Welcome to the international course on

Science Communication for Societal Impact

14-18 September, hosted online from Delft

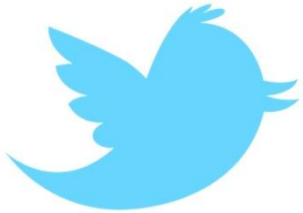
AESIS
NETWORK FOR
ADVANCING & EVALUATING THE SOCIETAL IMPACT OF SCIENCE

TU Delft

SCI COM NL

USC

DAY 3



#SciCom20
@AesisNet

OVERVIEW OF THE COURSE

Monday 14 September – Welcome and Introduction to Science Communication for Impact
Joost Ravoo & Roy Meijer, and Paul Manners

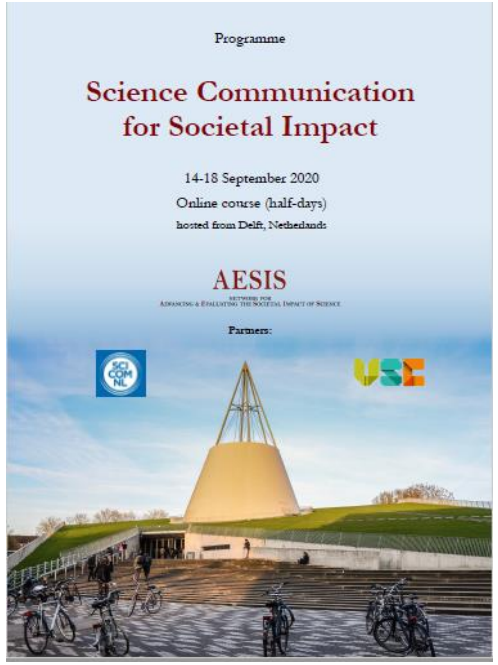
Tuesday 15 September – Science communication, university strategies, obstacles and criteria
Maarten van der Sanden & Alex Verkade

Wednesday 16 September – Facilitating science communication to society and lessons learned from COVID-19
Cissi Askwall and Anna Maria Fleetwood & Stefanie Molthagen-Schnöring

Thursday 17 September – Connecting Organisations for Societal Impact and Public & Policy Engagement
Ben Vivekanandan & Emily Jesper

Friday 18 September- Science Gallery Rotterdam: Science Communication and Societal Impact
Fred Balvert
Case study presentations

OVERVIEW OF TODAY'S PROGRAMME



Anna Maria Fleetwood & Cissi Askwall

Facilitating Science Communication to Society

- 'I want to, but there is no time'- *Researchers views on communication and Open Science*
- Support researchers to succeed in their communication
- Communicating science in a post-truth era

Stefanie Molthagen-Schnöring

Learnings from the COVID-crisis for Science Communication

- New challenges for science
- Failure and success of science communication
- The way ahead: applicability of old rules?

Anna Maria Fleetwood

Senior Adviser External Relations, Swedish Research Council

Cissi Askwall

Secretary General at Public & Science, Sweden

Swedish Research Council

Vetenskap & Allmänhet
VA – PUBLIC & SCIENCE

Anna Maria Fleetwood

Cissi Askwall

Researcher study in Sweden 2019

- Web based questionnaire
- Distributed by Ipsos
- Ramdom sample

31 universities

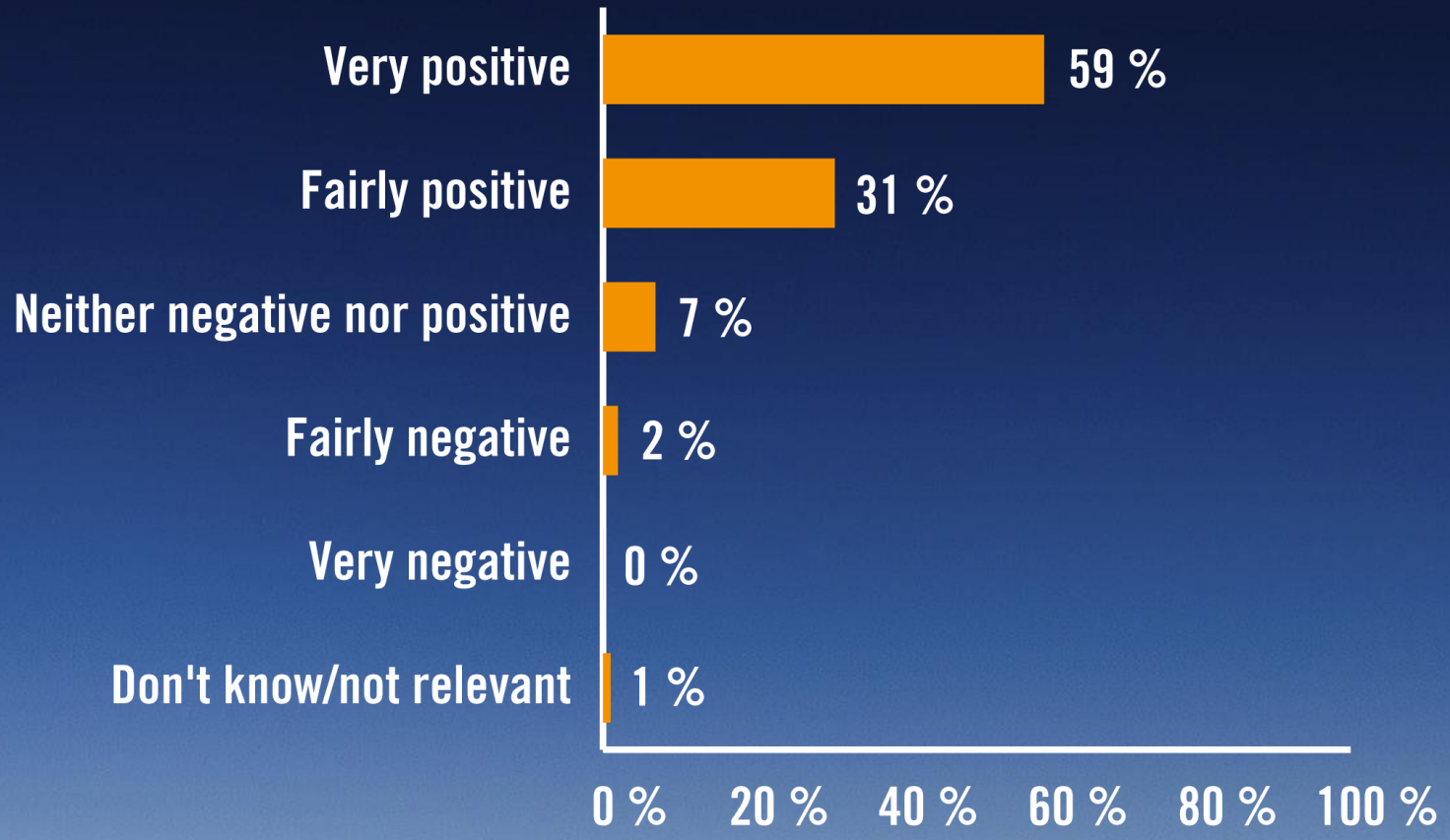
↓

21,073 invitations

↓

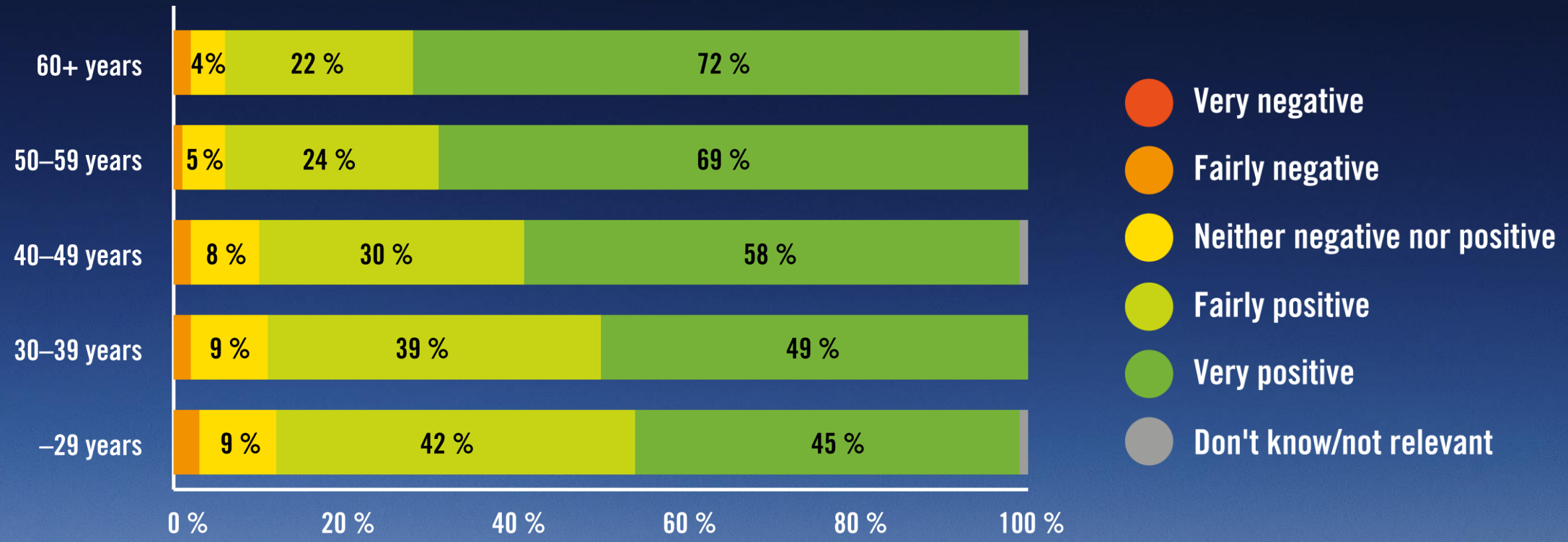
3,699 answers = 18 %

Overall, what is your personal attitude to communicating your research with the outside world?



