

Twenty-five years of Mahabaleshwar seminars in modern biology

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The Tata Institute of Fundamental Research (TIFR), Mumbai, the Ahmednagar College and the Indian Institute of Science, Bangalore have been sponsoring, since 1975, a series of annual seminars in selected and current areas of modern biology. The participants who are working scientists and research scholars number around forty. About ten teachers give formal lectures. Most of the available time is left for discussions. The aim of these seminars is to stimulate active interest among participants in the areas chosen and to make those trained in physical sciences aware of unsolved problems in biology, where physico-chemical approaches might yield fresh insights. Outstanding teachers from India and abroad have taught at these seminars and have helped in re-shaping modern biology research and teaching in the country. Among them have also been a few international leaders such as M. J. W. Eberhard, J. Maynard Smith, A. Bukhari, P. Slonimski, K. Sikora, F. W. Stahl, C. M. Radding, J. T. Bonner, John Nicholls and D. Weisblat. So, historically, these seminars carry the footprints of the same giants as well.

The idea to hold annual seminars, now known as 'Mahabaleshwar Seminars in Modern Biology' emerged during an informal discussion between Obaid Siddiqi (TIFR) and John Barnabas (Ahmednagar) more than twenty-five years ago. The first seminar entitled 'Genetics and Evolution' was held in the summer of 1975 at the Green Hill Campus at Mahabaleshwar; the lectures were held in the Chapel, which is located amidst a lot of greenery and far away from the busy main roads. For the first few years, all academic staff members, post-doctoral fellows and students from the then Molecular Biology Unit of TIFR used to participate in

these seminars. However, with rapid advances in the biology of living organisms, the topics gradually became more focused and specialized and gradually the present pattern evolved. Barnabas and his colleagues from Ahmednagar College bore the brunt of organizational responsibilities over many years when the seminars were held at Mahabaleshwar. Subsequently, when Barnabas moved to National Chemical Laboratory, Pune, the venue of Mahabaleshwar seminars during 1990–97 shifted to other places such as Pachmarhi, Khandala, Ecumenical Christian Centre at Whitefield, Mirik and Ooty. However, none of these places could match the ambience of Mahabaleshwar. Since 1998, it was decided to return to the Green Hill Campus in Mahabaleshwar.

A list of the faculty members who taught at the seminars will appear in a brochure being brought out separately. During the past 25 years, seminars have been held in most of the contemporary areas such as genetics and evolution, developmental biology, sensory mechanisms, structure and interactions of nucleic acids and proteins, evolution of social behaviours, membrane biology, basic immunology, theories in biology, plant viruses, genetic recombination, transposable genetic elements, pattern formation, molecular biology of infectious diseases, restriction and modification of DNA, theories in neurosciences, plant reproduction, protein folding and design, functional genomics and plant biotechnology.

The selection of a seminar topic and a convenor has usually been decided at least one year in advance, on the basis of suggestions from senior colleagues, sponsoring institutions and advances in particular disciplines in biology. The final decisions were taken initially by Siddiqi and Barnabas and in the later

years, since 1982 largely by M. M. Johri in consultation with the academic members of the department with minimal formality, without the need of a formally registered society or a consortium of office bearers. Important decisions were taken by a small number of individuals whose interest spanned a much broader canopy of modern biology. A flair for teaching and a wide understanding of the advancing frontiers were some of the important benchmarks that were considered while choosing the faculty.

It is estimated that over 800 student participants have attended the seminars held so far. In every Indian academic institution, there may be at least one person who has attended the Mahabaleshwar seminar during the past 25 years and a few of them have switched from physical sciences to modern biology. The Mahabaleshwar seminars have now come of age and command the highest level of academic expectations. The experience of Mahabaleshwar seminars can also serve as a very useful paradigm for any agency or institution planning to have a seminar series. The two-way learning process, where there has been a lot of interaction between the participants and the members, is especially noteworthy.

Over the years, the continued financial support by the sponsoring institutions, Council of Scientific and Industrial Research, Department Science and Technology and the Department of Biotechnology was also equally important in ensuring the success of Mahabaleshwar seminars.

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