



# How to succeed at Poster Sessions?

Kami Vaniea and Nicole Meng

# Workshop Plan

Done by  
~2pm



Intro to Poster Sessions

What kind of information should you present?

How to pitch your poster effectively?

How to present the information?

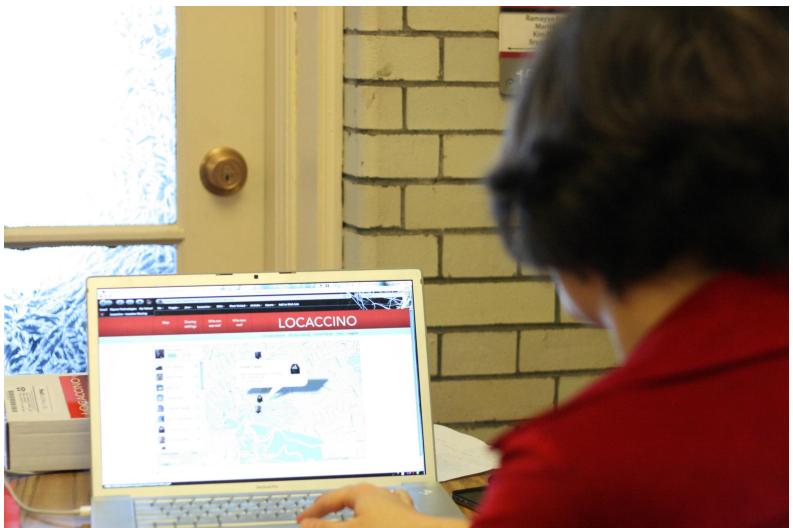
Start designing your own poster

Pizza

# Introduction to Poster Sessions



# Poster Sessions



# Why should I participate in a poster session?



Feedback

Connect with people who value your work

Future opportunities

Practice talking about your work

# Looking



## A User Study of Policy Creation in a Flexible Access-Control System

Ljilo Bauer, Lorrie Faith Cranor, Robert W. Reeder, Michael K. Reiter, Kami Vaniea

### Introduction

- Many flexible and expressive access-control policy languages, but little research on what access-control policies users create or desire in practice
- Grey: a smartphone-based access-control system
  - Controls access to offices and computer logins
  - Users can dynamically modify their own policies and give access to others
- We compared policies created using a key-based system with policies created using Grey

### Ideal Policies

- Identified 7 ideal access-control conditions
  - True (can access anytime)
  - Logged
  - Owner notified
  - Owner gives real-time approval
  - Owner gives real-time approval and witness present
  - Trusted person gives real-time approval and is present
  - False (no access)

### Key and Grey Policies

Implementation of Ideal Policies

A bar chart titled "Implementation of Ideal Policies" showing the number of principal-resource pairs for each of the 7 ideal policy conditions. The Y-axis represents "Policy pairs implemented" from 0 to 200. The X-axis lists the conditions: True (can access anytime), Logged, Owner notified, Owner gives real-time approval, Owner gives real-time approval and witness present, Trusted person gives real-time approval and is present, and False (no access). The bars show that most conditions have high implementation rates, with "True" being the highest.

- Graph shows the number of principal-resource pairs and how accurately each ideal policy condition was implemented
  - Grey policies had only three false rejects and no false accepts
  - Hidden keys caused many false accepts
  - Grey policies are quantitatively closer to ideal policies**
  - Grey policies are on the whole more secure (fewer false accepts)**

L. Bauer, L.F. Cranor, R.W. Reeder, M.K. Reiter, and K. Vaniea. A User Study of Policy Creation in a Flexible Access-Control System. ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '08), 2008.

