





LSU HEALTH
NEW ORLEANS
School of Medicine

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Background

Background text describing the study's context.

Preliminary Model

Design of the ELS model

Age Group	Age Size	Average Size	
Gender	70% male	95% female	
Stimulants	70% cocaine	20% heroin	10% none

Results

Bar chart showing Mean Time to Control of Bleeding (min) for two groups. The Y-axis ranges from 0 to 10. The X-axis is labeled 'Type of Tourniquet'.

Conclusions and Future Steps

Conclusions and Future Steps text.

STOP THE BLEED

ELS validated in Prospective Study

To validate the model, a trial run with emergency medical students, with experience in applying tourniquets to the torso, was conducted. The model was used to simulate a patient with a torso injury. The model was used to simulate a patient with a torso injury. The model was used to simulate a patient with a torso injury.

Methods and Materials

To test the model, the researchers used a commercial CAT and a custom-made ELS model. The model included a torso, a head, and a neck. The model was used to simulate a patient with a torso injury. The model was used to simulate a patient with a torso injury.

Procedure and Testing

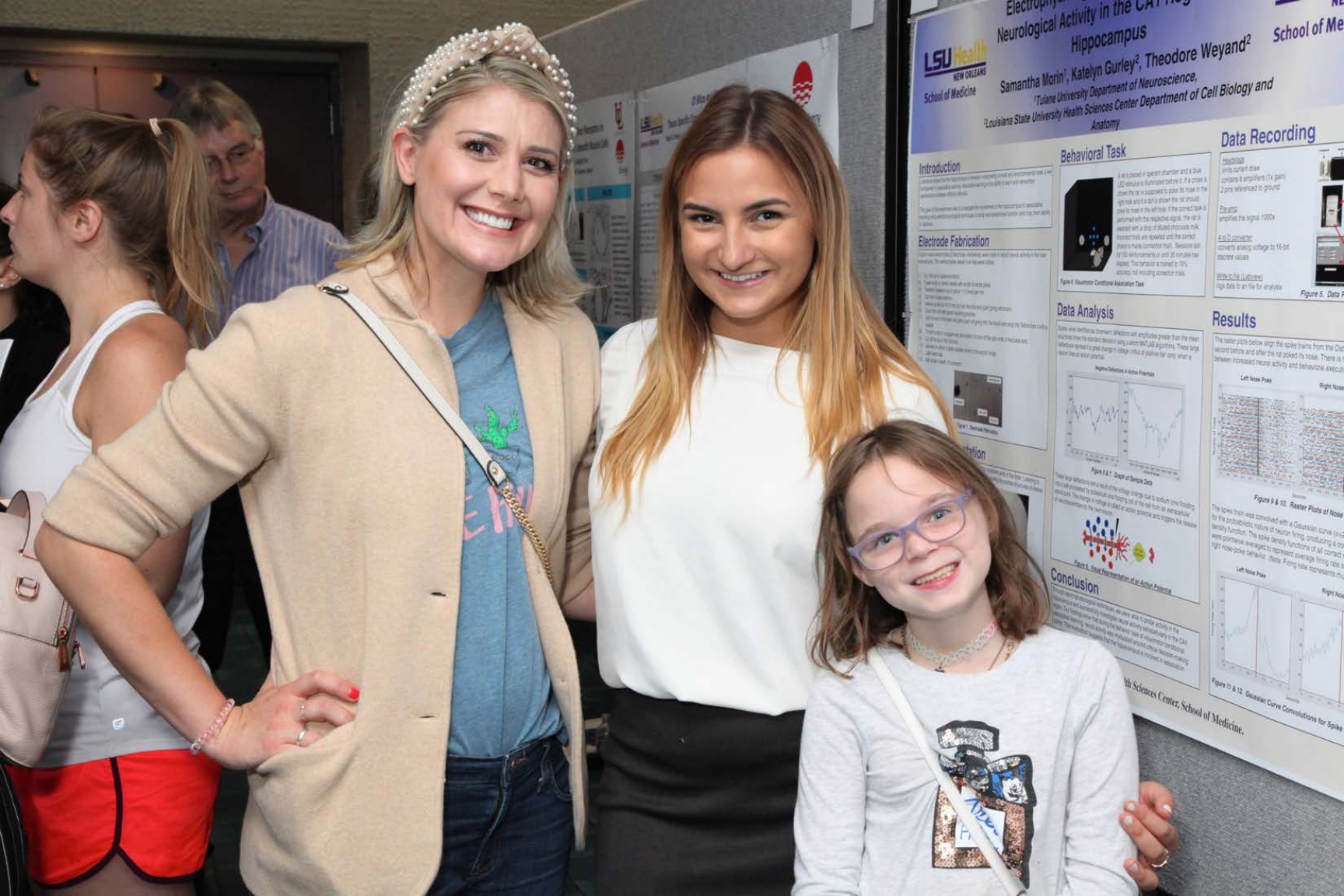
10 subjects (5 female and 5 male) were recruited for the study. The subjects were divided into two groups: the control group and the ELS model group. The control group used a commercial CAT, and the ELS model group used the custom-made ELS model. The subjects were tested on their ability to control bleeding from a torso injury.

