Tips for Successful Posters
What do we mean by **Poster Session**?
NOT this...
But THIS...
See it for yourself:

These videos and articles are from Discovery Day, which transformed into Discover UofSC in 2017 – bigger & better but at its heart, still the same 😊
Discover U of SC

Logistics
Review presenter guidance at Discover USC

(sc.edu/DiscoverUofSC)
Event date and schedule

https://sc.edu/about/signature_events/discover_uofsc/schedule/index.php
Logistics

• Posters are the primary form of presentation

• Notification on timing/format: early April by email

• Find your presentation format, time and room location on webpage under “Find a Presenter” (NOTE: this will not be active until early April!)

• Know your poster number; signs will be posted in hall to direct you
Logistics

• 2 posters per side of display board

• Poster dimensions:
  • Max: 4 ft high x 3.5 ft wide
  • Min for GLD: 2 ft x 3 ft (vertical or horizontal; templates on GLD website)

• 4 t-pins provided to hang

• Angle pins DOWN not straight through

• Nametags at registration; Bring Carolina Card
Logistics

• Posters sub-divided into categories
• Categories based on topic/mentor department
• Judged within categories (IF selected yes on abstract submission; can only change to NO)
Logistics

• Judging guidelines on webpage and guidance
• Judges: faculty, staff, and grad students
• Judges: 2-3 per section
• Judges are NOT experts in field
• No judging if NOT present at poster
Logistics

• Awards:
  • *Will be listed on the Discover UofSC website the Wednesday after the event*

• Award certificates:
  • Emailed as a PDF attachment to each awardee by the *end of May*
How To:

General Overview
A successful poster...

• conveys a clear message,
• by high-impact visual information,
• with minimum text

...grabs attention!
A great poster is...

• **Readable** – use clear language and good grammar in all poster text

• **Legible** – all poster text should be readable from 5 feet away

• **Well-organized** – group items logically and visually for maximum impact

• **Succinct** – you have 10 seconds to grab your audience’s attention
Remember: Do NOT duplicate the full text of your work on your poster.

Hit the high points!

Provide handouts for more information.
Overview: Content - Option 1

Sections you may wish to include:
(will vary depending on your desired message)

- Introduction, background, or overview
- Hypothesis (Question you explored)
- Motivation or purpose (Why you did it)
- Methods (How you did it)
- Results (What you found)
- Conclusions (What you learned)
- Significance (What it means)
- Future plans or next steps
- References (Works cited)
- Acknowledgements

Abstract is not needed!
Overview: Content - Option 2

Sections you may wish to include:
(will vary depending on your desired message)

- Introduction, background, or overview
- Activity/Event description (What you did)
- Motivation or purpose (Why you did it)
- Reflection (What you learned; What was the impact on you)
- Significance (What it means; what you want others to learn/know from your experience)
- Future plans or next steps
- References (Works cited)
- Acknowledgements
Overview: Layout

People take in information according to a known spatial sequence.

*Capitalize on this and use it effectively!*

Expected layout (3-4 columns of information):
Overview: Layout

Activity or Experience

Expected layout (3-4 columns of information):

- Title
- Names
- Background/Introduction/Overview of activity or experience
- Activity/Experience Description
- Reflection/Significance
- References, acknowledgements
Overview: Layout

Alternative layout: Progression of information
(*less common*)

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Names</td>
</tr>
</tbody>
</table>

| Introduction and Background |

| Results, Findings, data, etc. |

| Discussion and Conclusions |

References  | Acknowledgements |
Overview: Layout

Activity or Experience

<table>
<thead>
<tr>
<th>Title</th>
<th>Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background/Introduction/Overview of activity or experience</td>
<td></td>
</tr>
<tr>
<td>Activity/Event Description (what did you do)</td>
<td></td>
</tr>
<tr>
<td>Reflection/Significance</td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>Acknowledgements</td>
</tr>
</tbody>
</table>
Overview: Layout

YES!!!

You can use a different format than “expected.”

- The key is to make the flow of information logical.
- Be sure your chosen layout emphasizes your message!

See examples in the next section
How To:

Examples
“Expected” layout

Title
Names, departments

Introduction: Chemical Hydride Hydrolysis

Chemical hydrides are a means of storing hydrogen. Sodium borohydride (NaBH₄) undergoes hydrolysis to produce hydrogen as follows:

NaBH₄ + 2H₂O → NaBO₂ + 4H₂

The coefficient x represents the hydration state of sodium metaborate (NaBO₂).

