CITIZEN SCIENCE @AU

Workshop & Networking

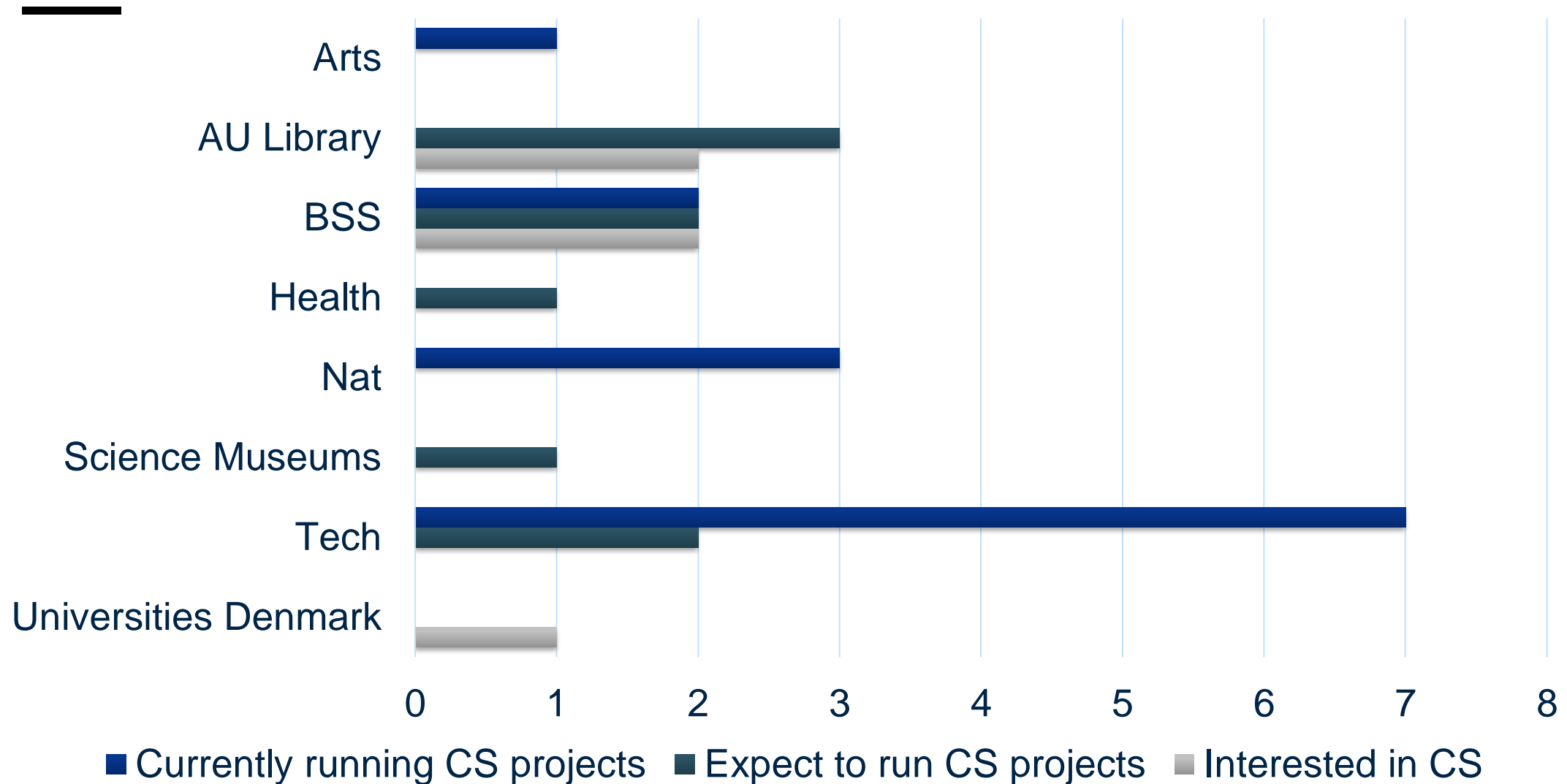**12.00-12.30** Lunch (sandwiches and drinks, networking)

12.30-13.30 Presentations of citizen science activities at AU

13.30-13.45 Coffee break

13.45-15.00 Workshop on future directions for citizen science network at AU

15.00-15.30 Wrap-up with drinks and snacks (the program formally ends at 15.30, but you are most welcome to stay and chat - we have the room until 17.00)

