

Materials List for:

The Swimmeret System of Crayfish: A Practical Guide for the Dissection of the Nerve Cord and Extracellular Recordings of the Motor Pattern

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Materials

Name	Company	Catalog Number	Comments
4-channel extracellular amplifier: MA 102	Amplifier	Elektroniklabor, Zoologie, Universität zu Köln, Germany	
air-table		Technical Manufacturing Corporation (TMC) a unit of AMETEK Ultra Precision Technologies, Peabody, MA, USA	63-534
Axon Digidata 1440A	Digitizer	Axon Instruments, Molecular Devices Design, Union City, CA	DD1440A
big bucket			
Clampex & Clampfit	pClamp 10, recording and analysis software	Molecular Devices Design, Union City, CA	pClamps 10 Standard
cold lamp source	with flexible light guide (fiber optic bundle)	Euromex microscopes holland, Arnhem, BD	LE.5211 & LE.5235
computer and monitor	equipped with recording software		
container and pipette for liquid waste			
crayfish saline	contains (in mM): 5.4 KCl, 2.6 MgCl ₂ , 13.5 CaCl ₂ , and 195 NaCl, buffered with 10mM Tris base and 4.7mM maleic acid; aerated for 3 hours. Adjust at pH of 7.4.		
dextran, Texas Red (3000MW, lysine fixable)	fluorescent dye, lysine fixable	Life Technologies GmbH, Darmstadt, Germany	D3328
dissection dish	(l x w x h) 15x7x5 cm; lined with black silicone		
faraday cage			
fixing pins			
forceps (biology, Dumont #5)	Forceps: Biology, tip 0.05 x 0.02 mm, length 11cm, INOX	Fine Science Tools (FST), Germany	11252-20
forceps (biology, Dumont #55)	Forceps: Biology, tip 0.05 x 0.02 mm, length 11cm, INOX	Fine Science Tools (FST), Germany	11255-20
forceps (electronic, Dumont #5)	Forceps: Standard, tip 0.1 x 0.06 mm, length 11cm, INOX	Fine Science Tools (FST), Germany	11251-20
intracellular electrode	Borosilicate glass capillaries (outer/inner diameter: 1mm/0.5mm), with filament	Sutter Instruments, Novato, CA	BF100-50-10
Leica S8 Apo StereoZoom	Dissection Microscope Zoom 1x - 8x	Leica, Germany	10446298
microscope table			

mirror	to illuminate preparation from below		
modeling clay			
Olympus SZ61	Dissection Microscope 0.67x - 4.5x Zoom	Olympus, Germany	
petri dish	94 x 16 mm; lined with clear silicone	Greiner bio-one, Germany	633180
ring scissors	ThoughCut, cutting edge: sharp/blunt, straight: 13cm	Fine Science Tools (FST), Germany	14054-13
spring scissors or alternative: Vannas spring scissors	cutting edge: 8 mm, tip diameter: 0.2mm, straight: 10cm or cutting edge 2.5 mm, tip diameter 0.075 mm, straight: 8cm	Fine Science Tools (FST), Germany	15024-10 or 15000-08
student Vannas spring scissors or alternative: Moria Spring Scissors	cutting edge: 5mm, tip diameter: 0.35mm, straight: 9cm or cutting edge: 5mm, tip diameter 0,1 mm, straight: 8 cm	Fine Science Tools (FST), Germany	91500-09 or 15396-00
sylgard	184 Silicone Elastomer Base and Curing Agent; for black sylgard add activated carbon	Dow Corning, Midland, MI, USA	
syringe filled with petroleum jelly and equipped with a 20 gauge needle with rounded tip			