- Maintaining x minimizes the total weight in the hydrogen delivery system while maximizing the efficiency.
- Your stable hydration states exist and the formation of these states is temperature dependent and shown below:

<table>
<thead>
<tr>
<th>Hydration State</th>
<th>Temperature Where Stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrate  (x=4)</td>
<td>&lt;54 °C</td>
</tr>
<tr>
<td>Dihydrate  (x=2)</td>
<td>5.5 °C – 110 °C</td>
</tr>
<tr>
<td>1/3 Hydrate  (x=1/3)</td>
<td>130 °C – 200 °C</td>
</tr>
<tr>
<td>Anhydride  (x=0)</td>
<td>&gt;350 °C</td>
</tr>
</tbody>
</table>

Water Usage and Reaction Pathway

- First attempted to hydrolyze sodium borohydride with liquid water.
- Required approximately 30 times more water than stoichiometric feed.
- Experimental conditions were limited to below 100 °C, yielding low reaction rates.
- Experimental temperature range increased with steam hydrolysis reactor.
- Steam would adhere, or deliquesce, to the surface of sodium borohydride.
- Extended temperatures to over 100 °C.
- Low relative humidities prevent reaction at high temperature conditions.

Deliquesce

- Sodium borohydride undergoes deliquesce in the presence of water vapor.
- Deliquesce is the process of water vapor in the air adhering to the surface of a solid.
- Water vapor goes to the liquid phase in contact with the solid during deliquesce.
- Deliquesce usually ends with too much water remaining on the solid, in which case the water will dissolve the solid.
- Water vapor uses as little as 10% of the liquid water needed to pre-dissolve the NaBH₄.
- To less water is needed to dissolve the NaBH₄, the necessary weight of the reaction lessens which, in turn, increases the efficiency.

Hypothesis and Objectives

- Construct and utilize a high-pressure batch reactor to hydrolyze solid sodium borohydride with water vapor.
- Predict the reaction progress as a function of time using the pressure profile.
- Determine the amount of NaBH₄ conversion using Boron-11 Nuclear Magnetic Resonance (B¹¹-NMR).
- Determine the water content of the final product using Thermogravimetric Analysis (TGA).

Apparatus

- Sodium borohydride and water are separated initially.
- Nitrogen originally pressurizes the bomb reactor.
- Heat is supplied to the reactor using six cartridge heaters.
- Thermocouples measure three temperatures at different points to ensure gradient.
- Pressure measurements were recorded by a pressure transducer.

Pressure Profile

- Experimental pressures were recorded using a pressure transducer.
- Expected pressures can be calculated for each of the four possible hydration states of NaBO₂.
- Expected pressures were calculated with the Redlich–Kwong equation of state.

NaBH₄ Conversion Measured with B¹¹-NMR

- B¹¹-NMR analysis measures the degree of BH₄⁻ and BO₂⁻.
- Thermogravimetric Analysis (TGA) quantifies the hydration of NaBO₂ products.
- A mass loss of 0.4% indicates 1/3-hydrate form.
- A mass loss of 35% indicates dithydrate form.

Water Content of Product Measured by TGA

- The TGA quantifies the degree of hydration of the NaBO₂ products.
- A mass loss of 0.4% indicates 1/3-hydrate form.
- A mass loss of 35% indicates dithydrate form.

Conclusions

- The batch reactor was successful in that the steam hydrolysis reaction went nearly to completion for runs with only a slight increase of water over the stoichiometric ratio.
- A stable 1/3 hydrate form of sodium metaborate was produced under the reaction conditions, significantly reducing the amount of water tied into the solid product.
- The decreased water in the solid product increases the efficiency of hydrogen delivery.
- The stable hydration states did not change with pressure.
- Although the pressure measurements were not as precise as desired, new reactor designs are being examined to address any potential problems.

Acknowledgements


References

Expression of Lipocalin-2 in Colorectal Cancer Metastasis to the Liver

Student name; Mentor name

ABSTRACT
Metastasis, frequently from the colon to the liver, is the major cause of death with colorectal cancer, reducing the five-year survival to less than 12%. Metastasis occurs due to productive collaborations between tumor cells and host-derived cells in the tumor microenvironment, where a pre-metastatic niche is created to prime for cancer cell invasion into the target organ. In a highly metastatic colorectal cancer cell line implanted into the cecum of Balb/c mice, microscopic analysis showed LCN2 is the most highly expressed protein in the liver of tumor-bearing mice prior to metastasis. Western blot analysis and examination of blood serum by ELISA illustrated increased levels of LCN2 in tumors progressed into metastasis, with similar results when RT-PCR was performed, as greater levels of LCN2 mRNA were found in highly metastatic cells in contrast to less metastatic cells. It has been found that LCN2 is highly associated with the promotion of colorectal cancer metastasis to the liver, with increased levels connected to the advancement of metastatic progression.

