# Making PCST Conferences as diverse and inclusive as possible
## Results from an online questionnaire

March 2022
Authors: Dr. Anne Dijkstra & Kim Darley Waddilove

# Summary

**Background -** This report contains the results of an online questionnaire distributed among potential participants of international PCST conferences. The questionnaire aimed to gain insights in respondents' thoughts, wishes and needs regarding 'diversity and inclusivity at PCST conferences' and how to improve upon current diversity, equity and inclusion (DEI) efforts and make PCST a more diverse and inclusive space.

**Method** - The questionnaire was developed with the support of the PCST Scientific Committee. Various drafts were circulated for review before a final draft was developed in Cognito – an online form builder. Ethical approval was granted by the BMS faculty of the University of Twente, Enschede, Netherlands. Responses were collected from 29 November 2021 to 8 January 2022.

**Results** - The main findings are the following: By far, the main reason for respondents for attending a PCST conference was that they expected to gain knowledge. A majority of the respondents, who came from various countries all over the world,  do not need any support which is a good sign. However, it is important to consider the wishes and needs from the group of people who indicated a need for support. Often financial support is wished for. Other support would consist of help with practical issues. In case of an online conference, the main online support wishes are an alignment to the time zone and a reduction or waiver of the conference fee, or a satellite conference. Finally, a majority of the respondents is willing to help meeting DEI needs at the conferences and, about a quarter of the respondents is unsure if their organisations can provide support.

**Discussion and conclusions -** The results of the questionnaire provide more insight in the DEI theme which can support in developing and implementing actions which will benefit DEI. The DEI committee of the LOC will take actions according to the plans that were developed and taking into account the outcomes of the questionnaire. One major task is to look for financial funding.

Other suggestions for creative ways of increasing Diversity, Equity and Inclusivity are welcomed. Please contact the LOC or the PCST scientific committee members.

# Table of Contents

# 1. Gathering views on diversity, equity and inclusivity for the next PCST conference

The [Public Communication of Science and Technology (PCST) network](#) welcomes members from all over the world who are interested in science communication in multiple ways. The PCST network seeks to promote new ideas, methods, intellectual and practical questions, and perspectives on the communication of science and technology. It specifically aims to **improve the theoretical understanding** of science communication by **providing a forum** to consider the latest developments; to **improve the practice** of science communication by providing a forum to consider strategies and methods and **to promote an exchange between practitioners and theoreticians** in order to improve both the study and practice of science communication ([https://pcst.co/ -](https://pcst.co/) PCST website, 2022).

One of the means to achieve that is via the bi-annually organised PCST conferences. The PCST conference take place every two years, bringing together practitioners, educators, and researchers in the diverse and growing field of science communication. The conferences include elements of academic and professional conferences, including presentation of research, reflections on practice, and practical workshops and demonstrations. They attract participation from more than 50 countries in all continents and have been hosted most recently in Aberdeen, Scotland (online due to COVID-19), New Zealand, Turkey, Brazil, Italy and India. Each event has helped boost interest in PCST in the relevant city, region or country, as well as strengthened international networking (PCST website, 2022). A broad network of collaborating parties will organise the **next PCST 2023 conference** which will take place from **12 to 14 April 2023 in Rotterdam in the Netherlands**.

*Diversity, Equity and Inclusivity working definition*
The organisers of the PCST 2023 conference, which comprises the PCST Scientific Committee and the Local Organising Committee, recognise that our experiences and views on science communication depend on our diverse cultures and lived experiences. Ensuring that people from diverse backgrounds participate in the PCST 2023 conference will foster mutual learning and understanding, leading to new ideas and collaborations. This blend of people and thought will add value to the conference as well as the science communication sector. To ensure diversity, equity and inclusion (DEI), the PCST Scientific Committee comprises 29 individuals from 19 countries. For PCST 2023, the organisers are making an express commitment towards DEI not only in terms of gender, age, ethnicity, and geographical locations, but also in terms of ideas and professional approaches (i.e. research and practice). The working definition of DEI will be discussed and developed as the PCST 2023 conference is being organised and during the conference itself. The organisers will work towards a DEI statement to be adopted by the PCST Network.

A first action to this commitment towards developing DEI was to develop an online questionnaire aiming at gathering respondents' views about increasing DEI at bi-annual PCST conferences, in particular, the PCST 2023 conference. It is hoped that these insights will support individuals who might face barriers to attendance.

This report presents results from the online questionnaire. In the next Chapter (2) the method is described. Chapter 3 presents the results, while in the final Chapter 4, the findings are discussed and a conclusion drawn.

## 2. Methods: An online questionnaire

In this Chapter, the steps regarding the development of the online questionnaire and the collection of the data is described.

**Design of the questionnaire**
The questionnaire was developed with the support of the PCST Scientific Committee. Various drafts were circulated for review among members of the PCST Scientific Committee before a final draft was developed in Cognito – an online form builder. Feedback on the *online draft version* was collected from people representing a variety of PCST members who came from various countries or backgrounds. Thereafter, the final version of the questionnaire and the informed consent were developed. The final version of the online form took about 5 to 10 minutes to complete.

Ethical approval was granted by the BMS faculty of the University of Twente, Enschede, Netherlands (nr. 211287). Responses were collected from 29 November 2021 to 8 January 2022 via the PCST Facebook page and Twitter account. To further distribution of the questionnaire, a snowball approach was applied where various people with networks in the field were approached personally and asked to distribute the link to the questionnaire in an attempt to reach networks worldwide.

**Topics in the questionnaire**
The questionnaire consisted of three sections. The first section explored respondents' motives for participation in the PCST2023 conference and the kinds of support required. The second section related to respondents' and their organisations' willingness and ability to contribute towards increasing DEI needs . A final section asked background questions such as gender, age, experience in the field, and type of experience, countries of residence compared to countries were science communication work was conducted, previous attendance at PCST conferences, and if respondents considered themselves disadvantaged and, if so, how they would categorise their disadvantages.

**Analysis**
In total 137 responses were collected. The results were exported to an excel table. Incomplete forms were excluded. Descriptive statistics were applied and the responses were visualized in tables and other graphs.

