



**CRAG
Training
Catalogue
2024-2025**

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INTRODUCTION

The Center for Research in Agricultural Genomics (Crag) stands as a beacon of excellence, recognized as a Severo Ochoa Centre of Excellence, showcasing our unwavering commitment to pioneering research in agricultural genomics. As a Consortium, Crag brings together the formidable expertise of the Spanish National Research Council (CSIC), Institute of Agrifood Research and Technology (IRTA), Autonomous University of Barcelona (UAB), and University of Barcelona (UB).

At Crag, we thrive on the dynamic collaboration of diverse research institutions, cultivating a unique environment for exploring the genetic and genomic determinants shared by plants and farm animals. Our mission is to unravel the molecular basis of genetic traits, applying cutting-edge molecular approaches to enhance breeding practices vital for agriculture and food production.

In alignment with our dedication to excellence, Crag proudly adheres to the principles of the Human Resources Strategy for Researchers (HRS4R), ensuring the continuous development and well-being of our scientific community. Collaborating closely with our Training Committee, comprised of dedicated professionals, we conducted targeted surveys aligned with HRS4R principles, identifying specific training needs for our researchers in 2023.

The culmination of these efforts is the creation of a comprehensive training catalog, strategically calendarized for the year. This catalog encompasses a wide array of topics, including Scientific Tools, Transversal Skills, Ethics and Good Practices, Administration Skills, Languages, Gender and Diversity, and Health and Safety. Notably, it also addresses the efficient functioning of scientific services, covering critical aspects like waste management, greenhouse operations, radioactivity protocols, and laboratory procedures.

Crag remains steadfast in translating research outcomes into societal benefits and nurturing the next generation of scientists. Through structured training initiatives, we aim to equip our researchers to address the challenges of the 21st century. As we navigate the evolving landscape of agricultural genomics, Crag continues to make strides in shaping the future, contributing meaningfully to scientific advancements and the sustainable development of agriculture.

CATEGORIES OF TRAINING ACTIVITIES

Scientific tools and techniques

Focused on using advanced tools and updated scientific methods, both for the field of bioinformatics and scientific research.

Introduction to R programming, Network analysis with StringDB and Cytoscape, Advance plotting using ggplot2, Cluster, RNAseq, Scientific Figure Design, Python, Scientific Writing, Grant Writing, Career development & Leadership and management skills.

Transversal skills

For the development of general and transferable skills, such as effective communication and stress management.

Technology transfer

Ethics and good practices

It aims to instruct researchers on ethical principles and responsible conduct in scientific research. This includes integrity in data collection and presentation, respect for participants, and the promotion of ethical standards to ensure the credibility and reliability of the research.

Ethical Issues

Administration skills

Focused on developing competencies related to the efficient management of resources.

Excel & Effective communication

Languages

Continuing education for the improvement of English.

Gender and diversity

Focused on promoting awareness and understanding of issues related to gender equality and diversity in the workplace.

Gender and Equality

Health and safety

Courses focused on job requirements in the laboratory and offices, safety course, well-being, and health promotion courses.

Workplace safety and health; Work Stress Management; and discover the essential aspects of scientific services in our introductory program, providing a concise overview of their functioning and key operational procedures such as Waste management, Use of greenhouses, Radioactivity & Laboratory operation.

REGISTRATION INSTRUCTIONS

For the registration of all Crag training sessions, it must be done through the [CragTraining](#) platform. This will be the only way to access any training, avoiding tedious and repetitive tasks such as sending and receiving emails.

The HR team will always notify through email about the launch of the training, directing you to the corresponding link. Simply log into your Crag account and apply, filling in the necessary fields. Once your registration is successfully completed, you will receive an email notification. Registrations for training sessions will open when the HR team notifies via email, and typically, registration will close between 9 and 7 days before the course session.

Cancellation: Once you have confirmed your attendance, you must provide at least 2 days (48 hours) notice if you wish to cancel, so that we have the opportunity to find another person to take your place. If you fail to do so, you may not be allowed to participate in a future course.

In case of unavoidable last-minute cancellations, such as illness, please send an urgent email to resources.humanos@cragenomica.es so that we can try to fill your spot.

