

A4L_ACTIONS

Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe

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D3.4 Skills Academy resource database

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Table of Contents

INTRODUCTION	3
BIOSTATISTICS: PRINCIPLES AND LIMITS OF STATISTICAL ANALYSES IN BIOLOGY AND	
MEDICINE - 1	4
BIOSTATISTICS: PRINCIPLES AND LIMITS OF STATISTICAL ANALYSES IN BIOLOGY AND	
MEDICINE - 2	5
BIOSTATISTICS: PRINCIPLES AND LIMITS OF STATISTICAL ANALYSES IN BIOLOGY AND	
MEDICINE - 3	6
BIOSTATISTICS: PRINCIPLES AND LIMITS OF STATISTICAL ANALYSES IN BIOLOGY AND	
MEDICINE - 4	7
BOOSTING THE CREATIVITY OF RESEARCH TEAMS	8
CONFLICT MANAGEMENT	9
FIRST STEPS TO ACHIEVING YOUR VISION	10
FROM IP IN THE LABS TO IP ON THE MARKET	11
HOW TO CHOOSE THE RIGHT JOURNAL FOR YOUR PAPER	12
SCIENCE COMMUNICATION: PRESENT YOUR RESEARCH RESULTS WITH CONFIDENCE	13
HOW TO ESTABLISH COOPERATION BETWEEN ACADEMIA AND BUSINESS?	14
MANAGEMENT OF RESEARCH PROJECT USING ONLINE TOOLS	15
PERSONALIZED COPING STRATEGIES FOR MENTAL HEALTH MAINTENANCE	16
PROJECT PROPOSAL WRITING	17
PROTEIN BIOMARKERS – THE ROAD FROM DISCOVERY TO CLINICAL USE	18
PSYCHOLOGICAL DETERMINANTS OF SUCCESS ENHANCING CREATIVITY AND EMPHASIZ	ZING
PROBLEM SOLVING STRATEGIES	19
RESEARCHER IDS AND PROFILES: INCREASING YOUR RESEARCH VISIBILITY	20
SCIENCE COMMUNICATION: PRESENT YOUR RESEARCH RESULTS WITH CONFIDENCE	21
SCIENTIFIC POSTER – TIPS & TRICKS	
SCIENTIFIC RESEARCH – FIND, READ & CITE	23
TEAMWORK AND ACHIEVING TEAM SYNERGY	24
TECHNIQUES OF SCIENTIFIC PRESENTATIONS PRACTICAL COURSE	25
TECHNOLOGY TRANSFER IN HEALTH RESEARCH	26

Introduction

D3.4 Skills academy resource database is part of WP3 Careers in Science and Beyond activities within Alliance4Life_Actions project. The aim of this deliverable is to provide researchers and other support staff with a set of trainings for building up competences that are transferable to almost any job or activity, i.e. communication, conflict and time management, leadership skills, etc.

Workshops, listed in this catalogue, include prominent trainers from Alliance4Life (A4L) institutions and cover various topics. Based on their diverse background and broad expertise in respective field trainers compiled a set of workshops, targeting PhD students, young researchers, senior researchers, and other support staff. Each workshop is presented as 1-pager, containing summary, information on trainers(s), delivery mode and duration.

Workshops, which can be held on site or online, are available to A4L partners. Several workshops have been conducted as part of Skills Academy events in Tartu (April 2022), Ljubljana (June 2023) and Budapest (March 2024), but the workshops can also be conducted individually at A4L institutions.

The catalogue is publicly accessible on the A4L website. Interested parties can contact their A4L representative for further information.



Course instructor: **MUDr. MSc. Michal Šitina, Ph.D., ICRC-FNUSA**Target audience: **PhD students and postdocs**

Annotation:

Medicine is an evidence-based discipline, but many studies have come up with strikingly contradictory conclusions, and a substantial percentage of studies yielded different results, usually negative, when replicated. There is also a known risk of publication bias, where only positive studies are accepted by journals, even though they may be flawed. Sometimes, even minor manipulation of results may be suspected. This raises the question of whether clinical or even experimental studies can be trusted at all. This course briefly summarizes the principles of various statistical methods, critically reflects on their shortcomings, and highlights the pitfalls of biomedical study methodology.

Course content / Which skills will you gain:

- Basics of the probability theory
- Tests of statistical hypotheses
- Categorical data analysis

About the trainer:

Michal Šitina is the Head of Biostatistics at ICRC-FNUSA research centre and a physician specialising in the Intensive care medicine. Michal studied medicine in the Czech Republic and Computational and data science at the Friedrich-Schiller-University in Jena, Germany. His research topic is the applied mathematics in intensive care medicine. He likes theoretical disciplines, because of their elegance, beauty and sense of profoundness. He is an active classical music piano player.