Figure 1. Side view of the ELS Model

Figure 2. (A) ELS model with CAT; (B) ELS model with ELS model

Figure 3. Subject testing of tourniquet on the ELS Model

This research project was supported through the LSU Health Sciences Center.



Electrophysiological Activity in the Hippocampus
 Samantha Morini¹, Katelyn Gurley², Theodore Weyand²
¹Tulane University Department of Neuroscience,
²Louisiana State University Health Sciences Center Department of Cell Biology and Anatomy

Introduction
 The hippocampus is a critical region for learning and memory. It is composed of several subregions, including the dentate gyrus, CA1, CA2, CA3, and CA4. The CA1 region is particularly important for the storage and retrieval of information. In this study, we investigated the electrophysiological activity in the CA1 region of the hippocampus in response to a behavioral task.

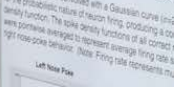
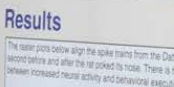
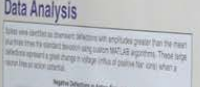
Electrode Fabrication
 The electrodes used in this study were fabricated using a multi-step process. First, a silicon wafer was coated with a layer of photoresist. The photoresist was then patterned using a photolithography process to create the desired electrode geometry. The electrodes were then etched into the silicon wafer using a dry etching process. Finally, the electrodes were coated with a layer of gold to improve their electrical conductivity.

Behavioral Task
 The behavioral task used in this study was a spatial working memory task. The subjects were trained to learn a sequence of locations in a circular arena. The subjects were rewarded with a drop of sucrose solution when they correctly recalled the sequence of locations. The subjects were then tested on their ability to recall the sequence of locations after a delay period.

Data Analysis
 The electrophysiological data were analyzed using a series of steps. First, the raw data were filtered to remove noise and artifacts. The filtered data were then averaged across trials to produce a mean response. The mean response was then compared to the baseline activity to determine if there was a significant change in activity during the behavioral task.

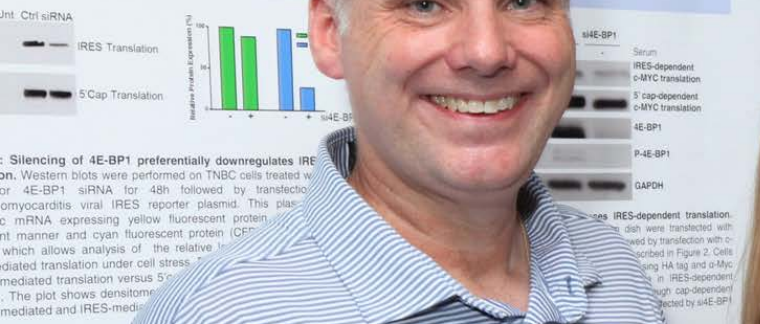
Results
 The results of this study show that there is a significant increase in electrophysiological activity in the CA1 region of the hippocampus during the behavioral task. This increase in activity is observed in all subjects and is consistent across trials. The increase in activity is most pronounced during the delay period, suggesting that the hippocampus is actively engaged in memory processing during this time.

