

The background of the slide is a photograph of a stone wall with a large, ornate metal door. The door is made of dark metal with a grid of small, square panels and is set within a stone frame. The wall is made of large, rectangular stone blocks. The text is overlaid on this image in a bright blue color.

Integrating the social and natural sciences in boundary organizations: Lessons from Sea Grant

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Texas Sea Grant College Program
Texas A&M University

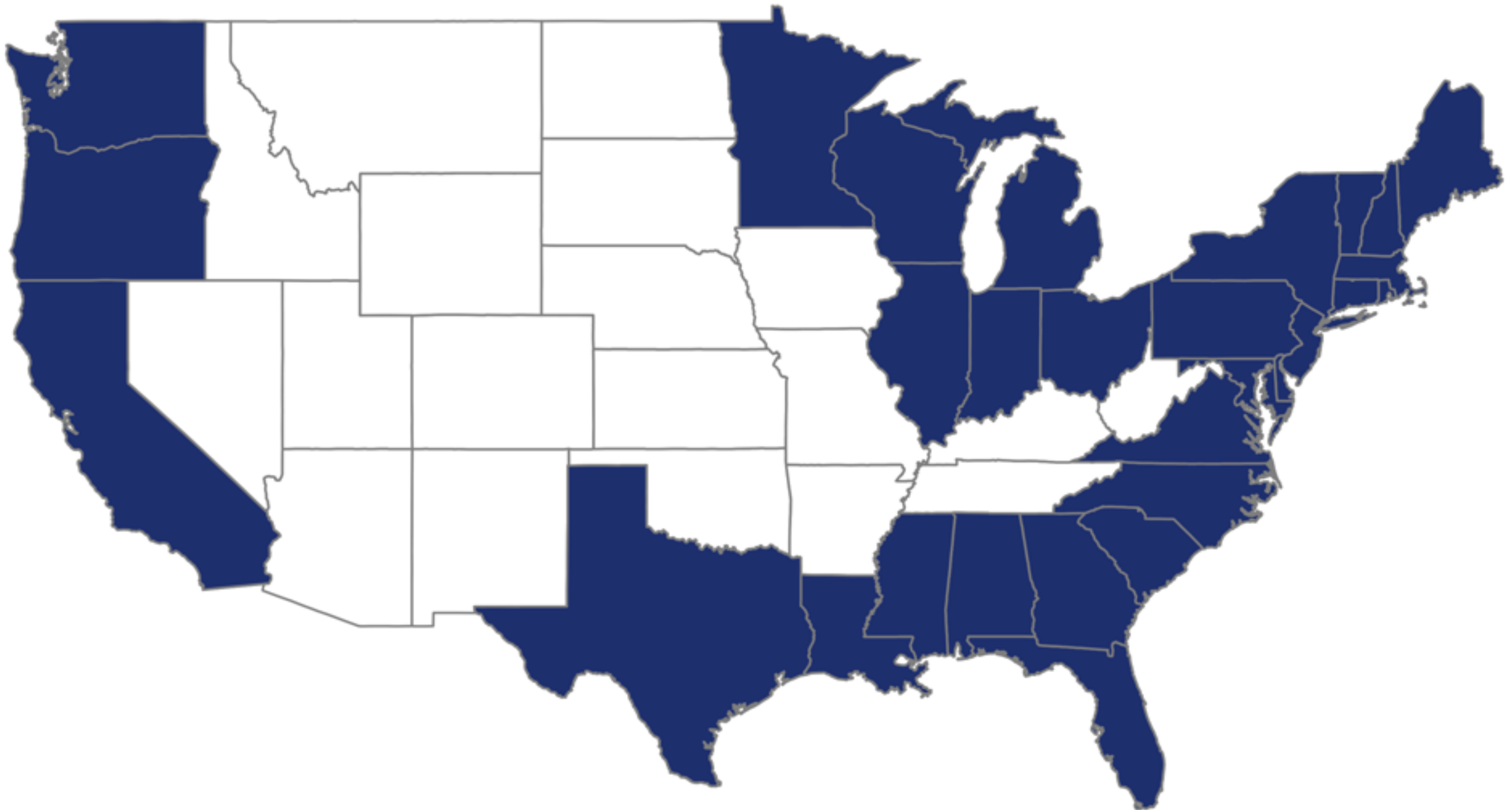
Thanks to Sea Grant Social Science Community of Practice