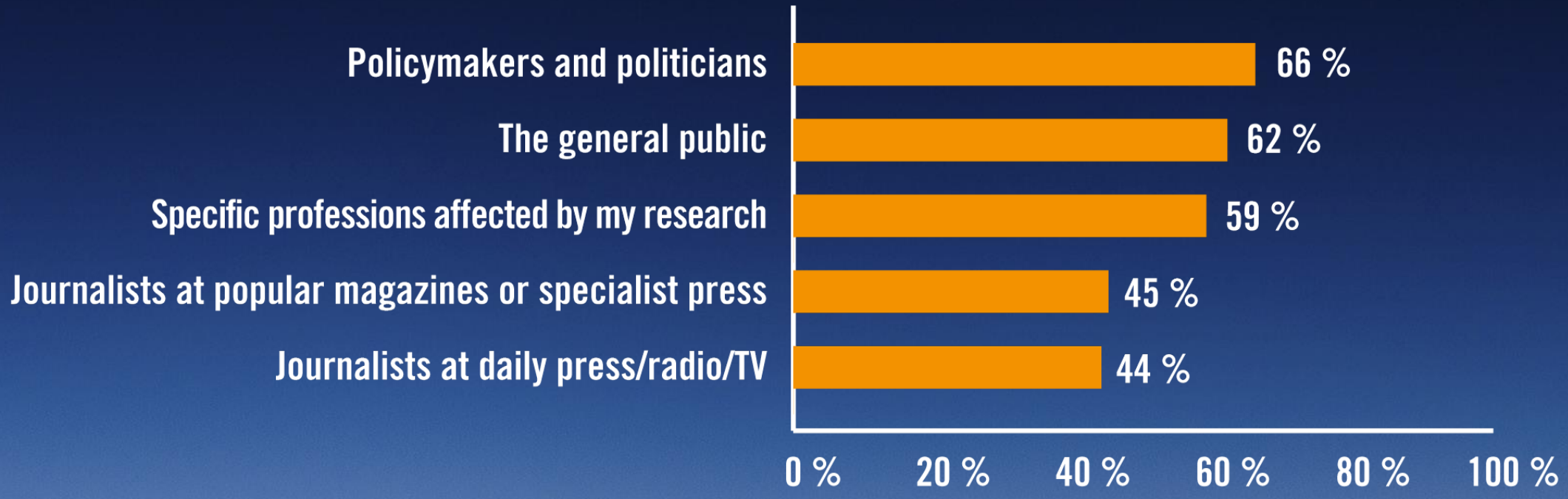
(Figure 2, VA Report 2019:8)

Overall, what is your personal attitude to communicating your research with the outside world?



(Figure 4, VA Report 2019:8)

Which groups or parts of society (outside academia) do you think it important for you to communicate with about your research? Select all those that you agree with.



(Figure 11, VA Report 2019:8)

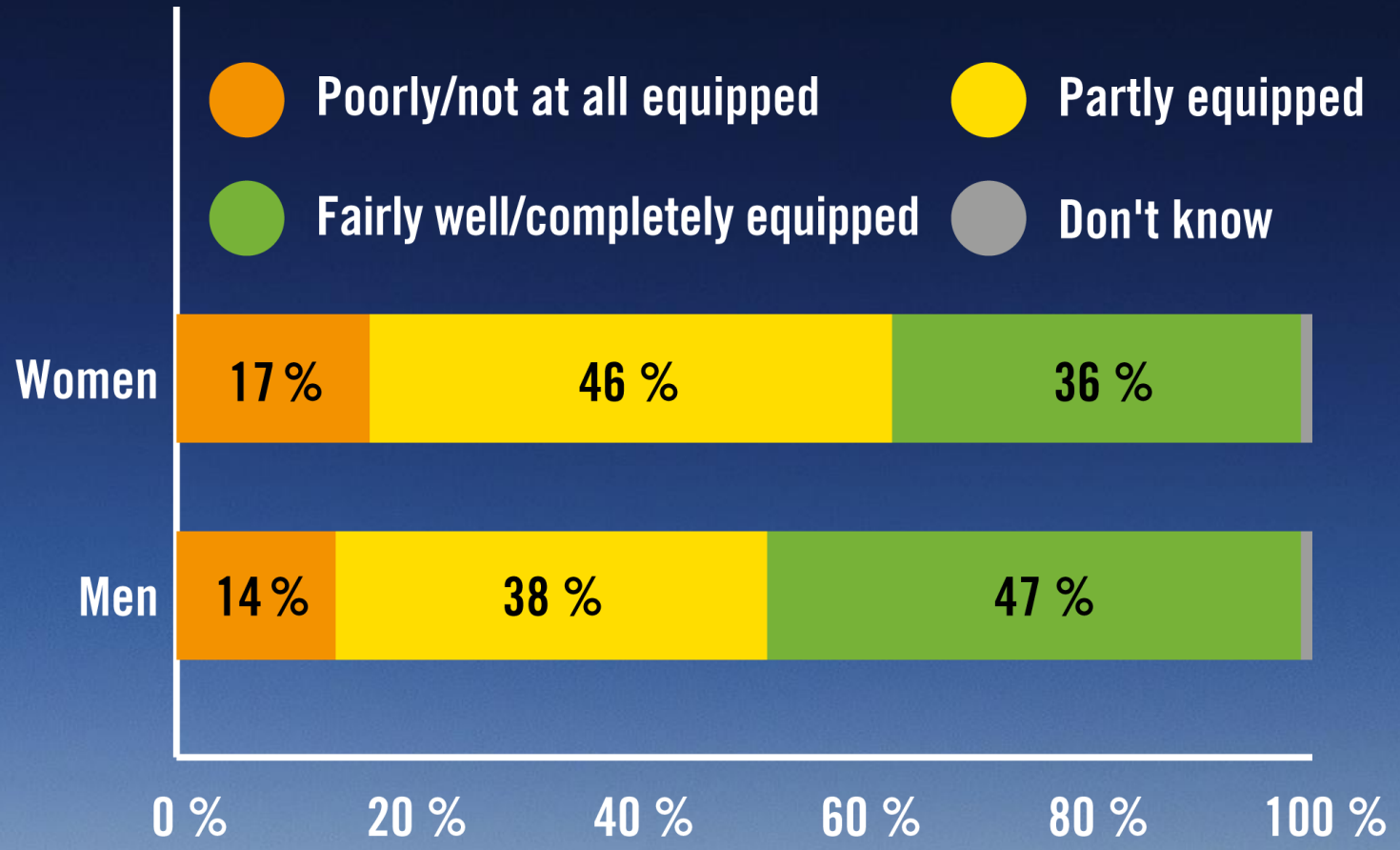
During the past twelve months, have you communicated your research with any of the following groups? Select all that apply.

(Figure 14, VA Report 2019:8)

What are the biggest barriers you face when communicating your research with the outside world? Select *up to three* (3) options..

(Figure 22, VA Report 2019:8)

Overall, how well equipped do you feel you are to communicate your research with the outside world?

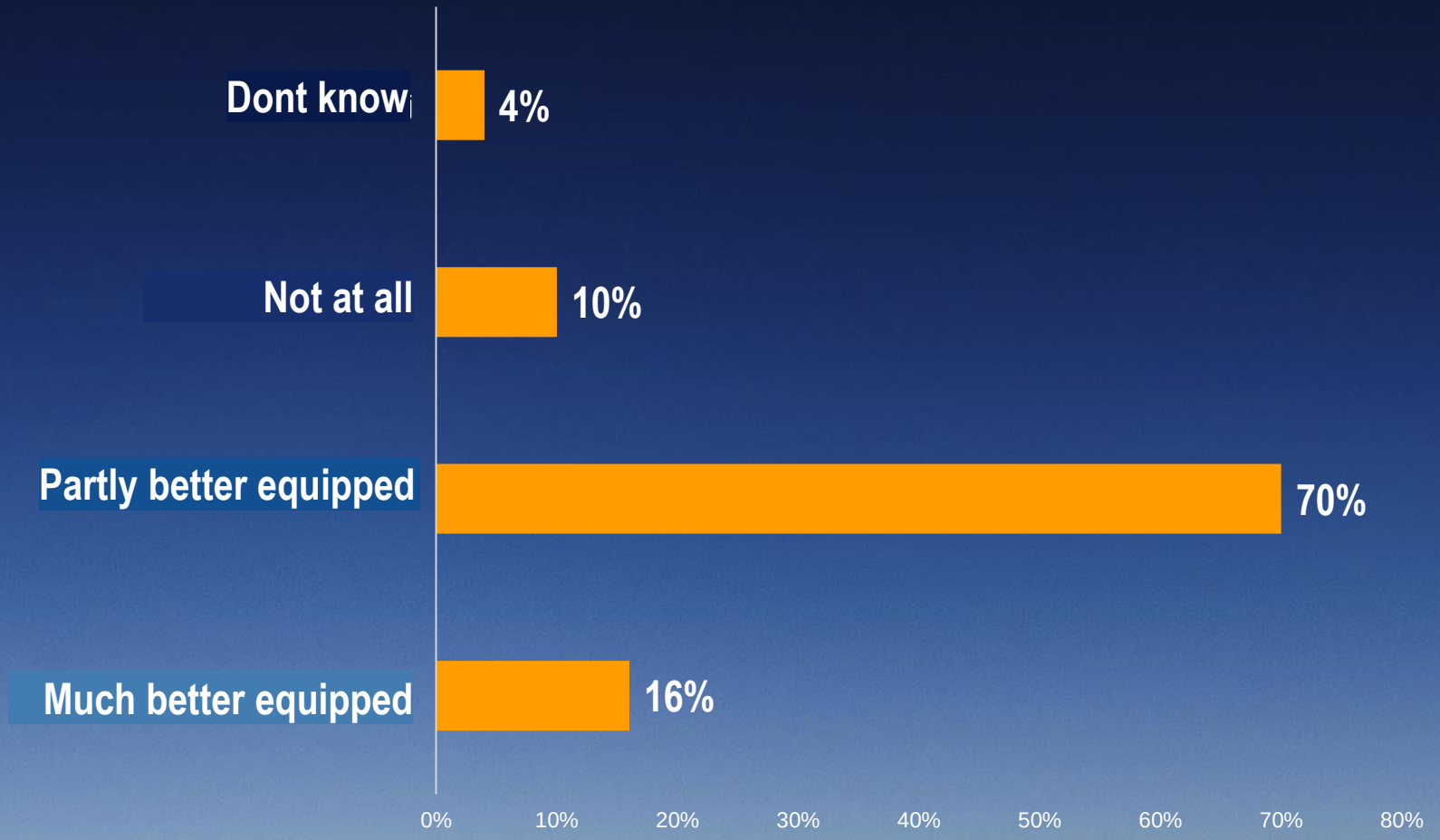


(Figure 19, VA Report 2019:8)

