



Training catalogue 2018

Introduction

IBEC's mission is achieved by carrying out different objectives, one of which is to train the next generation of experts in healthcare technologies. Training at IBEC aims to develop internal talent and offer a wide array of courses designed to meet the needs of IBEC's scientists and staff across all career stages and disciplines. It complements their expertise with the continuing development of transferable skills and competencies that can help them to be better prepared for today's rapidly changing environments, thus ensuring that they are given the opportunity for professional development and for improving their employability. Specifically, IBEC aims at preparing them to deliver brilliant research while giving them the opportunity to make the next steps onwards in their professional careers.

This objective is fully aligned with the current IBEC Strategic Plan, the Spanish Science, Technology and Innovation Strategy (2013-2020) and the European Charter and Code. Some of the training actions have been planned in the Action Plan of the Human Resources Strategy for Researchers. Moreover, our commitment to an excellent training is even stronger for IBEC as a Severo Ochoa Centre of Excellence.

This Training Catalogue is a summary of the transversal training courses offered at IBEC, but as the programme adapts existing courses and develops new ones to stay up-to-date with the evolving needs of our researchers, it will always be a work in progress.

As a novelty, this year we also have included a new section of courses organized by BIST, some of which are totally or partially funded. We'd like to thank BIST to support the training activities of the seven research centres (CRG, IRB, ICFO, ICIQ, ICN2, IFAE, and IBEC) thus improving the skills and abilities of our scientists and supporting the professional development of our researchers.

Announcements for each course will be emailed to all IBEC members with details about how to register. Any IBEC member may participate in training activities free of charge; however, in some courses there is an eligibility criteria 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.

We'd like to thank the PhD Committee for their collaboration and dedication in collecting the training necessities of IBEC's first-stage researchers, as well as their contributions in defining some of the courses in this Training Catalogue.

Some of the training activities are funded by the Spanish Ministry of Economy, Industry and Competitiveness under the Severo Ochoa grant SEV-2014-0425 (2015-2019).

Courses organized by IBEC will take place at IBEC:

Tower I, floor 11
Parc Científic de Barcelona
Baldri Reixac 4-8

Categories of training activities

A. Transferable skills

- Communication: Writing skills; Oral skills
- Leadership and management skills
- Innovation skills
- Gender & Diversity

B. Scientific tools and techniques

- Visualizing Data; Image J and Video processing; Statistical Analysis; Matlab; Good practices in a multidisciplinary lab; How to design experiments

C. Health & Safety

- Courses focused on job requirements: laboratory, safety course, health promotion workshops

D. Languages

- English, Spanish, Catalan

Registration instructions

Between one and two months before the start of each course individual calls for inscriptions will be sent by the HR Unit. Once the specific announcement for each course has been sent, if you would like to attend and you have your supervisor's agreement, please send an email to hr@ibecbarcelona.eu (please remember to include your supervisor in CC).

You will receive an email from HR confirming your registration.

You only need to register once, so even if HR sends more announcements for the same course, you don't need to register again.

Please note that when you register, you are asked to confirm that you will attend the course. You must give at least 3 days (72 hours) notice if you wish to cancel, so that we have the possibility of finding another person to take your place. If you fail to do this, you may not be permitted to participate in future courses.

In case of unavoidable, last-minute cancellations such as illness, please send an urgent email to hr@ibecbarcelona.eu or call extension 31144/ 20563 so that we can try to fill your place.

Training Catalogue Overview 2018

CATEGORY	TITLE	DATES	AIMED AT	ORGANISED BY
A. Communication	Say it so it stays: Oral presentation skills training for scientists	27 th , 28 th June & 2 nd July	PhDs and Postdocs	IBEC
A. Communication	Becoming a Scientific Writer, putting 'why' before 'how'	25 th October	PhD students and Postdocs	IBEC
A. Communication	Learning to write clearly, the 'how' of good scientific writing	15 th November	PhD students and Postdocs	IBEC
A. Leadership & management skills	Mindfulness for improved self-mastery & resilience	3 rd & 17 th May	All IBEC members	IBEC
A. Leadership & management skills	Time management & personal effectiveness	11 th & 12 th April	All IBEC members	IBEC
A. Leadership & management skills	Introduction to Research Integrity	9 th May	PhD students	IBEC
A. Leadership & management skills	Mentoring Skills for Mentors & Mentees	January 2019	Group Leaders & postdocs participating in the Mentoring Programme	IBEC
A. Leadership & management skills	Coaching sessions for Group Leaders	Throughout the year	Group Leaders	IBEC
A. Leadership & management skills	Effective Teamwork begins and ends with Communication	Throughout the year	All IBEC members of the same research groups	IBEC
A. Leadership & management skills	Conversaciones críticas	21 st & 22 nd or 23 rd & 24 th May	Administration	IBEC
A. Leadership & management skills	How to be an effective researcher	16 th & 17 th January	1 st year PhD students	BIST
A. Leadership & management skills	Grad School	27 th to 29 th June	2 nd & 3 rd year PhD students	BIST
A. Leadership & management skills	Leadership in Action	11 th to 13 th April	Early Postdoc researchers	BIST
A. Leadership & management skills	Leadership for postdocs seniors and senior researchers	October (TBD)	Postdocs seniors and Senior Researchers	BIST
A. Leadership & management skills	Leadership & management skills for Senior Group Leaders	October (TBD)	Senior Group Leaders	BIST
A. Leadership & management skills	Career Development for Scientists	11 th & 12 th July	PhD students and Postdocs	BIST
A. Gender & Diversity	Mitigating bias: promoting diversity and sustainable excellence in research	7 th March	All IBEC members	IBEC
A. Innovation skills	Spin off	13 th June	All IBEC members	IBEC
A. Innovation skills	Product development in the industry.	29 th November	All IBEC members	IBEC
B. Scientific tools & techniques	Good practices in a multidisciplinary lab	10 th April & November (to be determined)	Graduate students, Master Students and 1 st year PhD students	IBEC

