California Science Center

CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.)
amanda m mais

Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)
Amount of Electricity Produced by the Gastrocnemius Muscle on Certain Surfaces

Science Fair Use Only

S1513

Division
_ Junior (6-8) _X_ Senior (9-12)

Preferred Category (See page 5 for descriptions.)
15 - Physiology

Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.)
Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.

Problem Statement: On which surface will the gastrocnemius muscle produce the most electricity?

Hypothesis: The gastrocnemius muscle will produce the most electricty on the concrete surface.

Materials: All three surfaces: sand, concrete, and gym mat were provided by Phil Requejo. The electrodes, video monitor, volleyball net, and camera were also provided by Phil Requejo.

Results: The gastrocnemius muscle produced electricty on all three surfaces, but it produced the most on the gym mat surface.

Conclusions: The collected data did not seem to support the hypothesis that the gastrocnemius muscle would produce the most electricity while jumping on the concrete surface. The mat surface produced the most electricty and then followed by the sand surface. Jumping on the concrete produced the least. In conclusion, concrete is the easies to jump on.Amount of Electricity

Summary Statement (In one sentence, state what your project is about.)
Amount of Electricty Produced by the Gastrocnemius Muscle on Certain Surfaces.

Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.
Used lab equipment at USC under the direction of Philip Requejo PHD student