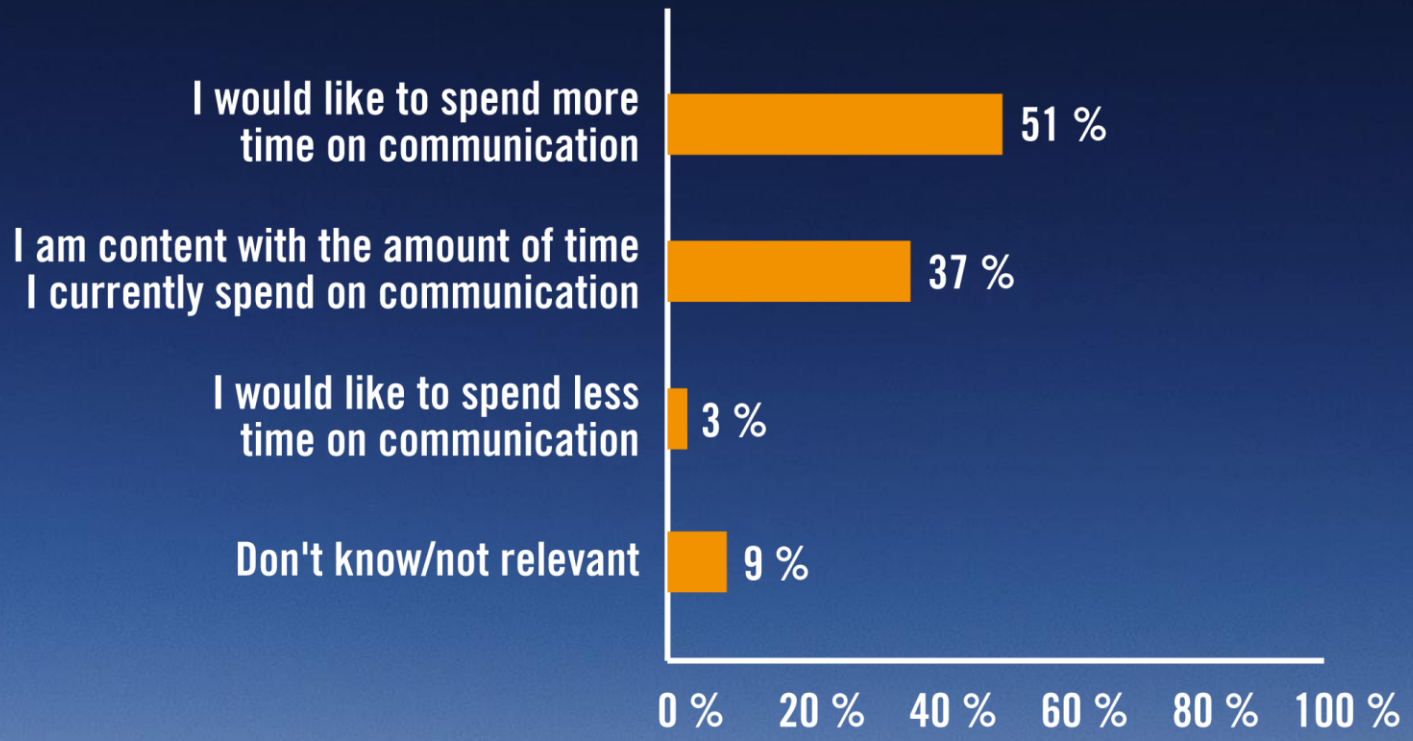
Have you ever undertaken any course/training on how to communicate research with the outside world?

(Figure 23, VA Report 2019:8)

You answered that you have taking part in some course/training in communication. Do you feel that this made you better prepared or equipped to communicate?

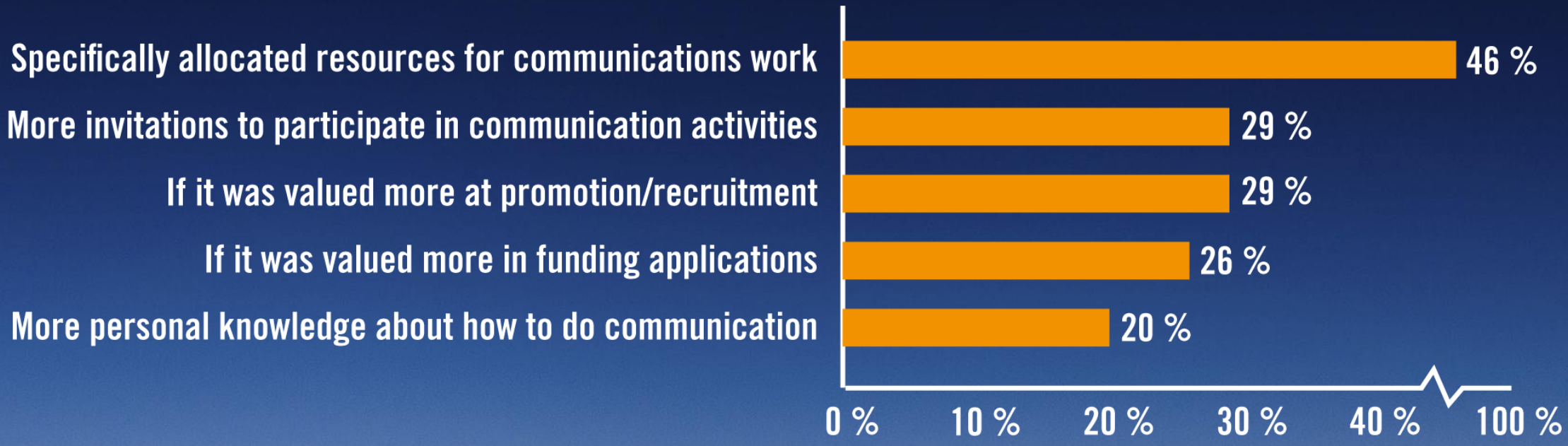


Would you like to spend more or less time than you currently do communicating your research with the outside world?



(Figure 29, VA Report 2019:8)

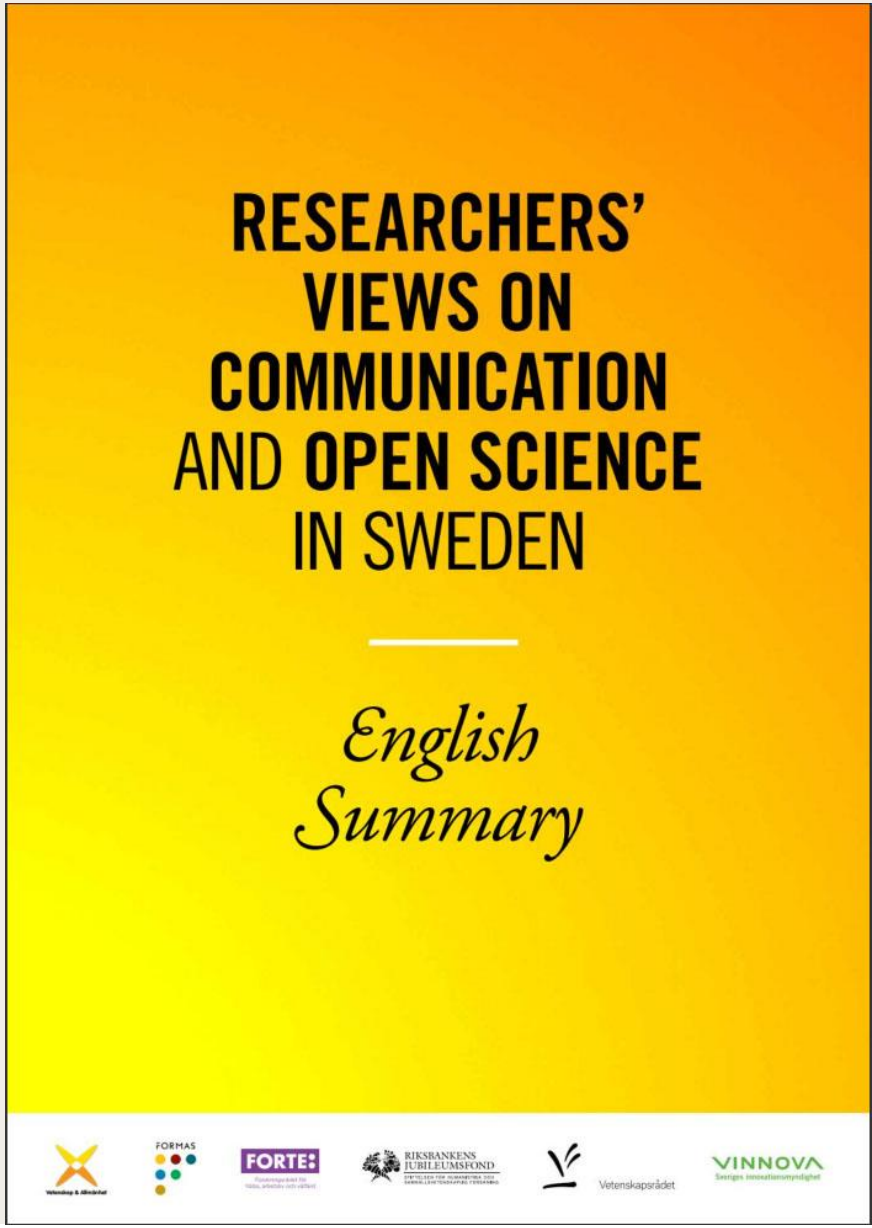
What would encourage you to spend more time on communication with the outside world? Select *up to three* (3) options



(Figure 33, VA Report 2019:8)

Key findings

- **Researchers want to communicate!**
- Researchers need support and training
- Female researchers need it more than male
- Lack of suitable opportunities to communicate



Conclusions

- 9 of 10 are positive to communicate
- A majority (51%) wants to dedicate more time to communication
- 29% wants to receive more invitations
- About one fourth (27%) have taken a course in communication
- 70% of those feel that the course made them better prepared 16% say they are much more prepared after the course
- Generally the knowledge of what kind of support the communication department can offer is low.

