

POSTER FORMAT FOR BORNS SYMPOSIUM

Posters must be 48" x 36" horizontal, and can have a matte finish.

1st year graduate students are required to submit a poster. If you are having issues getting your poster printing costs covered, please contact Rebecca Addressi at Rebecca.Addressi@maine.edu.

Please review the poster structure in the link below, and the provided article.

<http://blogs.nature.com/naturejobs/2017/11/06/using-design-principles-to-inform-scientific-posters/>

FORMAT OF POSTERS

- TITLE - Title, authors, affiliation, date
- ABSTRACT
- INTRODUCTION (for example: geologic setting, methods, hypotheses)
- RESULTS AND DISCUSSION
- If you use subheadings, use a different style, such as *italics* or **bold**, to set them off.
- CONCLUSIONS – tie things up by gathering the threads presented in the introduction
- REFERENCES CITED (do not list a Bibliography, list only those cited on the poster, you may use a smaller type font.)

Include FIGURES and FIGURE CAPTIONS, and any figure used must be specifically identified as to source in the caption.

TABLES must also have a caption and source. Scanned tables are usually unreadable, and often can be better if just retyped.

Use Geological Society of America REFERENCING STYLE (see box below).

ORGANIZE the poster on the large scale as above, and ORGANIZE PARAGRAPHS with a topic sentence, body of discussion, and concluding sentence. NO ONE-SENTENCE PARAGRAPHS, please.

FIGURES are best if scanned, using high resolution and saving in *jpeg* format. Grayscale mode is usually the best and least memory-consuming mode for diagrams, or use color. Text mode and line-drawing mode tend to be very rastery.

LAYOUT – the visual layout of the poster is critically important because you are trying to attract browsers to stop by to look, read, and, we hope, to discuss your work. It must be neat and attractive, eye catching but not necessarily “flashy.” Avoid over-decoration that detracts from the CONTENT.

FLOW – visitors will be expecting a logical flow through abstract, introduction, methods, results, conclusions, references. The standard English language format is upper left to lower right on pages. In a poster the “pages” should be sections. If there are three or more columnar sections, the reader is likely to unconsciously expect a zig-zag scan pattern (see figure below)

SECTIONS (COLUMNS) – should be a mix of visual displays (photos, diagrams, tables) and text. Text should be no more than about 12-15 words wide, to make reading easier, thus you may want three or more columns. It is also often very useful to separate the sections with lines or by placing them in individual boxes.

BALANCE – do not use too much text, the visitor will become quickly tired of reading what otherwise should be a published tome. The absolute worst posters (which you hardly ever see anymore) are written papers separated into pages and thumb-tacked to the board. However pretty the pictures and diagrams, however, they need some explanation. Find a comfortable mix.

FONT SIZE – a rule of thumb is that you should be able to read a font while **standing six times the width of the poster away**. Thus something like Times 14 or 16 may be the minimum readable fontsize. The title should be much larger (readable 20 feet away), and the authors, affiliations, section headings, etc. should be intermediate in size.

SUBSTANCE versus STYLE – use simple, readable fonts. Avoid ornate and *cutesy fonts* that slow down reading or interfere with comprehension. Fonts for diagrams are often sans serif (such as Geneva or Arial) to simplify and focus. Avoid over-decoration such as multiple layers of color highlighting, angels and bluebirds in the margins (such as in medieval manuscripts), etc. Many amateurs and some professionals go wrong by using a BACKGROUND picture with too much distracting detail (such as a forest scene) that interferes with comprehension. I prefer a simple color, or gradient colors. If you do use a background, place mono-colored boxes behind your graphs and text.

READABILITY – for fonts, pictures and diagrams choose a HIGH CONTRAST color (black on white, yellow, or light blue background, for example) rather than the defaults in some graphing programs. Yellow lines and symbols on a white background are usually unreadable.

ARRANGEMENT – many posters have converged on a simple three-column layout, for the logic and adherence to convention. However, there is nothing to prevent you from coming up with other creative arrangement, such as radial (starburst), branching, cyclical, or others as befits your topic.

