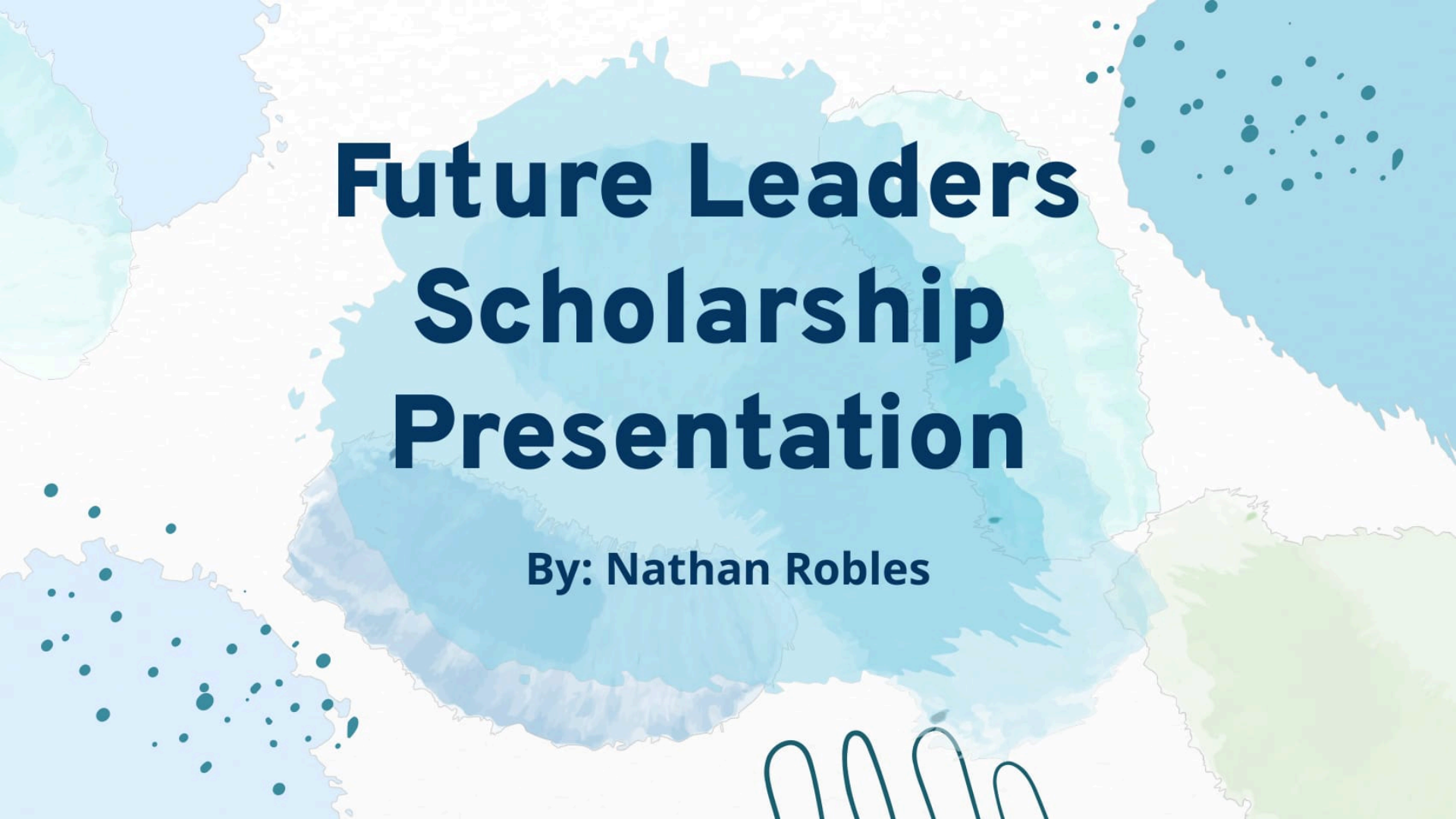


The background features several overlapping watercolor-style shapes in shades of light blue, teal, and pale green. Scattered throughout are numerous small, dark blue dots of varying sizes. At the bottom center, there are faint, stylized outlines of what appear to be fingers or a hand.

