The Scientific Research Poster

A scientific poster is a visual presentation of scientific research in a standard form, with heading, name of researcher, name of research institute, text, tables and illustrations displaying the results of the research. It is commonly used at scientific conferences, in addition to lectures, in view of the growing amount of research work and the desire to provide opportunities for all of it to be displayed. A special session, in a designated hall, is usually dedicated to the presentation of posters. The researchers can stand nearby to answer questions from other conference participants. At some conferences a committee reviews the posters and chooses the best among them, from the point of view of research, and their creators are asked to present the work to the audience at a special session, within a limited time (usually about 10 minutes).

The scientific poster format is an excellent way of presenting students' research work. It necessitates a brief and fluent formulation, setting out all the stages of the research in a condensed, clear and interesting form. The process requires thought and planning on selection of information and on design. It is a hands-on experience involving creative activity, teamwork and division of roles.

The scientific poster can provide an opportunity for students who are ‘weaker’ in the area of content to express themselves by means of creative display. Posters can be shown in an exhibition for other students, parents, and visitors to see. This gives opportunities for students to stand by their posters, show their research and answer questions. The exhibition can be on display for an extended period, for the enjoyment of visitors and as a source of pride for the students.

Notes and guidelines on making posters

Remember, your scientific poster is an advertisement of your work!

Planning

- Find out what the poster size should be, what formats (such as font size) you should use, where it will be displayed, and who will see it.
- Plan the content of your poster. Choose a heading. Select what information to include and what to leave out.

Making

- Use graphs, tables and coloured illustrations. Use photographs, provided that they help you to make your points.
- Make a sketch of the layout of your poster.
- Under the heading write your names and school name.
- Colour attracts attention, but too much can be distracting. Use one colour for all of the text and one for the background. Dark type on a light background is easiest to read.
- Don’t overcrowd your poster. Leave space around the text.
- A poster is read like a newspaper or magazine. Type text in columns. Columns should not vary in width.
- The information flow should be from top to bottom or from left to right, but not both or the reader can get confused.
- The captions and illustrations should be large enough to read from two metres away.
- Use a computer to display text clearly, and to process data for tables and graphs. Use plain fonts such as Arial, Helvetica, and Times New Roman. Spell-check and get someone else to ‘proof-read’ your poster.
- If a suitable printer is available, print the whole poster on one large sheet so you don’t need to use glue.

Continued overleaf
The Scientific Research Poster

Recommended font sizes

Title: 85pt minimum (size will vary to fit the space).

Names of authors and their organisations: 56pt minimum

Sub-headings: 36pt minimum

Body text: 24pt minimum

Captions: 18pt minimum

Samples

You can find examples of scientific posters at these websites:

- http://www.ncsu.edu/project/posters/examples/
- http://colinpurrington.com/tips/academic/posterdesign
- http://www.the-aps.org/careers/careers1/GradProf/gposter.htm
- http://www.ncsu.edu/project/posters/IndexStart.html
- http://www.strath.ac.uk/Departments/CAPLE/poster,
6. Knowledge Presentation

6.3 Recognising a scientific research poster: appendix

SCIENTIFIC POSTERS

A randomised controlled trial of the use of anti-anginal medication over a 16-week cardiac rehabilitation exercise program
K. McRae, M. Thurl, R. Stephenson
Centre for Physical Investigation, Byers Road, Glasgow G12 9L2, Scotland U.K.

Background

Exercise and Cardiac Rehabilitation

Diet has been reported to be a new active treatment against the progression of angiographically detectable coronary artery disease, and dietary programs have shown promising results. The aim of the research was to determine whether dietary programs could be effective in reducing cardiovascular risk factors, and to investigate the potential benefits of such programs in reducing the risk of future cardiovascular events.

Methods

Randomised Controlled Trial

A randomised controlled trial (RCT) was conducted among 100 patients with stable coronary artery disease who were referred to the cardiac rehabilitation programme. The patients were randomly assigned to one of two groups: a dietary intervention group or a control group. The dietary intervention group received daily supervision and advice from a trained diettian, while the control group received no such supervision.

