IBEC^R

Institute for Bioengineering of Catalonia

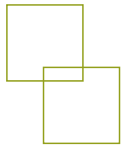EXCELENCIA SEVERO OCHOA

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HR EXCELLENCE IN RESEARCH

TRAINING
catalogue 2025

Created by IBEC's People Management Unit

Advancing Careers: IBEC's Commitment to Learning and Development

IBEC's mission is driven by several key objectives, one of which is to train the next generation of experts in healthcare technologies. Our goal is to equip researchers with the skills and knowledge needed to conduct outstanding research while preparing them for the next steps in their professional careers.

The **2025 Training Catalogue** is fully aligned with IBEC's Strategic Plan and the principles of the European Charter for Researchers. Many of the training activities included have been designed as part of the **Human Resources Strategy for Researchers (HRS4R) Action Plan**, reinforcing our commitment to professional development. As a **Severo Ochoa Centre of Excellence**, we are dedicated to providing outstanding training opportunities.
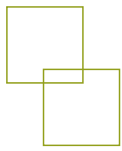
This catalogue presents a selection of workshops and courses available to the IBEC community, covering **transversal skills, scientific tools, gender & diversity, open science, languages, health and safety, and wellbeing.** These training sessions are at the forefront of new technology, with **AI tools** increasingly integrated into the various courses. This is a living document, continuously evolving to address the changing needs of our researchers and the broader IBEC community. Additionally, it includes the **Recommended Training and Development Path for predoctoral (R1) and postdoctoral (R2) researchers**, designed to support their personal and professional growth.

We take pride in the **high quality of our trainers**, who bring a balanced mix of academic and industry expertise from both internal and external sources.

As in previous years, this catalogue also includes training courses organized by BIST (Barcelona Institute of Science and Technology). We extend our gratitude to **BIST** for supporting the professional development of researchers across its seven affiliated research centres (CRG, IRB, ICFO, ICIQ, ICN2, IFAE, and IBEC), helping to enhance their skills and career prospects.

As this catalogue of training courses represents collaborative work, we would like to thank the PhD Committee and Postdoctoral Committee, Heads of Unit, Deputy Talent and Training Dr. Elisabeth Engel as well as the Group Leaders who have collaborated in collecting the training needs of IBEC's researchers, as well as their contributions in defining additional courses. We also want to thank the Work Council at IBEC for their collaboration and for making this Training Catalogue possible. Some of the training activities are funded by the Spanish Ministry of Science and Innovation under the grant Centros de Excelencia Severo Ochoa y Unidades de Excelencia María de Maeztu CEX2023-001282-S.

Carolina Marí, Head of People Management Unit

Categories of training activities

■ **Transferable skills**
Communication (oral & writing skills)
Leadership & management skills
Entrepreneurial skills and Tech Transfer
Open Science

■ **Scientific tools and techniques**
Statistical Analysis; ImageJ; Matlab; Python; Advance microscopy; IA.
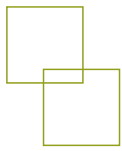
■ **Gender & Diversity**
Active bystander, Including Gender Perspectives in biomedical research, LGBTQIA+ Diversity Sensibilization

■ **Health & Safety and Wellbeing**
Courses focused on job requirements in the laboratory and offices, safety course, well-being and health promotion courses, such as psychological safety.

■ **Languages**
Spanish
Catalan
English

Registration instructions

As of February 2025, the registration system will be available at our IBECNET.

With this Intranet functionality, we will avoid time-consuming and repetitive tasks, such as sending and receiving emails.

Instructions for the process of inscription:

Important: To assure your participation, a TWO-STEP process is necessary. Without the second step, your inscription will not be registered.

- Click on the button "Training" at the IBECNET.
- Click on the course you are interested to attend. Your data will be uploaded automatically from our database. Register for the course (Step 1)
- Step 1 will be followed by an eligibility check by the HR Unit based on: predefined eligibility criteria; representativity of different areas, research groups and Units and chronological order of inscriptions.
- You will receive an email from HR where you will be asked to confirm (Step 2) your attendance at the IBECNET. Your confirmation closes the process.
- Once you have confirmed your supervisor will be informed by email.

At the IBECNET, 2 periods for inscriptions are available:

- From March to mid-July, for the courses within this period.
- From mid-July to December for the courses within this period.

Cancelation:

Once you have confirmed your attendance you must give at least 3 days (72 hours) notice if you wish to cancel (by Ibecnet). This allows us the opportunity to offer your place to someone else.

Failure to notify us within this timeframe may result in restrictions on your participation in the next course.

For courses with limited spots, priority will be given to participants who consistently attend training sessions or who adhere to their confirmed registrations.

In case of unavoidable, last-minute cancellations such as illness, please send an urgent email to training@ibecbarcelona.eu or call extension 24487 / 31144 so that we can try to fill your place.

Any IBEC member may participate in training activities free of charge; however, in some courses there is an eligibility criterion depending on career experience or other considerations. These are specified in the description of each course. In most of the courses free spots are offered to IBEC Alumni members.

When the training activity extends beyond lunchtime, a lunch meal or sandwiches will be covered by IBEC.

IBEC training courses will be held virtually or in-person, depending on the course content as well other restrictions.

Training Catalogue 2025

TITLE	DATES	AIMED AT	BY
COMMUNICATION			
Scientific Writing: Leading Teams for Senior Researchers and Group Leaders	March 13th	Group Leaders and Senior Researchers	IBEC
Visual Contents: Improve presentations, posters and graphs	March 18th and 25th	Researchers and staff	IBEC
Non-violent communication to de-escalate conflicts at work (online)	March - Sept	All IBEC	IBEC
Powerful presentation: Communicate with Impact	April 22nd and 24th	Researchers and staff	IBEC
Writing Thesis Bootcamp	16, 23, 30 May and 6 June	PhD students	BIST
Becoming a Scientific Writer: Focusing on "why" and on "how"	November 5th & 6th	PhD students and Postdocs	IBEC
LEADERSHIP AND MANAGEMENT SKILLS			
Group coaching: Communication and collaboration in research groups	All year	All IBEC research group	IBEC
Coaching individual for Group Leaders and Heads	All year	Group Leaders and Heads	IBEC
Mentoring Skills	March	Mentors and mentees	IBEC / BIST
Project Management - Managing Projects With Impact, Excellence, And Eficacy	April 2nd, 4th, 9th, May 7th and June 4th	Staff and Researchers	BIST
Leadership Training for Postdoctoral Scientists	30th April & 14th May, 28th May & 11th June	Postdoctoral researchers	BIST
Selecting the Best through Effective Candidate Interviews	May 8th	Supervisors, Group Leaders, Heads, Senior and Postdocs	IBEC
Time management in science: how to stop procrastinating and get the things done	June 18th and 19th	All IBEC	IBEC
Career week for scientist	7th to 11th July	PhD students and Postdocs	BIST
How to write a Competitive ERC Grant Proposal	TBC	Senior Researchers	IBEC
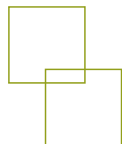
Research Integrity: Active action for Researchers	2nd semester	PhD Students and early researchers	IBEC
Microsoft 365 Essentials	2nd semester	Management area	IBEC
Liderazgo y comunicación para Senior Researchers	September 22nd & 29th	PhD students and Postdocs	BIST
Leading for success in science for Group Leader and junior Group Leader	2nd semester	PhD students and Postdocs	IBEC
ENTREPRENEURIAL SKILLS AND TECH TRANSFER			
Safeguarding your Research: Key steps for IP Protection before Publication	April 10th	All IBEC	IBEC
What Industry offers you: from lab to market	May 15th	All IBEC	IBEC
The world of Spin-Offs	2nd Semester	All IBEC	IBEC
The development process of a medical device	2nd Semester	All IBEC	IBEC
From Science to Business	2nd Semester	Researcher	BIST
Adhoc support, assistance and mentoring for the R2 projects or ideas of projects organised in small groups	All year	All IBEC	IBEC
OPEN SCIENCE			
Open Publishing	March 27th	All IBEC	IBEC
Research Data Management – General Overview	May 6th	All IBEC	IBEC
Preparation of Data Management Plans	May 20th	All IBEC	IBEC
Scientific Evaluation	Sep/Oct	All IBEC	IBEC

SCIENTIFIC TOOLS & TECHNIQUES
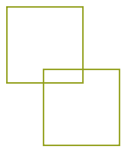
ImageJ and Python for Microscopy Data	January 23rd	Master's students, PhD students and Postdocs	IBEC
Statistical analysis applied to research data	February 25th and 27th, March 4th, 6th, 11th and 13th	Master's students, PhD students and Postdocs	IBEC
ImageJ Basic	April 3rd	Master's students, PhD students and Postdocs	IBEC
Artificial Intelligence (3 courses)	April to June	All IBEC	IBEC
Cybersecurity	1st semester (TBC)	All IBEC	IBEC
Python Basic	June 10th, 12th and 17th	Master's students, PhD students and Postdocs	IBEC
Python Advanced	June 26th, and July 1st and 3rd	Master's students, PhD students and Postdocs	IBEC
Matlab I: Basic	September 30th	Master's students, PhD students	IBEC
Matlab II: Medium	October 2nd	Master students, PhD students	IBEC
ImageJ Advanced	September	PhD students and Postdocs	IBEC
Advanced Optical & Fluorescence Microscopy & BioImage Analysis Course	2nd semester	PhD students and Postdocs	IRB

GENDER & DIVERSITY

Inclusion of the gender dimension in biomedical research	May 13th	All IBEC	IBEC
Active Bystander	June 3rd	All IBEC	IBEC
Awareness on Equality and Non-Discrimination of LGTBIQA+	November	All IBEC	IBEC
Cross-cultural working: understanding difference and maximizing diversity in science	November 18th & 20th	All IBEC	IBEC

HEALTH & SAFETY AND WELLBEING			
Fire extinguishing and emergency response	February 18th	All IBEC	IBEC
Psychological Safety: Cultivating a Learning Culture for High-Performing Research Teams	March 5th	All IBEC	IBEC
First aid in the workplace	March 20th	All IBEC	IBEC
Automated External Defibrillator (AED) and Semi-Automated External Defibrillator (SAED). Homologous Course	April 29th	All IBEC	IBEC
How to work safely with biological agents and biological samples	October	All IBEC	IBEC
Mindfulness and stress reduction	TBC	All IBEC	BIST
Harassment Prevention and Respectful Workplaces	2nd semestre	All IBEC	IBEC
LANGUAGES			
Spanish for beginners (online group)	March to June Sept to Dec	All IBEC members with an IBEC-labour contract	IBEC
Catalan for beginners (online group)	March to June Sept to Dec	All IBEC members with an IBEC-labour contract	IBEC
Catalan	All year	All IBEC	Consorci Normalit-zació Lingüística
Online Group English Classes	March to June Sept to Dec	All IBEC members with an IBEC-labour contract	IBEC
Tandem programme	All year	All IBEC	IBEC

Scientific Writing: Leading Teams for Senior Researchers and Group Leaders

For senior scientists leading teams of researchers, the challenge of publishing multiple papers per year is no longer just a writing task. It's a leadership task with a complex mix of challenges: balancing various projects in parallel, juggling one's own roles and responsibilities, and managing abilities, needs, motivations and relationships among our team members.