Maximum number of participants: 20

Course duration: 2 hours



Course instructor: **MUDr. MSc. Michal Šitina, Ph.D., ICRC-FNUSA**Target audience: **PhD students and postdocs**

Annotation:

Medicine is an evidence-based discipline but many studies have come up with strikingly contradictory conclusions, and a substantial percentage of studies yielded different results, usually negative, when replicated. There is also a known risk of publication bias, where only positive studies are accepted by journals, even though they may be flawed. Sometimes, even minor manipulation of results may be suspected. This raises the question of whether clinical or even experimental studies can be trusted at all. This course briefly summarizes the principles of various statistical methods, critically reflects on their shortcomings, and highlights the pitfalls of biomedical study methodology.

Course content / Which skills will you gain:

• Multiple linear regression and logistic regression

About the trainer:

Michal Šitina is the Head of Biostatistics at ICRC-FNUSA research centre and a physician specialising in the Intensive care medicine. Michal studied medicine in the Czech Republic and Computational and data science at the Friedrich-Schiller-University in Jena, Germany. His research topic is the applied mathematics in intensive care medicine. He likes theoretical disciplines, because of their elegance, beauty and sense of profoundness. He is an active classical music piano player.

Maximum number of participants: 20

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Annotation:

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Course content / Which skills will you gain:

• Statistical aspects of clinical studies, meta-analyses, sample size determination

About the trainer:

Michal Šitina is the Head of Biostatistics at ICRC-FNUSA research centre and a physician specialising in the Intensive care medicine. Michal studied medicine in the Czech Republic and Computational and data science at the Friedrich-Schiller-University in Jena, Germany. His research topic is the applied mathematics in intensive care medicine. He likes theoretical disciplines, because of their elegance, beauty and sense of profoundness. He is an active classical music piano player.

Maximum number of participants: 20

Course duration: 2 hours



Course instructor: MUDr. MSc. Michal Šitina, Ph.D., ICRC-FNUSA

Target audience: PhD students and postdocs

Annotation:

Medicine is an evidence-based discipline but many studies have come up with strikingly contradictory conclusions, and a substantial percentage of studies yielded different results, usually negative, when replicated. There is also a known risk of publication bias, where only positive studies are accepted by journals, even though they may be flawed. Sometimes, even minor manipulation of results may be suspected. This raises the question of whether clinical or even experimental studies can be trusted at all. This course briefly summarizes the principles of various statistical methods, critically reflects on their shortcomings, and highlights the pitfalls of biomedical study methodology.

Course content / Which skills will you gain:

- Risks of exploratory data analysis
- Methodology errors in medical research
- Can we trust clinical research?

About the trainer:

Michal Šitina is the Head of Biostatistics at ICRC-FNUSA research centre and a physician specialising in the Intensive care medicine. Michal studied medicine in the Czech Republic and Computational and data science at the Friedrich-Schiller-University in Jena, Germany. His research topic is the applied mathematics in intensive care medicine. He likes theoretical disciplines, because of their elegance, beauty and sense of profoundness. He is an active classical music piano player.

Maximum number of participants: 20 Course duration: 2 hours

BOOSTING THE CREATIVITY OF RESEARCH TEAMS

Course instructor: **Karolina H. Czarnecka-Chrebelska, MUL**Target audience: **PhD students and postdocs**

Annotation:

Working on research projects is usually related to close teamwork and many team meetings that do not always lead to achieving the intended goals or pushing the project forward. This workshop aims to organise the collaboration within research groups more innovatively and effectively. When it comes to group-working, we have to respond to the questions: Do we need groups to conduct research? Do we need a definition and roles to play? Wouldn't it be easier to conduct our research alone? Competition or cooperation – what enhances our creativity? To seek answers to these questions during the workshops, You will learn: 1) some techniques to increase creativity, 2) how encourage the team to "think outside of the box"; 3) how to motivate people for non-judgmental cooperation and support the development of other people's ideas.

Training content / Which skills will you gain:

- Analysis of the needs/expectations of the team
- Analysis of the roles in the team
- Techniques enabling the "think outside of the box" approach like Guilford's Unusual Uses Test; Exercise with tribonds, "What if?" and "5Why" methods
- motivate people for non-judgmental cooperation and to give positive feedback
- Brainstorming

About the trainer:

Karolina H. Czarnecka-Chrebelska is Assistant Professor at Medical University of Lodz. She has >15yrs experience in molecular biology, epigenetics & oncology. She acted as PI in scientific and implementation grants realised in Poland, and Spain also worked as Innovation Broker. She was granted the MSCA Individual Fellowship for experienced scientists. She is experienced in conducting scientific and pitch presentations workshops, team-management workshops, design-thinking, or boosting creativity training.

