

Construction of Local Field Potential Microelectrodes for *in vivo* Recordings from Multiple Brain Structures Simultaneously

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Materials

Name	Company	Catalog Number	Comments
Amplifier 16-Channel	A-M Systems	Model 3600	Amplifier
Cranioplasty cement	Coltene	Perm Reeline/Repair Resin Type II Class I Shade - Clear	Cement to hold microelectrodes
Cryostat Microtome	Precisionary	CF-6100	To slice brain
Diamel-coated nickel-chromium wire	Johnson Matthey Inc.	50 μm	Microelectrode wire
Dremel	Dremel	300 Series	To drill holes in mouse skull
Epoxy	CEC Corp	C-POXY 5	Fast setting adhesive
Hemostat	Any		To hold the headset
Forceps	Any		To hold microelectrodes
Light microscope	Nikon	SMZ-10	To see alignment
Ohmmeter	Any		To measure resistance
Pins (Headers and matching Sockets)	Mill-Max	Interconnects, 833 series, 2 mm grid gull wing surface mount headers and sockets	To attach microelectrodes to
Polymicro Tubing Kit	Neuralynx	ID $100 \pm 04 \mu\text{m}$, OD $164 \pm 06 \mu\text{m}$, coating thickness $12 \mu\text{m}$	Glass tubes
Pulse Stimulator	A-M Systems	Model 2100	To mark the microelectrode location at the end of the recordings
Scissors	Any		To cut microelectrodes
Superglue	Gorilla		Adhesive
Thick wire 0.008 in. – 0.011 in.	A-M Systems	791900	Tick wire to hold the microelectrode array
Thin wire 0.005 in. - 0.008 in.	A-M Systems	791400	Thin wire for reference and ground