These extra challenges often frustrate our progress in getting papers done. Surprisingly, writing itself can actually be quite fast; it's the thinking and communicating in teams that often slows things down.

In this session we will explore the challenges group leaders face in building papers efficiently in their research teams, and the link between paper writing and their leadership role

Dates: March 13th, 10:00 – 11:30 (In-person training)

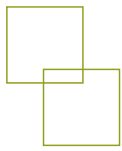**Target group:** Group Leaders, Senior Researchers who appear as lead/last author on their papers

Training content:

- Writing papers is not a writing task. It's a project management task
- What's first and what's next: Team process for building papers
- How to write as little as possible: Sentence Outline
- Getting it done: Defining roles that balance your workload and empower your people

Trainer: Dr Gavin Lucas, director of TPM Science.

Gavin is a scientist with 13 years of experience in biomedical research, and founder of TPM Science, where he has been an author's editor, consultant, and trainer since 2013. In addition to his own track-record as a publishing scientist on national, European and international research projects, he and his team at TPM Science have helped plan, critique, and polish over 700 original scientific articles for dozens of institutes in diverse fields, as well as more than 120 H2020 and Horizon Europe proposals.

He also has extensive experience as a trainer in transferable skills for researchers, and provides consultancy on training and scientific productivity at numerous research institutes, public agencies, charitable foundations, and private companies

Visual Contents: Improve presentations, posters and graphs

Equip participants with essential skills to enhance their visual content, focusing on effective design principles for presentations, posters, and graphs. Through practical workshops and hands-on exercises, attendees will learn to create visually compelling and impactful materials.

Dates: March 18th and 25th, 9:30 – 11:30 (two in-person sessions)

Target group: PhD students, post-docs, senior researchers, and administrative staff (maximum 20 participants).

Training content: Workshop on how to improve infographics, graphs, and scientific posters. Does not go into the operation of specific software.

Basic principles:

- Before Drawing
  - Storytelling
  - Prototyping
  - Graph types
  - Structure & Hierarchy
  - Color
  - Text & Fonts
  - Images
  - Less is more
  - Uncertainty
  - Papers
  - Posters

- Workshop (Day 1): Comments on some examples
- Homework
- Workshop (Day 2): How did we improve them? How can we improve them even further?

Trainer: Salva Ferré, Creative director.

Biologist, with a PhD in Biochemistry and Molecular Biology. He continued his scientific career in the communication arena by starting a blog that would eventually lead him to write and edit outreach books and digital textbooks. A few years ago he co-founded Eduscopi. In addition to directing Eduscopi and coordinating the Postgraduate Studies in Scientific Communication of UVic (in Barcelona), he writes scripts, records videos and podcasts, conducts trainings and, above all, tries to transmit the passion for science by all possible means.

Non-violent communication to de-escalate conflicts at work

In this online course, you'll develop skills to handle conflicts, understand their root causes, and enhance communication. Gain tools to prevent and resolve conflicts, improve internal dynamics, and foster a culture of dialogue. Feel empowered and confident in managing conflicts.

Dates: At your own pace as of March or September.
Format: Online course
Language: Spanish or English
Duration: up to three months
Dedication hours: 8-10 h

Target group: All IBEC

Training content:

- Why does labor conflict arise?
- How beliefs can change your life
- Conflict and emotions in communication
- Do you know which ear you listen with?
- What is my responsibility? Taking control of the conflict.
- Non-violent communication
- Conflict escalation
- Non-violent communication and self-empathy
- Empathy: looking at the other with the eyes of the heart

Trainer: CMBMediala a leading consultancy in the prevention and management of situations that may cause conflict within organisations. Acknowledgements: ADR2019 Methodology Award Mediala as the best initiative in conflict management (Generalitat de Catalunya); AMMI Award for certification in the Mediala methodology for conflict resolution.

Powerful presentation: Communicate with Impact

Learn a step-by-step approach to help you clarify and structure your ideas, sharpen your message and interact confidently with your audience in a variety of situations – to your research community, potential collaborators, your team, both online and face-to-face.

This is about learning how to communicate your ideas, research and results confidently and clearly, thus moving your audience to action.

Dates: April 22nd and 24th, 09:00 – 18:00 (two in-classroom sessions)

Target group: PhD students, post-docs, senior researchers, and administrative staff (maximum 16 participants).

Participants should be able to converse easily about their research/project in English.

Training content: Participants will spend approximately half the time in plenaries (all the group together) and the other half of the time working, in discussion and sharing ideas in workshops. Each participant makes a 4-minute presentation on which they receive feedback.

1. The differences, and (dis)advantages of different forms of communication – writing, conversations and speeches
2. How to grab the attention of the audience in your opening
3. How to structure your content to maintain the audience's attention
4. Interacting with your audience and answering questions
5. Rhetorical devices when preparing your speech - the rule of 3, rhetorical questions, metaphors, and storytelling
6. Brainstorming your presentation
7. Red-thread and closing
8. Voice and gesture
9. Feedback on voice and body language
10. PowerPoint design
11. Presentations - Feedback
12. Red-thread and closing

All participants will benefit from lifetime access to the complete self-taught course containing videos and readings for further learning. This is constantly updated with new materials and contains much more than can be covered in the live version.

Trainers:

Ana Paola is a lead facilitator. For the past 13 year she has advised governments and organisations on innovation, problem-solving, sustainability and resilience in more than 10 countries. She is teacher and facilitator at Performing Ideas, helping individuals and organisations strengthen their leadership skills, specifically on how to innovate and how to express their ideas convincingly and confidently.

Monica Ixchel Castillo Salgado, is a Political Scientist, Educator, Actress and Dancer from Mexico living in Barcelona, Spain. She is currently working as a facilitator and assistant at PerformingIdeas. She graduated from the City University of New York with a degree in Political Science (Cum Laude) in 2005

TESTIMONIALS WORKSHOPS "Powerful presentation"

" Well designed course, it covered all the main topics and also the not so obvious to have in account to make a good presentation, the trainers were excellent.

" Engagement, depth of content, feedback from trainers

" I did this course and actually had to give a talk 5 days later on an international symposium. I left the course, knowing I still would have to do a lot of work on my presentation. But with all the just learned techniques from the course I was able to overcome my fear of presenting and actually deliver a great presentation, resulting in winning the "Best Guest Presentation award"

Sabine (Klischies) Puzzovio, Senior editor
for Forecast Drugs at Clarivate
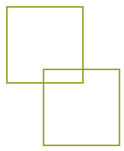
Writing Thesis Bootcamp

The Writing Bootcamp is a multi-session online course for final-year PhD students, who aim to submit their theses at the end of 2025. The contents offered consist of a balanced mix of theory and tools, practical experience and discussions.

The course is composed of a total of four 3-hour sessions over 4 weeks in May and June. Sessions will start with some theory and exercises and will be followed by a personal protected writing time, in where you can write while your peers are connected and writing at the same time, so you can contact them and the trainer.

Use this course as a perfect excuse to start your writing!

Dates: 16, 23, 30 May and 6 June (in-person training), 10.00 to 13.00, Online

Target group: PhD students (as 3rd or 4th year)

Training content:

- What a thesis is for and what it needs to do
- Sections of a thesis
- Writing frameworks
- Critical analysis and developing an argument
- Productivity
- Action planning

Trainer: Geraint Wyn Story, Cambridge Training Associates Ltd

Cambridge Training Associates is the trading name of Dr Geraint Wyn Story, who is an experienced professional development trainer.

Geraint brings experience from working for some of the world's largest life science companies, a PhD from Cambridge, and ten years of working within personal and professional development. This rare combination of experience and skills, combined with his down-to-earth style, means that he can bring the best of each of these worlds to benefit your organisation.

Geraint also works very closely with a number of other freelance trainers and professional development businesses that complement his own work. This network can offer a complete package to clients.

Becoming a Scientific Writer: Focusing on the 'why' and the 'how'

Is a workshop that provides a holistic overview of the most important skills you will need to become an efficient and effective scientific writer.

Dates: November 5th and 6th , 9:30 – 17:30h, (two in-person sessions)

Target group: PhD students (as of 2nd year) and post-docs

Training content: The aim of this workshop will be to help publishing scientists develop a more impartial, analytical view of their own writing behaviour and of their readers' perception of the finished product (the why). And at the same time, it will be an opportunity to improve their writing skills through awareness of the elements of clear writing: focusing on the language (the how), participants will learn linguistic tools to transmit scientific messages.

This training workshop is highly interactive with extensive elements of partner work, exercises and group discussion, and a special emphasis on sharing and learning from participants' own expertise and experience. To increase applicability, we work with real-life cases from the participants.

Trainer: Dr. Gavin Lucas, director of The Paper Mill.

Gavin is a scientist with 13 years of experience in biomedical research, and founder of TPM Science, where he has been an author's editor, consultant, and trainer since 2013. In addition to his own track-record as a publishing scientist on national, European and international research projects, he and his team at TPM Science have helped plan, critique, and polish over 700 original scientific articles for dozens of institutes in diverse fields, as well as more than 120 H2020 and Horizon Europe proposals.

He also has extensive experience as a trainer in transferable skills for researchers, and provides consultancy on training and scientific productivity at numerous research institutes, public agencies, charitable foundations, and private companies

"

In this course you learn techniques that make part of your daily work easier. In addition to being extremely useful, it is dynamic and very well organized.

Edition 2024

"

What was the focus and main take-away from the workshop? The goal of this workshop was to develop an analytical process-oriented view of scientific writing, introducing tools that will increase writing productivity and efficiency, also considering why? as well as How? of a scientific writing. In this workshop go through different stages of scientific writing, different parts of a paper and learn specific tasks for each part to improve writing ability.

Who would you recommend the workshop for? PhD students as well as other early-stage researchers that they aren't familiar with writing scientific papers

Melika Parchehbaf Kashani, PhD student

"

What was the focus and main take-away from the workshop "Becoming a scientific writer, putting 'why' before 'how'"? The workshop was about how to start writing your paper after the data you have received answered your research question. Workshop help you to develop a clear strategy and a plan for paper writing.

Who would you recommend the workshop for? PhD students

What was the focus and main take-away from the 'how' of good scientific writing workshop? Its focus is on how to build the sentences and paragraphs of your paper in a way that at the end you have a clear and coherent story.