She is also a professional evaluator of scientific projects.



Course duration: 2*90 (or 2*115) minutes workshop

Mode: workshops with the active involvement of participants. Ideally, the training should be stationary, but also can be performed online via TEAMS.



CONFLICT MANAGEMENT

Course instructor: **Tõnu Lehtsaar, UT**Target audience: **PhD students and postdocs**

Annotation:

Conflict management is one of the important social skills towards creating constructive interpersonal working atmosphere. The ability to cope with interpersonal tensions presupposes knowledge of conflict development dynamics and skills of managing an already materialised conflict. The key conflict management skills are conflict prevention, conflict management strategies and mediation. The conflict management skills to be specifically employed depend mainly on the roles of the persons involved in the conflict. There are constructive ways of behaving as a party to a conflict or the leader of the team in which the conflict is occurring or as a third party trying to mediate between the conflicting parties.

Course content / Which skills will you gain:

- Knowledge of the psychological dynamics of interpersonal conflict.
- Strategies of conflict prevention.
- Strategies and methods of conflict resolution.
- Constructive and destructive ways of handling a conflict.
- Psychological methods of mediation.

About the trainer:

Professor Tonu Lehtsaar has been teaching a conflict management course at the University of Tartu, Estonia, for twelve years. He has written a monograph about the psychology of interpersonal conflict (in Estonian). He has twenty years' experience in teaching conflict management for managers, teachers and state officials. At present, he is employed as university staff counsellor-chaplain. In this capacity, mediation of conflicts has been one of his major areas of activity.

Maximum number of participants: 15

Course duration: 90 minutes

Mode: in person participation with active involvement of the participants, online

FIRST STEPS TO ACHIEVING YOUR VISION

Course instructor: **Aleksandar Džakula, Tea Vukušić Rukavina, UZSM**Target audience: **PhD students and postdocs**

Annotation:

In addition to research results, scientific and professional development must be supplemented by some managerial competencies. A large number of scientists face serious problems when they have to move from the role of the researcher to the role of the project manager or leader. Achieving a vision is not just the result of hard work but the systematic use of knowledge, skills and management tools. Many management tools are simple and easy to use, but it is essential to understand their purpose and how to use them. The aim of this course is to teach participants some basic concepts and tools necessary for the project and team management (SWOT, PESTLE, Force Field, Fish-bone diagram, etc.).

Course content / Which skills will you gain:

- Introduction to project and team management
- Information about the role of a team leader and manager
- Defining key determinants for project management
- Understanding meaning and use of the managerial tools
- Detect and prepare inputs for managerial tools (SWOT, PESTLE, Force Field, Fish-bone diagram)
- Differences between defining vision and mission

About the trainers:

Associate Professor Aleksandar Džakula is a specialist in Public Health– Organization of Health Care. He has over 20 years of experience in the field of health care services analysis and development. His focus is in organizational changes in health care, particularly in health care system management and processes.

Associate Professor Tea Vukušić Rukavina is a specialist in psychiatry, with strong focus on promotion of mental health, mental health policy, communication in health-care and science and health management.

Both of them have finished Management for International Public Health Course at the Centers for Disease Control and Prevention (CDC), USA.

Maximum number of participants: 15

Course duration: 180 minutes

Mode: in person participation with active involvement of the participants



FROM IP IN THE LABS TO IP ON THE MARKET

Training moderator: Simona Rataj, UL
Target audience: PhD students, postdocs, TTO staff

Annotation:

Protection and exploitation of the intellectual property, developed by researchers, is as important as publishing the scientific articles. But is has to be done wright; in a wright order to keep as many doors and options open as possible. How to identify and protect IP? How to find partners / entrepreneurs for further development of the IP? What does it mean to cooperate with industrial partners & Why do it?

Training content / Which skills will you gain:

- Insight into the basics of intellectual property protection
- Fighting the myth: articles and patents do not mingle
- And overview of support mechanisms for research commercialisation in EU
- Finding the partners / entrepreneurs in EU through Ignition event
- Experience presentation: cooperating with industrial partners / entrepreneurs

About the speakers:

Simona Rataj is Head of Department for Strategic, Marketing of IPR University of Ljubljana and is an important part of the team that connects research and business communities and encourages cooperation.

Katarina Šimunović researcher from Biotechnical faculty, University of Ljubljana, advancing her research work towards industry.

Nikolai Adamovitch, the Founder and Visionary of Commercialization Reactor and an experienced business angel and entrepreneur.

