

Liposomes

We have rich experience in **formulation and scaling up** of

Liposomes which contain both hydrophobic and lipophilic drugs and reagents. Liposomes have been loading with the following

- Magnetic nanoparticles
- Proteins/peptides
- Plasmid DNA/RNA
- Drugs (e.g., statins)
- Imaging agent (dyes, contrast agents, radioisotope...)

These nanoparticles can be used for drug/gene/vaccine/cell delivery, sensing/detection, hyperthermia, imaging, diagnosis, and therapeutic treatment.

Contact:

Xingguo Cheng, Ph.D.
Chief Science Officer
Dynamic Entropy Technology LLC.
Tel: 216-269-6757
Email: xchengswri@gmail.com

Key publication and patents:

- Cheng, X. & Cao, F. **Liposomal Troponoid Compound Formulation**, U.S. Provisional Patent Application No. 62/894,187, Filed on 08/30/2019.
- Cheng X, Carson K, Mcdonough J, Gourapura RG, Lee CW, Dhakal S, inventors; **A liposomal subunit flu vaccine formulation**, Nov 19, 2019. U.S. Patent Award No. 10,478,488.
- Dhakal, S., Cheng, X., Salcido, J., Renu, S., Bondra, K., Lakshmanappa, Y. S., . . . Renukaradhya, G. J. (2018). **Liposomal** nanoparticle-based conserved peptide influenza vaccine and monosodium urate crystal adjuvant elicit protective immune response in pigs. **Int J Nanomedicine**, 13, 6699-6715. doi:10.2147/ijn.s178809
- Cheng X, Mustoe TA, Galiano RD, Hong SJ, Xie P, Jia SX. 2018. **A liposomal statin formulation**. United States Patent Application No 15/949,000, filed on April 9, 2018
- Cheng X, Tsao C, Saul JM, Sylvia V, Cornet D, Christy R. Comparison of Two **Nanoparticle Formulations** for Localized Delivery of Platelet-Derived Growth Factor (PDGF) from Aligned Collagen Fibers. *Pharmaceuticals Nanotechnology*. 2013; 1(1):1-10.