<i>B. Scientific tools & techniques</i>	Image J and video processing	26 th June	Master students, PhD students and Postdocs	IBEC
<i>B. Scientific tools & techniques</i>	Data Visualization	10 th October	PhD students and Postdocs	IBEC
<i>B. Scientific tools & techniques</i>	Good practices workshop: "How to design experiments"	18 th October	Master students, PhD students in 1 st year	IBEC
<i>B. Scientific tools & techniques</i>	Introduction to Matlab	January 2019	Master students, PhD students	IBEC
<i>B. Scientific tools & techniques</i>	Statistical analysis applied to research data	September (to be defined)	PhD students	BIST
<i>C. Health & Safety</i>	Ergonomía: lesiones músculo-esqueléticas	20 th March	All IBEC members	IBEC
<i>C. Health & Safety</i>	Security Laser Training	6 th March	Researchers at all career stages	IBEC
<i>D. Languages</i>	English (intermediate & advanced)	October-December January-March April-June	The course is aimed at all IBEC members with an IBEC-labour contract + all PhD students and Postdocs regardless their contracting Institution.	IBEC
<i>D. Languages</i>	Spanish for beginners	February-April October-November	All IBEC members	IBEC

A. Transferable skills

Communication: Oral & Writing skills

Say it so It stays: Oral presentation skills training for scientists

The course's aim is to improve scientists' effectiveness and confidence when presenting their research to peers and public and multi-disciplinary scientific audiences.

Dates:

27th June 10.00 -18.00; 28th June 10.00 -13.30 and 2nd July 14.00 -18.00

In person class sessions = 14 hours. One whole day and two half days.

In addition to the class sessions, there will also be some homework between sessions.

Target group:

PhD students and post-docs (maximum 10 participants).

Participants should be advanced English speakers who are able to converse easily about their research in English.

Training content:

- Learn what makes a science presentation really effective
- Realise the importance of the audience
- Understand the key steps in preparation
- Clarify the importance of message and purpose
- Find story techniques to enhance engagement
- Develop & use visual aids appropriately
- Practise performance skills
- Identify own strengths and weaknesses
- Strengthen critical awareness of features of successful presentations

Trainer:

Dr. Elinor Thompson has been developing professional education interventions for scientists and physicians for over 15 years. She is designer of an innovative interdisciplinary programme, known as the *Intervals Programme*, at the Barcelona Biomedical Research Park (PRBB).

Becoming a Scientific Writer, putting 'why' before 'how'

The aim of this workshop is to help publishing scientists develop a more impartial, analytical view of scientific writing, to better understand their readership, and to make them more efficient writers and editors. Their writing will no longer be driven by the standard formula for How? to write a paper, but will be inspired by the question Why?

Dates:

25th October, from 10 to 6pm. In person class sessions = 7 hours. One whole day.

Target group:

PhD students and post-docs

Training content:

Participants will develop a deeper understanding of the structure of scientific papers, with a renewed focus on the purpose of each section and the connections between them. They will practice applying this knowledge to the task of constructing a scientific manuscript from scratch. They will gain a global framework to conceptualise the entire publishing process, and the profile of their readership. They will explore some common problems of language construction that make scientists' writing unclear, and why we are prone to these problems; we will practice some intuitive editing tools to address them.

