

Materials List for:

# A Multi-Parametric Islet Perifusion System within a Microfluidic Perifusion Device

Adeola F. Adewola<sup>1</sup>, Yong Wang<sup>1</sup>, Tricia Harvat<sup>1</sup>, David T. Eddington<sup>2</sup>, Dongyoung Lee<sup>1</sup>, Jose Oberholzer<sup>1,2</sup>

<sup>1</sup>Department of Surgery, University of Illinois, Chicago

<sup>2</sup>Department of Bioengineering, University of Illinois, Chicago

Correspondence to: Jose Oberholzer at [jober@uic.edu](mailto:jober@uic.edu)

URL: <https://www.jove.com/video/1649>

DOI: [doi:10.3791/1649](https://doi.org/10.3791/1649)

## Materials

Name	Company	Catalog Number	Comments
60ml Syringes	BD Biosciences		
Fura-2 fluorescence dye	Molecular Probes, Life Technologies		
Rhodamine123 Fluorescence dye	Molecular Probes, Life Technologies		
Glucose	Sigma-Aldrich		
Bovine Serum Albumin	Sigma-Aldrich		
30" Silicone tubings	Cole-Parmer		1/16 x 1/8in
1.5ml Eppendorf tubes	Fisher Scientific		
Y-connectors	Cole-Parmer		1/16" & 4mm
Syringe connectors	Cole-Parmer		female luer plug 1/16"
Straight connectors	Cole-Parmer		1/16"
Elbow connector	Cole-Parmer		1/16"
Havard syringe pump	Harvard Apparatus		
Perifusion device			
Hot plate	PMC		
Thermometer	Omega Engineering, Inc.		
Fraction collector	Gibson		
Pipettor	Fisher Scientific		
Inverted epifluorescence microscope	Olympus Corporation	IX71	
Charge-coupled device	QImaging		Retiga-SRV, Fast 1394