Galyna Malieieva, postdoctoral researcher, Nanoprobes and Nanoswitches

Coaching for Group Leaders and Heads of Unit

The coaching process consists of 6 to 7 individual sessions between Coach and Coachee, with a duration of around 1 – 1.5 hours. They are performed with a maximum interval of 15 days between sessions.

The time between sessions pretends that the coaches can carry out actions and assimilate the changes.

Dates: All year

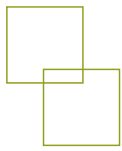**Target group:** Group Leaders, with priority for those involved in the group coaching (see above mentioned course).

Training content:

- First meeting: establish a goal of improvement jointly and consensually.
- During the 6-7 individual sessions with confidential character, the agreed objective of improvement will be worked on together.
- Last meeting: assess the results of the process and ensure that improvements in relation to the agreed objective have been achieved by the coachee.

Trainer:

Elena Palma: Founder of Tiempo de Aprender. Senior consultant Facilitator of Change in Organizations. Psychologist for the UB. Transformational Coach by Institute Gestalt & People Tech Solutions (Washington). Systemic coach. Certified in MBTI (Myers-Briggs Type Indicator). Systemic Projects and advice with Management Teams.

Monique Bruining: Professional Co-Active Coach. Certified MMS Basic Coach. International Coach Federation (ICF) certified. Certified DISC trainer. Managing Director of the Institute for Complex Molecular Systems (Eindhoven University of Technology). PhD in polymeric materials for biomedical applications.

Group coaching: communication and collaboration in research groups

The aim of the course is to improve communicative and relational competencies in research groups. We will understand what the identity of the research group is and the way of working and relating in the group, thus we aim to create strong relations, show awareness and consideration for others, promote supportive relationships based on trust and learn listening skills and how to give and receive feedback.

It is highly recommended that the group coaching sessions are combined with individual coaching sessions for Group Leaders.

Dates: 3 half-day sessions (one session per month). Dates to be agreed with the Group Leader. In-person class sessions 10 hours.

Target group: All IBEC members from the same research group. In 2024 up to 3 research groups will be trained.

Training content: Based on a first session between the consultants and the Group Leader a specific program will be created according to the needs of the research group. Contents common for all research groups, but not restricted to are the following:

- Communication: Know how to give and receive feedback, listen and ask. How to be more effective about exchanging information and ideas with others.
- Collaboration: Knowing how to establish agreements (ask and offer) and establish relationships of trust.
- Relationship: know how to recognize others, establish support alliances, share and support in situations of difficulty, understand how you complement with the others. How to balance between giving and receiving.
- Explore the reorganization of the group so that it gains autonomy.

Methodology: Group coaching, systemic analysis to understand the group as a relational system and case studies.

Trainers:

Elena Palma: Founder of Tiempo de Aprender. Senior consultant Facilitator of Change in Organizations. Psychologist for the UB. Transformational Coach by Institute Gestalt & People Tech Solutions (Washington). Systemic coach. Certified in MBTI (Myers-Briggs Type Indicator). Systemic Projects and advice with Management Teams.

David Valls: Systemic consultant and facilitator of transformation in organizations. Senior coach with international certificate (ICFPCC). Trainer of trainers and Consultant in Neurolinguistic Programming by the NLP University (Santa Cruz, CA). Higher Engineer in Electronics and Technical Engineer in Telecommunications from Ramón Llull University.

Mentoring Skills

The aim of the workshop is to prepare Postdocs and Senior Researchers for their roles as Mentors within the BIST mentoring programme. Participants will be prepared for their role as Mentor, before they start the different programme.
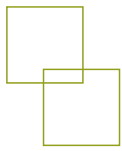
Dates: BIST Mentoring: February 4th and 6th

Target group: Postdoc and Senior researchers (mentors) participating in the BIST and IBEC's Bottom-up Mentoring Programs.

Training content:
- Objectives for and the overall programs
- Individual Expectations.
- What is Mentoring?
- Preparation of Learning Action Plan
- Follow up of the scheme.

Trainer: BIST Trainer

Project Management- Managing Projects with Impact, Excellence, And Efficacy

The course aims to offer a very broad and general vision of the Project Management framework, and the assimilation of concepts will be achieved combining theory and practice and with Collaborative learning through the preparation of practical cases in groups, always with a hands-on approach. Every participant will work in their own project and will leave the course with some work already done with it.

Dates: April 02, 04 and 09, May 7th and June 4th. From 9:00 to 14:00. (in-person)

Target Group: Anybody with interest in knowing the basics of project management and apply them in their science projects, their career or their personal life. In this fourth edition, we will give priority to participants that are part of a technical office (KTT; HR, communication, admin), core facilities, admin roles, or other types of scientific staff. Predocs, postdocs and group leaders are also welcomed to register.

Training content:

Day 1:
- Welcome, Introduction and calendar
- Project Management Fundamentals

Day 2:
- Project Management Toolkit: What is a project? Phases of a Project, Triple constraints, Project Planning, Team, RACI, Risk management, problem solving, lean-agile mindset

Day 3:
- Project Management Toolkit: Monitor and control, PDCA, continuous improvement, ecosystem, communication, urgent-important, reporting, closing, lessons learnt.
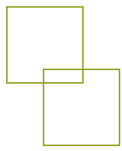
Day 4:
- Learning by doing: Each group or individual will choose one or multiple tols and apply them into their day-to-day work

Day 5:
- Competition Day: Each group or individual will defend their projects in a elevator pitch competition in front of a jury

Trainer: Iolanda Marchueta, Ph.D. in Organic Chemistry, Universidad de Barcelona, Program for Management Development Executive Education, PMD-ESADE Business School & Digital Business Executive Program, DIBEX – ISDI.

She has more than 20 years international experience in the Biopharma industry covering R&D, product launches and business models. More than 11 years leading cross-functional, cross-cultural, transversal, in person and remote teams.

Leadership in action for Postdoctoral scientists

bist

The main objective is to equip the target group with practical tools take on a leadership role in a sustainable manner, both for themselves and for their teams.

Participants will develop their self-leadership, feel more empowered and able to continue progressing in their scientific career, know and practice tools to exercise the leadership, develop their negotiating skills to reach their goals in an assertive manner and experiment with goal setting tools to better manage their careers.

Dates: April 30th, May 14th and 28th; June 11th, 10:00 – 14:00h (Attendance to all sessions in full is mandatory if registered)

Target Group: Postdoctoral and Senior researchers.

Training content:

- **Leading Yourself**

1. Expectations and objectives of the program
2. Working alliance
3. Brief introduction to Daniel Goleman's model of emotional intelligence
4. Time Management

- **Leading Others**
1. Communication skills for leading and motivating a team (active listening, assertiveness, feedback dined and why it matters)
2. Mintzberg's managerial roles
3. The art of delegating well

- **Leading your career**
1. Conflict resolution strategies for maintaining a positive work environment.
2. Win-win Negotiation Style
3. Setting career goals and developing a long-term vision (SMART Goal definition)
4. Tips for successful networking: a scientific approach

- **Mental wellbeing for a sustainable career**
1. Recognizing signs of stress and burnout
2. Two strategies for managing stress and maintaining mental health:
3. Promoting work-life balance for enhanced productivity
4. Cultivating resilience and coping mechanisms in a demanding academic area
5. Individual action plan

Trainer: Alicia Marín Muniesa, Extensive experience in multinational companies in Human Resources and Marketing. Expert in training, group facilitation and coaching. She works since 2012 for several biomedical research centres supporting residents to develop their leadership and improve their communication skills. She has been designing and facilitating programs to empower women leaders in the fields of education, science, and business for more than 10 years.

Selecting the Best through Effective Candidate Interviews

The workshop will be an opportunity for interviewers to practice and improve their interviewing techniques by sharing knowledge and good practices.

It is proven that the Competency Based Method of Interview can help us achieve better understanding of the candidate.

Using the recognized principle that past and present behaviours are best predictors for future performance and evaluating not only his/her aptitude or technical skills for the job, but also the alignment and match with the research group and IBEC, the recruitment process will be lead successfully and professionally. Likewise, as interviewer, in order to successfully identify the best candidates, it is necessary to be as objective as possible and detect any bias we may have.

Have you asked yourself:

- Am I an objective interviewer?
- Am I aware of my implicit bias? how can I reduce it?
- Do I follow standard techniques and best practices when interviewing?

Dates: 8 of May, 9:00 – 13:00 h (in-person)

Target Group: Supervisors: Group Leaders, Heads of Unit, Senior Researcher and Postdocs.

Training content:

- Awareness of implicit bias, how it influences our decisions and how to reduce it
- Competency Based Interviews: framework at IBEC
- Interview techniques and practical examples

Trainer: Carolina Marí is the Head of Human Resources at IBEC since 2009. She studied Sociology, a Master in HR and a postgraduate in HR Strategy. She has been working for more than 20 years as an HR professional in the field of organisation, development, recruitment and the implementation of strategic HR initiatives.

TESTIMONIALS WORKSHOPS "Selecting the Best through Effective Candidate Interviews"

" **What was the focus and main take-away from the workshop?** How to obtain the right information from a candidate in an interview and how to evaluate it efficiently.

Who would you recommend the workshop for? Goup leaders, senior post docs, heads and coordinators

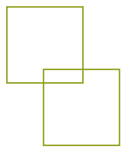**Would you like to comment anything else about the workshop?** Complete and useful

Teresa Galán, Coordinator
MicrofabSpace and Microscopy Characterization facility

" **What was the focus and main take-away from the workshop?** During the interview never ask a close question. An open-ended question gives a better idea about the candidate.

Who would you recommend the workshop for? Postdocs and junior group leader

Would you like to comment anything else about the workshop? It was a good experience. The best part of it was the practical demonstration as a mock interview. I think we can have that practical part a bit more.

Mohit Kumar, Senior researcher (post doc),
Molecular Bionics group

Time management: how to stop procrastinating and get the things done

How many times do we say to ourselves; I just don't have time! I wish I had more time, where did all my time go?

This interactive workshop focuses on three main aspects; Understanding poor time management, the barriers we face in time management and finally giving the skills tips and tools to improve giving participants a take home personal action plan will not only improve work performance but also help to reduce feelings of stress and being overwhelmed.

Dates: 18th and 19th of June, 9:30 – 13:30h (two in-person sessions)

Target group: All IBEC members

Training content:
- Personal assessment of your own triggers, reasons for wasting time, areas where most time is lost.
- Understanding your own circadian rhythms and how they affect your performance, how to use this knowledge to be more productive.
- Consequences of poor time management from supervisor, personal and mental health perspective.
- Barriers we face; Bad habits, procrastination, disruptions and interruptions, poor communication, flow and focus, multitasking.
- Skills, tips and tools: Organizing, scheduling and goal setting, priorities, apps, AI and online tools.
- Personal Action Plan; personal assessment, working with your own rhythm, improvements, strategy and take-home action plan.

