

Project Goals:

Part I:

Glia will coordinate the development of an open source injection mold for tourniquets. This will include the open source design and build of the mold and testing.

Part II:

Glia will use the injection mold and existing manufacturing practices to build tourniquets for medical aid in Ukraine.

Part B:

Glia will establish a Poland office to create an open source benchtop injection mold, resulting in tourniquets sent to Ukraine and open source benchtop mold files/process instructable added to the GitHub repository.

Progress:

March 2023

Canada

- FreeCad designs complete on GitHub
- Pending GitHub PR committed

Poland

- All current benchtop files PR on GitHub
- Aluminum CNC continues
- Clip is the only part left to re-design/mold

February 2023

Canada

- Significant FreeCad file progress with designers
- GitHub extension issue solved

Poland

- Initial resin molds printed
- CNC begins on aluminum mold
- PR made with benchtop files in progress
- Successful molding of tourniquet pieces

January 2023

Canada

- FreeCad designers contracted
- GitHub blocks identified

Poland

- Resin mold production/troubleshooting begins
- Mold and sewing production materials purchased

Injection Molded Tourniquet Project 2022:
Quarterly Fiscal Report - March 29, 2023- Q1

December 2022:

- Full shift to desktop molding design
- Development of new streams of work for project: bench top mold & production in Poland and testing and certification in Canada
- Hiring of Freecad designers to reverse engineer injection mold design (originally in Solidworks)
- Github training
- Redevelopment of project budget
- Contract adjustment
- Progress report completed
- Glia produced quarterly fiscal report

November 2022:

- Redesign of molding plan
- Donor management meetings and conferences
- Poland office engagement and planning
- Plans for desktop mold version arranged and discussed
- Hiring of new team members in Poland office for desktop mold build and production
- Open source software philosophy meetings
- Review of existing bench top molding work in Gaza office

October 2022:

- Communication meetings related to design
- Searching for additional quotes for mold build
- Coordination of 2d-drawings
- Mold shop negotiations

September 2022:

- Received completed mold design and sent to mold shop to begin build
- Sewing shop selected
- Design review meetings with mold designer
- Mold shop figuring out logistics for building mold
- Geometric dimension and tolerance review with mold builder engineer
- Pricing of materials
- Setting up mold spotting arrangements with Canadian shop
- Internal injection mold meetings - ongoing
- Progress report completed
- Glia produced quarterly fiscal report (start of October)

August 2022:

- Selected mold designer and completed mold design
- Made device design modifications for simpler mold design
- Coordinated with designer to influence design choices for a more widely accessible product, such as; generic components, simplifying build, etc.
- Selected molding shop and location for mold build
- Met with mold shop to secure timelines and expectations
- Sent parts to selected industrial sewing shops for sample creation
- Received samples from industrial sewers and QC performed
- Sewing instructions for shops finalized and posted to Github

Injection Molded Tourniquet Project 2022:
 Quarterly Fiscal Report – March 29, 2023- Q1

- Coordinating with production facility on part quotes, press sizes and material specs
- Progress report completed

July 2022:

- Obtained mold quotes and researched a selection of mold designers (to be done in non-open software)
- Completed potential designer presentation, collected feedback
- Glia received second instalment via wire transfer from Public Invention: USD\$21,970 on July 13, 2022
- Progress report completed

June 2022:

- Developed detailed project plan and arranged contracts between all parties
- Coordinated all organization, network and designated workloads/tasks
- Glia received first instalment via wire transfer from Public Invention: USD\$14,235 on June 15, 2022
- Glia produced quarterly fiscal report

Financial Reports:

Injection Molded Tourniquet Project: Budgets

Summary

Exchange Rate	1.27
Total Investment Public Invention (USD)	36,205.00
Total Investment Glia (CAD)	16,500.00
Total Project Budget (CAD)	62,480.35

Overtures will be negative.

Budget Actual Variance

Part I: Industrial Injection Mold Design, Development, Build, Testing & OS Publication

	Budget	Actual	Variance
Total Budget (CAD)	45,520.00	18,803.80	26,716.20
Solidworks Design of Mold	6,000.00	5,085.00	915.00
Redesign of Mold in FreeCAD	5,000.00	1,315.33	3,684.67
Mold Build	17,500.00	0.00	17,500.00
Fine-tuning & Fitting Mold	1,500.00	0.00	1,500.00
Shipping	2,000.00	0.00	2,000.00
Storage	1,000.00	0.00	1,000.00
Glia Labour	6,900.00	8,538.49	-1,638.49
Engineering Consultation	250.00	0.00	250.00
Glia Overhead	2,840.00	3,864.98	-1,024.98
Miscellaneous	500.00	0.00	500.00
Contingency	2,030.00	0.00	2,030.00

Injection Molded Tourniquet Project 2022:
Quarterly Fiscal Report - March 29, 2023- Q1

Part I, B: Benchtop Mold Design, Development, Build, Testing & OS Publication

Total Budget (CAD)	19,992.00	4,330.99	17,961.01
Equipment (capital)	1,500.00	0.00	4,000.00
Supplies (Non-capital)	1,200.00	0.00	1,000.00
Materials	1,200.00	0.00	1,200.00
Glia Canada Labour	5,000.00	1,315.33	3,684.67
Glia Poland Labour	6,500.00	2,078.53	4,421.47
Redesign of Mold in FreeCAD	2,000.00	0.00	2,000.00
Postage & Delivery	200.00	0.00	200.00
Overhead	1,249.50	937.13	312.37
Miscellaneous	250.00	0.00	250.00
Contingency	892.50	0.00	892.50

Part II: Production of Injection Molded Parts

Total Budget (CAD)	16,910.00	0.00	16,910.00
Molding Part	1,000.00	0.00	1,000.00
Shipping	500.00	0.00	500.00
Sewing	11,000.00	0.00	11,000.00
Glia Labour	2,155.00	0.00	2,155.00
Overhead	1,025.00	0.00	1,025.00
Miscellaneous	500.00	0.00	500.00
Contingency	730.00	0.00	730.00
Totals (CAD)	82,422.00	23,134.79	61,587.21

Project Budget Remaining (overtures are negative)	-19,941.65	39,345.56
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