



National Centre
for the Replacement
Refinement & Reduction
of Animals in Research

NC3Rs researchfish® 2019 overview



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researchfish® 2019 overview

Introduction

researchfish® is an online platform to gather outputs, outcomes and impacts arising from research. All researchers who have been awarded NC3Rs funding are required to report outputs such as publications, collaborations, further funding, engagement, impact on policy, research materials and the next destinations of researchers working on the grant on researchfish®. The data collected is used in conjunction with the qualitative and quantitative information on 3Rs impacts that we obtain as part of our regular interactions with Grant holders. We use information on outputs and impacts in our annual reports and research reviews, in case studies, to answer parliamentary questions, and to support funding bids for investment in the NC3Rs.

Grant holders report outputs into researchfish® that have resulted from, or are directly linked to, their NC3Rs awards. researchfish® is open to researchers all year round, but there is an annual submission period when researchers are asked to confirm that their information is accurate and up to date. All Grant holders are required to submit a report during the submission period for each year of their grant and typically for five years following the grant's completion.

We have collected data via researchfish® annually since 2013. Some Grant holders with awards that pre-date this have chosen to use researchfish®, where this data has been submitted it has been included in analysis, although the dataset is not complete. All averages have been calculated as the mean of data between 2013 and 2018 only as this is the period the NC3Rs have a complete set of reported researchfish® data. The data submitted via researchfish® is 'cleaned' by the NC3Rs team to check for accuracy, completeness and duplication.

Each graph includes an 'n' number, which indicates the total sample presented in the graph. Differences between header statements and graph 'n' numbers indicate data has not been provided. 0% indicates a value less than 1% that has been rounded down during analysis.

This page provides a summary of researchfish® data submitted by NC3Rs Grant holders in the period **4 February 2019 to 14 March 2019**. The NC3Rs had 440 awards (excluding CRACK IT research contracts) on the researchfish® system, of these 249 were expected to submit in the 2019 submission period.

Submissions were received for 252 grants from 216 Grant holders – these include 83 Project grants, 22 Strategic awards, 48 Infrastructure for Impact awards, Skills and Knowledge Transfer grants and Pilot Study grants, and 116 early career awards (PhD studentships and Fellowships) representing approximately £49 million of NC3Rs awarded grants.

The breakdown of these submissions by response code were as follows:

Response code	Number of submissions	Descriptor
1	203	A submission is expected this year from the PI or Fellow
2	0	No submission is expected this year. The PI or Fellow has been granted a one year exemption
3	29	No further submissions are expected against this award due. The award is excluded from the Submission Period
4	20	A submission is expected this year from the PI or Fellow but they are no longer working at the funded organisation
5	0	The PI or Fellow is no longer expected to make a submission, but may still do so if they wish to add new outcomes

More information on response codes can be found [here](#).

If you have any questions, comments or feedback on any aspect of this report please contact the NC3Rs funding team: 3rsgrants@nc3rs.org.uk

