

Musso: the Portable Muscle Scanner

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Who are we?

❖ **Cindy Weng**

- Lead Researcher
- Civil Engineer, BE from City College of New York
- Served as project manager for AECOM

❖ **Michael Pena**

- Financial Analyst, BA from Columbia University
- Worked as financial advisor for Apple

❖ **Imon Singha**

- Computer Programmer. BE from Stony Brook
- Worked for QlikView and Anderson Corporation

❖ **Manosh Paul**

- Computer Programmer, BE from Stony Brook
- Worked for Google for four years

❖ **Akbar Haider**

- Production Manager, BE from City College of New York
- Worked for Crompton light bulb company



Introduction

- Sport is one of the most important part of our society. Athletes are role models to the children. Almost too often the players are injured. Therefore, they are not able to participate in games.
- What is Musso?
 - Musso is a portable muscle scanner which has the ability to scan the injured muscle and provides with suggestions instantly.
 - Musso is able to reduce the number of injured participants.
- Why NFL?
 - American Football is one of the most dangerous sport where players always make physical contact with each other.

Why Musso?

- In 2017, the number of injured athletes reached up to seven per game day. (“NFL injuries 2017,” 2018).
- This is due to aggressive physical contact during the game such as getting tackled (Figure 1).
- Muscle pull during running.



Figure 1. NFL injuries. (2017)



- Injuries includes strains, bruises, fractures, dislocations, and concussions.
- Among these injuries, the average recovery time can take 4 to 6 months (“Common NFL injuries and unrealistic recovery time,” 2017).
- This is when Musso will help the NFL teams by reducing the lengthy recovery time.
- It will also keep the teams’ spirit high as it will keep their players fit on time.





Proposed Tasks

Task 1. Acquire approval to test innovation with medical staff during NFL game time.

Task 2. Research basic understanding of the medical use of x-rays.

Task 3. Order necessary materials for Musso and assemble it.

Task 4. File storage, circulation, and deletion. (Applications)

Task 5. Acknowledge and describe the risks and cautions when using the portable muscle scanner.

Task 6. Test prototype and improve it.

Schedule

Tasks	Date of Tasks				
Task 1: Acquire approval					
Task 2: Research x-ray and other methods					
Task 3: Research materials					
Task 4: Create model					
Task 5: Set criterias					
Task 6: Test Musso based on criterias					
	1	10	20	15	1
	July			August	September



Budget

- Employees (5)- \$10,080 weekly
- The product (Musso) - \$15,500 per Musso
- Materials/ Supplies- \$120,000
- Total direct cost -\$568,480



Musso prototype. Designed by Cindy Weng Zhu.

Q&A Section

Thank you!

The background is a solid orange color. In the top right corner, there are several decorative elements: a small orange circle, a larger orange circle, and a medium orange circle, all with a slight gradient and a shadow effect.