MY LIFE AS A RESEARCHER AND EDUCATOR

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Introduction

I am currently an assistant professor at Sofia University St. Kliment Ohridski, Sofia, a specialist in the Department of Clinical Immunology at University Hospital Lozenetz, and an affiliate editor in the Central Medical Library at the Medical University of Sofia in Bulgaria. My specialty and expertise have allowed me to be active at both the laboratory and the clinic. I also have a master’s degree in public health and health management, which has been very useful in helping overcome the challenges of the COVID-19 outbreak.

In the field of scholarly publishing, I serve as a reviewer for about 60 Web of Science listed journals and editorial board member of several medical journals, especially after receiving my certification as a reviewer at Publons Academy. This experience has allowed me to gain knowledge and confidence to mentor other young and inexperienced reviewers and researchers. Among the journals that I mostly review for are Rheumatology International, Archives of Rheumatology, World Journal of Clinical Cases, Diagnostics, Cancers, Allergy, Advances in Rheumatology, and European Review for Medical and Pharmacological Sciences.

I run a personal blog on immunology and have social media pages dedicated to presenting science and medical information in an understandable language. I find it rewarding to write popular medical articles for international sites and reading psychological and classic books as hobbies. I am blessed with two small children, a loving husband who is a medical doctor, and our pet dog. Indeed, professional career and personal family lives have been more than challenging to handle, and a balance between them is only imaginary.

Recently, I have been awarded the “40 under 40” recognition in the Medicine category for my educational work during the coronavirus pandemic and was chosen as one of the female role models by United European Gastroenterology. In addition, I was invited by the biggest publishing house in Bulgaria to write a popular book for children’s immune system and health, and I am very eager to start this project.

My research career (mentors, path, and main achievements)

In the course of my research career that started ten years ago, I had been privileged to have many dedicated mentors. I would say that my love for science, particularly immunology, took root during my medical student years. I am truly grateful to Professor Iskra Altankova and Professor Dobroslav Kyurkchiev for the opportunity of becoming a Ph.D. student and then as a resident in clinical immunology. They were the academic researchers and educators who actively cultivated my critical thinking and research interests.

My career began after receiving a doctor of medicine degree from the Medical University of Sofia in Bulgaria while working as a nurse at the Children Intensive Care Unit at the National Hospital of Cardiovascular Diseases in Sofia for several years. Following my medical education, I completed my Ph.D. in 2014. My doctoral thesis focused on a study of the immunological parameters for intestinal inflammation to establish novel markers for the diagnosis and follow-up study of patients with inflammatory bowel disease. After obtaining a specialty in clinical bowel disease. After obtaining a specialty in clinical bowel disease. After obtaining a specialty in clinical bowel disease.
and obtained a master's degree in public health and health management in 2017.

To date, I have participated in more than 15 scientific projects on various topics, but mainly in the field of autoimmune disorders, mucosal inflammation, cytokines, microbiome, inflammatory bowel disease, diabetes, and asthma. In collaboration with specialists from other medical fields, all of these projects have provided me a solid background in publishing more than 100 high-impact scientific papers. What I consider as my milestone for becoming a good researcher and a well-published author was when I became a reviewer for scientific journals. I then fully realized the main ingredients and recipe for writing an excellent paper. A good study design and methodology are important as they define the publishing outcomes. I would say that the most valuable lessons I learned from seasoned and leading professionals, such as the "ABC" of handling a paper from Iveta Miteva who is an experienced editor of the Central Medical Library at the Medical University of Sofia, and the efficient and very practical advice of Professor Yuri Gasparyan, have helped me to gain in-depth knowledge and experience in both scholarly writing and reviewing papers.

However, I fully realize that no excellent article can be published without the considerable support and participation of other researchers. This is tremendously important for generating and putting forward research ideas to arrive at a well-reasoned approach to a complex scientific problem. Furthermore, I find it very fulfilling to inspire and motivate the next generation of scientists.