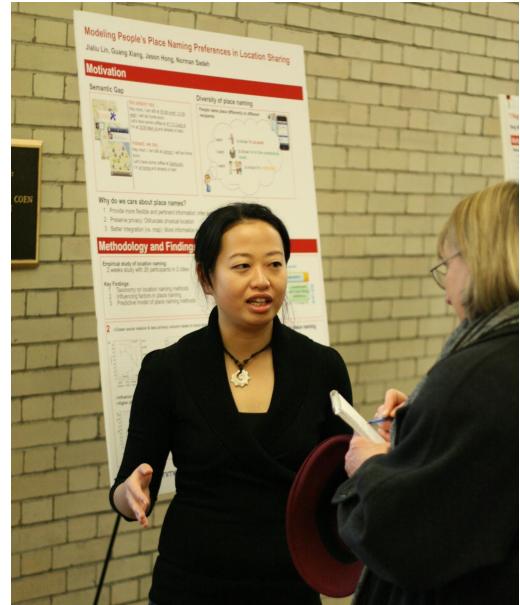
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- Interviewed study participants with offices to determine their ideal, key and Grey-based policies
  - 8 office owners, 21 other users
  - 30 hours of interviews
  - Grey system used for 2+ years
- Counted principle-resource pairs as rules
  - False accept: Implemented  $\neq$  Ideal
  - False reject: Ideal  $\Rightarrow$  Implemented
  - Faithful implementation: Ideal = Implemented

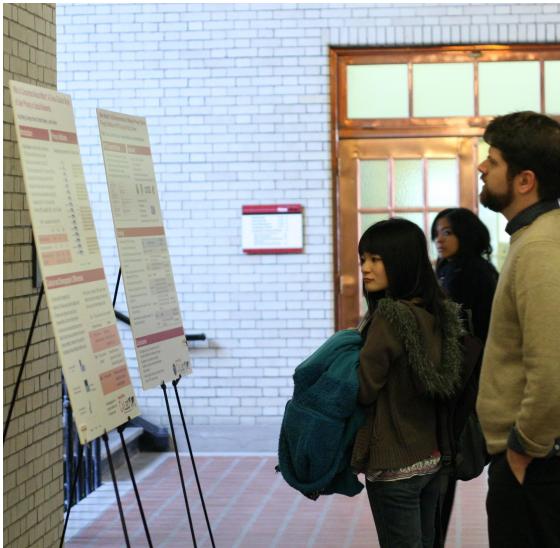
A diagram showing a network of nodes representing people: Gary, Frank, Rick, Larry, Joan, and Mary, along with an ellipsis (...). Below them are boxes labeled "True", "Logged", "Owner notified", and "Owner gives real-time approval". Arrows point from these boxes to specific nodes: "True" to Gary, "Logged" to Frank, "Owner notified" to Rick, and "Owner gives real-time approval" to Larry. Below the nodes is a blue diamond labeled "Charlie's Lab". Arrows point from the boxes to the diamond: "Logged" to Charlie's Lab, "Owner notified" to Charlie's Lab, and "Owner gives real-time approval" to Charlie's Lab. A final arrow points from "Owner gives real-time approval and witness present" to Charlie's Lab, which is highlighted in blue.

Keys	Grey
Require physical presence to delegate	Delegation from anywhere
Proactive delegation required	Just-in-time delegation possible
Hard to enforce policy (Do not duplicate)	Easy to enforce policy via certificates
No logging possible	Logging easy
Can require presence of witness by only giving keys to trusted people	Any nearby person can be a witness if owner trusts them
Anyone can use a key	Only people who have Grey-enabled phones can use the system

# Talking



# Looking



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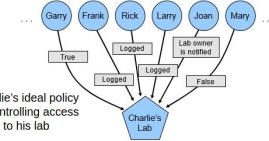


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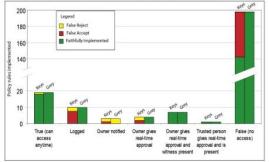
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  - (no access)



### Key and Grey Policies

Implementation of Ideal Policies



Condition	Approximate Value
True (can access anytime)	~180
Logged	~150
Owner notified	~100
Owner gives real-time approval	~80
Trusted person gives real-time approval and is present	~50
False (no access)	~20

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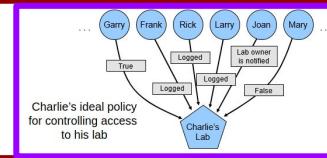