Any Crag member can participate in training activities for free; however, some courses may have eligibility criteria based on professional experience or other considerations, as specified in each course description.

When the training activity extends beyond lunchtime, lunch or snacks will be covered by Crag.

Crag training courses are delivered in English, although certain sessions may be identified in Spanish based on the target audience. Courses will be conducted either virtually or in person, depending on the content. For in-person sessions, the Training Room on the Ground Floor of the Crag building is typically utilized. Specific details will always be communicated by the HR team.

TRAINING CATALOGUE

TITLE	DATES	YEAR	AIMED TO	BY
Scientific tools and techniques:				
Introduction to R programming	February	2024 - 2025	PhD + Postdocs	CRAG
Network analysis with StringDB and Cytoscape	Not defined	2025	PhD + Postdocs	CRAG
Advance plotting using ggplot2	April	2024	PhD + Postdocs + IPS	CRAG
Cluster	June	2024	PhD + Postdocs + IPS	CRAG
RNAseq	October	2024	PhD + Postdocs	CRAG
Scientific Figure Design (online)	October	2024	PhD + Postdocs + IPS	Brabaham
Phyton	November	2024	PhD + Postdocs + IPS	CRAG
Scientific Writing	June	2024	PhD (3 rd , 4 th)	The Papermill*
Grant Writing	September	2024	Postdocs	The Papermill*
Career Development	May	2024	PhD + Postdocs	The Papermill*
Leadership and Management Skills Course	March	2025	Postdocs (AGeNT)	The Papermill*
Transversal skills:				
Technology transfer	December	2024	All CRAG	CRAG
Ethics and good practices				
Ethical Issues	March	2024	All CRAG, we encourage to PhD 1 st and 2 nd year	CRAG
Administration skills:				
Excel (Spanish edition)	June	2024	Administration	CilantroIT
Effective communication (Spanish edition)	July	2024	Administration	Instituto esMindfulness
Languages:				
English	All year	2024	All CRAG, we strongly encourage to people to develop their level up to B2.	Deliateacher
Gender and diversity:				
Gender Equality	March	2024	All CRAG	Equilatera
Health and safety:				
Workplace safety and health	All year	2024	All CRAG	Ergarsia
Work stress management (Spanish edition)	September	2024	Administration	Instituto esMindfulness
Waste management	All year	2024	All CRAG	CRAG
Use of greenhouses	All year	2024	All CRAG	CRAG
Radioactivity	All year	2024	All CRAG	CRAG
Laboratory operation	All year	2024	All CRAG	CRAG

* Tender call for 2023. Service to be tendered in 2024.

TRAINING DESCRIPTION

SCIENTIFIC TOOLS AND TECHNIQUES:

Introduction to R programming

Objective: After the course, you should be able to program in R, read data into R, analyze and plot your own data, install and configure R packages on your own, write R functions and comment R code.

Dates: 19th and 20th of February 2024

Duration: 14 hours

Target group: This course is aimed at everyone interested in writing their own analysis pipeline. We strongly encourage to PhD of 1st and 2nd year, but it is aimed at researcher interested in writing their own analysis pipeline at CRAG.

Training content: If you are not familiar with any programming language, here you will discover R, a popular scripting language that enables you to analyze, explore and plot your data. R is simple when getting started, as it is a high-level language.

- Getting familiar with R and RStudio
- R basics: Data types; vectors, matrices, lists and data frames; built-in functions; installing packages; importing data; descriptive statistics
- Plotting data: ggplot2
- The tidyverse
- Filtering and subsetting

Trainer: Víctor González, Doctor in chemical sciences, biochemistry and molecular biology and CRAG Bioinformatician Scientist with 8 years of experience in the center.

Network analysis with StringDB and Cytoscape

Objective: The primary goal of this course is to empower participants with the skills to proficiently utilize StringDB and Cytoscape for network analysis in biological research. By the end of the program, participants will be adept at constructing, visualizing, and interpreting biological networks. The course emphasizes practical application, ensuring participants can confidently apply network analysis techniques to their specific research contexts.