Trainer:

Dr. Gavin Lucas, director of ThePaperMill, is a scientist with 13 years of experience as a biomedical researcher, and 9 years of experience as an academic author's editor, consultant and trainer. In addition to his own solid track-record as a publishing scientist on national, European and international research projects, as an academic author's editor and consultant, he has helped plan, critique, and polish over 250 original scientific articles for dozens of institutes in diverse fields, as well as numerous FP7 and H2020 proposals. He also has extensive experience as a trainer in scientific writing and other topics, and provides consultancy on scientific productivity at academic institutes and agencies.

Learning to write clearly, the 'how' of good scientific writing

This workshop aims to help participants improve their writing skills through awareness of the elements of clear writing. Participants will learn linguistic tools to transmit scientific messages.

Dates:

15th November, from 10 to 18 pm. In person class sessions = 8 hours. One whole day.

Target group:

PhD students and post-docs

Training content:

To successfully place their articles in high impact journals, scientists need to be able to express themselves in a clear and simple manner when writing research articles. In this workshop, we will take a hands on approach to scientific writing in English. Participants will practice both critical reading and scientific writing, while conceptualising research as a conversation. We will use a series of tools to tackle the task of scientific writing at the word, sentence, and paragraph level, and will explore strategies and tools to help researchers improve the quality of their writing as an ongoing learning process.

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 impact and applicability, we work with real-life cases from the participants whenever possible.

Trainer:

Dr. Susan Frekko is an independent writing and research support specialist from the US, now based in Barcelona. Susan holds a Ph.D. in linguistic anthropology from the University of Michigan and has published her research in indexed journals since 2009. Before moving to Barcelona in 2013, she held faculty teaching positions at Wayne State University (Detroit) and Goucher College (Baltimore).

Leadership and management skills

Mindfulness for improved self-mastery and resiliency

Workshop of two ½ day sessions will feature the benefits of mindfulness, a tool to develop self-efficacy and improve stress management and resilience. This training is based on the MBSR (Mindfulness-based Stress Reduction, Center for Mindfulness, Univ. Massachusetts) program and has been designed as an experiential and interactive workshop, aiming to guide participants towards self-reflection and self-regulation. The program emphasizes the importance of stop and see before acting, and then learning to respond instead of reacting to stressful the events.

Dates:

3rd and 17th May from 9.30 -1:30pm. In person class sessions = 8 hours + Pre-reading material

Target group:

All IBEC members (maximum 14 participants).

Training content:

- Mindfulness as a tool to develop self-awareness and personal efficiency
- Explore emotional intelligence and develop emotion regulation
- Understand and apply the principles of stress management

- Improve Personal Mastery and Resilience

Trainer:

Dr. Andrés Martín Asuero holds a MSc. a MBA and a PhD in Psychology from Univ. A. Barcelona. He completed his education in France (INSEAD) and USA (MIT and UMass).

Time management and personal effectiveness

This workshop aims at inspiring participants to get most out of their working time by giving them insight in the principles, techniques and methods of time management and personal organisation, and helping them to put these into practice.

Dates:

11th and 12th April from 9.00 - 6pm. In person class sessions = 14 hours

Target group:

All IBEC members (maximum 15 participants).

Training content:

- Sensitisation exercise: The proactive attitude
- Working with deadlines: Student Syndrome, Parkinson's Law, Buffer management
- Understanding and responding to Stress & Burnout
- Priority management: The difference between important & urgent
- The visual correct planning
- Attention management:
- Fighting interruptions
- The clean desk policy (industry) & the perfect mess theory (academia)
- Assertive communication
- Finalising the personal action plan

Trainer:

Tom Jacobs holds a Masters in Psychology & Education from the Ghent University and looks back on years of experience in the private sector, although it always remained his ultimate passion to teach adults, in particular in the non-profit sector, aiming at the transfer of know-how from one environment to the other. Since 2005 he becomes a freelance trainer/consultant in the fields of personal and team organisation. Besides an important part of training at the Doctoral Schools of the universities of Ghent, Antwerp and Brussels he is a guest professor at the Vlerick Business School for the Master Class on Project Management

Introduction to Research Integrity

The goal of this interactive training session is to raise participants' awareness of some key research integrity issues. This includes understanding the concept of research integrity, visit some guidelines and explore some examples of research misconduct or questionable research practices, and how to avoid them. Concepts such as data management, record keeping, and bias will be discussed, as well as authorship and other issues related to scientific publishing in our competitive environment.

Dates:

9th May, 4Hours, from 9:30 to 1:30pm

Target group:

PhD students (maximum 18 participants).

Training content:

- Introduction to research integrity
- Examples and types of research misconduct
- Guidelines and tools to avoid research misconduct: the importance of Data Management
- RI in practice: role play

Trainer:

Maruxa Martínez studied biology at the University of Barcelona and has since moved from doing research in academia (PhD in Cambridge University, UK) to scientific publishing at a private company (Scientific editor in Genome Biology, London) and back to academia, but this time doing science communication (Scientific editor at the Barcelona Biomedical Research Park, PRBB). She has a deep interest in research integrity (RI); she is part of the "Good Scientific Practice" working group at the PRBB and teach Research Integrity to PhD and Masters' students in biomedicine and other scientific disciplines.