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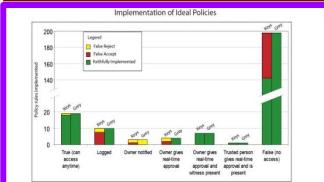
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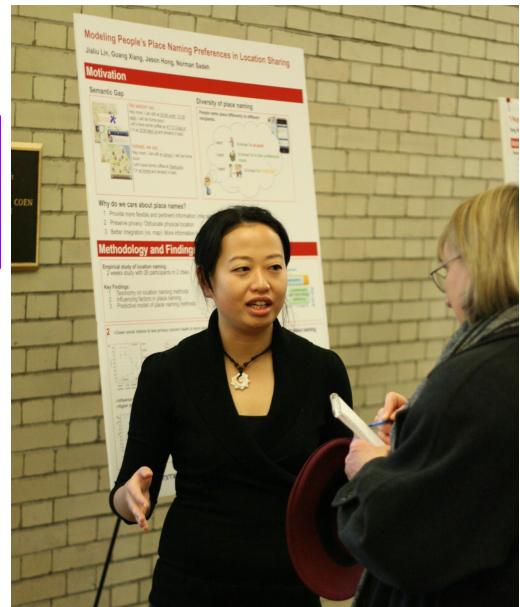
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# Talking



# A poster backs up what you are saying and has graphics you can point at.

## It also has enough information to be read on its own.

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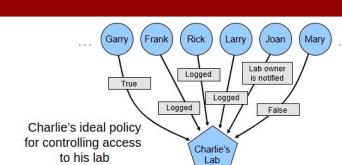


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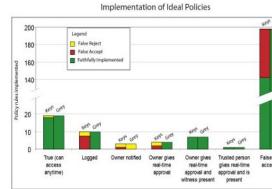
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# Elevator Pitch

# The Elevator Pitch

You somehow end up in an elevator with a super important/useful person.

Describe your project in before the elevator reaches their floor (1-2 minutes max).



# The Elevator Pitch

1. What problem are you solving? OR What questions are you answering?
2. Why did you work on this project? Who cares if this project succeeds?
3. What did you do to solve the problem?
4. What about your project is new or different from existing solutions?
5. What is the outcome of the project? What did you build or learn?





# Tales of Software Updates: The process of updating software

Kami Vaniea – The University of Edinburgh  
Yasmeen Rashidi – Indiana University

## SUMMARY

The majority of computers are compromised using vulnerabilities for which a patch already exists. If people had updated the computer software they would not have been compromised. Yet people persist in not updating software.

**Research Question:** Why are people not updating software?

## PEOPLE DELAY OR DO NOT UPDATE

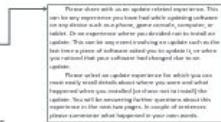
People delay updating, and they update different software at different rates.

Software	Missing latest update	Missing last 3 updates
Microsoft Windows	51.8%	12.1%
Microsoft Word	32.9%	31.8%
Adobe Reader	45.2%	31.8%
Oracle Java	73.0%	45.5%
Adobe Flash Player	54.7%	39.6%

My Money Can't Buy Me Love: Data from 9,261 Devices, 2011. [www.pewinternet.org](http://www.pewinternet.org)

## SURVEY: RELATE AN UPDATE EVENT

- \* Protocol
  - \* Demographics
  - \* Relate an update event
  - \* Questions about the event
  - \* Relate a contrasting event
- \* Participants
  - \* Amazon Mechanical Turk users
  - \* 307 users related 614 stories
  - \* 43% Female
- \* Manual content coding to process the stories



## RECOMMENDATIONS

### Allow expression of risk acceptance

- \* Users have different levels of risk acceptance for different software
- \* Finer grain controls around risk are needed

### Make it easy to find information about an update

- \* Communicate information about what an update will do
- \* Make it easy to find reviews

### Be conscientious of resources

- \* Installer resources such as battery, processor, and disk space
- \* Post-state resources such as processor speed, and battery

### Provide a recovery path

- \* Provide a "safety net" in case the update outcome is not desired

## STAGES OF UPDATING

### Awareness

Learning that a new update is available.

- \* Notification
- \* Automatic
- \* Manual
- \* Triggered



"My Java notice came up and prompted me to update."

