

Building a Biocube

Introduction

When it comes to collecting and comparing data, standardization is key. The following materials are what David Liittschwager recommends to build a Biocube that is both affordable and comparable to those used by Smithsonian researchers.

Materials

- 12 aluminum tubes (1/4in diameter, 12in length, .014in wall) – Any tube fitting these dimensions will work, and costs vary based on aluminum pricing but are typically around \$1.00/tube. We have used K&S Aluminum tubes.
- 24 6in-pieces of solid THHN wire (14 AWG), green – can be purchased at most hardware stores.
- Alcohol-based quick-drying spray paint - we've used fluorescent green.

Procedure

1. Bend pieces of wire in half so that they are L-shaped.
2. Hold three L-shaped pieces of wire together and insert into tube to make 3-way corner joint.
3. Repeat this step for each corner until you have a cube.
4. Use spray paint to paint cube so that you can easily separate the cube from the surrounding area. The Biocube team prefers florescent green, but it isn't necessary that the cube be green.