

Twinflag Workshop 2025

11 – 20 June

CINBIO. University of Vigo

11 June 2025 (Sala seminarios CACTI, CINBIO)

11:00 h **Antonella Bongiovanni**. Institute for Research and Biomedical Innovation, IRB-CNR, EVE Biofactory srl. *Nature's Nanosecret: Production and Engineering of Microalgal Extracellular Vesicles for Innovative Therapeutic and Cosmetic Applications*

12 June 2025 – **Management training** (Aula CITEXVI, CINBIO)

Welcome.

Sesión I. Chair: Eldara Rodríguez Cobo

10.30 h **Antonella Bongiovanni**. Italian National Research Council. *From Bench to Business: Navigating EU Grants and Start-Up Creation in Translational Science*

11:00 h **Lucía García**. ZABALA company. *Funding Opportunities for Biomedicine research in Horizon Europe*

11:30 – 12:00 Coffee break

Sesión II. Chair: Lucía Calvo

12.00 h . **Manuel Figueroa** (Ingenyus), **Noelia Freire** (Ingenyus) and **Juan Romero** (Science for Change). *Communication strategies*.

12:45 h Round table: **Lucía Calvo** (Communiation Department CINBIO), **Manuel Figueroa** (Ingenyus) and **Juan Romero** (Science for Change)

13.30 h Lunch and networking.

13 June 2025 – Management training (Aula CITEXVI, CINBIO)

10:30 – 11:00 Welcome coffee and pastries

Welcome

Chair: María D. Mayán

11:00 h **Lydia Fraga.** Biobank Santiago de Compostela Hospital. Use of Human Samples in Biomedical Research: practical considerations

11: 20 h Private funding opportunities and potential collaborations

Andrés Fernández. CEO de Zendal

Iván Rarís. Gerencia Cluster Saúde. From Local Synergy to Global Impact: How Galician Health Cluster Aligns Industry, Academia and the Public Sector .

12:30 h. **Noa Caramés.** Chief of Management Unit CINBIO

13:15 h. Visit to CINBIO

13:30 h Lunch and networking.

16 June 2025 – Workshop Twinflag (Aula CITEXVI, CINBIO)

9:45 h. **Welcome.** María D. Mayán.

Chair: Alexander Carneiro

David Posada. Phylogenomics. CINBIO (University of Vigo). Genomics and evolution in colorectal cancer

Veronica Salgueiriño. Hybrid Nanomaterials. CINBIO (University of Vigo). Virus-based nanocomposites with magnetotactic behavior and a programmed disassembly of their protein cages.

Ruta Aldonyte. Regenerative Medicine Department. IMC (Lithuania). Keep calm and breathe on: lungs and airways at the interface of peace and war

11:15 – 11:45 h. Coffee break

11:45 – 13:15 h. Session II.

Chair: Paula Carpintero

José Rivas. NanoMag. University of Santiago de Compostela. *The Role of Magnetic Nanoparticles in EV-Based Applications*

Alfonso Blanco. Flow cytometry core. Univeristy College Dublin. *How small can you Flow?*

Eiva Bernotiene. Regenerative Medicine Department. IMC (Lithuania). *Regenerative and biomarker based technologies: joint, heart and infertility*

13:15 – 13:45h Discussion and Future collaborations and grant applications

14:00. Lunch and Networking.

17 June 2025 – Workshop Twinflag (Aula CITEXVI, CINBIO)

9:30 h. Welcome: Miguel Correa. Director CINBIO. UVigo.

09:45 – 11:15 h. Session I.

Chair: Iñaki López

Malou Henriksen. BioNanoPlasmonics. CICBiomaGUNE. *Monitoring cell communication dynamics via 3D SERS imaging using biocompatible SERS tags*

Daniela Freitas. i3S Porto. *Short O-Glycosylated EVs as Biomarkers in Gastric Cancer and Mediators of Tumor Communication*

Juan Manuel Falcón. CIC bioGUNE. *Current challenges for the successful clinical application of the Extracellular Vesicles.*

Margaret McGee. Univeristy College Dublin. *Extracellular Vesicles: Redefining the Landscape of Liquid Biopsy Diagnostics*

11:30 – 12:00 h. Coffee break.

12:00 – 13:15 h. Session II.