1. Publications

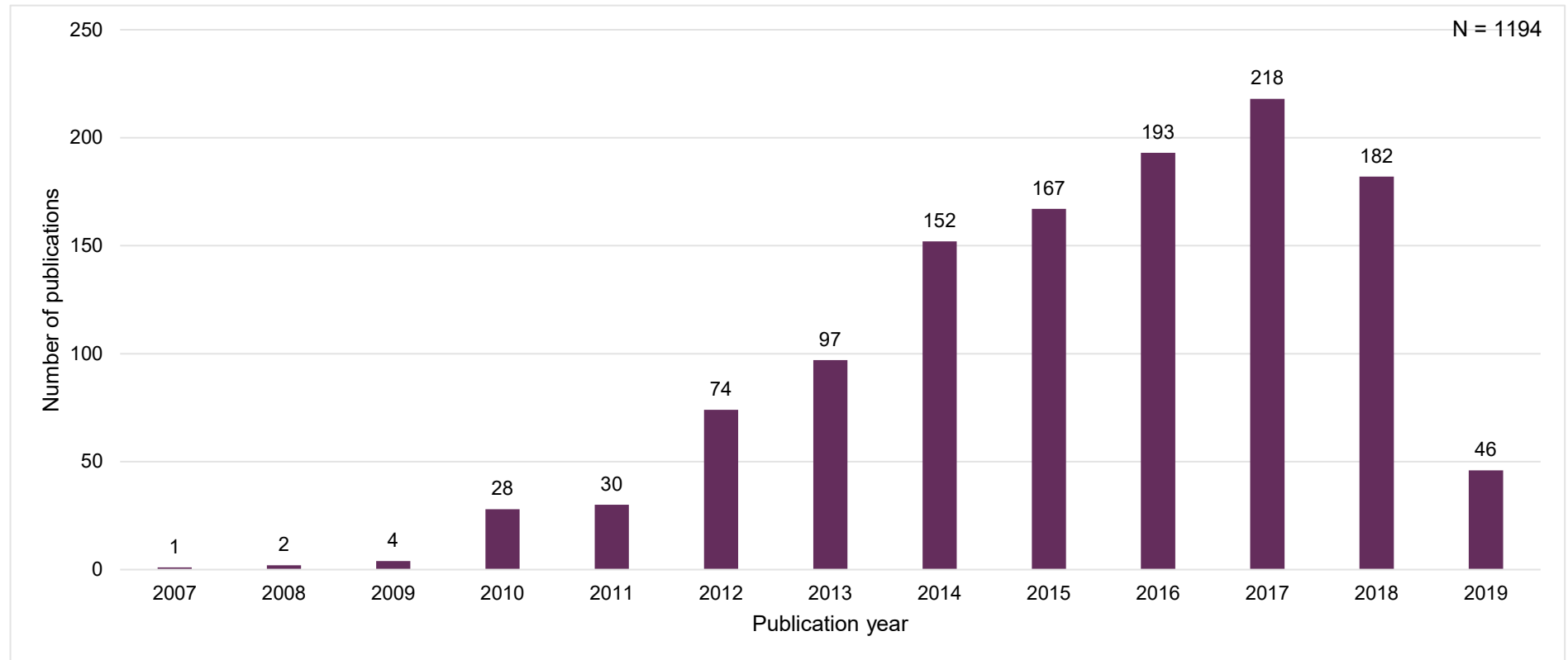
The analysis below highlights the publications (including journal articles, book chapters, conference abstracts etc.) published by NC3Rs Grant holders.

From 164 Grant holders reporting on 190 grants

- A total of 1230 unique publications were reported
- Median of 4 publications reported per grant

1.1. Number of publications published per year

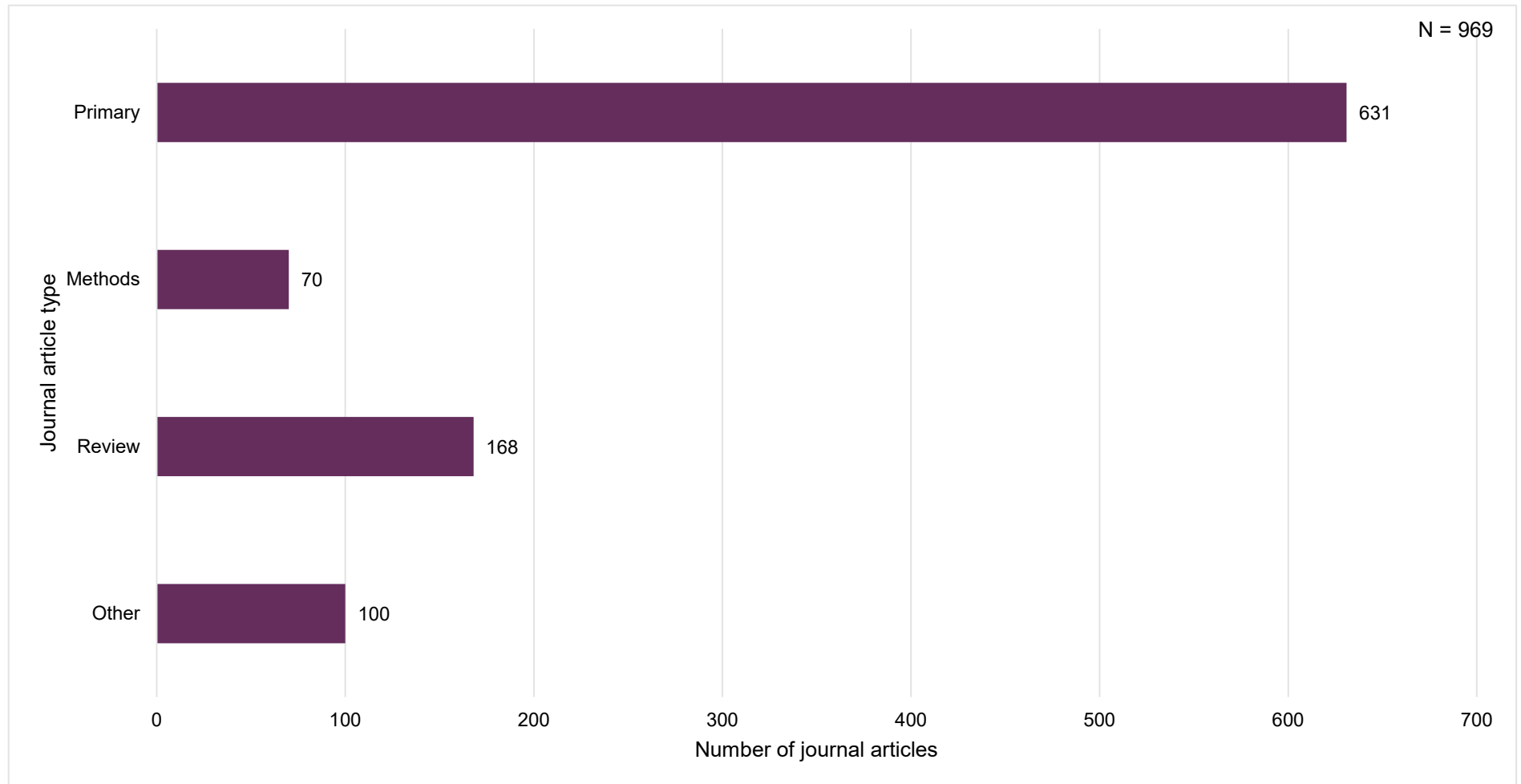
NC3Rs Grant holders report an average of 168 new publications each year*.



