RAD Posters & Preparation Overview

Research Appreciation Day Education Session
February & March 2018
By this point…

December 18  Abstract Submission Open
January 23   Abstract Overview Presentation
February 13  Abstract Overview Presentation
February 22  Abstract Submissions Closed
February 26  Poster & Prep Overview
March 6      Poster & Prep Overview
March 27     Oral Presentation Practice
March 29     Oral Presentation Practice

Note: Throughout this process work with your mentor or a faculty you feel comfortable with to discuss your poster submissions.
Note: The education sessions are tips for success and does not guarantee a winning poster.
Design

Getting Started

Design Elements

Data Visualization
Evaluating Sample

**Pigs in Space**

- What is unsuccessful about the example?
- What is successful about the example?

**Poster Explanation**
ABSTRACT: One major 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 even gain an arm, and the only side effect would be the need to upgrade one's strength 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 (ISS), individuals were housed separately and given unlimited amounts of high-caloric food packets. 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, gained weight in space. In addition to gaining nothing, no weight appeared to be gained over the duration of the protocol. If space continues to be gravity-free, and we become an outer space people, we believe that neither the overweight — nor those at risk for overweight — to space would be a lasting cure.

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

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. 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, and at the same time travel to space was prohibitively expensive and thus the issue was not seriously pursued. Now, however, multiple companies are developing cheap, extra-terrestrial travel options for personal consumption, and potential investors 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 permanently and for a large number of humans.

We studied this potential by following weight gain in Guinea pigs, a known Earth rodent 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 60 years, pending expedited review by local and Federal IRB.

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 mice divorced from argon wealthy space-fight start-ups. I am also grateful for comments on early drafts by Martha Athletic Club, Corpus Christi, USA. Finally, sincere thanks to the Cuy Foundation for generously donating animal care after the conclusion of the study.

LITERATURE CITED:
Recommended Program:

PowerPoint

From Scratch:
1) Open New Presentation
2) File/Page Setup…
   Width 56 inches
   Height 36 inches
3) Home/Layout – Blank layout

From Poster Template:
1) Go to: Research Appreciation Day Posters
   http://tinyurl.com/rad-posters
   Click: “Basic Poster Template”

Note: All posters must be 56x36 inches. Do not submit posters smaller or bigger than these dimensions.
THE QUICK, BROWN FOX JUMPS OVER A LAZY DOG

Names
Department of Pharmacology & Neuroscience

UNIT Health Science Center at Fort Worth, TX 75107

INTRODUCTION

The quick brown fox jumps over a lazy dog. The fox begins running at a speed of 20 mph. The dog starts running at a speed of 10 mph. The fox runs 100 yards before the dog catches up. The fox then jumps over the dog and continues running at a speed of 20 mph. The dog chases the fox for 200 yards before giving up. The fox jumps over the dog one more time before the dog finally catches the fox.

RESULTS

The results of the experiment are shown in the graph below. The x-axis represents the distance traveled by the fox and the y-axis represents the time it took for the fox to complete the distance. The blue line represents the fox's speed of 20 mph, while the red line represents the dog's speed of 10 mph. The graph shows that the fox is always ahead of the dog, and the fox successfully jumps over the dog three times.

REFERENCE

How does the fox jump over the dog? The fox jumps over the dog by using its superior speed and agility. The fox sprints at a speed of 20 mph, while the dog runs at a speed of 10 mph. The fox is able to jump over the dog by using its quick reflexes and powerful hind legs. The fox also uses its sense of smell to track the dog and anticipate its movements.

How do the fox and dog interact in the experiment? The fox and dog interact in the experiment by running and jumping. The fox runs at a speed of 20 mph and jumps over the dog three times. The dog runs at a speed of 10 mph and chases the fox for 200 yards before giving up.

How do the results of the experiment compare to real-world observations? The results of the experiment show that the fox is able to use its superior speed and agility to outdistance the dog. In real-world observations, foxes are known to use their speed and agility to escape predators. The experiment also demonstrates the importance of quick reflexes and anticipation in winning races.
<table>
<thead>
<tr>
<th>TYPOGRAPHY</th>
<th>BALANCE</th>
<th>LINE</th>
<th>SYMMETRY</th>
<th>HIERARCHY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aa Aa</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Match your typography choices to your design’s tone/concept</td>
<td>Balance ensures no one element overpowers the others</td>
<td>Lines help to enhance, direct and create movement</td>
<td>Symmetry is attractive, and creates a sense of harmony</td>
<td>Hierarchy helps signal the importance of each element</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLOR</th>
<th>COMPOSITION</th>
<th>DIRECTION</th>
<th>REPETITION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>A strong colour palette makes for a strong design</td>
<td>Composition is your design’s arrangement/scale/hierarchy</td>
<td>Direction gives your viewers’ eyes a path to follow</td>
<td>Repetition helps to tie individual elements together</td>
<td>Scale creates emphasis, drama and aids hierarchy</td>
</tr>
</tbody>
</table>

Note: Be intentional with your design choices! How do the poster’s visual elements help convey your content?
Typography

• Use textboxes to insert text into your poster layout. Be sure to be consistent with the width of your columns, by using the format panel.

