

Application for Round-6 QIBA Project Funding

<b>Title of Proposal:</b> I-123 DAT Scan Digital Reference Object Development		
QIBA Biomarker Committee/Task Force: SPECT Biomarker Committee		
NIBIB Contract Objective(s): Objective 4		
<b>PI (Project Coordinator or Lead Investigator Information)</b>		
Last Name: Miyaoka	First Name: Robert	Degree(s): PhD
e-mail:		Tel #:
Institution/Company: University of Washington		
Total Amount Requested:		

**Project Description**

The proposal describes the development of a Digital Reference Object (DRO) to support the QIBA SPECT biomarker Profile. Based upon the initial results from other QIBA committees that have developed DRO phantoms, it is clear that consistent testing of vendor data analysis software is necessary to validate/confirm that given the same reference image all vendor software will return the same values given the same analysis task.

**Primary goals and objectives**

To design and construct a prototype brain Digital Reference Object (DRO) with properties appropriate for testing software used to characterize I-123 Ioflupane uptake in the striatum and the derivation of striatal specific bind ratio in a quantitative fashion. The result can be used to help develop methods to be used in the SPECT DAT scan Profile and to test current commercial and academic I-123 DAT scan analysis software in a consistent fashion.