* The average is calculated from data for 2013 – 2018 as there is a complete dataset for these years. See page 1 for explanation.

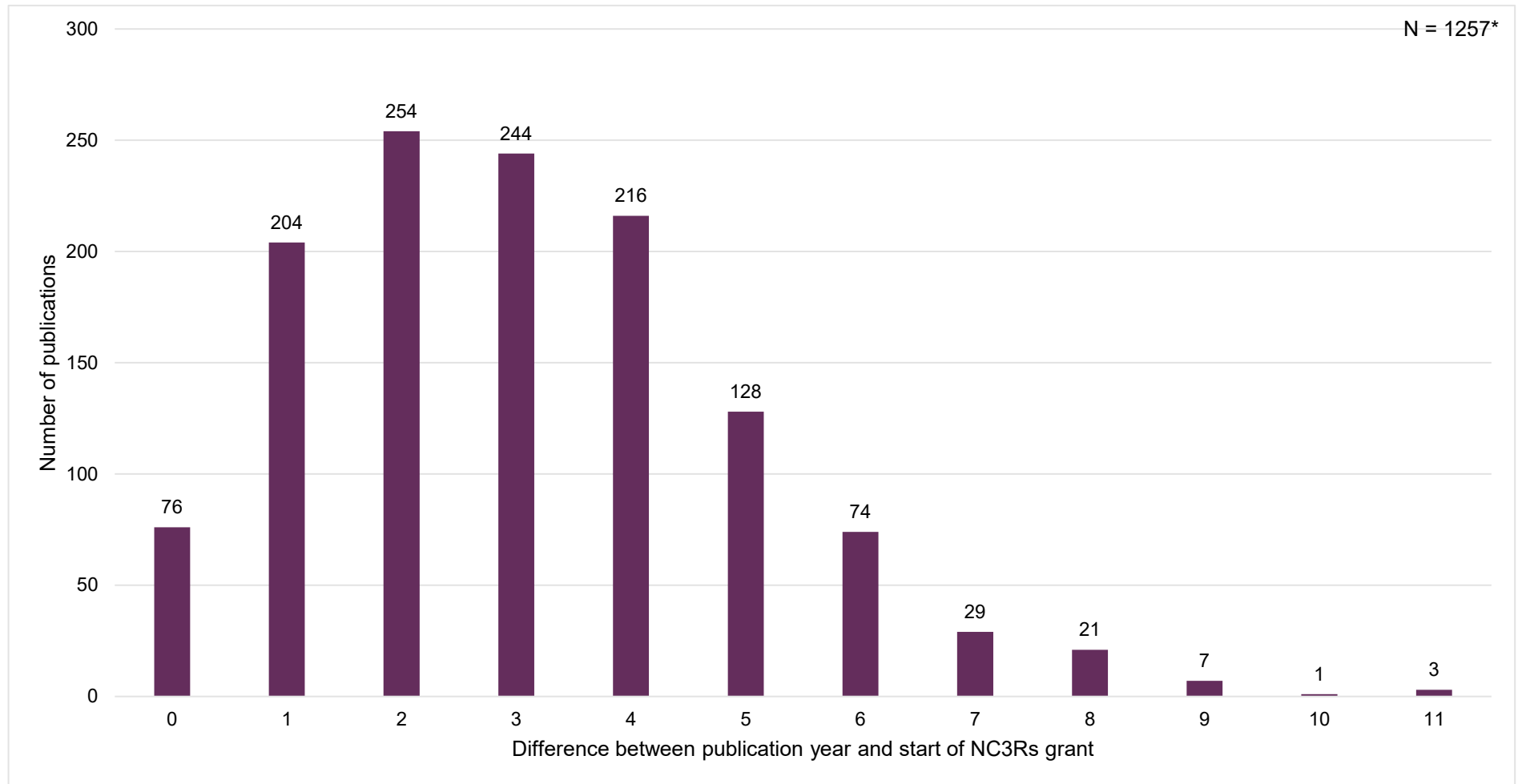
1.2. Number of journal articles by publication type

