

Stanford



Muna Aryal Rizal

Postdoctoral Research Fellow, Radiology

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Boston College (2014)
- Master of Science, Boston College (2010)
- Bachelor of Science, Tribhuban University (2006)

STANFORD ADVISORS

- Raag Airan, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Biomedical Ultrasound, Cavitation, Focused Ultrasound Mediated Drug Delivery for Cancer Therapy and Neuromodulation

Publications

PUBLICATIONS

- **Evaluation of permeability, doxorubicin delivery, and drug retention in a rat brain tumor model after ultrasound-induced blood-tumor barrier disruption.** *Journal of controlled release : official journal of the Controlled Release Society*
Park, J., Aryal, M., Vykhodtseva, N., Zhang, Y. Z., McDannold, N.
2016
- **Multiple sessions of liposomal doxorubicin delivery via focused ultrasound mediated blood-brain barrier disruption: A safety study** *JOURNAL OF CONTROLLED RELEASE*
Aryal, M., Vykhodtseva, N., Zhang, Y., McDannold, N.
2015; 204: 60-69
- **Enhancement in blood-tumor barrier permeability and delivery of liposomal doxorubicin using focused ultrasound and microbubbles: evaluation during tumor progression in a rat glioma model** *PHYSICS IN MEDICINE AND BIOLOGY*
Aryal, M., Park, J., Vykhodtseva, N., Zhang, Y., McDannold, N.
2015; 60 (6): 2511-2527
- **Ultrasound-mediated blood-brain barrier disruption for targeted drug delivery in the central nervous system** *ADVANCED DRUG DELIVERY REVIEWS*
Aryal, M., Arvanitis, C. D., Alexander, P. M., McDannold, N.
2014; 72: 94-109
- **Multiple treatments with liposomal doxorubicin and ultrasound-induced disruption of blood-tumor and blood-brain barriers improve outcomes in a rat glioma model** *JOURNAL OF CONTROLLED RELEASE*
Aryal, M., Vykhodtseva, N., Zhang, Y., Park, J., McDannold, N.