Sea Grant
50
YEARS

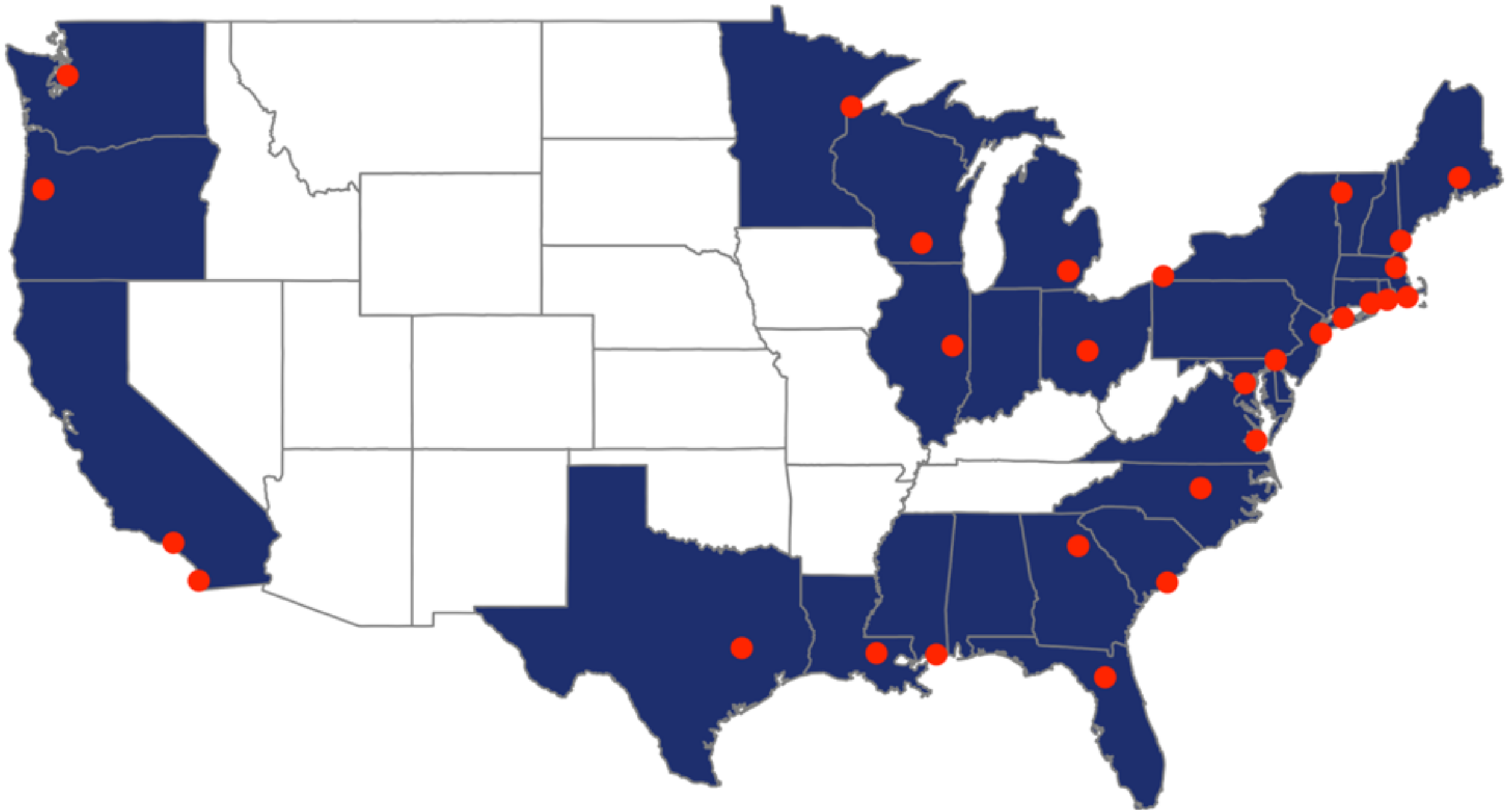


Background

Sea Grant states

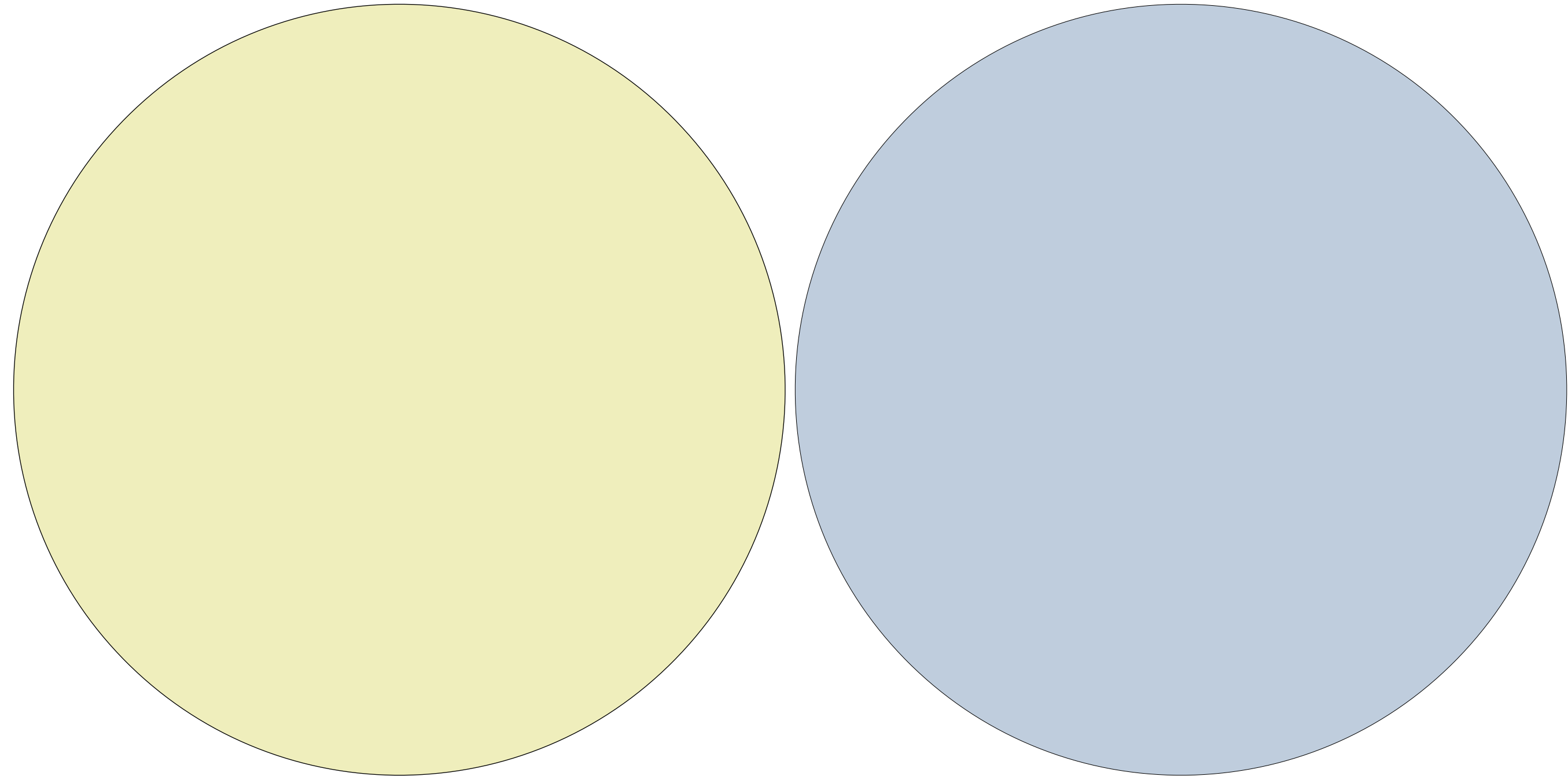


Sea Grant main office locations



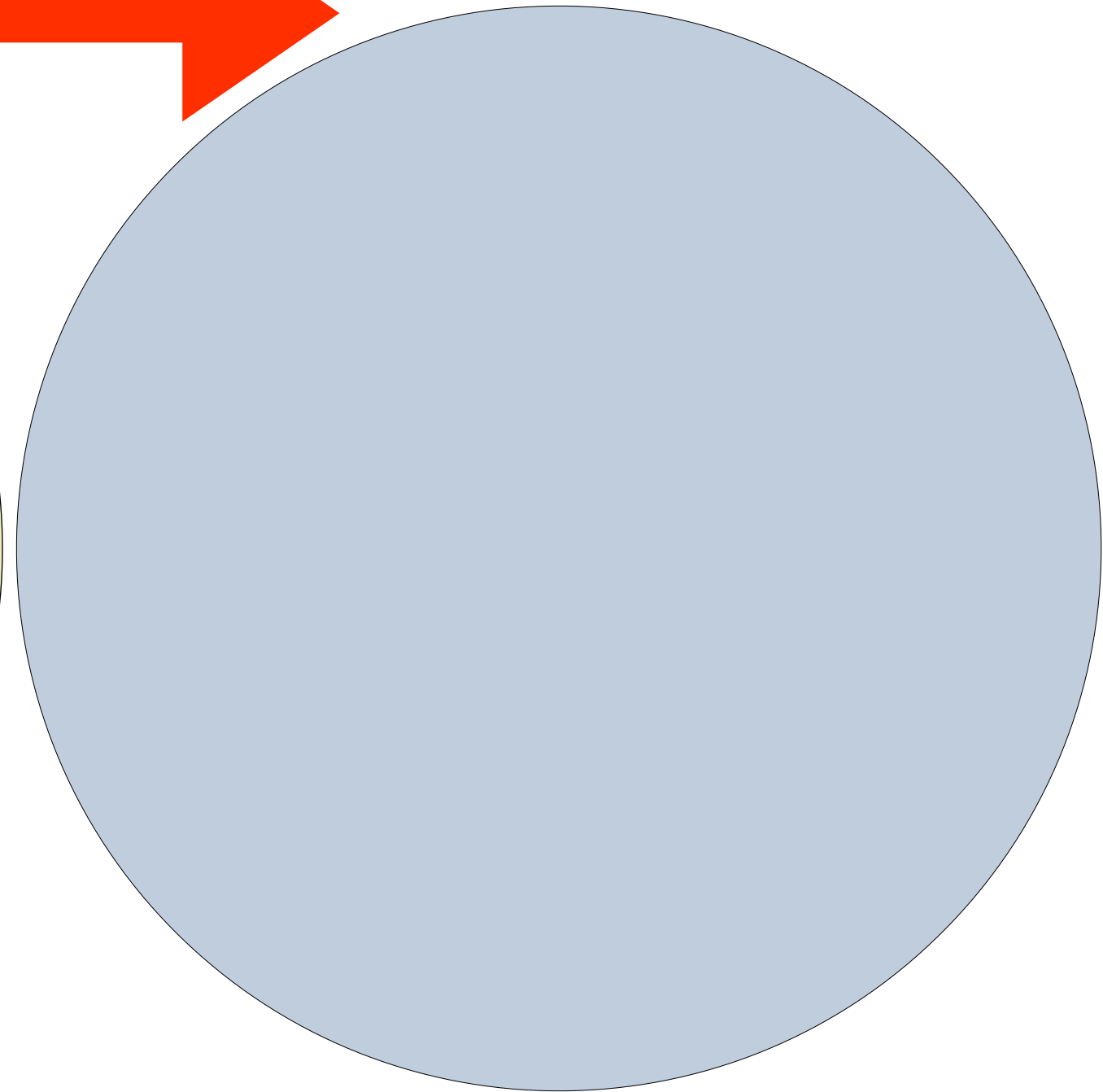
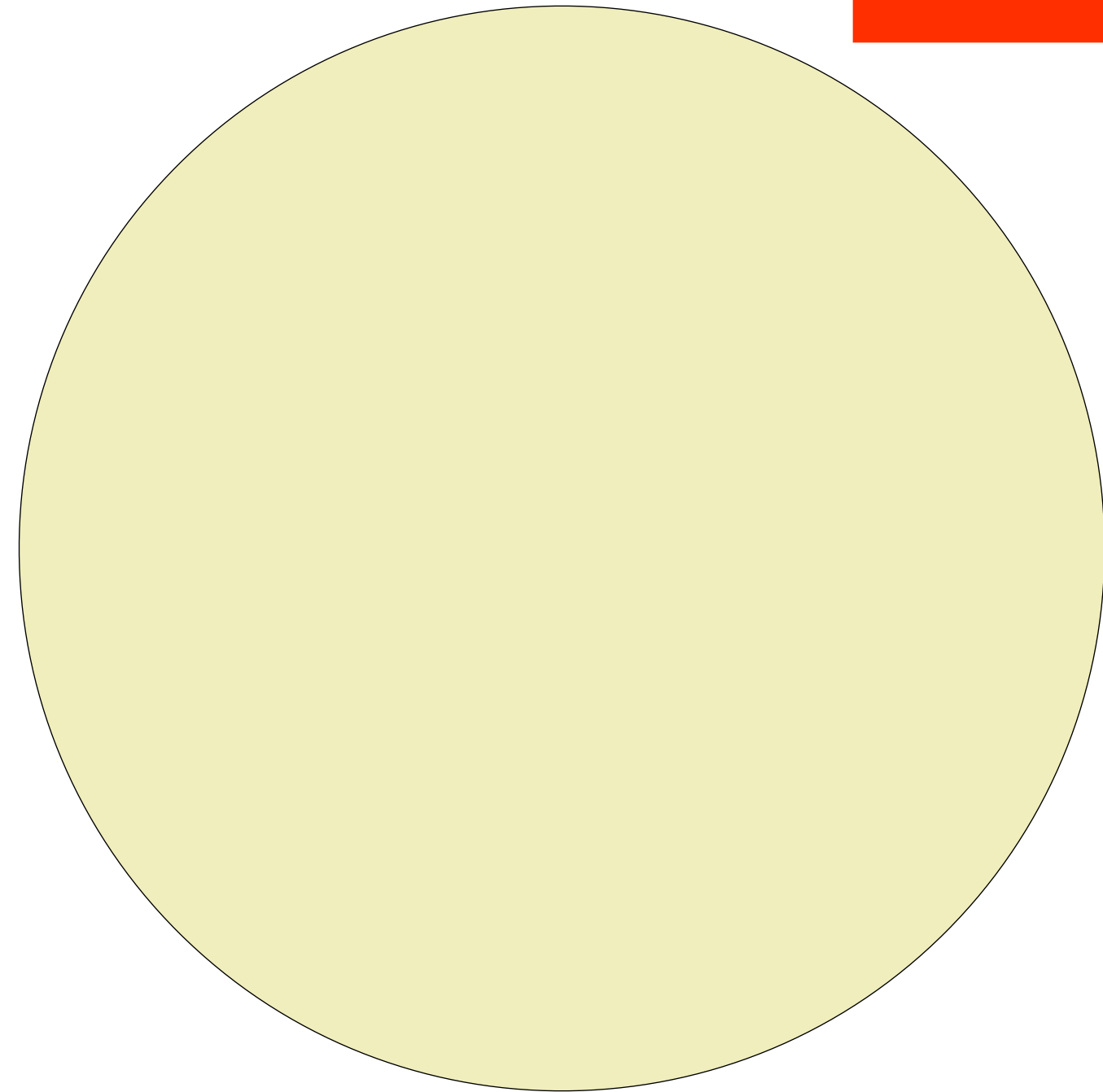
Scientists