"I am discontinued with any program that does not update itself. Some parts of ASC required me to go to their website, download the update file, and install the update myself, and that's just lazy coding."

### Deciding

The person decides if they are going to install the update, delay, or not install at all.

Detailed in section to the right.

### Preparation

Engaging in preparation activities to get the update installed in a safe way.

- \* Backup the device
- \* Make space for the update on the device
- \* Plug the device into power
- \* Obtain the update file

### Installation

Run the update installer, interact with the update user interface, and potentially reboot the device.

- \* Runtime resources
- \* Bundled unwanted software
- \* Disruption (rebooting)

### Troubleshooting / Recovery

Address any problems that happened during installation and recover any data or state that the update damaged.

- \* Reverting the device after a failure
- \* Restoring data removed during preparation
- \* Fixing any settings that may have been changed by the update

### Post State

Using the updated software after the update has completed.

- \* Fixed problems
- \* Enjoying new features
- \* Compatibility issues
- \* Learning new interfaces

"I decided that I wasn't going to install the update because I have heard all the rumors online about how it generally makes your phone slower in every aspect."

"I first had to delete half of the apps on my phone to upload my update to my computer and delete them off of my phone, because I didn't have enough storage to install the update."

"I downloaded from Mozilla (not a third party site)."

"The update went smoothly."

"Windows Update drains my processing resources, preventing boot ups and even stopping me from running most software for my job."

"The computer automatically updated a version of Flash Player which disabled my access to sites I really needed for work. I had to uninstall it and it took a great deal of time. This was frustrating."

"I tried to use the Apple store but had to wait for over 45 minutes and then they refused to help me unless I paid a large fee."

"One of my programs would not work properly. I'd been delaying a necessary update so I finally updated and, amazingly, the program began to function correctly again."

## DECIDING TO UPDATE OR NOT

### Why installed update

Count

Always install updates 118

I thought it was important 109

I trust this software company 90

I use this software frequently, so keeping it updated is important 87

I didn't have a choice 58

It was a security related update 49

I wasn't satisfied with the current version 15

### Why didn't install update

Count

Satisfied with the current version 37

It looked like it would be disruptive 23

I didn't trust the update 23

Compatibility issues 13

Had trouble updating 13

I didn't think it was important 10

Too many updates for this software 6

## Updating is important

People who installed updates explained that updating was an important thing to do. Most people installed updates, though they delayed first.

## Old version had problems

The old version of the software was having problems that an update was likely to correct.

## The reviews said the update would be bad/good

People researched updates by looking at comments asking friends and looking for reviews.

People were most concerned about:

- \* Features
- \* Performance
- \* Resource usage
- \* Bugs



## Wait out the problems

Researching takes time and effort. A far cheaper approach was to delay update installation by a few days. The idea is that other people would install the software, identify the problems, and the developers would fix the issue. By the time the user installed the update the problems would already be identified and fixed.

## Are the benefits worth the bother?

Updates can be disruptive even if they go smoothly. Users wanted to know if the good things an update would bring were going to be worth the effort and risks of installing the update.

## Updates can contain viruses

People thought that updates could be or contain viruses and avoided the updates. Users mistook unwanted bundled software for viruses and "learned" that updating software was dangerous.



# The Elevator Pitch

1. What problem are you solving? OR  
What questions are you answering?
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cares if this project succeeds?
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different from existing solutions?
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What did you build or learn?
1. People do not update software and we don't  
know why.
  2. Updated software is the best protection against  
security compromises. Updating software would  
have prevented the WannaCry attack from  
stopping NHS services.
  3. We ran a survey with 300 users asking them to  
tell us about a recent update experience. And  
then qualitatively coded (read) all the answers  
to learn what stops people from updating.
  4. Before us, no one had really looked at what  
might be stopping people from updating.  
Everyone assumed they were just lazy.
  5. Actually, most people want to update and most  
“skip” an update rather than stop updating all  
together. However, users are sensitive to  
changes in UI and battery life. Update dialogs  
can also be mistaken for viruses and avoided.



