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@EarlyCareerERS

Early career forum

ERS ECM Awardee 2021, a preview of LSC 2022 and a brief overview of the Respiratory Channel

In this article, we present an interview conducted with the winner of the European Respiratory Society (ERS) Early Career Member Award 2021, Alberto García-Basteiro, where he discussed his work and visions for the future. We also provide an overview of the ERS Lung Science Conference 2022, which will take place in Estoril (Portugal), with a brief description of the early career member (ECM) session. Finally, we discuss the most recent digital resource from ERS available to the respiratory community, the ERS Respiratory Channel.

Interview with the ERS ECM Award winner, Alberto García-Basteiro

The ECM Award is intended to honour a promising member of the ERS, aged 40 years old or younger, with strong potential for future contributions within the respiratory field. This year, the ECM Award winner was Alberto García-Basteiro (figure 1). Dr García-Basteiro is 39 years old and was born in Spain. Currently, he works at the Barcelona Institute for Global Health (ISGlobal, Barcelona, Spain) as an Associate Research Professor and he is the Coordinator of the Tuberculosis and HIV area in the Manhiça Health Research Centre (CISM), in Maputo (Mozambique). He has been an ERS member since 2014 and he is currently the Chair of Group 10.02 of Assembly 10 (Respiratory infections) on tuberculosis and nontuberculous mycobacteria (2020–2023).

As a recognition of his remarkable contribution to respiratory medicine, Dr García-Basteiro provided the Mina Gaga Lecture during the dedicated ECM session of the ERS International Congress 2021 entitled *Keys to success in science*, organised by the Early Career Member Committee (ECMC), where he presented his main career achievements and scientific work. Dr García-Basteiro was also interviewed by two ECMs from Assembly 10 (J.C. Costa and P. Mitchelmore), in a virtual format, to share his experience as a successful ECM and to provide new insights for the future. The interview is presented below.

How did you become interested in tuberculosis, since you are from Spain, a low-incidence country, and what led you to Mozambique in particular?

I have been very interested in research since I was in medical school. I was involved in the International Federation of Medical Students' Associations (IFMSA), and the contact with colleagues abroad and the exchange of experiences with them make me wish to pursue a career in global health. I realised at that time that I would like to put my efforts into coming up with solutions for diseases that are responsible for a huge burden in places that are already struggling with a lack of resources. During my Public Health residence, I worked in the fields of dengue and malaria. TB research appeared to

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This article presents the ERS Early Career Member Award winner 2021 (@agbasteiro), and provides a brief description of the @EuroRespSoc Lung Science Conference 2022 and the Respiratory Channel https://bit.ly/2XTylbK





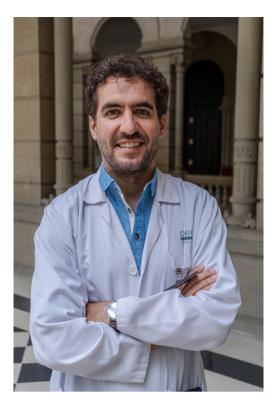


Figure 1 Alberto García-Basteiro, the ERS Early Career Member Award winner in 2021.

me as an opportunity, I was invited by the former director of the Barcelona Institute for Global Health (ISGlobal), Prof. Pedro Alonso, to embrace a huge challenge: to do field research at the *Centro de Investigação de Saúde de Manhiça* (CISM, Manhiça Health Research Centre) in Mozambique, a longstanding partner of ISGlobal. They were looking for an epidemiologist to move there for 3–4 years in order to answer key research questions about TB in a high-burden country like Mozambique. I had no doubts and I decided to take the challenge. That is how TB and Mozambique became linked to my life and to my career.

Should we be optimistic or pessimistic about the global response and management of TB in the coming years?

Looking at what has been done for COVID-19 in the past year and a half, I am quite frustrated that nothing of this magnitude has ever been done in TB research or control. This is particularly frustrating given the known burden and death toll associated with TB. We have shown that we are capable of doing great things when we are threatened. However, when a disease is mostly affecting poor countries, we have not managed to mobilise the needed resources to cope with these scourges of humankind that have been ongoing for centuries. We could have done it and the question for the coming years is: are we

going to learn something from COVID-19 to apply to other diseases? I am sceptical, to be honest. I think that, when the pandemic is over, we will likely go back to "business as usual" if high income countries are not severely affected by TB. I think rich countries will focus on other health issues and we will not take this amazing opportunity and example of global health response to fight other big diseases that are causing millions of deaths. I really hope that the international community supports new technologies (i.e. mRNA vaccines) arising from COVID-19 research in the field of TB research.

