

Guía para el Desarrollo de Pósters de Investigación

Seminario de Investigación de Posgrado
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1. Qué es un póster de investigación?

Un póster de investigación es un medio visual para comunicar los resultados de un trabajo investigativo. Un póster no es simplemente un artículo presentado en otro formato. El póster, a diferencia del artículo, es de carácter más gráfico. Un buen póster debe guiar al espectador usando una lógica visual, con una estructura jerárquica que enfatice los puntos principales del trabajo.

Generalmente, los pósters son exhibidos en sesiones especiales en conferencias. En estas sesiones, los asistentes tienen la oportunidad de interactuar directamente con los autores y obtener información adicional en caso de estar interesados. Por esto, es muy importante que el póster sea visualmente atractivo de manera que pueda capturar la atención del público y motivarlos a preguntar sobre los detalles.

2. Qué información debe contener un póster de investigación?

El póster de investigación, al igual que un artículo, debe mostrar claramente los detalles del trabajo de investigación que se quiere presentar. Específicamente, el póster debe responder a las siguientes preguntas fundamentales:

- Cuál es el problema que se está enfrentando?
- Cuál es el estado del arte?
- Cuál es su solución y qué tiene de novedoso?
- Cuáles son sus avances?
- Cuáles son los planes para el trabajo futuro?

Naturalmente, no se puede esperar incluir todos los detalles de un trabajo de investigación en el reducido espacio del póster. Por lo tanto, es importante enfatizar los conceptos, ideas y resultados más relevantes del trabajo investigativo.

Todo póster debe tener un título claro, el nombre de los autores y la afiliación de los mismos. Sin embargo, la estructura y contenido del póster dependen del tipo de trabajo que éste presenta. Por ejemplo, un póster sobre un trabajo de investigación avanzado con resultados tangibles puede contener los siguientes tópicos adicionales: introducción, solución propuesta (teoría, metodología), resultados, conclusiones y trabajo futuro. Un póster que presente una propuesta de investigación puede contener los siguientes ítems: antecedentes y justificación, formulación del problema, objetivos, metodología y secuencia de actividades. Opcionalmente, el póster puede contener las referencias bibliográficas más relevantes.

3. Estilo y formato del póster

El póster debe mostrar el contenido esencial en el título, encabezados principales y gráficas. La importancia relativa de los elementos debe ser indicada gráficamente: los puntos principales deben ser presentados en los encabezados con tipos de letra grandes, los detalles deben estar subordinados visualmente, usando un tipo de letra más pequeño. Todos los elementos del póster, incluyendo las leyendas de las figuras, deben ser legibles desde un metro de distancia.

El póster se ubica generalmente sobre un cartón de un pliego (A0) o medio pliego (A1). El póster que se realizará en este seminario se hará sobre un cartón de tamaño A0 (84cms×119cms).

Hay dos formas principales de organizar el póster: realizar diapositivas individuales de tamaño carta que se ubican, generalmente en columnas, sobre el cartón, o editar e imprimir el póster en su tamaño original. La segunda opción permite realizar pósters que se ven más profesionales, pero puede ser mucho más costoso imprimirlos. Una opción intermedia es editar el póster en su tamaño original e imprimirlo por partes en hojas tamaño carta que, posteriormente, deben ser pegadas para formar el póster.

4. Ejemplos

Southern Flounder Exhibit Temperature-Dependent Sex Determination
Reproductive Biology, Fall 2017, North Carolina State University, Raleigh, NC 27695

Introduction
 Southern flounder (*Paralichthys lethostigma*) is a protogynous hermaphrodite that changes sex from female to male during its lifetime. Temperature-dependent sex determination (TSD) is a mechanism by which the sex of an organism is determined by the temperature of the environment during development.

Objective
 The study was conducted to determine whether southern flounder exhibits temperature-dependent sex determination (TSD) and to identify the temperature range for sex determination.

Methods
 1. Southern flounder embryos were reared in controlled conditions (20°C and 25°C) for 30 days.
 2. Sex was determined based on the presence of male secondary sex characteristics (e.g., testes, vas deferens, and anal fin) and the presence of female secondary sex characteristics (e.g., ovaries and oviducts).
 3. The sex ratio (male/female) was calculated for each temperature treatment.
 4. Chi-square tests were used to determine if the sex ratio deviated significantly from a 1:1 ratio.

