

## DATOS GENERALES

## Curso académico

|                             |                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------|
| <b>Tipo de curso</b>        | Microcredencial Universitario                                                             |
| <b>Número de créditos</b>   | 3,00 Créditos ECTS                                                                        |
| <b>Matrícula</b>            | 350 euros (importe precio público)                                                        |
| <b>Requisitos de acceso</b> | Those interested in basic, biotechnological and ecological applications of flow cytometry |
| <b>Modalidad</b>            | On-line                                                                                   |
| <b>Lugar de impartición</b> | Online                                                                                    |
| <b>Horario</b>              | Monday-Friday 16.00-20.00 hours                                                           |

## Dirección

## Organizador

|                  |                                                                                                                                       |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dirección</b> | José Enrique O'Connor Blasco<br>Catedrático/a de Universidad. Departament de Bioquímica i Biologia Molecular. Universitat de València |
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## Plazos

|                                |                  |
|--------------------------------|------------------|
| <b>Preinscripción al curso</b> | Hasta 31/03/2023 |
| <b>Fecha inicio</b>            | Mayo 2023        |
| <b>Fecha fin</b>               | Julio 2023       |

## Más información

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|-----------------|--------------------------------------------------------------------|
| <b>Teléfono</b> | 961 603 000                                                        |
| <b>E-mail</b>   | <a href="mailto:informacion@adeituv.es">informacion@adeituv.es</a> |

## PROGRAMA

## Flow Cytometry

1. TECHNICAL BASES OF FLOW CYTOMETRY:
  - 1.1 Technical basis of flow cytometry.
  - 1.2 Overview of general applications of flow cytometry.
  - 1.3 Fluorescence and fluorescent markers.
  - 1.4 Components and operation of the flow cytometer: Fluidic System
  - 1.5 Components and operation of the flow cytometer: Optical System
  - 1.6 Components and operation of the flow cytometer: Electronic System
  - 1.7 Generation, Presentation, Storage and Data Management in Flow Cytometry
  - 1.8 Recent advances in Flow Cytometry
  - 1.9 Cytometry resources on the Internet.
2. APPLICATIONS IN BIOMEDICINE, BIOTECHNOLOGY AND ENVIRONMENT
  - 2.1 Flow Cytometry in Genomics and Transcriptomics
  - 2.2 Analysis of Cell Proliferation by Flow Cytometry
  - 2.3 Analysis of Cell Death by Flow Cytometry
  - 2.4 Analysis of Metabolism and Bioenergetics by Flow Cytometry
  - 2.5 Real Time Flow Cytometry (In Fluxo Analysis)
  - 2.6 Analysis of intercellular communication and signal transduction by Flow Cytometry
  - 2.7 Analysis of microparticles and extracellular microvesicles by Flow Cytometry
  - 2.8 Flow Cytometry in the study of Toxicity Pathways and Regulatory Toxicology
  - 2.9 Flow Cytometry in Preclinical Pharmacology and in Drug Discovery
  - 2.10 Flow Cytometry in Botany and Agriculture
  - 2.11 Flow Cytometry in Farming and Zootechnics
  - 2.12 Flow Cytometry in Environmental Studies

## PROFESORADO

Alberto Álvarez Barrientos

**Guadalupe Herrera Martín**

Técnico/a Superior Personal Técnico de Apoyo. Universitat de València

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**Alicia Martínez Romero**

Responsable del Servicio de Citometría - Fundación de la Comunidad Valenciana - Centro de Investigación Príncipe Felipe Valencia

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**Jordi Pétriz González**

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**Francisco José Sala de Oyanguren**

Investigador Doctor, Ludwig Institute for Cancer Research, Université de Lausanne

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## OBJETIVOS

Las salidas profesionales que tiene el curso son:

Improving the basic and applied knowledge in flow cytometry

The general objective of the course is to provide students with specialized knowledge in flow cytometry that will include the design and application of cytometric analysis procedures, the acquisition and management of data and the interpretation of results in basic, biotechnological and ecological applications of flow cytometry.