Discussion

Study Design

The primary outcome of this study was the proportion of patients achieving a reduction in total cholesterol levels of 50% or more. The study concluded that dietary programs were effective in reducing cardiovascular risk factors, and that these programs could be effective in reducing the risk of future cardiovascular events.

Conclusion

The results of this study support the use of dietary programs in the management of patients with stable coronary artery disease.

References


Southern Flounder Exhibit Temperature-Dependent Sex Determination

David Leibovitch, Wing Chong, and Russell J. Dorn
Department of Biology, University of North Carolina, Carolina, NC, USA

Introduction

Southern flounder, Paralichthys lethostigmus, are a protogynous hermaphroditic species that exhibit temperature-dependent sex determination (TDS). TDS is a phenomenon in which temperature plays a role in determining sex.

Objective

The objective of this study is to determine whether Southern flounder exhibit temperature-dependent sex determination (TDS), and if so, to identify the factors that influence sex determination.

Methods

Temperature Effects

Temperature was manipulated using a temperature gradient chamber, which allowed for the continuous monitoring of environmental temperature. The temperature gradient was set at 20°C for the first 10 days, followed by a gradual increase to 30°C.

Hormonal Effects

Hormones were administered to fish using subcutaneous injections. The hormones used were testosterone and estrogen.

Responsiveness to Temperature

Changes in gonadal development were observed in response to temperature changes.

Results

Temperature and Hormonal Effects

Temperature and hormone levels were found to be significantly correlated with gonadal development.

Responsiveness to Temperature

Gonadal development was found to be responsive to temperature changes, with higher temperatures leading to a greater proportion of male fish.

Conclusions

Temperature and hormone levels were found to be significant factors in determining sex in Southern flounder. These results suggest that TDS is a mechanism for sex determination in this species.

Acknowledgements

This work was supported by funding from the National Science Foundation (NSF) and the University of North Carolina at Chapel Hill. We wish to thank the staff at the University of North Carolina for their assistance.

Source: http://www.ncsu.edu/project/posters/examples/
Designing a scientific research poster: worksheet

Present your research work in the form of a scientific poster. This will be part of a class exhibition.

1. Check the specifications of size and orientation, before you start your poster. You will need to know the maximum poster size and the orientation (landscape, portrait or square).

2. Study the 'Notes and guidelines on making a scientific poster'.

3. Make your poster as 'professional' as you can.

4. Compare your posters with others from your class.

5. As a class, decide which poster is the best.

6. Use the example here to help you plan:

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**Poster title goes here**

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**Introduction**

Title

Check with conference organizers on their specifications of size and orientation, before you start your poster. You may need to know the maximum poster size and the orientation (landscape, portrait or square).

**Aim**

How to use the template:

Small changes in this text and replace it by taking in your own text, or copy and change the section on Visual Basic or PowerPoint templates. The text in the box should be between 24 and 32 points. An outline of the text is not required.

**Methods**

Tips for making a successful poster:

- Write up the technical details of your experiment in a separate section or if there is not enough space, use bold characters and a smaller font size.
- Label your axes:
- Use standard scientific conventions: i.e., do not write "in grams" as "in g".
- Make sure your poster is large enough to be read from a distance.
- Use color, and try to highlight the main points of your poster.

**Results**

Drawing diagrams:

- Diagrams should be kept to a minimum.
- Use standard scientific conventions: i.e., do not write "in grams" as "in g".
- Make sure your poster is large enough to be read from a distance.
- Use color, and try to highlight the main points of your poster.

**Conclusion**

For more information on:

- Poster Design: Scanning and Digital Photography, and Image: For hast.

**Acknowledgement**

Just highlight this text and replace with your own text. Replace it with your text.

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**Source:** [http://miu.med.unsw.edu.au/sci_posters.htm](http://miu.med.unsw.edu.au/sci_posters.htm)