## SERVICE REQUEST FORM FOR HUMAN PHENOTYPING CORE

## ADIPOSE TISSUE SUBCORE NEW YORK OBESITY NUTRITION RESEARCH CENTER

PROJECT PI:	Last Name	
PROJECT TITLE:		

Measurement	Туре	Member	Academic non-member
☐ Isolation of primary adipocytes and stromal vascular fraction	cell isolation		
(for up to 6 samples)			
<ul> <li>Quantification and Isolation of adipose tissue immune cells,</li> </ul>	immune cells		
including macrophages, lymphocytes and NK cells by Fluorescence	isolation		
Activated Cell Sorting (FACS) (per sample)	& quantification		
<ul> <li>Quantitative PCR for adipokine gene expression in whole fat,</li> </ul>	gene expression		
adipocytes, stromal vascular fraction, and macrophages (per assay	analysis		
per sample)			
<ul> <li>Western Blot for adipokine expression and insulin signal</li> </ul>	functional		
transduction elements (for up to 12 samples)	anlaysis		
<ul> <li>Quantitative assessment of macrophage infiltration by</li> </ul>	immunological		
immuostaining (per sample)	analysis		
<ul> <li>Determination of adipocyte size and number in paraffin-</li> </ul>	morphological		
embedded samples by computer-assisted analysis (per sample)	analysis		
<ul> <li>Adipose tissue lipoprotein lipase activity in frozen samples</li> </ul>	functional		
(per sample)	analysis		
In vitro adipose tissue lipolysis and glucose uptake (per	functional		
assay/sample)	analysis		
<ul> <li>Culture and differentiation of primary or 3T3-L1</li> </ul>	cell		
preadipocytes in vitro (for up to 12 samples)	differentiation		
<ul> <li>Adipokine secretion assay (per assay, for up to 10 samples)</li> </ul>	functional		
	analysis		
□ Adipose tissue histology:			
<ul> <li>Machine processing and embedding (per block)</li> </ul>	morphological		
□ Paraffin tissue sectioning (per slide)	analysis		
□ immunohistochemistry (per slide)			
☐ H&E staining (per slide)			
Training in adipose tissue smaple preparation:	training		
□ protein extraction			
□ RNA extraction			

For inquiries or cost information, please contact yz84@columbia.edu

Attach approved <u>IRB protocol</u>, and/or <u>consent form</u> where relevant and email the completed Service Request Form to <u>yz84@columbia.edu</u>