In 2019, it was estimated that TB cost 1.4 million lives, and potentially more in 2020 given the lack of access to and disruptions to health services in many high TB burden countries. I am pessimistic about the idea of high-income countries focusing on changing this. We are seeing this attitude already around COVID-19. In Mozambique today, only 1.5% of the population has been vaccinated with two doses of the vaccine. We could have taken a more equitable response to the pandemic. Instead, we have made sure that the rich countries get vaccinated, and as for the poor countries – let's see what happens.

How do you think that medical societies, such as the ERS, could help fighting respiratory diseases in third world countries?

I believe that scientific societies play an important role for facilitating scientific discussion and as organisations that allow researchers to create and to work with international peers to find collaborative solutions for global health problems. They are also important entities that can train health professionals in the different fields. The ERS to me is an inspiring scientific society. TB is not a huge health problem in most parts of Europe, although drug-resistant TB is still a topic of concern, particularly in the eastern Europe. I have found in the ERS a space for debate, for training and for ongoing TB research; a place that is inclusive, even for researchers outside Europe.

Who and what have been your inspirations and motivations for your research career?

I would like to be part of a solution to health problems that affect millions of people in poor countries. Fighting diseases is always a challenge but doing so in under-resourced settings is a double challenge. Many of these diseases (e.g. malaria, HIV and other neglected tropical diseases) are poverty-related diseases. Dedicating my time and efforts to this task makes all the sense to me and seems the right thing to do.

I have several professional inspirations. Leaving aside those who no longer are with us, one of them, of course, is Dr. Pedro Alonso, who was the one who offered me the possibility to be part of this ISGlobal and CISM family. His extraordinary scientific and public health career has translated into public policy and has contributed to trying to find solutions in the field of malaria. In the field of TB, there are many researchers that I really admire. Prof. Frank Cobelens was my PhD director at the Amsterdam Institute for Global Health and Development. He is an outstanding epidemiologist, and every time I talk to him new ideas and interesting discussions come up. I also have great admiration for Prof. Katherine Fielding and Prof Paul Fine, at the London School of Hygiene and Tropical Medicine, and Prof. Gavin Churchvard at the Aurum Institute in Johannesburg, to name just a few. They are amazing researchers and a source of constant motivation for me. These are some of the important researchers that I try to learn from.

What has been your biggest frustration as a researcher?

My biggest frustration or worry as a researcher is to receive funding for research projects. We apply and fail several times to get one grant. There is no wide public support for scientific research in Spain, as in other countries. This issue relates directly to the personal stability of the researchers and may impact careers and projects. The scarcity of the grants increases the pressure on researchers, as we need to be good, very good, constantly, to be financed. We need to be focused every time but at the end of the day our own personal instability can affect our work and peace of mind.

What impact has COVID-19 had on your research?

COVID-19 has affected every TB project that I know of. In Mozambique, we had to stop some studies earlier than expected and others have not started yet. Importing reagents and equipment has become more and more complicated during COVID-19 times. It has also been a cause of an ethical dilemma. I was in Spain when COVID-19 arrived, and I was shocked about the situation with lockdowns and thousands of deaths being reported. Our Institution (ISGlobal) asked us to contribute to the research needs of COVID-19. There were so many in March 2020, from basic disease epidemiology to diagnostic tests, treatments, etc. At the beginning, it was hard to get good estimates of what was going on with the burden of the disease and infection. Everything had to be described, so we tried to contribute to that.

The ethical dilemma came from dedicating a lot of time, that was supposed to be put into one disease (TB) that is killing a lot of people, to another disease (COVID-19). Furthermore, this other disease has less impact in countries with a high burden of TB because of the age distribution of the population. For example, in Mozambique, 50% of the population is under 16 years old. People are getting infected but the number of people that are very ill or die are a lower proportion of the population compared with European countries. Neglecting an already neglected disease, such as TB, was a big problem for me. Consequently, I returned to dedicating all my energy to TB research as I believe this is the right thing to do. After the COVID-19 pandemic, the high TB burden countries are going to face a huge problem. The Stop-TB Partnership has estimated that there are going to be around 1400000 additional deaths in the next 5 years because of the disruption of the pandemic.

What are the lessons to be learnt from the pandemic?