Dates: 2025 (Not defined)

Duration: 8 hours

Target group: The course is open to all scientists at CRAG. Programming know-how is not necessary. All you need is your laptop with wifi connection.

Training content:

1. Introduction to Network Analysis:

- Overview of network biology principles.
- Importance of network analysis in understanding biological systems.

2. Exploring StringDB:

- Navigating the StringDB database.
- Retrieving and interpreting functional protein associations.

3. Cytoscape Fundamentals:

- Introduction to Cytoscape interface and functionalities.
- Importing data from StringDB into Cytoscape.

4. Network Visualization and Customization:

- Techniques for visualizing complex biological networks.
- Customizing network layouts and styles for effective representation.

5. Integration of Experimental Data:

- Incorporating experimental data into network analysis.
- Validating and refining networks with additional information.

6. Case Studies and Practical Applications:

- Real-world examples showcasing the application of StringDB and Cytoscape.
- Guided exercises for participants to apply learned concepts.

Trainer: Víctor González, Doctor in chemical sciences, biochemistry and molecular biology and CRAG Bioinformatician Scientist with 8 years of experience in the center.

Advance plotting using ggplot2

Objective: The student will learn how to create any plot using ggplot2, solve common problems in creating plots with that library, know the different aesthetics mappings and geometric layers, use facets to create multiple plots at once, or annotate plots with statistical results or other information.

Dates: April 11th 2024

Duration: 8 hours

Target group: This course is aimed at everyone interested in improving his/her R plotting abilities. Hence, some basic knowledge of the R language and R-studio is required. Also, some basic knowledge of the tidyverse package is advisable.

Training content: This course is intended as a complement to the Introduction to R with Tidyverse for molecular biology course.

- Aesthetics mappings
- Geometric layers
- Scales
- Faceting
- Summary statistics
- Themes
- Other subjects: adding p-values to charts, adding regression lines, combining plots

Trainer: Ignasi Andreu, CRAG Bioinformatician technician with 3 years of experience in the area of research and bioinformatics.

Cluster

Objective: The primary objective of this course is to provide participants with a comprehensive understanding of CRAG's cluster computing platform. By the end of the program, participants should be proficient in navigating the system, executing bioinformatics workflows, and maximizing the efficiency of their analyses. The course will cover key aspects such as system architecture, best practices, cost management, and data storage strategies.

Dates: June 27th, 2024

Duration: 5 hours

Target group: Any CRAG researcher who is interested in using the CLUSTER.

Training content:

1. Introduction to CRAG's Cluster Computing Platform
 - Overview of CRAG's commitment to cutting-edge bioinformatics.
 - Importance of cluster computing in agricultural genomics research.
2. Getting Started: Navigating the Platform
 - Accessing the cluster: A step-by-step guide for Windows, Mac, and Linux users.
 - Introduction to the command line interface.
3. Understanding the Cluster Architecture
 - Overview of hardware and software components.
 - Role of nodes, job scheduling, and parallel computing.
4. Best Practices for Bioinformatics Workflows
 - Efficient job submission and management.
 - Optimizing code for parallel processing.
 - Handling large datasets effectively.
5. Cost Management and Resource Allocation
 - Understanding the cost structure of cluster usage.
 - Strategies for cost-effective computing.
 - Resource allocation policies and guidelines.
6. Data Storage Strategies
 - Overview of storage options available on the cluster.
 - Best practices for data organization and management.
 - Backing up and archiving data securely.
7. Hands-On Sessions
 - Practical exercises to reinforce concepts.
 - Guided tutorials for executing common bioinformatics analyses on the cluster
8. Q&A and Troubleshooting
 - Open floor for questions and discussions.
 - Troubleshooting common issues encountered during cluster usage.

Trainer: Victor González, Ignasi Andreu and Josep Torres, with a background in Computer Sciences and specialized in Training Security, oversees System Administration at CRAG.

RNAseq

Objective: This course introduces the QC, processing and analysis of RNA-Seq data. It focuses on a workflow where RNA-Seq is performed on a large eukaryotic genome for which there is a reference genome available. The course starts with a comprehensive lecture covering the theory of RNA-Seq data generation and analysis and is then followed by hands-on practical sessions which run through the entire RNA-Seq analysis pipeline from raw fastq files to a list of differentially expressed candidate genes.