# 3. Results

In this Chapter results are presented. First the responses to the block of questions related to respondents' background is given. Thereupon, the wishes and needs for the PCST2023 conference are discussed while, thirdly, respondents' views on participation are described.
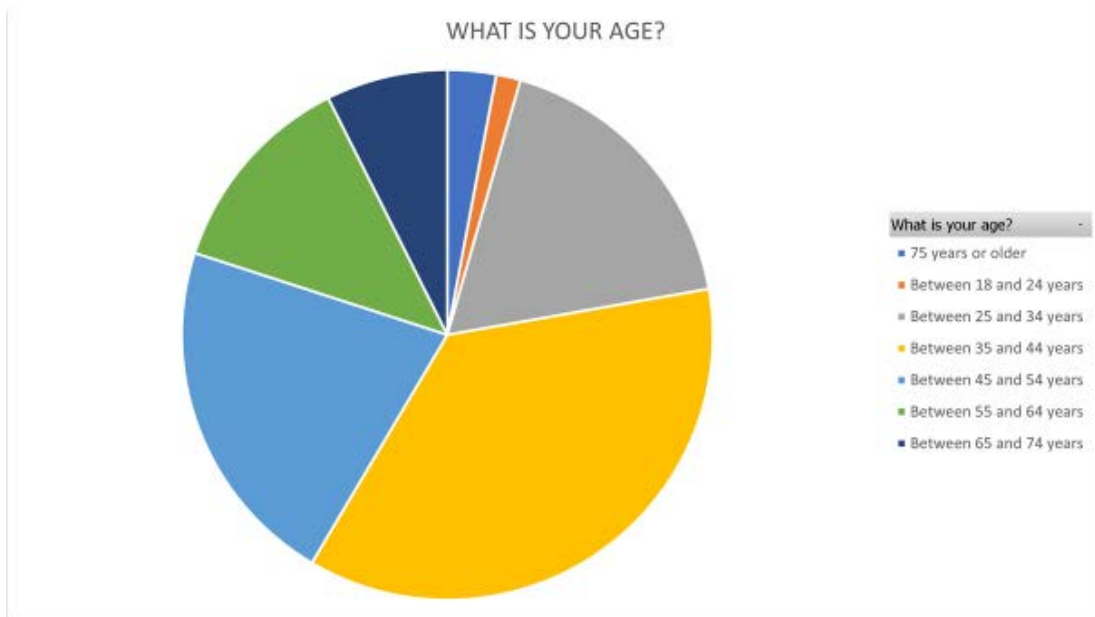
***Background of the respondents***
First, the section related to the respondents' background is presented. In total, 137 respondents filled in the questionnaire. Six respondents handed in incomplete questionnaires and these were removed from the analysis.

The majority of the respondents' gender is female (61%) with the balance made up of mostly male counterparts – see the representation in the pie chart below.
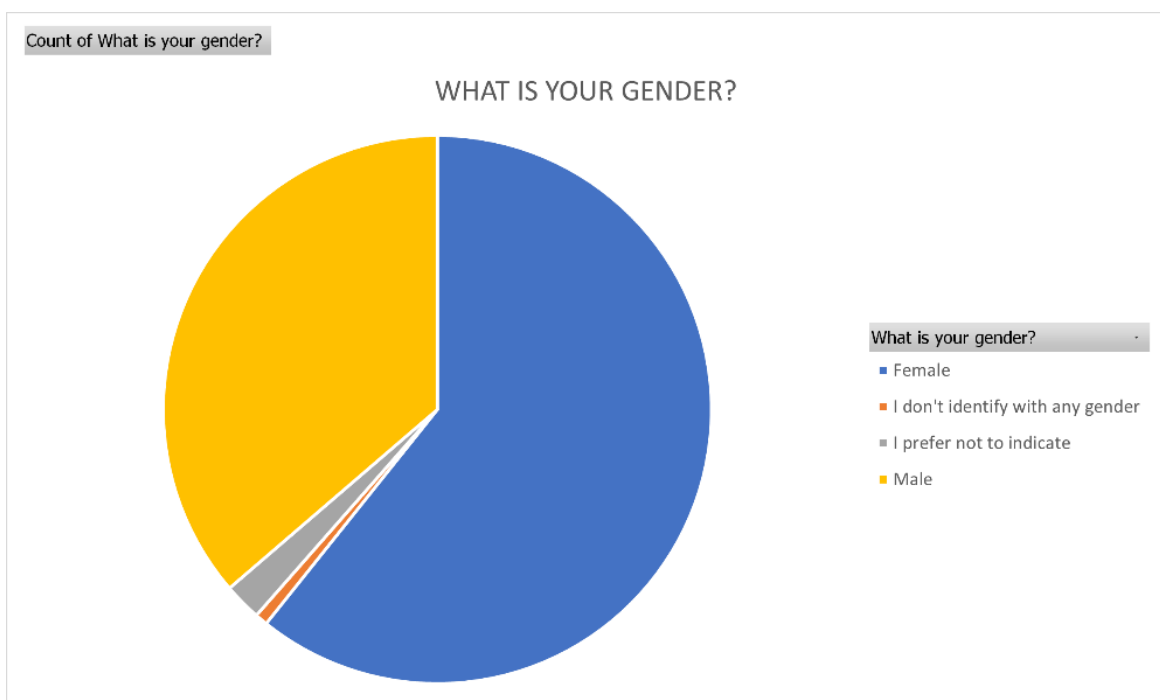


Respondents' age varied and is spread across all age groups as is shown in the pie chart below. A large majority of the respondents are between 25- and 64-years-old.

WHAT IS YOUR AGE?

What is your age?
- 75 years or older
- Between 18 and 24 years
- Between 25 and 34 years
- Between 35 and 44 years
- Between 45 and 54 years
- Between 55 and 64 years
- Between 65 and 74 years

**Experience in the field**
About 18% of the respondents have one to five years of experience in the field, while about 26% have between 5 and 10 years of experience. More than half the respondents have more than 10 years of experience as is shown in the pie chart below.

In order of number of responses, respondents indicated having experience as an event organizer (about 50%), as a lecturer, researcher, student, communication or PR officer, science journalist or writer, policy maker, trainer or science museum practitioner.

Count of How many years of experience do you have in the science communication field?