To discuss:

Do the results surprise you?

How do they affect your work?

Research for a wiser world

- Provides funding for research of the highest scientific quality
- Overall responsibility for national research infrastructure
- Performs analyses and advises the government
- Promotes international collaborative research
- Coordinates and develops communication about the significance, results and conditions of research

International Trends

The context we leave in

- Post – truth society
  - fact resistance
- Fake news
- Place based Scicomm/public engagement
- Co-creation/Citizen Science
- Involvement with under-represented groups
- Science Gallery
- Science Literacy

Strategy for science communication

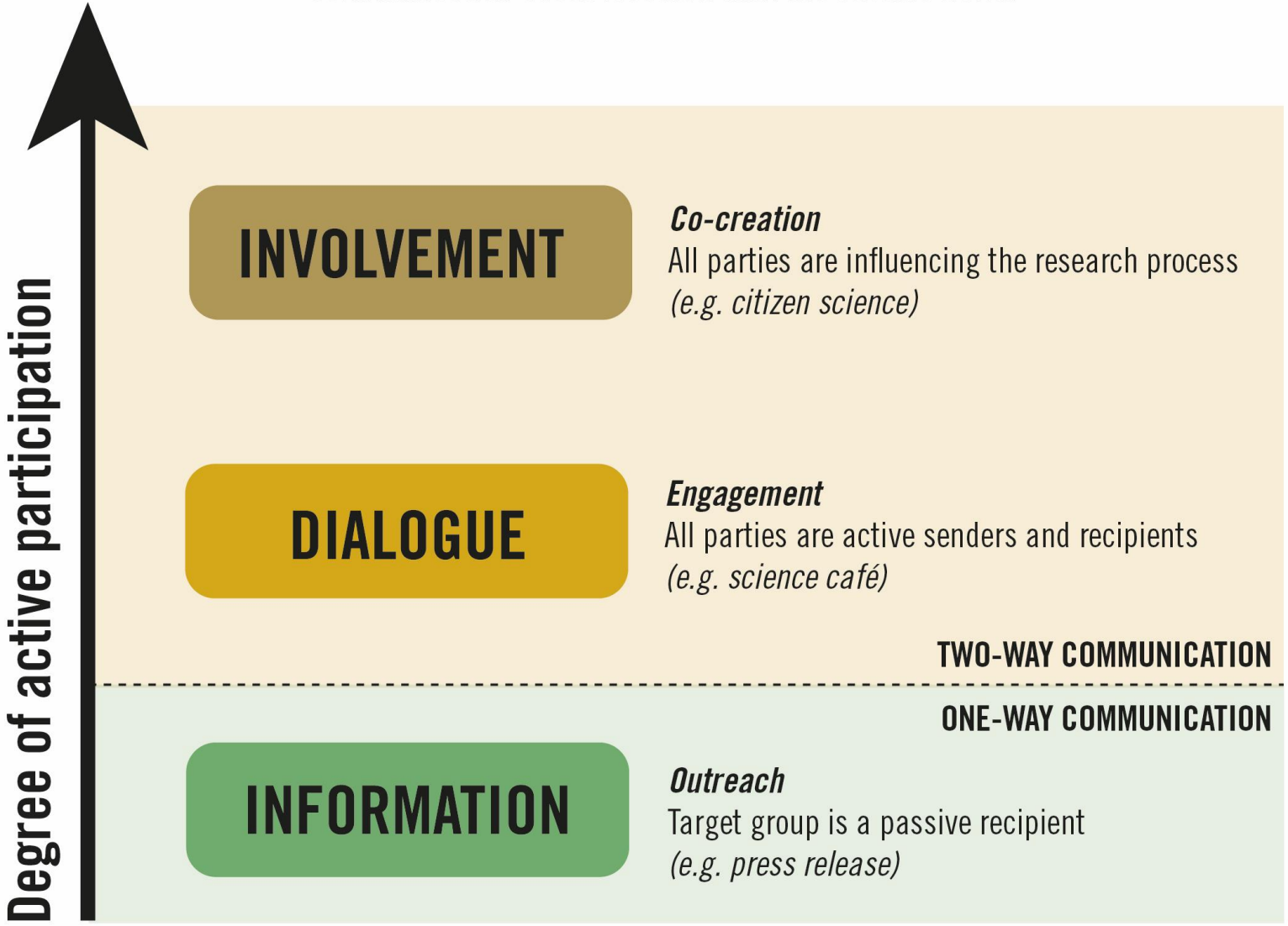
by the Swedish Research Council

Strategic approaches:

- Facilitate for and inspire researchers to communicate their research
- Reward communication and cooperation outside academia in our research funding
- Stimulate initiatives that promote and contribute to the communication of research
- Operate channels and arenas for communication about research
- Monitor international developments (active monitoring of the contemporary environment)
- Increase the understanding of the importance of researcher-initiated basic research

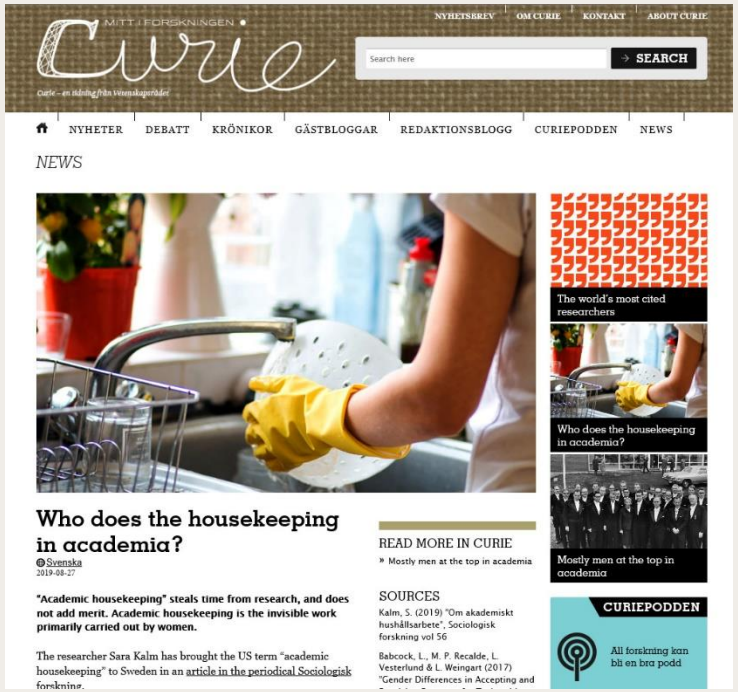
SCIENCE COMMUNICATION

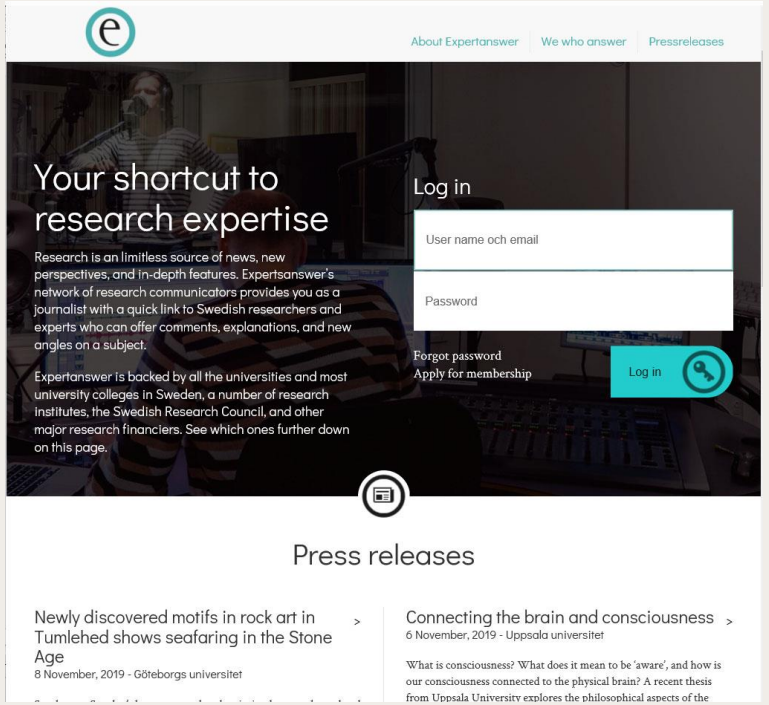
Communication about research with the outside world.