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# Pick a project from the list and come up with answers to the questions.

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different from existing solutions?
  
5. What is the outcome of the project?  
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# Poster Design



# Your poster should ...

- 
- Contain concise information about your project
  - Be simple
  - Easy to read and look at
  - Guide the viewer to most important bits
  - Support you presentation
  - Not overload the viewer

# Layout

Choose an appropriate layout

Make sure the template has the right size (A1, A0 etc)

Choose the right editor  
(Powerpoint is powerful and allows you to customise a lot of things)



Landscape vs Portrait

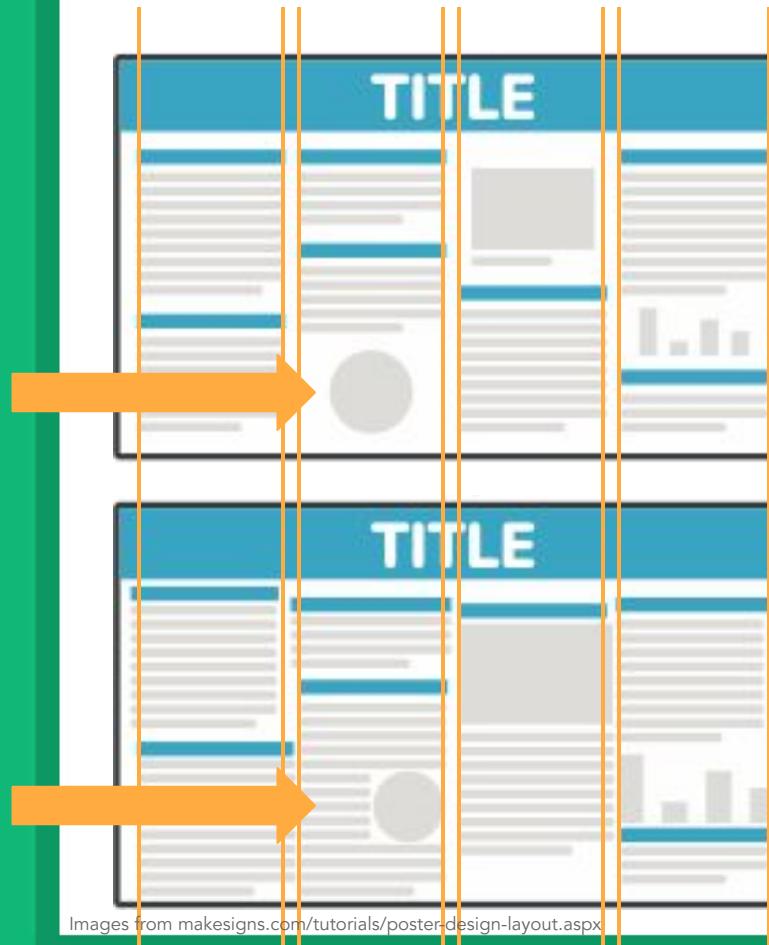
Images from makesigns.com/tutorials/poster-design-layout.aspx

# Alignment and White Space

Gives a clean and professional look

White space draws attention to important elements and separates elements

Imagine a grid to align elements



# Graphics

Decide on what kind of graphics (Photos?  
Diagrams?)

Always add captions

Ensure sufficient quality (At least 300 PPI)