The majority of articles published by NC3Rs Grant holders are primary research papers. 'Other' includes papers such as conference proceedings published in a journal, news/views articles and editorials.



1.3. Time taken for report of publication to be made

The average time taken for an NC3Rs Grant holder to report a publication is three years after their grant start date.



* This includes publications attributed to multiple grants, publications may have been counted multiple times in this analysis.

2. Collaborations

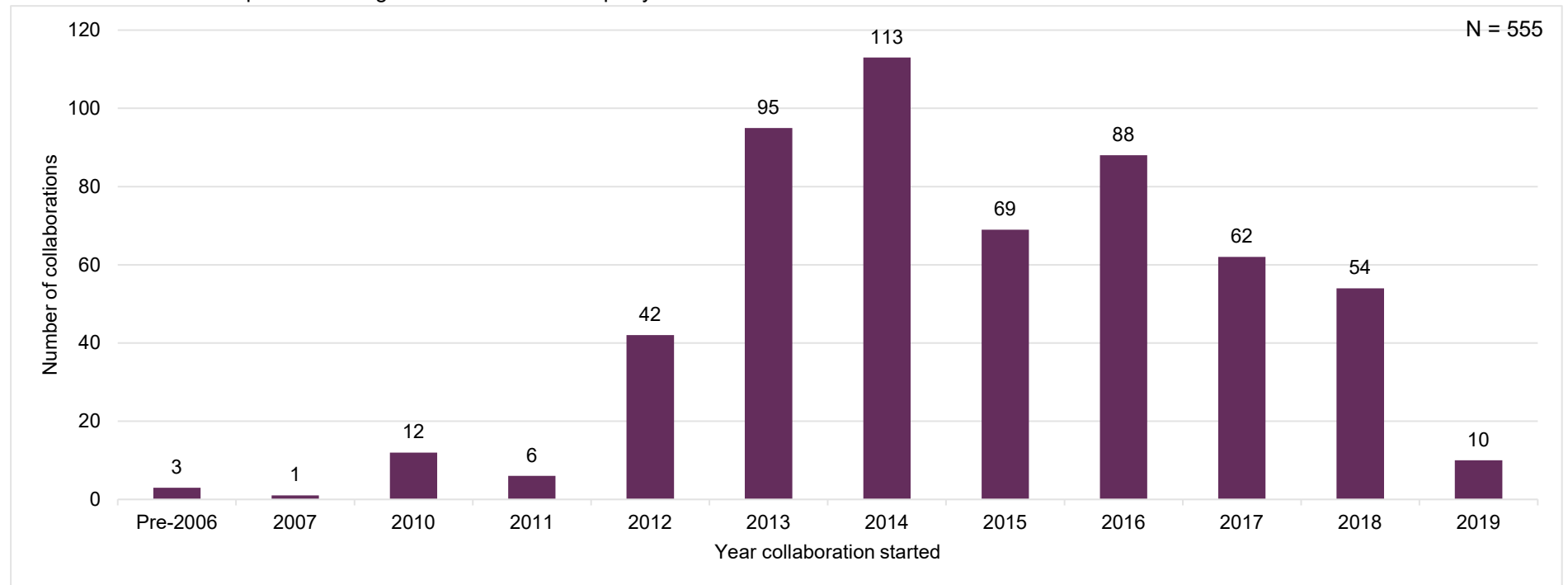
Collaborations can take the form of joint funding shared between multiple investigators, the exchange of expertise, or the use of facilities or staff. Sharing datasets, such as in meta-analyses, are also classified as collaborations in this dataset. Some collaborations may be subject to confidentiality agreements, data has been removed from analysis as appropriate.

