## Crafting a Powerful 3MT Rice inaugural competition

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November 2017

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#### Three Minute Thesis

#### THE BASICS

- 3 minutes
- 1 PowerPoint Slide
- Panel of Judges
- Non-special Audience



#### **HISTORY**

- Developed by the University of Queensland in Australia in 2008
- Adopted in 62 countries outside of Australia
- More than 200 competitions in the U.S.A.
- More information about 3MT® is available at <a href="www.threeminutethesis.org">www.threeminutethesis.org</a>

# 3 MITE

## **3 MINUTE THESIS FINALS**

MARCH 9, 2018

5:30 - 8:00 pm Lois Chiles Studio Theater Moody Center for the Arts





#### Eligibility

- Students must be currently enrolled in a thesis masters or doctoral graduate program at Rice University.
- Students must be working on thesis or dissertation research.
- The presentation must include findings and/or outcomes of the research. Research proposals will not be accepted.
- Work presented must have been conducted at Rice University.

#### Why should you participate?

Practice communicating your research to a non-specialist audience – an important skill!

- Improve your public speaking skills
- Create funding opportunities
- Opens opportunities for collaborations
- Crystalize the purpose of your research in your own mind
- Receive professional coaching
- Enhance your CV
- Obtain a professional video of your talk to share with others

- Prepare for a thesis defense, conference talk, or interview
- Raise your profile Promote your research and its impacts on society
- Network with alumning
- Win prizes!
- Grand Prize winner will represent Rice University at the Council of Southern Graduate Schools Regional Competition

#### Competition Structure

- Preliminary Rounds
  - Week of February 26
  - Provide students time slots
  - Panel of Rice faculty and staff will provide scores and feedback
  - Talks will be recorded for your personal use

#### Finals

- March 9<sup>th</sup>
- The top 10 12 students from the preliminary rounds will be invited to participate in the final round
- Panel of Judges Rice alumni, faculty, and administrators
- Awards Grand Prize, Runner up, Audience's Choice

#### Timeline

Registration Deadline	January 14, 2018 by 11:59pm
Coaching Sessions	January 15 – February 23, 2018
Preliminary Rounds	Week of February 26, 2018
Finalist Coaching	March 1 – 7, 2018
Dress Rehearsals for Finalists	March 8 and 9, 2018
2018 Rice University Three Minute Thesis Competition	March 9, 2018 5:30 – 8:00 pm in Lois Chiles Studio Theater Moody Center for the Arts

#### Three Minute Thesis—Rules and Regulations

- One single static slide; no slide transitions, animations or 'movement' of any description are allowed. The slide is to be presented from the beginning of the oration.
- No additional electronic media (e.g. sound and video files) are permitted.
- No additional props (e.g. costumes, musical instruments, laboratory equipment) are permitted.
- Presentations are three minutes max; anyone going over three minutes is disqualified
- Presentations are to be spoken word (e.g. no poems, raps or songs).
- Presentations are to commence from the stage.
- Presentations are considered to have commenced when a presenter starts their presentation through either movement or speech.
- The decision of the adjudicating panel is final.

Note: Variations of the competition do permit more than 1 slide as well as other types of visual aids (e.g. UC Grad Slam)

#### Judging Criteria—Comprehension & Content

- Did the presentation provide an understanding of the **background** to the research question being addressed and its significance?
- Did the presentation clearly describe the key results of the research including conclusions and outcomes?
- Did the presentation follow a clear and logical sequence?
- Did the presenter spend adequate time on each element of their presentation - or did they elaborate for too long on one aspect or was the presentation rushed?
- Was the thesis topic, key results and research significance and outcomes communicated in language appropriate to a non-specialist audience?
- Did the speaker avoid jargon, explain terminology and provide adequate background information to illustrate points?

#### Judging Criteria—Engagement & Communication

- Did the oration make the audience want to know more?
- Was the presenter careful not to trivialize or generalize their research?
- Did the presenter convey enthusiasm for their research?
- Did the presenter capture and maintain their audience's attention?
- Did the speaker have sufficient stage presence, eye contact and vocal range; maintain a steady pace, and have a confident stance?
- Did the PowerPoint slide enhance the presentation was it clear, legible, and concise?