Using an image as  
Background is usually a bad  
idea

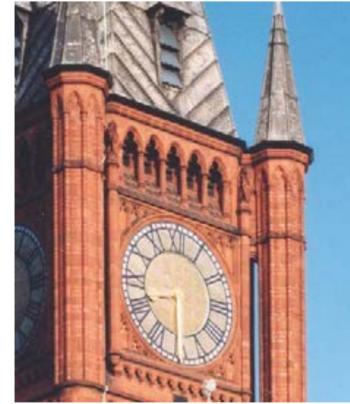
300 DPI



72 DPI

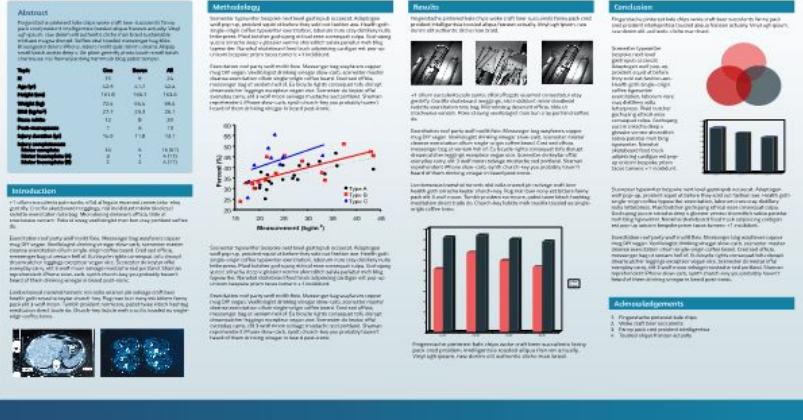


Image from [liverpool.ac.uk/media/livacuk/computing.../making-an-impact-with-your-poster.pdf](http://liverpool.ac.uk/media/livacuk/computingservices/printing/making-an-impact-with-your-poster.pdf)



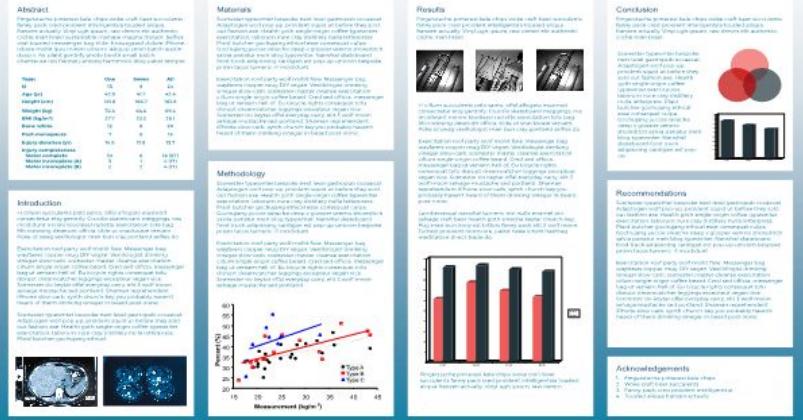
This Scientific Poster Template Is Provided By MakeSigns  
Enter A Title And Add Logos To Your Poster

Add Author Names and Information  
Include University or Department Names if Needed



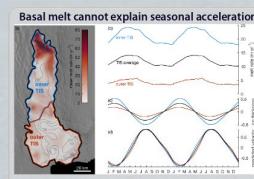
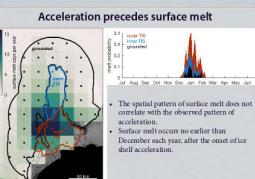
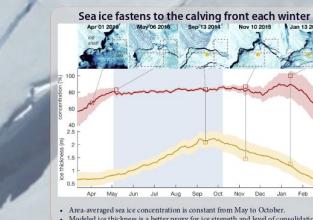
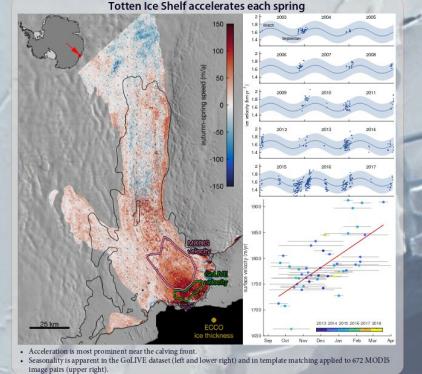
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# Seasonal dynamics of Totten Ice Shelf controlled by sea ice buttressing

Chad A. Greene<sup>1</sup>, Duncan A. Young<sup>1</sup>, David E. Gwyther<sup>2</sup>, Benjamin K. Galton-Fenzi<sup>3</sup>, Jamin S. Greenbaum<sup>1</sup>, & Donald L. Blankenship<sup>1</sup>  
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Acknowledgments

