Creating Effective Posters

Chanel La
August 2, 2016
Key to effective posters:

- Focus
  - Focus on a single message
- Order
  - Use a logical, easy to read sequence
- Graphics
  - Minimise text, maximise figures, pictures etc
Clear, concise and to the point:

“Effects of oral ethanol self-administration on socialization and collaboration formation in humans: potential for low-dose positive effects”

Or

“Low dose oral EtOH enhances socialization and collaborative projects among scientists during a scientific conference”
Content

- A poster is an **illustrated abstract**
- Keep the same format
- Stick to **one** main message
Headings

• Summarize
• Organize
• Be Hierarchical

Blank space

• Leave some negative space so poster is not to “crowded”
Layout is everything!

Use **font size** to give cues to important sections
Dare to be different...

Boring.

Cool!
Font size

• Title: 85 point
• Authors: 56pt
• Sub-headings: 36pt
• Body text: 24pt
• Captions: 18pt

NOTHING below 18 point!!
Fonts

- Use a serif font for most text - easier to read.
  Arial
  Georgia
  Times

- Sans-serif font OK for titles and headings
  Helvetica
  Futura
  Tahoma
Images

- Image resolution – **150 dpi** minimum

- Web images are usually very low resolution – expect them to be blurry on actual poster

- Don’t drag and drop images into Powerpoint. Always Insert > Picture > Select file ....

- For graphs from Excel - .png format better resolution than .jpg

- Don’t forget scale bars!
Borders make pictures stand out more
**Colour schemes**

- Blue on red makes your eyes hurt.
- Red on blue makes your eyes hurt.
- Neon induces seizures.
- Black and white is boring.
- Picture backgrounds can cause headaches.
The good, the bad and the ugly...
Text overdose

Percutaneous Radio Frequency Nerve Ablation (RFNA) as an Alternative to ESWT for the Treatment of Plantar Fasciopathy

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Both Israel DeCarlo II, Medical Center, Haverford Medical School, Boston, MA and Reynoldsburg Podiatry Center, Reynoldsburg, OH

ABSTRACT

Percutaneous radio frequency nerve ablation is a well-established procedure for the treatment of chronic pain in the lower extremity. In some cases, patients with persistent chronic pain after the procedure may benefit from additional treatments such as extracorporeal shock wave therapy (ESWT). However, ESWT has been shown to have limited efficacy in the management of plantar fasciopathy. This study evaluated the efficacy of percutaneous nerve ablation for the treatment of plantar fasciopathy. Patients were randomized to either the ESWT group or the percutaneous nerve ablation (PNA) group. The primary outcome measure was the Visual Analog Scale (VAS) pain score at 6 months. The results showed that the PNA group had a significantly lower VAS pain score compared to the ESWT group. The authors conclude that percutaneous nerve ablation is a safe and effective alternative to ESWT for the treatment of plantar fasciopathy.

INTRODUCTION

Background: Plantar fasciopathy is a common condition that causes pain and discomfort in the heel and sole of the foot. Traditional treatments such as rest, ice, and anti-inflammatory medications are often ineffective. Extracorporeal shock wave therapy (ESWT) has been used as a treatment option for plantar fasciopathy, but its efficacy is limited. Percutaneous nerve ablation (PNA) is a procedure that involves the use of radiofrequency energy to disrupt nerve fibers, potentially reducing pain.

METHODS

Patients were randomized to either the ESWT group or the PNA group. The primary outcome measure was the Visual Analog Scale (VAS) pain score at 6 months. The PNA procedure was performed using a radiofrequency device that delivers a controlled amount of energy to the targeted nerve fibers. The ESWT procedure involved the use of shock waves to disrupt tissue and promote healing. Both procedures were performed by experienced practitioners.

RESULTS

The results showed that the PNA group had a significantly lower VAS pain score compared to the ESWT group. The difference was statistically significant (p < 0.05). The authors concluded that percutaneous nerve ablation is a safe and effective alternative to ESWT for the treatment of plantar fasciopathy.

DISCUSSION

Percutaneous nerve ablation has been shown to be an effective treatment for plantar fasciopathy. The results of this study support the use of PNA as an alternative to ESWT for the treatment of plantar fasciopathy. Further research is needed to evaluate the long-term efficacy of PNA.

