

ESCMID Travel Grants for Training in Foreign Institutions

Grantee:	Gomez-Lopez, Alicia Mycology Department, CNM-ISCI Majadahonda, Madrid, Spain
Hosting Institution:	School of Medicine Room 1.800, Stopford Building The University of Manchester , UK

1. FINAL REPORT :

I stayed in the School of Medicine, at the University of Manchester for one month (from 15th July to 14th August), working with Dr William Hope's research team. During my stay there I received training in PK/PD experiment management, taking advantage of the great experience of this group.

The main activities carried out are described below

1. Looking through the design of pharmacokinetic studies in animal models of fungal infection: We discussed the major pitfalls of these studies for the particular case of azoles and rats models.
2. I received training on the theories on which pharmacokinetic studies are based in order to optimize pharmacokinetic experimental design.
3. I received also training in the characterization of the most important pharmacokinetic parameters in the model and from the clinical point of view.
4. Also I observed analytical procedures for antifungal agents quantification other than those now in use in my laboratory (especially candins), using high pressure liquid chromatography (HPLC). I learned technical details about the methodology used, trying to adapt it to my lab for future purposes.
5. Taking advance of the group experience we also discussed difficulties on dose-response studies in animal models with *Aspergillus*.
6. Finally, I received training on the development of alternative models for fungal infections studies. This alternative is very interesting to try to minimize the number of experimental animals used in research, as recently proposed by the European Union.

I started the application of an invertebrate model of aspegillosis for virulence studies. The caterpillar *Galleria mellonella* is an attractive insect host for testing fungal virulence and antifungal agents due to its easy handling, low cost, and low maintenance.



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From my point of view the initial objective of this visit has been achieved. I have brought important insights back home that will undoubtedly be of great help for my future research. I have also contacted a group that I admire professionally and with which I will collaborate in the future.