Trainer: Roni Wright is an experienced cancer researcher, teacher and trainer. Providing courses and workshops for research professionals on oral presentation skills, time management and career development for over 10 years.

Career Week

BIST Career Week! 5 days full of contents designed to help you in your career development. Learn trips and tricks in the morning, and explore new job opportunities in the afternoon. All activities are free and open to everyone.

Workshops: learn from experts and get ready for your next professional move. Every morning (Mon-Thu), online, from 10:00 to 12:00.
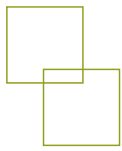
Roundtables: listen to professionals working in science-related jobs and ask them about their job and the paths they took. Every afternoon (Mon-Thu), online, from 15:00 to 16:30.

The BIST Career Week is an event organized by the BIST People Commission (CRG, IBEC, ICFO, ICIQ, ICN2, IFAE, IRB Barcelona, and BIST core team) and counts with the support of the Barcelona City Council (Ajuntament de Barcelona).

Dates: July 7th to 11th

Target group: PhD students and Postdoctoral

Trainer: At least 5 experts

Research Integrity: Practical Strategies for Responsible Research

The aim of the training workshop programme is to explore key principles of research integrity and good research practice.

Dates: November (TBC), 4-hour session

Target Group: Early career researchers (PhD Students, Master students. Postdocs)

Training content:

Theoretical introduction to Research Integrity (RI)
- What do we understand by RI and its importance
- Examples of misconduct, frequency, and consequences
- Types of misconduct (FFP and QRP), who can misconduct
- General guidelines for good conduct (international and other codes)

Practical introduction to RI
- Dilemma games or work in groups (motivations and frustrations in science, trust, the importance of context)
- Discussion about Open Science

Tools to help you maintain your RI
- Importance of Planning, Data Management and Record Keeping
- Conflicts of interest (potential role play)
- Other concepts: sharing of data, biases.

Trainer: Maruxa Martínez-Campos, PhD in Biology and in charge of digital media and scientific affairs at PRBB. Coordinator of the Good Scientific Practices Group of the PRBB. Associate Professor at UPF.

How to write a Competitive ERC Grant Proposal

The course, organized by IBEC's Projects Office, is targeting investigators that are considering applying for an ERC grant in the coming few years. The objective of the training is to provide researchers with a good understanding of:

Dates: TBC (in-person)

Target group: Group Leaders, Senior Researchers and Post-doctoral researchers aiming to apply for an ERC Grant during the next 2 years.
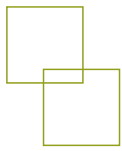
Training content:
- The evaluation criteria and how to analyse them;
- How to write a competitive scientific proposal considering panel specifics and type of project; and
- What makes an excellent PI according to the reviewers of the different domains/panels and type of ERC grants.

The information provided will enable you to develop an excellent conceptual research idea and scientific approach and to enhance the like-hood of funding.

At the last part of the session, two IBEC ERC grantees will share their experience with the preparation of their ERC proposals.

Trainers: TBC.

Microsoft 365 Essentials: Teams, Sharepoint, To-Do, One Note

The objective of this course is for the user to be able to work in the collaborative environment of Microsoft 365 and to master each of the business tools it comprises. Acquiring this knowledge will allow you to fully utilise the necessary capabilities for document management and communication within the company, and also to share all information with your organisation in the easiest, most efficient, and agile way.

Language: This edition will be held in Spanish (ES)
Dates: 2nd semester (live - online), 4 hours each session, 8 hours in total
Target group: All IBEC, especially management staff (maximum 16 participants)

Training content:

- **SharePoint Online:** It's an intranet with a document repository, a virtual place where you can upload and share all kinds of files and data with the company, controlled with user permissions.
- **Teams:** It's the Microsoft 365 workspace based entirely on instant communication. An ideal working method for teamwork.
- **OneNote:** It's an advanced text notebook for sharing notes among your team or keeping them personally and organising them in virtual notebooks.
- **Planner:** It's a group task manager for carrying out projects. It allows you to assign tasks to users, set due dates, etc.
- **To Do:** Better organise your daily work by recording your personal tasks. Integrate it with Planner and Outlook to centralise all tasks in one place.

Trainer:

Aglaia, specialised consultancy in Microsoft, official Microsoft partner

Liderazgo y Comunicación para Senior Researchers

To address the leadership and communication needs of the senior researcher, the two workshops will focus on the following objectives:

- Distinguish and define the two pillars of power and leadership
- Recognise capabilities and limitations for humble self-confidence
- Identify the communicative profile and possible adaptations according to the interlocutor
- Train in styles of communicative influence

Language: This training will be held in Spanish (ES).

Dates: 22nd & 29th of September, 4-hour session

Duration: 8 hours (9:30 – 13:30 each session)

Target group: Senior researcher (10 attendees max).

Training content:

Leadership
- The Two Dimensions of Power: Functional Power and Personal Power
- The Box and the Content: Function and Capacity
- Uses of Power and Consequences: Abuse, Assume, Evade

Communication
- MBTI Profile and Adaptations
- Styles We Use "to Convince" (A. Grant)
- Styles of Influence

Trainer:

Elena Palma: Founder of Tiempo de Aprender. Senior consultant Facilitator of Change in Organizations. Psychologist for the UB. Transformational Coach by Institute Gestalt & People Tech Solutions (Washington). Systemic coach. Certified in MBTI

Leading for success in science

The aim of this workshop is to influence and support both the present scientific work and future careers of participating group leaders. The main focus will be to address the human aspects of doing science. The course will provide a nurturing frame for practical training, as well as for scientific exchange and networking.

This 3-day workshop is held at a venue in Barcelona, away from the attendees' work institutions. Although not residential, the intention is to create a retreat atmosphere and participants should ensure their diaries are clear for all 3 days.

Dates: TBC, 3-full day training (in-person).

Target group: Group leaders and Junior group leaders

Training content:

Leadership skills, which are essential for today's challenges in scientific work, can be acquired and developed.

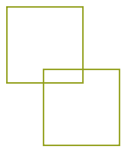During this course, participants will:

- Improve their communication, collaboration and leadership skills
- Understand how to reach career goals more efficiently and effectively
- Learn how to enable and empower others to do good science
- Improve their (self-) organisational skills
- Exchange their experiences as leaders in science
- Learn how to better lead individual and group processes
- Be encouraged to establish and maintain a peer support group

Trainer:

HFP Consulting is a company that provides leadership and other professional development training exclusively to scientists. They have developed and established professional development workshops for scientist working at leading institutions in Europe, Middle East, USA, Africa and Japan.

" *Enlightening. Definitely learned a lot about myself, my own personal management, as my current leadership skills. I would highly recommend to other professionals, even if they have already done a different management and leadership training*

Group leader

Safeguarding Your Research: Key Steps for IP Protection Before Publication

This training session will provide researchers with essential knowledge on protecting intellectual property (IP) before publication. Participants will gain insights into different IP protection mechanisms, with a focus on patents, and learn best practices to ensure their innovations remain safeguarded. The session will also cover internal procedures for protecting inventions at IBEC.

Dates: April 10th, 10:00 – 12:00h (In-person training)

Target group: All IBEC members.

Training content:

- Critical considerations before publishing
- Intellectual property rights and protection mechanisms
- Fundamentals of patenting
- Requirements for patentability
- Roles of inventors and applicants
- Patent structure and key components
- Free tools for patent searches
- IBEC's internal process for protecting inventions

Trainer:

Martina Giovanella, obtained her BSc and MSc in Physics at the University of Pisa (Pisa, Italy). After a research stay in the Technical University of Berlin (Berlin, Germany), she completed her PhD in Medical Photonics from ICFO (Barcelona, Spain). As a researcher, she gained experience in applied research for development and validation of medical devices, in a collaboration between a research and technological centre, a medical device company and a research hospital (Rigshospitalet, Copenhagen, Denmark). Since 2019, she has been working as a professional in Technology Transfer Offices of research centres.

[TRANSFERABLE SKILLS] [ENTREPRENEURIAL SKILLS AND TECHNOLOGY TRANSFER]

What Industry offers you: from lab to market

The objective of this training is to provide participants with an overview of the benefits and opportunities that the industry can offer for professionals with academic backgrounds. This includes exploring various career paths beyond research centres, understanding how technical skills can meet global market needs, and learning different strategies to transfer research results and innovations to companies.

Dates: May 15th, 10:00 – 12:00h (In-person training)

Target group: All IBEC members.

Training content:

- Introduction to opportunities in the healthcare industry
  - Overview of career opportunities in the healthcare industry
  - Benefits of working in industry versus research centres
  - Scientific versus non-scientific career options in the industry

- Leveraging technical skills in the global market
  - Identifying your skills and talents
  - How technical skills can address industry needs?

- Characteristics and constraints of the innovation process in companies
  - Understanding the innovation process in companies
  - Common challenges and how to overcome them

- Pathways to transfer research results and innovations
  - Different pathways for transferring research to the industry
  - Case studies of successful technology transfers

- Overview of different strategies for innovation transfer

Trainer:

Asli Raman holds a PhD in chemistry and an MSc in Nanotechnology and Materials Science from Universitat Autònoma de Barcelona. Her research mainly focused on nanomaterials for biological applications. In addition to being involved in research, she delivered classes to undergraduate students across different disciplines and acted as a final degree project supervisor at Universitat Autònoma de Barcelona. She has over ten years of experience in both academia and the life sciences industry, leading projects in business development, healthcare consulting, communications, and marketing. She has worked on several different projects with a range of clients from big pharma to small start-ups or university spin-offs.

The World of Spin-Offs

Provide an overview of the world of spin-offs, focusing on the internal processes and instructions for promoting a spin-off at IBEC. Participants will learn about professional outcomes and alternative pathways for PhD students and postdocs, as well as explore projects developed at IBEC that have the potential to result in a spin-off.

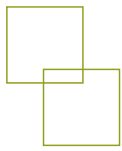**Dates:** 2nd semester, 1 hour session, (In-person training)

Target group: All IBEC members.

Training content:
- Introduction to Spin-Offs: definitions and benefits
- Step-by-step guide to the internal process for promoting a Spin-Off at IBEC
- Professional outcomes and alternative pathways for PhD students and postdocs
- IBEC Projects with Spin-Off Potential: Overview of successful projects at IBEC or case studies

Trainer:

TBC

The development process of a medical device

The objective of the course is to acquire the knowledge of the process from the medical need identification to the authorization of commercialization for a new medical device.
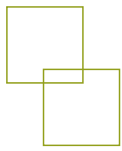
Dates: 2nd semester, 2 hour session, (online)

Target group: All IBEC members.