From 138 Grant holders reporting on 153 grants

- A total of 559 collaborations were reported
- Average of 4 collaborations reported per grant

2.1. Number of collaborations per year

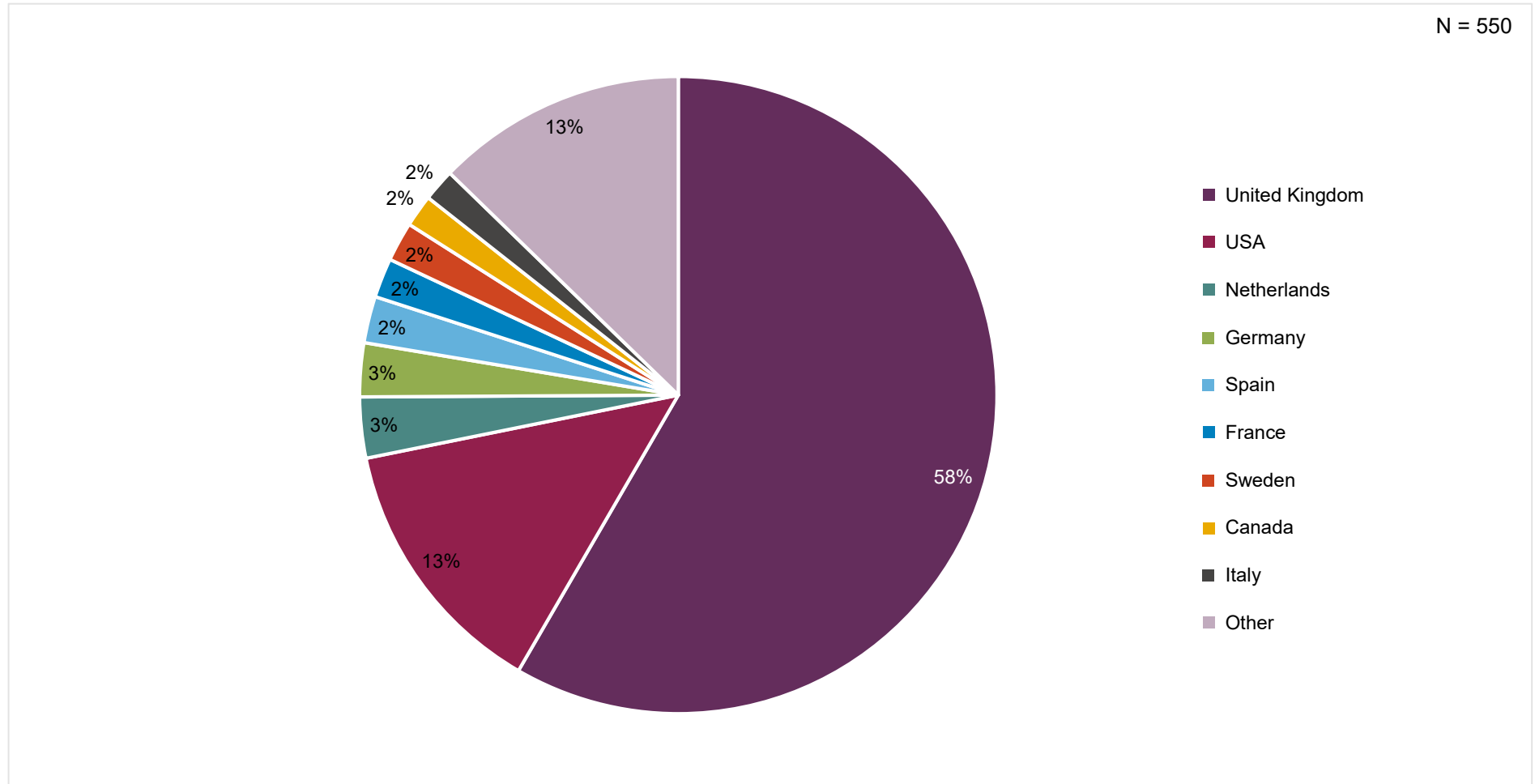
NC3Rs Grant holders report an average of 80 collaborations per year*.



