

BME 301 Progress Report

Automated Bioanalytical Chemistry Sample Tube Uncapping and Capping Device

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* **Client:** Dr. Robert Radwin (ISyE, BME)

* **Advisor:** Dr. Chris Brace (Dept. of Radiology)

* **Report Period:** January 30th - February 3rd

* **Project Overview:**

Employees in a commercial laboratory cap and uncap more than 500-700 test tubes per day for a rapid, high throughput analyzer. This is causing undesired stress in the lab technician's fingers and hands. A design of a completely automated sample bottle cap cassette is desired that will eliminate much of the manual work by the technician during use of the analyzer.

* **Last Week's Goals:** Establish team roles and prepare to meet with our advisor on 1/27.

* **Summary of Design Accomplishments:** Formed a draft of our PDS

* **Summary of Team Role Accomplishments:**

Katie (Leader) – progress report, PDS draft

Alec (Communicator/BSAC) – communicated with client, advisor, and team. Attended BSAC meeting.

Jake (BWIG) – updated website with team roles

Sam (BPAG) – no news

*** Activities:**

Date	Person	Task (hours)	Previous Total	Weekly Total	Semester Total
1/26	Katie (Leader)	<i>Progress Report (0.75)</i>	0	0.75	0.75
2/1		PDS (1)	0.75	1	1.75
1/26	Sam (BPAG)	<i>Brainstorm capping mechanism (0.75)</i>	0	0.75	.75
1/26	Alec (Communicator /BSAC)	<i>Initial Contact with Advisor and Client (0.5)</i>	0	0.5	0.5
2/1		PDS formation (1)	1	1	1
1/26	Jake (BWIG)	<i>Fix up existing device (1)</i>	0	1	1
2/1		PDS (1)	1	1	2

*** Team Goals:** Specify design goals for semester, begin drafting PDS, obtain contact with Radwin and/or Covance.

*** Individual Goals:**

Katie – Update progress report, ensure a PDS draft is created before deadline (2/3)

Sam – Brainstorm design ideas

Alec – Brainstorm a mechanism for capping a twist-on sample tube

Jake – Brainstorm design ideas

* **Difficulties:** Some trouble was encountered in communication with the client, therefore delaying the progress of determining a design path to focus on for the semester. The client responded to the team's email late this week, so crucial design decisions will be made during Friday's client meeting.

* **Expenses:** No news

Item	Cost	Company/store
Total		