## Anatomy of the 3MT

#### Promoting audience investment

- Opening sentences of your pitch should be...
  - Immediately intriguing
  - Relatable to a non-expert's experience
  - Memorable

- Try offering...
  - A surprising fact or statistic
  - An urgent social issue
  - A current event the audience will know
  - A resonant description of a societal problem

#### Presenting the Research Question or Problem

- Identify a scientific, technological, cultural, social, or political problem to be solved (narrow your focus—frame your talk)
- Offer concise background details to make this problem meaningful (use metaphors or analogies if the problem is hard to understand)
- Explain the relevance of the problem or question within your discipline
  - Why is this an important problem/question?
  - How have others attempted to solve the problem or answer the question in the past?
  - What has been inadequate about these solutions?

#### Explain your approach

#### Advocate for your approach

- Explain your method in simply terms (which models, analytical tools, equations, equipment, interdisciplinary insights and why?)
- Articulate how you have improved on previous approaches
- Identify the feasibility of your approach (cost, time, logistics of implementation)

#### Make your methods accessible

- Decide which details are necessary to explain and which could be omitted
- Explain using analogies if relevant
- Define any field-specific terms

#### Illuminating why it matters...impacts

- Developing new technologies or methods for...
  - Promoting a cleaner environment
  - Maximizing efficiency
  - Saving costs
  - Protecting the safety and welfare of workers
  - Address/redressing a social ill
- Discuss future areas for study
- Discuss connections between your work and other researchers' efforts---how does your work help other scholars answer their questions

#### End memorably

- Remind the audience of your unique insight
- Restate why it is important--how it addresses a significant problem
- Try to come full circle if appropriate—gesture back to the reference or image you used to promote audience investment.

#### Crafting strong visual(s)

- Map
- Data set
- Diagram (of a model or method)
- Photographs

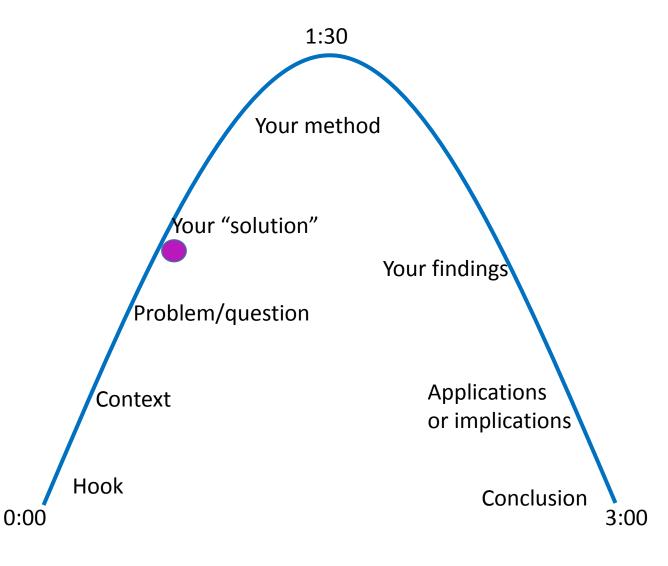
- Avoid the title slide—not necessary
- Do not glut slides with multiple data sets—be very selective!
- Do not include images that do not help the audience's comprehension
- Avoid using text/bullets
- Do use color and make designs attractive

## Tips for composing a script...

#### Craft a narrative arc

#### Time hacks

- 1 min. hook and context for the problem
- 1 min. proposed solution and method
- 1 min. potential impacts, applications, and conclusion
- 30-45 sec. hook and context for the problem
- 2:00-2:15 min. method, solutions, findings
- 15-30 sec. implications of research and conclusion



#### Grand scale: reflect on scale and scope

- What is one research question/problem that you'd like to focus on in your talk?
- What aspects of your method (your approach to answering the question/solving the problem) are most important for you to explain?
   Could you use an analogy or metaphor to explain your approach to the audience?
- What findings are most significant for you to mention?
- What are 1-2 images/data sets that would help you to explain the problem/question or your method of solving it?

