

## **Final Technical Report for DOE Grant DE-SC0017198**

**Project Name:** Support for Students, Postdoctoral Fellow and Trainees who have been accepted to present at the 22<sup>nd</sup> International Symposium on Radiopharmaceutical Sciences

**Report Date:** June 2018

**Principal Investigator:** Silvia S. Jurisson (University of Missouri)

**Federal Program Manager:** Ethan Balkin

**Work-scope Highlights:** This grant was used to support students, postdocs and trainees to attend the 22<sup>nd</sup> International Symposium on Radiopharmaceutical Sciences (ISRS). The trainees supported all presented their research at ISRS2017 held in Dresden, Germany from 14-19 May 2017. All trainees performed their research at US institutions. Ten trainees were supported.

The following presentations were supported to attend ISRS2017. They represented the following institutions: Hunter College of City University of New York (New York, NY), University of Missouri (Columbia, MO), University of Michigan (Ann Arbor, MI), Memorial Sloan Kettering Cancer Center (New York, NY), University of Alabama-Birmingham (Birmingham, AL),

1. *Novel Reagents for the Site-Specific Modification of Proteins and Peptides with Radiometal Chelators*
2. *Microwave assisted synthesis of Re (III and V) Schiff base complexes for potential theranostic agents*
3. *Imaging the Receptor for Advanced Glycation Endproducts with [<sup>18</sup>F]RAGE*
4. *Imaging glioblastoma using ectodomain vimentin targeted antibodies*
5. *Targeted Zwitterionic Radioligands for Improved Molecular Imaging*
6. *Production of <sup>186</sup>Re and <sup>189</sup>Re from Enriched <sup>189</sup>Os and <sup>192</sup>Os Targets*
7. *<sup>89</sup>Zr-nanohydroxyapatite-phospha-TOC as new PET imaging agent*
8. *Synthesis of a <sup>55</sup>Co-labeled albumin-binding NODAGA-folate: A potential PET agent for folate receptor imaging*
9. *Silver-Mediated Synthesis of  $\gamma$ -[<sup>18</sup>F]Fluoro- $\alpha$ , $\beta$ -unsaturated esters from  $\alpha$ -Diazob- $\beta$ , $\gamma$ -unsaturated esters using silver [<sup>18</sup>F]fluoride*
10. *The Impact of Fc<sub>y</sub>RI Receptor Binding on ImmunoPET Imaging*

The ten trainees awarded bursaries all had very nice presentations and were able to network with various scientists in their field and meet many international scientists. This was an excellent opportunity for them.