Conclusion
 The results of this study provide evidence that the hippocampus is actively engaged in memory processing during the behavioral task. The increase in activity in the CA1 region of the hippocampus during the delay period suggests that the hippocampus is playing a critical role in the storage and retrieval of information.



Unfolded Protein Triple Negative Breast Cancer Cell Survival

1,2, Duane Jeansonne
ne, 2LSU Health Sciences Center, S



Silencing of 4E-BP1 preferentially downregulates IRES-mediated translation. Western blots were performed on TNBC cells treated with si4E-BP1 or siRNA for 48h followed by transfection with oncovaditis viral IRES reporter plasmid. This plasmid contains mRNA expressing yellow fluorescent protein (YFP) in a cap-dependent manner and cyan fluorescent protein (CFP) in an IRES-dependent manner. The plot shows densitometric analysis of IRES-mediated and IRES-independent translation.

Health Behavior Differences between African-American and White Breast Cancer Survivors



Angelle Brown, Mirandy Li, Yu-Hsiang Kao, PhD, Tung-Sung Tseng, PhD, Hui-Yi Lin, PhD
Louisiana State University Health Science Center, School of Public Health



Background

Breast cancer is the most commonly diagnosed cancer among women in the United States. The health behaviors of cancer survivors are important for the prevention of cancer death.

National Health Interview Survey

Results (cont.)

Most cancer survivors suffer worse health behaviors than the general population. African-American women have a higher death rate than White women.

Health behaviors of breast cancer survivors by race/ethnicity and education level.

Behavior	African-American	White
Smoking	~15%	~10%
Alcohol use	~10%	~15%
Physical activity	~10%	~15%
Healthy diet	~10%	~15%



Entergy

Immunohistochemistry of α7 on mouse lung sections. A: control section without antibody. B: immunostained α7-nAChR antibody. nAChR was expressed in SMC, and macrophages (brown signal). BEC, bronchial epithelial cells; SMC, smooth muscle cells; a, alveolar; *, macrophages.

expressed weakly. α9 are expressed at the highest level. In tissue sections, α9 is expressed in the smooth muscle macrophages. α9 expression is confirmed by qPCR showing

α9 in pulmonary and α3 nAChR in nicotine-induced inflammation in α9

Workforce Training Grant

LSU Health

NEW ORLEANS

School of Medicine

Of Mice and Many Repeats:

Tissue Specific Expansion in a Friedreich Ataxia Mouse Model

Authors: [Name], Jennie [Name], Caroline Burroughs, Ashley Henderson, and Ed Grabczyk
Department of [Name], Louisiana State University Health Sciences Center



Entergy

Gain in the Brain

Ear Today, Tomorrow?

Friedreich's ataxia is most often caused by expansion of CAG repeats. We also investigated death of neurons in the brain and life a



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30

Physiological Techniques to Study Activity in the CA1 Region of the Hippocampus

Authors: [Name], Kathryn Gurley, Theodore Weyand
LSU Health Sciences Center, Department of Neuroscience, Louisiana State University Health Sciences Center, Department of Cell Biology and Anatomy





Differences in Fat Signaling in Obesity Prone and Obesity Resistant Rats
Energy

Sulindac Sulfide's Effect on Hepatic Lipid Metabolism in Obese Mice
Samuel Martin, Chao, et al.
LSU Health NEW ORLEANS
School of Medicine
Stanley S. Scott Cancer Center
Department of Physiology
Louisiana State University

