Tips for Writing Eye-Catching Meeting Abstracts

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In effort to gain insight into preparing high quality meeting abstracts, members of the New Investigator Committee (NIC) and I recently contacted a panel of investigators who had previously reviewed abstracts for ISEH. Our findings were summarized in a recent *Connections* article, however, given that the abstract deadline for the ISEH 45th Annual Scientific Meeting has been extended to 15 April 2016, we thought it might be helpful to send out an abridged version of the original *Connections* contribution for review.

Novelty & Significance

Two aspects that were highlighted as important by several reviewers were Novelty and Significance. Specifically, Dr. Margaret Goodell, Director of the Stem Cells and Regenerative Medicine Center at the Baylor College of Medicine (Houston, USA) commented: “There are no specific attributes, but we all want to learn something new that we did not know before. So think about what is novel, and make it clear to the reader.” MickMilsom of the HI-STEMInstitute andGermanCancerResearchCenter (Heidelberg, DE) added: “Asareviewer, I’mtryingtoselectworkthatIthinkwilltranslateintoapresentationthatwillengageandinterestthe conference attendees. In that context, novelty is clearly something that figures very highly on my list of desirable attributes.” Providing additional insight, Dr. Connie J. Eaves of the Terry Fox Laboratory and BC Cancer Agency (Vancouver, CA) said: “In my view, the most compelling and exciting abstracts are ones that articulate an important problem or question in the field, followed by the description of a strategy used to address it and some exciting results that take the field one step further or require current dogmas to be revised.”

Provide a Clear and Concise Structure

When asked if there are specific aspects or attributes of an abstract that they are looking for, many of the reviewers gave emphasis to abstract structure. For example, Dr. Steven Lane of the QIMR Berghofer Medical Research Institute at the University of Queensland (Brisbane, AU) said: “I think the composition of the abstract is more relevant than any one specific attribute. It's important to identify the problem and provide a clear, but succinct scientific rationale for pursuing this work.” In agreement, Dr. Stefan Fröhling of the NCT Clinical and Translational Research Groups,GermanCancerResearchCenter (Heidelberg, DE) states: “Provide clear structure: specific research question, experimental approach, results, conclusions. Sufficient detail in the Results section, combined with an interesting and timely research question and the use of innovative and creative experimental approaches are all keys.” Dr. Milsom also suggests: “Try to come up with a clear narrative that runs through your abstract and then be clinical about deciding which data adds to the narrative, and therefore should be included, and which data is irrelevant and should be rejected.”

To ensure your abstract is clear and understandable, Dr. Goodell provides another helpful suggestion: “Clear writing will set your abstract apart. As a trainee, have graduate students from other labs, not working in the field, read the abstract. Ask them: Is it clear why this is important? Is it clear what we have accomplished?”

Make a Good First Impression

Dr. Claudia Scholl of the NCT Clinical and Translational Research Groups,GermanCancerResearchCenter (Heidelberg, DE) recommends to bring the novelty and significance of your abstract to light in the title: “The title is very important, since people decide whether or not to read the abstract based on the title. It should be as short as possible and convey the key findings.”

Avoid Being Vague

Many of the responses that we received included things to avoid when preparing an abstract, such as being too vague. Dr. Milsom said: “I’m always a bit concerned when abstracts propose an interesting idea, but are extremely vague about describing their experimental work. I’d always be quite reluctant to award such an abstract an oral presentation slot as I would be worried that they might not actually have much substance to speak about.”

Dr. Karen Keeshan of the Institute of Cancer Sciences at the University of Glasgow (Glasgow, UK) advises to clearly state the results of large experiments such as screens, specifically stating: “Expression analyses or big screens that conclude “a difference” but don’t actually state what the difference is or its importance is very disappointing.” Dr. Fröhling added: “Vague description of results: we performed a screen and looked for this and that and will tell you at the meeting what we found” would be insufficient In line with this, Dr. Lane said: “I also dislike a generic "additional data will be presented" statement. If you have the data, present it.”

Dr. Julie-Aurore Losman of Medical Oncology at the Dana-Farber Cancer Institute (Boston, US) also warns not to spare details about controls: “Frequently, in the interest of space, controls that were done to establish the specificity and robustness of the findings are left out. I think this is a bad idea. Including a description of the controls (especially negative controls) can really elevate the level of the abstract.”

The Happy Medium

Although you want to avoid being too vague, Dr. Goodell points out that you can also provide too much detail: “as scientists, we want details and hard core results. So, there is really a “Goldilocks” place - where you don’t want so much detail that reviewers get lost, but you want enough for reviewers to believe that you have good and exciting data.” Dr. Ann Mullally from the Department of Medicine at Brigham & Women’s Hospital (Boston, USA) added: “The thing that bothers me most is an overly detailed abstract, where you struggle to

determine what is the central question the abstract addresses."

Let the Results Tell the Story
Another issue that should be avoided is over-interpreting the results of the studies. Dr. Losman laments her experiences with over-interpretation: "I see far too many correlative studies that beautifully demonstrate a particular finding, and then the authors make huge assumptions about the mechanistic basis for the correlation without having done any real biochemical or functional studies."

Dr. Eaves also warns not to get too over-enthusiastic about certain data: "Usually, trainees who are excited about their findings will convey that excitement, but over-interpreting findings should also be avoided. The possibility that the methods used and/or the data obtained do not eliminate other interpretations or conclusions is also a frequently overlooked negative."

Summary
So, as you are preparing/finalizing your abstracts for submission to ISEH, we recommend that you consider the following factors:

- Establish a clear and concise narrative that appropriately conveys the novelty and significance of your results.
- Make sure the title reflects the importance of your studies.
- Structure your abstract. Significance (i.e. what is the outstanding question), Methods, Results and Concluding remarks that sum up the results.
- Deliver sufficient detail/results (including controls, replicates and possibly statistics) without being excessive.
- Do not over-interpret or embellish results.
- Have other people review your abstract for both grammatical errors and clarity.

Hopefully, this article will be of help to those of you who are planning to submit an abstract to the upcoming ISEH meeting (submission deadline is now 15 April 2016).

Good Luck!

I would like to thank all of the interviewees for their input and help.

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To view the full version of this article, released in Connections, visit http://www.iseh.org/blogpost/772431/New-Investigator-Digest.