**My career as an educator (mentors, path, and main achievements)**

I have always wanted to teach and mentor students. This came to fruition six years ago when I was first assigned as an assistant professor at the Department of Clinical Laboratory and Clinical Immunology at the Medical University of Sofia. Since then I have enjoyed and never stopped teaching, even during my two maternity leaves. Three years ago, I moved to Sofia University at the Department of Internal Medicine, Clinical Pharmacology, Pediatrics, Epidemiology, Infectious and Skin diseases. I am also a guest teacher for online training in clinical immunology for students at Medical Faculty, Trakia University. I continue to improve my skills and spread my reach, aiming to collaborate as a guest professor in leading universities in Europe and across the world.

What I find very inspirational is communicating with young and highly motivated students. I believe that we can mutually exchange knowledge with me giving them essential details in immunology and with them refreshing me with their advance medical education. I also have experience in online education as a creator of free medical courses in vaccines and probiotics for patients and doctors. Therefore, participating as a lecturer in webinars for medical students, doctors, and specialists is important for me.

**How research and education transform amidst the COVID-19 pandemic**

The current COVID-19 pandemic has changed many aspects of our routine laboratory, clinical and research work. As researchers, we have faced many challenges in designing and starting studies, conducting small trials, and establishing experimental settings. At the same time, we continue to experience the uncertainty of whether we will be able to complete a started project or not. In some cases, research work has been postponed during the intensive infection waves. However, we made use of our time during the lockdowns and infection waves by completing our journal articles. Many of my colleagues completed and published behind-the-schedule articles, which proved very fruitful for our academic careers. We have to keep in mind that networking, conferencing and participating in other scientific and educational activities help us grow and move forward during the pandemic. Fortunately, the scientific community has rapidly evolved into the new normality which has kept research in progress.

In terms of education, we extended our teaching activity and especially our online trainings. On these occasions, I include not only the education of students at universities but also the education of citizens. The COVID-19 pandemic occurred during my maternity leave and so I had to switch to working from home. As my specialty became the central focus during the pandemic, I decided to help both non-medical people and my colleagues by searching, interpreting and providing verified scientific information about SARS-CoV-2, the immune system, vaccination and information related to the COVID-19 pandemic. I volunteered as a contributor to the coronavirus information page, and as a translator of scientific articles about COVID-19 with other volunteers in a national initiative, wrote several scientific articles about coronavirus, and answered questions in medical groups on social networks together with colleagues and other medical professionals. These endeavors brought me great satisfaction when I and other volunteers were able to help people understand the complexity of the
SARS-CoV-2, immune responses or the pandemic as a public health threat.

For several months, I was also engaged in the hot phone line of the National Patient Organization to answer the people's questions on COVID vaccines. When we started working together with more people and colleagues during the pandemic, and provided verified and simplified medical information to the citizens, everything went to the next level. This was my modest contribution to the COVID-19 pandemic while I was at home with my two young children. At the same time, my colleagues worked on the front line with COVID-19 patients. I found many like-minded people whom I was privileged to establish a network.

Moreover, I developed my twitter account further using it to spread and obtain scientific information and discuss with colleagues across Europe and the world. Interestingly, the words “immunology” and “epidemiology” began to be pronounced correctly during the pandemic as I and my colleague Dr. Hristiana Batseleva look at the events that have continued to unfold.

How Bulgaria may benefit from quality research and online education
The research and academic situation in Bulgaria is presently in disarray. Hopefully, this is just temporary. A driving engine for the development of any country is quality research. Bulgaria desperately needs to increase the qualification, education and ethics of its scientists. The key to success is to work together consistently and continuously to improve all these aspects. This collaborative effort will enhance the credentials of our studies and science. I believe that the optimal approach is to have a combination of online and onsite educational activities. In the interim, we have to adapt and learn more from the current circumstances, using time and opportunities wisely and gaining more experience in online education. This will pave the way for improving our knowledge on how to properly use new technologies, expand our networks, establish new connections, and create new ideas.

My message to ongoing researchers and educators in Central Asia
I would like to encourage you to never stop educating yourself. Keep improving your skills and knowledge, and stay up to date in your field. These attributes will open more doors for you to work as a researcher, educator, clinician, biologist, and technician, among others. These will also maintain or even increase your passion and love for science. Always be an ethical and reliable researcher, aiming to uphold the highest standards of science. Welcome all opportunities that allow you to gain experience and skills to advance in your career. Strive to learn, be curious, and stay persistent.
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