PARTICIPANTS & CS PROJECTS/INTEREST

Chart legend:
- ■ Currently running CS projects
- ■ Expect to run CS projects
- ■ Interested in CS

Categories: Arts, AU Library, BSS, Health, Nat, Science Museums, Tech, Universities Denmark

PARTICIPANTS

Alexandra Fogtmann-Schulz. Gertrud Thomsen. Hanne Munch Kristiansen. Henrik Vetter, AU Library, Royal Library

Cathrine M. Schrøder, **Henning Heldbjerg,** Section of Wildlife Ecology, Dept. of Bioscience, TECH

Clive Sabel, BERTHA – Big Data Centre for Environment and Health, TECH

Inie Madsen, Universities Denmark

Lucilla Losi. Peter Nicolaisen. Simon Fuglsang, The Danish Centre for Studies in Research and Research Policy, Dept. of Political Science, BSS

Mette Kjærgaard Nielsen, Research Unit for General Practice, Dept. of Public Health, HEALTH

Milena Corredig, Dept. of Food Science, TECH

Pernille Kallehave, Dept. of Management, BSS

PRESENTATIONS

Gitte Kragh, Centre for Science Studies, Dept. of Mathematics, NAT & Center for Hybrid Intelligence, Dept. of Management, BSS

Andres Dobat, Dept. of Archeology and Heritage Studies, ARTS

Hans Peter Hansen, Section of Wildlife Ecology, Dept. of Bioscience, TECH

Jacob Sherson, ScienceAtHome, Dept. of Physics and Astronomy, NAT & Center for Hybrid Intelligence, Dept. of Management, BSS

Linda Greve, Science Museums

Prince Michael Amegbor, Dept. of Environmental Science, TECH

Qian Janice Wang, Dept. of Food Science, TECH

Sune Agersnap, Sec. for Genetic, Ecology and Evolution, Dep. of Biology, NAT

Tine Iversen, AU Library

Ulrik Bak Kirk, Research Unit for General Practice, Dept. of Public Health, HEALTH

Kristian Hvidtfelt Nielsen, Centre for Science Studies, Dept. of Mathematics, NAT

GITTE KRAGH

Centre for Science Studies (-> Kristian Hvidtfelt Nielsen)

ScienceAtHome/Center for Hybrid Intelligence (-> Jacob Sherson)

- **Giv de unge ordet**, project led by Health (-> Ulrik Bak Kirk)

British Ecological Society Citizen Science Special Interest Group (2013-)

- www.britishecologicalsociety.org/membership-community/special-interest-groups/citizen-science

European Citizen Science Association (ECSA) (2016-)

- Working groups, e.g., on CS in universities, and CS networks (https://ecsa.citizen-science.net/working-groups)
- Board member

The Danish Citizen Science Network (2018-)

- Citizen Science Portalen: https://citizenscience.dk
- WG on Biodiversity, Nature & Environment

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DEPARTMENT OF MATHEMATICS

The DIME-project - Danish amateur archaeology as citizen science

dime.au.dk is an online platform/application for registering archaeological finds produced by members of the public in cooperation with museum professionals.

Aims:

1) promote and facilitate creative interaction with archaeological heritage/research;

2) democratize heritage management;

3) facilitate cutting edge archaeological research.

Status 2021: *2947 active users; 30 participating museums; 114.085 registered finds.*

Future: *moving from data production to more active participation of the public in analytical processes (from contributory to collaborative) .*

Challenges for citizen science in DK/AU:

1) *sustaining digital citizen science infrastructure;*

2) *promoting citizen science as key element of future AU impact strategy;*

AARHUS UNIVERSITY   MOMU MOESGAARD MUSEUM

Andres S. Dobat (Minos) farkado@cas.au.dk
Dep. of Archaeology and Heritage Studies & MOMU

INTERESTS IN CITIZEN SCIENCE

OPPORTUNITIES	CHALLENGES
• Emancipation • Empowerment • Social Learning • Deliberation • Sustainable development • Democratic consolidation	• Intersection between societal and scientific dimensions citizens science • Lack of reflection on the type and nature of citizen science • Lack of theoretical framework • Lack of progress (data supply) • 'Add on'

CENTER FOR HYBRID INTELLIGENCE

VISION: understanding and fostering 21st century skills (in particularly computational thinking, complex problem solving and creativity) through the lense of Hybrid Intelligence

Jacob Sherson

Founder and director,
ScienceAtHome.org
Center for Hybrid Intelligence

BASIC RESEARCH

Vil du være med til at skabe Danmarks nye superhjerne?