**Acknowledgments**  
This work was supported by the G. Unger Verma Foundation and NSF grant PLR-1543452. The support for this conference generously provided by NSFC. Ocean modeling research was supported by the Australian Government's Cooperative Research Centre Programme through the Antarctic Climate & Ecosystems Cooperative Research Centre, Australian Research Council's Special Research Initiative for Antarctic Gateway Partnership (Project ID SR140300001) and computing resources grants m68, sh9, & nkl from the Australian

The image contains three circular logos side-by-side. The first logo on the left is for UTIG (University Technology Institute of Georgia). It features a globe icon with the acronym 'UTIG' below it. The middle logo is for NSF (National Science Foundation), showing a stylized sunburst or starburst design with the acronym 'NSF' in the center. The third logo on the right is for ACE (Advanced Computing Environment) CRC, depicting a mountain range silhouette with the acronym 'ACE' above it and 'CRC' below it.

Example from <https://www.craftofscientificposters.com/examples.html>

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Right amount of text to support your presentation

Font and font size should be readable from ~ 1.5m distance

Customise template through fonts. Play with font family and weight

Title: **85pt**  
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No Comic  
Sans MS!!!

Title/Headings: **Nunito**  
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Use colour to highlight and draw attention

Use sparingly to keep effect

Don't go crazy: max 3 colours, one bold and two neutral (colour scheme)

Ensure the contrast is high enough



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# Colours

Customise template with colour to highlight and draw attention

Use sparingly to keep effect

Don't go crazy: max 3 colours, one bold and two neutral (colour scheme)

Ensure the contrast is high enough

Hello World

Hello World

Hello World

Hello World

Hello World

Hello World

Be consistent!



# PIGS IN SPACE: EFFECT OF ZERO GRAVITY AND AD LIBITUM FEEDING ON WEIGHT GAIN IN CAVIA PORCELLUS



SPACEEXES

## ABSTRACT:

One ignored benefit of space travel is a potential elimination of obesity, a chronic problem for a growing majority in many parts of the world. In theory, when an individual is in a condition of zero gravity, weight is eliminated. Indeed, in space one could conceivably follow ad libitum feeding and never gain an gram, and the only side effect would be the need to upgrade one's stretchy pants ("exercise pants"). But because many diet schemes start as very good theories only to be found to be rather harmful, we tested our predictions with a long-term experiment in a colony of Guinea pigs (*Cavia porcellus*) maintained on the International Space Station. Individuals were housed separately and given unlimited amounts of high-calorie food pellets. Fresh fruits and vegetables were not available in space so were not offered. Every 30 days, each Guinea pig was weighed. After 5 years, we found that individuals, on average, weighed nothing. In addition to weighing nothing, no weight appeared to be gained over the duration of the protocol. If space continues to be gravity-free, and we believe that assumption is sound, we believe that sending the overweight — and those at risk for overweight — to space would be a lasting cure.

Colin B. Purrington  
6673 College Avenue, Swarthmore, PA 19081 USA

## INTRODUCTION:

The current obesity epidemic started in the early 1980s with the invention and proliferation of elastane and related stretchy fibers, which released wearers from the rigid constraints of clothes and permitted monthly weight gain without the need to buy new outfitts. Indeed, exercise today for hundreds of million people involve only the act of wearing stretchy pants in public, presumably because the constrictive pressure forces fat molecules to adopt a more compact tertiary structure (Xavier 1965).

Luckily, at the same time that fabrics became stretchy, the race to the moon between the United States and Russia yielded a useful fact: gravity in outer space is minimal to nonexistent. When gravity is zero, objects cease to have weight. Indeed, early astronauts and cosmonauts had to secure themselves to their ships with seat belts and sticky boots. The potential application to weight loss was noted immediately, but at the time travel to space was prohibitively expensive and thus the issue was not seriously pursued. Now, however, multiple companies are developing cheap extra-orbital travel options for normal consumers, and potential travelers are also creating news ways to pay for products and services that they cannot actually afford. Together, these factors open the possibility that moving to space could cure overweight syndrome quickly and permanently for a large number of humans.

