90 Second Thesis

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RICE | GPS
Graduate and Postdoctoral Studies

CENTER FOR WRITTEN, ORAL AND VISUAL COMMUNICATION

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Agenda

- What is 90 Second Thesis?
- New Competition Divisions
- Crafting a 90 Second Thesis
  - Conventions of the genre
  - Samples, videos, rubric
- How to prepare for 90 Second Thesis
  - Coaching Process and Resources
- Judges and Scoring

What is a 90 second thesis?

Elevator Pitch

- Succinct business pitch
    - 30 seconds—2 minutes
- Describes how an organization, product, or service adds value
- Is mindful of mission, vision, and experience of audience
- Persuades and "sells" an idea

90 Second Thesis

- Encapsulation of research
- Describes a problem or question and why it matters
- Presents methods and findings
- Is mindful of audience's diverse experience and knowledge
- Intrigues, inspires, and teaches

Why should I compete?

- Practice a future job requirement

- Present to a broad audience

- Clarify your contribution to your field
  - Prep for academic job market interviews
  - Prep for fellowship or internship interviews
  - Compete for grants

- Re-ignite your passion for your research

90 SECOND THESIS

New Competition Divisions

- Arts, Culture, and Languages
- Community, Society, and Policy
- Computational Methods & Information Technology
- Energy
- Environmental Science & Sustainability
- Health & Medicine
- Global & International Studies
- Materials
- Origins - Fundamental or Theoretical Research
- OR OTHERS SUBMITTED BY YOU!

Participants will have an opportunity to finalize their competition division closer to the date of the event.

90
SECOND
THESIS

Crafting the 90 Second Thesis Pitch

Anatomy of a 90 second pitch

- Begins with a "Hook"   [10 seconds]
- Presents a problem   [20 seconds]
- Explains your approach   [30 seconds]
- Explains why it matters   [20 seconds]
- Closes memorably   [10 seconds]

Getting the audience hooked

- 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 curious episode in history
  - An attention-getting quote
  - A cultural reference the audience will know
  - A question for the audience to answer

90 SECOND THESIS

Presenting the "problem"

- Identify a scientific, technological, cultural, social, or political problem to be solved

OR

- Identify a theoretical or critical question to be answered

Establishing context for the problem/question

- Offer concise background details as needed

- Explain the relevance of the problem or question within your discipline

- Identify current efforts to respond to the problem or question

Explaining your approach

Advocate for Your Approach

- Explain your methodology
- Articulate how this improves on previous approaches
- Identify the feasibility of the approach

Which...Why?

- Models
- Analytical tools
- Equations
- Writings, art objects
- Theoretical lenses
- Archival sources
- Interdisciplinary insights

Illuminating why it matters

- Develop new technologies that promote health, security
- Revise public policy
- Design more ideal built environments or cities
- Reduce inequities (social, political, cultural, educational)
- Resolve conflict at home and abroad
- Promote conservation or preservation efforts
- Improve institutional and organizational structures
- Understand our nation within a larger global community
- Contemplate social forms/communities in other times/places
- Understand how the arts inform other fields of interest
- Understand the nature of the universe we live in
- Lay groundwork for other scholars to answer *their* questions

Ending memorably

- Remind the audience of your unique insight

- Restate why it is important

- Try to come full circle if appropriate

Being accessible & memorable

- Focus on concision (~210-225 words)
- Imagine a freshman non-major as audience
- Ensure terms of art, instruments, methods are understandable
- Use analogies or metaphors to explain key processes or aspects of study

- Repeat key phrases
- Consider alliteration, rhymes, and "catchiness"
- Add possessives (e.g. "*My* research….")

Being natural

- Keep sentences relatively short

- Make language conversational

- Remove/rephrase word choices or phrasings that cause you to stumble

- Choose words that are easier to pronounce/hear (if possible)

Performing your pitch

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

- May speak from behind podium or on floor
- Maintain good posture
- Maintain eye contact
- Incorporate gestures
- Be confident and excited

Sample 1: Elizabeth Korver-Glenn

"Ticket to Ride: Exploring the Impacts of METRORail on Houston's Latinos"

"Imagine a typical 5 pm commute. **You feel frustrated**, angry, and helpless. You're wasting time and gas and probably years of your life."

The Hook—she invests the audience in her research. Nearly everyone has experienced the frustration of rush hour traffic.