Channels and arenas for communication about research

Digital Communication





- Newsletter 114 100
- Facebook 1550
- Twitter 2890
- Page views/year: 359 334

- Newsletter 9 344
- Facebook 7 256 followers
- Twitter 9 730
- Page views /year: 3 445 100

- Journalists 4500-5000
- Universites connected 50
- Network around 320 (Science Communicators, Press officers)
- Facebook 180 followers
- Twitter 1743

Vetenskapsrådet

Forum for Science Communication

Largest Nordic conference and meeting place for everyone working with science communication

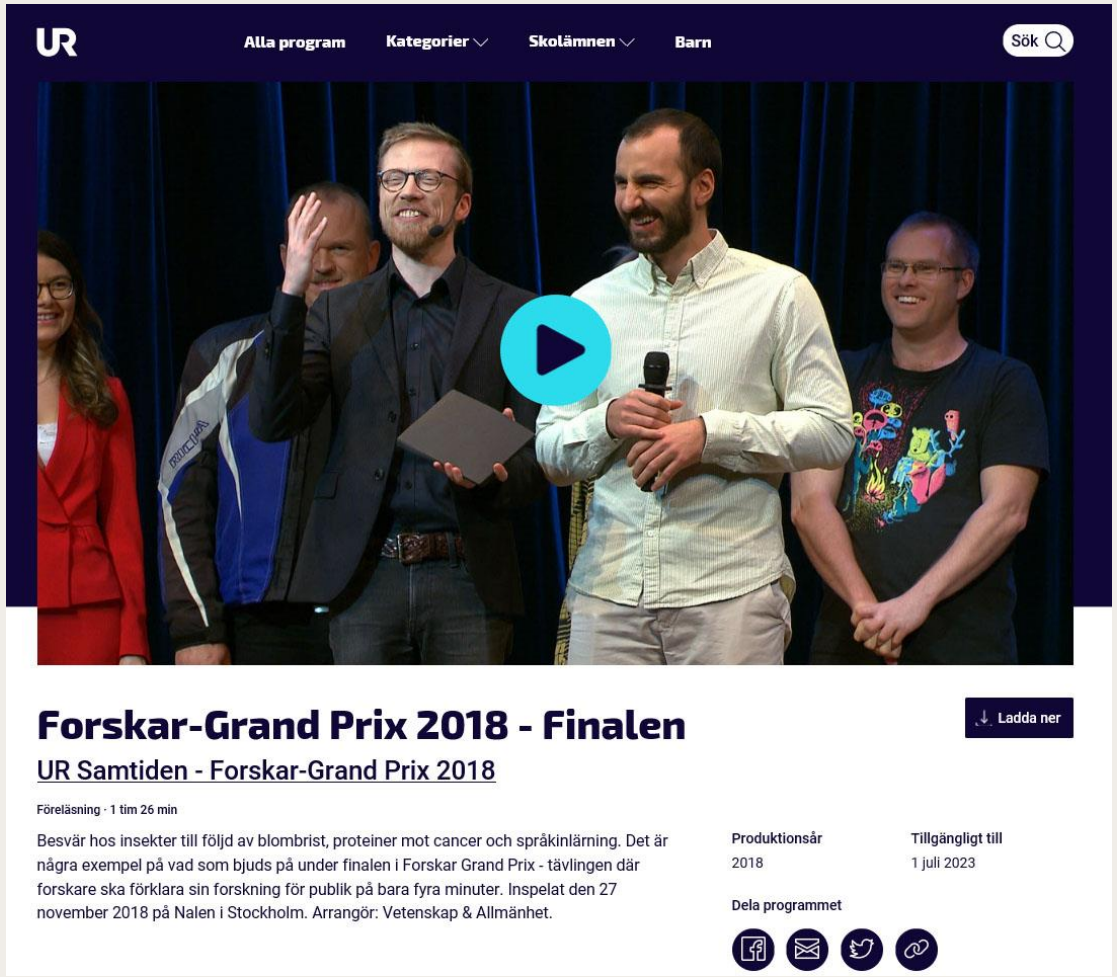
Vetenskapsrådet

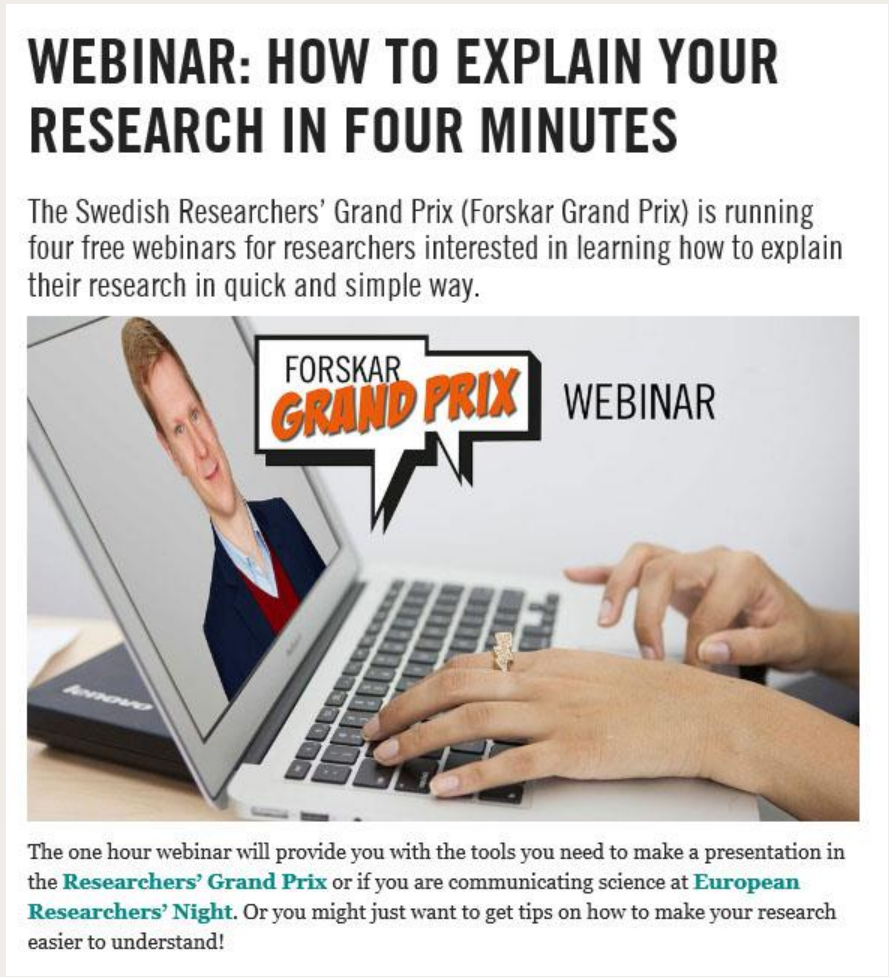
VINNOVA Sveriges innovationsmyndighet · FORTE: Forskningsrådet för hälsa, arbetsliv och välfärd · Vetenskapsrådet · KK-stiftelsen · MISTRA · Knut och Alice Wallenbergs Stiftelse · Riksbankens Jubileumsfond

What's in it for me?

- Reach wider audience
- New opportunities and increased recognition
- New ideas
- Encourage next generation of scientists
- Extra citations!
- It’s the law!

Researchers’ Grand Prix





The European Research Council

Character	Your project	Intro
Goals	The holy grail in your field	
Motives	Scientific rationale	
Problems	Issue facing researchers	
Actions	Research strategy	Body
Risks	Overcoming obstacles	
Summarise main take home message		Conclusion

Next steps

Education in Science Communications skills at Doctoral Studies

Earmarked funding for Science Communication

Promote research in Science Communication

Further development of infrastructure and collaboration for Science Communication

Evidence-Based Science Communication (EBSC)

1. Evidence-based practice: Increase the systematic use of evidence in science communication practice to maximize effectiveness and forestall negative impacts.

2. Evidence-based research: Reduce questionable science communication research practices, avoid preventable methodological shortcomings and increase transparency.

Eric A. Jensen Alexander Gerber

Evidence-Based Science Communication (EBSC)

1. **Evidence-based practice:** Increase the systematic use of evidence in science communication practice to maximize effectiveness and forestall negative impacts.
2. **Evidence-based research:** Reduce questionable science communication research practices, avoid preventable methodological shortcomings and increase transparency.
3. **Assessing impact:** Make impact evaluation of science communication a standard expectation in communication and engagement funding with the aim of refining practices based on findings.
4. **Bridging the chasm:** Address the divides between research and practice in science communication along the entire Knowledge Cascade (see above) to enable an integrated evidence-based practice.
5. **Mutual appreciation and collaboration:** Develop initiatives to encourage both researchers and practitioners to develop mutual understanding about their needs, experiences and unique capabilities and forms of expertise.
6. Establish more effective mechanisms for exchange that work for practitioners and researchers that transcend the limitations of scholarly publishing.
7. **Recognizing applicability:** Where research results and theory can be tested in real world situations, both research and practice need incentives to engage and collaborate. More applied, or at least practice-relevant, research also requires more systematic analysis of the needs for research from the perspective of science communication practice.
8. **Collaboration:** Instead of trying to merely transfer abstract expert knowledge into practice, the science communication field needs more transdisciplinary means of collaboratively investigating and optimizing science communication from within, using real-world data to develop both research and practice through the same initiatives without compromising quality standards on either side.
9. **Revisit the raison d'être for science communication:** Promote important societal values such as social inclusion, good ethical practices and democratic participation through the design of science communication initiatives.
10. **Systematic reviews:** Produce practical guidelines to effectively inform and orient practice by distilling the best available evidence in a methodologically robust way. This should also foster replicability and replication for key topics by making methodological transparency the norm.
11. **Systemic change:** Encourage informed decision-making in the selection of science communication approaches for particular settings and circumstances, backed up by funding review processes that insist on evidence-informed approaches.
12. **Certification:** Encourage the next generation of leaders in evidence-based science communication through certification processes and standards in teaching and training.