Training content:

In the course we will enter into the details on how to identify and select of a medical need, and how to design and establish the technical specifications of the product to be developed. We will learn how to identify the Gold Standard for the comparison of the new product. We will understand the analytical and clinical validation studies and the process to obtain the CE mark.

 Trainers:

Claire Murphy, Associate Consultant at Tecno-med.
Xavier Canals Riera - Director Tecno-med Ingenieros.

Adhoc support, assistance and mentoring for the R2 projects or ideas of projects organised in small groups
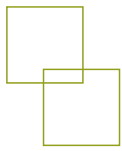
This programme has been established within the Training and Development Path for Postdoctoral Researchers - R2. Its aim is to provide tailored training for researchers who have a project and are more familiar with some of the previous training sessions organised in the Entrepreneurial & Tech Transfer section.

Dates: All year

Target group: All IBEC members

Trainer content:

It's an Ad hoc programme where topics related to Understanding and dealing with venture capital companies, Patents and intellectual property protection, how to engage with the industry, Developing a business case, Crafting a pitch, Valuation plan, and the development process of a medical device are explored in a more personalised manner or small groups.

From science to business

A hands-on workshop with 5 one-day on-site sessions on entrepreneurship in research, delivered in collaboration with ESADE Business School during a 3-week period.

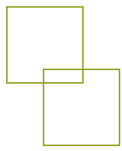**Dates:** October (TBC), in-person sessions

Target group: Senior and postdoctoral researchers, staff and graduating doctoral students. The participants will be selected by Tech Transfer Unit.

All participants might need to present a project, but only a few of those projects will be selected to move forward during the course. The KTT teams from the BIST centres, together with ESADE representatives, will chose five projects to work with. Due to the nature of this course, all participants will need to contact the KTT representative of their BIST centre before registering to the course.

Training content:

- Get acquainted with the business world and learn how companies create value for society and for themselves: providing more, better and healthier food, a cleaner, healthier and safer environment, and a better quality of life and wealth.

- Understand the framework within which companies work and how they create value in a competitive environment.

- Get a hands–on approach to the new venture creation process in the workshop session, and the role that science/technology plays in it.

- See that new venture creation needs scientists and engineers, and that entrepreneurship can be an attractive career path.

Trainer: ESADE

Open Science I: Open Publishing

As the author of a research article or book, you can ensure that your research can be accessed and used by the widest possible audience. The workshop introduces Open Access to IBEC researchers.

Dates: 27th of March, 9:30 – 12:30 (in-person)

Target group: All IBEC

The development of research activity entails adherence to a series of rules that seek to ensure the fair exploitation of publicly funded results, so that they can reach peers and the public and/or be reused for the benefit of science and society at large and as quickly as possible. The recent Covid-19 crisis provides a clear example of the power of data reuse.

Open access (OA) refers to the free, immediate, online availability of research outputs such as journal articles or books, combined with the right to use these outputs fully in the digital environment. OA content is open to all, with no access fees.
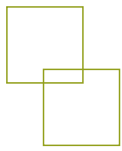
Open Access benefits:
· Increased citation and usage
· Greater public engagement
· Wider collaboration
· Faster impact
· Compliance with open access mandates

Training content:
1. The Open Science framework
2. Open Access policies, funders current requirements
3. IBEC Open Access policy, procedures and tools
4. The scientific publication process
5. Finding open access journals and publications
6. Routes to Open Access for authors
7. Licensing: copyright and Creative Commons

Trainer:

Fidel Bellmunt, IBEC's Knowledge Manager at Strategy Unit. He has a degree in Documentation. He has worked in knowledge management centers and projects in health sciences, both in the private and public spheres. At IBEC he is mainly in charge of managing scientific production, publications and research data, both for internal exploitation and to achieve the objectives of open science.

Open Science II: Research Data Management – General Overview

To learn the general issues and concepts related to Research Data Management (RDM), referred to the organization, storage and preservation of data created during a research project. It covers initial planning, day-to-day processes and long-term archiving and sharing.

Dates: 6th of May, 9:30 – 12:00 (in-person)
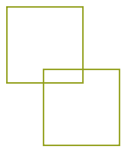
Target group: All IBEC

Training content:

Research data have a long-term value for research and academia, with the potential for widespread use in society. To ensure this, research data should follow FAIR principles and be findable, accessible, interoperable and reusable.

Also, to know IBECs policies, procedures and tools related to RDM.

1. Definitions and the Research Data Life Cycle
2. Research Data Management policies, funders current requirements
3. The Data Management Plan (general view)
4. The FAIR principles
5. IBEC's Research Data Management Policy, procedures and tools
6. Choosing a data repository
7. Licenses and copyright

Trainer:

Fidel Bellmunt, IBEC's Knowledge Manager at Strategy Unit. He has a degree in Documentation. He has worked in knowledge management centers and projects in health sciences, both in the private and public spheres. At IBEC he is mainly in charge of managing scientific production, publications and research data, both for internal exploitation and to achieve the objectives of open science.

Open Science III: Preparation of Data Management Plans

To practice the Data Management Plan (DMP) preparation. A DMP is a planification document related to research data, which is required as a deliverable in most of the current research projects by the funders.

**Dates:** 20th of May, 9:30 – 12:00 (in-person)

Target group: All IBEC

Training content:

Understanding and use of different templates and tools available to prepare DMPs following the FAIR principles.

1. DMP objectives and characteristics
2. DMP creation tools and templates
3. Practice preparing a DMP

Trainer:

Fidel Bellmunt, IBEC's Knowledge Manager at Strategy Unit. He has a degree in Documentation. He has worked in knowledge management centers and projects in health sciences, both in the private and public spheres. At IBEC he is mainly in charge of managing scientific production, publications and research data, both for internal exploitation and to achieve the objectives of open science.
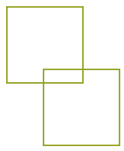
Open Science IV: Scientific evaluation

Research assessment is a powerful tool for making the transition to Open Science a reality. Making evaluation practices more accurate, transparent and responsible will allow universities to establish best practice and work together for our academic community.

Open Science is a paradigm shift. Open publication, open access, open citations, open data, open-source software, citizen science - in the same cooperative spirit, all these innovations revolutionize research by rejecting competition, even though many researchers still consider this inevitable.

This new science approach seems likely to develop further and, in the long run, to become the norm. However, no matter how hard advocates strive, Open Science will never be achieved unless it is accompanied by a change in the way researchers are evaluated. Without this, no researcher, (and especially no early-stage researcher,) will take the proven risk of departing from the old principles that continue to paralyze scientific communications: publish as often as possible, in journals with the best possible reputation.

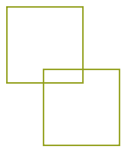**Dates:** 2nd semester, TBC (in-person)

Target group: All IBEC

Training content:

1. Overview of the current scientific evaluation systems
2. The European proposal
3. The Spanish situation and trends
4. Implications of the different models on how science is done

Trainer:

Fidel Bellmunt, IBEC's Knowledge Manager at Strategy Unit. He has a degree in Documentation. He has worked in knowledge management centers and projects in health sciences, both in the private and public spheres. At IBEC he is mainly in charge of managing scientific production, publications and research data, both for internal exploitation and to achieve the objectives of open science.

ImageJ and Python for Microscopy Data

The aim of the workshop is to achieve skills in the analysis and quantification of microscopy images using ImageJ and Python. The course is interactive, and participants will have opportunities to carry out practical exercises.

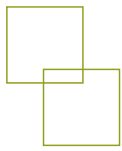**Dates:** 23rd of January, 9:30 – 12:30, (in-person training)

Target group: Master's students, PhD students and Postdocs. *The participants should have a previous basic knowledge of Python, ImageJ and the ImageJ Macro Language*

Training content:

- Introduction to PyImageJ.
- Data conversion between Java and Python.
- Working with images.
- Running ImageJ Macros from Python.
- Discovering and running ImageJ commands.
- Application of PyImageJ to problems such as:
  - Object counting.
  - Cell Tracking.
  - Segmentation.
  - Other quantifications.

Trainer:

Manuel Gómez González is a Senior postdoc at the Integrative Cell Tissue and Dynamics group, under the supervision of Prof. Xavier Trepat, at IBEC. Manuel's knowledge of ImageJ comes from his use for microscopy analysis and data processing, starting with his pre-doctoral research at the lab of Prof. Juan Carlos del Álamo, University of California, San Diego, and continuing now at IBEC.

Statistical Analysis applied to Research Data

The course will give an overview on important concepts and methods used to analyze biological data. The emphasis will be on the understanding of statistical concepts and their interpretation in a research framework. The final goal is to have a deep understanding of the meaning and interpretation of a test statistic and how to construct own statistic given data.

**Dates:** 25th, 27th of February, and 4th, 6th, 11th, 13th of March, 15:00 – 18:00h (In-person training)

Target group: Master's students, PhD students and Postdocs.

Training content:

1. Feb 27th: Introduction. Descriptive statistics. Sampling distribution. Confidence Intervals.
2. Feb 29th: Introduction to hypothesis testing. T-student test.
3. March 5th: Comparing means, one way-analysis of variance.
4. March 7th: Two-way ANOVA. Multiple comparison procedures.
5. March 12th: Correlation and regression. Partial correlation.
6. March 14th: Categorical Data. Introduction to Experimental Design and Effect size.

Trainer:

Hafid Laayouni is an associate researcher at Universitat Pompeu Fabra and the coordinator of the degree of Bioinformatics (Join degree between UPF, UPC and UB). He obtained a master degree in Genetics and a PhD in Biological Sciences from University Autònoma de Barcelona in 2000.He is author of more than 36 papers in indexed journals, two book chapters and mentor of 5 PhD theses. He is joined professor at the University Autònoma de Barcelona and visiting professor of the master's degree of Bioinformatics and Computational Biology of the Escuela Nacional de Sanidad (ISCIII, Madrid).
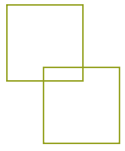
ImageJ Basic

The aim of the workshop is to achieve basic skills in the analysis and quantification of microscopy images using ImageJ. The course is interactive, and participants will have opportunities to carry out practical exercises.

Dates: 3rd of April, 09:30–12:30 (In-person)

Target group: Master's students, PhD students and Postdocs.

Training content:

- Image and video modes and memory allocation
- Image tools:
- Understanding image properties
- Transformation (cropping, removing background, filters...)
- Quantification (intensity profiles, types of measurements)
- Video tools
- Opening image sequences
- Transformation (drift, slice selection, background, walking average...)
- Quantification (kymographs, tracking, montage...)
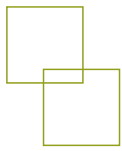- Generating videos for publication.
- Plugins

Trainer:

Manuel Gómez González is a Senior postdoc at the Integrative Cell Tissue and Dynamics group, under the supervision of Prof. Xavier Trepat, at IBEC. Manuel's knowledge of ImageJ comes from his use for microscopy analysis and data processing, starting with his pre-doctoral research at the lab of Prof. Juan Carlos del Álamo, University of California, San Diego, and continuing now at IBEC.