Dates: October 3rd, 2024

Duration: To be confirmed

Target group: All Crag, PhD Students, Postdocs and Scientists.

Training content:

- The theory of RNA-Seq analysis
- Raw data QC
- Mapping RNA-Seq data with hisat2
- Viewing RNA-Seq data with SeqMonk
- Differential expression analysis with DESeq
- Reviewing and visualizing differential expression hits
- Analyzing more complex multi-condition studies

Trainer: Víctor González, Doctor in chemical sciences, biochemistry and molecular biology and Crag Bioinformatician Scientist with 8 years of experience in the center & Ignasi Andreu, Crag Bioinformatician technician with 3 years of experience in the area of research and bioinformatics.

Scientific Figure Design

Objective: is an online course, that provides a practical guide to producing figures for use in reports and publications. It is a wide-ranging course which looks at how to design figures to represent your data, the practical aspects of graph creation, the allowable manipulation of bitmap images and compositing and editing of final figures clearly and fairly.

Dates: October 15th, 2024

Duration: 8 hours

Online format

Target group: All CRAG, PhD Students, Postdocs and Scientists.

Training content:

- Data Visualization Theory Lecture
- Data Representation Practical
- Ethics of Data Representation Lecture
- Design Theory Lecture
- Inkscape Tutorial
- Inkscape Practical

Trainer: Brabaham, has experience in a wide variety of areas of bioinformatics including genomics, proteomics, statistics, and microarrays as well as having extensive experience of custom software development.

Phyton

Objective: This course aims to equip beginners with the foundational skills necessary to leverage Python for bioinformatics applications. Participants will begin by establishing a solid understanding of Python fundamentals, including syntax, data types, and control structures. As we progress, the focus will shift to data manipulation and analysis using essential libraries and basic automation scripts. The course will then delve into bioinformatics-specific tools, introducing Biopython for tasks like sequence analysis and database interactions. Practical sessions on data visualization with Matplotlib and Seaborn will enhance participants' ability to interpret biological data visually. The culmination of the course will involve solving bioinformatic problems from the Rosalind platform, enabling participants to apply their newfound skills to practical bioinformatics challenges.

Dates: 18, 20, 25 and November 2024

Duration: 30 hours

Target group: The course is open to all scientists at CRAG. Programming know-how is not necessary. All you need is your laptop with Wi-Fi connection.

Training content: This course is designed for beginners who are eager to dive into the world of programming and apply their skills to solve biological problems.

- Setting up your python environment (Windows, Linux, ios)
- Variables and Data Types
- Functions and Methods
- Python data structures
- Iterators, Loops and Conditional Statements
- Text Processing
- Reading and Writing Files
- Writing Functions and Larger Scripts
- Using libraries
- Solve bioinformatic problems

Trainer: Ignasi Andreu, CRAG Bioinformatician technician with 3 years of experience in the area of research and bioinformatics.

Scientific Writing

Objective: The workshop aims to empower scientific authors by fostering a more impartial and analytical approach to scientific writing. It seeks to enhance their understanding of readers as the central focus of scientific communication, ultimately making them more efficient writers and editors. Participants will transcend the confines of standard paper-writing formulas, shifting their focus from "How?" to a more inspired perspective driven by the fundamental question, "Why?"

Dates: 26th & 27th June 2024

Duration: 16 hours

Target group: 3rd and 4th year PhD students at CRAG

Training content:

- Five stages of Publishing
- Who is my reader?
- Creating an Expectation: Destination and Roadmap
- Building structure and connectivity: Guide Layer
- From scientific report to a scientific argument: Sentence Outline
- Writing for Readability – words, sentences, and paragraphs
- Using AI in Scientific Writing

Trainer: Gavin Lucas (ThePaperMill) is director of ThePaperMill, and a scientist with 13 years of experience as a biomedical researcher, and 14 years of experience as an academic author's editor, consultant and trainer.

Tender call for 2023. Service to be tendered in 2024.