# **Future Leaders Scholarship Presentation**

**By: Nathan Robles**

# Where It All Started

- Around a year ago, I accidentally crashed my e-bike on the Williamsburg Bridge
- My hand slammed into the metal railing at full speed
- X-rays showed my fourth metacarpal was shattered and I needed surgery
- The injury occurred during my varsity soccer season, immediately limiting my ability to train and compete



# The Core Realization

- After a month of healing, I learned that being “healed” does not always mean being fully functional.
- My bone healed long before my movement and strength returned
- Recovery required retraining movement, not just repairing bone
- From this injury and occupational therapy, it was made clear that progress heavily depended on consistency and behavior





# From Patient to Intern

- Returned to the hospital as a pre-operative intern in NYPQ through China AIDS Fund
- Took initiative by managing pre-op bays, patient intake, and preparing patients for various surgeries
- Working in the pre-op department showed me how patient care actually runs behind the scenes



# Career Direction and Scope

- Inspired from those experiences, orthopedics interests me because it restores movement, not just treats disease
- It pushed me to care about long-term quality of life, not quick fixes
- Rehabilitation and injury recovery is so crucial because they give people their physical independence back.
- Orthopedic surgery is a serious long-term possibility as I continue to explore the field



# Extending Beyond the Hospital

- I created a simple digital injury recovery and prevention guide for teammates across age groups on my club team.
- Through my role as a Science Olympiad Co-president, I shifted into a mentoring role in Anatomy & Physiology and other biology-related events, creating study materials and supporting teammates and partners.

## Page 1: Prepping the Body – Warm-Ups & Mobility

### Why Dynamic Warm-Ups Matter

Dynamic warm-up stretches get your muscles working, get more blood flowing, and loosen up your joints. In contrast to static stretches, where the position is held, moving movements will help improve coordination and limit the risk of injury. Static stretching should only be done after exercise or dynamic work. Skipping the warmups (like I used to do before) gave me a higher chance of getting injured or having more joint pain the following days.

### Example Full-Body Warm-Up (6-7 minutes)

- Jumping Jacks: 30 seconds
- Leg Swings (front to back and side to side): 10 each leg
- Arm Circles: 10 forward, 10 backward
- Walking Lunges with Twist: 10 total
- High Knees: 30 seconds
- 90 90 Hip Stretch: 10 per side
- Butt Kicks: 30 seconds

This routine activates the entire body and prepares muscles for optimal performance.

### Mobility Drills to Add

- Hip Flexor Stretch
- Standing Quad Stretch
- Seated Hamstring Stretch
- Foam Rolling (quads, hamstrings, calves)
- Shoulder Rolls

