

# How to write and abstract and get it accepted

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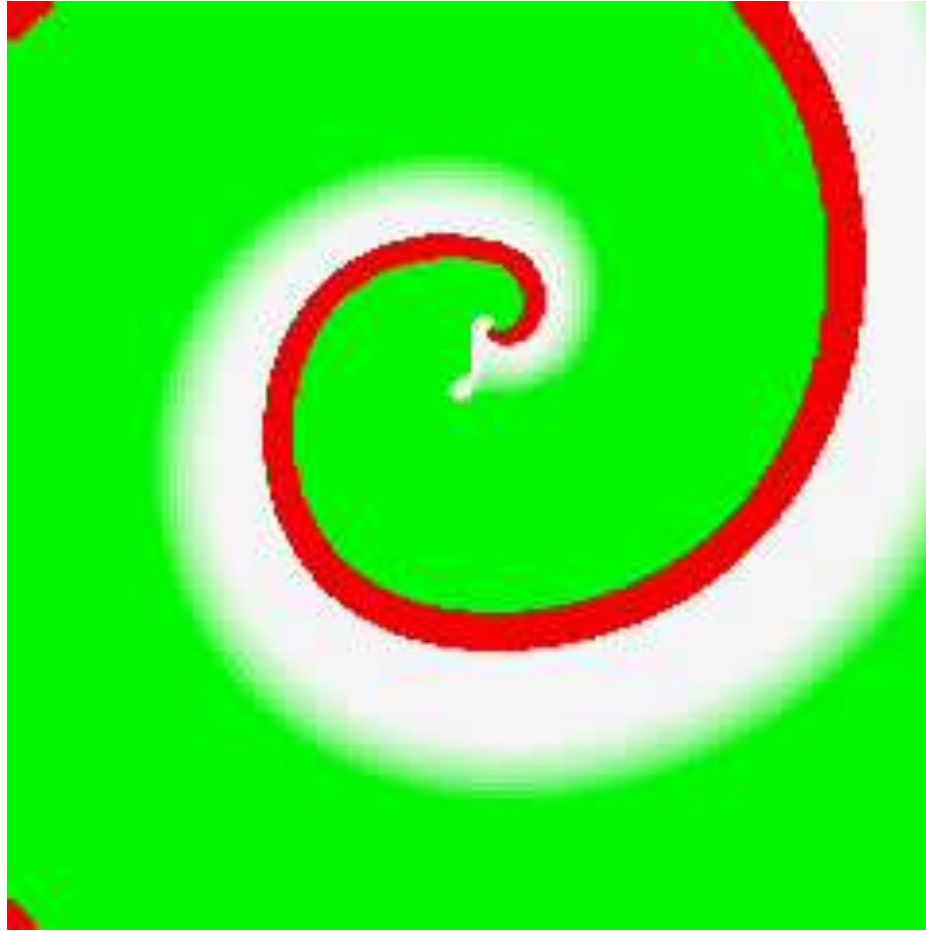
# Why bother?

- Meeting - preview work in progress
  - Origin – era of long publication times
  - Attract attendance of meeting
- Researcher - consolidation
  - Justify attendance of meeting
  - Completion data sets
  - Evaluate research progress
  - Hypothesis generation – next steps
  - But not worth the paper written on

# How accept/reject decision made?

- Peer review
  - Batches of 20-40 to ~5 reviewers
  - Score
    - 1, 2 reject
    - 3
    - 4,5 accept
  - High throughput
    - Not looking for the rough diamond
    - Looking for reason to reject

# Structure



# Structure

- Grab attention
  - Appropriately declarative title
  - Short sharp Intro – 1 sentence background + Hypothesis
  - Enjoy the challenge of being succinct
- Avoid
  - Long contrived Intro
  - Overstating the conclusion
- Data
  - original
  - of interest
  - adequate
  - justifiable

# Structure

- Background
  - Short sharp
  - 1 sentence + hypothesis
- Methods
  - Essentials/Novelties only
- Results
  - Best first
- Methods & Results
  - Why template like this?
    - Avoids repetition
    - Investigating..... by measuring ..... showed....
    - Mixed flow :
      - Method A ⇒ Result A
      - Method B ⇒ Result B
- Conclusion
  - State finding + Implication

# Before submission

## Ideal

- Allow 2 weeks for Co-author review
- Have full manuscript drafted
  - If data hot, will need to get in print
  - Avoids embarrassing retraction of findings
- Recheck all values
- Get independent review



# Title

## **Enhancement of Gap Junctional Coupling During Acute Myocardial Infarction Reduces Inhomogeneity of Border Zone Scarring And Late Ventricular Arrhythmias**

Fu Siong Ng, Jeremy M Kalindjian, Simon A  
Cooper, Rasheda A Chowdhury, Caroline H  
Roney, Pravina M Patel, Emmanuel Dupont,  
Alexander R Lyon, Nicholas S Peters.

**Introduction:** Survivors of myocardial infarction (MI) are predisposed to ventricular arrhythmias as the healed infarct scar forms a substrate for re-entry. Increased inhomogeneity of scarring is associated with greater arrhythmia susceptibility. We hypothesized that enhancing gap junctional (GJ) intercellular communication during acute MI can produce a more homogeneous chronic infarct scar thus reducing late susceptibility to post-MI arrhythmias, and that this strategy was not pro-arrhythmic acutely.

**Methods:** For chronic MI studies, Sprague-Dawley rats underwent LAD ligation and were treated with rotigaptide (ZP123) to enhance GJ coupling (ROT, n=13) or saline control (CON, n=14) immediately pre-MI, and then for 7 days post-MI by osmotic minipump. At 4 weeks post-MI, rats had *in vivo* ECG-telemetry, and *ex vivo* programmed electrical stimulation (PES) with optical mapping. Heterogeneity of infarct border zone (IBZ) scarring was quantified by histomorphometry. For acute ischaemia-reperfusion (I-R) studies, rat hearts were treated with AAP10 to enhance GJ coupling or control (n=10 each) and subjected to 8 minutes LAD ischaemia then reperfusion *ex vivo*, with optical mapping and ECG monitoring.

**Results:** Chronic MI studies: ROT-animals had reduced arrhythmia susceptibility at PES (VT Inducibility score: ROT  $2.4 \pm 0.8$ , CON  $5.0 \pm 0.6$ ,  $P < 0.05$ ). Infarct size was not different (ROT  $25 \pm 2\%$ , CON  $21 \pm 5\%$ ,  $P = \text{NS}$ ). ROT-hearts had less heterogeneous IBZ structural complexity than control (S.D. of IBZ Complexity Score: ROT  $1.1 \pm 0.1$ , CON  $1.4 \pm 0.1$ ,  $P < 0.05$ ), associated with a non-significant improvement in IBZ conduction velocity (ROT  $43.1 \pm 3.4$ , CON  $35.7 \pm 1.7$  cm/s). Acute I-R studies: AAP10 attenuated the conduction slowing that occurred during acute ischaemia and reduced reperfusion VF incidence (50% vs. CON 90%).

**Conclusions:** Enhancement of GJ coupling for a limited duration during acute MI produced more homogeneous scarring at the infarct border zone and reduced arrhythmia susceptibility at 4 weeks post-MI. Enhancing GJ coupling was also anti-arrhythmic in the acute I-R setting. Short-term GJ modulation at the time of MI may represent a novel therapeutic strategy to modify the morphology of the healed infarct scar and reduce late post-MI arrhythmic risk.

# Summary

- Grab attention
  - Compelling and clear
- Avoid “so what?”
- No substitute for
  - important question
  - proper science
  - great data
  - Being on the right ship riding the right wave