Public



Scientists

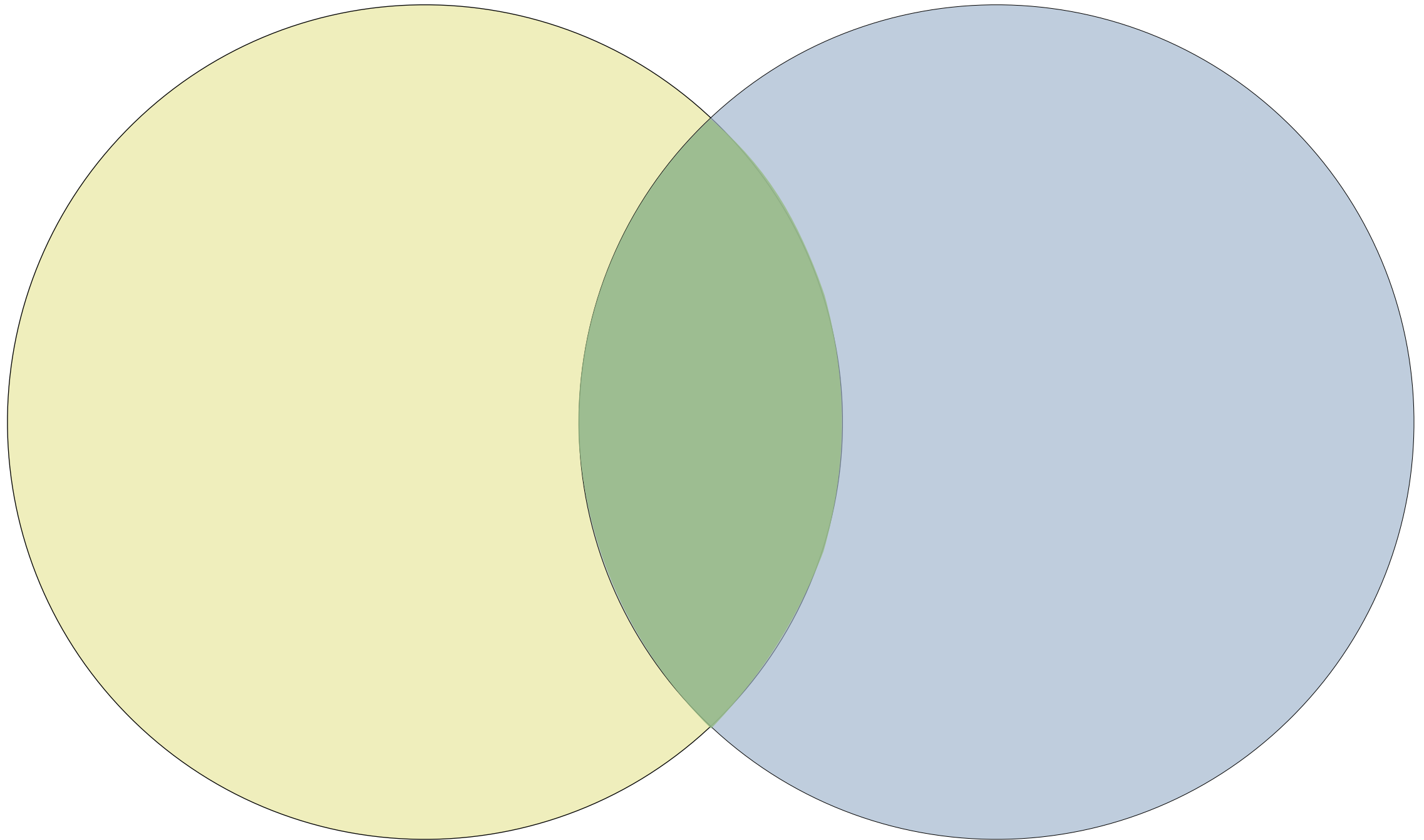
Public



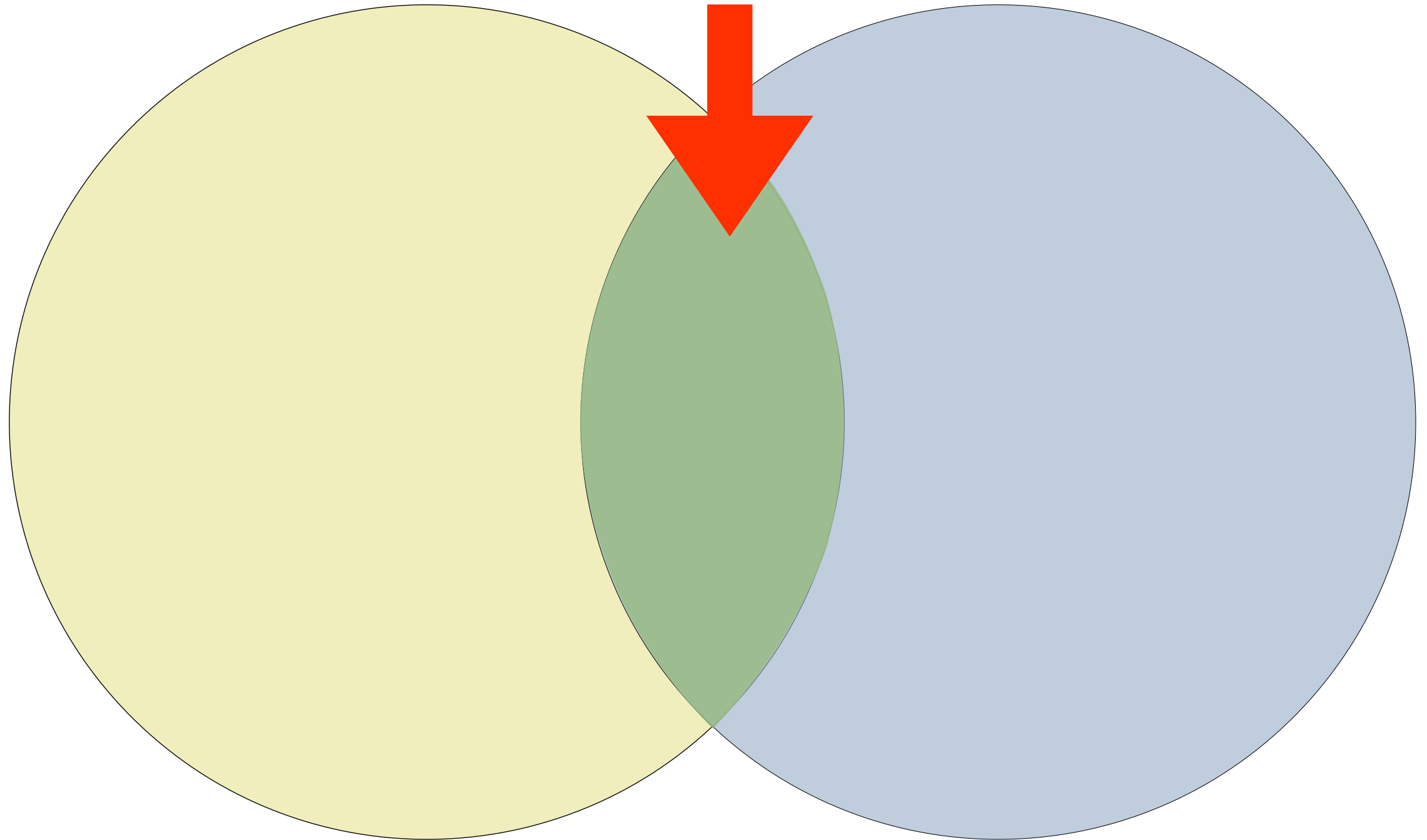


Scientists

Public

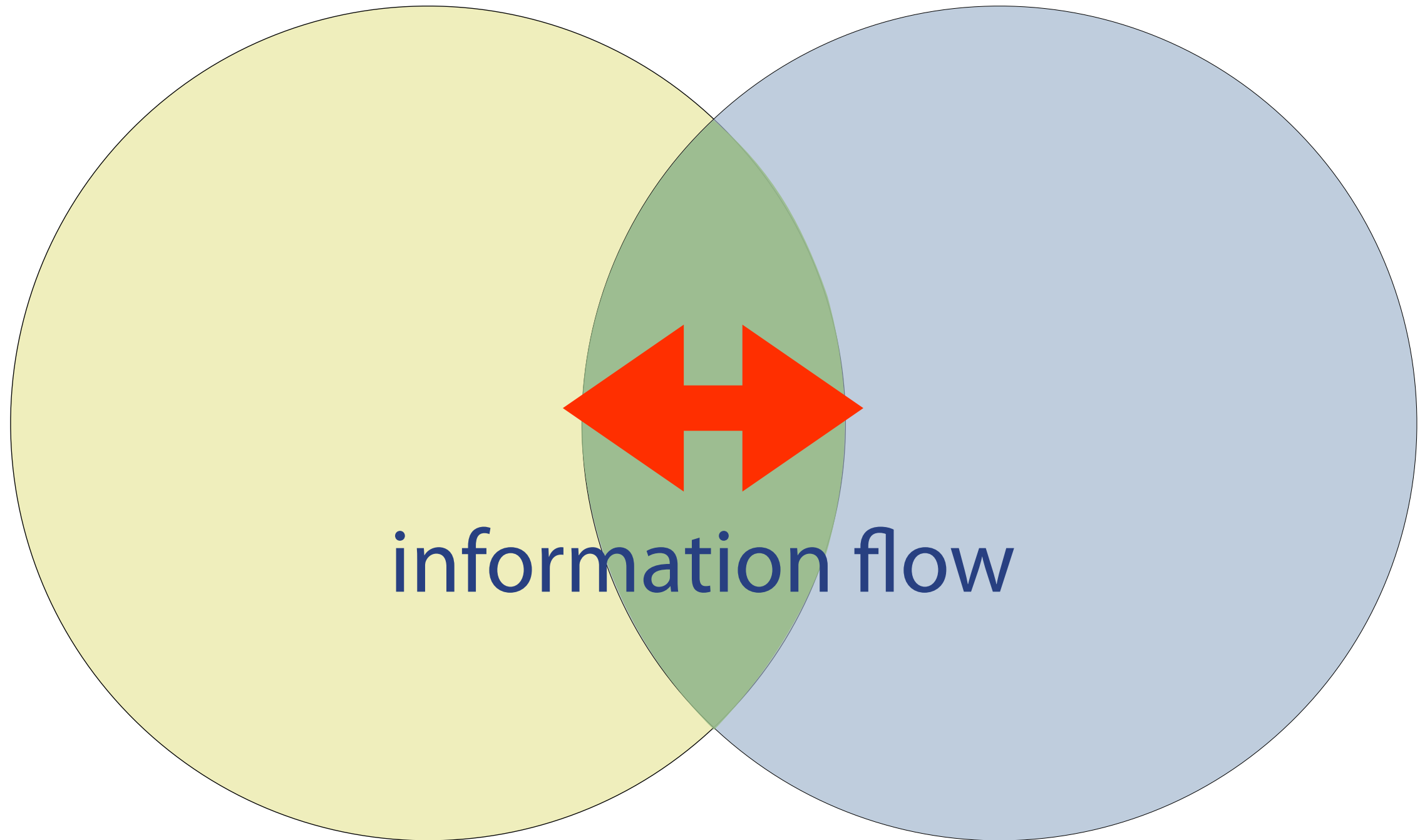


Scientists Science-policy interface Public



Scientists

Public



information flow



Science-policy interface

Boundary organizations provide a bridge for and broker knowledge between the production side (universities, research institutes) and the use side (stakeholders, decision makers).

