

Materials List for:

# Intracellular Recording, Sensory Field Mapping, and Culturing Identified Neurons in the Leech, *Hirudo medicinalis*

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## Materials

Name	Company	Catalog Number	Comments
Sylgard	Dow Corning	182 silicone kit	
NaCl	Sigma-Aldrich	S7653	
KCl	Sigma-Aldrich	P9333	
CaCl <sub>2</sub>	Sigma-Aldrich	C5670	
Tris/maleic acid	Sigma-Aldrich		
Bleach	Sigma-Aldrich		To chloride silver wire
NaOH	Sigma-Aldrich	221465	To adjust pH
HCl	Sigma-Aldrich	H1758	To adjust pH
Collagenase/Dispase	Boehringer Mannheim	269-638	
Leibovitz L-15 with L-Glutamine	Gibco	041-01415H	
Fetal calf serum	Ready Systems Ag		
04-001			
D-Glucose-Monohydrate	Merck	8342	
Gentamycin sulfate	any supplier		10 mg/ml
Glutamine	Gibco	043-0503H	
HEPES	Sigma	3375	Free acid, crystalline
Concanavalin A Type IV	Sigma	C 2010	
Poly-L-Lysine Hydrobromide	Sigma	P 7890	MW 15-30,000
Microwell plate, 60 x 10 µl	Falcon	3034	Flat bottom, 10 in a bag
Dissecting tools	World Precision Instruments	assortment	
Intracellular electrode probe			
Faraday cage			
Insect Pins	Fine Science Tools, Inc	26001-60	
Dissecting microscope (100X)			
Fiber optic lamp			
Small adjustable mirror			To direct light beam toward the preparation.
Glass electrodes	Sigma-Aldrich	CLS7095B5X	Box of 200, Suction electrodes
Micromanipulator	World Precision Instruments	MD4-M3-R	Can fix for base or on a metal rod
Raised preparation stand			
Silver wire (10/1,000 inch)	A-M Systems	782500	
Computer	any company		

AC/DC differential amplifier	A-M Systems	Model 3000	
PowerLab 26T	 AD Instruments	27T	
Head stage	 AD Instruments		Comes with AC/DC amplifier
LabChart7	 AD Instruments		
Electrical leads	any company		
Glass tools	make yourself		For manipulating nerves
Cable and connectors	any company		
Pipettes with bulbs	Fisher Scientific	13-711-7	Box of 500
Beakers	any company		
Wax or modeling clay	any company or local stores		
Stimulator	Grass Instruments	SD9 or S88	
Plastic tip for suction electrode	local hardware store (Watt's brand)	¼ inch OD x 0.170 inch ID	Cut in small pieces. Pull out over a flame and cut back the tip to the correct size.