"But Houston's expanding rail line is transforming transportation, particularly for groups usually considered ethnic minorities. **Almost all current rail construction is occurring in Latino and African American neighborhoods.** But in Houston, Latinos are *not* ethnic minorities and in fact make up 42% of the city's population, the highest of any ethnic group."

Context--While we might consider better public transportation to be an ultimate good, she underscores the challenges of addressing a problem within a diverse context.

"But how are Houston's Latinos being affected by rail construction? **At this point, no one knows**. But given Houston's unique status as a 21st century global city, **we should know.**"

The Problem—In qualitative social science and humanistic research the "problem" is often posed as a research question. Her wording implies that there is, in fact, a critical gap in the research.

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"So, as a **sociologist and resident** of one of the Latino neighborhoods affected by rail construction, I have started studying my neighbors' responses to these changes. Over the next couple of years I will also be using **surveys and interviews** to examine the challenges and opportunities introduced by the expanding rail for local businesses, churches, civic clubs, developers, and government officials."

Method--She might be more specific if she were to present to those in her discipline/field. Greater specificity in this context might be lost on this audience, however.

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"This data, which so far indicates residents have mixed feelings about the rail, has **direct policy implications** for decisions made at local, national, and global levels. And my research, which analyzes the communities affected by human inventions, is therefore crucial for **healthy social change.**"

Findings, Significance, Conclusion. She identifies "why it matters" and gestures to potential applications. She comes full circle in alluding to the more narrow context in which light rail is often assumed to be an unquestionably ethical choice.

Click here to watch Elizabeth's pitch!

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Sample 2: Alicia Jones

"Better, Stronger, Faster: Studying the Effects of Circular Permutation to Expand the Protein Engineering Toolbox"

*"**Better, faster, stronger.** Have you heard this before? Maybe training as an athlete? Well, I'm a protein engineer and my goal is to **make proteins better, faster, stronger.**"*

The hook—she references a phrase the audience has likely heard before—if not in the context of "Citius, Altius, Fortius" [Faster, Higher, Stonger"—the Olympic motto] then in other popular references.

"No, not the type that you eat or drink. I'm referring to the biological molecules or, little work-horses, that have numerous functions and can be engineered to address many industry challenges—anything from diseases and cancer to environmental issues and oil spills."

She offers brief context and offers a characterization of the protein that is likely to be meaningful for the audience

"We strive to make proteins more effective by taking natural, or *wild type* proteins and changing them a little bit. There are many ways to do this, but **some methods take a long time** or they **'beat up' the protein too much.**"

She identifies the problem and describes it in a user-friendly way

"I'm studying a different approach. To provide protein engineers with more tools to use. My research uses **circular permutation** to change wild-type proteins which exist folded into a **little wiggly glob** with two different ends. In permutation, I **connect the original two ends and create new ends elsewhere in the structure.**"

Her solution to the problem—note the strategic use of a single field-specific term

"**You may not think this does much** but I have identified over 50 variants of a permuted protein and found that it does affect the **production, stability, and even the activity** of a natural protein—all of which are goals of a protein engineer."

Significance of her findings—note the preempting of the audience's assumptions about her findings

So, just as an athlete uses many tools to overcome their training obstacles, my work provides another approach to conquer industry challenges—for instance, using these permuted proteins to **fight cancer or clean up oil spills in a better, faster, stronger way.**

Applications and conclusion. She mentions a few applications of permuted proteins– in a longer pitch, she might add greater detail (she is not involved in these applications, and is simply gesturing to them). She closes by reiterating her hook.

Click here to watch Alicia's pitch!

Scoring Rubric

MESSAGE

- **AUDIENCE ENGAGEMENT/"HOOK"**
  - Piques audience members' interest & investment in the topic at the outset of the presentation

- **PROBLEM, QUESTION, GAP**
  - Identifies a scientific, cultural, political, or social problem to be solved OR Identifies a theoretical or critical question or scholarly gap to be answered or filled

- **CONTEXT**
  - Establishes a context for the problem, question, or gap that his/her research will answer or fill
  - Explains the relevance of the problem, question, or gap within his/her discipline
  - Identifies current efforts to respond to the problem, question, or gap

- **METHOD**
  - Explains methodology or approach
  - Articulates why this methodology is superior to other approaches
  - Identifies the feasibility of the approach

