

Materials List for:

# Measurement of Bioelectric Current with a Vibrating Probe

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## Materials

| Name  | Company   | Catalog Number | Comments  |
|---|---|----------------|---|
| Eligoy-Stainless Electrode  | World Precision Instruments, Inc.   | SSM33A70       | 76 mm, 7 MΩ, 1-2μm tip  |
| Gold R30 connector  | <a href="http://www.vectorelect.com">www.vectorelect.com</a>                | R30            | Re-usable   |
| Silver-loaded epoxy   | 3M  | SL65           | Mix 1-part Resin with 1-part Hardener   |
| Dissecting microscope   | Olympus Corporation   | SZ40           | Magnification x6 to x40   |
| Potassium dicyanoaurate (KAu(CN) <sub>2</sub> )   | Sigma-Aldrich   | 379867         | CAUTION: Toxic  |
| Chloroplatinic acid hydrate (H <sub>2</sub> PtCl <sub>6</sub> x 6H <sub>2</sub> O)                  | Sigma-Aldrich   | 520896         | CAUTION: Toxic  |
| Lead(II) acetate trihydrate (Pb(CH <sub>3</sub> CO <sub>2</sub> ) <sub>2</sub> x 3H <sub>2</sub> O) | Sigma-Aldrich   | 185191         | CAUTION: Toxic  |
| Nano-Amp power source   | Home made   | -              | Powered by six 1.5 V (AAA) batteries  |
| 3-dimensional micro-positioner  | Line Tool Co.   | Model H        |   |
| Lock-in amplifier   | Stanford Research Systems   | SR530          |   |
| Digital I/O interface   | National Instruments  | PCI-6220       |   |
| Shielded Connector Block with BNC connections   | National Instruments  | BNC-2110       |   |
| Strathclyde Electrophysiology Software  | University of Strathclyde Institute of Pharmacy and Biomedical Sciences, UK | WinWCP V4.1.5  | Free download from: <a href="http://spider.science.strath.ac.uk/sipbs/software_ses.htm">http://spider.science.strath.ac.uk/sipbs/software_ses.htm</a> |
| Calibration Chamber   | Home made   |                |   |
| Constant Current Calibrator   | Vibrating Probe Company   |                | Powered by one 9 V (PP3) battery  |