AI and machine optimization
Gradient based optimization and machine learning
First real world application of alpha zero

AlphaZero beat humans at Chess and StarCraft, now it's working with quantum computers

HYBRID INTELLIGENCE

physicsworld

Citizen scientists excel at creating Bose–Einstein condensates

Social Science Super Collider
Scalable social science in the wild using public participation in research

Fields of work: Behavioral economics, Human problem solving, Cognitive and creativity profiling

Search heuristics

Natural Science Games
Using citizen science to crowdsource human common sense

Fields of work: Quantum physics, Fluid dynamics NP hard problems

IMPACT AND APPLIED RESEARCH

EDUCATION
Scaffolding students to think with technology
- Digital educational tools and inquiry based material as well as in person interventions

GAMES FOR GOOD
Applying games to the public sector
- SAH Examples: crea.blender SDG, Smithsonian, Confoo Bio, Corona Minister

CORPORATE TRAINING
Playfully adapting research insights to corporate context
- Workshop concept: Play, reflect, learn, adapt
- Areas: AI and optimization, data visualization, 21st century skills and creativity, hiring and team formation and collaboration, corporate ethics, strategic foresight in the age of AI…

FUTURE WORK

CORPORATE COLLIDER
Developing HI solutions in corporate context

Applying SSSC games in the private sector (bridging the gap between lab and corporate context)

CROSS-CUTTING UNITS

- Data Science
- Public engagement
  Citizen science + communication
- Software development

ArguNotes

Corona Minister

Create the Future with us!
And win 10.000 DKK!
1-5 September 2021, online and in Middelfart, Denmark

CENTER FOR HYBRID INTELLIGENCE

UTOPIAN   DYSTOPIAN

AARHUS BSS
DEPARTMENT OF MANAGEMENT
AARHUS UNIVERSITY

AACSB ACCREDITED   ASSOCIATION AMBA ACCREDITED   EFMD EQUIS ACCREDITED

LINDA GREVE

PRINCE MICHAEL AMEGBOR

2019-2023

Momentary Assessment of The Effect of Urban Nature on Mental Health – The ReGreen Ecological Momentary Assessment Study (Task 4.2.1)

**Aims**: In Task 4.2.1 of the REGREEN Project, we aim to use ecological momentary assessment (EMA) mobile app to capture to capture the momentary restorative benefits of urban nature or nature-based solutions psychological wellbeing of urban residents Europe and China.

Methods: The methodological approach involves geo-fencing urban nature locations in the six urban living labs (ULLs). The smartphone app based on EMA framework triggers the momentary assessment questions when users enter these geo-fenced locations. The app collects the information on:
- ❖ frequency and duration of visits
- ❖ positive and negative affects
- ❖ responses to urban environmental changes or interventions programs
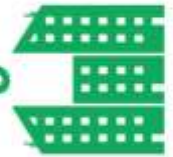
twitter.com/REGREEN-nbs

linkedin.com/company/regreen-horizon-2020

Event: Citizen Science @ AU - Workshop and Networking
Date: Friday, 20th August 2021.
Venue: Richard Mortensen Room, build. 1422, Fredrik Nielsens Vej 2, 8000 Aarhus C

CONTACT:
Email: regreen.nbs@gmail.com
Website: www.regreen-project.eu

QIAN JANICE WANG
— "CURATING CITIZEN ENGAGEMENT"
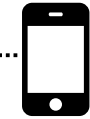
Take a picture to access students' activities
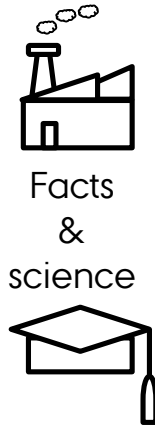
QIAN JANICE WANG   INFORMPACK

An "all you need to know" online guide for sustainable disposal of food packaging

What type information
Who, where and how it needs to be communicated

Questions & issues

Information behavior

Facts & science

Tailored campaigns

Positive impact
CO_2

Behaviour & Choices

18-45 years of age

What do we aim to demonstrate?

• Different issues faced by consumers across EU & different information behaviours (Culture & micro-culture) ✓

• Impactful interventions therefore need to be tailored and align with the culture of the issues/information!