Grant Writing

Objective: The goal of this workshop is to boost participants' chances of obtaining competitive funding by providing training that is immediately applicable in their working environment. One of the key messages is to understand grant preparation, not just as a writing task, but as a Project Management and Communication task. At the end of the workshop, participants will have acquired a set of practical tools and concepts to facilitate the grant writing process, giving them a competitive advantage.

Dates: September 5th & 6th 2024

Duration: 16 hours

Target group: Researchers from postdoc onward at CRAG

Training content:

- Developing your scientific idea
- Charting the grant landscape
- Analyzing the call
- Organizing and connecting your ideas
- Dealing with key sections for success
- Reverse planning for preparing and submitting

Trainer: Gavin Lucas (ThePaperMill) is director of ThePaperMill, and a scientist with 13 years of experience as a biomedical researcher, and 14 years of experience as an academic author's editor, consultant, and trainer.

Tender call for 2023. Service to be tendered in 2024.

Career Development

Objective: The goal of this workshop on career development for scientists is to give participants a competitive edge in the job market both by developing an intellectual framework for making informed career choices, and by providing practical help with the application and selection process, be it within or outside the academic environment.

Dates: 27th & 28th May 2024

Duration: 16 hours

Target group: PhD students and postdocs at CRAG.

Training content:

- Skills, interests and values: why are you doing science and what for?
- Identifying opportunities: mapping the job market for academics
- Developing your competence profile: finding out and expressing what you are good at
- Decision making theory: how to make the right choices for the right reasons
- Creating a competitive CV: how to get on the shortlist
- The job interview: a clear framework to finding the right match
- Taking action: tools and tips to kick off your career.

Trainer: Lisa Saemisch (ThePaperMill) is a physicist by training, with a PhD in nanophotonics, and over 7 years of experience as a researcher.

Tender call for 2023. Service to be tendered in 2024.

Leadership and Management skills

Objective: Postdoctoral researchers are a somewhat forgotten collective in the research system, despite their key role in running research projects and in managing and training junior staff. The goal of this workshop is to address their changing needs as increasingly expert researchers with growing responsibilities and pressures. Participants will gain a renewed perspective of some key transferrable competencies for the postdoctoral research stage and beyond. The over-riding principle of this training is awareness-raising: to develop a conceptual framework to understand and deal with some of the most common challenges that postdocs face, and to acquire a set of practical tools and methods that are immediately applicable in the participants' working environment.

Dates: March 2025

Duration: 16 hours

Target group: Postdocs at CRAG.

Training content:

- Review of core communication skills: Communication is the key to everything we do as researchers, whether it's transmitting our science or managing our colleagues. Interpersonal communication will be a recurring thread throughout the workshop, and we will begin by exploring a model for interpersonal communication, how to give and receive feedback.
- Time and task management: How do you prioritize tasks to get important things done first? How do you plan your day to work effectively? Participants will learn intuitive tools to gain efficiency, as well as how to set realistic medium-term goals, and review digital helpers to manage their work and collaborate better.
- Motivation: Science can give us many reasons to feel demotivated, with consequences for our work and career progression. We will work with a simple framework for understanding demotivation, both in ourselves and in colleagues we supervise.
- Delegation: As researchers work on and lead ever-larger projects, we become increasingly responsible for the work of other team members. In this module, we will learn an intuitive model for delegating effectively, and following-up on progress.
- Understanding Conflicts: This workshop has an important communication focus, with tools to facilitate working relations through good communication. However, conflicts inevitably arise in any working environment, and are a cause of stress and lost productivity. We will present a model to understand how conflicts develop, and a powerful tool for resolving them through direct, appreciative, de-escalated communication.
- Negotiation: Researchers increasingly find themselves in situations where negotiating well is essential for professional success, including for roles and workload on collaborative projects,

authorship on publications, or start-up package for career moves. In this module, participants will practice a proven framework for negotiation, with the goal of maximizing satisfaction for all parties.

Trainer: Lisa Saemisch (ThePaperMill) is a physicist by training, with a PhD in nanophotonic, and over 7 years of experience as a researcher.

Tender call for 2023. Service to be tendered in 2024.

TRANSVERSAL SKILLS

Technology transfer

Objective: To train research staff on basic concepts and the intellectual policy of the center.