- Kirchoff, Lemos, and Dessai 2013

How can social science help navigate this boundary?



Photo: Flickr user san_drino

We used social science to find out



Methods

Delphi panel: systematically eliciting expert consensus



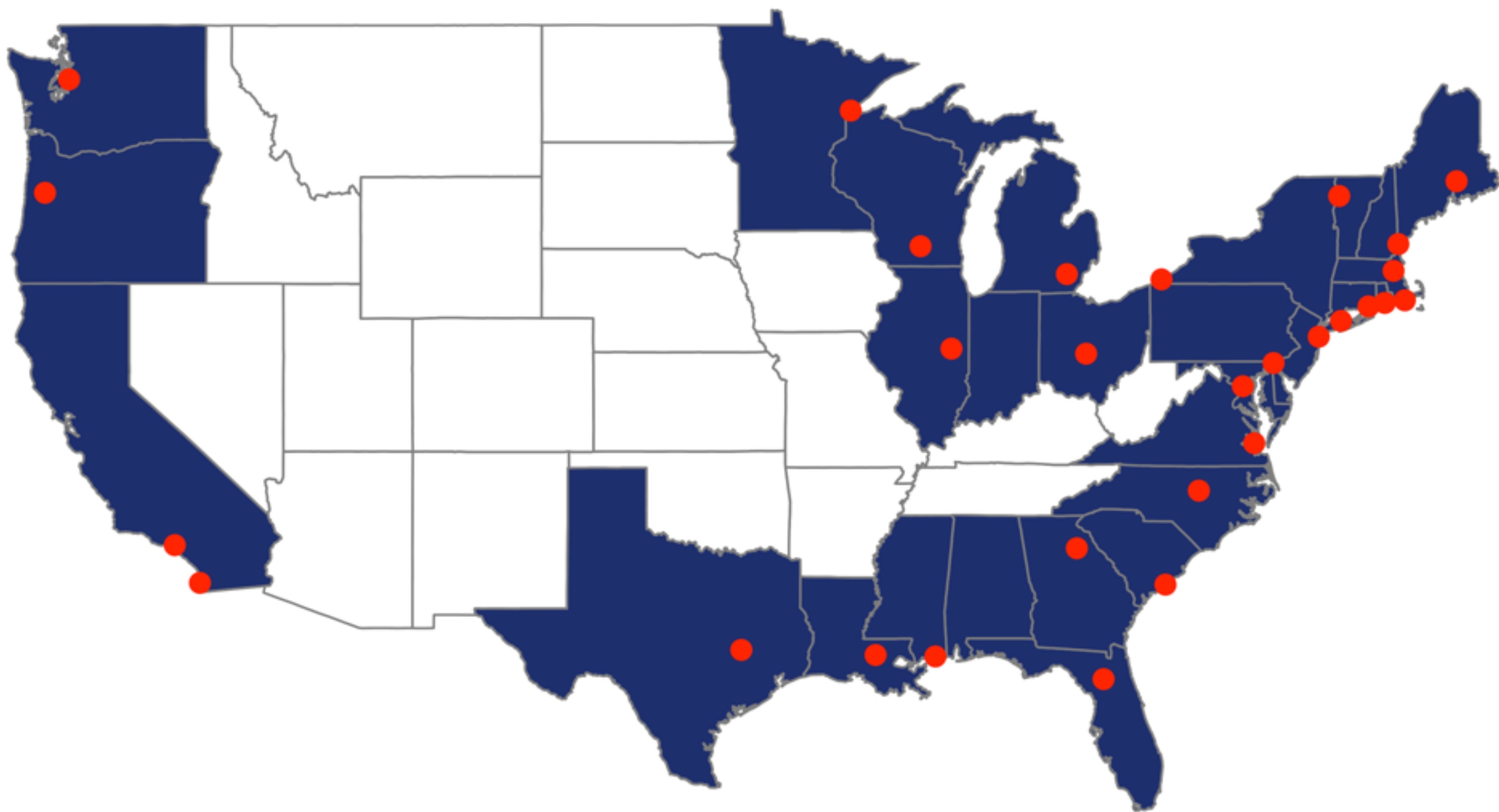
Photo: Ronny Siegel

Delphi panel: systematically eliciting expert consensus

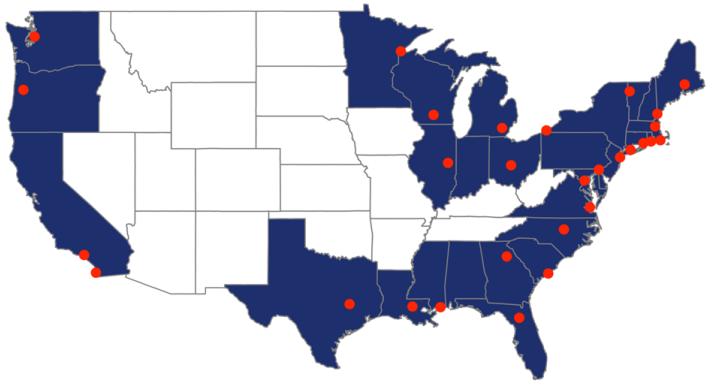


(Reporting on round 1 today)

