Posters-Best Practices
Posters are a critical component of science communication – an important element in a successful scientific career

Posters sessions provide opportunities for:

- Personal interaction
- Networking
- Potential collaboration
1 – Writing Poster Titles & Figure Titles

Writing titles as “takeaways” – i.e., complete thoughts that cue the reader to the meaning of your overall poster and each figure

2 – Designing for Readability

Developing discrete sections; eliminating words so your poster is not “text heavy”; cueing the reader how to view your information

3 – Telling the Story

Creating “flow;” organizing your introduction; framing your methods, conclusions, and next steps
1 – Writing Poster Titles & Figure Titles

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Best posters are snapshots of your work, and good titles—main and figure—are critical to communicating your research.
First, what is the difference between poster title #1 and poster title #2?

- **Title 1:** E2F1 effects on p53 and neovascularization in the ischemic myocardium
- **Title 2:** E2F1 stabilizes p53 and suppresses neovascularization in the ischemic myocardium
What makes poster title #1 a *Topic* title and poster title #2 a *Message* title?

**Topic title**

*E2F1 effects on p53 and neovascularization in the ischemic myocardium*

1. Key word – descriptive noun with no relationship or causality
2. Not a sentence

**Message title**

*E2F1 stabilizes p53 and suppresses neovascularization in the ischemic myocardium*

1. Key words – active verbs showing a relationship or causality
2. A complete sentence
Now, good poster titles don’t necessarily HAVE to be sentences. But they should describe the poster’s main point.

Development of Metastatic Precursor Lesions in Murine Pancreas following Mutant Kras Expression in Adult Pdx-1 Positive Cells

With this title we can quickly process the main point of the poster: precursor lesions came about as a result of a specific gene expression.
Of course, it is very easy to transform this title into a sentence.

Development of Metastatic Precursor Lesions in Murine Pancreas following Mutant Kras Expression in Adult Pdx-1 Positive Cells

Metastatic Precursor Lesions in Murine Pancreas Developed following Mutant Kras Expression in Adult Pdx-1 Positive Cells
Finally, use message titles in your figures as well – avoid topic titles – and number your figures

Each figure title:

- is a sentence that tells us exactly what we should “takeaway” from the figure
- uses verbs, showing relationship or causality
- is numbered so we know where we are in the “sequence” of the poster’s story and for reference
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How do you want your viewers to read your poster? Think of the directional “flow” of your poster’s story.
The “Pure Column” is the standard classic approach to poster design.
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Pure Column

Here is the title of the poster Here is the title of the poster Here is
And here are some typical parts of a Pure Column poster, which can be three or four columns.

### Pure Column

Here is the title of the poster

<table>
<thead>
<tr>
<th>Background</th>
<th>Figure/Table</th>
<th>Figure/Table</th>
<th>Figure/Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>Figure/Table</td>
<td>Figure/Table</td>
<td>Figure/Table</td>
</tr>
<tr>
<td>Design Methods</td>
<td>Figure/Table</td>
<td>Figure/Table</td>
<td>Figure/Table</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Next Steps</td>
<td></td>
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</tbody>
</table>

Figure/Table
Here’s another Pure Column approach that uses the terms “Introduction” and “Hypothesis” among others.
Consider Hybrid Row Column especially if figures reflect a sequential dependent time pattern in experimental results.
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<table>
<thead>
<tr>
<th>Introduction</th>
<th>Figure/Table 1</th>
<th>Figure/Table 2</th>
<th>Figure/Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis</td>
<td>Figure/Table 4</td>
<td>Figure/Table 5</td>
<td>Figure/Table 6</td>
</tr>
<tr>
<td>Design/Methods</td>
<td>Figure/Table 7</td>
<td>Figure/Table 8</td>
<td>Figure/Table 9</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Next Steps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hybrid Row Column
But note that looking at layouts, a reader STILL may not know how to read it – or have to work to figure out how to read it.

So what’s the solution?
But note that looking at layouts, a reader STILL may not know how to read it – or have to work to figure out how to read it

**Pure Column**

- **Background**
- **Objectives**
- **Design Methods**
- **Figure/Table**
- **Figure/Table**
- **Figure/Table**
- **Conclusions**
- **Next Steps**

**Hybrid Row Column**

- **Introduction**
- **Hypothesis**
- **Design/Methods**
- **Conclusions**
- **Next Steps**

**Here is the title of the poster Here is the title of the poster Here is the title of the poster Here is**
### Pure Column

<table>
<thead>
<tr>
<th>Here is the title of the poster Here is the title of the poster Here is</th>
<th>Figure/Table</th>
<th>Figure/Table</th>
<th>Figure/Table</th>
</tr>
</thead>
</table>
| **Introduction**  
|  
| **Hypothesis**  
|  
| **Design/Methods**  
|  | Figure/Table | Figure/Table | Conclusions  
|  
|  
| Next Steps  
| | Figure/Table | Figure/Table |  |
Here is the title of the poster

<table>
<thead>
<tr>
<th>1</th>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>3</td>
<td>Design/Methods</td>
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<tr>
<td>4</td>
<td>Results</td>
</tr>
<tr>
<td>5</td>
<td>Conclusions</td>
</tr>
<tr>
<td>6</td>
<td>Next Steps</td>
</tr>
</tbody>
</table>

Figure/Table 1  
Figure/Table 2  
Figure/Table 3  
Figure/Table 4  
Figure/Table 5  
Figure/Table 6  
Figure/Table 7  
Figure/Table 8  
Figure/Table 9  
Figure/Table 10

To assist readers, number your key sections and figures, create distinguishing headers, and thin rules to separate sections.
Now, let’s look at text. How many posters do you see that look like this?
So what are the flaws here?
Overriding principle: Make your poster “skimmable”

Changes sentences to bullets, phrases

Not:
cDNA cloning methods are being developed to meet the needs of bioinformatics and the evolving landscape of the transcriptome

Instead:
cDNA cloning methods can:
--meet needs of bioinformatics
--enhance understanding of transcriptome

Highlight key categories with boldface

For example, in Methods Section, have a three or four word “Title” of each method that’s bolded and then a brief description of the method

Lots of white space

Do a word count – do you have more than 1,000 words? Then think about cutting. Do NOT drop what amounts to a scientific paper onto your poster.

Let your figures tell the story

A good sequence of figures, with explanatory titles, should carry the bulk of your story; keep additional narrative to a minimum
Agenda

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To create flow within your poster, you must organized opening sections using the CCQH “funnel” pattern

- **Context**: Context gives the big picture—what everyone knows, agrees to.
- **Complication**: Complication tells us what’s unknown or uncertain about the issues raised by the context.
- **Question**: The Question raised by the complication should be answerable in a way that will resolve the complication.
- **Hypothesis**: The Hypothesis is the narrowest point of the funnel— the hypothesis focuses not only the work itself but the presentation.
Here’s one way you can map the funnel onto a set of poster sections

<table>
<thead>
<tr>
<th>1</th>
<th>Introduction</th>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Research Question</th>
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<table>
<thead>
<tr>
<th>3</th>
<th>Hypothesis</th>
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<th>Design/Methods</th>
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<tbody>
<tr>
<td>Design/Methods</td>
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<table>
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<tr>
<th>5</th>
<th>Results</th>
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<tr>
<td>Figure/Table 1</td>
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<tr>
<td>Figure/Table 2</td>
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Let’s look at an example poster. Does it follow our principles?