The poster layout is organized as follows:

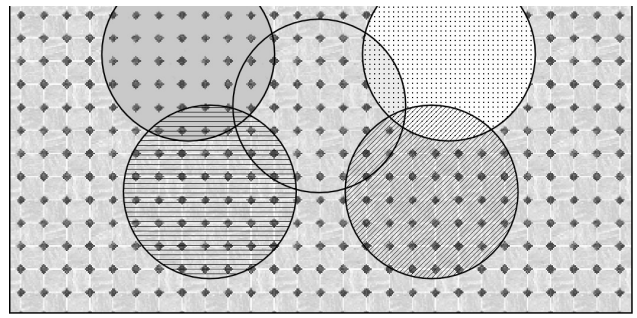
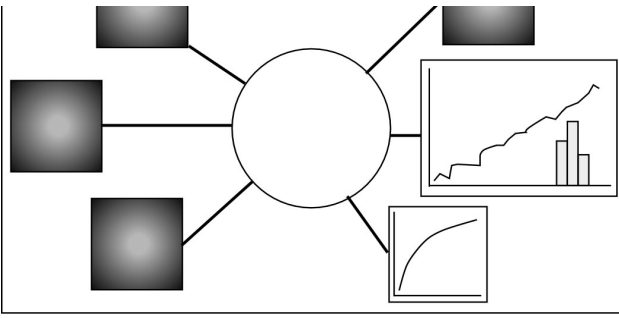
- Top Row:** Title of the Poster (repeated three times) and Authors and Authors' Affiliations, Addresses, e-mails.
- Second Row:**
 - Left Column:** Abstract (with a grid), Introduction (with a grid), Results and Discussion (with a grid).
 - Middle Column:** A large figure placeholder containing a line graph and a bar chart.
 - Right Column:** A large image placeholder.
- Third Row:**
 - Left Column:** A large image placeholder.
 - Middle Column:** Two smaller image placeholders.
 - Right Column:** Conclusions (with a grid) and a figure placeholder showing a curve.
- Bottom Row:** References Cited (with a grid) and Acknowledgements (with a grid).

This simplified layout includes:

- Top Row:** Title of the Poster (repeated three times) and Authors and Authors' Affiliations, Addresses, e-mails.
- Middle Section:**
 - Left Column:** Text area.
 - Right Column:** Large image placeholder.

This decorative layout includes:

- Top Row:** Title of the Poster (repeated three times) and Authors and Authors' Affiliations, Addresses, e-mails.
- Middle Section:**
 - Left Column:** Text area.
 - Right Column:** Large image placeholder.



Abstract - is not just another introduction. It succinctly summarizes the whole poster in simple declarative sentences. DO NOT use phrases such as “It will be shown that...” or “Several examples of sedimentary environments are described.” DESCRIBE them. Avoid future tense (“In the next section I will demonstrate that...”), just lay out the facts. Also, the abstract should not just run into the introduction. Write the abstract as if the reader only has time to read it and not all the text on the poster (that is often the case). In turn, write the Introduction as if the Abstract did not exist - assume nothing has yet been written above (not even the title).

Introduction - sets the stage by giving the hypotheses, geologic setting, features or ideas to be compared and contrasted. Start with a broad overview of the topic, end with a paragraph that states the purpose of this particular paper. The most important part of the introduction is answering the reader’s innate question: **“Why should I care?”** Never use the style “It will be demonstrated in the Discussion that ...” **Just say it.** Also, the future tense is incorrect, because it already exists, in black and white: all I have to do is look at that section to read it. Avoid second-person narrative: “you see that...”, “we can see that...” etc. **Just state the facts:** “Figure 2 is a plot of x versus y, with a clear trend of increasing concentration through time.” First-person narrative is discouraged in scientific writing, but it is better than passive voice if you actually did the work or made the observation: “I collected 64 samples of mud in 1999 in order to analyze the heavy metals content.”

