Nano/Micro Devices for Biomedical Applications: from Point-of-Care Diagnostics to Microphysiological Systems, Jian Gu, PhD

November 21, 2024 - 12:00 PM

Overall Activity Objectives:

- 1 Incorporate into practice recent research in basic and biomedical sciences and/or biomedical AI/ML.
- 2 Incorporate into practice knowledge of the growth and development or health of organisms (Basic Medical Sciences) or the assessment or management of health-related issues (Biomedical Informatics).

Session Objectives:

- 1 1) Understand the benefits of vertical flow immunoassay over the traditional lateral flow immunoassay
- 2 2) Review the bubble-assisted focused ultrasound (BAFUS) technology for non-invasive spatially targeted drug delivery to the brain by reversibly opening of the blood-brain barrier
- 3 3) Learn the journey of using an ultrasound-transparent organ-on-chip for in vitro modeling of blood-brain barrier opening by BAFUS

Accreditation Statement:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The University of Arizona College of Medicine - Tucson and University of Arizona College of Medicine - Phoenix The University of Arizona College of Medicine - Tucson is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Arizona College of Medicine - Tucson designates this Live Activity for a maximum of 1.00 *AMA PRA Category 1 Credit(s)* $^{\text{TM}}$. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Relevant Financial Relationships Statement(s):

University of Arizona College of Medicine - Tucson Continuing Medical Educationadheres to the ACCME's Standards for Integrity and Independence in Accredited Continuing Education. Any individuals in a position to control the content of a CME activity, including faculty, planners, reviewers or others are required to disclose all financial relationships with ineligible entities (commercial interests). The CME office reviewers have nothing to disclose. All relevant financial relationships have been mitigated prior to the commencement of the activity.

Name of individual	Individual's role in activity	Nature of Relationship(s) / Name of Ineligible Company(s)
Frederic Zenhausern, MBA	Course Director	Nothing to disclose - 02/09/2024
Jian Gu, PhD	Faculty	Nothing to disclose - 11/18/2024