Mentoring Skills

The aim of the two workshops is to prepare Scientists for their roles of Mentor and Mentee in the IBEC mentoring programme.

Mentors will learn key skills to encourage and support the learning of their mentees and consider how to manage the different stages in the process. They will also identify what their personal developmental objectives are in their own career paths.

Mentees (Post Doc researchers) will be introduced to the IBEC Mentoring Programme and will be prepared for their role as Mentee, before they start the programme.

Dates:

January 2019

For Mentors: 3.5 hours+ Pre-reading material

For Mentees: 2,5 hours

Target group:

Group Leaders (mentors) and Postdoc researchers (mentees) participating in the IBEC's Mentoring Programme.

Training content:

For Mentors:

- Welcome, introductions and sharing expectations.
- What is Mentoring and what is the role of a Mentor
- The learning contract and learning styles
- The Mentoring journey; different phases and what to prepare.
- Building trust; Listening and Observing.
- Questions to probe and to discover.
- Giving and receiving feedback.
- The use of documents to record and reflect.
- How the Mentoring Programme runs
- Personal Preparation.
- Conclusion and review of the training.

For Mentees:

- Objectives for today and the overall programme
- Individual Expectations.
- What is Mentoring?
- The features of the IBEC Mentoring Programme.
- What does it mean to be a mentee?
- Preparation of Learning Action Plan
- Follow up of the scheme.
- Next steps

Trainer:

Louise Schubert works both as an Organization Consultant and Executive Coach and has more than 30 years' experience working as a specialist in Learning and Development. She is accredited by the European Mentoring and Coaching Council (EMCC) at Senior Practitioner level; she has an MSC in Organization Consulting and is also certified as a Coach Supervisor. Over the last 4 years she has been helping organizations to set up Mentoring programmes and also works as a Mentor herself with Oxford Brookes University, in the UK. She is English and has lived in Spain for the last 25 years.

Coaching for Group Leaders (only in Spanish)

El proceso de coaching consta de 8 sesiones individuales entre Coach y Coachee, de entre 45min y 1h.

Se realizan con un intervalo máximo de 15 días entre sesión y sesión.

El tiempo entre sesiones pretende que el coachee pueda llevar a cabo acciones e ir asimilando los cambios. El coach en ese tiempo está presente de forma virtual o telefónica.

Sesiones individuales de coaching. (En 2018 se ofrecerá un total de 2 procesos de coaching)

Target group:

Group Leaders.

Content:

Primer encuentro: El propósito de este encuentro es establecer de forma conjunta y consensuada un objetivo de mejora.

Durante las de 8 sesiones individuales con carácter confidencial se trabajará conjuntamente en el objetivo de mejora pactado.

Último encuentro: El propósito de este encuentro es valorar juntos los resultados del proceso y asegurar que las mejoras en relación al objetivo pactado se han alcanzado.

Trainer:

Elena Palma, es psicóloga, coach, consultora y supervisora de Proyectos de Desarrollo Organizacional y de Desarrollo en Habilidades con más de 20 años de experiencia. Coach en procesos de cambio para la búsqueda de mejoras profesionales y personales.

Effective teamwork begins and ends with communication

Workshop focused on improving and developing communication and teamwork skills within a research group.

The title of this program is inspired in Mike Krzyzewski's quote, a basketball coach who led the team to numerous winning seasons. Teamwork and communication are key elements for a great performance as individuals and as a group, and these are the competencies that we will focus on this training program. The most effective teamwork happens when people harmonize their efforts and work toward a common goal, and communication is the foundation for this path.

Dates:

3 half day sessions (one session per month). Dates to be negotiated with the Group Leader.

In person class sessions = 14 hours.

In 2018 up to 3 research groups will be trained.

Target group:

All IBEC members from the same research group.

Training content:

Teamwork:

- Understand your teamwork style and your colleagues with the “Basadur” profile
- How people face new problems/challenges and work together for new solutions
- Create complementary teams, and understand how you complement with the others
- Build a more collaborative environment

Communication:

- Understand each other’s communication style, and the impact on others.
- How to be more effective about exchanging information and ideas with others
- Active listening, how to make questions to clarify and make sure you have all the information
- How to give and receive feedback

Trainer:

Yolanda Atienza is Co-founder at D’Alma Business Partners, a consultancy specialised in organizational transformation. Works as a coach to implement stress reduction, emotional intelligence and efficient communication programs at organizations.