Escape from the Ivory tower
Nancy Baron

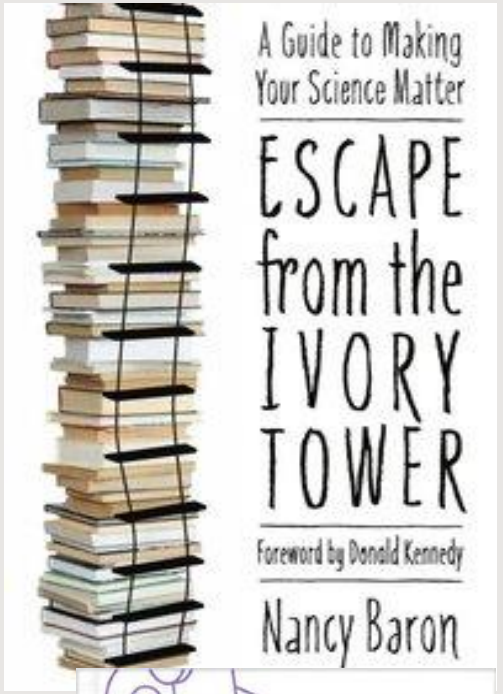
Share your research
Videnskab.dk

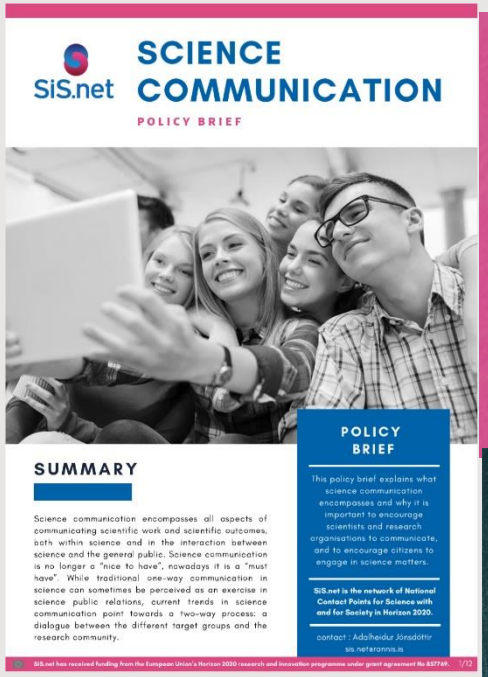
Eurofleets+
Toolkit

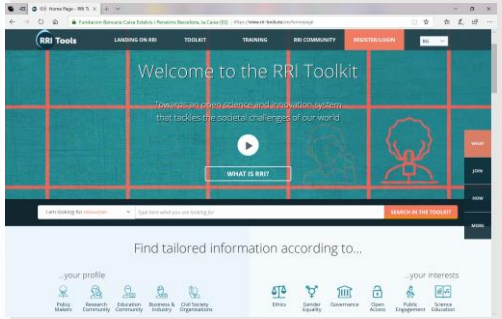
Prepare for 15 min of fame
Fred Balvert et. Al

Science Communication
SIS.net

How to become a better speaker
Altitude Meetings







To discuss:

How do you practically support researchers within your organisation?

What more would you like to do?


Wild conspiracy theories are infecting the Internet.

CORONAVIRUS EXPLAINED

Save the Children

START HERE

So you've heard this word 'coronavirus' a lot. And life is a little different to normal. Like maybe you're not in school or visiting friends and family. Let's understand what's happening.

WHAT IS CORONAVIRUS?

It causes a disease called COVID-19 and it has made quite a lot of people sick. Getting it can be quite like getting the flu.

Common Symptoms

People who are older or who have other illnesses are more likely to get sicker with coronavirus. That's why we are being really careful.

We could carry the germs without feeling sick, so we are staying away from people to protect each other.

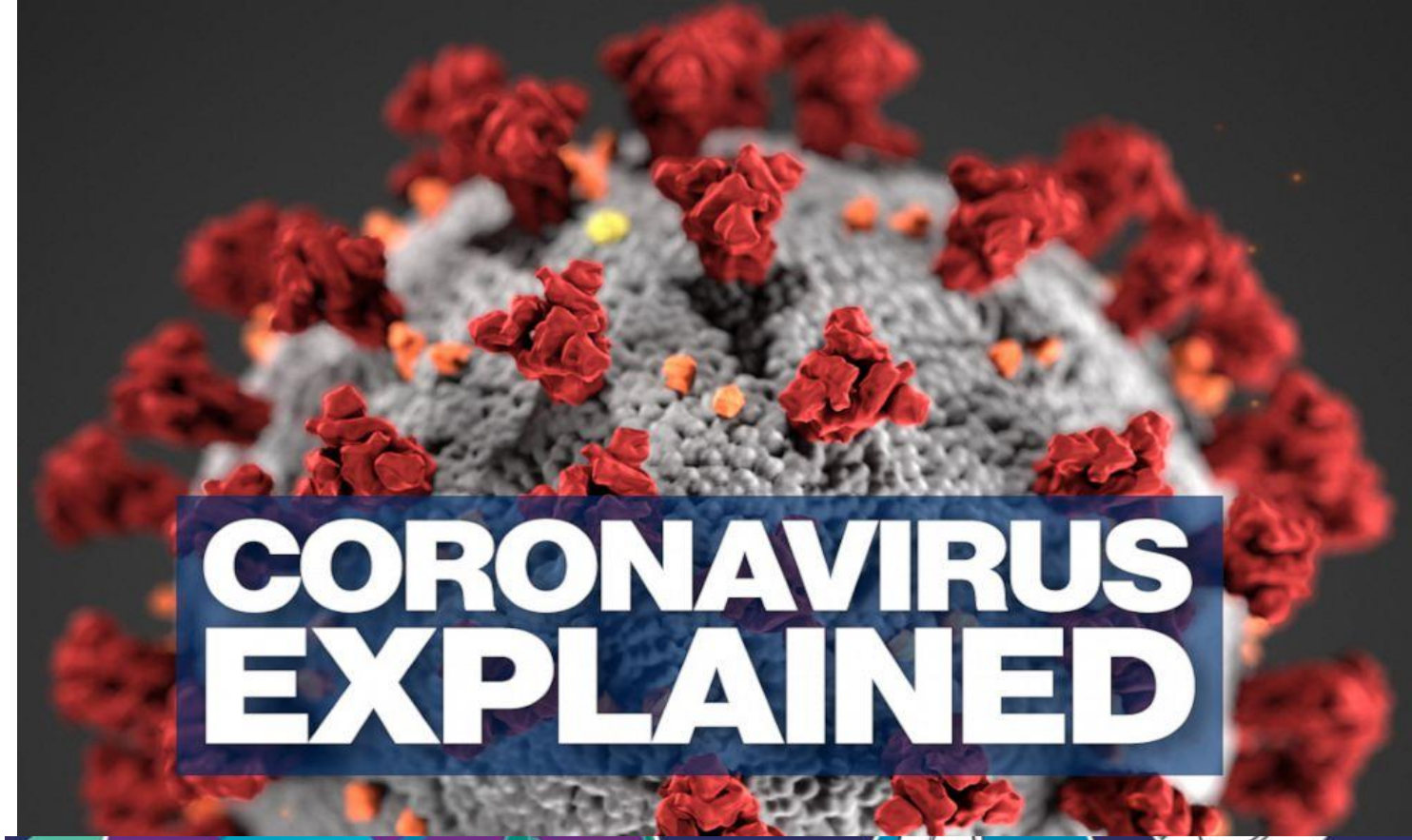
If someone gets the virus they will have to stay away from other people for a while. And for the small number of people who get really sick, hospitals are there to help.

LOOKING AFTER YOURSELF

When things are different, it's totally normal to feel a little worried or angry or sad. Tell a grown up how you're feeling. It almost always helps to share these things.

Staying active will help - you can play games, sing, read, learn, chat with friends and family online or write them a letter. You can even make cleaning and tidying fun!

And try to eat healthy food, too - it can help you feel better.



Coronavirus: the science explained

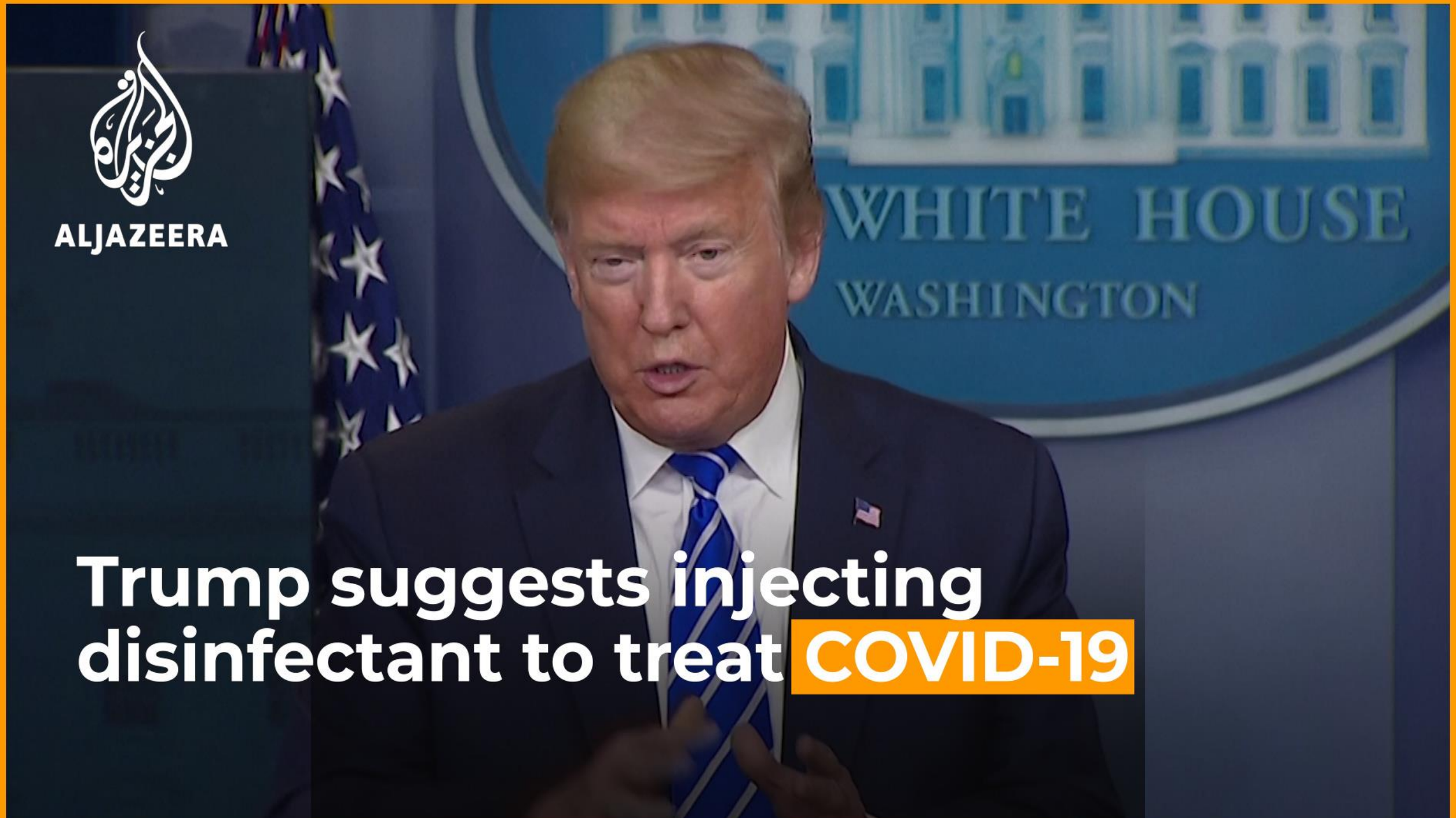
This site lays out the evidence and facts about the virus, the disease, the epidemic, and its control