Maximum number of participants: 100

Course duration: 90 minutes

Mode: online, with active involvement of the participants



HOW TO CHOOSE THE RIGHT JOURNAL FOR YOUR PAPER

Course instructors: **Lea Škorić, Dina Vrkić, UZSM**Target audience: **PhD students and postdocs**

Annotation:

Publishing papers in high quality peer-reviewed journals is an important goal for most research activities. As early-career researchers, where you choose to publish your work is especially important, since this can impact your career advancement, funding opportunities and professional reputation for years to come. There are over 30.000 active scientific journals indexed in international bibliographic databases today, so choosing the right journal for your paper can be a daunting task. In this course you will learn what to consider during your selection process, what to look for and what to avoid.

Training content / Which skills will you gain:

- An overview of scientific publishing landscape
- Current trends in scholarly communication
- What to consider when choosing the journal for publication, including:
- o Content, scope, aims
- o Audience and reach
- o Reputation
- o Editorial practices
- o Transparency
- o Timeliness
- o Tools and services for authors
- o Financial aspects

About the trainers:

Lea Škorić, Ph.D. is a Librarian Advisor at University of Zagreb School of Medicine Central Medical Library. She is involved in teaching in several courses at UZSM graduate and postgraduate level. Her interests include scholarly communication, open science, research assessment and information literacy.

Dina Vrkić is a Senior Librarian at University of Zagreb School of Medicine Central Medical Library. She is a LIS Ph.D. candidate at the University of Zagreb. Her interests include information literacy, information behavior, scholarly communication, bibliometrics, altmetrics, learning analytics and text mining.

Maximum number of participants: 30

Course duration: 90 minutes

Mode: in person participation / online



SCIENCE COMMUNICATION: PRESENT YOUR RESEARCH RESULTS WITH CONFIDENCE

Course instructor: **Ester Jarour, CEITEC**Target audience: PhD students and postdocs

Annotation:

Giving scientific presentations is an important part of sharing researchers work and achieving recognition in the larger scientific communities. The ability to do so effectively can greatly contribute to career success, regardless if PhD students choose to pursue academic career or join the industry. However, instead of engaging audiences and conveying enthusiasm, many presentations include pitfalls such as overly complicated content, monotone delivery and focusing on what speaker want to say instead of satisfying the needs of the audience. The goal of this course is to teach early-stage researchers how to prepare effective presentations that would appeal to a wide range of audiences.

Training content / Which skills will you gain:

- Introduction to science communication
- Information processing and target audiences
- Goal oriented science communication
- Storytelling in science and defining your own narrative
- Structuring your presentation
- Presentation delivery techniques for dynamic presentation

About the trainer:

Ester Jarour is communications lead at CEITEC Masaryk University. She has a proven track record of improving the overall visibility of CEITEC research results, as well as in engaging researchers in science communication activities. She developed by students well-rated science communication course that teaches students how to deliver engaging scientific presentations to various audiences. Ester studied International Management at the Zurich University of Applied Science in Switzerland. She enjoys helping others to achieve their professional goals.

Maximum number of participants: 12

Course duration: 90 minutes

Mode: in person participation with active involvement of the participants



HOW TO ESTABLISH COOPERATION BETWEEN ACADEMIA AND BUSINESS?

Course instructors: **Karolina H. Czarnecka-Chrebelska, Magdalena Wrzesińska, MUL**Target audience: **students, PhD students and postdocs**

Annotation:

Collaboration between science/academia and business gives mutual benefits. For scientists, it allows testing the results of scientific projects in the target environment, jointly conducting bold research and discernible implementation of advanced solutions. It also allows earning profits from selling solutions/licencing patents.

On the other hand, companies can reduce their early-stage research spending and outsource them to universities. This also causes companies to seek access to the best scientific and engineering minds in specific domains. However, establishing long-term cooperation is not always easy.

Training content / Which skills will you gain:

- What are the standard ways of establishing collaboration between academia and business?
- How can the Technology Transfer Centers (TTCs) help establish a partnership?
- How to find a common language and elaborate common goals and gains in cooperation?
- What should we learn before entering into collaboration with SMEs?
- How to protect the IP?
- What are the most common mistakes in establishing cooperation?

About the trainers:

Karolina H. Czarnecka-Chrebelska is Assistant Professor in Medical University of Lodz, researcher in the molecular biology & oncology. PI in scientific and implementation grants, experienced evaluator of scientific projects and Innovation Broker. She is experienced in conducting scientific and pitch presentations workshops, design-thinking, or boosting creativity training.

Magdalena Wrzesińska is Associate Professor in Medical University of Lodz. Lecturer and researcher in public health. Specialist in development and commercialization of the innovation in health care. Participant of the fellowships organized by EIT-Health, tutor in the ETC-PHHP.