INTRODUCTION
Colorectal cancer is the third most common cancer, accounting for approximately 95,000 deaths per year worldwide. In the United States, it is the second leading cause of cancer-related deaths. When patients are treated for colorectal cancer prior to metastases, the survival rate is high. Unfortunately, those affected do not typically express outward symptoms of metastasis and it is often diagnosed when very late can be done. More research must be pursued on the biological and molecular hallmarks that direct the early stages of metastasis, which can provide the best opportunity for therapy to block its progression. Lipocalin 2 (LCN2) is from a family of proteins associated with cell regulation, specifically in differentiation and proliferation. There is conflicting evidence on their role in cancerous growth; some evidence suggests that lipocalins can inhibit the proliferation of cancer cells, while others suggest that they promote its progression. These studies examined LCN2 expression in cancer cells, but not in the target organ microenvironment; thus, further studies must be undertaken to determine the role of LCN2 in establishing and promoting metastasis.

HYPOTHESIS
Increasing presence of LCN2 is more associated with progression of early colorectal cancer metastasis to the liver.

OBJECTIVES

- To assess LCN2 protein levels in isogenic colon cancer cell lines with different metastatic capabilities.
- To determine whether increasing levels of LCN2 coincides with the progression of early colorectal metastasis to the liver.

PRELIMINARY DATA

Figure 1. Mouse model on cancer metastasis to the liver, CT26 cells with low metastatic capabilities are educated to become highly metastatic CT26-FL3 cells.

RESULTS

Figure 3. Frequency of liver metastasis in mice bearing tumors from two transgenic cell lines. Mice bearing tumors from the less metastatic CT26 parental cells had 10-fold less frequency of liver metastases compared to mice with tumors from CT26-FL3 cells.

Figure 4. Immunohistochemical staining of Lcn2 expression in tumor-bearing mice at various stages of metastasis. In mice with CT26-FL3 cells, the circulating Lcn2 levels increase with tumor progression.

Figure 8. Lcn2 protein levels in CT26 and CT26-FL3 cells stably expressing high levels of Lcn2.

Figure 6. Lcn2 protein levels secreted into the media by over-expressing cells.

Figure 7. Concentration of Lcn2 (ng/mL) secreted by stably transfected CT26-FL3 cell lines.

REFERENCES

RESULTS

LCN2 is positively associated with colon cancer cells with greater ability to metastasize.

LCN2 is upregulated in the pre-metastatic niche after implantation of colon cells shown by real time PCR.

The impact of manipulating LCN2 levels both by gene suppression and overexpression in vitro, and especially in vivo, must be assessed to additionally determine the role of LCN2 in early colorectal cancer metastasis to the liver.

The results of this further experimentation may provide significant support for the possibility that LCN2 is a biomarker for the event of metastasis to the liver.
"Expected" layouts with height greater than width
“Expected” layout when few pictures available

Title
Names, departments

Introduction
Wireless Networks
• Wireless networks are expected to be available and reliable at all times and all locations
• Environmental conditions like walls, weather, and large crowds cause problems

Smartphones
• Smartphones have a variety of sensors built into them that can gather information about the surrounding environment
• These sensors include accelerometers, compasses, light detectors, and proximity detectors
• They also have WiFi radios and GPS

Goals
• This project aimed to use the readings from the sensors to detect situations that will cause reduced signal strength
• It may be possible to predict when the user is going to have poor reception so the phone can plan accordingly

Other Work
• A number of other projects are underway that also make use of the sensors available on smartphones
• Mobile Assistant for Inattentive Drivers (MAID)
• Improving the reliability of natural interaction systems such as Microsoft's Kinect

Methods
Android App
• An app was developed for Android phones that would automatically collect data every 15 minutes
• This interval was chosen to balance frequency of collection with battery life
• The app was allowed to run constantly on the user's phone to collect data in real-world situations
• The app uploaded data after each collection to a MySQL database

Data Collected
• Data collected included: time, proximity, battery level, location, cellular signal strength, and WiFi signal strength
• The data were downloaded from the database into an Excel spreadsheet
• The correlation function in Excel was used to determine if acceleration, magnetic field, proximity, battery charge, or light appeared to have an influence on cellular and WiFi signal strengths
• The data points corresponding to WiFi signal strength were plotted on a map and color coded to indicate the signal strength of the University wireless network, “ucstudent” at that location.

