



BIOMIT

Biomanufacturing
Challenges of
Immunotherapy

WELCOME TO THE SECOND ANNOUNCEMENT OF BIOMIT 2024

OCTOBER 13 TO 18



CIM
Centro de Inmunología
Molecular



COMPROMETIDOS
POR LA SALUD

On behalf of the Organizing Committee of **Biomanufacturing Challenges of Immunotherapy 2024** we take honour and a great pleasure in welcoming academic scientists, researchers, research scholars, students and experts of biotech application fields to **Melia International Hotel, Varadero, Cuba** for the **6th edition of BIOMIT 2024 (October, 13 to 18)** to foster the progress in the field of **Biotechnology and Bioengineering** by contributing with your expertise to what promises to be a very comprehensive and exciting congress.

This will be an especial edition because we will be celebrating the **30th years of the Centre of Molecular Immunology (CIM)**. The CIM is a Cuban Biotech Centre dedicated to research, development, production and commercialization of monoclonal antibodies and recombinant proteins for cancer and non-transmissible diseases. For this reason, we will like that this congress will be a place to show all the results obtained for us during these years, and share, exchange, discuss and exploring new tendencies and challenges of **Biotechnology and Bioengineering** including the newest research.

The event will have plenary speakers, established keynote speakers, active invited speakers and fresh contributed speakers. Virtual format for oral presentations and posters will be also included. In addition, a variety of poster presentations along with workshops and special sessions will be interested in the audience.

We sincerely hope that **BIOMIT 2024** will be an excellent opportunity to learn about Cuban Biotech achievements, visit Cuban scientific centres, to discuss, present new results, create new opportunities and new collaborations projects.

	Sunday	Monday	Tues day	Wednes day	Thurs day	Friday
8:30 AM		Welcome words and Opening Lecture				
9:00 AM		Cell line development and protein expression systems	Downstream platforms	Modern techniques in biopharmaceutical products characterization	Quality and regulatory trends	
10:30 AM		coffee break, marketing and networking sponsors - clients	coffee break, poster sessions (1 - 4), sponsors marketing and networking	coffee break, poster sessions (5 - 8), sponsors marketing and networking	coffee break, marketing and networking sponsors - clients	free time
11:20 AM	Transfer Havana - Varadero	Cell line development and protein expression systems	Downstream platforms	Modern techniques in biopharmaceutical products characterization	Quality and regulatory trends	
12:30 PM		lunch time				
1:30 PM		Culture for glycoprotein and antibody production	Challenges in new protein formulations	Improvement of regulatory challenges : logistics and technology vision	Business challenges	
2:30 PM		break				
2:50 PM		Culture for glycoprotein and antibody production	Challenges in new protein formulations	Improvement of regulatory challenges : logistics and technology vision	Business challenges	Transfer Varadero - Havana
4:00 PM	Free time				Poster prizes and closing words	

Lectures and posters will be included in 8 principal sessions. These sessions will especially cover topics like:

1. Cell line development and protein expression systems (Chairwoman: MsC Tammy Boggiano)

- Cell line engineering ensuring stability, quality and developability.
- Cell line to produce multi specific antibodies.
- Strategies in cell line development to speed-to-clinic.
- Cell lines for therapeutic development.



2. Culture for glycoprotein and antibody production (Chairman: Bs Julio Palacio)

- Perfusion mammalian cell culture for recombinant protein manufacturing
- Development technologies for improvement of productivity in the perfusion processes
- Scale up of perfusion process
- Impact of multivariate analysis of metabolites on improving the upstream process
- Technology 4.0 use in the mammalian cell fermentation for production of recombinant proteins
- The used of metabolomics tools in the improving the production processes of glycoproteins and monoclonal antibodies

3. Downstream platforms (Chairwoman: Dr. Lourdes Hernández)

- Process intensification in downstream processing: continuous processing, single use technologies, novel filtration strategies and novel chromatographic materials.
- Unit operations and purification strategies innovations for mAb processing
- Research approaches in downstream processing of pharmaceutically relevant proteins
- Downstream process design for personalized medicine
- Modelling strategies for product and process understanding
- Downstream process development strategies

4. Formulation: Protein stability and Aggregation (Chairman: MsC. Julio F. Santo Tomas)

- AI/ machine learning in the development of therapeutic protein formulation. Excipient screening, formulation design and predicting stability
- Biophysical methods for formulation screening and monitoring stability: Predictive parameters of stability
- Protein Aggregation: controlling aggregation and particle formation
- Sub-micron particle characterization and quantification
- High protein concentration formulations: Reducing viscosity and aggregation



- Improving sryngeability and delivery of high protein concentration formulations
- Vaccines characterization and manufacturing
- Delivery systems of tumoral antigens for therapeutic cancer vaccines
- Novel drug delivery systems: nucleic acid formulation and delivery for gene therapy and vaccines
- Lipid nanoparticles and virus-like particles
- Quality by design of therapeutic protein formulation
- Stress testing and forced degradation studies of therapeutic protein formulations
- Stability and charactertization of therapeutic protein co-formulations
- Novel excipients
- Recent developments in lyophilization and alternatives drying techniques of therapeutic protein formulations

