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Charting the Course for *Monoclonal Antibodies in Immunodiagnosis and Immunotherapy*

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We are delighted and honored to be appointed as the new Editor-in-Chief (EIC) (Dr. Cory L. Brooks) and Deputy EIC (Dr. Andrei Moroz) of *Monoclonal Antibodies in Immunodiagnosis and Immunotherapy*. We inherit a legacy of rigorous publication maintained by outgoing EIC, Dr. Thomas Kieber-Emmons (2020–2024). Founded in 1981 as *Hybridoma* with Dr. Zenon Steplewski as the founding editor (1981–2020), the journal served as a repository for early work on cutting-edge hybridoma technology and the development of monoclonal antibodies. Dr. Kieber-Emmons tenure as EIC resulted in an expansion in the aims and scope of the journal, ushering the journal into the 21st century state-of-the-art in antibody science. He also oversaw the journal during the tumultuous period of COVID-19. This period witnessed an explosion of interest in anticovid monoclonal antibody (mAb) therapies, vaccines, and immunology as governments, companies, and other agencies brought enormous resources to bear on the COVID pandemic. During this time, *Monoclonal Antibodies in Immunodiagnosis and Immunotherapy* articles and editorials became an instrumental venue for discussing ideas surrounding the role of antigen sin and anti-idiotypic antibody networks in severe acute respiratory syndrome coronavirus 2.^{1–3} We graciously thank Dr. Kieber-Emmons for his stewardship and leadership during his tenure as EIC.

As we move into a post-COVID world, mAbs remain more important than ever. At the time of the journal's founding, mAb therapy was only a hypothetical dream. Today, there are 207 mAbs approved or under review by the FDA,⁴ and another 141 in late-stage clinical trials.⁵ These therapies are making real-world impact on the lives of patients across a wide range of disease indications, with special mention to cancer, where immunotherapy is used adjuvantly with traditional antitumor treatments. The inventiveness and creativity of antibody engineers have also begun to bear fruit. From more sophisticated, elegant, and more efficient immunization techniques, during the production of mAbs,^{6,7} to nontraditional antibody formats including: bispecific antibodies, Fab, ScFv fragments, antibody drug conjugates, immunotoxins, and VHH have all successfully been brought to the clinic. On the horizon are the exciting

prospect and promise of generative artificial intelligence (AI) and machine learning to transform antibody discovery. The first glimpse of this promise has come from the Baker lab at the University of Washington, who have used RfDiffusion to “hallucinate” single-domain antibodies to user-defined epitopes, which is a remarkable achievement.⁸ The recent release of AlphaFold3, which allows for accurate prediction of protein interactions, opens the door for the prediction of antibody–antigen complexes,⁹ a potentially transformative application of AI. The future is bright for antibody researchers.

As the new editors of *Monoclonal Antibodies in Immunodiagnosis and Immunotherapy*, our goal is to continue the trajectory established by Dr. Kieber-Emmons. We aim to grow the journal and hope it can become not only a repository for the description of new mAbs, but the home for all antibody-related research. In the coming months, we will update the aims and scope of the journal to reflect this philosophy, accepting articles related to diagnostics, therapeutics, antibody biology, genetics, characterization of antibody–antigen interactions, and antibody engineering. We also plan to develop special issues at the forefront of antibody science and therapeutics and expand and enhance the number and diversity of our editorial board. Along with our superb editorial stall, we will maintain the highest standards of rigorous peer review and the ethical handling of articles.

We both look forward to serving the antibody research community in our new roles. We look forward to new submissions to *Monoclonal Antibodies in Immunodiagnosis and Immunotherapy* as original articles, review articles, short communications, protocols, letters to the editor, perspectives, and editorials.

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