Results and Discussion
Accelerometer
• Cellular Strength: 0.146
• WiFi Strength: 0.069
• These low correlation values indicate the absence of a relationship between acceleration and both cellular and WiFi signal strengths

Magnetic Field
• Cellular Strength: -0.133
• WiFi Strength: -0.022
• These correlation values were even smaller than the ones for acceleration, so there is again little evidence to suggest a relationship between magnetic field and the signal strengths

Proximity
• Cellular Strength: 0.302
• WiFi Strength: -0.289
• These values are much stronger than the previous two and are the strongest observed
• There is a possibility of a slight negative correlation
• The relatively strong correlation could also be explained by the phone being in a pocket versus in the open

Battery Charge
• Cellular Strength: -0.291
• WiFi Strength: -0.193
• These values are weaker than the proximity values and slightly negative
• There may be a negative correlation between battery charge and the signal strengths

Light
• Cellular Strength: 0.205
• WiFi Strength: 0.017
• These values were opposite the proximity values and much weaker
• This difference supports the possibility of being in the pocket reducing signal strength and being in the open increasing it

Figure 1: WiFi Map
• The map reveals the clustering of the data points
• As the project continues, a more even distribution of data points will be collected
• WiFi signal strength appears to be stronger inside than outside

Figure 1: WiFi Signal Strength

Wifi Map

Ongoing and Future Work
Signal Correlations with Other Sensors
• Use fewer sensors such as gyroscopes, barometers, and thermometers
• Collect data in diverse scenarios using multiple phones

Mobile Assistant for Inattentive Drivers (MAID)
• Link the phone to the car's diagnostics port to get real-time data from the car's sensors
• Identify the fingerprint for each event and create the abstract sensor modules
• Reckless: detect reckless driving
• Speed: detect when the driver is going too fast
• Turn signal: detect if the driver properly signaled before turning
• Stop: detect if the driver obeyed a stop sign
• Light: detect when the driver appears to be lost
• Yield: detect if the driver properly yielded at a yield sign
• Clasp: detect if the driver is causing traffic to back up behind him
• Distracted: detect drunken driving
• Lane change: detect lane changes
• Identify additional situations that might be detectable using the phone's sensors

Enhancing Kinect with Smartphones
• WiFi uses accelerometer and gyroscope to detect motion
• Kinect uses video and depth camera to detect motion
• Combine the two methods together to make a more robust system
• Use the phone in the pocket in place of the WiFi remote
• Use its accelerometers/gyroscopes sensors to aid Kinect
• Allow players to Kinect cannot see to interact with the system
• Help the system identify players from a crowd
Modular Nano-Enabled Sorption Cartridge for Water Treatment

Student Name: Mentor Name
Civil and Environmental Engineering, University of South Carolina, Columbia, SC

Motivation:
- World-wide potable water crisis needs affordable treatment technologies
- Nanomaterials have promising capabilities (sorption/filtration)
- Lack of strategy for useful application

Results:
- [Images of sample results]

Objectives:
- STEP 1. Immobilize Carbon Nanomaterial in a Water Filter
- STEP 2. Optimize Nanomaterial Distribution within Filter
- STEP 3. Analyze Contaminant (e.g., BPA, Lead, Arsenic, etc.) Removal Efficiency

Materials:
- Carbon Nanotubes (CNTs)
- Organic Solvent: N,N-Dimethylformamide
- Commercial Water Filter

Underlying Mechanism:
- Untreated Filter Surface (No Affinity)
- Chemically Treated Filter Surface (Thermodynamic Affinity)

Methods:
- Prepare stock filter by cleaning and chemically pretreating
- Create uniform CNT suspension
- Characterize suspension uniformity
- CNT deposition on filter surface
- Electron Microscopy to characterize modified filter surface

Conclusions:
- CNTs can be deposited on functionalized surfaces
- The attachment is irreversible thus results in immobilized CNT coated surfaces

Invention Disclosure (SCRI# 00910): Carbonaceous Nanomaterials Immobilized on Porous Matrices to Remove Organic Contaminant from Water
Non-traditional layout

**Title**
Names, departments

**Introduction**
How are certain photochemical reactions influenced by being carried out in a confined environment?

- Macrocycles
  - Porous self-assembling micromoners
  - Form tubular crystals
  - Can increase selectivity of certain reactions
  - Reusable

**Background**
Chlorines are always looking for ways to make reactions more efficient. That's why they are always asking, "How can we achieve a higher yield of our target products with less energy and a minimal environmental impact?" One possible solution can be found in trapping reactions in a confined environment. By restricting the reaction site, we not only can increase the selectivity of the product of a reaction, but also reduce the use of expensive, harsh chemical reagents. This concept is analogous to the use of enzymes in biological systems, where enzymes drive reactions by fitting substrates together and thereby reduce the activation energy for those reactions.

