# Resources Required

## Available

Praxim Representative

Chris Plaskos is the client of the project and will act as our main point of contact. We have gathered an idea of the requirements of the project from our telephone conversation.

(Chris Plaskos contact info)

Course Supervisor

Dr Antony Hudgson is the supervisor of the project and will offer guidance throughout.

Dr Antony Hudgson

ahodgson@mech.ubc.ca

Funding

Our supervisor, Dr Antony Hodgson, has generously agreed to sponsor all financial expenditures for the project with research grants.

Orthopedic Expertise

We are in the process of setting up interviews and possibly a visit to Vancouver General Hospital to observe a knee replacement surgery with orthopedic surgeon, Dr Greidanus. Erica is acting as liason.

(Dr Geidanus contact info)

Current Prototype and Documentation

The prototype from last year is available as a reference and resource for our designs. Brad Roger, a member of last year’s Praxim group, will be our main contact for any technical information regarding the robot. We have seen a working demo of the robot and have received a copy of the current software. With respect to documentation, we have the report from last year and Nikolai Hungr’s master’s thesis at our disposal.

Brad Roger

778-552-7388

bradroger@gmail.com

## Need to Acquire

Current Prototype Analysis

The performance of the current prototype has yet to be quantified. We will need to measure all relevant performance data before beginning any design work.

Praxim Bone Mount

Since the size of the bone mount and its loading capacity will dictate our designs, we hope Praxim will send us a sample or specifications to work with. Erica will contact Chris Plaskos for further details.

Tools

|  |  |
| --- | --- |
| Dremel Tool | $100 |
| Dremel Flex Shaft Attachment | $40 |
| Foam | $10 |
| Animal Bones | $20 |

\*approximate costs

Parts

|  |  |
| --- | --- |
| Motor | $200 |
| Encoder x2 | $100 |
| Electronics | $200 |
| Bearings | $50 |

\*approximate costs

Test Subjects

The project will be tested ideally by surgeons for feedback regarding performance and usability. All external test subjects will require ethnical review by the Behavioural Research Ethics Board or Clinical Research Ethics Board, which our supervisor Dr Antony Hodgson will offer guidance. Finding test subjects could be a potential problem depending on the boards’ decisions.

Medical Standards

To ensure our designs will be suitable for surgery, our robot and processes will conform to the following standards: ISO 13485, MDD 93/42/EEC. UBC Library will offer a license for the ISO standard. The MDD standard is available on their website.