Maximum number of participants: 100 Course duration: 90 minutes workshop Mode: online lecture in ZOOM/TEAMS



MANAGEMENT OF RESEARCH PROJECT USING ONLINE TOOLS

Course instructor: **Karolina H. Czarnecka-Chrebelska, MUL**Target audience: **PhD students and postdocs**

Annotation:

Working on research projects is usually related to close teamwork and many team meetings. However, in the more complex projects involving scientists and clinicians working in different institutions, cities or countries, the collaborations may be based on online collaboration. Organizing and evaluating teamwork seems more difficult, mainly if no management system is applied. This course aims to train early-stage researchers to use various practical online tools to facilitate team cooperation and project management. We will use diverse tools for different project stages, from creating new projects bulling the team to planning, directing and executing tasks. We will use Asana, Trello, Slack, Doodle, Miro, Survey Monkey, GoogleDocs platform and Microsoft 365 online services. We will also analyse methods for describing activities and tasks in the project at each project creation stage (Mind Mapping, Drill Down, PERT method, CPM).

Training content / Which skills will you gain:

- team-work, organizing and evaluating the work in project
- organizing teamwork using modern information and communication technology, controlling the course of the project using web tools and applications
- solving problems related to team management
- development of research project management competences,
- preparing a scientific project plan, techniques used at individual stages of project creation, project management.

About the trainer:

Karolina H. Czarnecka-Chrebelska is Assistant Professor at Medical University of Lodz. She has >15yrs experience in molecular biology, epigenetics & oncology. She acted as PI in scientific and implementation grants realised in Poland, and Spain also worked as Innovation Broker. She was granted the MSCA Individual Fellowship for experienced scientists. She is experienced in conducting scientific and pitch presentations workshops, team-management workshops, design-thinking, or boosting creativity training.

She is also a professional evaluator of scientific projects.

Maximum number of participants: 12

Course duration: 2*90 (or 2*115) minutes workshop

Mode: workshops with the active involvement of participants. Preferably on-site, optionally online (TEAMS)

Personalized coping strategies for mental health maintenance

Course instructor: Maja Rus Makovec
Target audience: PhD students and postdocs

Annotation:

PhD students and postdocs are considered a subgroup with high intellectual capacities, creativity and marked work productivity. However, it is possible to overlook the fact that these potentials do not simultaneously provide the ability to self-soothe and the ability to flexibly deal with emotional and relational problems. Self-protective strategies are very diverse both in their neurobiological and psychological origins and in their effects. The workshop will inform about top-down and bottom-up neurobiological processes that are effective in dealing with stressors and introduce ideas how to better recognize and choose personalized forms of self-protective behavior regarding one's own mental health.

Course content / Which skills will you gain:

- Familiarization with top-down and bottom-up coping processes
- Information about the process of mentalizing one's own and other people's mental states in order to recognize and predict behavior
- Introduction to the concept of psychological resilience in the face of interpersonal stressors and losses
- Exercise: Identifying personalized sources of strength for mental health maintenance

About the trainers

Associate Professor Maja Rus Makovec is a specialist in psychiatry with professional focus in addiction, family psychopathology, trauma, psychosomatics and psychotherapy in psychiatry. She has been course leader of postgraduate training in systemic family psychotherapy at the Faculty of medicine UL in cooperation with colleagues from GB since 2003 and has long-term experiences in the training of tutors and mentors at the faculty/university and the medical clinical context.

Maximum number of participants: 30 Course duration: 180 minutes

PROJECT PROPOSAL WRITING

Course instructor: **Smiljka Vikić-Topić, UZSM** Target audience: **PhD students and postdocs**

Annotation:

Scientific research is funded through the projects and scientists invest a lot of time on the project proposal writing. It is important for young scientists to learn the skills needed for the successful proposal submission.

This basic course in project proposal writing will focus on the EU programme for research and innovation (Horizon Europe) with the emphasis on health field, but the principles that will be presented can be useful for application for any other open calls for EU competitive grants and other funders.

The aim of this course is to teach participants how to write a successful project proposal and provide an overview of the funding sources for the life science research in Europe.

Course content / Which skills will you gain:

- Project and project proposal –definition, types and structure
- Why is it important to apply for projects
- Steps toward the successful project proposal submission
- Coordinator of the EU project tasks and characteristics of the project leader
- Main mistakes in the proposal preparation
- EU funding sources for Life sciences

About the trainer:

Smiljka Vikić-Topić is a professional with >12 years of experience in technology transfer and project proposal writing and management, with extensive pharma-industry experience. She assisted in preparation of over 80 European and national projects proposals, managing more than 20 (two coordinating, FP7 and H2020). She teaches project proposal writing, IP protection and technology transfer at doctoral studies in biomedicine at the University of Zagreb.