One type of confined environment that is currently being studied employs the use of porous crystalline studying structures known as macrocycles. This is composed of identical monomers. The size of these macrocycles can be manipulated to make the macrocycle compact, allowing for control of the overall size of the macrocycle. This is beneficial for a wide range of molecules to react within the macrocycle.

**2-Cyclohexene**
- Phenylether macrocycle used as host
- Increased selectivity

**Methodology**
Testing for the best solvent for sox loading

- In which solvent does thymine absorbance decrease?

**Data & Discussion**

**Loading**

**Irradiation**

**References**

**Acknowledgements**
I would like to thank Dr. Linda Shliker for the wonderful opportunity to conduct undergraduate research during the Summer of 2013. I would also like to thank the entire Shliker Group for their complete support and hospitality during my time as an undergraduate research. Finally, I would like to give very special thanks to my Graduate Mentor, Dr. Michael Zier, who guided me through every step of this fantastic journey.
Title
Name, Department, University of South Carolina

Problems, Issues & Plans

Why a Journal?
- Provide students multiple formats to showcase research (complements presentation opportunity through Discovery Day, university’s research conference)
- Publication experience valuable to complete research process
- Publication in professional journals not available for all students
- Marketing tool to showcase student research

Why On-line?
- Available for all disciplines
- Broader audience access: students, prospective students, potential partners, colleagues
- Recurring costs low
- Content refreshed regularly
- Dynamic interface

Why Now?
- Technology advanced to meet the needs of publication for all disciplines
- Administration support critical: impetus, staffing, funding

Why Caravel?
- Named after the type of ship used by explorer Magellan
- "Magellan programs" is the university’s undergraduate research brand
- Research is about the journey not the destination

Site Design and Development

Site Considerations and Needs
- Time constraints, staff expertise, IT resources
- Server accessibility (will the site be hosted co- or off-site)
- Content Management System (allows easy updating of website with minimal training; eliminates annual contract with web developer)
- Platform-responsive website (adjusts for desktop, laptop, tablet, phones)
- Article archiving (how often, search options, accessibility)
- Submission process and forms (with or without)
- Journal focus (articles/thematically) on the homepage
- What information needs to be available and where

Site Development and Bid Process
- Evaluate timeline to completion
- Previous experience (review previous journal websites for compatibility with journal needs)
- Compare and contrast competing bids for user interface
- Training of staff for site management
- Cost: $34,500
- Site: http://caravel.ac.edu

Editorial and Submission Process

Submission Guidelines
- Guidelines must be discipline appropriate
- All submissions include a written component, for an "eclectic reading" format in an artist's statement or abstract, providing context
- Student forms address plagiarism, copyright, and compliance issues (human subjects and animal use)
- Faculty mentor approval of submission
- "Paper" forms to be submitted by email
- Writing center consultation encouraged

Faculty Editorial and Advisory Board
- Same board used to guide journal development and review submissions
- Faculty reviewers only
- Provide feedback on submission guidelines and site needs
- Market journal to colleagues and students

Role of Editorial Board
- Review all submissions within discipline or non-discipline
- Identify and solicit second reader (topic expert) for each submission (see Lessons Learned)
- Provide publication recommendations in terms of timing and discipline representation
- Final decision for publication made by Vice President for Research

Review and Feedback Process
- Anonymous review
- Two reviewers: editorial board and topic expert
- Three options: Accept with minor changes, accept with major changes, or revise and resubmit
- No decline option as this is viewed as an educational experience
- All students receive feedback
- "Revise and resubmit" may include a requirement of additional research inquiry and or writing center consultation

Other
- Eligibility: undergraduates and one year post-graduation
- Research conducted by university’s undergraduates at any location and with any mentor
- Copyright: not restrictive, submission may be published in other forums

Future Plans
- Student review board/graduate students may be added in future
- Submissions will move to webform/database system later by email
- Will use short, catchy titles to capture a broader audience (marketing focus)

Faculty and Student Quotes
Thank you so much for the good news you bring to [student], whose work it was my pleasure to supervise. I also commend the University, yourself, and all others who work on the journal for having launched such a great initiative and for contributing to the development of our students. -- Faculty mentor

Working with my partner and mentor on this paper has been extremely beneficial for me academically in that it has given me a thorough understanding of how to construct a proper research paper and working well with others to finalize the project. This experience will help me reach my goal of going to graduate school. -- Student
Dennis and Dennis Architects: Architecture and Culture in Macon, Georgia

Student Name
Art History, Sociology

Introduction

I am investigating the cultural and architectural histories of six major buildings in downtown Macon, Georgia by the long-existing local firm of Dennis and Dennis. Though the firm produced many recognizable public and private buildings during their long career, none has thoroughly examined the extent of their influence in Macon. By analogy to a variety of similar firms, my project assesses both internal evaluations of the firm’s work as well as the public perception of their buildings over time. In the course of my research, the evolution of the firm throughout their work on these six buildings has aligned with and been a parallel to the city’s own commercial growth. The products of this research combine architectural histories of each building with analyses of the unique cultural impact that the firm and their buildings have had on the city.