There are so many lessons to be learnt from COVID-19. One of the conclusions of the report of the independent panel that evaluated the international response to COVID-19 was that, if we had followed some of the recommendations from previous outbreaks and pandemics (such as Zika virus and Ebola), then we would not be in this horrible position. So, preparedness, prevention, and learning from the past is crucial. For me, there is one particular lesson which I wish we pay more attention to in the future and that is the global response. We are seeing new viral variants being spread and very high transmission rates in places where the vaccination coverage is low. This is a great threat for the generation of new variants to go back to high income countries and perhaps being less susceptible to vaccines. If we do not pay attention and think of a global response to COVID 19, the situation can be perpetuated. Vaccination coverage is 1.5% for sub-Saharan Africa with two doses (as of mid-July 2021).

In Europe, we may have made some progress in the response. If the COVID-19 pandemic happened 20–30 years ago, we may have seen Germany, the UK and Russia get vaccinated before other poorer European countries. That would now be seen as unacceptable and nonequitable within Europe. However, our horizon as a species should not be Europe but the entire planet. This will require significant political will in the international affairs arena, but I think it should be possible and I hope we are learning now that this is the right response.

What do you imagine yourself to invent, create or achieve as your masterpiece in your career?

I wish I can contribute to the development of new tools, transformative tools, that can directly impact the populations' health, such as vaccines. The available TB vaccine, the BCG, is already 100 years old and, as we know, it is not very effective in the prevention of pulmonary TB in adults. If I could contribute with my work to the development of an effective tool such as a new vaccine, I will be more than satisfied at a professional level. Additionally, I want to contribute to the development of the local health and research structures as well as to the training of local fellows in Africa.

Where do you see yourself 5 years from now?

I see myself continuing to research TB because, sadly, we still have a lot of work to do! I will be looking to implement more projects coming from my own ideas. That will mean that I am advancing professionally and scientifically. I hope that, in 5 years, I can still be involved in teaching activities, which is something I also enjoy very much.

What does this award and the ERS mean to you?

This award is a great source of motivation and a boost of energy. Overall, it probably means that our team is doing some good work and that we are doing research in the right direction. It is always important to be recognised, especially outside of your own institution. To be given an award from the biggest respiratory scientific organisation in the world, the ERS, is also a responsibility for the future and a reason for humbleness, motivation and focus.

What advice would you give to someone entering the world of respiratory research?

Who am I to give advice? I have learnt that networking and collaborations are very important. You have to be exposed to the work that others are doing. Anyone that wants to enter the field of respiratory research needs to team up, join societies and organisations where they can meet researchers, doctors and healthcare professionals from other countries. We have a lot to learn from each other, such as how others work in their environments, their different techniques and how they approach research ideas. It can be very eye-opening to realise that the same solutions might not apply everywhere. In addition, it is such an enriching experience to work with international colleagues.

I think it is very important that research methods are taught in depth at medical schools, but this is not always the case. We should involve young residents and even undergraduates to be part of research projects early on in their careers. The more

you see research, the more likely you want to be part of it at a later stage.

You have been actively involved in the ERS. Do you think that this involvement had an impact on your career? And, if so, how?

I have been involved in the ERS since 2013. My involvement started as soon as I realised that my field of work was going to be a major (mostly) respiratory disease such as TB. This involvement allowed me to meet amazing colleagues, to integrate research networks and to be part of a new professional family. This cooperative work allows us to develop research projects, apply for research grants and be involved in teaching activities. Despite the low incidence of TB in many parts of Europe, it has not gone away. There are, for example, around 4000 to 5000 cases per year only in Spain. For this reason, we must be aware and vigilant in Europe as TB is still an important differential diagnosis that must be constantly considered in almost any specialty. Overall, being involved with the ERS gave me access to postgraduate training, some of them were satellites to the ERS Congress, the TBNet network and the ECM events.

What would you say to ECMs who are currently in a similar position as you were 5 years ago?

I would say to be cheeky! Try to be involved in some of the activities of the ERS. It will bring you more than we bring to the Society, so it is a win-win scheme. I would definitely tell them to try to set a plan for their professional development. Try to take advantage of the opportunities of the ERS, especially of the networking opportunities at the scientific activities. This will make you a better professional and a better researcher.

Preview of the ERS Lung Science Conference 2022

After a fully online event in 2021, the 20th ERS Lung Science Conference (LSC) will take place in Estoril (Portugal) on 10–13 March 2022. The LSC is at the forefront of basic and translational respiratory science and provides a unique opportunity for early career and renowned respiratory professionals to network with peers from across the globe and share cutting-edge findings in the field of experimental lung research. The 20th LSC will be centred around the theme of *Mucosal immunology of the lung: balancing protective immunity and chronic inflammation* and the conference programme has been developed

by an expert committee consisting of Reinoud Gosens (ERS Conferences and Seminar Director), Martijn Nawijn, Florence Schleich and Önder Yildirim. The sessions will focus on the important topics of the lung cell atlas in health and disease, tissue resident and recruited immunity, trained immunity, mucosal immunity in the lung and infections and, lastly, cytokine targeted therapies and personalised medicine in respiratory diseases (https://www.ersnet.org/events/lung-science-conference-2022/programme/).