Search this site

Enter search terms

Examples: immunity, testing, "face masks"

Search


ALJAZEERA
WHITE HOUSE
WASHINGTON
Trump suggests injecting disinfectant to treat COVID-19

Coronavirus Disease 2019: Myth vs. Fact

There's a lot of information circulating about COVID-19, the disease caused by the new coronavirus, so it's important to know what's true and what's not.

TRUE or FALSE? You can protect yourself from COVID-19 by injecting, swallowing, bathing in or rubbing onto your body bleach, disinfectants or rubbing alcohols.

The answer is false.

RELATED

Patient Safety Infographic

Coronavirus Symptoms: Frequently Asked Questions

Coronavirus, Social and Physical Distancing and Self-Quarantine

COVID-19: How to Help Teens Cope at Home


RELIABILITY
LEVEL
per cent
meter
20
30
40
50
60
70
80
90

The News Evaluator

3 questions to evaluate news items' credibility:

- **Who is the sender and what is the purpose?**
- **Which is the evidence for given claims – and how trustworthy is it?**
- **What do other independent sources say?**

Nyhetsvarderaren.se

March for Science 2017

#hur vet du det?

Hur vet du det?

Politiker måste ta hänsyn till mycket: vetenskap, värderingar, ekonomi, opinion och attityder i samhället. Olika delar väger tyngst i olika frågor och det är viktigt att veta varför. Därför behöver politiker vara öppna med vad förslag och beslut bygger på, och kunna ta del av och bedöma vetenskapliga underlag.

Vad är sammanhanget?

Forskningsresultat kan vinklas och tolkas på olika sätt. Något kan ha ökat med 2 procent under ett år, men minskat med 20 procent över en tioårsperiod. Vad är mest betydelsefullt? Vem använder vilken siffra och varför?

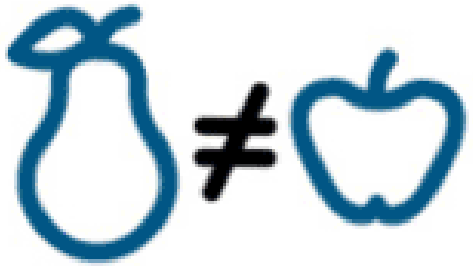
Går det att förklara enklare?

Det är lätt att bli bländad av svåra ord och krångliga formuleringar. Ibland används de när någon inte lärt sig förklara på ett enkelt sätt, ibland för att dölja osäkerhet och slippa granskning. Därför måste vi fortsätta fråga tills vi förstår.

Kan f… ha

Alla människor kan granskas både ny… andra forskare. Gran… av vetenskapen, … Ibland slinker felak… ningar igenom.

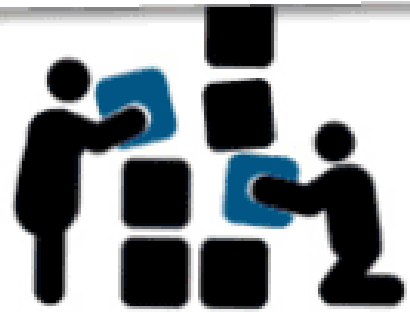
… att jämföra?



En studie på möss säger inte alltid något om människor. Forskning om några individer kan inte överföras till hela befolkningen. Att två resultat stämmer överens betyder inte självklart att orsaken är densamma. Se upp

Vad säger andra studier?

Ju fler studier som kommer fram till samma resultat, desto stabilare blir kunskapen. När en studie kommer fram till ett visst resultat medan andra pekar på motsatsen finns det anledning att vara extra försiktig.

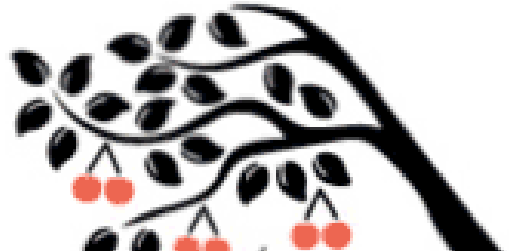


Är det för bra för att vara sant?

Ibland beskrivs något som ett vetenskapligt genombrott. I vissa fall är det så, men oftast inte. Forskning bygger på tidigare kunskap

Är det hela bilden?

Det kan vara frestande att luta sig mot studier som bekräftar våra egna åsikter. Men om vi vill basera beslut på vetenskap måste vi se till den samlade kunskapen på området – även när den inte stämmer med vår världsbild.



Fråg… SMARTAR…

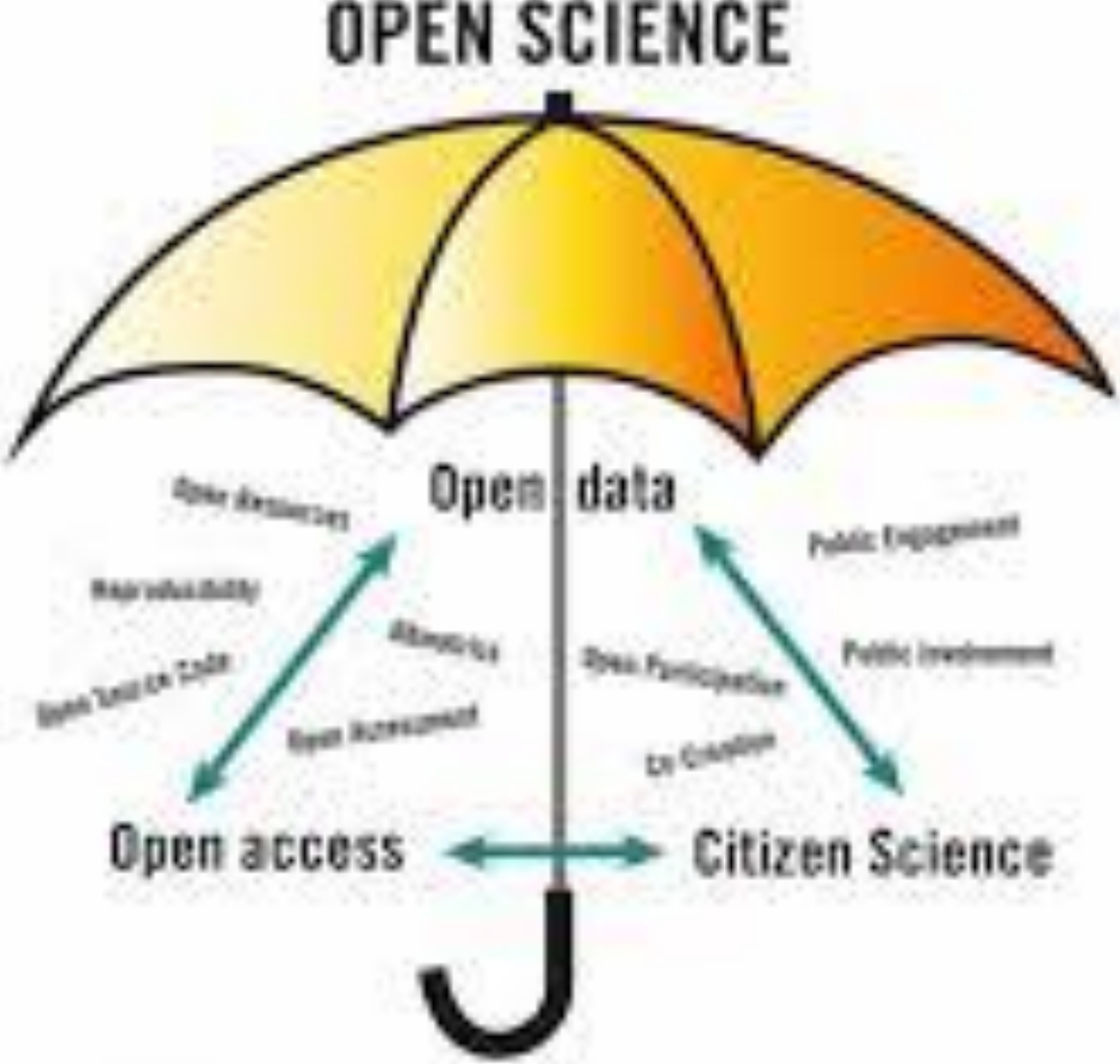
Politiker s… vetenskap sk… förslag. Me… vill vi låta ve… ta större … Välja f…