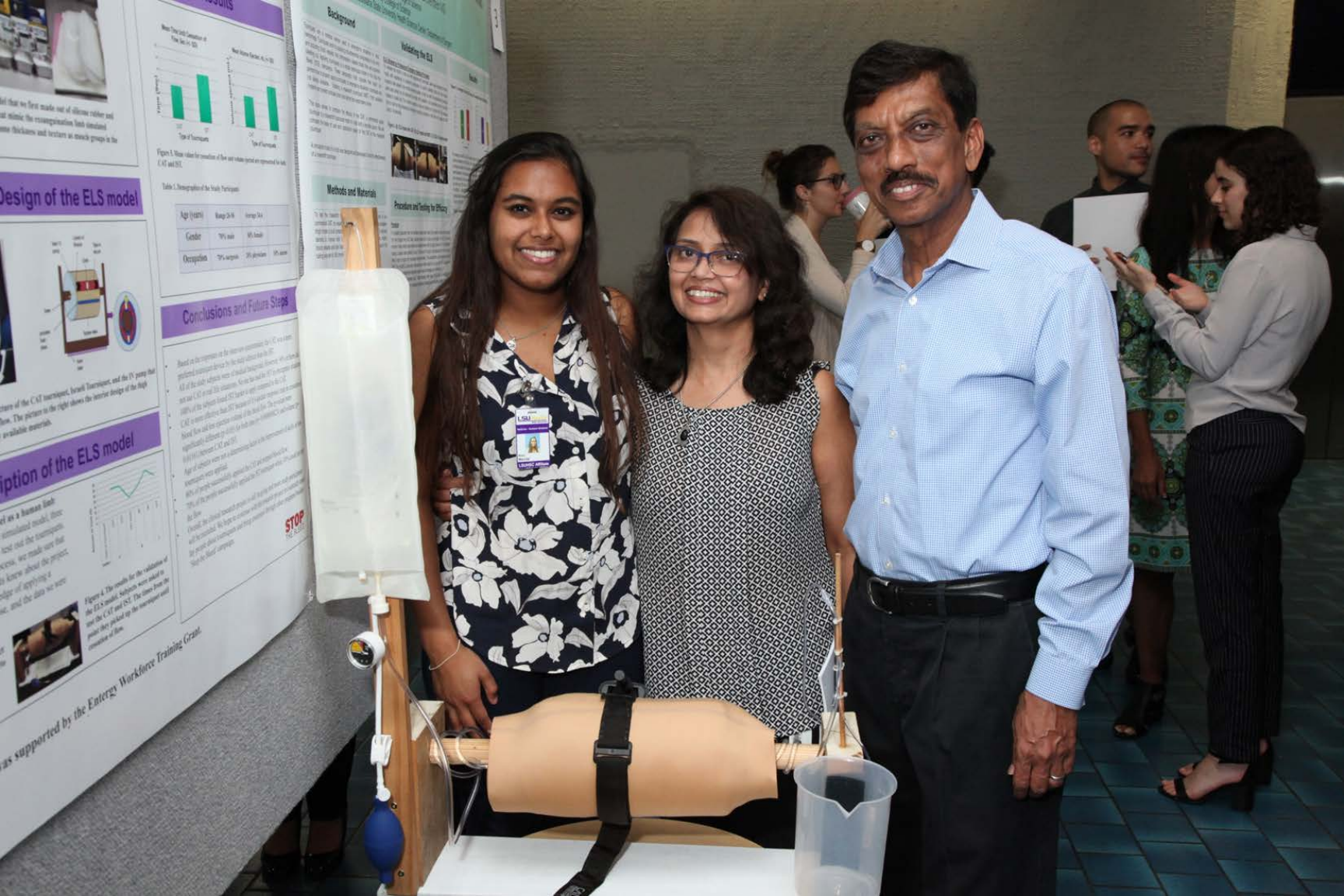
Introduction
Obesity is a global health problem that is associated with a number of chronic diseases, including type 2 diabetes, cardiovascular disease, and certain types of cancer. The underlying mechanisms of obesity are complex and involve a combination of genetic, environmental, and behavioral factors. One of the key areas of research in obesity is the role of fat signaling in the development of obesity and its associated complications. This study aims to investigate the effects of Sulindac Sulfide on hepatic lipid metabolism in obese mice.

Proposed
The proposed study will involve the use of obese mice and the administration of Sulindac Sulfide. The study will measure various parameters related to hepatic lipid metabolism, including liver weight, lipid content, and gene expression. The results of the study will be compared to those of control mice.