Total

How many years of...
- Between 1 and 5 years
- Between 5 and 10 years
- Less than 1 year
- More than 10 years
- No experience at all
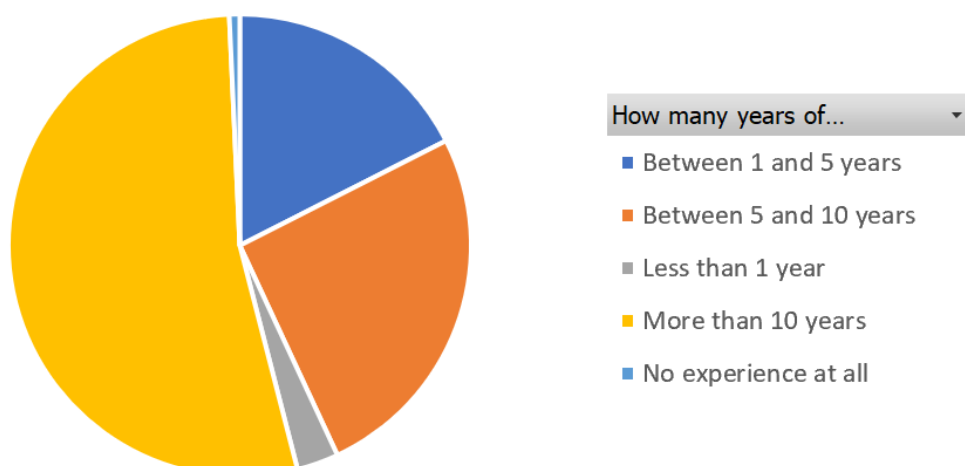
## Country of residence and country of work

Respondents' country of residence varied largely. In total respondents from 39 different countries completed the questionnaire. The highest number of respondents came from India and South Africa. In both countries 12 respondents completed the questionnaire. North and South Americas as well as European countries and Australia and New Zealand were represented with at least two respondents each.
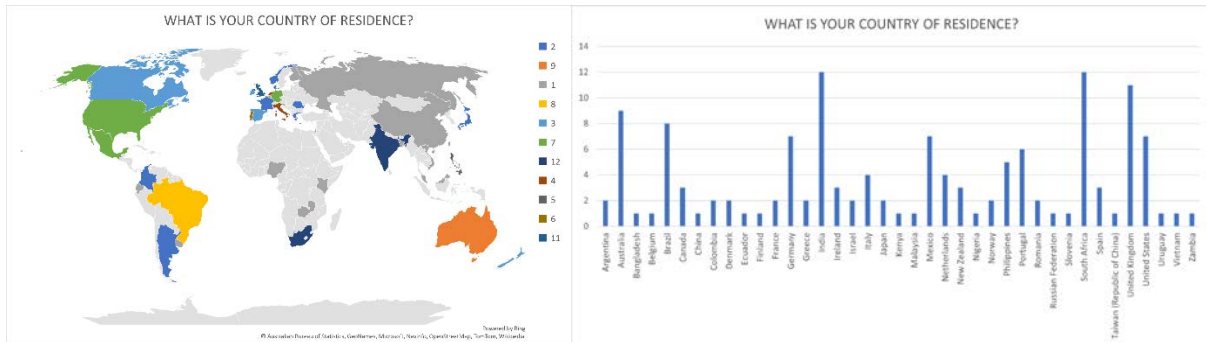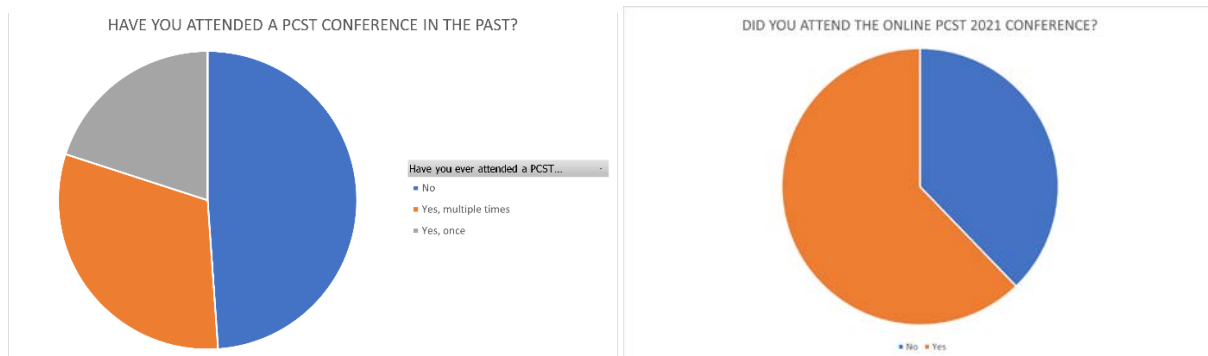


It is interesting to note that respondents do not always primarily work in their country of residence. Three quarters of the respondents work in their country of residence. Almost 25% of the respondents also work in other countries. Their self-reported answers indicate that these respondents often work in multiple countries, for example in African, American, Asian, European or Pacific countries, or even globally.
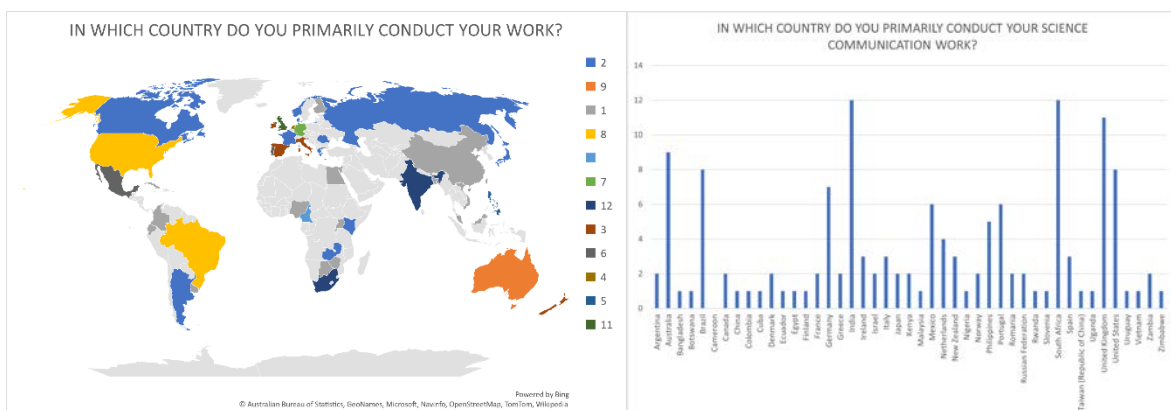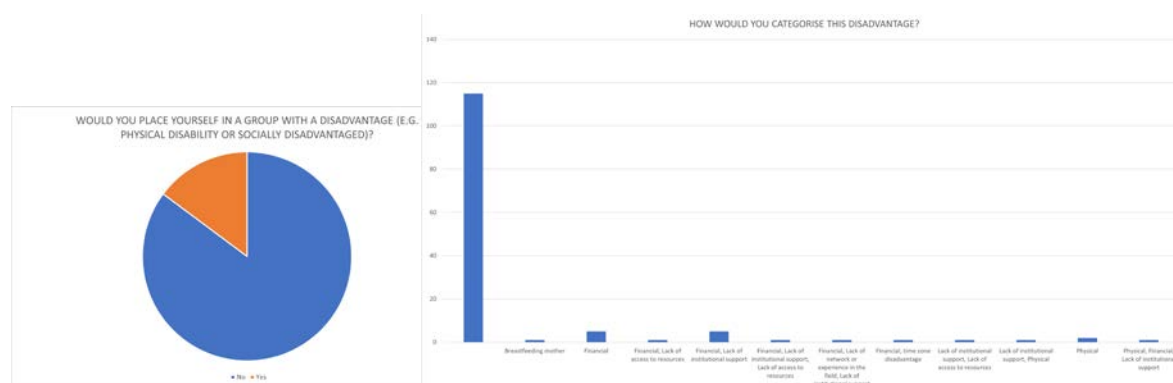


