

Editorial

Whither Catalytic Antibodies?

Two major lines of research have developed in the field of catalytic antibodies in recent years. One is devoted to the engineering of catalytic sites in antibodies by immunization with transition state analogs and antibodies to enzyme active sites. The second explores the generality and biological significance of findings that antibodies can develop catalytic activity by natural means under certain circumstances, particularly in autoimmune disease, and seeks ways of combining this phenomenon with directed development of antigen-specific catalytic antibodies. Much heat and publicity have surrounded the birth of these ideas, which has been somewhat detrimental to an orderly scientific development of the field. Nevertheless, the interest and controversy has also served a useful purpose, i.e., to highlight the enormous potential of this field as a platform technology for therapy of various human conditions, including autoimmune diseases, microbial infections, and tumors.

This special issue of *Applied Biochemistry and Biotechnology* is a compilation of peer-reviewed papers presented at the Second Conference on Catalytic Antibodies held in Compiègne, France, October 14–18, 1996. The first conference in this series took place in Moscow in 1994, the proceedings of which were published as a special issue of *Appl. Biochem. Biotechnol.* (47:107–410: 1994), and the third conference scheduled for 1998 (October 29–November 2, 1998, New Delhi; Web address: www.abzyme.med.uth.tmc.edu). The conference series is designed to articulate recent interesting developments in the field and to define consensus principles upon which further research work can be based to realize the promise of catalytic antibodies. In Compiègne, the conference participants were exposed to French Old World charm and cuisine in an informal scientific atmosphere, all of which factors promoted a free exchange of ideas. Financial support for the conference was generously provided by Le Biopôle de Picardie, Le Centre National de la Recherche Scientifique, and L'Université de Technologie de Compiègne.

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