Conversaciones críticas

Taller centrado en el desarrollo de tres competencias básicas del IBEC: Comunicación; Proactividad y Trabajo en equipo

Dates:

21 y 22 o 23 y 24 de Mayo

Total de 12 Horas en 2 sesiones de 9.30 a 16 horas cada una.

Target Group:

Personal de Administración.

Training content:

Contrastar ideas con otros:

- Exponer y escuchar
- Argumentos y emociones.
- Suspender el juicio
- Pensar diferente no es una amenaza
- Confiar para poder dudar (Victoria Camps)
- Humildad para poder empatizar.

Cuestionar el propio punto de vista:

- No se trata de tener la razón: desterrar certezas.
- Convencer mejor que persuadir: Cultivando la inteligencia colectiva.
- Cambiar o constatar el punto de vista.

Trainer:

Elena Palma, es psicóloga, coach, consultora y supervisora de Proyectos de Desarrollo Organizacional y de Desarrollo en Habilidades con más de 20 años de experiencia. Coach en procesos de cambio para la búsqueda de mejoras profesionales y personales.

How to be an effective researcher



Every organisation needs great leadership. Dynamic and purposeful leaders can literally change the world. In academia the very best leaders are self-aware, skilful communicators with excellent people skills. This course is designed to develop leadership skills for postdocs and focusses on identifying and honing everyone's personal leadership style. It will bring leadership to all aspects of your personal and professional life.

Dates:

2 groups: 16th & 17th January and 18th & 19th January

Residential course at:

Centre ESPLAI Hostel

C/ Riu Anoia 42-54

El Prat de Llobregat

Target Group:

1st year PhD Students.

54 places in total for all BIST centres.

Training content:

- PhD project planning
- Effective working practices
- Working with others in the research environment
- Maximising your impact
- Managing your supervisor

- Negotiating
- Getting feedback
- Making the most of your PhD – planning for the future.

Trainer:

Senior trainers Jen Allanson and Geraint Wyn Story from VITAE. VITAE is the UK organization championing the personal and professional development of researchers and provides a range of resources and events to help them to develop and articulate their skills and plan their continuing professional development.

GRADschools are three day practical learning and development programmes which enable researchers to reflect upon and develop their skills as doctoral researchers. The programme enables researchers to develop skills that can be applied in their current research and the next steps of their careers.

Dates:

Residential course from 27th to 29th June.

Place to be confirmed. The course is set up such that you will spend the nights at the venue, which is located out of the city to maximize the impact and your interactions. BIST will provide transportation by bus from Barcelona (BIST,C/ Urgell 187, Barcelona).

Target Group:

2nd and 3rd year of PhD.

45 places in total for all BIST centres.

Training content:

- develop professional and personal effectiveness
- make a positive impact on career planning and management
- enhance self-awareness, engage with others and challenge assumptions
- broaden a range of skills for becoming a more effective researcher including communication, team working, project management, decision making, negotiating and creativity
- meet doctoral researchers from a variety of disciplines, backgrounds and countries
- work with a range of experienced tutors as role models who openly share their career experiences both of research and other careers

Trainer:

The workshop will be conducted by an experienced team of 2 VITAE consultants. VITAE is the UK organization championing the personal and professional development of researchers.

Leadership in Action



Every organisation needs great leadership. Dynamic and purposeful leaders can literally change the world. In academia the very best leaders are self-aware, skilful communicators with excellent people skills. This course is designed to develop leadership skills for postdocs and focusses on identifying and honing everyone's personal leadership style. It will bring leadership to all aspects of your personal and professional life.

Dates:

From 11th to 13th April
Residential course at:
Montserrat Hotel & Training Center
Collbató (35 min. from BCN)

Target Group:

Early postdocs. 1st and 2nd year Postdoctoral researchers.
54 places in total for all BIST centres.

Training content:

- Understand a range of leadership styles
- Develop as an effective leader of people and teams
- Use strengths and achievements to create success
- Build confidence in leadership abilities in a range of situations
- Gain advantage in highly competitive employment situations

Researchers will be able to:

- work with a team of proven leaders from a range of career backgrounds
- experience and understand the impact of different leadership styles on those being led
- acknowledge personal values and how these affect decisions
- engage with researchers from a variety of disciplines, backgrounds and career stages
- receive feedback on personal leadership styles and identify how these can be developed further.

Trainer:

The workshop is one of the VITAE's most popular programmes. VITAE is the UK organization championing the personal and professional development of researchers and provides a range of resources and events to help them to develop and articulate their skills and plan their continuing professional development.

Leadership Skills for Senior Postdocs and Senior Researchers



We believe that interpersonal skills, essential for today's challenges in scientific work, can be acquired and developed. Our goal is to enable scientists to productively deal with challenges related to the human aspects of doing science. These aspects are traditionally not taught in academic training and we aim at filling this gap.