Maximum number of participants: 30 live (more if online)

Course duration: 120 minutes

Mode: presentation with participants' involvement



PROTEIN BIOMARKERS – THE ROAD FROM DISCOVERY TO CLINICAL USE

Course instructor: **Lovorka Grgurević, UZSM** Target audience: **PhD students and postdocs**

Annotation:

Protein biomarkers are a promising tool of precision medicine with an increasing role in disease diagnosis, outcome prediction and response to therapy. The growing demand for quantitative protein analysis is met by mass spectrometry, which is often used for biomarker candidate selection. Their downstream validation is crucial in translation of research to clinical practice, enabling a personalized therapeutic approach. However, this expensive, multifaceted procedure also carries a significant finantial burden, so the success rate remains modest. Participants in the course will gain a basic understanding on the concepts and principles of protein biomarker discovery, development and validation.

Training content / Which skills will you gain:

- Criteria for evaluating potential markers.
- Sample collection, experimental design and quality control.
- Ethical and legal issues.
- Proetomics based biomarker discovery tools.
- Validation of protein biomarkers.
- Protein biomarkers in disease detection and tracking.
- Protein biomarkers in drug discovery and disease targeting.

About the trainer:

Lovorka Grgurević, *MD*, *PhD* is a full professor at the Department of Anatomy, UZSM and head of the Department for Proteomics at the CTCR. Her scientific interest lies in the field of translational medicine, with an accent on protein biomarker discovery related to bone healing, rare bone diseases, arthropathy, chronic kidney disease, breast and skin cancer. Her discovery of a new regenerative bone device, derived from mass spectrometry-based proteomics, is now in preclinical testing.

Maximum number of participants: unlimited

Course duration: 90 minutes

Mode: in person participation with active involvement of the participants



PSYCHOLOGICAL DETERMINANTS OF SUCCESS Enhancing creativity and emphasizing problem solving strategies

Course instructor: Matej Tušak
Target audience: PhD students and postdocs

Annotation

Psychological determinants of success in carrier and life: The lecture with short workshops will try to emphasize the key determinants of success. We will start through motivation variables such as self-motivation, persistence, internal locus of control, goal setting, self-confidence, etc. We will continue through meaning of specific competences, coping stress strategies and specific personal traits which contribute to success. And we will finish lecture through meaning of emotional intelligence, teamwork, effective communication, and good leadership. A lot of patience will be focused on social skills to understand effective teams. Through short stories about successful people and short workshops we will try to explain importance of mentioned factors to help researchers to understand that results are made inside effective teams and that good knowledge is not the only important skill to be successful.

Enhancing creativity and emphasizing problem solving strategies: The lecture with short workshop will be focused on the process of creativity with exploring psychological factors of creativity process. We will discuss the strategies of problem solving, stages and differences. We will mention some errors of estimation and evaluation. Mentions about thinking out of the box will be discussed.

About the trainer:

Matej Tušak is Professor and Head of The Department of Sport Psychology at University of Ljubljana, Faculty of sport, Institute for Sport. He is also Chairperson of Council of Slovenian National Olympic Institute, motivational speaker, researcher, psychologist, lecturer and coach. He is an experienced Psychologist with a demonstrated history of working in the higher education industry. He excels in Sports Psychology, Organizational Development, Social Media, Athletics, and Public Speaking. Strong community and social services professional with a Ph.D focused in Psychology from University of Ljubljana, Faculty of Arts.

Maximum number of participants: 30

Course duration: 180 minutes



RESEARCHER IDS AND PROFILES: INCREASING YOUR RESEARCH VISIBILITY

Course instructors: Lea Škorić, Dina Vrkić, UZSM Target audience: PhD students and postdocs

Annotation:

Increasing the visibility of one's research work and its' scholarly outputs in an online environment has become an essential skill for early career researchers. Enhanced visibility and discoverability potentially brings an increase in readership and citations. In addition, using various online tools for promoting your research and scientific skills and interests will help you reach other researchers and gain collaboration opportunities. This course aims to teach earlystage researchers about researcher IDs, author profiles, and other tools for boosting research visibility in the scholarly community.

Training content / Which skills will you gain:

- An overview of researcher IDs and profiles for a researcher
- Understand the diversity and benefits of different researcher IDs and profiles
- Recognizing their use in increasing online research visibility and discoverability
- How can researcher IDs and profiles save time through the research landscape
- Identify the proper researcher ID and profile(s) to promote research
- Tips and tricks

About the trainer:

Lea Škorić, Ph.D is a Librarian Advisor at University of Zagreb School of Medicine Central Medical Library. She is involved in teaching in several courses at UZSM graduate and postgraduate level. Her interests include scholarly communication, open science, research assessment and information literacy.

