Tips for Improving the Quality of Your Peer-Reviewed Manuscripts

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Mind-Mapping (Also Called Concept-Mapping)

1) Scribble down your ideas for the paper
2) Draw circles around each idea
3) Box the main idea or a few central ideas each.
4) Connect the central ideas with the "satellite" ideas, Let the connections show how the satellites relate to the central ideas.
5) If you lack a strong central idea, find the common element that relates all your central ideas. This result IS your main idea. Write it down quickly.
6) Number the other central ideas, in order of logical relationship to the main idea and to each other.
7) Number the satellites relative to the central ideas that they are connected to.
8) You have yourself an outline, sucked out of the right hemisphere and into the left (via the corpus collosum).

There’s lots of software available for Mind-mapping, as well as other types of organizing.

   See Aquamind’s Note Taker - http://www.aquaminds.com/including
   Circus Ponies’ Note Book - http://www.circusponies.com/
   Freeware such as FreeMind - http://freemind.sourceforge.net/wiki/index.php/Main_Page

Article Titles:

Write crisp, informative titles that stand out in PubMed lists

Before:
Premature aging-like syndromes and impaired maintenance of postural balance in mice lacking LIVELONG receptors

After:
Mice lacking LIVELONG receptors mimic rapid aging and fail to maintain postural stability

Before:
Loss of skin epithelial BABYFACE receptor stimulates mature skin proliferation and promotes prostate metastatic tumor invasion

After:
Skin Epithelial BABYFACE receptor Suppresses Skin Growth and Tumor Invasion
Effects of synthetic goopogen on flabby tissue transcriptome in mice measured by serial analysis of gene expression

In order to characterize the action of the hormone goopogen on flabby tissue, we have investigated the effects of goopectomy (GPX) and synthetic goop (SG) replacement on global gene expression in mice. The serial analysis of gene expression method was performed on the flab of female mice in six experimental groups: intact, GPX and GPX+SG injection 1, 3, 6 or 24 h before they were killed. A total of 888 888 sequenced tags quantified the expression level of 80 142 tag species. Thirteen and seventy-nine transcripts were differentially expressed in GPX and SG respectively (P < 0.05). The induced transcripts within 3 h after SG injection were involved in the following functions: transcription, translation, protein modification and turnover, flabby tissue turning to jello, jello turning to flab, synthesis of many different small co-factors, cell cycle progression and arrest, angiogenesis, energy metabolism, immunity and just about everything else. However, the inductions of transcripts related to flab turning to jello and angiogenesis were no longer significant 12 h after SG treatment. The current study might suggest that SG promotes several biochemical and physiology functions at the transcriptional level in flabby tissue in vivo.

Annotations about things to change in this abstract:
In order to characterize the action of the hormone goopogen on flabby tissue, we have investigated the effects of goopectomy (GPX) and synthetic goop (SG) replacement on global gene expression in mice. **WHY WOULD ANYONE CARE THAT YOU WANT TO CHARACTERIZE THE ACTION OF GOOPOGEN ON FLABBY TISSUE? OPEN BY STATING WHAT THE PROBLEM IS, THEN HOW YOU WENT ABOUT TACKLING IT.** The serial analysis of gene expression method was performed on the flab of female mice in six experimental groups: intact, GPX and GPX+SG injection 1, 3, 6 or 24 h before they were killed. A total of 888 888 sequenced tags quantified the expression level of 80 142 tag species. **TOO MUCH EXPERIMENTAL DETAIL FOR AN ABSTRACT.** Thirteen and seventy-nine transcripts were differentially expressed in GPX and SG respectively (P < 0.05). The induced transcripts within 3 h after SG injection were involved in the following functions: transcription, translation, protein modification and turnover, flabby tissue turning to jello, jello turning to flab, synthesis of many different small co-factors, cell cycle progression and arrest, angiogenesis, energy metabolism, immunity and just about everything else. **A SIGN OF A LACK OF FOCUS.** However, the inductions of transcripts related to flab turning to jello and angiogenesis were no longer significant 12 h after SG treatment. **SO WHAT? IS THERE ANY POSSIBLE SIGNIFICANCE TO THIS?** The current study **might suggest** that SG promotes several biochemical and physiology functions at the transcriptional level in flabby tissue in vivo. **“Might suggest” INCORRECT LANGUAGE STEMMING FROM A CONCERN FOR CAUTION.**
Information for the Introduction vs Discussion:
In competitive fields, don’t oversell the competition’s work with a citation in the Introduction if an explanation in your Discussion works well.

**Emphasizing the work of other in the Introduction:**
Locks and Bhagle reported that the BBB region of the Y chromosome was a locus for remote channel changing (RCC) genes, and postulated that there might be more than one gene in males that controlled RCC. We sought to determine whether this region contained any male-specific RCC genes and, if so, what they were. We confirmed that male manual dexterity genes existed there, and report the sequence of three such genes.