## Attendance PCST conferences

Almost half of the respondents have not attended a PCST conference on location in the past. Around 12% attended once and about 20% of the respondents have been able to attend multiple PCST conferences. The online conference in Aberdeen, which was postponed to 2021, was attended by about 60% of the respondents as is shown below.

HAVE YOU ATTENDED A PCST CONFERENCE IN THE PAST?

Have you ever attended a PCST...
- No
- Yes, multiple times
- Yes, once



DID YOU ATTEND THE ONLINE PCST 2021 CONFERENCE?

- No - Yes

## Respondents' self-reported disadvantages

The final questions in this section asked respondents if they considered themselves disadvantaged either physically or socially. Most of the respondents did not label themselves as disadvantaged. About 10% placed themselves in this group as is shown below. Of these respondents, almost all indicated a financial disadvantage, while lack of institutional support, lack of access to resources, lack of network or experience in the field, time zone disadvantage, and physical disadvantages were also given as answers. Respondents could provide multiple answers.
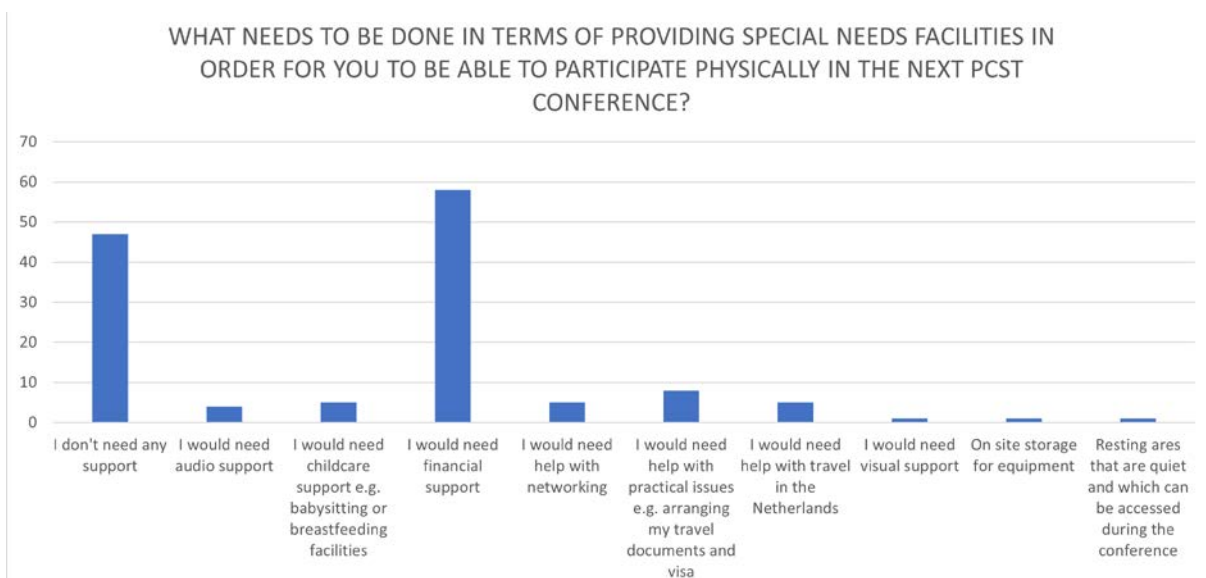


WOULD YOU PLACE YOURSELF IN A GROUP WITH A DISADVANTAGE (E.G. PHYSICAL DISABILITY OR SOCIALLY DISADVANTAGED)?

- No - Yes



HOW WOULD YOU CATEGORISE THIS DISADVANTAGE?

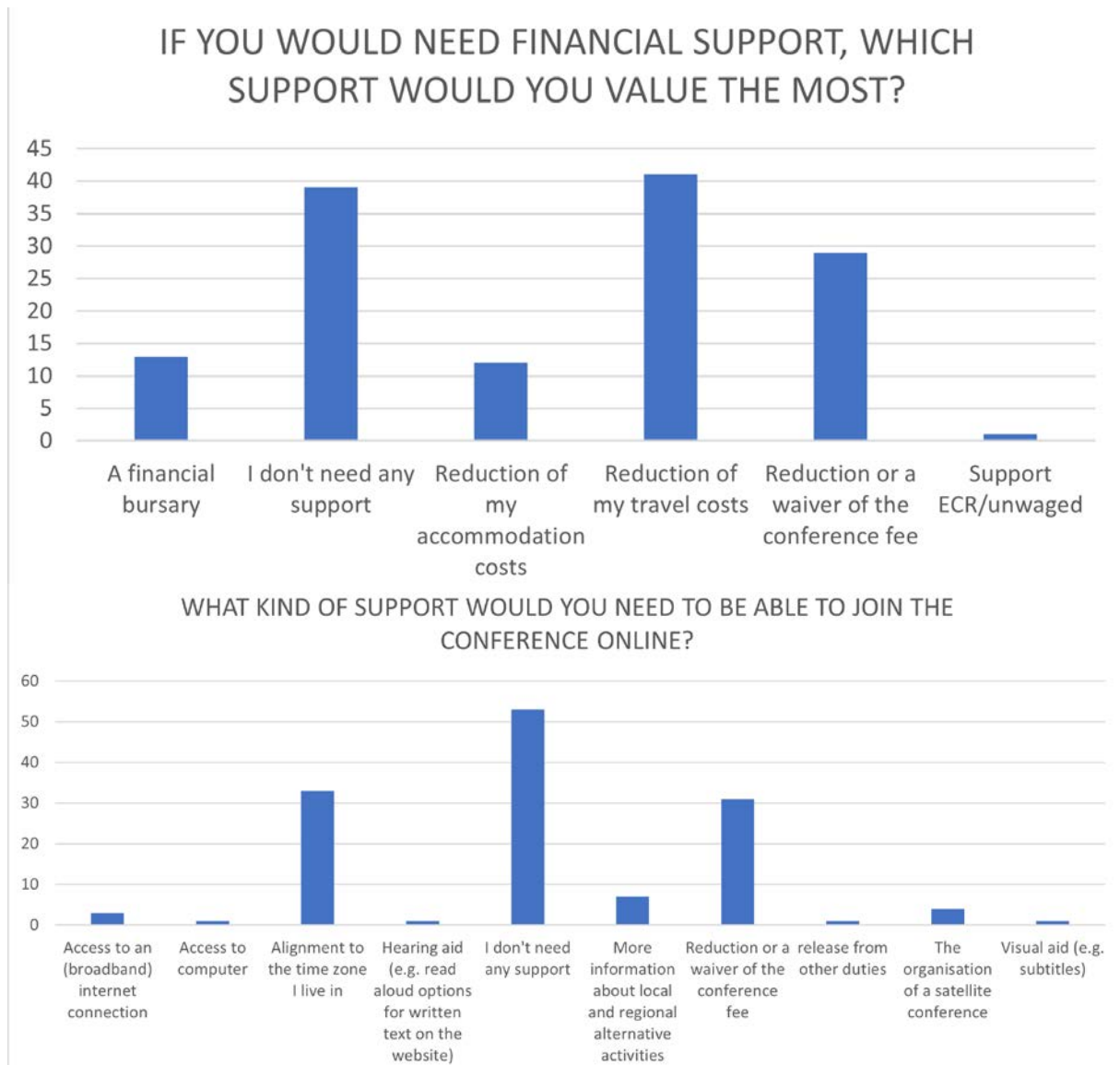## Perceived benefits of attending PCST conferences