" *What was the focus and main take-away from the workshop Image j basic? Learn basic Image J techniques. The take away was to know the possibilities it offers.*

Who would you recommend the workshop for? Undergraduate students, Master students and PhD students who start to do research.

What was the focus and main take-away from the workshop Image j advances? To automatize ImageJ and write macros. The main take-away was that it is unavoidable to learn ImageJ macros, and it is better to do it before you actually need it.

Miquel Bosch, PhD Student, Integrative Cell and Tissue Dynamics

Artificial Intelligence (3 courses)

Course 1: INTRODUCTORY SESSION ON AI

Date: April (TBC), 6 hours, (in-person training)

Target group: All members of VHIR and l'IBEC

Content:

Module 1 (2 hours)
- What is AI, and why is it a technological revolution?
  - The history of AI
  - The current state of AI (The four waves of AI)
  - Types of AI algorithms (Predictive AI and Generative AI)
  - Applications of AI
  - Current limitations of AI

- Introduction to the basics of machine learning
  - What does it mean to learn from data? Data and models
  - Tasks: Classification, Regression, Recommendation
  - The AI model lifecycle and its implications
  - Uses and examples of machine learning
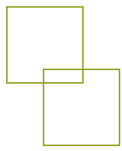
Module 2 (2 hours)
- What is Generative AI?
  - How is a Generative AI system trained?
  - Types of Generative AI
  - How to use a Generative AI system
  - Prompting techniques
  - RAG systems
  - Fine-tuning
  - Agents
  - Examples of use: chatbots, voice transcription, document processing, etc.

- Opportunities and risks of Generative AI
  - How can we create value with Generative AI?
  - What are the risks of using Generative AI?
  - How to balance risks and value? The need for governance

Module 3 (2 hours)
- **Legal and ethical aspects**
  - Ethics vs. legality
  - Legislation: Medical devices, privacy, GDPR, AI law
  - Technical perspective: Secure storage, differential privacy, synthetic data, risk control
  - Bias and discrimination: Representing all populations, biases from poor data management, biases resulting from structural discrimination

Trainer:

Jordi Vitrià (Mates-Info, UB), Santi Segui (Mates-Info, UB) i David Casacuberta (Filosofia, UAB)

Artificial Intelligence (3 courses)

Course 2: PRACTICAL COURSE ON USING BASIC GENERATIVE AI TOOLS

Date: May (TBC), 4 hours, (in-person training)

Target group: All members of VHIR and l'IBEC members interested in increasing their productivity in daily tasks.
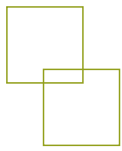
Content:

Module 1 (1 hours)
- Introduction to LLMs and foundation models (e.g. GPT, BERT, Gemma, Llama, etc.)
- The lifecycle of an LLM project
- Tools and techniques for customisation
- Deploying LLMs in real-world applications: from prototyping to cloud deployment
- Security aspects: Data protection in AI environments
- Ethical considerations
- Establishing clear policies for data and AI use in corporate settings

Module 2 (3 hours)
- Prompt Engineering
  - Prompt design
  - Prompt refinement
  - Prompt chaining

- Creating a personalised RAG system
- Fine-tuning a language model

Trainer:

Jordi Vitrià (Mates-Info, UB), Santi Segui (Mates-Info, UB)

Artificial Intelligence (3 courses)

Course 3: COURSE ON ADVANCED AI TOOLS FOR SCIENTIFIC RESEARCH

Date: June (TBC), 5 days of 4 hours, 20 hours in total (in-person training)

Target Audience: All VHIR and IBEC members with basic knowledge of Python programming, calculus, linear algebra, and statistics.

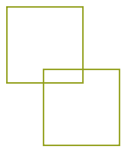**During the course, participants will learn to:**
- Use modern tools for data management and programming in scientific environments.
- Develop predictive models based on structured and unstructured data.
- Explore advanced techniques such as deep neural networks and generative AI.
- Implement scalable solutions in the cloud.

Content:
- Introduction: From raw data to knowledge – transforming data into meaningful insights.
- Software Carpentry: Essential technical foundations for efficient data work, including version control (Git), script automation, environment management, and Python programming basics.
- Data Exploration and Analysis: Methodologies for in-depth data examination, pattern detection, anomaly identification, and data preparation using Pandas and NumPy.
- Regression: Mathematical models for predicting continuous values, including linear and polynomial regression.
- Supervised Learning: Algorithms such as decision trees, random forests, support vector machines (SVM), and basic neural networks with practical applications.
- Unsupervised Learning: Clustering, dimensionality reduction, and techniques such as k-means and PCA.
- Deep Learning I: Introduction to deep neural networks and their architecture.
- Deep Learning II: Introduction to convolutional and recurrent neural networks.
- Causal AI: Understanding causality in AI—moving beyond simple correlation to identify cause-and-effect relationships.
- Generative AI in Scientific Research: Exploring the applications of generative AI in research.

Trainer:

Professors del Postgrau de Data Science & Intel·ligència Artificial de la UB.

Cybersecurity

Workshop aimed on empowering IBEC's users to take personal responsibility for protecting the organization's information and yours. Cybersecurity is an obligation to all IBEC users.. Learn to view cybersecurity not in absolute terms but relative, a function of risks and rewards (for an adversary) and costs and benefits (for you).

Dates: TBC, 2 hours (Online)

Target group: All IBEC

Training content:
- Main cybersecurity threats to companies
  - Kidnapping, theft, manipulation, destruction of data.
  - -Denial of service (directly or indirectly)

- Types of attacks possible attacks:
  - Malware (indiscriminate or APT)
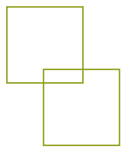 - PhishingCopy, fold and combine queries.

- Social Engineering and Safe Internet Browsing

- Entry routes:
  - Email, the most important.
  - Navigation (be careful with the social networks and downloads)
  - Removable storage devices
  - Wifi

- Resolution of participants doubts.

Trainer:

TBC

Python (Basic)

The workshop aims to provide participants with an accessible and comprehensive introduction to Python.

Dates: 10th, 12th, 17th of June, 09:30–12:30 (In-person training)
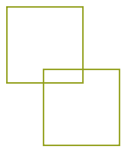
Target group: PhD students, Master students and post-docs.

Training content:
- Introduction to Python
- The Python interpreter
- Python programming environment
- Python distributions and module install
- Python language syntax
- Libraries
- Introduction to Python's scientific libraries
- Working with ".csv" files
- Introduction to parallel computing

Trainer:

Manuel Gómez González is a Senior postdoc at the Integrative Cell Tissue and Dynamics group, under the supervision of Prof. Xavier Trepat, at IBEC. Manuel's knowledge of ImageJ comes from his use for microscopy analysis and data processing, starting with his pre-doctoral research at the lab of Prof. Juan Carlos del Álamo, University of California, San Diego, and continuing now at IBEC.

Python (Advanced)

The workshop aims to provide participants with an accessible and comprehensive introduction to Python at an advanced level.

Dates: 26th of June; 1st and 3rd of July, 09:30–12:30 (In-person training)
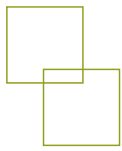
Target group: PhD students, Master students and post-docs.

Training content:
- Day 1: Data Analysis and Statistics
- Day 2: Creating publication-quality figures with Python
- Day 3: Introduction to image processing using Python

Trainer:

Manuel Gómez González is a Senior postdoc at the Integrative Cell Tissue and Dynamics group, under the supervision of Prof. Xavier Trepat, at IBEC. Manuel's knowledge of ImageJ comes from his use for microscopy analysis and data processing, starting with his pre-doctoral research at the lab of Prof. Juan Carlos del Álamo, University of California, San Diego, and continuing now at IBEC.

ImageJ Advanced

The aim of the workshop is to achieve advanced skills in the analysis and quantification of microscopy images using ImageJ. The course is interactive, and participants will have opportunities to carry out practical exercises.

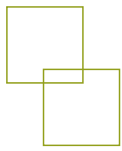**Dates:** 2nd Semester, 09:00 – 14:00 (in-classroom)

Target group: PhD students, Master students and post-docs.

Training content:
- ImageJ Macro language
- ImageJ Macro creation and recording
- Application of ImageJ Macros to problems such as:
    - Object counting
    - Cell Tracking
    - Segmentation
    - Batch processing
    - Other quantifications

Trainer:

Manuel Gómez González is a Senior postdoc at the Integrative Cell Tissue and Dynamics group, under the supervision of Prof. Xavier Trepat, at IBEC. Manuel's knowledge of ImageJ comes from his use for microscopy analysis and data processing, starting with his pre-doctoral research at the lab of Prof. Juan Carlos del Álamo, University of California, San Diego, and continuing now at IBEC.

Matlab I: Basic

The workshop aims to provide participants with an accessible and comprehensive introduction to Matlab.

Dates: September 30th, 09:00 – 14:00 (in-person)

Target group: PhD students, postdocs and researchers (maximum 20 participants).
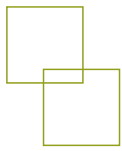
Training content:
The course is interactive, and participants will have opportunities to carry out practical exercises. IBEC provides MATLAB license for the course.

- Introduction to the MATLAB environment.
- Data types.
- Matrices and Operators.
- Scripts and Functions.
- Flow control.
- Basic plotting.
- Practical exercises.

Trainer:

Dr. Antonio Pardo Martínez is tenure-track lecturer in the Departament d'Electrònica i Enginyeria Biomèdica at Universitat de Barcelona. He received his diploma in physics 1991 and his PhD in 2000. His research interests include signal processing for gas sensors, pattern recognition, chemometrics, chemical instrumentation, and artificial olfaction.

Lluís Fernández Romero is a Physicist and Electronic Engineer from the University of Barcelona (UB), where he also earned a Master's in Nanoscience and Nanotechnology and a PhD in Engineering and Advanced Technologies. His PhD focused on designing a chemical sensing system inspired by the mammalian olfactory system. Afterward, he pursued a postdoc at the Institute for Bioengineering of Catalonia (IBEC), developing automated pipelines for metabolomic analysis using NMR and LCMS data in R. Currently, he is a Lecturer at UB's Department of Electronics and Biomedical Engineering while continuing to collaborate with IBEC's Signal and Information Processing for Sensing Systems group.

Matlab II: Medium

The workshop aims to provide participants with an accessible and comprehensive introduction to Matlab at a medium level.