Temperature Affects Sex Determination

Temperature (°C)	Sex Ratio (M:F)
20	1:1
25	~1:1.5

Growth Does Not Differ by Sex

Temperature (°C)	Sex Ratio (M:F)
20	1:1
25	~1:1.5

Rearing Temperature Affects Growth

Temperature (°C)	Sex Ratio (M:F)
20	1:1
25	~1:1.5

Conclusions
 1. Southern flounder exhibits temperature-dependent sex determination (TSD).
 2. The sex ratio is significantly biased towards males at 25°C compared to 20°C.
 3. Growth does not differ significantly between sexes at either temperature.

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An Optimized Point-Based Multimodality Image Registration Algorithm
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ABSTRACT
 A novel efficient, robust, and accurate algorithm is presented for multimodality point-based image registration. The method is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets. The algorithm is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets. The algorithm is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets.

WEIGHTED RAUO DENSE MEASURE
 The proposed method is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets. The algorithm is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets.

REGISTRATION ALGORITHM
 The proposed method is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets. The algorithm is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets.

CONCLUSIONS
 The proposed method is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets. The algorithm is based on a novel point-based registration algorithm that uses a point-based registration algorithm to register the point sets.

Helix-Turn-Helix Motif Detection in Protein Sequences
 Giri Narasimhan¹, Changsong Bu², Yuan Gao³, Tom Milledge⁴, Xuning Wang⁵, Ning Xu⁶, Gaslin Zheng¹, And Kala Mathee²

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ABSTRACT
 We use machine learning and knowledge discovery to design an algorithm to identify helix-turn-helix motifs. The algorithm identifies a motif in a protein sequence. The algorithm identifies a motif in a protein sequence. The algorithm identifies a motif in a protein sequence.

Previous Methods
 Previous methods for identifying helix-turn-helix motifs are based on sequence alignment and motif discovery. These methods are based on sequence alignment and motif discovery. These methods are based on sequence alignment and motif discovery.

Pattern Examples
 Examples of helix-turn-helix motifs are shown. These motifs are based on sequence alignment and motif discovery. These motifs are based on sequence alignment and motif discovery.

New Algorithm - Basic Assumptions
 The new algorithm is based on the following assumptions: 1. Helix-turn-helix motifs are conserved across species. 2. Helix-turn-helix motifs are conserved across species. 3. Helix-turn-helix motifs are conserved across species.

Methods in Protein Sequences
 Methods for identifying helix-turn-helix motifs are presented. These methods are based on sequence alignment and motif discovery. These methods are based on sequence alignment and motif discovery.

New Algorithm Outline
 The new algorithm is based on the following steps: 1. Identify potential motifs. 2. Identify potential motifs. 3. Identify potential motifs.

Experimental Results
 The experimental results show that the new algorithm is more accurate and efficient than previous methods. The experimental results show that the new algorithm is more accurate and efficient than previous methods.

Conclusions
 The new algorithm is more accurate and efficient than previous methods. The new algorithm is more accurate and efficient than previous methods.

Future Work
 Future work includes extending the algorithm to identify other motifs. Future work includes extending the algorithm to identify other motifs.

Website for GYM Online: www.cs.fiu.edu/~giri/bioinf/GYM2/welcome.html

A Framework for Assessing the Condition of Agricultural Lands
 George Hess¹, Anne Holtkamp², Mike Munster³, Steve Peck⁴, Lee Campbell⁵, Betty McQuaid⁶, Steve Shafer^{1,5}

Mission: To develop indicators of the condition of agricultural lands within an ecological framework, and to monitor and evaluate this condition on a regional basis.

Sustainable agriculture has been defined as agriculture that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Indicators were selected to reflect crop productivity and land stewardship.

Potential Indicators for Annually Harvested Herbaceous Cropland

As a starting point, we chose to consider only those indicators that are directly related to crop productivity and land stewardship. We chose to consider only those indicators that are directly related to crop productivity and land stewardship.

Fields are for crops but landscapes are for all of us.

Acknowledgements: This work was supported by the National Science Foundation (NSF) Grant 1044110, the National Center for Sustainable Agriculture (NCSA), and the National Center for Food Safety and Inspection (NCFSI).

5. Referencias

Esta guía se basó parcialmente en la información encontrada en los siguientes sitios:

- <http://www.biology.lsa.umich.edu/research/labs/ktosney/file/PostersHome.html>
“How to create a poster that graphically communicates your message”, Kathryn Tosney, The University of Michigan.
- <http://www.ncsu.edu/project/posters/IndexStart.html>
“Creating Effective Poster Presentations”, George R. Hess y Leon H. Liegel, NC State University.

Un sitio con recursos adicionales es: http://www.drizzle.com/~afox/writings/Posters_HOWTO.htm.