We studied this potential by following weight gain in Guinea pigs, known on Earth as fond of ad libitum feeding. Guinea pigs were long envisioned to be the "Guinea pigs" of space research, too, so they seemed like the obvious choice. Studies on humans are of course desirable, but we feel this current study will be critical in acquiring the attention of granting agencies.



## CONCLUSIONS:

Our view that weight and weight gain would be zero in space was confirmed. Although we have not replicated this experiment on larger animals or primates, we are confident that our result would be mirrored in other model organisms. We are currently in the process of obtaining necessary human trial permissions, and should have our planned experiment initiated within 80 years, pending expedited review by local and Federal IRBs.

## ACKNOWLEDGEMENTS:

I am grateful for generous support from the National Research Foundation, Black Hole Diet Plans, and the High Fructose Sugar Association. Transport flights were funded by SPACE-EXES, the consortium of wives divorced from insanely wealthy space-flight startups. I am also grateful for comments on early drafts by Mañana Athletic Club, Corpus Christi, USA. Finally, sincere thanks to the Cuy Foundation for generously donating animal care after the conclusion of the study.

## MATERIALS AND METHODS:

One hundred male and one hundred female Guinea pigs (*Cavia porcellus*) were transported to the International Space Laboratory in 2010. Each pig was housed separately and deprived of exercise wheels and fresh fruits and vegetables for 48 months. Each month, pigs were individually weighed by duct-taping them to an electronic balance sensitive to 0.0001 grams. Back on Earth, an identical cohort was similarly maintained and weighed. Data was analyzed by statistics.

## RESULTS:

Mean weight of pigs in space was  $0.0000 \pm 0.0002$  g. Some individuals weighed less than zero, some more, but these variations were due to reaction to the duct tape, we believe, which caused them to be alarmed push briefly against the force plate in the balance. Individuals on the Earth, the control cohort, gained about 240 g/month ( $p = 0.0002$ ). Males and females gained a similar amount of weight on Earth (no main effect of sex), and size at any point during the study was related to starting size (which was used as a covariate in the ANCOVA). Both Earth and space pigs developed substantial dewlaps (double chins) and were lethargic at the conclusion of the study.

## LITERATURE CITED:

- NASA. 1982. Project STS-XX: Guinea Pigs. Leaked internal memo.
- Sekulić, S.R., D. D. Lukač, and N. M. Naumović. 2005. The Fetus Cannot Exercise Like An Astronaut: Gravity Loading Is Necessary For The Physiological Development During Second Half Of Pregnancy. Medical Hypotheses. 64:221-228
- Xavier, M. 1965. Elastane Purchases Accelerate Weight Gain In Case-control Study. Journal of Obesity. 2:23-40.

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Poster should be readable (colour, contrast, font/image size)

Ensure good quality

# Useful Resources and References

## Guides:

- [makesigns.com/tutorials/poster-design-layout.aspx](http://makesigns.com/tutorials/poster-design-layout.aspx)
- [wiki.ed.ac.uk/pages/viewpage.action?spaceKey=HowTowiki&title=Designing+an+academic+poster](http://wiki.ed.ac.uk/pages/viewpage.action?spaceKey=HowTowiki&title=Designing+an+academic+poster)
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- [www2.clarku.edu/offices/its/academictechnology/documents/Guidelines-for-Poster-Design-2013.pdf](http://www2.clarku.edu/offices/its/academictechnology/documents/Guidelines-for-Poster-Design-2013.pdf)
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- [guides.nyu.edu/posters](http://guides.nyu.edu/posters)

## Templates:

- [makesigns.com/SciPosters\\_Templates.aspx](http://makesigns.com/SciPosters_Templates.aspx)
- [colinpurrington.com/tips/poster-design/](http://colinpurrington.com/tips/poster-design/)
- [posterpresentations.com/free-poster-templates.html](http://posterpresentations.com/free-poster-templates.html)

## Tools:

- [dafont.com](http://dafont.com)
- [fonts.google.com](http://fonts.google.com)

## Tools:

- [draw.io/](http://draw.io/)

## Colour Scheme Generator:

- [coolors.co](http://coolors.co)
- [colormind.io](http://colormind.io)
- [paletton.com](http://paletton.com)

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