**5. Modern techniques in biopharmaceutical products characterization
(Chairwoman: MsC. Judey A. García)**

- Chemical physical methods for the characterization of Immunotherapeutic products (development, standardization...)
- Relationship between molecular structure and biological activity in biopharmaceutical products
- The rol of modern Mass Spectrometry for Biosimilar Development
- Characterization of innovative products

6. Quality and regulatory trends (Chairwoman: Dr. Mercedes Cedeño)

- cGMP on Multiproduct/Multipurpose management of biomanufacturing facilities.
- Risk management and control strategy of adventitious agents in bioprocessing.
- Comparability study during process development. An ISO 9001-2015 Quality Systems - Certification in a Biotech company.
- Process Analytical Technologies (PAT) and Data Analytics for the Manufacture of Monoclonal Antibodies
- Correlation study between predictive clinical efficacy bioassay and bioassay for product release. Case Studies



- Approach for Supplier Evaluation and Selection in a Pharma company.

**7. Improvement of regulatory challenges: logistics and technology vision.
(Chairmen: Yuri A. Tamayo and Ramses Menendez)**

- The Supply Management of Raw Materials and Materials in the Biotechnology Industry in the Current International Context
- Warehouse Management in the Biopharmaceutical Industry
- Circular Economy and Industry 5.0
- Supply Chain Resilience: Bottlenecks & Core Capacities
- Automatization of critical systems as support of production.
- Critical systems as support for production processes.
- Risk-based maintenance management to improve the quality and availability of critical equipment and systems in biotech industry.
- Energy efficiency and renewable energy sources

8. Business challenges and process economics (Chairman: MsC. Einard Blanco)

- Current trends in biotech products and financing landscape
- Challenges for developing and financing early stage biotech pipelines
- The role of business models in attracting venture capital investment
- Getting ready for the IPO process

Call for Abstracts

- Oral abstract submission deadline: July 31th /2024
- Poster Abstract submission deadline: August 31th /2024

All abstracts should be submitted to Elinet Lombardia (elinet@cim.sld.cu) and Elio Infante (elio@cim.sld.cu)

Registration Fees

All prices are in euros	All-inclusive + transfer Havana Airport-Varadero (taxi)	All-inclusive + transfer Havana hotel - Varadero (bus)
Participant (single occupancy)	1300	1150
Participant (double occupancy) sharing room with another participant or bringing a guest, additional fee (ask to Organizing Committee contact)	1000	900



The registration fees will include the access to all sessions of the congress, the program and abstract book, a short report in the CIM Journal (Bioprocesos), the attendance and Speaker/Poster certificates, the coffee breaks during the congress days, accommodation, meals and all scientific and social activities organized by the congress or hotel. Any additional information related with virtual presentations, please contact with the Organizing Committee BIOMIT 2024.

Opportunities for Conference Attendees

For Researchers:

1. Speaker Presentation.
2. Poster Display.
3. Poster Competition (winner will get best poster award)

For Business Delegates:

1. Speaker Presentations.
2. Networking Opportunities.
3. Audience Participation.

For Sponsors:

1. **Gold Sponsor Fee:** 6000 euros (3 participants with all included)
2. **Silver Sponsor Fee:** 3000 euros (1 participant with all included)
3. Sponsorship Opportunities (announcement, sponsor logo, lecture/workshop, commercial poster, two specialists as participant)
4. Product Launch
5. Workshop Organizing
6. Marketing and Networking with Clients

Invitation Letter

The Organizing Committee will provide an invitation letter to participants, in case of it is requested, to make easier the steps for getting visa and funds.



Conference Hotel



Situated on one of the finest stretches of beach in Varadero, Melia Internacional hotel is the reincarnation of a true classic on the Hicacos Peninsula, Cuba's destination. The Meliá Internacional is a modern, All Inclusive 5 star resort. The modern Convention Centre in one of the most beautiful parts of Varadero Beach is a perfect choice for professional trips and events.

Publications

All accepted abstract will be published in conference abstract book and Biprocesos Journal.

Scientific Advisory Board

- Dr. Scott Rudge. USA
- Prof. Francesc Godia. Spain
- Dr. Yves Durocher. Canada
- Dr. Robin Curtis. UK
- Prof. Alan Dickson. UK
- Dr. Estela Gimenez. Spain
- Dr. Lars Stockl. Germany
- Prof. Simon Gaskell. UK
- Dr. Luis J. Gonzalez. Cuba
- Dr. Kalet Leon. Cuba
- Dr. Rolando Perez. Cuba



Organizing Committee

- DrC. Kathya R. de la Luz
- Bs. Leonardo Delgado
- Bs. Yamila Bosque
- Bs. Elio A. Infante
- Elinet Lombardía
- Maria Karla Valdez

Contact:

President of the Organizing Committee:

- DrC Kathya R. de la Luz

Email: katiar@cim.sld.cu

Tel: + 53-7-214-3174

Fax: + 53-7-272-0644

Center of Molecular Immunology

P.O.Box. 16040. La Habana 11600. Cuba



CIM

Centro de Inmunología
Molecular



COMPROMETIDOS
POR LA SALUD