Dates:

Residential course of 3 days in October (dates to be confirmed).

Target Group:

Senior Postdoctoral Researchers and Senior Researchers from BIST community.

Training content:

- Key communication skills
- Dealing with conflicts
- Organizing your work: setting goals and priorities
- Dealing with different personalities
- Gender bias
- The art of giving and receiving feedback
- Delegation
- Mastering the job interview process
- Designing a competence portfolio of transferable skills for future career
- Strengthen your network within the BIST community

Trainer:

The workshop will be conducted by an experienced team of 2 Hfp consultants. Hfp consulting is a provider who exclusively focuses on training and coaching life scientists, that have developed and established such workshops for postdocs for example at EMBO, the PRBB or SystemsX.ch network.

Leadership and Management skills for Senior Group Leaders

Course organized by BIST in collaboration and coordination with ICIQ.
Being a leader in science is a role most people grow into but are rarely trained for.

Dates:

Residential 3 full days in June (to be determined)

Target Group:

Senior Group Leaders from BIST community.

Training content:

- Keys to effective communication.
- Dealing with conflicts constructively.
- Achieving better agreements through negotiation.
- Managing time and tasks.
- Dealing with different personalities.
- Delegating tasks more effectively.
- Managing meetings and discussions.
- Setting clear goals.
- Recruiting the right people.

The course will include a session dedicated to fostering interdisciplinary project ideas.

Trainer:

The workshop will be conducted by an experienced team of 2 Hfp consultants. Hfp consulting is a provider who exclusively focuses on training and coaching life scientists, that have developed and established such workshops for postdocs for example at EMBO, the PRBB or SystemsX.ch network.

Career development for Scientists

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

Dates:

11th and 12th July 2017

In person class sessions: 14 hours, from 10:00 to 18:00

Target Group:

PhDs and Postdoctoral researchers. Maximum 12 participants.

Training content:

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

Trainer:

Tobias Maier is a science communication professional with a PhD in biochemistry and a ten-year track record in academic research. As a freelance trainer, Tobias gives career development workshops for scientists, leadership and management skills courses for scientists and he writes a popular science blog in German called WeiterGen. He is an employed lecturer and science communication researcher at NaWik. He is specialized on Social Media and Scientific Writing.

Gender and Diversity

Mitigating Bias: promoting diversity and sustainable excellence in research

Do you know what unconscious bias is and how we can mitigate it? Could such bias affect your scientific career? This 2-hour seminar aims to explore and explain the concept, causes and consequences of implicit or unconscious bias and how it affects careers, workplace culture, and work-family reconciliation in research organizations. In addition, ways to effectively promote diversity and inclusion in research by learning how to mitigate bias in the scientific career progression will be addressed.

At the end of the seminar there will be an opportunity for networking and for sharing experiences over some nibbles.

This is the first joint seminar, organized by the IRB Barcelona and IBEC Equality and Diversity Commissions.

Dates:

7th March from 11 to 1 pm. At Dolors Aleu Room, at PCB

Target group:

All IRB & IBEC members

Trainer:

Claartje Vinkenburg, PhD, associate professor of organizational behaviour affiliated with VU University Amsterdam, independent expert consultant. Dr Vinkenburg's research activities, partly funded by the European Research Council, deal with gender and ethnic diversity in professional and academic careers as well as with sustainability in combining career and care.

Innovation skills (IP and Tech Transfer)

New Spin-off Creation: best practices and lessons learned

During this course we will explore the main principles and best practices for the creation of a new Spin-off company coming from a Hospital, University or Research Center. We will explore the main topics such as Business plan preparation, Fundraising strategy, Tech transfer process and Legal framework..

Dates:

13rd June, from 11 to 13H. In person class sessions: 2 hours

Target group:

All IBEC members. Maximum 20 participants.

Training Content:

- o Business Plan preparation. Main topics and how to draw them
- o Fundraising strategy: how to make the company attractive for investors
- o Tech transfer process and legal framework: main topics for a successful negotiation with investors.

Trainer:

Josep Lluís Falcó. Doctor in Chemistry and MBA has more than 20 years of experience in the biomedical sector. He has worked for big pharma companies (Sanofi), mid-size pharmas (Ferrer Grupo), small biotechs (Hospital spin-off), Tech Transfer Offices (Fundació Bosch i Gimpera) and Consulting firms (Antares Consulting and Asphaltion). He has also been associate professor at IQS. His experience is based in Healthcare Strategy, Technology Transfer and Fundraising of start-up companies among others. Josep Lluís has founded 4 companies. He currently serves as board member for 4 start-up companies and he has been involved in 11 private fundraising processes.