The section related to attending PCST conferences consisted of various questions. The first question inquired about benefits of attending a PCST conference. By far, the main reason for respondents attending a PCST conference was that they expected to gain knowledge. Other reasons – in order of most responses received – were getting to know experts in the field, networking with people in the field, establishing collaboration, learning from others, stimulation for the respondent's career, participation in workshops, professional development and travelling.

**WHAT BENEFITS DO YOU GET OUT OF ATTENDING A PCST CONFERENCE?**
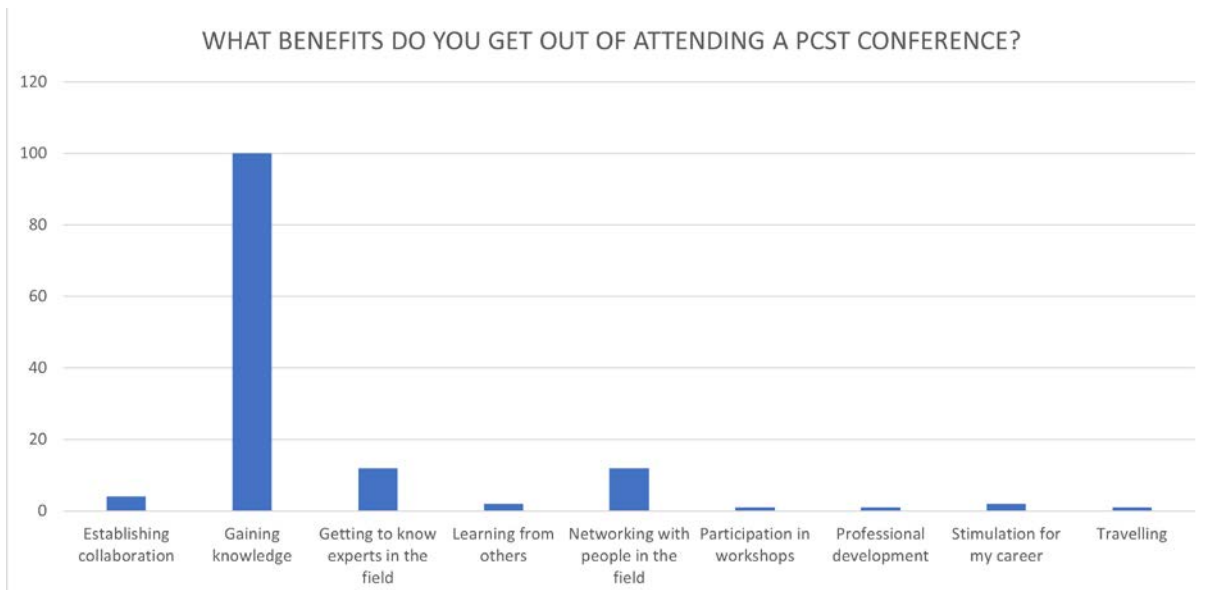


The following questions explored respondents' wishes and needs for physical and online attendance. For physical attendance, in particular, financial support is welcomed. Almost 60 respondents gave this answer. Just over 45 respondents do not need any support. Other needs would be: help with practical issues like arranging the travel documents and visa; childcare support; help with networking; help with travel in the Netherlands, audio support, visual support, on-site storage of equipment, or quiet resting areas during the conference.

**WHAT NEEDS TO BE DONE IN TERMS OF PROVIDING SPECIAL NEEDS FACILITIES IN ORDER FOR YOU TO BE ABLE TO PARTICIPATE PHYSICALLY IN THE NEXT PCST CONFERENCE?**



Financial support can be categorised as follows: reduction of travel costs; reduction or a waiver of the conference fee; a financial bursary; reduction of accommodation costs; and unwaged support (ECR). In case of an online conference, online support wishes are an alignment to the time zone; reduction or waiver of the conference fee; more information about local or regional alternatives activities; a satellite conference; access to (broadband) internet or computer; visual or hearing aids; and temporary release from other duties.

## IF YOU WOULD NEED FINANCIAL SUPPORT, WHICH SUPPORT WOULD YOU VALUE THE MOST?



## WHAT KIND OF SUPPORT WOULD YOU NEED TO BE ABLE TO JOIN THE CONFERENCE ONLINE?



**Ability of supporting PCST conferences either as an individual or via the institution or organisation**

Two questions asked how the respondents **as individuals** could support DEI at PCST conferences and **how their institutions/organisations might** support DEI.