Dina Vrkić is a Senior Librarian at University of Zagreb School of Medicine Central Medical Library. She is a LIS Ph.D. candidate at the University of Zagreb. Her interests include information literacy, information behaviour, scholarly communication, bibliometrics, altmetrics, learning analytics, and text mining.

Course duration: 120 minutes (90 if online)

Mode: in person participation with active involvement of the participants / online





SCIENCE COMMUNICATION: PRESENT YOUR RESEARCH RESULTS WITH CONFIDENCE

Course instructor: **Ester Jarour, CEITEC**Target audience: PhD students and postdocs

Annotation:

Giving scientific presentations is an important part of sharing researchers work and achieving recognition in the larger scientific communities. The ability to do so effectively can greatly contribute to career success, regardless if PhD students choose to pursue academic career or join the industry. However, instead of engaging audiences and conveying enthusiasm, many presentations include pitfalls such as overly complicated content, monotone delivery and focusing on what speaker want to say instead of satisfying the needs of the audience. The goal of this course is to teach early-stage researchers how to prepare effective presentations that would appeal to a wide range of audiences.

Training content / Which skills will you gain:

- Introduction to science communication
- Information processing and target audiences
- Goal oriented science communication
- Storytelling in science and defining your own narrative
- Structuring your presentation
- Presentation delivery techniques for dynamic presentation

About the trainer:

Ester Jarour is communications lead at CEITEC Masaryk University. She has a proven track record of improving the overall visibility of CEITEC research results, as well as in engaging researchers in science communication activities. She developed by students well-rated science communication course that teaches students how to deliver engaging scientific presentations to various audiences. Ester studied International Management at the Zurich University of Applied Science in Switzerland. She enjoys helping others to achieve their professional goals.

Maximum number of participants: 12

Course duration: 90 minutes

Mode: in person participation with active involvement of the participants



SCIENTIFIC POSTER - TIPS & TRICKS

Course instructor: **Octavian Andronic** Target audience: **students, PhD students**

Annotation:

Current trends in the presentation of scientific research results are to make visual representations that are easy to present and understand. The development of social media has led to the habit of sharing science results through visual representations such as infographics or visual abstracts. In this context, it is important that the scientific posters we make fit into current trends regarding both the form and the content, in order to have the greatest possible impact. The goal of this course is to familiarize early-stage researchers with the concept of scientific poster and current standards for their realization.

Training content / Which skills will you gain:

- Introduction to scientific poster
- Content of a scientific poster
- Design of a scientific poster
- Technical information
- Pitch your poster

About the trainer:

Octavian Andronic is Assistant Professor and Coordinator of the Big Data Analysis Department of Innovation and eHealth Center at Carol Davila University of Medicine and Pharmacy Bucharest. Additionally, he is also the Chair of the Romanian Chapter of the European Association of Science Editors. Octavian has constantly held courses, workshops and conferences on topics such as scientific publishing, ethics, scientific public speaking, peer-review, scientometrics and open access. He is also involved in managing several open access medical journals.

Maximum number of participants: 40

Course duration: 90 minutes

Mode: online



SCIENTIFIC RESEARCH - FIND, READ & CITE

Course instructor: Octavian Andronic Target audience: students, PhD students

Annotation:

Scientific research, regardless of the field or the research type, involves an initial review of the current literature. The basis of any review is to search the databases, select the studies and critically analyse them. All selected articles must be cited correct in the final document in order to give authors credit and avoid plagiarism suspicions. All these actions can be difficult for early-stage researchers in the absence of specific training. The course aims to help participants become familiar with notions such as advanced search formula, setting criteria and critical evaluation of articles or correct citation.

Training content / Which skills will you gain:

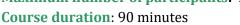
- Introduction to literature review
- Research hypothesis
- Advanced search formula
- Managing references
- Critical evaluation of articles
- How to cite your sources

About the trainer:

Octavian Andronic is Assistant Professor and Coordinator of the Big Data Analysis Department of Innovation and eHealth Centre at Carol Davila University of Medicine and Pharmacy Bucharest. Additionally, he is also the Chair of the Romanian Chapter of the European Association of Science Editors. Octavian has constantly held courses, workshops and conferences on topics such as scientific publishing, ethics, scientific public speaking, peer-review, scientometrics and open access. He is also involved in managing several open access medical journals.