Product development in the industry: How they think, how they work

Technology and science advance exponentially, to keep being innovative, the pharmaceutical industry opens the walls of the laboratories to enter into collaboration models with other companies and research centers to bring new treatments to market. To be more efficient, sharing risks and benefits.

Dates:

29th November. In person class sessions: 2 hours

Target group:

All IBEC members. Maximum 20 participants.

Training Content:

- Decision making process (project selection).
- Project management.
- Open innovation and other strategies.
- Key points of a successful collaboration. Worries about collaboration with public researchers.
- Regulatory affairs and scale up.

Trainer:

Isabel Amat is the Global Head of Innovation and Pipeline Management at Reig Jofre. She participated in the foundation of Archivel Farma, a Biotech Company focused in the development of a Tuberculosis vaccine. She participated in the foundation of different Biotechs: Bioempren, Manremyc and Specypig. She is Chemist and Master in Business education. .

B. Scientific tools and techniques

Good practices in a multi-disciplinary lab

The objective of this workshop is to acquire the good practices necessary in a multidisciplinary laboratory to ensure the highest quality of the results.

Dates:

The workshop will be offered twice a year.

- 10th April, from 10 to 13pm
- 2nd half November

Target group:

Vocational training Students, Undergraduate students, Master students and PhDs in their first year.

Training content:

- Planning the work
- During the work
- Finishing the work
- Before leaving the bench
- Practical part: performance of different good practices in a simulated multidisciplinary bench

Trainer:

IBEC's Risk Prevention representatives.

Image J and Video Processing

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

Dates:

26th June, from 10 to 1 pm. In person class session: 3 Hours

Target group:

PhD students, Master students and post-docs.

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:

Dr. Pere Roca-Cusachs, Group Leader at IBEC. Pere's expertise in ImageJ comes mostly from his time as post-doctoral researcher at the lab of Michael Sheetz, Columbia University, where he used the software for day-to-day image analysis and data processing.



Data Visualization

BIST
Barcelona Institute of
Science and Technology

Essential visual communication: participants will learn about human visual perception and how to present research ideas and results visually so they are effortlessly understood. This includes lessons on how to use color and typography, how to visually organize and group visual items and create an intended eye-flow. We will go over graphic design software and features they all have in common. Moreover, we will distill best practices from a plethora of scientific figure examples to learn how to more clearly communicate complex messages.

Dates:

10th October, from 10 to 6pm

Target group:

PhD students and post-docs

Training content:

- How to effectively communicate with specific scientific and non-scientific audiences.
- Human visual perception and what we find intuitive.
- Colors: how to amplify, not 'fancify'.
- Visual organization: how to structure to simplify comprehension.
- Eye-flow: effortlessly guide the audience through the design.
- Typography: how to choose and combine fonts for legibility and aesthetics.
- Visual consistency: how to make consistent style for multiple figures.
- Graphic design software: technical tips for Photoshop, Illustrator and PowerPoint.

- Graphical abstract drawing exercise: draw your own research and get feedback from your peers.

Ahead of the workshop, participants send their slides, posters, journal papers and I prepare a selection of visuals. We comment on and try to improve them during the workshop.

Trainer:

Dr. Jernej Zupanc PhD research in computer science (biomedical image analysis). He worked as Head of computer vision at a startup for five years. He regularly conducts workshops for researchers at research institutes and universities, e.g. at LMU, DKFZ, HU, MPI, Harvard, and 40+ other institutions in Europe, US and Asia. He established Seyens in 2013.

Good practices workshop “How to design experiments?”

The objective of the course is to learn how to apply Chemometrics to design better experiments. The training will focus on the rationale behind using an experimental design, rather than on the “technical” part.

Dates:

18th October. In person class session: 9:30 to 17:30

Target group:

PhDs and master’s students (maximum 20 participants).

Training content:

- Why thinking multivariate
- Multivariate optimization
- Design experiments and try hypothesis
- What to do when I have more than one response?

Trainer:

Prof. Riccardo Leardi, Associate Professor at the Department of Pharmacy at University of Genova and his research field is Chemometrics. His interests are mainly devoted to problems of classification and regression, experimental design, process optimization, multivariate process monitoring and multivariate quality control. He is author of more than 130 papers and more than 120 communications in national and international meetings; he was invited to give talks and courses in several industries and research centers.

Introduction to Matlab

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

Dates:

January 2019

Target group:

PhD students (maximum 20 participants).

Training content:

- Introduction to the MATLAB environment.
- MATLAB basics: data types, operators, functions, control flow, plotting, file input/output, debugging.
- Statistics and machine learning: descriptive statistics, hypothesis tests, regression, visualization.
- Signal processing: smoothing, peak finding, cross-correlation.
- Practical exercises.