SUNE AGERSNAP

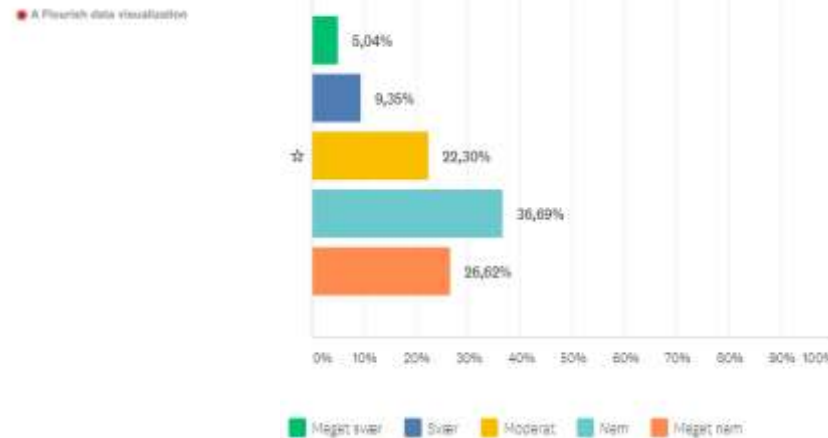www.havblitz.dk

Danmarks Naturfredningsforening

VELUX FONDEN

NORDSØEN OCEANARIUM

FJORD BÆLT

DEN BLÅ PLANET

ØRESUNDSAKVARIET

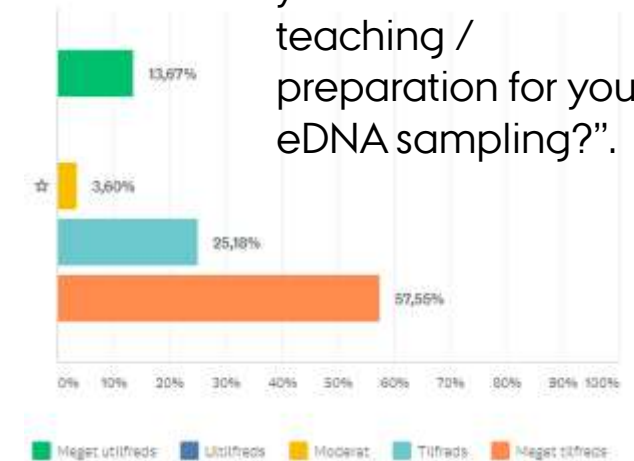Kattegatcentret

Neogobius melanostomus
Round goby

Seasons
Spring ▲
Autumn ●

"How would you evaluate eDNA sampling as a volunteer?".

"How satisfied were you with the teaching / preparation for you eDNA sampling?".

Citizen Science

- what does the library have to offer?

Leru.org

Support researchers and students at AU
Disseminate knowledge about Citizen Science (p.t. homepage)
Support researchers and students in their work with Citizen Science
Teach students about Citizen Science (p.t. in cooperation with med Kristian Hvidtfelt Nielsen).
Improve skills on how to make Citizen Science projects (also librarians needs skills)
- by cooperating with AU and CS colleagues at the Royal Library (AUL CS network group / KB CS network group), and other national and international initiatives.

Cooperation with AU
Develop a strategy for Citizen Science in cooperation with AU
Cooperate with AU partners (e.g. ScienceAtHome, KNOCOS (AU's Open Science Center), Research Support Office, Graduate Schools (PhD), and museums at AU)
Search for researchers and others interested in working with Citizen Science.

DET KGL.
BIBLIOTEK
Royal Danish Library

HOW CAN RESEARCH COMMUNICATION CREATE VALUE IN YOUNG PEOPLE'S LIVES?

ULRIK BAK KIRK, PROJECT MANAGER

[HTTPS://GIVDEUNGEORDET.DK/](https://givdeungeordet.dk/)

CITIZEN SCIENCE @ AU : WORKSHOP AND NETWORKING

20 AUGUST 2021

WHO?

- Aarhus University
  - Dept. of Public Health
- The Academy for Talented Youth | Midt
- ScienceAtHome
- Science Museums
- The Animation Workshop/ VIA University College

WHY?

1) To explore how co-creation, dialogue and cross-media communication can innovate research communication targeting young people.

2) To study how new platforms can be used for research communication about health and the use of technology.