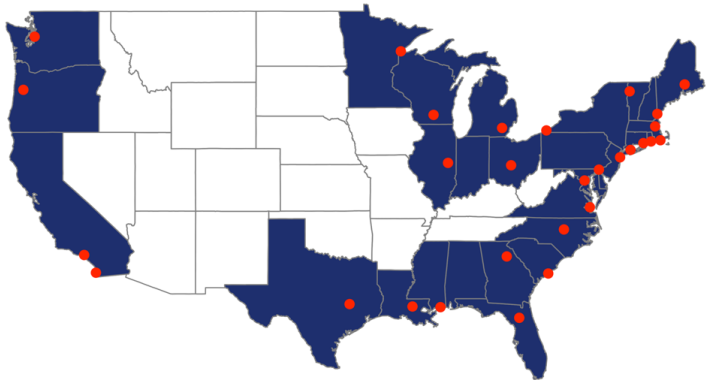
Photo: Ronny Siegel



Delphi panel round 1

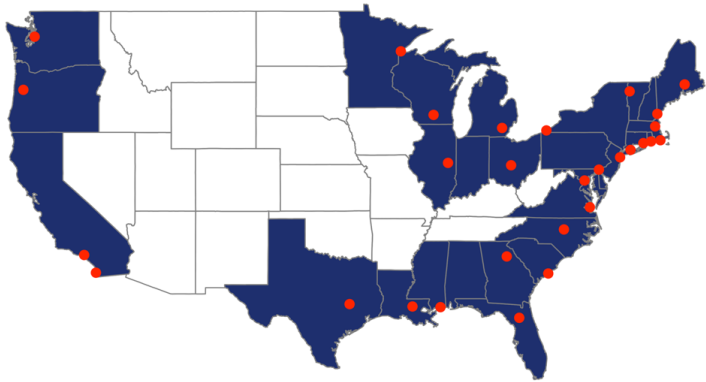


Surveyed directors & 1–3
staff at each program

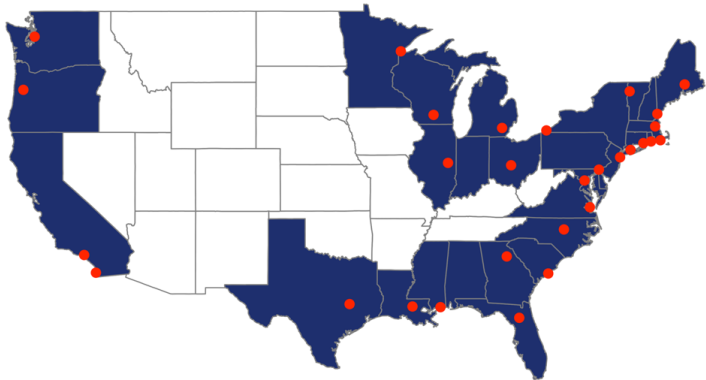


62% response rate

Delphi panel round 1



Inductive coding of open-ended responses



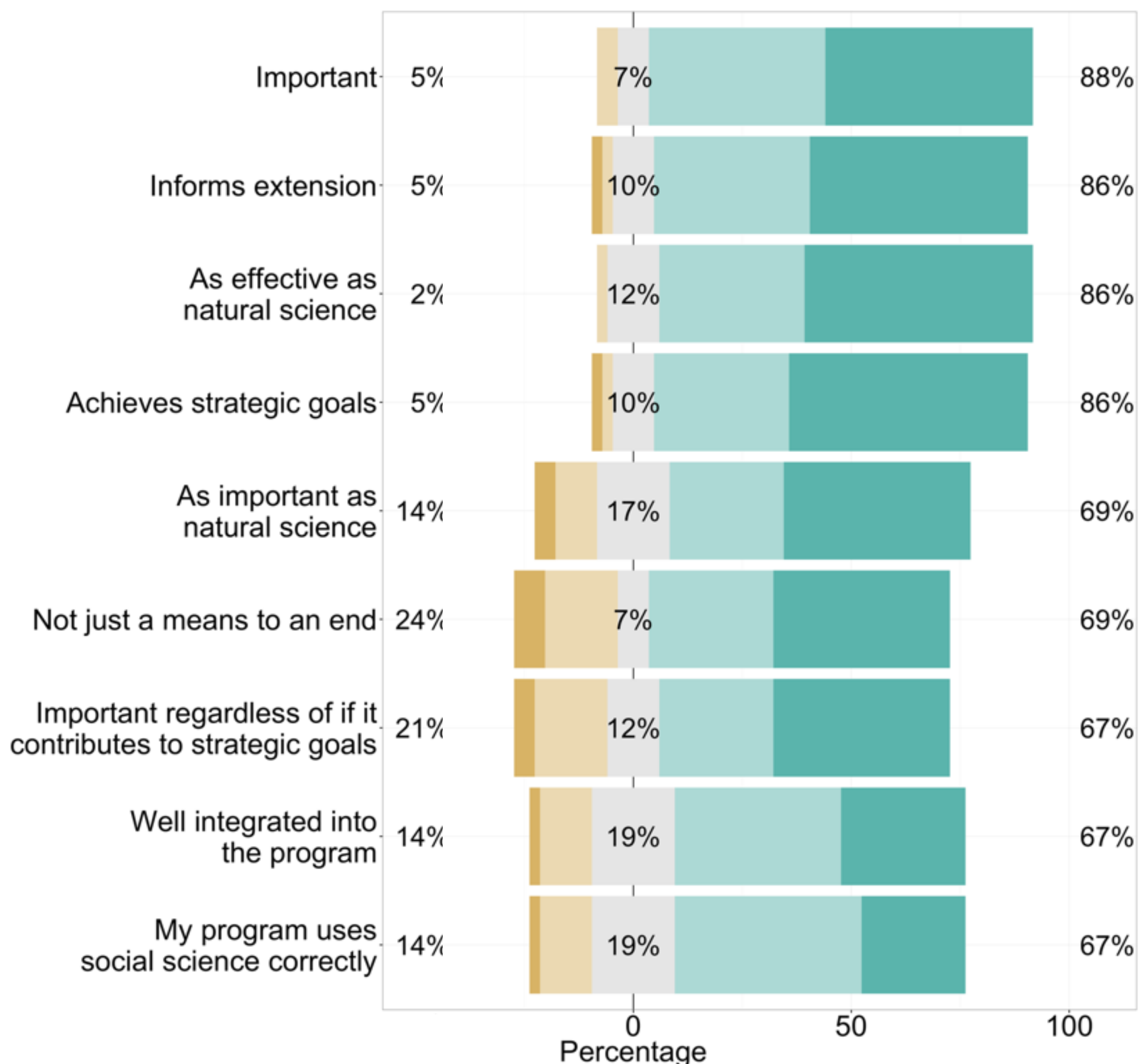
3 topics to discuss today

1. What are attitudes toward social science at Sea Grant?

2. What is a successful social science project at Sea Grant?

3. What factors promote or hinder successful social science at Sea Grant?

1. What are attitudes toward social science at Sea Grant?



2. What is a successful social science project at Sea Grant?

A word cloud of terms related to community-based coastal management and information use. The words are arranged in a roughly circular shape, with the most prominent words in the center and smaller words towards the edges. The colors range from light blue to dark blue.

programming
knowledge groups
something
adaptation
people and/or
improve
data target
know
communities
good
make
behavior
allows
impacts
change
able valuable
projects define
inform public
defined
address
coastal
needed used
use can
goals useful
efforts
better issue
findings
significant
information
result
produces
understand marine
management outreach
community important
needs practices
sustainable

A word cloud of terms related to community-based coastal management and sustainable development. The words are arranged in a roughly circular shape, with the most prominent words in the center and smaller words towards the edges. The color of the words transitions from a light blue at the top to a darker blue at the bottom.

programming
knowledge groups
adaptation something
people and/or improve data target
know communities good
make behavior allows
impacts change able valuable
projects define inform public
defined coastal
address used use can goals useful
needed efforts better issue findings
significant information result resource
understand marine produces
management outreach
community important
needs practices
sustainable

[illegible]

A word cloud of terms related to marine management and community engagement. The words are arranged in a circular pattern, with some words appearing more frequently or in larger fonts than others. The words include: knowledge, groups, something, improve, communities, behavior, change, results, use, can, better, issue, information, result, understand, marine, management, outreach, important, community, produces, resource, findings, useful, goals, coastal, inform, public, able, valuable, allows, good, target, data, and people. The words are in various shades of blue and green, and are of different sizes, creating a dynamic and visually appealing composition.

