

2020 Call for Highlights

A Guide to Submitting the Lay Research Summary Infographic,
for Principal Investigators of OCAST Health Research Awards

About this guide

Purpose of the Call for Highlights

In 2016, with direction from the Health Research Committee, OCAST decided to make a few modifications to the Health Research Conference requirement for PIs of OCAST Health Research Awards. In lieu of requiring Health Research PIs to bring a scientific poster to the conference, PIs would instead submit their research "highlights" in the form of a Lay Research Summary Slide. These highlights help us communicate the excitement, importance, and value of achievements derived from your OCAST-supported project to the general public.

This year we are changing the format from a summary slide to an infographic, a visual image used to represent information or data.

Your highlights are essential to advancing OCAST's mission in the following ways:

- Communicating the value of OCAST Health Research advances and innovations to the citizens of Oklahoma
- Helping build public support for research funding
- Informing the investment community and large corporations to new health-related technologies
- Showcasing projects that have resulted in innovation supporting economic growth, including patents or startup companies
- Providing examples of outreach efforts that generated student interest in science and increased understanding of the importance of scientific research by the public
- Demonstrating the impact of your research on other fields of science

Highlights may also be submitted to OCAST throughout the year as appropriate, and upon special request by OCAST. These infographics, either in whole or in part, along with any OCAST supported publications as reported in progress reports submitted by PIs, may be posted on the OCAST public website and/or social media. Some Information provided in the infographics may also be incorporated in the program booklet distributed to participating PIs.

OCAST values the advancement of scientific knowledge and activities that contribute to the achievement of beneficial outcomes. Such outcomes include, but are not limited to: increased economic competitiveness of Oklahoma; increased partnerships between academia, industry, and others; increased public scientific literacy and public engagement with science and technology; improved well-being of Oklahomans; development of a diverse, competitive STEM workforce; full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education; and enhanced infrastructure for research and education.

Users of this guide

Principal Investigators of OCAST Health Research Awards

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Quick Start Guide – Lay Research Summary Infographic

What is it?	<p>It is a single infographic communicating highlights of your OCAST Health Research project, written in simple lay language for the general public. The highlights should attempt to answer the following questions:</p> <ul style="list-style-type: none">• Why is your research important? How does it benefit society?• What problem does your research address?• Why should anyone care? Why does it matter?• What are the broader impacts of your project?
Who needs to submit?	<p>Principal Investigators of OCAST Health Research Awards.</p>
Why is it important?	<p>The purpose of creating the Lay Research Summary Infographic is to share highlights of your work to engage the interest and imagination of the public, as well as to help non-scientists understand the importance of the scientific process and its impact on society. The idea is to convey the value of science in terms that the general public would understand, and demonstrate the importance of public investment in science and basic research in the hope of encouraging continued public support, future public/private investment, and large corporate partnerships so that innovation in Oklahoma may continue to advance forward.</p>
How will it be used by OCAST?	<p>Infographics may be used in the Health Research Conference program, or posted on the OCAST website or other social media platform.</p>
What should be included?	<p>The Lay Research Summary Infographic should include:</p> <ul style="list-style-type: none">• A "layman's version" of your project title, something interesting and engaging,• Actual project title and number,• Your name as the PI and institution/organization,• Research topic category,• Highlights of your research,• Compelling images with captions to explain the activity, which complement the highlights, and• Recent accomplishments and findings.
When should you submit?	<p>Email (as attachments) the Lay Research Summary Infographic as a .pdf file and a copy of the completed Photo Release Form on page 8 to OCAST by Friday, December 18th, 2020</p>

Detailed Instructions

General format

The Lay Research Summary Infographic should be created in as a standard-sized presentation infographic with a white background, using a portrait orientation layout. Use sans serif fonts for all text. Please refer the sample infographic on page 7.

The placement and layout of the highlights and images can be suited to your specific preferences, but please position the lay title, actual title, PI name and institution/organization, OCAST project number, and research area across the top section of the infographic.

Important - Do not include any confidential and proprietary information in the infographic.

Required infographic components

1. Lay project title and actual project title. Both titles will go across the top of the infographic as shown in the sample on page 7.
 - The lay project title serves as the main title of the infographic and functions as a simplification of the original project title that is easily understandable to the general public. The title should be interesting, to engage the general audience. It should be limited to 60 characters. The font size of the lay project title should be 18 – 24.
 - The original project title serves as the subtitle of the infographic. The font size of the original project title should be 10 – 14.
2. OCAST project number. The font size should be 10 – 14. Position this information below the original project title.
3. PI name and institution/organization. The font size should be 10 – 14. Position this information below the original project title.
4. Research area. The font size should be 10 – 14. Position this information below the original project title.
 - Use the research topic that best matches the project from these broad categories:
 - Biomedical Engineering
 - Cancer Research/Cancer Biology
 - Cell/Molecular Biology
 - Chemistry & Biochemistry
 - Genomics & Gene Expression
 - Immunology
 - Infectious Disease
 - Data Science/Clinical Platforms/Computational Biology
 - Neurobiology
 - Nutrition/Psychology/Public Health
 - Physiology /Pharmacology

5. Highlights of the research project.

- Use language that is understandable to the general public (a diverse non-technical audience).
- Avoid using disciplinary jargon.
- Use titles and lead-in sentences to engage the reader where appropriate.
- Describe the problem that motivated your research and how your approach is unique
- Describe the result(s) of your research (if available) and its impact
- Describe the broader impacts of your research project, which may be accomplished by the research itself, or through activities that are supported by and/or are complementary to the project.
- Limit highlights to 500 words in all and a font size of 10 – 14.