WHAT?

1) we will focus on young people's health and their use of technology, using animation films, podcasts, an exhibition and an interactive dilemma game (3 project cases in 3 years).

2) we aim to promote engagement, critical reflection and dialogue about both health and the use of technology among young people.

CITIZEN SCIENCE @ SCIENCE STUDIES
—— Kristian Hvidtfelt Nielsen

TIME4CS (Horizon2020): Institutional change in support of CS

- Grounding actions (GAs), Forerunners -> GAs, Implementers
- Best practice repository (GAs) available on Zenodo

Lakes in the freetime (Søer i fritiden, SDU, Villum Foundation)

- Citizen science project on water quality and biodiversity
- Survey on motivation and science capital

Engaging Citizen Science Conference, April 25-26, 2022

- Workshops, dialogue stands, and posters
- Citizens' Day, Sunday April 24, 2022

COFFEE & NETWORKING

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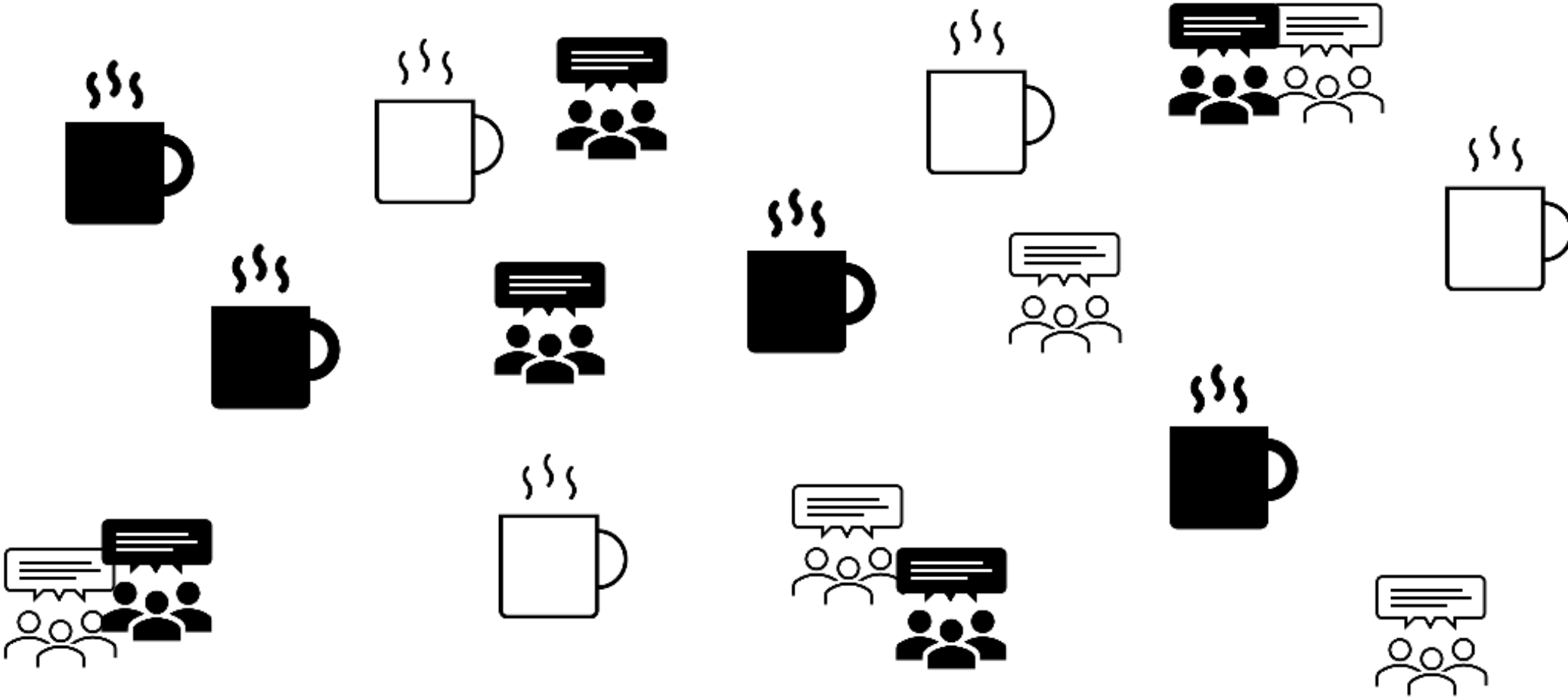
BREAKOUT GROUPS

Discussion points

1. **Ideas, lessons learned, and challenges encountered/expected - and maybe solved - in your own CS projects / project ideas**

   a) Brainstorm, write down on post-its and discuss
   – similar challenges, practical and institutional? Lessons learned and/or solutions that others can use in their own projects?

