

## **“Writing in Sciences” Early Stage Researcher online training**

**by Joana Lama (ESR2)**

One of the unique characteristics of the TOBeATPAIN ITN is the training provided to ESRs, which is important for their development as young researchers and scientists. During these challenging times - being away from the laboratory and my lab-based experiments - I found the opportunity to further educate myself by investing time on courses to develop myself as a scientist. I would like to share my experience after recently completing an 8-week course entitled “Writing in Sciences”, provided by Stanford University, available at the Coursera platform and taught by Dr. Kristian Sainani.

This course included several aspects of scientific writing: (i) introduction and principles of effective writing (iii) writing a scientific manuscript (iv) identifying and avoiding plagiarism, (v) understanding the peer review process, (vi) understanding how to write a review, (vii) familiarizing with grant proposal writing, (viii) recognizing importance of communicating science and (x) writing for lay audience.

After undertaking this course, I further realised how important it is for a scientist to be able to express and share their ideas clearly and concisely. The course was engaging - involving practical examples, exercises and tests in the learning process.

I highly recommend attending this course for several reasons. Firstly, this course was helpful and informative, especially for non-native English speakers like me. Secondly, as we all aim to publish our results in scientific journals, undertaking this course will allow one to better understand the process of writing a scientific manuscript efficiently, potentially saving time which is always in short supply. At some point in our academic career, being a reviewer of scientific manuscripts in our field of expertise can be part of our job. Understanding the peer review process allows us to review successfully and constructively.

When in the lab, it's easy to focus on our experiments and neglect investing our time in writing a paper on a long-forgotten project. During this global pandemic, scientists suddenly found themselves working from home. This gave many people the time to write a review in their field of expertise. Learning the basics and having a clear understanding of the process and requirements of writing a review is crucial. Acquiring writing skills allows us to write in an efficient and comprehensible way.

### **How science communication and developing writing skills fits into our ITN programme**

One year ago, in our first Transferable Skills Training course entitled “Knowledge communication: Public engagement, fundraising and CSR”, Dr. Aiofe Kiely from the Alzheimer’s Society gave us an insight into communicating and writing science for the public. ESRs were taught how to write public-oriented scientific articles raising awareness and also learnt the importance of communicating basic research to people that suffer from a pathological condition. Communicating research is essential – the researcher should be able to disseminate their work in an understandable way. This will improve knowledge and better understanding of the development of diseases and also of the possible treatments that are available. Scientists usually discuss their research with their colleagues by using terms that will not be understood by the lay audience. Therefore, it is important to learn how you should write an article for the lay audience in order to communicate science.

A few months ago, in our third Transferable Skills Training course (Innsbruck, 3-5 February 2020) Dr. Gabriele Werner-Felmayer introduced us to the importance of avoiding plagiarism. Plagiarism is when you present someone else's writing or ideas as your own and is considered a serious misconduct. In addition to what we learnt in our ITN training, this course provided further details and examples of how to avoid it in our own work and detect it in the work of others we might be reading or reviewing.

As a part of TOBeATPAIN ITN training, ESRs will also get the opportunity to participate in a Grant proposal writing training in January 2022 in Jena. The writing course provided by Stanford University gave an introduction to writing grant proposals which I hope will be further elaborated on in this future training session.

To conclude, I highly recommend everyone to undertake this course. Not only did it complement the skills training already undertaken as part of our TOBeATPAIN ITN, I believe it will also serve as an introduction for several aspects that will be discussed in our ITN's future Transferable skills training sessions.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Grant Agreement No 764860