**Versus as part of Discussion:**
Although previous studies (Lock and Bhagle) used physical maps to identify a general region where manual dexterity genes were likely to be located, the lack of fine detail mapping prevented the hypothesis from being explored. Using our criss-cross, over the top mapping method developed at boy-scout camp, we were able to interactively sequence and map this region, fully identifying three key genes responsible for manual dexterity in males. We provided further confirmation of our results by dunking our gels in rose water, while the previously published studies (Locks and Bhagle, Smith and Smith) give additional validation of these findings.

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**Making connections in the results:**

(See Handout)

In previous experiments, a Pop3p-GFP fusion was used to visualize the localization of RNase MRP. This produced a diffuse nuclear staining pattern indicative of poor association with the RNase MRP complex (Ref), and similar results were seen with an Smn1p-GFP fusion (unpub. data). So that RNase MRP localization could be more clearly defined, a GFP-tagged version of the Pop1p subunit under control of the actin promoter (pTD125 GFP-Pop1p; Table I) was introduced…

….Because Pop1p is also a subunit of RNase P, it was important to demonstrate that RNase MRP localized to all of the sites seen, as opposed to only a subset of them. This was accomplished by….

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**Before:**
It is not known whether FLIPFLOP hypersecretion is caused by accelerated turnover of FLIPFLOP precursors in the gut, which would preclude them from final differentiation into functional circulating cells if this can only occur within a restricted period of time.

**After:**
It is not known whether FLIPFLOP hypersecretion is caused by accelerated turnover of FLIPFLOP precursors in the gut. If faster turnover occurs within a restricted time, it might preclude the precursor cells from final differentiation into functional circulating cells.

**Before**
GREEN-producing cells accumulate in the stoma mainly as a consequence of dysregulation of apoptosis because GREEN cells cycle infrequently.

**After**
GREEN cells cycle infrequently. Therefore, their accumulation in the stoma stems mainly from dysregulation of apoptosis.
When possible, make your point with a few words.

Before:
AAs have been known to play a role in the process of nerdiness.

After:
AAs regulate nerdiness.

Clearer text isn’t always shorter text. It may mean breaking long, multipart sentences into several shorter ones.

Before:
Finding compounds to release more transcriptionally active TROG via interruption of the interaction between TF and TF coregulators including TROG, and subsequently letting the dissociated TF become more vulnerable to degradation, which results in the decreased mutant TF nuclear aggregates, might represent a novel strategy that can simultaneously target the two most likely pathogenesis sites.

After:
A compound that disrupts aggregates comprised of mutant TF along with various coregulators might have potential therapeutic benefit for two complementary reasons. First, such a compound could increase the level of transcriptionally active coregulators, including TROG, by releasing them from the nonproductive interaction with mutant TF. Second, disrupting the aggregates might render the released mutant TF more vulnerable to degradation, thereby reducing its toxic effect.

For cover letters, invite the editor into your study and tell her where she is. Don’t just drop her into its center, forcing her to orient herself before trying to get your message.

Before:
The HIP/HOP complex has been increasingly implicated in cancer development. Our work further supports the role of this complex and its potential impact in several ways. First, though OOPS1 and OOP2 are known to be missing in both cancer cell lines and tumors, the mechanisms of their frequent concomitant loss have not yet been investigated. In our manuscript, we address this issue by sequencing a variety of OOPS1-OOPS2 deficient cancer cell lines......

Comment: In the original draft, the author fails to define “HIP/HOP”, the term mentioned at the start of the first sentence, until the middle of paragraph 2 (not shown). If HIP/HOP is so important, it should be defined early on. If its importance is secondary, it should not be introduced so soon in the letter.

After:
The enclosed manuscript shows that restoration of the protein OOPS1, which is frequently lost in cancer, has a tumor suppressive effect and therefore may be a useful part of treatment in certain cancer therapeutic regimens. OOPS1 is a component of the chromatin remodeling complex HIP/HOP, which is involved in global activation of transcription. The HIP/HOP complex, which also includes the protein OOPS2, has been increasingly implicated in cancer development. Our work substantiates the impact of loss of this complex on cancer development in several ways.
Writing Resources

The Science of Scientific Writing
If the reader is to grasp what the writer means, the writer must understand what the reader needs
George D. Gopen, Judith A. Swan
American Scientist
http://www.americanscientist.org/template/AssetDetail/assetid/23947

Articles covering specific communications challenges that scientists encounter, by Chris Edwards, can be found as links to pdf files on the Still Point Coaching & Consulting Web.
http://www.stillpointcoaching.com/articles.htm
These articles originally appeared in the “Adapt or Die” column of HMS Beagle, the online magazine from Elsevier/BioMedNet.

Writer's Block:
Blockbusting How to understand Writers Block.
Blockbusting II How to defeat it.

Publishing:
Publishers Roulette How to increase the odds that your papers will be accepted.
Anatomy of a Rejection Why papers get rejected.
Make Your Figures Count Make great tables and figures.

Mind-Mapping, Note Taking Software:

Circus Ponies’ NoteBook

Note Taker (uses mind mapping for organizing notes)

FreeMind (Freeware for mind-mapping)
http://freemind.sourceforge.net/wiki/index.php/Main_Page