

Materials List for

Preparation of Peripheral Nerve Stimulation Electrodes for Chronic Implantation in Rats

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Materials

Name	Company	Catalog Number	Comments
Biocompatible polyurethane-based polymer tubing, 0.080" OD x 0.040" ID	Braintree Scientific	MRE080 36 FT	
Dissecting microscope	AM Scopes	#SM-6T-FRL	
Fine Serrated Scissors, straight, 22mm cutting edge	Fine Science Tools	#14058-09	for cutting Pt/Ir wire and suture thread
Forceps, #5 Dumont forceps, straight, 11 cm, 0.1 x 0.06 mm tip	Fine Science Tools	#11626-11	
Forceps, ceramic tipped forceps, 0.3 mm x 30 mm tips	Electron Microscopy Sciences	#78127-71	
Gold Pins, PCB Press Fit Socket	Mill-Max	#1001-0-15-15-30-27-04-0	or similar small pins for connecting cuff leads to headcap
Isobutane lighter	BIC	#LCP21-AST	for de-insulating Pt/Ir wire
Micro strip connector with latch, 4-pin	Omnetics	A24002-004 / PS1-04-SS-LT	
Pipette tip, 10 uL	VWR	89079-464	
Platinum-Iridium (90/10%) Wire, 0.001" (diameter) x 9 strands, PTFE insulated	Sigmund Cohn	10IR9/49T	
Razor Blade, Single Edge, Surgical Carbon Steel No.9	VWR	#55411-050	for cutting MicroRenathane tubing
Sewing needle, ca. 4.0 cm length x 0.7 mm diameter (size 6-7)	Singer	00276	Smaller needle for threading Pt/Ir wire
Sewing needle, ca. 4.5 cm length x 0.8 mm diameter (size 2-3)	Singer	00276	Larger needle for pinning cuff during assembly and for threading suture
Small foam board	Juwo+/Amazon	B07C9637SJ	for fabrication platform; our dimensions are ca. 2.5" x 3.5" x 1" (L x W x H)
Solder, multicore lead-free, 0.38mm diameter	Loctite/Multicore	#796037	
Soldering station	Weller	WES51	or similar soldering iron compatible with long conical tips (this part has been discontinued)

Soldering tip, long conical, 0.01" / 0.4 mm	Weller	1UNF8	
Suture, nonabsorbable braided silk ,size 6/0	Fine Science tools	#18020-60	
UV (405 nm) spot light	Henkel/Loctite	#2182207	
UV Light Cure Adhesive 25 ml	Henkel/Loctite	AA 3106	or similar biocompatible UV cure adhesive
Wire wrapping wire, 30 AWG	Digikey	K396-ND	