A word cloud of terms related to marine management and community engagement. The words are arranged in a circular pattern, with some words appearing more frequently or in larger fonts than others. The words include: knowledge, groups, something, improve, communities, behavior, change, results, use, can, better, issue, information, result, understand, marine, management, outreach, important, community, produces, resource, findings, useful, goals, coastal, inform, public, valuable, able, allows, good, target, data, andor, people, adaptation, know, make, impacts, define, defined, address, needed, used, efforts, significant, projects, and programs. The words are in various shades of blue and green, and are of different sizes, creating a dynamic and visually appealing composition.

What is successful
Sea Grant social
science?

Applied (41%)

Behaviors & behavior change (27%)

Helps stakeholders make decisions (24%)

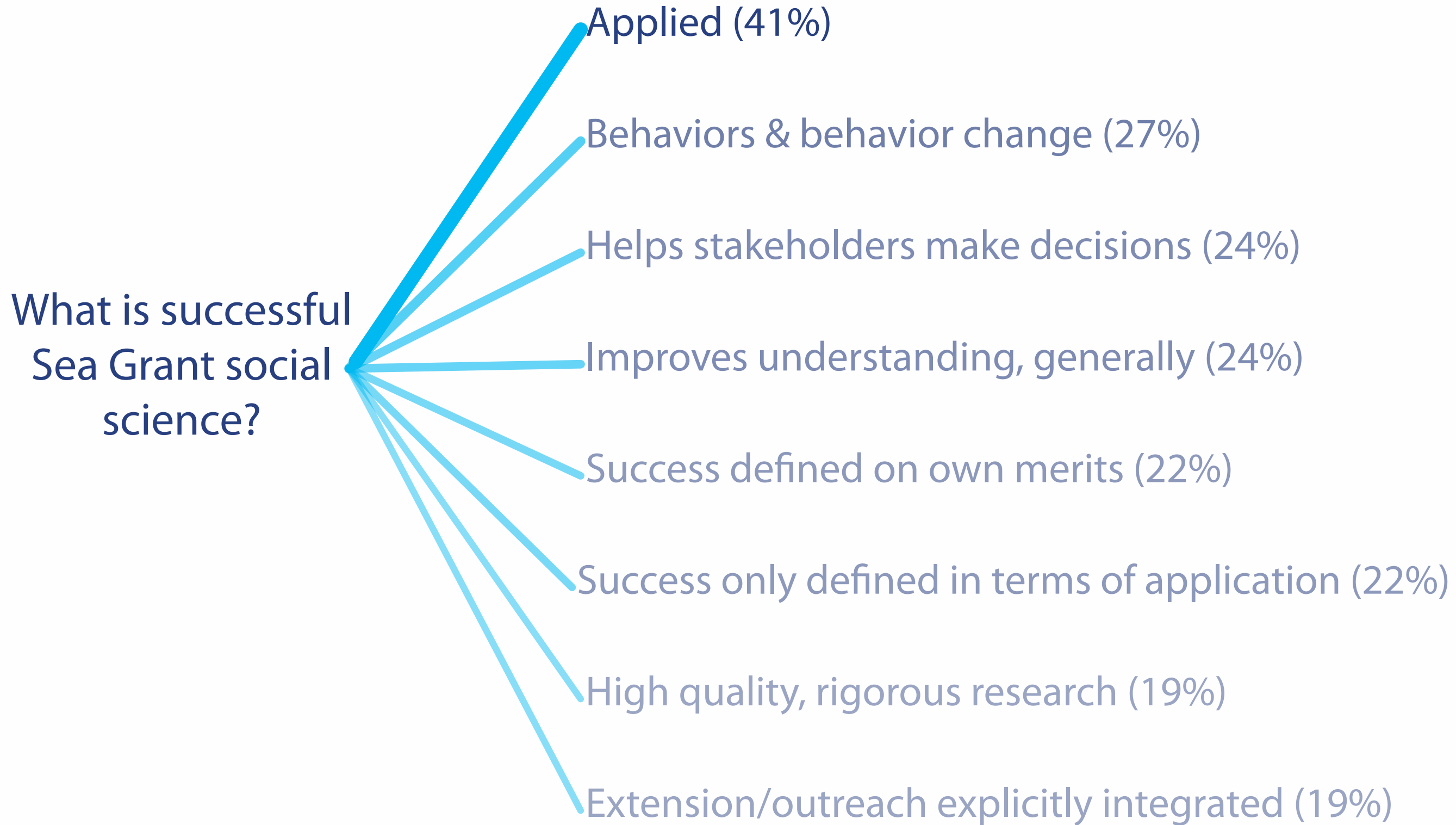
Improves understanding, generally (24%)

Success defined on own merits (22%)

Success only defined in terms of application (22%)

High quality, rigorous research (19%)

Extension/outreach explicitly integrated (19%)



3a. What factors promote successful social science at Sea Grant?

A word cloud visualization of terms related to community-based research and funding. The words are arranged in a roughly circular shape, with the most prominent words in the center and smaller words towards the edges. The colors range from light blue to dark blue.

understand
value focus dont
use access partners
community
group also **conduct** working
andor **funding** trained
capacity tools
time needs
strong local **staff** natural
support extension
can sure
scientists work people
projects conducting
develop input
resources
understanding

A word cloud with the words 'funding', 'staff', and 'support' in large, bold, dark blue font. Other words in a smaller, lighter blue font include: 'conduct', 'time', 'strong local', 'scientists', 'work', 'projects', 'conducting', 'develop', 'input', 'resources', 'understanding', 'can', 'sure', 'people', 'extension', 'natural', 'needs', 'trained', 'tools', 'capacity', 'and/or', 'group', 'also', 'community', 'use', 'access', 'partners', 'value', 'focus', 'don't', 'understand', 'group', 'also', 'working', 'value', 'focus', 'don't', 'use', 'access', 'partners', 'community', 'group', 'also', 'working', 'and/or', 'capacity', 'trained', 'tools', 'needs', 'natural', 'extension', 'can', 'sure', 'people', 'conducting', 'develop', 'input', 'resources', 'understanding'.

understand
value focus don't
use access partners
community
group also **conduct** working
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value focus dont
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group also **conduct** working
andor
capacity **funding** trained tools
time **staff** needs
strong local **support** natural
extension
can sure
scientists work people
projects conducting
develop input
resources
understanding

A word cloud of terms related to agricultural extension and community support. The words are arranged in a roughly circular shape, with some terms appearing more frequently or in larger fonts than others. The colors range from light blue to a darker blue.

understand
value focus dont
use access partners
community
group also conduct working
andor capacity funding trained tools
time staff needs
strong local support natural
extension
can sure
scientists work people
projects conducting
develop input
resources
understanding

understand
value focus dont
use access partners
community
group also conduct working
and/or capacity funding trained tools
time staff needs
strong local support natural
extension
can sure
scientists work people
projects conducting
develop input
resources
understanding



3b. What are some barriers that hinder social science at Sea Grant?

questions
opposite natural
capacity sciences
work projects
take
staff funding value survey
focus don't agencies
etc fear data
lack irb can many
conduct support
effective including process
understanding

A word cloud with a light orange background. The words are arranged in a roughly circular shape. The words 'time' and 'lack' are the largest and are colored a dark red. Other words are in a lighter orange color and vary in size. The words include: questions, opposite, natural, capacity, sciences, work, projects, staff, funding, value, survey, agencies, data, irb, can, many, support, conduct, effective, including, process, understanding, focus, dont, etc, fear, take, and projects.

questions
opposite
natural
capacity sciences
work projects
staff funding
value survey
agencies
data
irb
can many
support
conduct
effective including
process
understanding
focus
dont
etc
fear
take
projects

A word cloud visualization of research-related terms. The words are arranged in a roughly circular shape, with some words appearing in a larger, darker red font and others in a smaller, lighter orange font. The words include: questions, opposite, natural, capacity, sciences, work projects, staff funding, value, survey, agencies, data, many, can, support, conduct, lack, time, focus, dont, etc, fear, irb, effective, including, process, and understanding.

questions
opposite
natural
capacity sciences
work projects
staff funding
value
survey
agencies
data
many
can
support
conduct
lack
time
focus
dont
etc
fear
irb
effective including
process
understanding

A word cloud featuring various terms related to research and project management. The words are arranged in a roughly circular shape, with some terms being significantly larger than others. The colors range from a light peach to a darker orange. The words include:

- questions
- opposite
- natural
- capacity sciences
- work projects
- take
- staff funding
- value survey
- focus
- dont
- agencies
- etc
- fear
- time
- data
- irb
- can
- many
- lack
- conduct support
- effective including
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- understanding

questions
opposite natural
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work projects
take staff funding value
survey
focus don't time agencies
etc fear lack irb data
can many
conduct support
effective including
process
understanding

What are barriers to
successful social
science at Sea
Grant?