6. Images which complement the highlights.

- Use compelling images with captions to explain the activity which complement the highlights.
- Incorporate high resolution pictures of at least 300 dpi but no more than 600 dpi. Stretch to correct size and aspect ratio. Images should be large enough to easily see all details. Provide appropriate credits where appropriate.
- Add a brief description (caption) for each image. If lab members are pictured, include their names and roles in the project.

7. Recent accomplishments or findings.

- Provide 2 or 3 bulleted sentences or short paragraphs that summarize using lay language recent project accomplishments, findings, or activities.

Submission



Email the Lay Research Summary Infographic as an attached .pdf file and a copy of the completed Photo Release Form (found on page 8) to OCAST by **Friday, December 18th, 2020**.

If the file size is larger than approximately 20MB, OCAST email servers may reject the email; if this occurs please contact OCAST for other possible options.

Failure to comply with these guidelines may result in rejection of the Lay Research Summary Infographic and resubmission of a revised infographic that meets guidelines stated in this guide at the sole discretion of OCAST.

Tips for writing good highlights



1. Level of difficulty of text (words and structure)
 - The text should be written in an easily readable style. Use common English words in place of complex words. Do not get into details.
2. Structure
 - The text should be ordered logically and flow naturally.
3. Avoid complex or meaningless terms and phrases
 - Examples include terms such as ‘virtually’ or ‘literally’ or archaic language (e.g. amidst, whilst), as well as verb choices such as ‘purchase’ used in place of the simpler ‘buy’.
4. Expressing ideas in the active voice
 - Text should be written in the active voice ('I... you..') and second person ('you') should be used in place of third person ('he/she'). "For example, 'You will have chemotherapy' rather than 'Chemotherapy will be given to you'.
5. Straightforward to read
 - The writer should limit the memory load on readers – don't ask them to remember too much jargon/abstract information.
6. Content
 - The text should provide answers to the essential questions: Who, What, Where, When, Why, How?"
7. Person-centered language
 - The language used should be person-centered, rather than focusing on circumstance, illness or disability. For example: ‘people with a disability/illness’ is preferable to ‘the disabled/invalids’; a person ‘has cerebral palsy’ rather than ‘is a victim of cerebral palsy’.
8. Appropriate tone
 - The text should use simple language that will entice readers and show enthusiasm.
9. Don't oversimplify your research
 - There's a fine line between making your research understandable and oversimplifying it to the point where the reader learns nothing from your summary. Remember, lay readers are a diverse group and some members will be highly knowledgeable about your area of interest.
10. Get a colleague and a non-scientist to look at it
 - This is important. Your colleague will be able to tell you if the science is correct, while a friend or relative without a scientific background can tell you whether it flows well and explains your research goals. If they still have questions after viewing it then you may want to make revisions.

Use images which complement the highlights, or help illustrate your main research ideas



**Tips for selecting
good images**

- Incorporate high resolution pictures of at least 300 dpi but no more than 600 dpi.
- The image may illustrate a metaphor or analogy that is part of the main research idea
- The image should be visually engaging and strike interest
- The image should not be offensive
- Types of acceptable images/illustrations (non-exhaustive):
 - Pictures of instruments, facilities, or experimental setups relevant to tell the story of the research project
 - Microscopy images
 - Simple, non-complex diagrams which help to convey an important relevant process, preferably using color (no charts or graphs)
 - A picture of yourself (PI) or your lab staff. Limit only one (1) of this type of image. Make sure to include names and roles.

Example of a Lay Research Summary Infographic

A kind of bacteria found in your gut and its dangerous genes can lead to serious life-threatening infections

Bacterium Enterococcus faecalis and the virulence of acquired genes leading to severe enterococcal infections

PI: James Dewey, University of Cambridge

OCAST Project: HR15-314

Research Area: Microbiology

Make sure to retain this layout on top of your infographic.

<p>E. faecalis is NORMAL</p>	<p>but can cause SERIOUS INFECTIONS</p>	 <p>Carol Channing, a scientist in our lab, displays DNA from a test subject</p>
 <p>A streak test performed on a petri dish</p>	<p>It can form new genes that make it resistant to antibiotics</p>	<p>Our research will focus on understanding these new genes and their mode of transfer</p>
<p>The benefits:</p> <ul style="list-style-type: none">new anti-infectivesreduce healthcare costsreduction of lost hours	 <p>Microscopic image of bacterium E. faecalis</p>	<p>Recent accomplishments:</p> <ul style="list-style-type: none">evaluation & optimization of lab techniquesstudying intestinal tissue samplesusing light & fluorescent microscopes to see where E. faecalis accumulates

Note:



The placement and layout of the highlights and images can be suited to your specific preferences, but please position the lay title, actual title, PI name and institution/organization, OCAST project number, and research area across the top of the infographic.

Photo Release Statement

Permission for Use of Photography

I grant to the Oklahoma Center for the Advancement of Science and Technology ("OCAST") and its legal representatives and assigns, the irrevocable and unrestricted right to use and publish photographs or illustrations that I have provided for editorial, trade, advertising, and any other purpose and in any manner and medium; and to alter and composite the same without restriction and without my inspection or approval. I hereby release OCAST and its legal representatives and assigns from all claims and liability relating to said photographs or illustrations.

SIGNATURE, PRINCIPAL INVESTIGATOR
NAME
TODAY'S DATE
PHONE
STREET ADDRESS
CITY, STATE, ZIP

Return this completed form to Laura Sohl-Smith at Laura.Sohl-Smith@ocast.ok.gov