Dates: October 2nd, 09:00 – 14:00 (in-person)

Target group: PhD students, postdocs and researchers (maximum 20 participants).
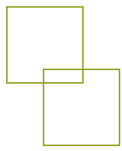
Training content:
The course is interactive, and participants will have opportunities to carry out practical exercises. IBEC provides MATLAB license for the course.

- Importing/Exporting data.
- Introduction to Statistics: descriptive statistics, linear regression.
- Introduction to Signal processing: smooth a noisy signal and find peaks.
- Introduction to Image Processing: correct non-uniform background and detect foreground objects.
- Advanced plotting.
- Practical exercises.

Trainer:

Dr. Antonio Pardo Martínez is tenure-track lecturer in the Departament d'Electrònica i Enginyeria Biomèdica at Universitat de Barcelona. He received his diploma in physics 1991 and his PhD in 2000. His research interests include signal processing for gas sensors, pattern recognition, chemometrics, chemical instrumentation, and artificial olfaction.

Lluís Fernández Romero is a Physicist and Electronic Engineer from the University of Barcelona (UB), where he also earned a Master's in Nanoscience and Nanotechnology and a PhD in Engineering and Advanced Technologies. His PhD focused on designing a chemical sensing system inspired by the mammalian olfactory system. Afterward, he pursued a postdoc at the Institute for Bioengineering of Catalonia (IBEC), developing automated pipelines for metabolomic analysis using NMR and LCMS data in R. Currently, he is a Lecturer at UB's Department of Electronics and Biomedical Engineering while continuing to collaborate with IBEC's Signal and Information Processing for Sensing Systems group.

Advanced Optical & Fluorescence Microscopy & BioImage Analysis Course (IRB)

This course targets research staff who need Bioimaging: Phd students, Postdocs and research staff from IRB Barcelona and institutions at the PCB. The course is free and will be held in person.

Dates: two days in October or November (TBC), 09:30 – 14:00 (in-person)

Target group: PhD students, postdocs and researchers (maximum 20 participants).

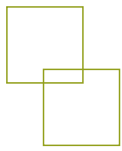**Training content:**
Day 1
- SESSION 1: Image Formation and 3D Imaging
- SESSION 2: Nano-scale & Mesoscopy/Lightsheet
- SESSION 3: Meso-scale Imaging (Mesoscopy), Lightsheet Fluorescence Microscopy

Day 2
- SESSION 4: Molecular Imaging and High-Content/High-Throughput
- SESSION 5: BioImage Analysis in Life science

Trainer:

Experts from the IRB

Inclusion of gender dimension in biomedical research

"Gender dimension" means integrating sex and gender analysis into research. With a focus on bio-medical and bio-engineering fields this workshop will show how Sex and Gender Analysis is to be integrated into all phases of basic and applied research—from setting priorities to funding decisions, to establishing project objectives and methodologies, to data gathering, analyzing results, and evaluation.

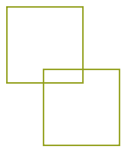**Dates:** 13th of May , 10:00-13:00h (online)

Target group: All IBEC members

Training content:
- Sex/gender as conditions of quality in science knowledge making
- Using research process as the frame, demonstrate sources and effects of gender bias in results and outcomes (e.g., hypothesis formation, literature search, data collection and analysis, theoretical considerations, reporting, application/innovation etc.)
- Demonstrate examples of research that has included methods of gender analysis (e.g., vaccines, biomarkers, cancer immunotherapy, etc.)
- Cell sex: why it matters
- Issues in commercial supply of cell lines, and biobanks
- Issues and opportunities for innovation: e.g. lab-on-a-chip, predictive biomarkers,
- Lessons from Horizon 2020 on integrating gender dimension in proposals and in evaluation

Trainer:

Dr.Elizabeth Pollitzer is founder and Director of Portia, an organization devoted to improving gender equality in STEM and promoting the inclusion of the gender dimension in STEM. She has 20 years' experience teaching and researching in the Departments of Computing and Management at Imperial College, University of London. Her original training was in Biophysics. She now applies this scientific background to her work as director of Portia. Portia was the coordinator of the genSET project, the Gender Summits were established as part of the genSET project.

Active Bystander

"What hurts the victim the most is not the cruelty of the oppressor but the silence of the bystander"

Elie Wiesel, Holocaust Survivor

To equip attendees with skills to respond to inappropriate behaviours, including those which may have been normalised over time. This innovative and award-winning programme is designed to empower staff and/or students/ trainees to challenge poor behaviours and help bring about cultural change.

Dates: June 3rd, 11:00-12:15h (online)
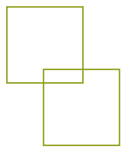
Target group: All IBEC members

Training content:
- A video demonstrating bystander apathy
- Specific references to your reasons for running the training – such as staff survey data, policies or value frameworks
- Scenario discussion
- References to high profile examples of inappropriate / unacceptable behaviour
- Details of your internal support facilities, such as HR / DEI contact details, whistleblowing hotline and/or relevant policies and procedures

Each attendee receives our Active Bystander Toolkit booklet which contains the main techniques covered in the session. This is delivered in PDF format after each session.

Trainer:

Fiona Edmondson, The Active Bystander Training Company. https://www.activebystander.com/

Awareness on Equality and Non-Discrimination for LGBTQIA+

With this course you will be able to identify and analyses the different cases of discrimination against LGTBI individuals that occur today and learn how to create a diverse and inclusive space in the institution. Learn about the Protocols of action in cases of discriminatory harassment based on sexual orientation or gender identity.
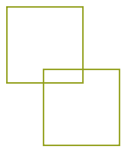
Dates: 2nd semester

Target group: All IBEC members

Training content:
- Concepts: equality, discrimination, and integration
- Stereotypes and biases
- Introduction to diversity and non-discrimination
- Discrimination based on sexual orientation
- Discrimination based on gender identity
- Inclusion of diversity
- Equal opportunities for LGTBIQ+ individuals
- Measures to be applied
- Prevention of harassment against LGTBI individuals
- Key elements in a situation of harassment or discrimination
- How to identify a situation of harassment or discrimination
- Who can suffer from harassment or discrimination
- Effects on the harassed person
- Practical examples: How to act if you are a victim or witness. The procedure.

Trainer:

TBC

Cross-cultural working: understanding difference and maximizing diversity in science

This workshop will develop the awareness, skills, and personal attitudes of participants for thriving in a cross-cultural working environment.

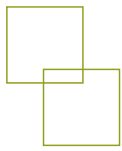**Dates:** November 18th & 20th, 9:30 – 13:30 (In person-training).

Target group: All IBEC members

Training content:
- Increase self-awareness of communicative style and cultural preferences
- Recognize the key factors that contribute to Cultural Intelligence
- Analyse the impact of cultural differences on work relationships and performance
- Identify appropriate practices for managing cross-cultural communication challenges at the workplace

Trainer:

Alicia Marín Muniesa, Extensive experience in multinational companies in Human Resources and Marketing. Expert in training, group facilitation and coaching. She works since 2012 for several biomedical research centres supporting residents to develop their leadership and improve their communication skills. She has been designing and facilitating programs to empower women leaders in the fields of education, science, and business for more than 10 years.

Fire extinguishing and emergency response (Practical Training)

Acquire knowledge about the characteristics of fire: conditions for its initiation, development, propagation, and inherent dangers. Gain understanding of different extinguishing agents and their application to various types of fires, along with the proficiency required in using fire extinguishing means during the initial stages. Offer practical insights so that in the event of a fire, individuals have sufficient judgment to assess the danger, identify the stage of the fire, understand the extinguishing capabilities of available resources, and take appropriate action to extinguish the fire rapidly and effectively.

Dates: 18th of February, 9:30 – 13:30 (in-person)

Target group: All IBEC members

Training content:

THEORETICAL PROGRAM (1.5 hours)
- Legislation and applicable regulations.
- Fire chemistry: fire triangle and fire tetrahedron.
- Fire extinguishing: fire classes, extinguishing mechanisms, and extinguishing agents.
- Preventive measures.
- Work procedures and safety recommendations.
- Situations and actions in case of emergency.

PRACTICAL PROGRAM (2.5 hours)
- Use and handling of extinguishers for different types and classes of fires
- Entry into a fire-affected area and assessment of fire progression.
- Use and handling of Standpipes (BIEs) for different types and classes of fires.
- Orientation in conditions of low or no visibility.
- Procedures for evacuation in case of emergency

Trainer:

PREVING CONSULTORES, VITALY
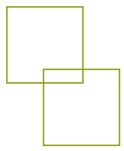
Psychological Safety: Cultivating a Learning Culture for High-Performing Research Teams

Psychological safety is the belief that team members can express ideas, raise concerns, or admit mistakes without fear of punishment or humiliation. For managers, fostering this environment is essential to building high-performance teams. It encourages open communication, trust, and collaboration, enabling individuals to share feedback, take risks, and challenge the status quo effectively.

When psychological safety is present, employees feel comfortable being authentic and fully engaged. Teams can brainstorm freely, voice ideas, and navigate disagreements knowing their contributions are valued. Managers play a pivotal role in creating this culture by promoting honesty, candor, and mutual support.

Organizations with psychologically safe teams unlock their full potential, fostering innovation, preventing failures, and achieving sustained success. Far from being just a "nice to have," psychological safety is a key ingredient for high-performance teams and long-term organizational excellence.

Dates: 5th March, 9:30 – 13:30h (in-person)

Target group: All IBEC members, but priority will be given to managers, heads, and directors.
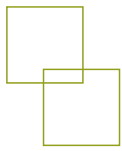
Venue: Recinte la Maternitat, room TBC

Training content:
- Explore the link between psychological safety and high performance
- Pinpoint the things that undermine psychological safety
- Create a culture where it's "safe" to express ideas, ask questions, and admit mistakes
- Nurture the level of engagement and candor required in today's knowledge econom
- Follow a step-by-step framework for establishing psychological safety in your team or organization

Trainer:

Míriam Bayés. MD PhD ACC HSDP is a consultant, mentor, and expert coach in leadership within the science and health sectors. She assists professionals in healthcare, academia, and science in effectively and transformationally leading their teams, thereby increasing motivation and enhancing productivity at the individual, team, and institutional levels.

