IN VITRO</i> OBESITY MODELING: HATSC-DERIVED ADIPOCYTES SHOW RELEVANT TRAITS OF DYSFUNCTIONAL ADIPOSE TISSUE
10	Lennert Heirman	UGent	Belgium	DEVELOPMENT OF AN EQUINE <i>IN VITRO</i> PROARRHYTHMIA ASSAY: TOWARDS SAFE ANTI-ARRHYTHMIC DRUGS FOR HORSES
11	Katerina Papageorgiou	VUB	Belgium	TESTICULAR ORGANIDS: A POTENTIAL MODEL TO STUDY THE IMPACT OF ENDOCRINE-DISRUPTING CHEMICALS ON STEROIDOGENESIS
12	Jen Hochmuth*	PETA	Germany	RECOMMENDATIONS FOR ADDRESSING PHARMACEUTICAL SECTOR-SPECIFIC CHALLENGES TO MEET THE EUROPEAN COMMISSION'S GOAL OF PHASING OUT ANIMAL TESTING FOR REGULATORY PURPOSES
13	Batuhan Yildiz	VUB	Belgium	DEVELOPMENT AND CHARACTERIZATION OF A MASH <i>IN VITRO</i> 3D HUMAN LIVER CO-CULTURE SPHEROID MODEL
14	Raf Van Campenhout	VUB	Belgium	INTEGRATING <i>IN VITRO</i> SCREENING IN DRUG DEVELOPMENT TO REDUCE ANIMAL USE: A CASE APPROACH

# Advancing New Approach Methodologies for safer, more sustainable fragrances



At IFRA we are pioneering the use of New Approach Methodologies (NAMs) to promote the safe and sustainable use of fragrance ingredients.

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