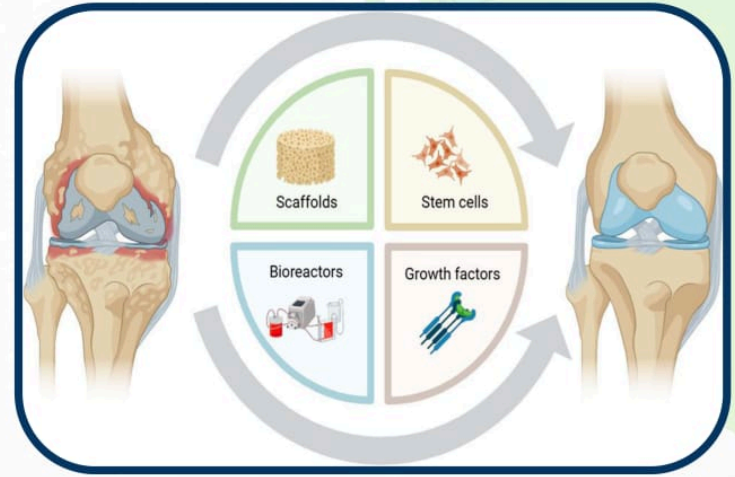


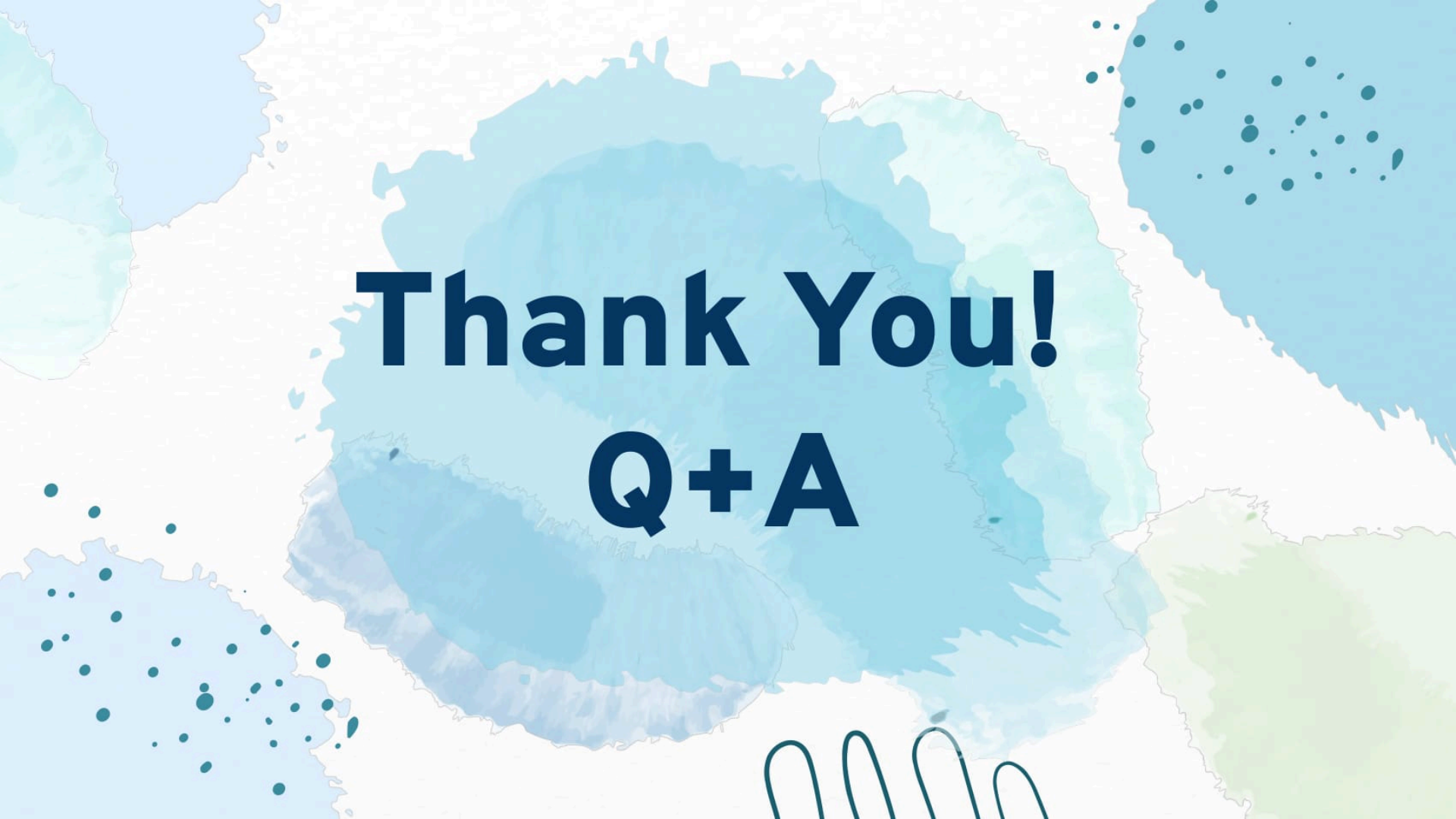
Use these 2-3 times per week to *improve range of motion and reduce tightness*.



# Looking Forward

- Plan to study neuroscience, physiology, or biochemistry in college
- Focused on building a strong STEM foundation for medicine
- Interested in regenerative medicine
- I hope to continue building a career in restoring movement through more hospital work, EMS involvement, and research.



The background features several overlapping watercolor-style shapes in shades of blue, teal, and light green. Scattered throughout are numerous small, dark blue dots of varying sizes. At the bottom center, there is a simple line drawing of a hand with fingers slightly spread.

**Thank You!**  
**Q+A**