#### Sentence level—keep audience in mind

- Focus on concision (~450-475 words is a "safe" length)
- Imagine a freshman non-major as audience
- Limit the number of field-specific terms that you use
- Use strong transitional signal words (However, Yet, While, But, For example, For instance, Similarly)

#### Sentence level--be memorable and natural

- Repeat key phrases
- Connect your work to popular cultural references as appropriate
- Add possessives (e.g. "My research...")

- Keep sentences relatively short
- Use conversational language for the most part
- Remove/rephrase word choices or phrasings that cause you to stumble
- Choose words that are easier to pronounce and hear (if possible)

#### Perform your Pitch

- Memorize
- Vary pace
- Vary inflection
- Enunciate
- Should eliminate fillers (uh/uhm)
- Do not go over time

- Maintain good posture
- Maintain eye contact
- Incorporate content-related gestures
- Be confident and excited

## Sample Videos

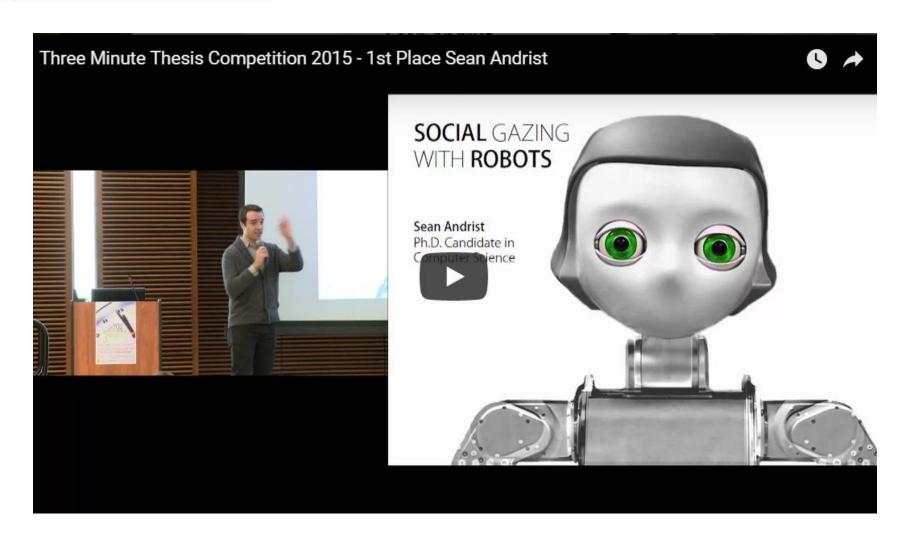
#### "A New Approach to Cooling Hypersonic Vehicles"

Benjamin Huang, University of Virginia, Chemical Engineering, 3MT competition <a href="https://youtu.be/FtwKMKVgUHE">https://youtu.be/FtwKMKVgUHE</a>



#### "Social Gazing with Robots"

Sean Andrist, University of Wisconsin-Madison, Computer Science <a href="https://youtu.be/kDivUiIrfJ4">https://youtu.be/kDivUiIrfJ4</a>



#### "Renaissance on the Bayou: Reviving the Chitimacha Language"

Daniel Hieber, University of California, Santa Barbara, Linguistics, UC Grad Slam competition

https://youtu.be/QrNOHKjA2q4?t=46m53s



#### Next Steps

- Register! Registration closes on January 14, 2018
  - http://3mt.rice.edu/register/
  - All those that register are invited to participate in the preliminary rounds.

- Plan your 3MT presentation start early!
  - Check out helpful resources at <a href="http://3mt.rice.edu/resources/">http://3mt.rice.edu/resources/</a>
- Set up an appointment with a CWOVC Consultant. Appointments starting in January
  - More information at <a href="http://3mt.rice.edu/coaching/">http://3mt.rice.edu/coaching/</a>

### REGISTER BY JANUARY 14

## R 3MT.RICE.EDU

3 MINUTE THESIS COMPETITION MARCH 9, 2018

PRELIMINARY ROUNDS

Week of
February 26, 2018