

Materials List for:

# Fiber-optic Implantation for Chronic Optogenetic Stimulation of Brain Tissue

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## Materials

| Name                                                             | Company                          | Catalog Number                | Comments                              |
|------------------------------------------------------------------|----------------------------------|-------------------------------|---------------------------------------|
| LC Ferrule Sleeve                                                | Precision Fiber Products (PFP)   | SM-CS125S                     | 1.25 mm ID                            |
| FC MM Pre-Assembled Connector                                    | PFP                              | MM-CON2004-2300               | 230 µm Ferrule                        |
| FC MM Pre-Assembled Connector                                    | PFP                              | MM-CON2004-2300               | 230 µm Ferrule                        |
| Miller FOPD-LC Disc                                              | PFP                              | M1-80754                      | For LC ferrules                       |
| Furcation tubing                                                 | PFP                              | FF9-250                       | 900 µm o.d., 250 µm i.d.              |
| MM LC Stick Ferrule 1.25 mm                                      | PFP                              | MM-FER2007C-1270              | 127 µm ID Bore                        |
| MM LC Stick Ferrule 1.25 mm                                      | PFP                              | MM-FER2007C-2300              | 230 µm ID Bore                        |
| Heat-curable epoxy, hardener and resin                           | PFP                              | ET-353ND-16OZ                 |                                       |
| FC/PC and SC/PC Connector Polishing Disk                         | ThorLabs                         | D50-FC                        | For FC ferrules                       |
| Digital optical power and Energy Meter                           | ThorLabs                         | PM100D                        | Spectrophotometer                     |
| Polishing Pad                                                    | ThorLabs                         | NRS913                        | 9" x 13" 50 Durometer                 |
| Aluminum oxide Lapping (Polishing) Sheets: 0.3, 1, 3, 5 µm grits | ThorLabs                         | LFG03P, LFG1P, LFG3P, LFG5P   |                                       |
| Standard Hard Cladding Multimode Fiber                           | ThorLabs                         | BFL37-200                     | Low OH, 200 µm Core, 0.37 NA          |
| Fiber Stripping Tool                                             | ThorLabs                         | T10S13                        | Clad/Coat: 200 µm / 300 µm            |
| SILICA/SILICA Optical Fiber                                      | Polymicro Technologies           | FVP100110125                  | High -OH, UV Enhanced, 0.22 NA        |
| 1x1 Fiberoptic Rotary Joint                                      | doric lenses                     | FRJ_FC-FC                     |                                       |
| Mono Fiberoptic Patchcord                                        | doric lenses                     | MFP_200/230/900-0.37_2m_FC-FC |                                       |
| Heat shrink tubing, 1/8 inch                                     | Allied Electronics               | 689-0267                      |                                       |
| Heat gun                                                         | Allied Electronics               | 972-6966                      | 250 W; 750-800 °F                     |
| Cotton tipped applicators                                        | Puritan Medical Products Company | 806-WC                        |                                       |
| VetBond tissue adhesive                                          | Fischer Scientific               | 19-027136                     |                                       |
| Flash denture base acrylic                                       | Yates Motloid                    | ColdPourPowder+Liq            |                                       |
| BONN Miniature Iris Scissors                                     | Integra Miltex                   | 18-1392                       | 3-1/2"(8.9cm), straight, 15 mm blades |
| Johns Hopkins Bulldog Clamp                                      | Integra Miltex                   | 7-290                         | 1-1/2"(3.8 cm), curved                |
| MEGA-Torque Electric Lab Motor                                   | Vector                           | EL-S                          |                                       |
| Panther Burs-Ball #1                                             | Clarkson Laboratory              | 77.1006                       |                                       |
| Violet Blue Laser System                                         | CrystaLaser                      | CK473-050-O                   | Wavelength: 473 nm                    |
| Laser Power Supply                                               | CrystaLaser                      | CL-2005                       |                                       |

|                               |                    |          |  |
|-------------------------------|--------------------|----------|--|
| Dumont #2 Laminectomy Forceps | Fine Science Tools | 11223-20 |  |
| Probe                         | Fine Science Tools | 10140-02 |  |
| 5" Straight Hemostat          | Excelta            | 35-PH    |  |
| Vise with weighted base       | Altex Electronics  | PAN381   |  |