CONCLUSION

Percutaneous nerve ablation is a safe and effective alternative to ESWT for the treatment of plantar fasciopathy. The results of this study support the use of PNA as an alternative to ESWT for the treatment of plantar fasciopathy. Further research is needed to evaluate the long-term efficacy of PNA.
Never use ‘comic sans’
Quorum-sensing regulation of adhesion in *Serratia marcescens* MG1 is surface dependent

**Introduction**

- Quorum-sensing is an important cell-cell communication mechanism that plays a role in the regulation of gene expression in *Serratia marcescens*. This is crucial for the pathogenesis of bacterial infections.
- In *S. marcescens*, quorum-sensing occurs through the production of a signal molecule, which can be detected by neighboring bacteria.

**Aim**

The aim of this study is to investigate the role of quorum-sensing in the adhesion of *S. marcescens* MG1 to various surfaces.

**Results**

- Adhesion to different surfaces can be regulated by quorum-sensing.
  - PGE plays a crucial role in the regulation of adhesion, as it is released when quorum-sensing circuits are activated.
  - The release of PGE leads to the inhibition of adhesion, suggesting a quorum-sensing mechanism.

**Conclusions/Implications**

- The study highlights the importance of quorum-sensing in the regulation of adhesion in *S. marcescens* MG1.
- This mechanism provides a novel approach for the regulation of bacterial adhesion, which could be exploited for the development of new therapeutic strategies.

**Figure 1.** The QS system of *S. marcescens* MG1 is highly sensitive.

**Figure 2.** Adhesion of MG1 to a hydrophobic surface is reduced by a signal molecule (PGE).

**Figure 3.** Adhesion of MG1 to a hydrophilic surface is increased by a signal molecule (PGE).
No thanks.
Easy to read

But the colour scheme?.. Debatable.
Photophysics and Such of Single Dye-molecules Isolated in Salt Crystals

Eric D Bott • Kristin L Wustholz • Erin A Riley • Bart Kahr • Phillip J Reid

make sure to thrust and number them

1.1

Eye-catching?...
Nice layout, easy to read & eye catching
Software

- Powerpoint – easiest
- Adobe Illustrator – less easy but more awesome
- InDesign
Feedback

• Get comments and suggestions from others – especially your lab group!
• It should also make sense to someone who knows nothing about your work
Resources

- Cornell University guide to creating posters

- Neurotopia science blog – Poster edition

- Creating effective posters
  http://www.ncsu.edu/project/posters/NewSite/index.html
Now take 5 minutes to edit/rearrange/add to your poster

Then trade posters with the person next to you and give each other feedback
Effective Presentation Skills

Chanel La
August 2, 2016
Visual Aid

- Keep it simple
- Use:
  - Diagrams
  - Charts
  - Figures
  - Tables
- Use large fonts and try to avoid clutter
- Ensure smooth transitions between slides
General Guidelines

• The audience may come from any scientific background – do not be too specific

• Follow a logical sequence:
  ▫ Intro – background & goal
  ▫ Methods
  ▫ Results
  ▫ Conclusion
Intro: Background + Goal

• Emphasize the importance of your work
  ▫ What is the significance? Impact?

• Capture the audience in the first sentence
  “In 2015, Zika virus affected more than 1 million people in Brazil alone.”
  or
  “How many of you in the audience know someone with high blood pressure?”
Methods & Results

• Briefly state your principle method
• Describe not just what you found, but what it means
• Use examples & analogies
• Use your slides for visual representation
Conclusion

• Briefly summarize your findings

• Mention how this is novel
  ▫ Different from current literature?
  ▫ Never been studied?

• Mention what doors this may open for future work
Extra Tips

• Avoid acronyms, jargon, exaggerations

• Breathe & feel free to pause

• Use positive language & be enthusiastic
Evaluations

- Rate using the following scale:
  - 0 - (not so good)
  - 1 – (average)
  - 2 – (good)
  - 3 – (great)

<table>
<thead>
<tr>
<th>Quality of Slides</th>
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Can I create a burrito so hot even He couldn't eat it?
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Time to Reflect

Take 5 minutes to jot down the key message to your research story.
Subgroups

Take turns practicing your 3 minute presentation to the group.

The rest of the group should provide feedback (5 mins) after each practice talk.
Resources

- UBC 3MT Past Finalists Videos’
  http://3mt.grad.ubc.ca/videos-images/

- Canadian Association for Graduate Studies, 3MT how-to video & finalists
  http://www.cags.ca/3mt_howto.php#.V6C5RGM32SU
  http://www.cags.ca/3mt/index.php

- CBR Research Day 2015
  http://cbr.ubc.ca/events/research-day/
We hope you enjoyed & learned a lot doing research this summer.

Have fun & good luck on CBR Research Day!