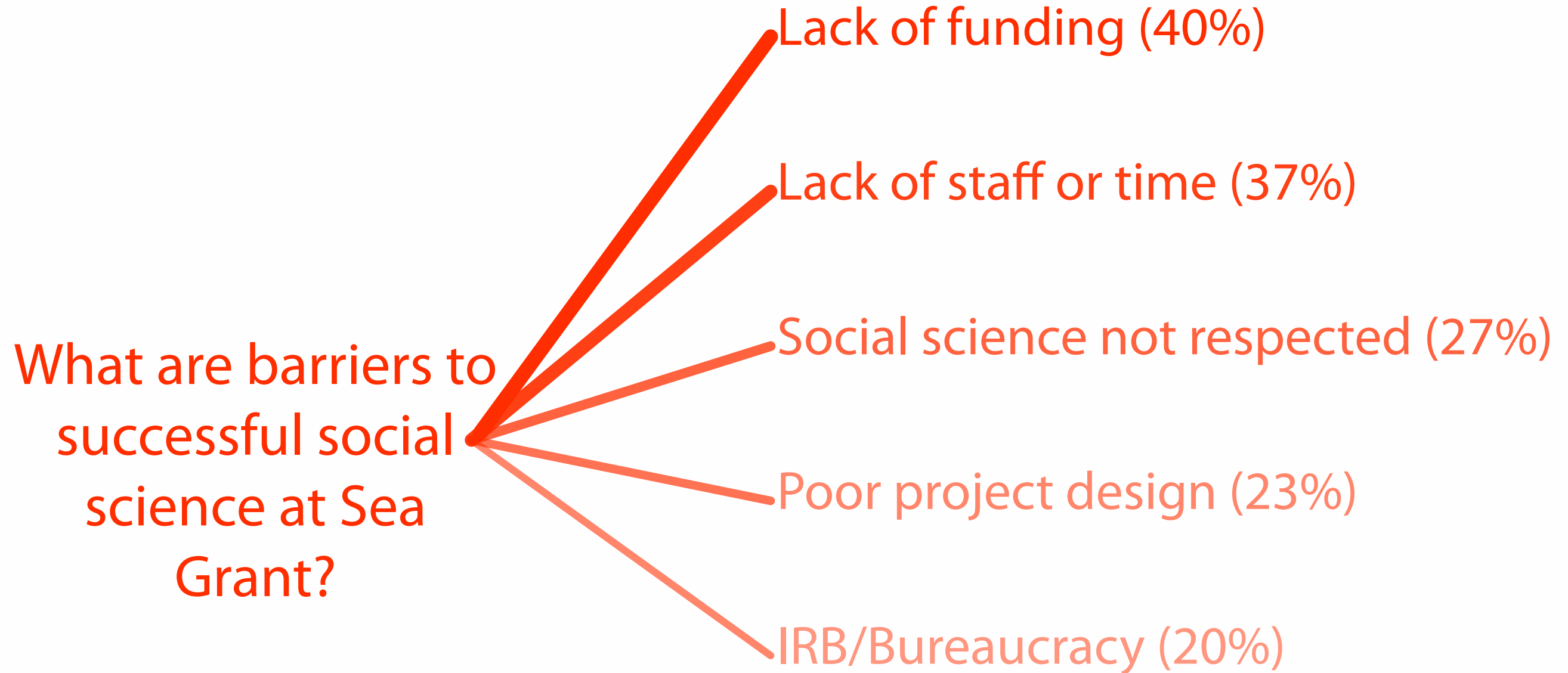
Lack of funding (40%)

Lack of staff or time (37%)

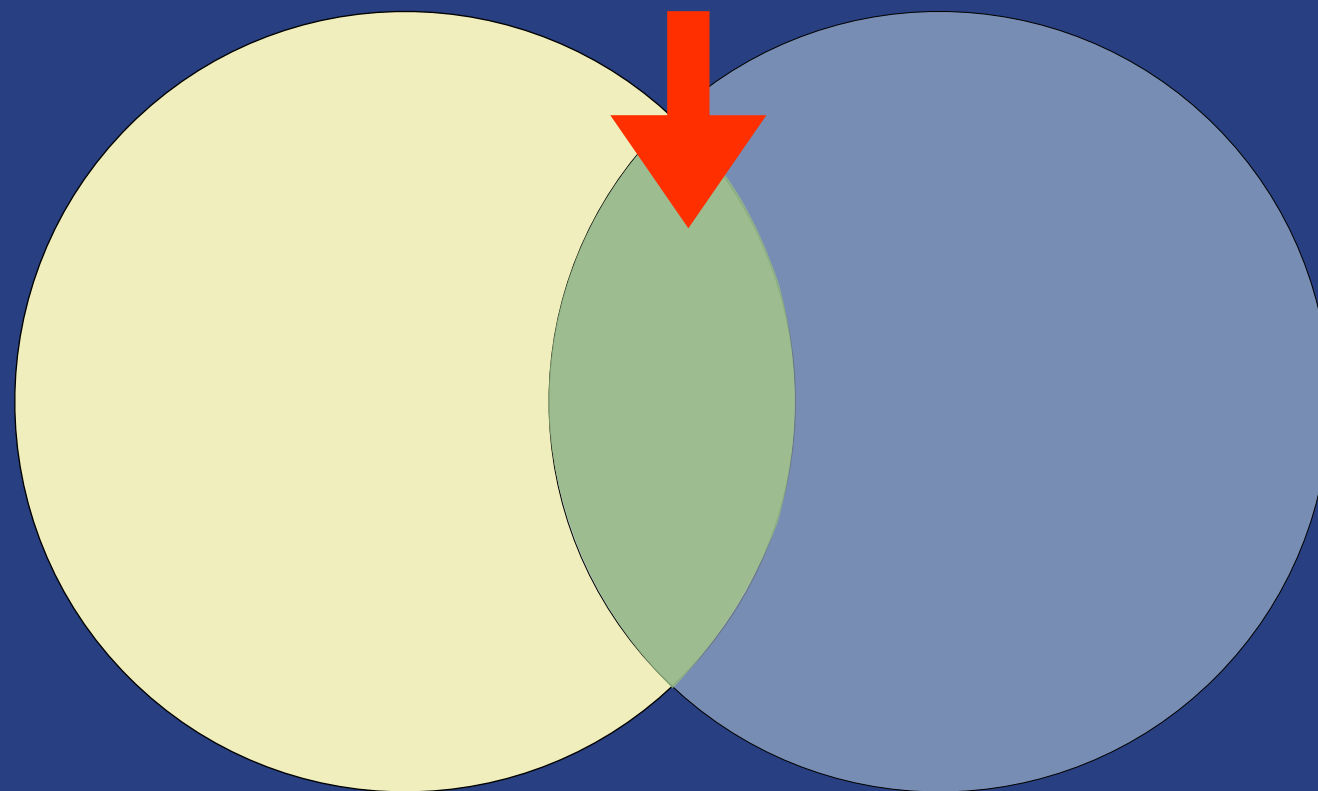
Social science not respected (27%)

Poor project design (23%)

IRB/Bureaucracy (20%)