Chair: Paula Carpintero

Lorena Dieguez/Carlos Honrado. INL Braga. *Microfluidics and nanosensors for the isolation and analysis of circulating biomarkers*

Celso Reis. i3S Porto. *Glycosylation in cancer: Novel insights into the role of EV glycans in tumour biology*

Maria D. Mayán. CellCOM Research Group CINBIO. University of Vigo. *Connexins & EVs: Partners in Cellular Crosstalk in Ageing and Cancer*

13:30 h Lunch and Networking

20 June 2025 – Meet the CINBIO (Aula CITEXVI, CINBIO) –

10:00. Welcome.

10:15. 5 min-talks.

Chair: Alexander Carneiro

Juan Pérez. Neurocircuits. CINBIO. University of Vigo. *Studying the first eye movements through the lamprey's visual system.*

Rosana Simón. Immunology group. CINBIO. University of Vigo. *Immunotherapy and Nanomedicine for Disease Prevention and Treatment*

Claudia Román Freijeiro. Hybrid nanomaterials group. CINBIO. University of Vigo *Synthesis of Magnetic Nanoparticles*

Irene Fernández Rodríguez. Hybrid nanomaterials group. CINBIO. University of Vigo. *Manipulation of Magnetic Nanoparticles*

Miguel Arenas. Computational Molecular Evolution. CINBIO. University of Vigo. *Investigating virus molecular evolution*

Valeria Zoni. Computational Molecular Evolution. CINBIO. University of Vigo. *Investigating the Fixation of Viral Resistance: Insights from Protein Stability and Binding through Molecular Dynamics*

Sara Vila. Rare Diseases Lab. CINBIO. University of Vigo. *Protocol optimization for ALMS1 knockout in RPE1 cells.*

Aida Bilbao. Rare Diseases Lab. CINBIO. University of Vigo. *Functional characterization of CORO2B mutations.*

Ana Covelo. Neuroscience. CINBIO. University of Vigo. *Dissecting astrocyte roles in the control of neuronal networks*

Carlos Renero. Biomimetic Nanomaterials. CINBIO. University of Vigo . *Using gold for hitting cancer.*

Carmen Hervés. Biomimetic Nanomaterials. CINBIO. University of Vigo. *Nanoparticle Dielectrophoresis: New prospects for data storage*

Jolita Pachaleva. Regenerative Medicine Department (IMC) Lithuania. *The Role of STAT3 Signaling in Human Nucleus Pulposus Cell Senescence;*

11:15- 11:45 Coffee break

Chair: Paula Carpintero

Raminta Vaičiulevičiūtė. Regenerative Medicine Department (IMC) Lithuania. *Analysis of mitochondria containing extracellular vesicles*

Sergio Dasilva. TeamNanoTech. CINBIO. Univeristy of Vigo. *Targeted and controlled release: role of nanocarriers in oral drug delivery*

Alexis Dorta Gorrín Dorta Gorrón. Hybrid nanomaterials group. CINBIO. Univeristy of Vigo. *Encapsulation of bacteriophages as potential treatment to infections caused in cystic fibrosis patients*

Ramón Novoa Carballal. ORCHID. CINBIO. Univeristy of Vigo. *Polysaccharide copolymers by Click Chemistry, from mimetic to chimeric structures*

Alexander Carneiro. CellCOM Research Group. CINBIO. Univeristy of Vigo. *Connexin43 Trafficking and Function: From Junctional Communication to Extracellular Vesicle-Based Cancer Therapy*

Iñaki López. CellCOM Research Group. CINBIO. Univeristy of Vigo. *Extracellular vesicles derived from microalgae to deliver senotherapeutic peptides to joint tissues for osteoarthritis treatment*

Rebeca Martínez. CellCOM Research Group. CINBIO. Univeristy of Vigo. *EV-based mRNA therapy as a novel approach for TNBC*

Cesar Reyes. University College Dublin. *Sorting EVs. How does it sound?*

Raminta Vaičiulevičiūtė. Regenerative Medicine Department (IMC) Lithuania. *EVs for diagnostics of unexplained infertility endotypes*

Tomas Ragauskas. Regenerative Medicine Department (IMC) Lithuania. *Histological processing of PCL scaffolds.*

Rokas Mikšiūnas. Regenerative Medicine Department (IMC) Lithuania. *Impact of Cardiotoxic Drugs on Calcium Transients in HL-1 Cardiomyocytes.*

Jaroslav Denkovskij. Regenerative Medicine Department (IMC) Lithuania. *Precision genome editing to model human pathogenic CACNA1c mutations in zebrafish Danio rerio.*

Jolita Pachaleva. Regenerative Medicine Department (IMC) Lithuania. *Analysis of Human Cartilage and Synovium Explant Extracellular Vesicles: Targeting Cellular Senescence*

13:30. Lunch and networking