About 60% of the respondents did not think they were able to provide any support. The balance indicated the type of support they felt they could provide via a checklist of choices with the option of adding any suggestions they felt were missing from the list. The answers from most given to least, were: by offering access to the respondent's network; by contributing to funds via the pay-it-forward option; by helping to find sponsorships; by offering accommodation in Rotterdam (or in the Netherlands); by volunteering with online tasks or helping organizing activities; by mentoring, relevant discussions, or sharing learnings in YouTube channels; by advocacy for inclusive structures and activities and, by helping with anything related to lowering costs.

HOW DO YOU THINK YOU AS AN INDIVIDUAL CAN SUPPORT DEI AT PCST?
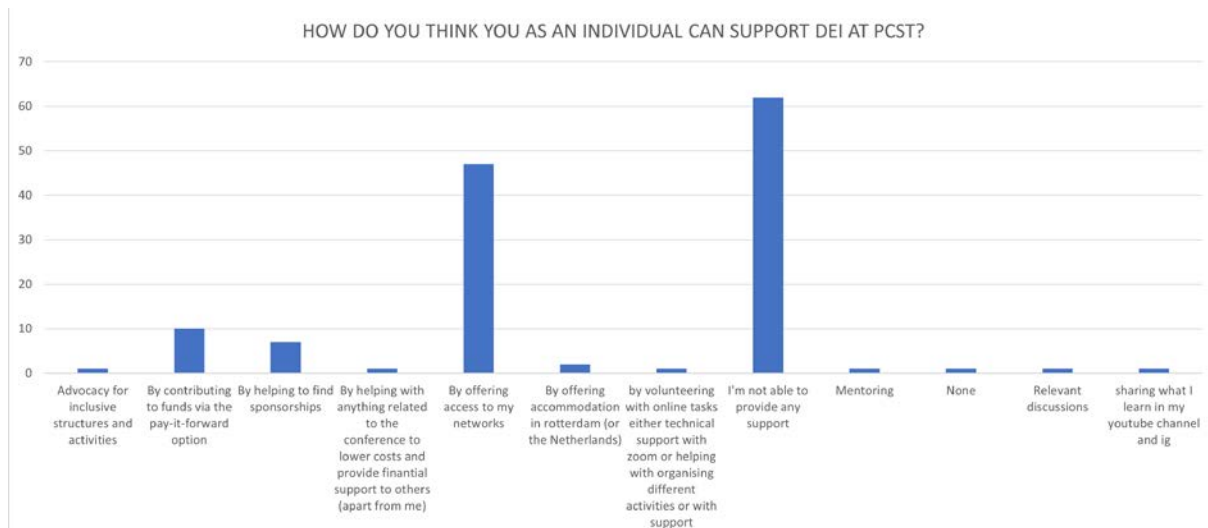
In terms of organizational/institutional support, respondents indicated that their places of work might offer DEI support by offering access to the organization's network; financial support; sponsorships; providing speakers as well as academic partners; taking advantage of existing expertise; amplifying through TV and social networks; and by offering community academia engaging scientific activities.



HOW DO YOU THINK YOUR ORGANISATION/INSTITUTION CAN SUPPORT DEI AT PCST?
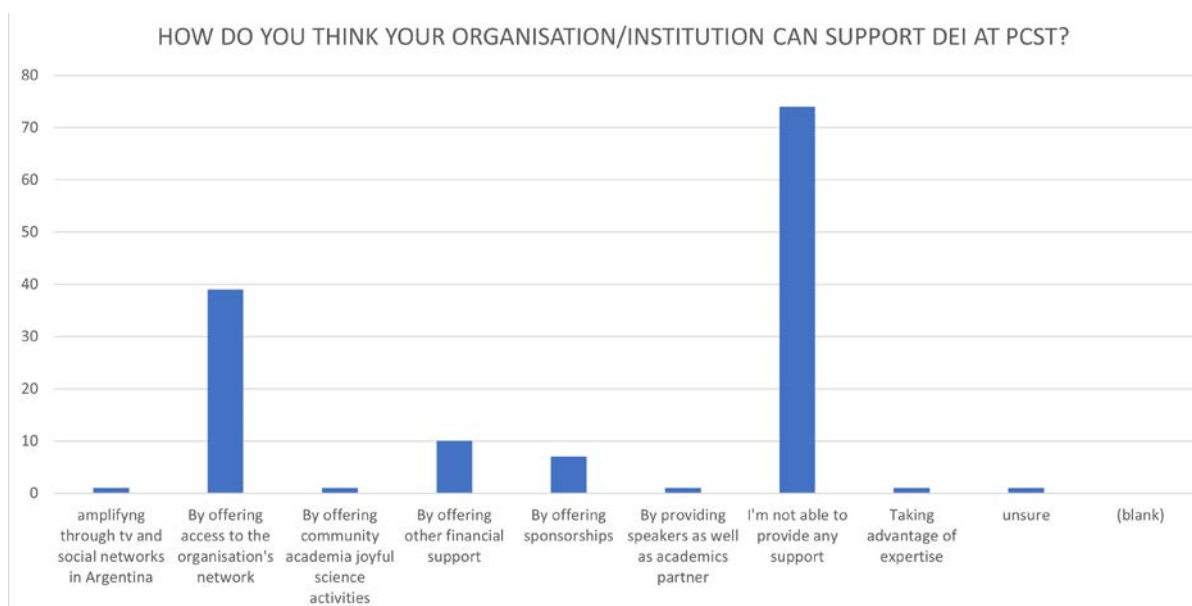
The final questions asked respondents to what extent they **or their institutions or organisations would be willing or able** to help meeting DEI needs at PCST conferences. The answers are provided in one table as below, with percentages, while in the graph below the four answers can be compared. In sum, a majority of the respondents (39% likely and 38% very likely) is willing to help meeting DEI needs at the conferences, but they estimate their ability to do mainly as likely (36% likely and 14% very likely). About a quarter of the respondents is unsure about their organisation's or institution's willingness (24%) or ability (28%) to help.