www.hu…

#hurvetd… …


ASK FOR
EVIDENCE

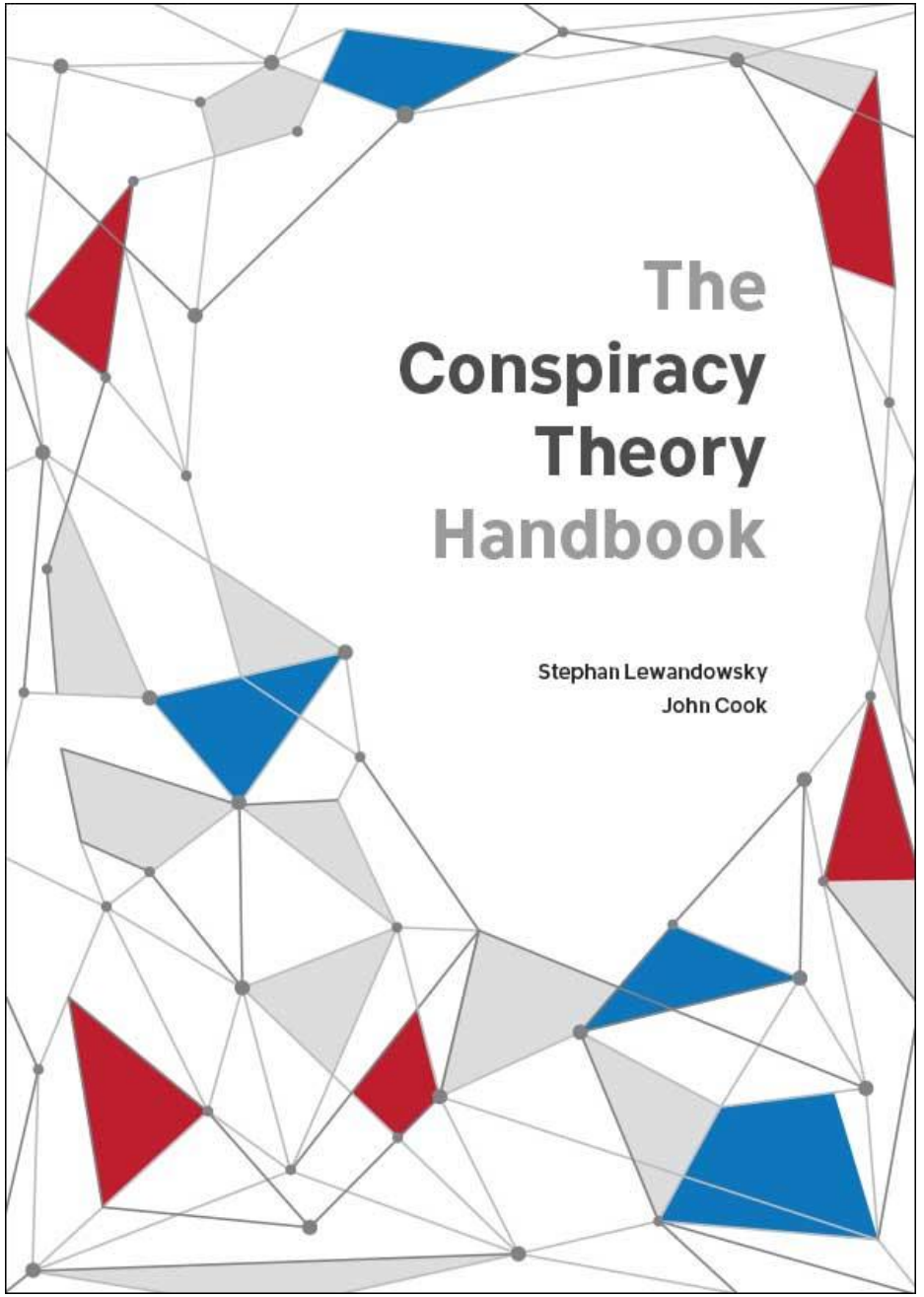

UNCERTAINTY
AHEAD


OPEN SCIENCE
Open data
Open access
Citizen Science

Debunking

Can be based on:
- Logic
- Source
- Facts
- Empathy
- Links to fact-checkers

To debunk:
- Use trusted messengers
- Show empathy
- Affirm critical thinking
- Avoid ridicule




Science Media Centre
Advice for researchers experiencing harassment
JOURNALISM, 'FAKE NEWS' & DISINFORMATION
Handbook for Journalism Education and Training
The Conspiracy Theory Handbook
Stephan Lewandowsky
John Cook
the DEBUNKING handbook
John Cook
Stephan Lewandowsky
A PARTICIPATORY PROPAGANDA MODEL
UNDERSTANDING OUR POLITICAL NATURE
RESIST
Counter-disinformation toolkit

To discuss:

Which infodemic related challenges have you experienced?

How do you respond to them? Any examples?!

Swedish Research Council

Vetenskap & Allmänhet
VA – PUBLIC & SCIENCE

Anna Maria Fleetwood
Senior Adviser External Relations
anna.maria.fleetwood@vr.se

Cissi Askwall
Secretary General
cissi@v-a.se

Break

We will be back at ***10.07 (GMT+2)***

Break

We will be back at ***11.15 (GMT+2)***

Stefanie Molthagen-Schnöring

Vice President for Research and Transfer, HTW Berlin

Break

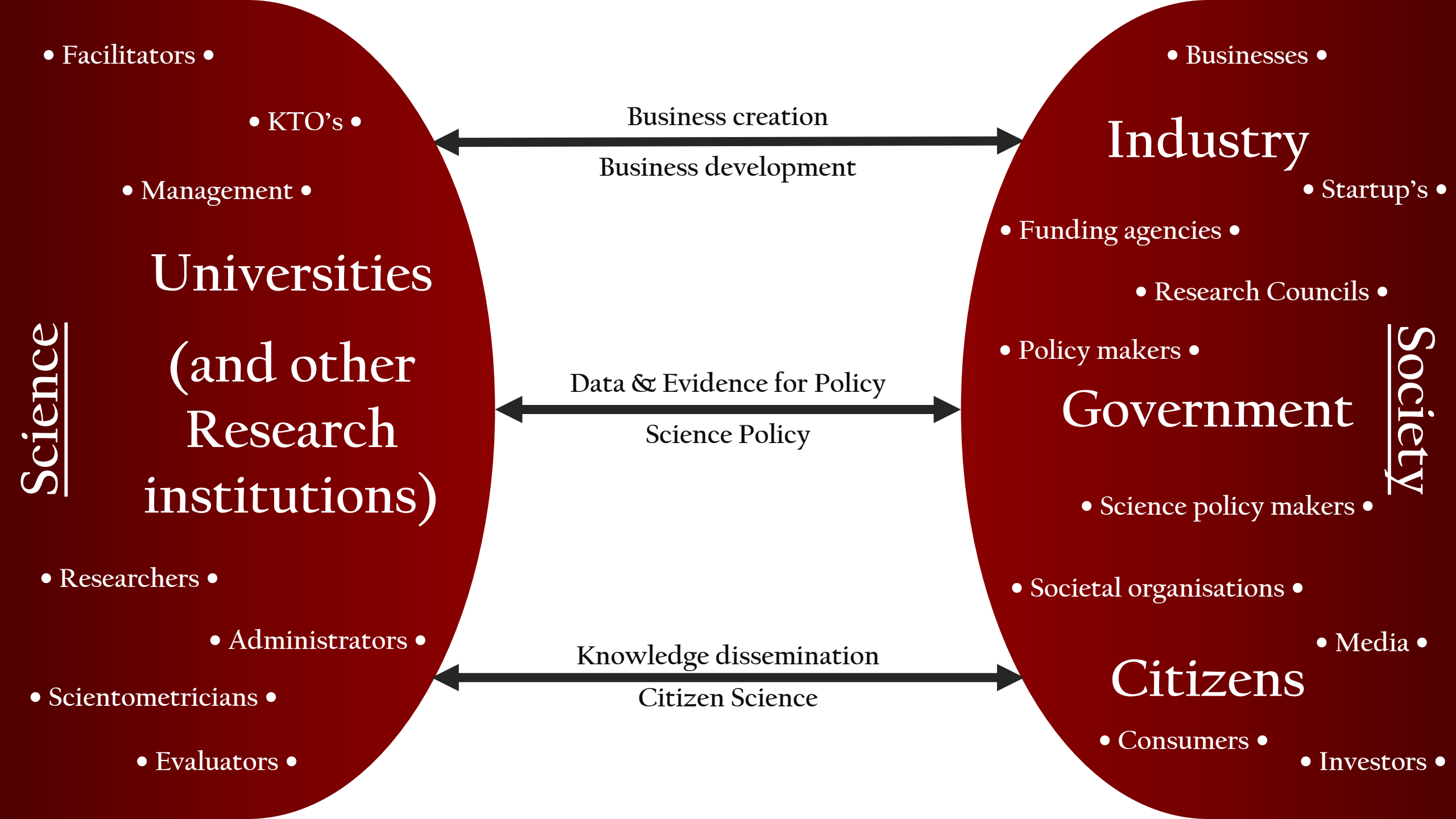
We will be back at ***12.10 (GMT+2)***

CASE STUDY PREPARATION

A proposal to improve the societal impact of your institute
by integrating effective science communication methods and tools

Stakeholders

Identify stakeholders with respect to achieving your goals, internally
Discuss the different benefits from the perspectives of the different stakeholders
How to address the stakeholders and convince them to be involved (aka communication for science communication)?


• Facilitators •
• KTO's •
• Management •
Universities
(and other
Research
institutions)
Science
• Researchers •
• Administrators •
• Scientometricians •
• Evaluators •
Business creation
Business development
Data & Evidence for Policy
Science Policy
Knowledge dissemination
Citizen Science
• Businesses •
Industry
• Startup's •
• Funding agencies •
• Research Councils •
• Policy makers •
Government
Society
• Science policy makers •
• Societal organisations •
• Media •
Citizens
• Consumers •
• Investors •

CASE STUDY PREPARATION

A proposal to improve the societal impact of your institute
by integrating effective science communication methods and tools

Impact

What is needed to connect science communication and societal impact and strengthen this bond?
How would you describe success? Assessing the effectiveness of science communication, the societal impact, or someting else?

Lingering questions....

Thank you

Enjoy lunch!

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