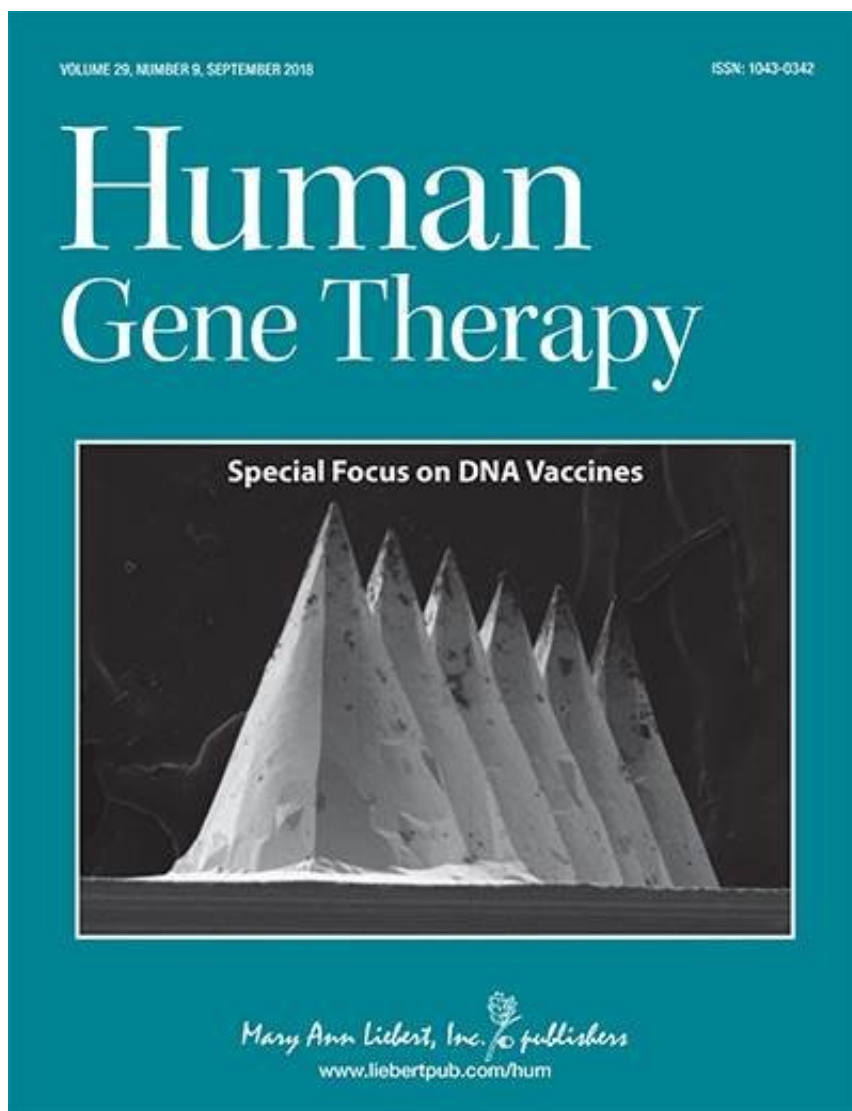


Advantages of DNA immunization platform for eliciting monoclonal antibodies in multiple species

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Credit: Mary Ann Liebert, Inc., Publishers

Researchers have taken advantage of the benefits of DNA immunization over traditional protein-based immunization to elicit monoclonal antibodies (mAbs) against challenging targets in three species – mouse, rabbit, and human models. They describe their use of DNA immunization as a new mAb development platform in an article published in a special issue on DNA Vaccines in *Human Gene Therapy*.

Shuying Liu, SYL Consulting, Thousand Oaks, CA and Shixia Wang and Shan Lu, University of Massachusetts Medical School, Worcester, MA co-authored the article, titled "Using DNA Immunization to Elicit Monoclonal Antibodies in Mice, Rabbits, and Humans." Shan Lu was guest editor of the special issue.

The researchers described the multiple advantages of DNA immunization, including the ability to stimulate both innate and adaptive immunity to elicit high levels of antigen-specific antibody responses, to activate multiple pathways of innate immunity, and together with T cells to lead to the development of antigen-specific B cells that can generate high affinity antibody responses.

"The innovative approach described by this team demonstrates the great flexibility and utility of DNA vaccines in the creation of [monoclonal antibodies](#)," says Editor-in-Chief Terence R. Flotte, MD, Celia and Isaac Haidak Professor of Medical Education and Dean, Provost, and Executive Deputy Chancellor, University of Massachusetts Medical School, Worcester, MA. "In this context, it represents a particularly precise approach to precision medicine."

More information: Shuying Liu et al. Using DNA Immunization to Elicit Monoclonal Antibodies in Mice, Rabbits, and Humans, *Human Gene Therapy* (2018). [DOI: 10.1089/hum.2018.077](https://doi.org/10.1089/hum.2018.077)

Provided by Mary Ann Liebert, Inc

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