2. **CS strategy, embedding CS, and CS networking at AU**

   a) Brainstorm, write down on post-its and discuss
   – what would you like from an AU CS Network? Ideas for better anchoring of CS at AU? How & where would you like to see CS at AU? How to reach that goal?

BREAKOUT GROUPS

Kristian Hvidtfelt Nielsen

Gertrud Thomsen

Hanne Munch Kristiansen

Hans Peter Hansen

Prince Michael Amegbor

Tine Legarth Iversen

Andres Dobat

Jacob Sherson

Linda Greve

Pernille Kallehave

Sune Agersnap

Gitte Kragh

Alexandra Fogtmann-Schulz

Henning Heldbjerg

Henrik Vetter

Qian Janice Wang

MAIN POINTS FROM GROUPS

WRAP UP (& SNACKS & DRINKS)

AU CS NETWORK

➢ **Website: citsci.au.dk**

    ➢ People, projects, events

➢ **Mailing list**

➢ **Working groups**

    ➢ Institutional change & anchoring of CS at AU (leads: Kristian Hvidtfelt Nielsen & Gitte Kragh)

    ➢ Suggestions for groups?

➢ **Other meetings**

    ➢ Once per semester – workshop & networking

    ➢ If you're interested: we can set up knowledge exchange / project presentation & discussion meetings on a regular basis

Thank you ☺

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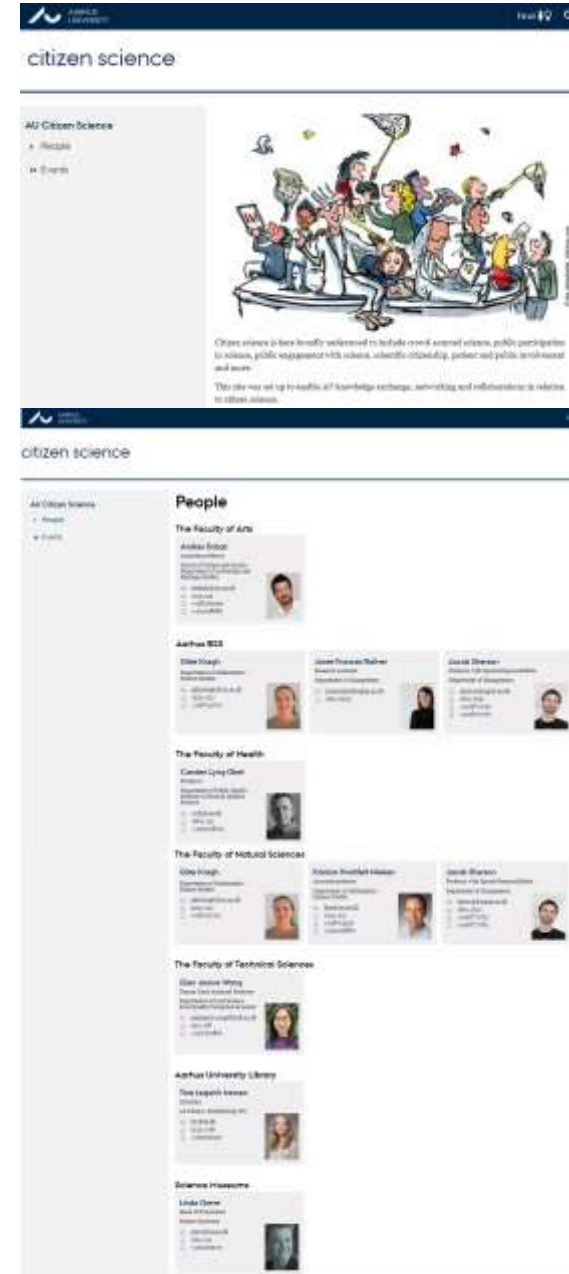
citsci.au.dk

Contacts: Gitte Kragh (gitte.kragh@css.au.dk)
Kristian Hvidtfelt Nielsen (khn@css.au.dk)