Maximum number of participants: 40

Mode: online





Teamwork and achieving team synergy

Course instructor: **Tea Vukušić Rukavina**Target audience: **PhD students and postdocs**

Annotation:

In addition to research results, scientific and professional development must be supplemented by some managerial competencies. A large number of scientists face serious problems when they have to move from the role of the researcher to the role of the project manager or leader. Coordinating teamwork and achieving synergy in the team is not just the result of hard work but the systematic use of knowledge, skills and management tools. This course aims to teach participants the benefits of teamwork, how to recognize different profiles/skills of team members, distribute tasks according to team members' profiles, identify key elements of project management, and achieve synergy.

Course content / Which skills will you gain:

- Introduction to teamwork and the role of a team leader and manager
- Recognizing the profiles and skills of team members (DISC analysis)
- Identifying key elements in the project management
- Exercise: "Creating and leading a successful team how to achieve synergy?"

About the trainers

Associate Professor Tea Vukušić Rukavina is a specialist in psychiatry, with a strong focus on the promotion of mental health, mental health policy, communication in health care and science and health management. She is a lecturer in numerous courses in the Leadership and Management of Healthcare Services postgraduate program at the UZSM. She has completed Management for International Public Health Course at the Centers for Disease Control and Prevention (CDC), USA.

Maximum number of participants: 30 Course duration: 180 minutes

TECHNIQUES OF SCIENTIFIC PRESENTATIONS PRACTICAL COURSE

Course instructors: **Karolina H. Czarnecka-Chrebelska, Kinga Zel, MUL**Target audience: **PhD students and postdocs**

Annotation:

For most scientists, public speaking is a slice of daily bread; it is a huge stress for others. They say you have to be born a good speaker, but we are convinced that performing in front of a large audience or giving a scientific presentation is a trainable skill. We do not promise to teach you how to present without stress or effortless. Still, we will help you structure the presentation according to the performance purpose, build relationships with recipients, show the effects of your hard work effectively and encourage future cooperation with You. Correct preparation of the visual part of the presentation and gathering information about the recipients, their needs, and expectations will allow you to structure your presentation better and move freely from scientific to pitch presentation.

Training content / Which skills will you gain:

- Conducting scientific presentations, moderating discussions
- Analysis of the needs / expectations of audience and adjusting the structure and content of the presentation regarding the type of performance: scientific, didactic or pitch-presentation
- Learning the principles of creating and preparing the presentation tailored to the needs of the audience, i.e. adjusting the level of complexity of the lecture to the target group,
- Mastering the techniques of presenting visual data pictorial presentation of research results
- Developing communication skills

About the trainers:

Karolina H. Czarnecka-Chrebelska is Assistant Professor in Medical University of Lodz. She has >15yrs experience in molecular biology, epigenetics & oncology. PI in scientific and implementation grants, experience evaluator of scientific projects. She is experienced in conducting scientific and pitch presentations workshops, design-thinking, or boosting creativity training.

Kinga Zel is a senior specialist on international projects in Medical University of Lodz. She has >14yrs experience in prepreparation, implementation and reporting of international projects. Many years of experience in presentation of funding opportunities and presentations on and within projects that are implemented at MUL.



Course duration: 2*90 (or 2*135) minutes workshop

Mode: workshops with the active involvement of participants. Preferably on-site, optionally online (TEAMS)



TECHNOLOGY TRANSFER IN HEALTH RESEARCH

Course instructor: **Smiljka Vikić-Topić, UZSM** Target audience: **PhD students and postdocs**

Annotation:

Today's scientists are facing various challenges, one of them being the "impact" as an important part of their research. Use of the intellectual property rights (IPR) and achieving impact through the process of technology transfer (TT) became a regular part of research. In the field of health, researchers face even more specific issues in protecting their intellectual property and securing associated rights that are not encountered by those in other disciplines.

The aim of this course is to teach participants how to recognize the results with the commercial potential and how to navigate them through the technology transfer process.

Course content / Which skills will you gain:

- Overview of the technology transfer process
- Documentation/agreements related to TT how and when to use them
- Opportunities with inventions licensing and spin-offs
- Specificities of the TT in health research
- Examples of (successful?) biotech inventions from academic institutions

About the trainer:

Smiljka Vikić-Topić is a professional with >12 years of experience in technology transfer and project proposal writing and management, with extensive pharma-industry experience. She assisted in preparation of a number of project proposals, especially with the commercialization potential. She teaches project proposal writing, IP protection and technology transfer at doctoral studies in biomedicine at the University of Zagreb and enjoys in helping champions to achieve their goals.

Maximum number of participants: 30 (or more if online)

Course duration: 90 minutes

Mode: in person or online with active involvement of participants