*Table 1: Willing or able to help meeting DEI needs at PCST conferences*

|  | Very unlikely | Unlikely | Neither | Likely | Very likely | Unsure |
|---|---|---|---|---|---|---|
| Respondent willing | 3% | 2% | 7% | 39% | 38% | 11% |
| Respondent able | 6% | 11% | 11% | 36% | 14% | 22% |
| Institution willing | 18% | 12% | 15% | 22% | 9% | 24% |
| Institution able | 5% | 12% | 20% | 17% | 18% | 28% |
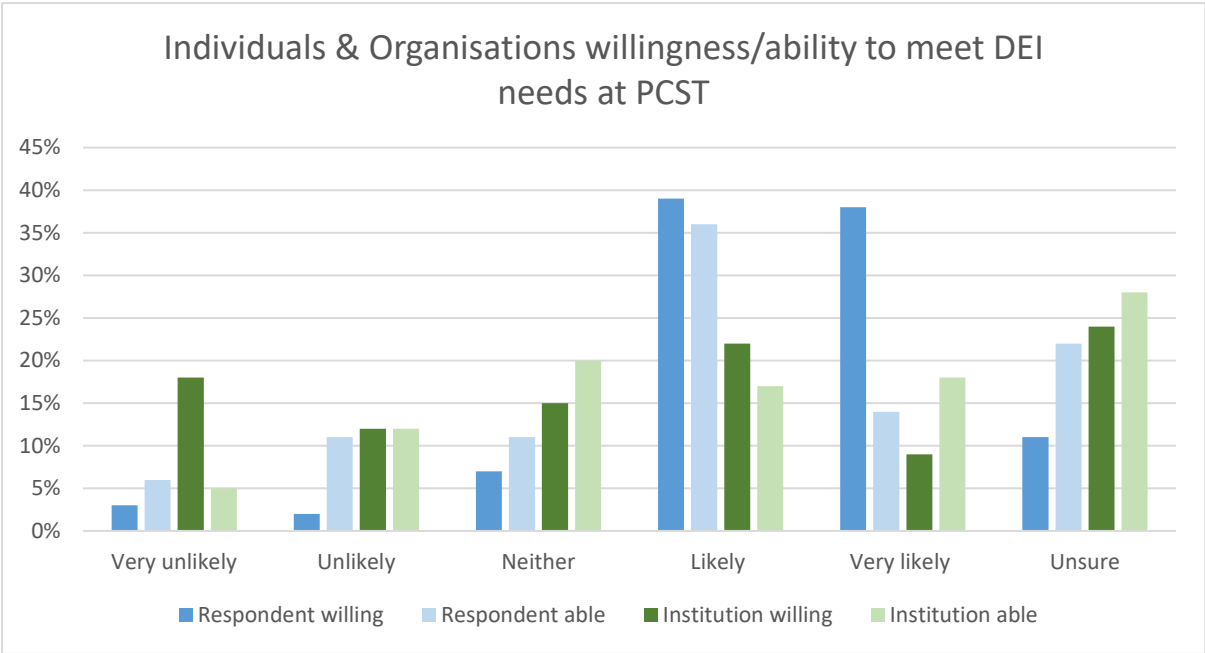
# 4. Discussion and Conclusion

In this Chapter, the results are discussed and conclusions for possible steps of action are drawn.

**Discussion**

The questionnaire for gathering insights into needs and wishes regarding diversity, equity and inclusivity at the PCST conferences. By far, the main reason for respondents who came from various countries all over the world for attending a PCST conference was that they expected to gain knowledge. Other reasons – in order of most responses received – were getting to know experts in the field, networking with people in the field, establishing collaboration, learning from others, stimulation for the respondent's career, participation in workshops, professional development and travelling

A majority of the respondents do not need any support which is a good sign. However, it is important to consider the wishes and needs from the group of people who indicated a need for support.

- Often financial support is wished for. Financial support can be split up to reduction of travel costs; reduction or a waiver of the conference fee; a financial bursary; reduction of accommodation costs; and unwaged support (ECR).
- Other support would consist of help with practical issues like arranging the travel documents and visa; childcare support; help with networking; help with travel in the Netherlands, audio support, visual support, on-site storage of equipment, or quiet resting areas during the conference.
- In case of an online conference, online support wishes are an alignment to the time zone; reduction or waiver of the conference fee; more information about local or regional alternatives activities; a satellite conference; access to (broadband) internet or computer; visual or hearing aids; and temporary release from other duties.

A majority of the respondents (39% likely and 38% very likely) is willing to help meeting DEI needs at the conferences, but they estimate their ability to do mainly as likely (36% likely and 14% very likely). About a quarter of the respondents is unsure when talking about their organisation's possibilities to help out. Also, respondents are less sure about the actual support they would be able to give.

Some limitations should be taken into account as well. A total of 137 responses from respondents all over the world. This is an encouraging result, but at the same time this number represents only part of the PCST community. Still, we believe that the results provide valuable insight in the situation.

**Actions**

The results of the questionnaire provide more insight in the DEI theme which can support in developing and implementing actions. The DEI committee of the LOC will take actions according to the plans that were developed and taking into account the outcomes of the questionnaire.

One major task is to look for financial funding. Therefore, one of the first steps will be to increase efforts to apply for funds to enable reduction of conference fees, travel grants or other.

Other suggestions for creative ways of increasing Diversity, Equity and Inclusivity are welcomed. Please contact the LOC or the PCST scientific committee members.

# Appendix: Questionnaire

## Making PCST conferences as diverse and inclusive as possible Questionnaire

*November 2021*

This questionnaire is aimed at gathering **input** about increasing <mark>diversity, equity and inclusion</mark> (DEI) at our <mark>biennial</mark> PCST conferences, **in particular**, for the **PCST 2023 conference. This conference will be held from 12 to 14 April 2023 in Rotterdam in the Netherlands**. The questionnaire is especially aimed at facilitating the participation of those individuals who might be interested in participating at PCST conferences but because of different types of barriers are not able to do so.

**STATEMENT REGARDING DEI AT PCST 2023**

**The organisers of the PCST 2023 conference recognise that our experiences and views about science communication depend on our diverse cultures and lived experiences. Ensuring that people from distinct backgrounds participate in the PCST 2023 conference will foster mutual learning and understanding, leading to new ideas and collaborations. This blend of people and thought will add value to the conference as well as the science communication sector. To ensure diversity, equity and inclusion (DEI), the PCST Scientific Committee is comprised of 29 individuals from 19 countries. For PCST 2023, we are making an express commitment towards DEI not only in terms of gender, age, ethnicity, and geographical locations, but also in terms of ideas and professional approaches (i.e., research and practice). We will discuss and develop this working definition of DEI as we organise the PCST 2023 conference and during the conference itself. We will work towards a DEI statement to be adopted by the PCST Network.**
**What does your participation entail?**

The questionnaire is expected to take **approximately 10 minutes** and your input will be used to stimulate actions for better DEI. The data will be stored securely. Access to primary data will only be granted to individuals directly involved in the analysis of the questionnaire. The results will be summarized in a public report which will be made available at the PCST website for members only. The report will present aggregated findings which will be anonymized to ensure confidentiality. The report may quote specific responses, which will not be attributable to individual respondents. The report will be used as input for PCST activities as well as a possible publication.