Trainer:

Javier Burgués is a doctoral student in Engineering and Applied Sciences in the department of Engineering Electronics at the University of Barcelona. Since 2014 he is working under the advisement of Dr. Santiago Marco at the Institute for BioEngineering of Catalonia (IBEC). He received his master's degree in Computer Science from the University of Southern California in 2013 and BS in Telecommunication Engineering from the University Autónoma of Madrid in 2010. His main research interests are the application of signal processing and pattern recognition techniques to chemical sensor data, integration of chemical sensors into robotic platforms and the development of bioinspired navigation algorithms for localization and mapping of chemical sources.

Statistical Analysis applied to Research Data



The course will give an overview on important concepts and methods used to analyse "Biomedical data". The emphasis will be on the understanding of statistical concepts and their interpretation in a research framework.

Dates:

September (to be confirmed)

Target group:

PhD students

Training content:

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. A special emphasis will be done to get a correct understanding of key words in basic statistic: null hypothesis, alternative hypothesis, error type I, error type II, statistical power, causation and correlation, sampling error, random error, systematic error, sampling distribution, p-value, statistical and practical significance, effect size and statistical power.

To be determined

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.

C. Health & Safety

Ergonomía cómo prevenir o mejorar lesiones músculo-esqueléticas (In Spanish only)

El curso tiene como objetivo prevenir o mejorar lesiones músculo-esqueléticas derivadas del mantenimiento de posturas estáticas no ergonómicas y la realización de movimientos repetitivos. Ayuda a tomar conciencia de la postura y de los movimientos más habituales para así modificarlos y mejorarlos. La reeducación postural empieza casi siempre por romper viejos hábitos y patrones de movimiento buscando la participación activa de la persona. Para evitar la sobrecarga muscular se realizarán ejercicios de relajación de los diferentes grupos musculares.

Fechas:

20 de Marzo. 4 horas, de 9 a 13h.

Participantes:

Toda la comunidad IBEC. Máximo 12 personas

Contenido del curso:

- Riesgos ergonómicos en los puestos de PVD's y laboratorio.
- Recuerdo anatómico de las principales zonas afectadas.
- Patologías relacionadas con los riesgos ergonómicos en usuarios de PVD's y laboratorio.
- Recomendaciones para prevenir la aparición de patologías:
- Adecuación del puesto de trabajo
- Consejos generales
- Fisioterapia preventiva

Idioma de impartición: castellano

Formador/a:

Formador/a de la empresa ASEM, especialistas en prevención de riesgos laborales.

Security Laser

Safety awareness against laser and intense light. This is a training session to ensure sufficient competence so that staff that need to be in contact with the laser system has the minimum knowledge necessary to protect others and himself against the risk of accidental exposure to lasers.

Dates:

6th March 2018, from 9 to 2pm.

Target group:

This course is highly recommended to researchers who design or are responsible of laser equipment and researchers working near laser systems or intense light sources. Maximum 12 participants.

Training content:

Basic principles of light and laser, risks to skin and eyes and best practices. The agenda of the basic training includes the following topics:

- Risk and preventive measures UV and blue light
- The laser beam
- The laser classes
- Hazard level in optical communication systems
- Accidental exposure
- The human eye
- Hazard mechanisms
- Risk parameters with lasers
- Accidents and their causes
- The laser safety program
- Selection of laser safety eyewear

Trainer:

Two experienced trainers from ProcarelighCare (light and laser safety solutions).

D. Languages

English classes

As of October, English classes begin every year for all IBEC members with IBEC labour contracts and for all PhD student regardless of the contracting institution. However, participants can start at the beginning of every trimester (in October, January or April) after taking a level test.

Requirement: to attend at least 75% of the classes.

Dates:

English in Groups that meet one hour twice a week.

Intermediate Group: Monday and Wednesday from 8:30 to 9:30 am.

Advanced Group: Tuesdays and Thursday from 8:30 to 9:30 am.

Target group:

The course is aimed at all IBEC members with an IBEC-labour contract + all PhD students and Postdocs regardless their contracting Institution.

Training content:

Dynamic English classes using an integrated methodology of oral expression, written expression and grammar.

Trainer:

Experienced native speaker teachers from the language school Oxford House.

Spanish classes for beginners

Non-Spanish speakers staying at IBEC, will have the possibility to attend Spanish classes during 1 trimester.

Dates:

One trimester, from February to April. Mondays from 17.30 – 19.00 h

One trimester, from October to December. (Time schedule to be confirmed)

Target group:

The course is aimed at Non-Spanish speakers without Spanish knowledge or a beginner's level. For PhDs, postdocs, Senior researchers, Group Leaders, technicians and research assistants regardless of the contracting institution. (Maximum 14 participants).

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.