

**Subject:** Training Course Visit to Biotechnical faculty (University of Montenegro)

**Place:** Podgorica, Montenegro

**Date:** 8<sup>th</sup> December to 11<sup>th</sup> December, 2015

**Procurement plan:** Training, line 5

Training course visit to Podgorica is planned to provide a three-day course on academic research skills to LOVCEN project researchers and students by Professor Stephen Quarrie. The course will take place at Biotechnical faculty, University of Montenegro and Institute for Public Health of Montenegro.

### **Training visit goals and activities WP 3 b**

The title of the course is “Academic Research Skills”

The whole course, which targets young scientists developing a career in research, will give participants a wide range of skills needed to become good quality researchers, whatever their subject area. The course will also equip them with a broad range of generic (lifelong learning) skills, valuable for any career in academia and commerce. The course provides the following learning outcomes:

- to appreciate the importance of quality control at every step in the research cycle,
- to appreciate different methods for processing and analysing experimental results,
- to be able to construct a good quality scientific paper for publication in English,
- to be able to present results effectively in either tabular or figure formats,
- to acquire skills in presenting scientific research to others at meetings in poster and oral formats,
- to appreciate the criteria needed to write a successful research proposal,
- to acquire basic skills for self-management, human resource management, decision-making and strategic planning,
- to be able to prepare an effective CV and motivation letter for career development,

The course for the LOVCEN project will be divided into six main sections, with two presented each year:

**Good quality research:** Looking for the truth, hypothesis testing, the research cycle, the research pyramid, a Gantt chart in practice, principles of experimental design, anticipating problems, the Null Hypothesis, sources of error, data quality control, errors in biochemical analyses, ignoring data but avoiding fraud.

**Scientific writing skills:** Marketing strategy to persuade a publisher to want your paper, recognising whether you have good quality science, different types of research papers, suitable journals, impact factors, journal instructions for authors, "once upon a time ... they all lived happily ever after", how to tell a convincing story, recommendations for the Abstract, Introduction, Materials and Methods, Results, Discussion, improving the style and the English, the refereeing process.

**Presentation skills:** Interacting with stakeholders at scientific meetings, points to consider for posters, identifying the pros and cons of different poster styles, how to put together a PowerPoint presentation, preparing what to show, preparing how to show it, preparing the environment, commenting on a short presentation.

**Proposal writing skills:** Examples of different types of proposal and the criteria to be met, the philosophy needed for success, background/objectives, workplan/Gantt and PERT charts, milestones

and deliverables, management, risk analysis, budget, Logical Framework Matrix, a “road map” on developing skills in proposal writing, essential points to remember, taking part in Horizon 2020.

**Self-management and human resource management:** Self-management, decision-making, time management, setting priorities (importance and urgency), strategic planning, SWOT analysis, a research training programme, planning a research project

**Career development:** Effective CVs and motivation letters, learning to be competitive.

Main goal of this visit is to give the parts of the course on Presentation and Proposal writing skills to give participants an appreciation of an effective poster presentation and good quality oral presentations and the philosophy needed for success at writing project proposals. These will be achieved through lectures and activities for participants during the two days of the course. The visit will include a summary of the first two parts of the course (Good quality research and Scientific writing skills), mainly for the benefit of those who were unable to attend those sections of the course during the previous visit.

Arrival date: 8<sup>th</sup> December, 2015

Departure date: 11<sup>th</sup> December, 2015