During the LSC, the ECMC organises a dedicated session for ERS ECMs. The topic of this year's session is *Tools for career development* and will include presentations about "Effective teaching and mentoring"; "How to collaborate successfully", from both an industry and academia perspective; "A career in scientific editing"; and a discussion on "Transferable skills". This session will provide insights into topics important for the development of early career professionals, but not always directly addressed within their training. Following the presentations, a panel discussion and networking event will take place during which the audience, and specifically all ECMs, can pose questions they may have and share their experiences.

The LSC provides unique opportunities for early career professionals to present their research as a thematic poster presentation or an oral presentation. The format of the presentation will be selected based on the quality of the abstracts and the five highest ranked abstracts submitted by ECMs will be presented in the Young Investigator Session and are thus nominated for the prestigious William MacNee award. Moreover, the best oral presentation will be awarded with the Geoffrey Laurent award and all poster presenters are eligible for a distinguished poster prize. Selected abstract authors who have applied for and received a bursary will be assigned a mentor with whom they can discuss various aspects of their research and career development in respiratory medicine during a dedicated mentor lunch.

Overall, the LSC 2022 provides an exciting scientific programme and an excellent opportunity for ECMs to interact with and establish networks with current and future leaders in the field of respiratory science. Moreover, there will be many opportunities to discuss your future involvement in ERS activities with ERS officers and ECM representatives. We look forward to welcoming you in Estoril for the 20th LSC in March 2022!

ERS Respiratory Channel

The ERS Respiratory Channel (https://www.ersnet.org/ers-respiratory-channel/) is a new online resource which was designed to respond to the growing needs of the respiratory community for increased and accessible digital content. The COVID-19 pandemic further increased this need as

it forced a shift to online activities and events. The channel was launched on 1 February 2021 with a free COVID-19 webinar, *Understanding new vaccines for SARS-CoV-2 and their regulation*, chaired by the ERS President Anita Simonds (London, UK) and Tobias Welte (Hannover, Germany).

The purpose of the ERS Respiratory Channel is to provide professionals and researchers working in the respiratory field with a single online location where the latest digital content from ERS/European Lung Foundation (ELF) can be easily accessed, including online activities and events already produced/delivered by ERS and ELF, as well as new content made specifically for the channel. There is also specific content for respiratory patients which is tagged as "patient focused".

In terms of content, the channel delivers:

- Live events and activities. Some of the activities are free and others are paid. These activities include educational courses, webinars, conferences, patient focused events, and panel discussions. Anyone visiting the channel can see which live online events are taking place that week and over the next few weeks. They can get further information and register for the events and, on the day, they can access their chosen events from the channel landing page.
- A wide range of content which is free and immediately accessible. This includes recordings of some live events such as the ERS Vision Live panel discussions, ERS podcasts, patient perspective videos, short educational videos, etc.
- Dynamic content. The content is regularly updated and ever changing based on what is current in the respiratory field. It is also capped so that it isn't overloaded, this means that the channel is very easy to navigate, and it is easy to see the full content in a short amount of time. The idea is that people who visit it regularly will get the most out of it.
- Content from the ERS industry partners. There is a separate content page on the channel which features digital content from ERS industry partners (https://www.ersnet.org/industrychannel/). It is important to note that ERS does not collaborate on this content, nor is any of this content produced or endorsed by ERS.

The ERS Respiratory Channel is a dynamic platform, which means that the platform can develop over time according to the need of the respiratory community. Changes may include introducing new features and/or developing the format as it moves forward. Follow the channel regularly to find out what's new!

The ECMs have been actively involved in various activities and events on the ERS Respiratory Channel. If you are interested in participating in these activities, please contact your Assembly officers or your ECM representative to find out how you can collaborate in future activities.

Final remarks

This article presented the ERS ECM Awardee 2021 and provided information on some of the ERS activities available to the respiratory community.

Keep up to date with the latest events and activities by visiting the ERS Respiratory Channel and by following us on Twitter (@EuroRespSoc and @EarlyCareerERS) and/or Facebook (@EuropeanRespiratorySociety, ERS Early Career Members group).

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Conflict of interest

None declared.