Statistical Excellence Award for Early-Career Writing

The why, the what and the how







p-values Are we any closer to a "post p < 0.05 era"?

Sound human

Statistics, statisticians and the news media

The why

- Significance is a showcase for statistics and data science
 - Challenge myths
 - Answer questions
 - Support decisions
- Written by experts for anyone interested in the analysis and interpretation of data

The why

- To reach a broad audience, we need:
 - Enthusiastic statisticians and data scientists
 - Strong writers
 - Compelling storytellers
- To find these people, we launched the Young Statisticians Writing Competition

The what

- The competition was launched in 2011, with the first winner announced in 2012
- In 2017, it became part of the RSS Statistical Excellence Awards and was renamed the Statistical Excellence Award for Early-Career Writing
- The winning article is published in *Significance*
- Runners-up may also be featured in *Significance*

The what

- What's in it for us?
 - A great piece of content from a talented young writer
- What's in it for you?
 - Exposure to our international readership
 - Coverage in mainstream/science media
 - The chance to present at the RSS 2021 Conference in Manchester, England

The what

- What we're looking for
 - 1,500 to 2,500 words on any subject... as long as it involves data, statistics and statistical analysis
 - An easy-to-read, magazine-style feature
 - An original article that isn't under consideration for publication elsewhere
- See significancemagazine.com/writingcomp for the full set of competition rules

- How do you decide on a topic?
- Remember: you can write about *anything*
 - The population of rats in New York City
 - Using probability distributions to plan a wedding
 - Analysing Google search data to see whether Christmas really does come earlier each year
- See more examples at significancemagazine.com/613

- Ask yourself: "What's the best way to showcase the power of statistics and data science?"
- You might want to:
 - Bust apart a popular myth
 "Are millennials really less politically engaged?" (Kevin Lin, 2017)
 - Answer a burning question
 "How many cancers can we hope to prevent?" (Stensrud and Valberg, 2018)
 - Provide evidence to support decision-making
 "How many guests should I invite to my wedding to ensure a full house?" (Damjan Vukcevic, 2013)

Make sure it's a topic you're interested in, personally and professionally

If you're not interested in what you're writing about, your audience will know

- Tips for writing an engaging article:
 - Strong introduction, grab the reader's attention straight away
 - Make it clear why they *have* to read your article
 - Give them just a hint of what they are going to learn, or find out, if they carry on reading
 - But don't give the entire game away upfront

- Think about story structure:
 - Once you've grabbed their attention with a strong introduction, draw them further into the subject
 - Start fleshing out the background and context
 - Introduce them to new ideas and concepts in a natural way – don't front-load the detail and explanation, let the story develop
 - Most important: tell the reader only what they need to know to understand your story

- Accessibility is key
 - Don't get bogged down in detail
 - Don't use jargon to explain other jargon
 - Make things relevant and relatable always use real-life examples and analogies where possible
 - Always ask yourself, "Can I make this more readable?"

Write: "Parts of the data set were pretty noisy" Don't write: "There was evidence of considerable heteroscedasticity"

(with thanks to Robert Matthews for the example)

- End your article by circling back to where you started
 - Return to the example or question or promise that was made in the introduction
 - What do we know now that we didn't know before?
 - Coming full circle helps the reader to appreciate what they have learned and how far they have come in their understanding
 - But <u>don't</u> just restate what the article has said, e.g.: "In this article, we have shown that..."
 - Keep the reader engaged tell your story right until the very end
- See bit.ly/notes4authors for more tips and advice

- How do we pick a winner?
 - Our judging panel, including Significance editors and YSS committee members, read and debate the entries
- Judges are looking for:
 - Interesting, engaging and easy to read articles
 - A strong story, married to sound statistics and fault-free analysis

Three finalists will be selected in June, and the winner will be announced at the RSS Statistical Excellence Awards ceremony in July

Best of luck in the competition