Future Work

There is still so much more to be learned about the firm and I hope to have opportunities to continue this research. I want to have a more comprehensive look at the scope of their work and the history of the firm itself, eventually achieving a better point of comparison for their work across the country and within the Middle Georgia area. As I prepare to begin graduate coursework for Historic Preservation, I hope to eventually foster a career of highlighting the great stories behind buildings such as those that sit quietly in shape communities.

Resources

My research comes from the firm’s private archives, the records of The Macon Telegraph, and the Historical Room at the Washington Memorial Library.

Temple Beth Israel

- Constructed: 1952
- Designed for the oldest Jewish congregation in the city
- Style: Classical details, portico, and a towering cupola define the symmetrical façade
- Masonry and stone composition
- White-stained, shingled, and red brick exterior
- Impacts: Situated on a major street, near short to Mercer University, and facing public space, the church makes a strong statement to the community, making the building a prominent feature of the downtown area.

Centenary United Methodist Church

- Constructed: 1933
- Commissioned by a small congregation that started as a Sunday school
- Style: High Gothic architectural elements
- Materials: Stained glass, wooden pews, and a large stained glass window
- Impacts: The church is a testament to the community's heritage and serves as a cultural landmark.

City Auditorium

- Constructed: 1921
- Renovated in 1965
- Style: Art Deco
- Impacts: Important cultural and historical landmark

Macon City Hall

- Constructed: 1853
- Designed by George Richard
- Style: Greek Revival
- Impacts: Significant in the city's history

Insurance Company of North America

- Constructed: 1921
- Style: Art Deco
- Impacts: Important cultural and historical landmark

Post Office

- Constructed: 1914
- Style: Art Deco
- Impacts: Important cultural and historical landmark

Section Drawing by A.D. Dennis

General, After Completion

City Auditorium Original Entrance

City Hall after Completion

The Original City Hall Building

Dennis and Dennis Rendering of the Post Office

Macon Telegraph Article about Open House

Dennis and Dennis Rendering of the Post Office
Alternative layout with top to bottom flow
“Expected” layout for activities/experiences

Title
Student Name; Mentor Name
Department, University of South Carolina

In Class Experience
In my School’s in Community (EDFN 308) class I have been able to learn what it means to be an educator. I have researched several different regions and learned how education looks differently where ever you go. Being able to take the information I have learned inside the classroom has created a gateway to what I participate in outside the class. Learning strategies such as how to tutor students makes a difference.

Waverly Program
I take the most pride in the transformation the Waverly program has taken since I started to work with it. The 2012-2013 school year was the first year that I took over the program as Executive Director. I have been able to improve the program. We not only expanded our volunteer base, but we also expanded the program so that we could help even more students. This year, we partnered with St. Lawrence Place, a transitional shelter for single mothers, and brought the Waverly Program there so that their children could have access to the same resources as those who attend Melrose Park. Everyday I see significant similarities between what I have learned in my classes and the work that I do with Waverly. Being able to make a connection between the two helps a lot, especially since the work I do directly correlates to my future career plans.

Waverly embodies what USC Connect stands for when it comes to outside experiences.

Reflection
In my work with Waverly I am preparing myself to be an educator. My goals consist of expanding the program I have grown as well as working more on learning exactly what it means to be an educator.
Alternative layout with top to bottom flow for activities/experiences
Non-traditional layout for activities/experiences
Want to provide additional information or handouts during your presentation? -add a folder or envelope of info to bottom of the display board

**MUST bring your own push pins or thumbtacks**
Display format

By permission and special request ONLY
This format is for static or visual arts; some demonstration based projects/experiences

- Contact our@sc.edu to discuss needs
- Table (half ~4ft) / NO poster board
- No electricity available
How To: Planning your poster
Planning:

REMEMBER:
You are not in this alone – talk with your mentor!

ASK for assistance!
What do you want the audience to know when finished?

Identify your message!
Planning: Support Message

What information is CRITICAL to understanding this message?