• When selecting a font you can’t go wrong with the classics: Arial, Times New Roman or Helvetica.
• Keep it simple, no more than two fonts—generally one for the titles and one for the body text.
• If you are adventurous, use tools such as Canva Font Combination tool or Google Fonts to find fresh font combinations.
# Font Requirements

<table>
<thead>
<tr>
<th>Title</th>
<th>Sub-Title</th>
<th>Body Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Font Size:</strong> should be <em>at least</em> 48 points or greater</td>
<td>• <strong>Font Size:</strong> should be <em>at least</em> 48 points</td>
<td>• <strong>Font Size:</strong> should be 24-32 points, including captions</td>
</tr>
<tr>
<td>• <strong>Type title:</strong> in ALL CAPS</td>
<td>• <strong>Type sub-title:</strong> in ALL CAPS</td>
<td>• <strong>Type body:</strong> in sentence style.</td>
</tr>
<tr>
<td>• <strong>Type authors:</strong> in Upper And Lower Case</td>
<td></td>
<td>The quick, brown fox jumps over a lazy dog.</td>
</tr>
</tbody>
</table>

**POSTER TITLE**

Author Name

**SUB-TITLE**

The quick, brown fox jumps over a lazy dog.

**Note:** Readability is the most important consideration when choosing fonts. Avoid making fonts too small, or too distracting.
Balance

- Your poster should be more than just words.
- Where possible include images and graphs to create balance and to communicate your content in a different way.

How to add an image:
- Insert/Picture/Picture from file...
- Hold *Shift* while resizing to avoid distortion.

Image Requirement:
- Importing images into PowerPoint should be *jpg* or *png* format
- **300 dpi** (better for printing large scale)
- or **72 dpi** with larger dimensions (i.e. 1920px x 1280px)
UNT Logo

• Every poster is required to have the UNT logo.

Branding Guidelines

• The wordmark cannot be altered from its original form and cannot be smaller than 1 1/4 inches in width on printed materials.

• The wordmark can not be stretched, rearranged or altered in any way other than proportional scaling and appropriate use of color. the mark must maintain a ratio of 6:1 (width: height). to check this, divide the length by the height.

• The wordmark should always appear in UNT green, white or black and when possible should appear over UNT green, white, black or shades of those colors.

• An area of clear space surrounding the wordmark should be used to maintain visual impact and legibility. -UNT Marketing and Identity Guide
Color

• Your poster scheme should be UNT green. Just remember it should be professional.
• If you would like to match the UNT colors the official green is:
  • hex color for UNT green: #059033
  • HSL color model for UNT green: hue 93, Sat 224, Lume 70
  • RGB color model for UNT green: red 5, Green 144, Blue 51
• Avoid large areas of black or extremely dark colors. Dense areas of ink can make the paper weak and takes a long time to dry.
• Consider matching your color palette with your imagery.
Composition

Legibility

• Do not over crowd poster with information.
• Make sure all elements work harmoniously.

Margins

• Be conscious of the margins
• Information too close to the edge may be cut off
Data Visualization Basics

- Represent as much relevant data as possible/ if not full range
- Clear data over artful design
  - Appropriate labels & units specified
- Effect shown in graphic = effect in data
- Avoid 3D (unless necessary or definite benefit)
- Can it be resized/reproduced without distortion?
- Avoid graphic clutter & “chartjunk” (Tufte, 1983)
  - Does it aid comprehension? Is it necessary?
  - Using grid lines? Make them gray not black.

Additional Tips & Examples

Selecting the Right Chart

NNLM Data Visualization Resources

Graph Files - Best Practice

• *Use PowerPoint-native graphs whenever possible.*
  - If this is not possible, export *jpg* files from your graphing program.
  - You may try to copy and paste your graphs directly into your PowerPoint, but this can create a conflict and the pasted graphic may not print correctly.
  - **DO NOT** copy from Graphing Program to Word to PowerPoint.

• If your graphing program **will not** let you save as a *jpg* file then print, scan, and save them as *jpg* files

• Keep *jpg* files at 300 dpi.

• *Save your originals.*

**Reminder:** Throughout this process work with your mentor or a faculty you feel comfortable with to discuss your poster submissions...including your charts & visuals.
Exporting File for Printer

Exporting from PowerPoint:
- File/Save as…
- File Format: (select) PDF

Note: PDFs maintain fonts and composition. They also have good quality for printing.

Proof before Printing:
- Open PDF in Adobe Acrobat
- Print – Actual size
This will allow you to see a sample section of your poster to know if the font is legible and the images are not pixelated.

A PDF will be the final file you will send to the printers, not the PowerPoint.
Printers

Recommended Printer:

One Stop Printing

2904 Cullen St.
Fort Worth, TX 76107
Off University going North

Cost: $57
Before March 20th

Cost: $108
After March 20th

Approximate Cost: $100-130

Does not offer prints larger than 24x36

Approximate Cost: $100-130
Sending Poster

What to send:
• Attach a PDF of your poster
• Fill out and attach RAD Poster Order Form
• Include “RAD 2018 Poster Order” in the subject line
• Consider sending your poster after approval - March 12

Payment
• If you plan to have your poster printed elsewhere, you will need to verify cost and deadline information with the vendor.
• Check with your principle investigator or mentor to discuss how payment will be arranged.

http://tinyurl.com/rad-posters
Dress for Success

Professionalism and Dress

Dress to Impress

Attention to Detail
Professionalism and Dress
Dress To Impress

What to wear?

- Business Professional
  - Appropriate shirts and pants
  - Neat and clean apparel
  - No casual attire
- Business Casual
  - Casual, neat attire
  - Appropriate shoes
  - No jeans

- Business Professional
  - Neat and clean appearance
  - No casual attire
- Business Casual
  - Casual, neat attire
  - Appropriate shoes
  - No jeans

**NOTE:** For interviews, dress professional. Business Professional attire.
Attention To Detail

Reminder: Check with your mentor or a faculty you feel comfortable with to discuss recommended dress for RAD.

Your smile is your logo, your personality is your business card, how you leave others feeling after an interaction is your trademark.

@Businessmindset101