

Report on the Activities of the ECFS Basic Science Working Group (BSWG)

Annual Report

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1. Goals

The ECFS BSWG – Basic Science WG (renewal approved in January 2018) has the following goals:

- 1) Widening the number of European scientists (as ECFS members) doing fundamental research related to CF, in particular the BSWG aims to attract, train and maintain younger investigators in the CF field;
- 2) Promote best practice procedures (through organization of workshops);
- 3) Develop a network (jointly with ECFS-TDN and Registry) for the creation of biobanks of CF patients' materials across Europe for the generation (e.g., primary cultures of epithelial cells, intestinal organoids, etc) and distribution of resources for CF research;
- 4) Production of consensus guidelines for standardization of research-derived laboratory techniques that can be applied to the clinic (e.g., novel biomarkers to be used in CF diagnosis or as "surrogate endpoints" for clinical trials, etc);
- 5) Prioritizing topics related to emergent needs in the field so as to create "task forces" (e.g., on assays to measure CFTR activity, drug discovery, etc);
- 6) Promotion of excellence in CF research by fostering European-scale research to avoid effort duplication at national level and fragmentation and to achieve competitiveness for EU consortia
- 7) Liaising with basic scientists in other societies (European Respiratory Society; United European Gastroenterology, UK Physiological Society) and patients associations (CFF-USA; Mukoviszidose e.V, CF Trust, Vaincre la Mucoviscidose, etc) to maximize and optimize efforts.

2. Activities

2.1. Annual meeting of the BSWG

As already stated in the 2020 report, the BSWG aimed to organize a session within the 17th ECFS Basic Science Conference in Albufeira, Portugal, 25-28 March 2020, which would have taken place on Thursday, 26 March (18:00 - 19:45). However, due to the Covid-19 pandemic, the 17th ECFS Basic Science Conference did not take place and neither did this BSWG session. Meanwhile, the report on the BSWG symposium that took place on 28 March 2019 at the 16th ECFS Basic Science Conference in Dubrovnik, Croatia, 27-30 March 2019, was published in JCF:

- Amaral MD, Beekman JM (2020) *Activating Alternative Chloride Channels to Treat CF: Friends or Foes?* Report on the Meeting of the Basic Science Working Group in Dubrovnik, Croatia. *J Cyst Fibros* **19**: 11-15. [PMID: [31676346](https://pubmed.ncbi.nlm.nih.gov/31676346/)]. DOI: 10.1016/j.jcf.2019.10.005

Although postponed to 2021, the 17th ECFS Basic Science Conference has once again been cancelled due to the Covid-19 pandemic. Accordingly, the BSWG session cannot take place either in 2021.

2.2. BSWG Workshop

Based on the very positive evaluations of the BSWG ESP2019 Workshop (see evaluation by participants in Annex 4 of the 2020 report), the BSWG aimed to organize in 2020 the "Summer School on Epithelial Systems: Physiology and Pathophysiology¹" (ESP2020), that would take place between 27 – 31 July 2020, at the Faculty of Sciences of the University of Lisboa (FCUL), Portugal.

As in previous years, this workshop aimed to elucidate researchers from the CF community on the theoretical aspects of basic CF science, as well as providing practical training in the new techniques underlying current and novel biomarkers based on CFTR activity and other molecular and cell biology parameters. The Workshop would be open to 20 participants, both from different countries across Europe and from outside Europe.

However, in March 2020, we took the decision of not organizing the 2020 Summer School as planned due to the Covid-19 pandemic. We considered that although in July 2020 the situation could have cleared, it was still unclear in March whether it will be possible to organize face-to-face events in July. Moreover, for participants the decision to attend would need to be taken by April when there is still great uncertainty regarding travel.

Given the uncertainty in Europe of the Covid-19 pandemic, due to the delay in the vaccination process, we have also taken the decision of not organizing the 2021 Summer School as planned. Again, to take this decision, we considered that although in July 2021 the situation could have significantly improved, at the time of registration (March-April) the travel restriction would still be in place thus averting possible participants from registering.

¹ Previously called "Hands-on Workshop on Epithelial Systems: Physiology and Pathophysiology"