**Conclusions: What does this mean for
social science research at boundary
organizations?**



We aren't the Oracle: applied, partner-driven research is important

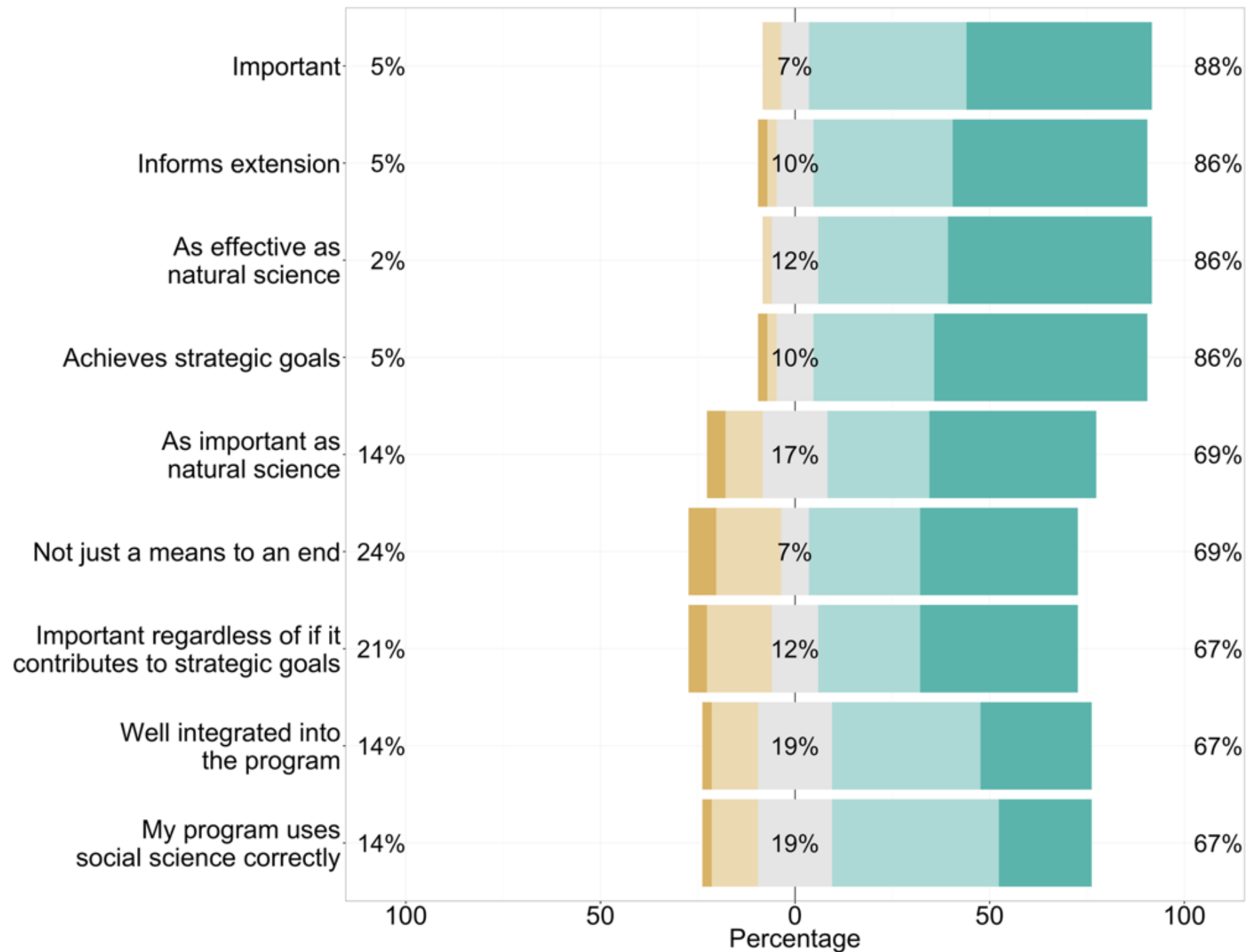


(We aren't Socrates, either)

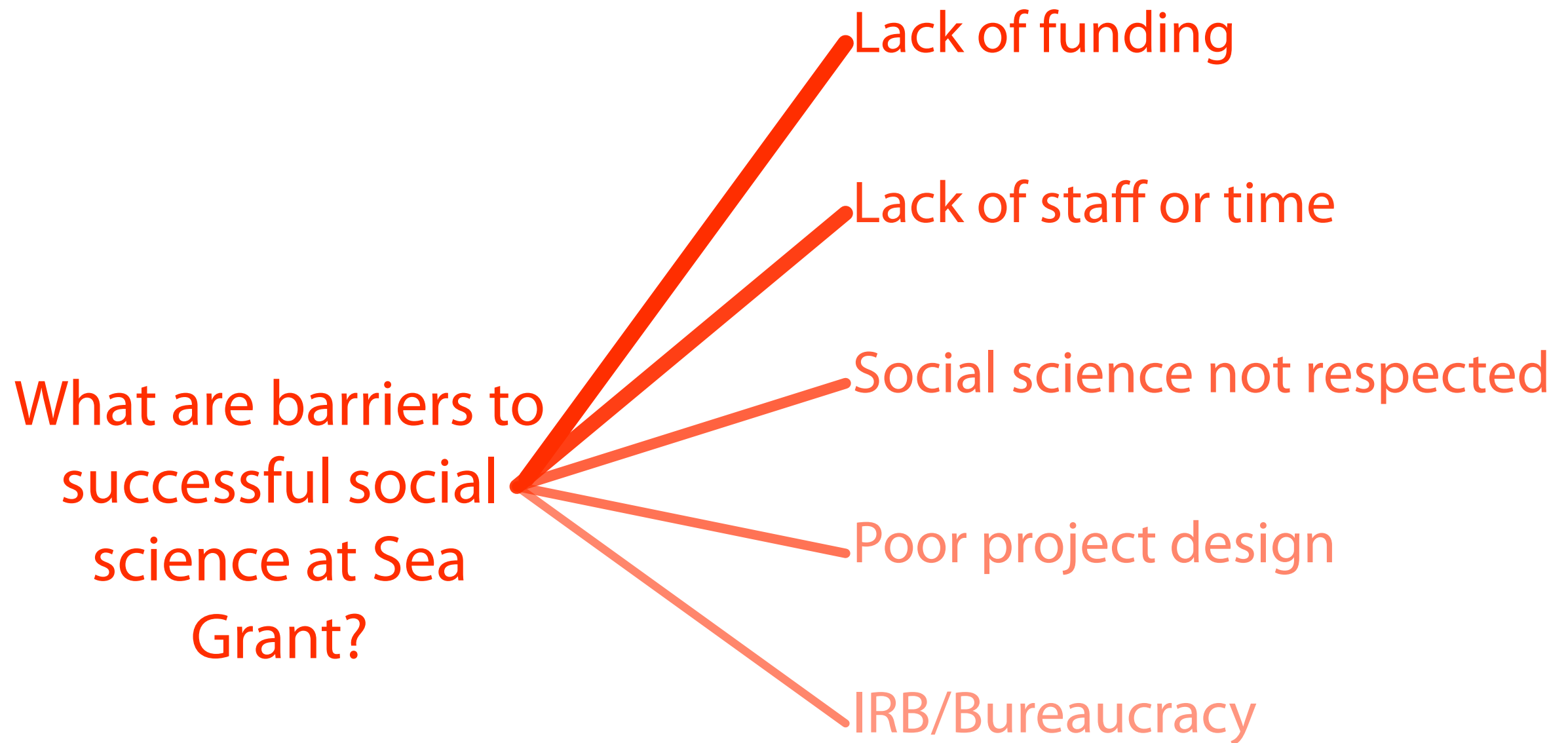


**Yes! Like sands of the hourglass,
so are the days of our lives.**

Favorable attitudes vs. lack of buy-in



Favorable attitudes vs. lack of buy-in



2 stakeholder groups



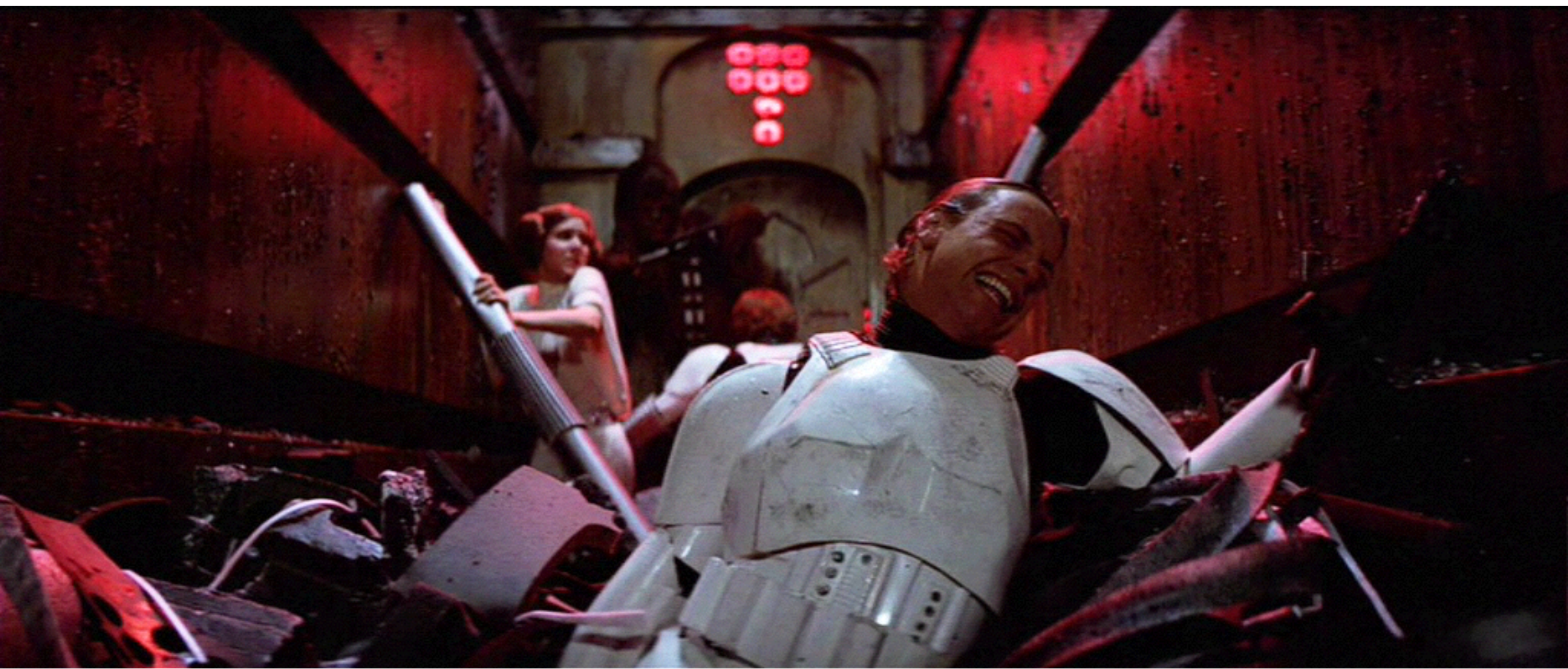


Image: Star Wars: A New Hope





The background of the slide is a photograph of a large, ornate stone door set within a stone wall. The door is made of dark stone and features a grid of small, circular indentations. The wall is made of light-colored stone blocks. The entire image is overlaid with a blue gradient, which is darker at the top and bottom and lighter in the center. The text is in a bright blue color that contrasts with the background.

Thank you.

Stuart Carlton

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