Include ONLY message supporting information!
Planning: Outline Information

Outline your message and supporting information

The abstract is a good starting point
Possible questions/issues to consider in your outline:

1) Clarify your message
2) What activities or results support message
3) What information is needed to understand the results/experience and how you got to those results
4) Are there images that can help explain or support the message
5) Introduce or explain the activity to put it in context
6) Are there any future plans or next steps
7) Review “typical” sections (Slide #18)

Stay message focused!
Planning: Mapping Poster

Map your outline into poster format on paper

Review critically; focus on the message!
Planning: Mapping Poster

**Example**

Title
Names

Optional:
Purpose of
presentation

Background
info or
details on trip

Situation 1 + pictures

Situation 2 + pictures

Situation 3+ pictures

Conclusions:
Skill
development
& convincing
others to go
abroad

Future plans

References,
acknowledgements

Review critically; focus on the message!
Planning: Resources

- Connect with your mentor, supervisor, and/or instructor EARLY in the planning process for recommended resources and content

- **REMEMBER:** some content cannot be shared due to intellectual property – ask your mentor!

- General resources and how tos – there is a lot of info available on line to help support your poster development
How To:
Creating your poster
Creating your Poster with PowerPoint

A ton of info is available on line to help support your poster development.

Check out YouTube for tutorials on making research posters in PowerPoint; be sure to filter by upload date for the most recent software versions.

Discover UofSC Poster Size

**MAX:** 48in (H) x 42in (W)

**MIN (GLD):** 24in x 36in (vertical or horizontal; [GLD poster templates and guidance here](#))
How To:

Details: Making it GREAT
Guidelines: Color

Use color, photos, charts, and graphs to support your poster and message.

**Remember**: A little color goes a long way. Stick to two or three colors for text.
GOOD:
1) use of color to highlight and separate sections;
2) uses color and pictures effectively in results;
BAD: text small
Guidelines: Color

When choosing colors for your poster, err on the side of conservatism.

- Chartreuse and pink? **Not so much!**

Certain colors “vibrate” when side-by-side, making text difficult to read:

- **Headache**
- **Yikes**
GOOD: 1) use of color and contrast; 2) sections highlighted and separated for emphasis; 3) good focus on data/results; BAD: too much text
Guidelines: Color

Color can be used to accentuate, separate, and/or highlight information.
Guidelines: Color

Avoid background pictures!
Background overwhelming text; text too small
Introduction

Play behavior in juvenile rats is important for the recognition of social cues and behaviors in adulthood. One of the biggest indicators of play in juveniles is pinning (Panksepp & Beatty 1988), which is when one play partner is laying dorsal-side down with another partner laying on top (Vanderschuren et al 1997). Pins are usually preceded by contact with the dorsal area of the pinned rat.

In the past, play has been shown to be affected in models of Fetal Alcohol Syndrome (FAS) (Meyer & Riley 1986). While FAS modes show that alcohol affects both duration and rate of social behavior (Kelly et al 2000), relatively little research has been done on play.

Sibly & Panksepp (1987) found that juvenile rats with their dorsal body surface anesthetized show a concentration-dependent reduction in play behavior. The current experiment uses an FAS model to analyze the effect of alcohol exposure on play behavior in rats with varying degrees of sensory impairment induced by local anesthetic.

Treatment

Prenatal and postnatal alcohol exposure administration was done via intragastric intubation (see table below).

<table>
<thead>
<tr>
<th>Group</th>
<th>Treatment of Dams (GD1-Birth)</th>
<th>Treatment of Pups (PD2-PD16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>GD1-Birth untreated rats</td>
<td>PD2-PD16 untreated rats</td>
</tr>
<tr>
<td>Ethanol Exposed (E)</td>
<td>GD1-Birth alcohol treated rats</td>
<td>PD2-PD16 alcohol treated rats</td>
</tr>
</tbody>
</table>

Procedure

Two males and two females were used from each litter. Rats were weaned at postnatal day (PD) 21 and housed separately at PD 27. On PD 32 to 34, rats were habituated for five minutes to play in an isolated area. On PD 35, rats pairs began hosting. Five drops of xylocaine, a local anesthetic, were used: 0.05%, 0.50%, 1.00%, 2.00% and 4.00%. 2 ml were administered dorsally in five places behind each ear, and laterally at each side above the masticatory. The treatments were administered in randomized fashion over five days of testing.

Results

The amount of mean pins for each xylocaine treatment in the ET group was significantly more than the IC or NC groups, except for 0.05% (p > 0.05). These data are collapsed across sex.

Conclusions & Future Directions

The data at this point suggest that the effect of xylocaine treatment did not interact with group. This suggests that the change in play behavior seen here in ethanol-exposed rats is not a function of somatosensory processing changes, and instead must be a function of some other aspect of the social behavior system.