- **RESULTS, IMPLICATIONS, APPLICATIONS**
  - Identifies current findings or results
  - Points to potential implications or applications of the research
  - Concludes strongly leaving the audience with a "take-away" or memorable message

- **CLARITY & ORGANIZATION**
  - Avoids excessive jargon
  - Explains unfamiliar terms & concepts clearly, analogies or comparisons as necessary
  - Organizes ideas in a logical and easy-to-follow

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Scoring Rubric

DELIVERY

- **DEMEANOR**
  - Projects confidence, strong leadership presence
  - Conveys intellectual curiosity & excitement
  - Makes eye contact with all areas of the room; sustains a strong connection with audience

- **POSTURE/GESTURES**
  - Exhibits professional yet natural posture & stance
  - Incorporates specific, well-integrated content-related gestures
  - Avoids distracting gestures

- **VOLUME, INFLECTION, & ARTICULATION**
  - Audible throughout; volume is appropriate for the room
  - Uses voice to emphasize key points
  - Varies inflection for interest (not monotonic)
  - Enunciates distinctly throughout

- **PACING**
  - Speaks fluidly
  - Varies pace for emphasis
  - Avoids "filler" or "bridge" words such as Uh/Uhm; Like; You Know; So…

Rules

- Each contestant will have 90 seconds to engage the audience, describe their research, and convey its significance

- Points will be deducted if a contestant exceeds the 90 second time limit.

- A small hand-held prop is allowed, if it is appropriate and helps describe the research topic

- PowerPoint slides are not permitted.

- Contestants are required to participate in at least one coaching session prior to the competition. If you do not sign-up for coaching, you will not be eligible to participate.

How to prepare for 90 Second Thesis

- Read sample scripts

- Watch videos from past competitions

- Schedule a coaching session to get feedback on your script
  - Jan 30-Feb 23—Script and oral presentation consulting at CWOVC

- Work with a coach in McMurtry Auditorium
  - Feb 24-Mar 1—Oral presentation consulting

- Attend Open Practice at McMurtry
  - Mar 2 & Mar 3, No consultants present

- Practice with friends

- Record yourself
  - CWOVC has a room set up with cameras!

Resources, instructions on how to sign up for coaching, and more at
90secondthesis.rice.edu

Important Dates

Registration Deadline EXTENDED	January 29, 2017 by 11:59pm
Script and Presentation Coaching Sessions with CWOVC	January 30 – February 23, 2017
Presentation Coaching in McMurtry Auditorium	February 24 – March 1, 2017
Dress Rehearsals	March 2 – 3, 2017
90 Second Thesis Competition	March 3, 2017 5 – 8 pm in McMurtry Auditorium

Judges

- Judges are Rice Alumni, Experienced Professionals, Community Partners, and Rice Faculty and Staff.

- Brief training before the event

- Judges from the 2016 competition represented over 30 different organizations, including:

7 Hills Pharma, LLC • AIDAP • Applied Cognitive Solutions • Association of Governing Boards of Universities and Colleges • Baker Hughes • Baylor College of Medicine • Boulevard Realty • Doeren Mayhew • Haliburton Energy Services • Home Run Specialty Chemicals, Inc. • JLL • KBR • Lone Star College • Lyn Realty • MD Anderson Cancer Center • Mercer • NiRMit, LLC • Olson & Olson, LLP • Page • Pearl Dental • Petroleos Ebano • RBG Associates • Red Oak Instruments, LLC • Rice University • Saifee Signs • Sam Houston State University • San Jacinto College • Schlumberger • Shell Global Solutions • Smyser Kaplan & Veselka, LLP • St. Stephen's Episcopal School • Texas Children's Hospital • Texas Woman's University • University of Houston • University of Texas - Tyler

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Scoring Process

DIVISION AWARDS

- Judges will score each contestant on a scale of 1-10, where 1 is poor and 10 is excellent.

- Judges can provide feedback in comments section

- Scorecards are collected, scanned into a computer

- AutoGrader program reads the score sheets and calculates the average scores

- Comments are aggregated and distributed to participants

- Top 2 participants in each category will win a prize!

AUDIENCE CHOICE

- Audience members will have the opportunity to cast a vote for their favorite 90 Second Thesis pitch!
- Voting cards will be handed out to all audience members as they enter and collected at the end of the competition.
- Judges DO NOT vote for audience choice

Questions?

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