

# How to Make an Academic Research Poster

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Office of Undergraduate Research and Inquiry

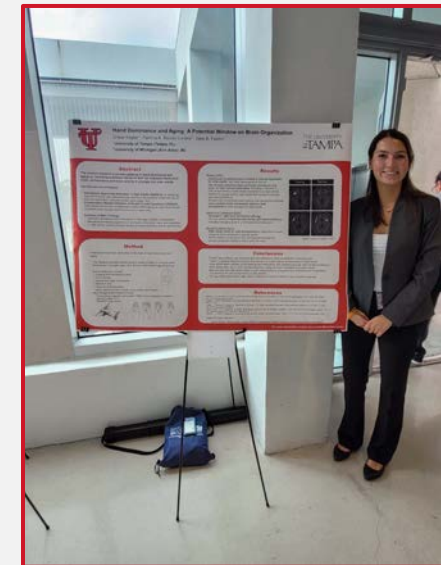
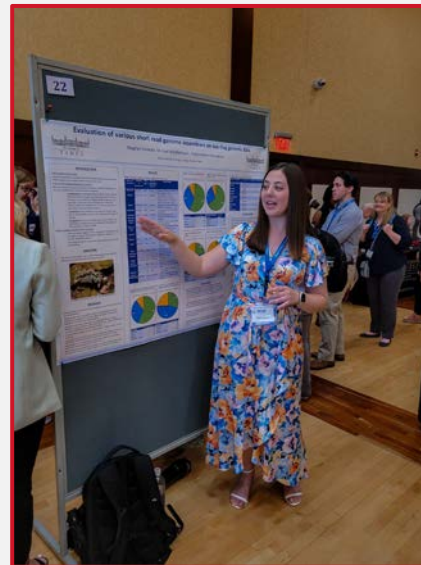
University of Tampa

Presentation Prepared by Jillian Arzoumanian



# What is an Academic Research Poster?

- Visual representation of your research
- Summarize and communicate your study to an audience
- Opportunity to receive feedback, share ideas, generate discussions, and network in an academic setting (*e.g.*, conference, symposia, hallways, etc.)
- Demonstrate expertise and develop greater public speaking skills



# Where Do I Start?



**Microsoft PowerPoint**



**Google Slides**



**Canva**



**Adobe Illustrator**



# Main Elements of a Poster

- Find out the size requirement for your poster → Typical sizing is 48” (width) x 36” (height)

**The most important aspects to any good academic poster is that is it easy to follow:**

- Title & Authors
- Introduction & Objective
- Methods
- Results
- Discussion/Conclusions
- Limitations
- Future Work
- References
- Acknowledgements
- Contact Information



# Creating the Poster

- **Title** → clear, descriptive title of your project
- **Introduction** → necessary background information
  - What is your project? What is its purpose? (objectives/hypotheses)
- **Methods** → describe your experimental procedures
  - Could be designed in a flow chart
  - Pictures or diagrams of the organism and/or equipment used.
- **Results** → supporting data and analyses
  - *E.g.*, graphs, tables, images, maps or figures
- **Discussion/Conclusion** → takeaway statements from your study
  - What can be concluded from the study and its general implications
- **References** → citations to literature (if applicable)
- **Acknowledgements** → credit to those who helped you produce this research
  - *E.g.*, collaborators or funders



# Academic Expression

- **Fonts** → make sure its legible!
  - Times New Roman
  - Arial
  - Calibri
- Text sizing should be as large as possible (no less than ~20)!
  - Rule of Thumb: the smallest text on your poster should be legible from 6-10 feet away!
- Appearance/Content varies by discipline or lab
  - Make it visually appealing!
- **Color** → adding color for organization can invite a captive audience (but use sparingly).
- **Alignment** → make sure everything is spaced and aligned properly



# Example Template

Institutional Logos



<div style="text-align: center;"><b>Title of Project</b> Authors Affiliations</div>		
<b>Introduction</b> Body text goes here	<b>Results</b>  Title (88 font size / pts) Authors & Affiliations (68 pts)	<b>Discussion</b>
<b>Methods</b>		<b>Future Work</b>
		<b>Acknowledgements</b>
		<b>References</b> <small>This text can be smaller (but no less than 20')</small>

Subheadings (60 pts)



Body Text (~34 pts)



# Examples of Posters

## Evaluation of various short read genome assemblers on sea slug genomic data

Meghan Violette, Michael Middlebrooks, Padmanabhan Mahadevan  
The University of Tampa, Tampa, Florida 33606

**INTRODUCTION**

Genomic assembly is a complex process that takes fragments of individual DNA sequences and pieces them together to form a complete set. The quality of the assembly is affected by the quality of the sequencing data, the complexity of the genome, and the choice of the assembler. The goal of this study is to evaluate the performance of various short read genome assemblers on sea slug genomic data.

**RESULTS**

Table 1: Comparison of assemblers based on N50, contig length, and coverage. Table 2: Comparison of assemblers based on assembly size and coverage. Table 3: Comparison of assemblers based on assembly size and coverage.

**CONCLUSION**

The results of this study show that the choice of assembler significantly affects the quality of the genome assembly. The SPAdes assembler consistently performed best across all metrics, producing the most complete and accurate assembly.

## An Examination into Communication Strategies on Web and Social Media by Florida Nonprofits During the COVID-19 Pandemic

Emily Huff [huffemm@gmail.com](mailto:huffemm@gmail.com)  
Faculty Advisor: Lina Gomez-Vasquez, PhD.

**Background**

The COVID-19 pandemic had a significant effect on all organizations, but was particularly noticeable in the nonprofit sector. This study examines the communication strategies of Florida nonprofits during the pandemic, focusing on their use of web and social media.