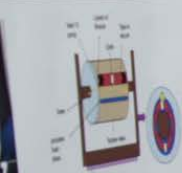
Results
The results of the study will be presented in a series of graphs and tables. The graphs will show the changes in liver weight, lipid content, and gene expression over time. The tables will provide a summary of the data for each parameter.

Materials and Methods
The study will be conducted using a randomized, controlled design. The mice will be divided into two groups: control and Sulindac Sulfide-treated. The control group will receive a placebo, while the Sulindac Sulfide-treated group will receive a daily dose of Sulindac Sulfide. The mice will be monitored for weight gain and other parameters over a period of 12 weeks. At the end of the study, the mice will be sacrificed, and their livers will be analyzed for lipid content and gene expression.

This research project was supported through the LSU Energy Program.



Design of the ELS model



...of the C&I treatment, hand treatment, and the IV pump that ... The picture to the right shows the interior design of the ... available materials.

Simulation of the ELS model



Figure 4. The results for the validation of the ELS model. ... The data from the ... and the data we use.

... supported by the Entergy Workforce Training Grant.

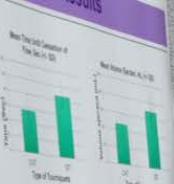


Figure 1. Bar chart to compare the ... of the ... C&I and IV.

Table 1. Description of the Study Participants

Age (years)	Range 20-30	Average 24
Gender	70% male	30% female
Occupation	70% caregiver	30% physician

Conclusions and Future Steps

Based on the response to the literature review, the ... of the ... All of the data collected were ... The ... of the ... The ... of the ... The ... of the ...

Background

Validating the ELS

Methods and Materials

Procedure and Testing for Effectiveness

STOP

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Validating the ELS

...by Professional Emergency Medical Providers
...model, a trial run with experienced tourniquet users was conducted. A Navy
...experience in applying tourniquets on active bleeding limbs and two trauma
...asked if the model seemed realistic. A trial run with the experienced tourniquet
...med out. AI deemed the model both realistic in its consistency and in the effort
...use flow. The model is realistic in feel and density to a human limb. The average
...of the professional emergency medical providers in the trial run to apply the CAT
...conds.

ELS model with CAT; (B): ELS model with MST; (C): ELS I.V bag and pump

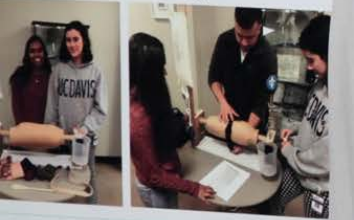


Procedure and Testing for Efficacy

(separate from the validation experiment) were first shown a video and instructed
...apply the CAT. Next, subjects were told to pick up and apply the CAT in a timely
...stop watch was started and subjects were told to begin. Once the I.V. fluid stopped
...jects were asked to stop. The amount of liquid in the reservoir and the amount of
...to apply the tourniquet were recorded. The experiment was repeated using the
...MST, a belt and a wooden spoon were laid out as was the CAT. Subjects were
...a questionnaire regarding ease of use and background information.
...cluded 3 females and 7 males ranging from ages 26-56 with an average age of
...jects were of a medical professional background including nurses, surgeons and

...tion
...ent of time (sec) from picking up the materials/tourniquet to the cessation of flow was
...The stopwatch began when the liquid began to flow and stopped when the fluid
...owing. The amount of fluid expelled (mL) from the tubing into the reservoir was also
...after each tourniquet application. The survey questions answers were also recor-

Subject testing of tourniquet on the ELS Model



...was supported through the LSU Health Sciences Center

Results

Figure 4. A: Average Time Until COF (sec); B: Average Volume Collected (mL)



On average, the MST took 2 seconds longer than the CAT to stop the flow. The
...volume collected for the CAT was 35 mL and for the MST was 38 mL. These
...tourniquet application for this experiment were discarded. A t-test was also
...also conducted for the volume of fluid collected. The p-value for the
...time until COF was P=0.420617. The CAT had a success rate of 100%.
...P=0.420617. The CAT had a success rate of 100%. Success rates were much
...do so for the MST.

Figure 5. Average Time Until COF (sec)