You have the right to withdraw at any time without prejudice and without providing a reason. If you have any further questions about the procedure, please contact <mark>Professor Anne Dijkstra via email on</mark> <mark>a.m.dijkstra@utwente.nl</mark>

**By clicking you consent to the above > continue to the questions**

**BLOCK: Questions related to the PCST2023 conference**
**We would like to ask some questions related to why attending the PCST2023 conference in Rotterdam might be interesting for you and what kind of support the organisers should try to provide according to you.**

1. What benefits do you get out of attending a PCST conference? Multiple options are possible.
   o Gaining knowledge
   o Getting to know experts in the field
   o Networking with people in the field
   o Travelling
   o Enjoyment
   o Professional development
   o Learning from others
   o A stimulation for my career
   o Establishing collaboration
   o Participation in workshops
   o Other, namely …

2. If there are any barriers (physical or online) for you to attending a PCST conference could you indicate them? Multiple options are possible.
   o None that cannot be overcome
   o Financial
   o Physical
   o Travel restrictions
   o Visa applications
   o Home situation, e.g. childcare or care for others
   o Work-related obligations, e.g. teaching
   o Technical, like internet access, paperwork
   o Practical issues, like lack of institutional support
   o Lack of network
   o Language barrier
   o Other, namely …

**Consider the following two situations. In the first situation you are able to attend in person. In the second situation, you are NOT able to attend in person but would like to join online. For each of the situations we have questions. Multiple answers are possible.**

**If you are able to attend in person**
3. What needs to be done in terms of providing special needs facilities in order for you to be able to participate physically in the next PCST conference?
   o I would need audio support
   o I would need visual support
   o I would need wheelchair accessibility
   o I would need childcare support, e.g. baby sitting or breast feeding facilities
   o I would need financial support
   o I would need help with practical issues, e.g. arranging my travel documents and visa
   o I would need help with travel in the Netherlands
   o I would need help with networking
   o I would need other support, such as (please elaborate)
   o I don't need any support

4. If you would need financial support, which support would you value the most?

   *As an example: Attendance fee for attending the PCST2018 conference in Dunedin for a full-paying member was about 510 Euros; online attendance fee for a full-paying member to the PCST 2020+1 conference in Aberdeen was about 220 Euros.*

   - o Reduction of my travel costs
   - o Reduction of my accommodation costs
   - o Reduction or a waiver of the conference fee
   - o A financial bursary
   - o Other…
   - o No support needed

**If you are not able to attend in person but like to join online.**
5. What kind of support would you need to be able to join the conference online?
   - o Access to a computer
   - o Access to an (broadband) internet connection
   - o Alignment to the time zone I live in
   - o More information about local and regional alternative activities
   - o The organization of a satellite conference
   - o Reduction or a waiver of the conference fee
   - o Visual aid (e.g. subtitles)
   - o Hearing aid (e.g. read aloud options for written text on the website)
   - o Other, please describe …
   - o No support needed

## Block: Community participation
**We have a few questions about participation to enable the PCST2023 conference to better meeting needs**

6. How do you think you as an individual can support DEI at PCST?
   - o By helping to find sponsorships
   - o By offering accommodation in Rotterdam (or the Netherlands)
   - o By contributing to funds via the pay-it-forward option
   - o By offering access to my networks
   - o Other, please specify ….
   - o Not able to provide any support

7. How do you think your organization or institution can support DEI at the PCST?
   a. By offering sponsorships
   b. By offering organisational support
   c. By offering other financial support
   d. By offering access to the organisation's network
   e. Other, please specify…

f. Not able to provide any support

8. Could you answer the following questions taking in mind a scale from very unlikely (left) to very likely (right):

| | Very unlikely | Unlikely | Neither | Likely | Very likely | Unsure |
|---|---|---|---|---|---|---|
| To what extent would **you** be **willing** to help meeting DEI needs at PCST conferences? | ○ | ○ | ○ | ○ | ○ | ○ |
| To what extent would **you** be **able** to help meeting DEI needs at PCST conferences? | ○ | ○ | ○ | ○ | ○ | ○ |
| To what extent would **your organisation** be **willing** to help meeting DEI needs at PCST conferences? | ○ | ○ | ○ | ○ | ○ | ○ |
| To what extent would **your organisation** be **able** to help meeting DEI needs at PCST conferences? | ○ | ○ | ○ | ○ | ○ | ○ |

9. Do you have any other suggestions for us to enhance diversity and inclusivity at PCST conferences? Please specify…

**We would like to end by asking a few background questions:**

10. What is your current country of residence?
    o [dropdown menu – all countries]

11. In which country do you primarily conduct your current science communication work?
    o [dropdown menu – all countries]

12. Do you have other countries where you regularly conduct significant science communication work?
    o No
    o Yes, please specify…

13. What is your gender?
    o male
    o female
    o other, please specify
    o I don't identify with any gender
    o I prefer not to indicate

14. What is your age?
    o Younger than 18 years
    o between 18 and 24 years
    o between 25 and 34 years
    o between 35 and 44 years
    o between 45 and 54 years

- o    between 55 and 64 years
- o    between 65 and 74 years
- o    75 years or older

15. How many years of experience do you have in the science communication field?
- o    No experience at all
- o    Less than 1 year
- o    Between 1 and 5 years
- o    Between 5 and 10 years
- o    More than 10 years

16. What kind of experience do you have in the science communication field? I have experience as a(n): [multiple options are possible]
- o    event organiser
- o    lecturer in science communication
- o    policy maker or decision maker
- o    practitioner in various types of activities
- o    researcher in science communication
- o    science journalist
- o    science museum practitioner
- o    science writer
- o    science education or science communication student
- o    trainer in science communication
- o    communication or public relations officer in a scientific organisation
- o    other, please specify

17. Have you ever attended a PCST conference in person in the past?
- o    yes, multiple times
- o    yes, once
- o    no

18. Did you attend the online PCST 2021 conference?
- o    yes
- o    no

19. Would you place yourself in a group with a disadvantage (e.g. physical disability or socially disadvantaged)?
- o    no, please continue with the final question
- o    yes, please continue with the following question

20. If yes, would you categorize this disadvantage in the following ways (more options are possible):
- o    physical
- o    visual
- o    hearing

- financial
- lack of network or experience in the field
- lack of institutional support
- lack of adequate education
- lack of access to resources
- other, please specify…

**Finally,**
21. Do you have any other comment to make? …

Thank you very much for participating in this survey.