Discussion - organize logically, as by location, or process, or by individual papers to be compared. Don’t mix results and interpretations. Opinions should be reserved for the conclusions. DON’T make value judgments (“This is a very good paper.” or “The authors missed the boat.” Evaluate the facts, compare and contrast, point out potential conflicts or logical errors, point out alternative hypotheses or data sources if necessary, but “dueling opinions” are useless without supporting data. For example, if an author suggests that passive margin sediments are found on the Chilean shelf, it is valid to question the conclusions. In the same case, a statement such as “I think we need to evaluate causes other than plate tectonics theory” would be vague and unproductive.

Paragraph Structure - Be sure that each paragraph has a topic sentence and a concluding sentence, and that the paragraph hangs together as a coherent topic. Organize carefully so that the argument flows from the topic sentence through a series of arguments or examples, and in the concluding sentence it is generally best to refer back to the initial topic. One sentence is insufficient for a paragraph. Lay out paragraphs with the **first line indented**, and no space between. Exceptions include Subheading topic paragraphs (like many of those above), or bullets. Separate **sections** with an extra space and a heading.

Don’t “over quote.” You have been taught to use **quotations** and **references** to avoid plagiarism, but you can paraphrase and summarize thoughts in your own words. A sentence with 2 or 3 quotes of fewer than 8 words length could much more easily be smoothed into your own voice. Conversely, direct quoting of line after line, or even full paragraphs, is simply an attempt to avoid doing the work required (thinking for yourself). You rarely have exactly the same intent as the original author, so synthesize it for your own needs. Also avoid or use sparingly the style: “Clarke (2001) states that...” just say: “Two thousand years of uplift created this landscape (Clark, 2001).”

Avoid passive voice. For example: “Samples were taken to provide heavy minerals for provenance models by Jones (1999).” = PASSIVE; or: “In the study by Jones (1999), samples were analyzed to show the relative abundance of heavy minerals.” = PASSIVE AND CONVOLUTED. Better: “Jones (1999) collected 200 heavy mineral samples. He modeled provenance by comparing sediment suites with known rock compositions.”

Above all, **write simply**. Avoid run-on sentences. Emulate Ernest Hemingway by expressing one thought per sentence. Write in simple, declarative sentences.

Figures, equations and tables are important parts of any scientific presentation, illustrating concepts much more succinctly than can be stated in words. **Always write your own captions**, to avoid plagiarism, and because you seldom have exactly the same purpose as that of the original author. In an official publication, you would almost always redo a table or redraw a figure, unless specific permission is obtained to reprint it. We are more casual for term papers.

Conclusions - generally the weakest part of a student paper or poster. Draw the threads back together. Make a statement that compares and contrasts, suggests future work, provides a view of the significance of the work. This is the place for your opinions. NEVER use fluff statements such as “These are very important and interesting papers.” You can say that if you say WHY.

If you use a **reference**, be sure it is listed and one that you have looked at specifically. The common geologic style is to embed the references into sentences, rather than as a footnote. Thus: “The Presumpscot Formation is a glaciomarine mud, found throughout coastal Maine, with a type section on the banks of the Presumpscot River (Bloom, 1963).” Or: “Stuiver and Borns (1974) described the effect of isostatic rebound on the Maine local relative sea-level curve.” Never write out the title in the text - that is what the list is for. If a reference is an unavailable yet important reference, list it as, for example: “cited by Doe, 1999.” Check the journals for typical styles of reference lists. In rare cases you may need to make a reference more specific by stating the page number in the text, as for example when making a direct quote: (Jones, 1996, p. 54). Also write your own captions for figures, and cite as “*from*: Smith, 1999” or if you change it, as “*after* Jones, 1999” or *modified from* In the text, don’t make vague statements such as “It has long been recognized that the study of” In most cases give a specific reference. In the REFERENCES CITED list at the end of the paper, use a standard format such as shown in the New York Times Manual of Style and Usage, or as in a current journal. For example:

Dow, J.J., and Jones, W.S., 1988, The Industrial Average, *In*: N.W. Rockefeller, ed., How to Make a Million, New York, John Wiley and Sons, p. 1914-1929.

Smith, D.C., Jones, A.B. and Doe, A.E., 1999, The greatest article ever written, Geosciences Magazine, v. 1, p. 345-355.
