

RESEARCH CONFERENCES

Europe-Africa Frontier Research Conference
Series

Infectious Diseases: From Basic to Translational Research

The Cape Winelands • South Africa
4 – 9 April 2009

Chairs: **Monique Capron**, Inserm, Lille 2 University, Institut Pasteur de
Lille, FR – **M. Iqbal Parker**, International Centre for Genetic Engineering
and Biotechnology, Cape Town, ZA

www.esf.org/conferences/09277



Conference Highlights

Please provide a brief summary of the conference and its highlights in non-specialist terms (especially for highly technical subjects) for communication and publicity purposes. (ca. 400-500 words)

This event held in Cape Town, South Africa was the first conference of a new series of Scientific Conferences within the framework of European Science Foundation (ESF) Research Conferences, named « Europe- Africa Frontier Research Conference Series », aiming at bringing together experts and participants in Basic Science profiling African and European excellence in topics of major importance to the scientific community.

This conference was funded by ESF in partnership with ICSU (International Council for Science), a consortium of European Academies (Nederland, UK, Sweden, France), the Network of African Science Academies (NASAC), and received financial support from EMBO, NWO, IUBMB, FNSNF, Inserm, IRD, SIDA, Fondation Mérieux.

The general topics of this first conference organised in Africa, focussed on the understanding of basic mechanisms underlying infectious diseases with a particular interest for neglected and emerging diseases (excluding AIDS), and their translation into field actions.

This conference was chaired by **Monique Capron**, Inserm, Lille 2 University, Institut Pasteur de Lille, FR – and **M. Iqbal Parker**, International Centre for Genetic Engineering and Biotechnology, Cape Town, ZA.

I hereby authorize ESF – and the conference partners to use the information contained in the above section on 'Conference Highlights' in their communication on the scheme.

Scientific Report

Executive Summary

(2 pages max)

The meeting was a real success, confirmed by the answers to the questionnaire as well as by the various e-mails received.

One key reason of the success was the excellence of location and practical organisation, thanks to the ESF conference organiser (Ms Anne Blondeel).

This meeting allowed many new contacts between European and African researchers and according to the participants, more than 50% established new collaborations with another lab.

100% of the participants recommended organising a second conference in the near future including both more transdisciplinary basic science (genomics, mathematics and physics...) as well as more operational research (an interesting challenge for the next chairmen!....).

Scientific Content of the Conference

(1 page min.)

- Summary of the conference sessions focusing on the scientific highlights
- Assessment of the results and their potential impact on future research or applications

The very final program including some last minute changes is attached.

The primary objective of the meeting, based on **excellence and fruitful exchanges**, was completely achieved, as attested by the scientific quality of the presentations in both invited lectures and short talks, and by the level of discussion inside and outside the meeting room.

One of the very good points was the high **attendance** until the end of the meeting due to the really ideal organisation: no parallel sessions, everybody dining and lodging in the same hotel , excellent timing and ideal locations outside the city.

The posters on display for the entire meeting and the **poster session** allowed many discussions between advanced and younger researchers, but a little more organisation for instance with thematic discussions or short presentations , or "walking" discussions could have helped the exchanges .

One of the more interesting points was the continuous mix between **top European leaders and younger African scientists** in a wide range of infectious diseases covering not only malaria and TB, but also more neglected diseases such as trypanosomiasis, leishmaniasis and schistosomiasis, together with emerging diseases such as Chikungunya, and Buruli ulcer.

The more surprising point was the **high standard of research** performed in some places in Africa, not only South Africa (as expected) but also Mali, Kenya and Tanzania for instance.

It was really encouraging to see how young African scientists now publish in international journals (NEJM, Lancet, PLoS Biology, PLoS One, PLoS NTD etc...)

The objective of this conference was to bring together scientists from **different fields and involved in different approaches**: it is not so frequent to have in the same room scientists interested in genetics of TB and leishmaniasis or in malaria and TB vaccines, although these diseases are often encountered in the same endemic areas and share some common characteristics. All the participants certainly learned a lot from other fields, which is a very important point to make in these days of (too) highly specialised research.

One of the more interesting discussions emerging at the end of the meeting was the need to include both **more basic science** (genomics, mathematic and physics...) as well as **more operational research!**

100% of the participants think that the conference should be repeated and I do think that there is really

matter to extend the theme to some of these aspects which could not be approached due to lack of time. Another very positive point was the possibility given to all participants (speakers and poster presenters) to send a manuscript to FEMS Immunology and medical Microbiology, which will consecrate one full issue on the theme of our meeting 'Infectious diseases: from basic to translational research'

Forward Look

(1 page min.)

- *Assessment of the results*
- *Contribution to the future direction of the field – identification of issues in the 5-10 years & timeframe*
- *Identification of emerging topics*

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- Is there a need for a foresight-type initiative?
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Atmosphere and Infrastructure

- *The reaction of the participants to the location and the organization, including networking, and any other relevant comments*

One of the objectives was to increase synergistic contacts throughout Europe and Africa, based on excellence. Twenty speakers were first invited for oral presentations on the basis of excellence (judged by publications) and speakers for short talks were selected by a selection committee from a list of more than 300 abstracts received.

In total, a perfect balance was obtained between European (15 speakers from 7 different countries) and African speakers (15 from 8 different countries).

All together, the meeting included around **100 participants** (55 from Africa and 45 from Europe).

In addition, the meeting benefited from the presence of **leaders of european organisations**, at the highest level: Fotis Kafatos (ERC president), Hermann Bujard (EMBO Director) and Ole Olesen (FP7 Scientific Officer for Neglected Infectious Diseases), who stayed for the entire meeting and participated in all discussions.

Finally, I have been privileged to be contacted by the Chief Editor of the journal **FEMS Immunology and Medical Microbiology** (Dr Patrik Bavoil) who proposed to devote a thematic issue of this journal on "Neglected Tropical Diseases", based on the different presentations during the meeting and submission of abstracts. This was a great opportunity that I accepted with enthusiasm. Dr Peter Timms, one of the co-editors, came to the meeting and 2 guest editors were designated: V. Mizrahi (South Africa) and M. Capron (France).