Dates: December 10th, 2024

Duration: 4 hours

Target group: Researchers and Postdocs at CRAG.

Training content:

Module 1: Introduction to Technology Transfer

- Definition and key concepts.
- Importance of technology transfer in the current context.
- Role of researchers in the transfer process.

Module 2: Technology Identification and Evaluation

- Methods to identify technologies with transfer potential.
- Assessment of technical and commercial viability.
- Market analysis tools.

Module 3: Transfer models.

- Creation of spin-offs
- Inventions protected by patent rights (duration of the international phase, licensing strategy, etc.).
- Collaboration agreements with companies.

Module 4: Regulations

- Internal regulations on intellectual property CRAG.
- Incompatibilities and science law.

Trainer: Carlos Muñoz has a double degree in law and biotechnology and he is a CRAG technology transfer technician for just over a year.

ETHIC AND GOOD PRACTICES

Ethical Issues

Objective: To have a knowledge of the basic questions of Bioethics and Research Integrity that may influence the research work of CRAG scientists.

Dates: March 14th, 2024

Duration: 3 hours

Target group: All CRAG, PhD Students, Postdocs and Scientists.

ATTENTION! You will need to complete this course to enroll in the Scientific Writing and RNAseq training.

Training content: The content will be a description of the legal environment that defines scientific practice, how it is implemented in grant application and in the practice of research, in the disciplines that are performed in CRAG. A particular emphasis will be given of Research Integrity, its meaning and the meaning of scientific misconduct and its consequences.

Trainer: Pere Puigdomènech, Ph.D. in Biological Sciences from the Autonomous University of Barcelona (UAB), served as the inaugural director of CRAG from 2003 to 2013. Presently, he contributes as a dedicated researcher in plant genetics within the Structure and Evolution of Plant Genomes group.

ADMINISTRATION SKILLS:

Excel

Objective: To get to know and learn how Microsoft Excel 2016 works, seeing the functions available in this programme when creating and modifying simple spreadsheets. The training is divided into different levels, depending on the previous knowledge of each student, as well as by sectors, taking into account the purpose of use of each worker.

Dates: June 2024

Duration: 8 hours

Target group: General and scientific services.

Training content: The content will be adapted according to the level of the training (basic or intermediate) and according to the sector (finance and labour, pivot tables).

Trainer: CilantroIT

Effective communication

Objective: Facilitate listening and dialogue where collective intelligence and collective intelligence and learning can be fostered and facilitate team communication by encouraging leadership and complex problem leadership and complex problem solving

Dates: July 1st and July 4th in the year 2024

Duration: 8 hours

Target group: General Services and Scientific Services

Training content:

- Self-awareness; how to be in Your Zone and unfold the best version of you
- The value of empathy with the dynamic "Mandarin hats" !
- Types of conversation, moving from Debate to Dialogue to facilitate learning !
- 4 levels of listening (Otto Scharmer Model) and an empathic listening exercise.
- Finally we look at the 7 rules of non-violent communication.
- The PUZZLE a real exercise to solve a complex problem in a team, where we test communication skills and communication and leadership skills are put to the test.
- Communication and stress. Avoid passive or aggressive reactions and encourage assertiveness.
- Conflict management. How to use the most appropriate style in each conflict (Thomas-Killmann model), in order to Thomas-Killmann model), to take care of team cohesion and solve the problem.
- 4 roles in dialogue, (Kantor model) for effective meetings where to generate collective intelligence.

Trainer: Instituto Mindfulness, have 20 years of experience in training for a healthy, beautiful and effective mind, giving courses and conferences in both private and public companies.

LANGUAGES:

English

Objective: The main purpose of these courses is to improve the students' fluency and accuracy in English.

Dates: January to June 2024

Duration: 40 – 50 hours

Target group: General and scientific services, and PhD students.

Training content: The course content varies depending on the level (Academic English 2, Academic English 4 or Speaking Course). The first two focus on developing the key language skills: grammar and vocabulary, reading, writing, listening, and speaking. The latter, encouraging them to actively participate in conversation and apply their knowledge of grammar.