First Aid in the workplace

Practical and very dynamic workshop focused on understanding first aid procedures, as well as basic resuscitation maneuvers

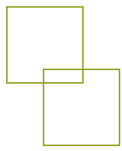**Dates**: 20th of March. 9:30 – 13:30, (in-person training)

Target group: All IBEC members

Training content:
- Theoretical Part
  - Principles of first aid
  - First aid.
  - Actions in different situations: choking, fainting, heatstroke, coma, epilepsy, insect bites, hemorrhages, wounds, poisonings, burns, cold injuries, ear, nose, and throat emergencies, ophthalmic emergencies, fractures, sprains, and dislocations, bandaging, chemical exposure, biological exposure, radiation exposure (UV lamp, laser), …
  - Transportation of the injured
  - First aid kit

- Practical Part:
  - Recovery position.
  - Cardiopulmonary resuscitation.
  - CPR practice

Trainer:

Grupo Preving

Automated External Defibrillator (AED) and Semi-Automated External Defibrillator (SAED). Homologous Course

Basic initial training to perform basic life support (BLS) on patients requiring cardiopulmonary resuscitation, and to apply the semi-automatic external defibrillator (AED) on individuals requiring cardiopulmonary resuscitation.

Dates: April 29th, 9:00 – 15:00, (in-person training)
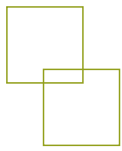
Target group: All IBEC members

Training content:
- Theoretical Part (1 hour)
    - Introduction.
    - Most common causes and locations of cardiopulmonary arrest.
    - Chain of survival, situation recognition, and activation of the Emergency Medical Systems (EMS) (112).
    - Importance of high-quality cardiopulmonary resuscitation (CPR).
    - What an AED is and its purpose.
    - Importance of early defibrillation.
    - Safety in the use of AEDs, maintenance, and legal aspects.
    - Action algorithm with and without AED from the European Resuscitation Council (ERC).

- Practical Part (5 hours)
    - Scene safety, assessing consciousness, opening the airway with the head-tilt-chin-lift maneuver, assessing if the person is breathing normally, activating the EMS (112), performing high-quality chest compressions, performing rescue breaths, alternating compressions and breaths.
    - Waste management
    - Perform a complete resuscitation sequence.
    - Recovery Position (RP).
    - Understand what an AED is, how to place the pads, and how to use the AED correctly and safely.
    - Simulation of integrated BLS practices with and without AED.

Trainer:

Course provided by VITALY HEALTH SERVICES S.L.U., an entity authorized by the Department of Health of the Generalitat de Catalunya, with an accredited trainer/instructor.

How to Work Safely with Biological Agents and Biological Samples

IBEC has to declare to the authority the use of biological agents and genetically modified organisms in its installations. For that reason biological risk assessments have been performed in all IBEC laboratories. After these evaluations, it is of interest to offer a training in Biosafety to strengthen the safe work with biological agents and biological simples

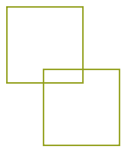**Dates**: October (TBC), 10:00 to 12:00, (in-person)

Target group: All IBEC members

Training content:
- What is the biological risk?
- Biologic agent classification in risk groups and biosafety levels
- Good laboratory practices
- Transport of agents and samples, inside and outside the PCB
- Waste management

Trainer:

Miriam Funes, holds a Bachelor of Biology, a Master of Molecular Biotechnology in 2009 and Biosafety specialization in 2019. Since 2004 she has been holding the position of laboratory technician for IBEC´s Nano-bioengineering Group, overseeing laboratory management, training in biological techniques, the culture room and participation in research projects. She is responsible for Biosecurity at IBEC.

Mindfulness and stress reduction

bist

A theoretical-practical program designed to facilitate self-awareness and self-care to reduce stress through mindfulness. This course is designed to facilitate an understanding of the process and develop personal skills to reduce stress. This course is divided in two sessions, to provide time to reflect and to put in practice all the concepts learnt. Participants should attend both sessions to take the most of this course.

Dates: TBC, 8 hours (in-person)

Venue: Recinte la Maternitat, room TBC

Target group: All IBEC members

Training content:
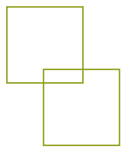**Part 1: MINDFULNESS AND STRESS REDUCTION, 4-hour session**
- Mindfulness and self-awareness: The attention triangle and the "Earthling" exercise to reduce cognitive rumination.
- Body exploration: Training deep relaxation to reduce discomfort.
- Emotion management: How to recognize and manage the 4 basic emotions.
- Emotional regulation (Tich Nath Hahn model) in 5 steps.
- Training plan between sessions and self-diagnosis (identify your stressors and typical behaviors).

Part 2: COPING STRATEGIES, 4-hour session (on another day)
- Guided meditation, discussion about insights gained, and connection to the previous session.
- The 4 elements for stress management and building a resilient personality.
- The circle of control: The difference between reactivity and proactivity.
- Time thieves: How to change attitudes regarding time use.
- Time management: Focusing on the important instead of the urgent.
- The 7 habits for well-being and final recommendations.

Trainer:

Andrés Martín Asuero, Director of Instituto esMindfulness holds a degree in Science, an MBA, and a PhD in Psychology. Specialising in mindfulness programmes for stress reduction, leadership, and organisational learning, he collaborates with companies, hospitals, and universities, delivering seminars to over a thousand people annually.

Harassment prevention and respectful workplace

This course aims to educate employees on recognizing, preventing, and addressing workplace harassment to foster a safe and respectful working environment.

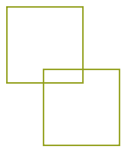**Dates:** At your own pace, 2 hours (e-learning course)

Target group: All IBEC members

Training content:
- Differentiation of the different types of harassment at a conceptual level and based on examples of situations that can occur within IBEC.
- What is considered a work environment and when the protocols can be applied.
- Circuit for resolving harassment situations
- Presentation of the IBEC Equality Plan: main commitments. Explanation of what an LGTBI plan is.
- Protocols for prevention and action against workplace, sexual and gender-based harassment and against LGTBI people.
- Presentation of reference international and national regulations and IBEC protocols.

Trainer:

TBC

Spanish classes (beginner)

Non-Spanish speakers at IBEC will have the possibility to attend Spanish classes during one trimester.

Upon enrolment, participants will undergo a level assessment to accurately determine their proficiency. Based on the assessment results, we will form one group consisting of a maximum of 6 individuals with similar level for these Spanish classes.

Dates: From March to June. (Wednesday from 17:30 – 19:00). Please keep in mind that a minimum attendance of 75% is required, so check your schedule before registering.

Methodology: Online class session: 18 Hours, 1,5 hour per week

Target group: The course is aimed at Non-Spanish speakers with a beginner's level . Minimum 7 participants. Maximum 10 participants.
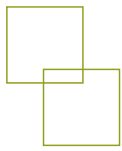
The course is open for IBEC community, however members with an IBEC employment contract will receive priority if the course reaches full capacity.

Training content:
- In the first session, an analysis of needs will be carried out with all the participants in the group.
- At the end of the trimester there will be an evaluation test based on the content of the classes, as well as a performance review with each participant to check if he/she has achieved the objectives.
- By not following a book, the teachers can make the class subjects more flexible to adapt to the objectives and needs of the students in the class.
- The course will follow the integrated methodology of oral expression, written expression and grammar.

Trainer:

Experienced native speaker teachers from the language school Oxford House.

English classes (Upper-Intermediate)

English course designed for individuals with an intermediate level (B2) proficiency in English. Upon enrollment, participants will undergo a level assessment to accurately determine their proficiency. Based on the assessment results, we will form one group consisting of a maximum of 10 individuals for these English classes.

Dates: From March to June. (Wednesday from 17:30 – 19:00). Please keep in mind that a minimum attendance of 75% is required, so check your schedule before registering.

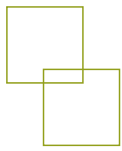**Methodology:** Online class session: 18 Hours, 1,5 hour per week

Target group: The course is aimed for individuals with an intermediate level (B2). Maximum 10 participants. The course is open for IBEC community, however members with an IBEC employment contract will receive priority if the course reaches full capacity.

Training content:
- In the first session, an analysis of needs will be carried out with all the participants in the group.
- At the end of the trimester there will be an evaluation test based on the content of the classes, as well as a performance review with each participant to check if he/she has achieved the objectives.
- The teachers can make the class subjects more flexible to adapt to the objectives and needs of the students in the class.
- The course will follow the integrated methodology of oral expression, written expression, and grammar.

Trainer:

Experienced native speaker teachers from the language school Oxford House.

Catalan classes (beginner)

Non-Catalan speakers at IBEC will have the possibility to attend Catalan classes during one trimester.

Dates: From March to June. (Wednesday from 17:00 – 18:30). Please keep in mind that a minimum attendance of 75% is required, so check your schedule before registering.

Methodology: Online class session: 18 Hours, 1,5 hour per week

Target group: The course is aimed at non-Catalan speakers with no knowledge of Catalan language. Maximum 10 participants.

The course is open for IBEC community, however members with an IBEC employment contract will receive priority if the course reaches full capacity.
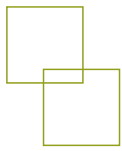
Training content:
Catalan classes are taught by native teachers with specific training in teaching language to non-Catalan speakers, and with extensive experience. The teacher and the department of studies will design the course content and prepare the materials suitable for the classes, after analysis of need.
- Introduction to Catalan
- The teachers can make the class subjects more flexible to adapt to the objectives and needs of the students in the class.
- The course will follow the integrated methodology of oral expression, written expression and grammar.

BCN Languages provides you with additional material, such as books and movies in Catalan, internet connection at the school, and access to the virtual campus.

Trainer:

Experienced native speaker teachers from the language school Oxford House.

Catalan (all levels)

There are 3 official course formats available, depending on your learning preferences.
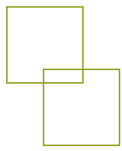
- **Classroom Training:**

If you prefer classroom training, you should contact the **Consorci per a la Normalització Lingüística (CPNL).** They offer courses for all levels of Catalan, both intensive and long-term. It is necessary to do an initial evaluation of your level. You can find training centers in all neighborhoods of Barcelona: https://www.cpnl.cat/cursos-catala/

- **Online Training:**

If you prefer to study online, the best option is the official platform **PARLACAT**. They offer courses in learning groups and also free recourses, if you prefer to learn at your own rhythm: https://www.parla.cat/pres_catalaenlinia/AppPHP/login/index.php?lang=en

- **Language mentors:**

If you prefer to learn Catalan with a local, we recommend the organization **Voluntariat per la Llengua** (volunteers for Catalan) .Local people meet with you for conversations. It's an excellent way to improve your conversation skills. The organization offers many additional recourses, like cultural activities and an online platform: https://www.vxl.cat/

Tandem programme

If you want to practice a language and are willing to offer conversation in your mother tongue(s), join our language-tandem program.

Dates: All year.

Target group: All IBEC members

Content:

The program consists of an informal language exchange between IBEC members. IBEC's HR will gather information on all interested IBEC members and find as many learning couples as possible. It's up to the couples if they prefer to meet in-person (e.g. over lunch) or to meet virtually.

Register HERE

IBEC^R

Institute for Bioengineering of Catalonia