West Virginia University

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Spirocyclic hypervalent iodine(III)-mediated radiofluorination as a practical method to synthesize fluorine-18 labeled non-activated aromatics

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Fluorine-18 labelled arenes and heteroarenes are an important class of substrates in medical imaging by positron emission tomography (PET). Traditionally, these molecules are prepared via nucleophilic aromatic substitution (S_NAr) reactions of an appropriately activated substrate, which limits the scope of molecules that can be radiolabelled with [^{18}F]fluoride. This presentation will discuss an alternative methodology that employs the use of spirocyclic hypervalent iodine(III)-complexes for the efficient one-step labelling of a broad range of non-activated functionalized arenes and heteroarenes. The application of this methodology towards preclinical and clinical research will be discussed.

Date: Fri, Sept 15, 2017

Time: 4:30-5:30 pm

Location: 208 Clark Hall

Students, meet the speaker over coffee and cookies in the Bennett Conference room at 3:30 pm