**Methodology**

20 organizations from across the state were analyzed. Five organizations from the following categories: Animal Welfare, Environmental, Human Services, Disaster Aid, Arts and Culture, and a mix of other categories. Data was collected from their websites, social media profiles, and press releases.

**Organizational Reference to COVID**

Organizations were categorized based on their reference to COVID-19 in their communication. Categories included: No reference, Minimal reference, Moderate reference, and Extensive reference.

**Research Questions**

- What strategies are being used by Florida nonprofits during COVID-19, and how do they vary by organization type or size?
- How do the types of messages and communication strategies used vary by organization type or size?
- How do the types of messages and communication strategies used vary by organization type or size?

**Discussion and Future Work**

Organizations with lower asset levels communicated about COVID significantly less than those with higher asset levels. This suggests that financial resources may influence an organization's ability to communicate during a crisis.

## The Adoption of Collaborative Group Exams in Biology Courses Reduces the Student Performance Gap

Allison Anagnostou, Susan Yang, Michelle Ross-Owens, and Jeffrey M. Goin  
Department of Biology, The University of Tampa, Department of Biology, 33606

**Collaborative group exams enhance student exam performance without inflating overall course grades**

**Overview**

The implementation of collaborative group exams (CGEs) in biology courses is likely to increase student exam performance. This study evaluated the impact of CGEs on student performance and overall course grades.

**Methods**

Students (n = 134) took an assessment twice: once individually and once in a collaborative group. The assessment included multiple-choice questions and short-answer questions.

**Results**

Students who took the assessment in a collaborative group performed significantly better than those who took it individually. However, overall course grades were not significantly different between the two groups.

**Conclusion**

The adoption of collaborative group exams in biology courses can reduce the student performance gap without inflating overall course grades. This suggests that CGEs are an effective strategy for improving student learning outcomes.

## Art Space Re-Program

Dana Fider - BA, BS (expected Dec 2022), Joseph Scarce - Ph.D., Renee Buono MA  
dana.fider@partners.ut.edu - jscarce@ut.edu - delaney@ut.edu

**Abstract**

This poster discusses the re-programming of the Art Space at the Tampa Museum of Art. The goal is to create a more inclusive and accessible space for the community.

**Methods**

Community surveys, focus groups, and stakeholder interviews were used to gather input from the community. The results of these surveys were used to inform the re-programming process.

**Background**

The Art Space at the Tampa Museum of Art has been a central part of the museum's programming for many years. However, it has become increasingly clear that the space needs to be re-programmed to better serve the community.

**References**

Various academic and professional sources were cited to support the research and findings of the re-programming process.

## Spatiotemporal Models of Gray Tampa

Zoe Gold  
Department of Biology, Department of Enviro

**Introduction**

Gray Tampa is a species of fish that is found in the Tampa Bay area. This study aims to develop a spatiotemporal model of the population dynamics of Gray Tampa.

**Methods**

Field observations, interviews, and data analysis were used to develop the model. The model takes into account factors such as habitat, food availability, and predation.

**Results**

The model shows that the population of Gray Tampa is highly variable over time and space. This is due to a combination of factors, including changes in habitat and food availability.

**Discussion/Conclusion**

The results of this study suggest that the population of Gray Tampa is declining. This is due to a combination of factors, including habitat loss and overfishing. Conservation efforts are needed to protect the species.

## Adoptive Transfer of Memory T Cells in a Murine Model of Multiple Sclerosis

Dr. Priscilla K. Coleman

**Introduction**

Multiple Sclerosis (MS) is a complex neurological disease. This study aims to investigate the role of memory T cells in the pathogenesis of MS using a murine model.

**Methods**

Memory T cells were isolated from mice and transferred to recipient mice. The effects of the transfer on disease severity and immune response were measured.

**Results**

The transfer of memory T cells significantly reduced disease severity in the recipient mice. This suggests that memory T cells play a protective role in MS.

**Conclusion**

The results of this study suggest that adoptive transfer of memory T cells may be a potential therapeutic strategy for MS. Further research is needed to confirm these findings in humans.

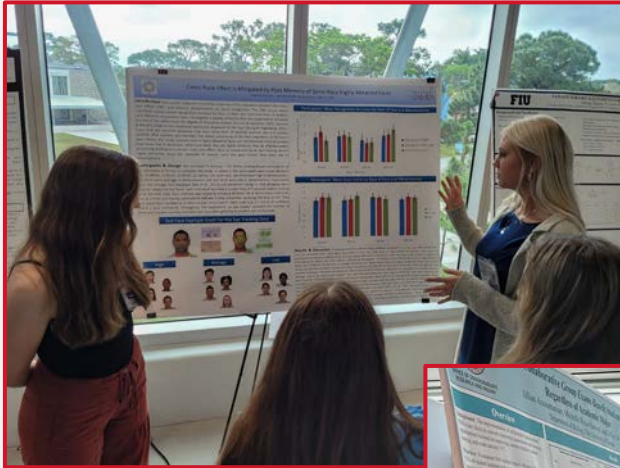


# Tips & Things to Avoid

- Avoid clutter and busy backgrounds
  - Graphs/Figures should be clean and simple to understand
  - Try to use white spaces as pauses
- Poster ≠ Paper
  - Avoid blocks of text; rather condense into short sentences (or use bullet points)
- Your poster is **NOT** an arts and crafts project
- Double-check for spelling and typos



# Presenting Your Research



- Dress appropriately for the occasion
  - Check your event for more information on the dress code
- Stand beside your poster (make sure you don't block it)
- Know who your audience is
- Treat your poster presentation like a conversation
  - Ask questions
- Practice
  - Aim to tell a story with your project

**Remember, you are the expert of your study!**



**Questions?**

Email the OURI at [OURI@ut.edu](mailto:OURI@ut.edu)