Trainer: DELIATEACHER, English academy with 10 years of experience.

GENDER AND DIVERSITY:

Gender Equality

Objective: To learn about the regulatory framework of equal opportunities, to reflect on gender inequalities in the workplace and in organizations and to learn about instruments that favor equal opportunities in organizations.

Dates: March 5th, 2024

Duration: 4 hours

Target group: All CRAG.

Training content:

- Equal opportunity laws and equal treatment and non-discrimination laws.
- Introduction to the sex-gender system: sex, gender, sexual orientation, gender identity, gender expression.
- Gender inequality in the labor market:
 - Access to and participation in the labor market.
 - Horizontal and vertical segregation
 - Wage gap
 - Androcentric and sexist communication.
 - Violence in organizations
- Specific instruments: equal opportunities plan, codes of conduct, inclusive language manuals, harassment prevention and action protocols, wage register, job evaluation and pay audit.

Trainer: Equilatera, a working cooperative formed by a team of professionals from the fields of social sciences, health and law, who work for the implementation of the principle of equal opportunities and the achievement of gender equality in the field of organizations, from a feminist and transformative perspective.

HEALTH AND SAFETY:

Workplace safety and health

Enhance workplace safety and health with our specialized courses tailored to laboratory and office job requirements, including comprehensive safety training. Our platform offers all the essential training you need. Partnering with ERGASIA, we take pride in our Health and Safety technician who continually enhances our safety measures.

Work stress management

Objective: To provide participants with the knowledge and skills necessary to cope with or prevent stress to improve their motivation and quality of work/personal life.

This training will have two editions: one in English (2025) and the other in Spanish (2024).

Dates: September 10th and 17th, 2024 (Spanish one)

Duration: 8 hours

Target group: General Services and Scientific Services

Training content:

- Mindfulness and stress reduction: Theoretical-practical program aimed at facilitating self-awareness and self-care to reduce stress through Mindfulness. It includes the following topics:
 - Mindfulness and self-awareness; The triangle of attention and the Earthling exercise, to reduce cognitive rumination.
 - Body exploration. Training in deep relaxation to reduce discomfort.
 - Emotion management. How to recognize and manage the 4 basic emotions.
 - Emotional regulation (Titch Nath Hahn Model) in 5 steps.

- Self-diagnosis and coping strategies: Theoretical-practical program aimed at facilitating understanding of the process and developing personal skills to reduce stress. It includes the following topics:
 - Guided meditation, dialogue, and connection with the previous session, doubts, and learnings.
 - The resilient personality, a personal exercise to address your stress.
 - The circle of control and the difference between being reactive or proactive.
 - Coping strategies, in tasks or emotions, the value of adaptation.
 - Deep adaptation in 3 steps (Jem Bendell Model) for change management.

Trainer:

Instituto Mindfulness, has 20 years of experience in training for a healthy, beautiful and effective mind, giving courses and conferences in both private and public companies.

Waste Management

Explore efficient waste disposal methods and environmental stewardship practices within laboratory settings, emphasizing sustainable solutions and compliance with safety regulations.

Person in charge: Mercè Miquel

Use of greenhouses

Gain insights into the principles of greenhouse operation, covering topics such as plant cultivation, environmental control, and sustainable agricultural practices for enhanced research outcomes.

Service Manager: Glòria Villalba.

Radioactivity

Navigate the safe handling and protocols associated with radioactivity in laboratory environments, ensuring a comprehensive understanding of radiation safety measures and regulatory compliance.

CRAG has a radioactivity facility ("hot lab") in the ground floor. Its access is restricted, and people interested in taking advantage of this laboratory must obtain a license beforehand. Radioactive nuclei that can be used in the facility are P-32, P-33, S-35, H-3 and C-14.

Person in charge: Mercè Miquel

Laboratory operation

Delve into the fundamentals of laboratory procedures, including equipment handling, experiment protocols, and adherence to safety guidelines. Acquire essential skills for maintaining a secure and productive laboratory environment.

Coordinators of the equipment on the 1st and 2nd floors: Mayte Galiñanez and Carlos Vicent.
Coordinator of the equipment on the 3rd floor: Àngel Ma. Montejo.