The heightened number of pins in the ET group suggests that either the ethanol-exposed rats are more motivated to engage in play behavior, are more sensitive to play initiation by another animal, or are more likely to exhibit play responses. The lack of differences in dorsal contacts across groups suggests that there are no differences in play responses and the lack of interaction between group and xylocaine dose suggests no differences in sensory sensitivity to play initiation. Therefore, it may be that motivation to play is altered in alcohol-exposed animals.

This suggests that alcohol exposure may be altering social motivation during the juvenile period. FAS is known to increase the likelihood of impulsive, and subsequently delinquent behavior, at least in males (Tremblay et al 1994), and this may be due to changes in motivation.

References
Guidelines: Text

Break text into easy-to-read chunks:

• Use paragraphs sparingly
• Use lists/bullets
• Use audience appropriate language
• Use distinctive section headers
  • Emphasize with text size, color, or font
Good use of color and contrast; sections highlighted and separated for emphasis; bulleted lists easier to read
Guidelines: Text

Use an easy-to-read font for all text at a minimum size of 24pt.

Avoid ALL-CAPS for extended blocks of text, as they are HARD TO READ.
Guidelines: Text

Limit to two fonts:

one serifed and one non-serifed
Guidelines: Text

Use “standard” fonts, such as:

Serif:
• Times New Roman
• Garamond
• Georgia

Sans Serif:
• Arial
• Calibri
• Verdana

Symbols, math:

Use only the most basic symbols needed
Using “standard” fonts limits printing concerns.

Unknown fonts might be changed during the printing process, resulting in changes to your design and layout.

To avoid font substitution, see “how to” docs for embedding fonts prior to printing.
Guidelines: Text

Suggested font sizes:

• **Title** - sans serif, Title Case, 90-120pts
• **Sub Titles** (names, etc) - sans serif, 72 pts
• **Section Titles** - sans serif, 45 pts
• **Main Text** - serif font, minimum 24pts (bigger is better!)
Guidelines: Images

Pictures, graphs, etc = GOOD!

Clip art = BAD!!!!!
Guidelines: Images

• Check the quality of your image, picture, graph, etc. BEFORE printing (check it at 100% size – find this under “View” in PowerPoint)

• Avoid pixilated pictures and graphs!
Guidelines: Images

Don’t use images you find on the internet for your poster unless you know:

1. The images are not copyrighted
2. The images are large enough to print well on your poster
Guidelines: Aesthetic

Simplify!
Excellent example of image use and extremely limited text
Guidelines: Aesthetic

Question everything!

- Does it support the message
- Is the language understandable
- Is it too wordy
- Is it too busy
How To:

Viewing and Editing
Viewing and Editing

Throughout the process, view layout and contents at **full size** and **overall**!

In PowerPoint:
• To view full size: View-Zoom-100%
• To view overall: View – “fit-to-window”
Viewing and Editing

Share drafts with mentor and peers:

• HONEST opinions
• Editing assistance (grammar, spelling, language usage, layout, aesthetics, etc)

In PowerPoint:
• Email PowerPoint file
• Convert to PDF (Office button-Save As-PDF)
• Print on 8.5x11 paper (Office button-Print-check box: Scale to fit paper-preview to confirm-Print)
Viewing and Editing

Full size editing:

If possible, it’s a great idea to print out a full size draft for editing

HOW:  (tips here)
• Printers
• Adobe Acrobat
• Publisher
• Excel
• Other?
Remember:

A successful poster...

- conveys a clear message,
- by high-impact visual information,
- with minimum text

...grabs attention!
How To:

Presenting
Presenting

The TALK

- Prepare a 30sec, 2min, and 5min overview of your project/activity
- Possible topics (think message and outline):
  - the context of your problem/experience and why it is important (Introduction/Background)
  - your objective and what you did
  - what you discovered or results
  - what the answer means in terms of the context or the impact

Spread the message!
Presenting

**Consider Audience**

- Be prepared to talk with experts and non-experts
- Know definitions
- Critically review your poster and talk for potential questions
- Don’t be scared of “I don’t know,” “I hadn’t thought of that,” and “Great idea!”

Don’t assume knowledge!
Engage the viewer

- Invite the viewer to ask questions or offer to “walk them through it”
- Use the poster as a visual aid to emphasize points and share information (point to things)
- Don’t stand in front of your poster (can move in while pointing to things)

Be welcoming!
Presenting

#4

Attitude

• If you are bored – your audience will be bored!
• Show your enthusiasm for your topic

Share your passion!
Presenting

Appearance

- Don't distract the audience with your own appearance
- Be neatly neutral OR complement colors
- Business casual (suits not required)
- Sensible shoes (remember standing!)

Don't clash!

#5
As Gamecocks, our expertise has No Limits.