* The average is calculated from data for 2013 – 2018 as there is a complete dataset for these years. See page 1 for explanation.

2.2. Collaborations by location

Approximately 40% of collaborations reported by NC3Rs Grant holders are with an international partner.



NB. Other includes the following locations: Denmark, Belgium, Global, Switzerland, Australia, Austria, Japan, Norway, Portugal, Brazil, China, Ireland, Israel, Slovenia, Colombia, Czech Republic, Ethiopia, European Union (EU), Finland, Hungary, India, Kenya, Malta, New Zealand, Singapore, South Africa, Thailand

3. Engagement activities

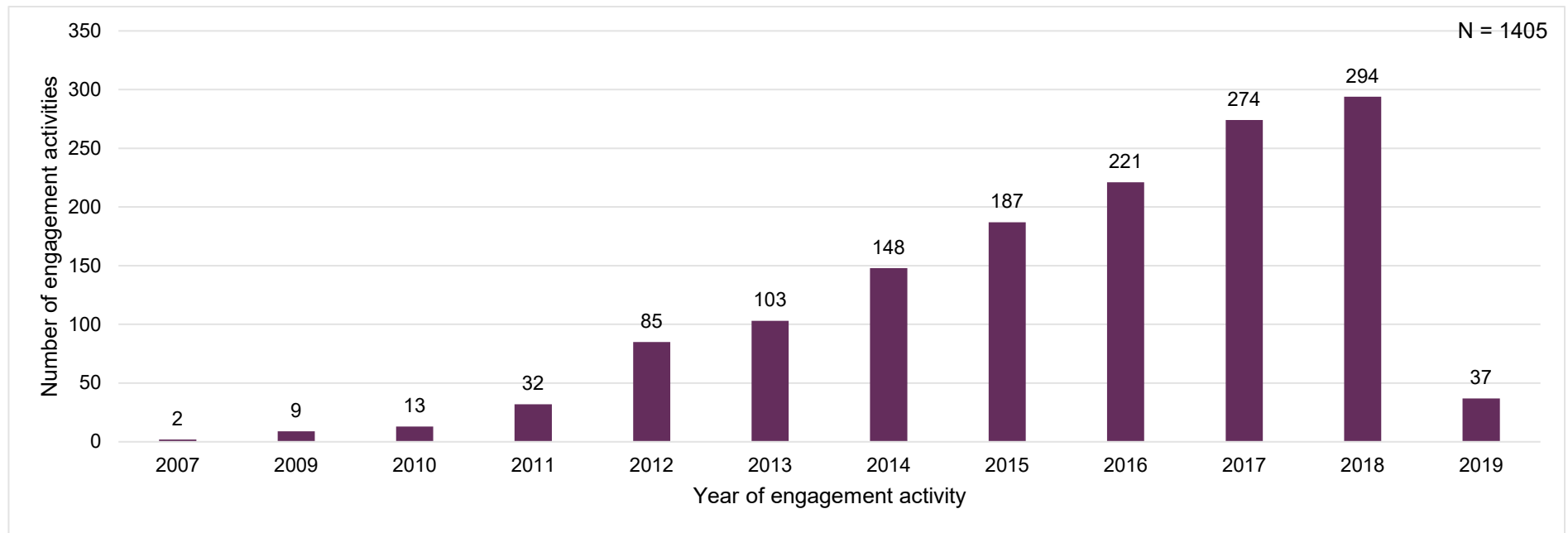
Communicating science to a wider audience is an important part of a scientist’s role. This includes engaging the public, researchers, policymakers and students in a number of different ways. Engagement activities can include open days, presentations, school visits, and articles published in magazines, newsletters or on an online platform. Some engagement activities take place at events, which may be organised by the NC3Rs or other organisations but can also be driven by the Grant holders.

From 173 Grant holders reporting on 197 grants

- A total of 1407 unique engagement activities were reported
- Average of 7 engagement activities reported per grant

3.1. Number of engagement activities reported per year

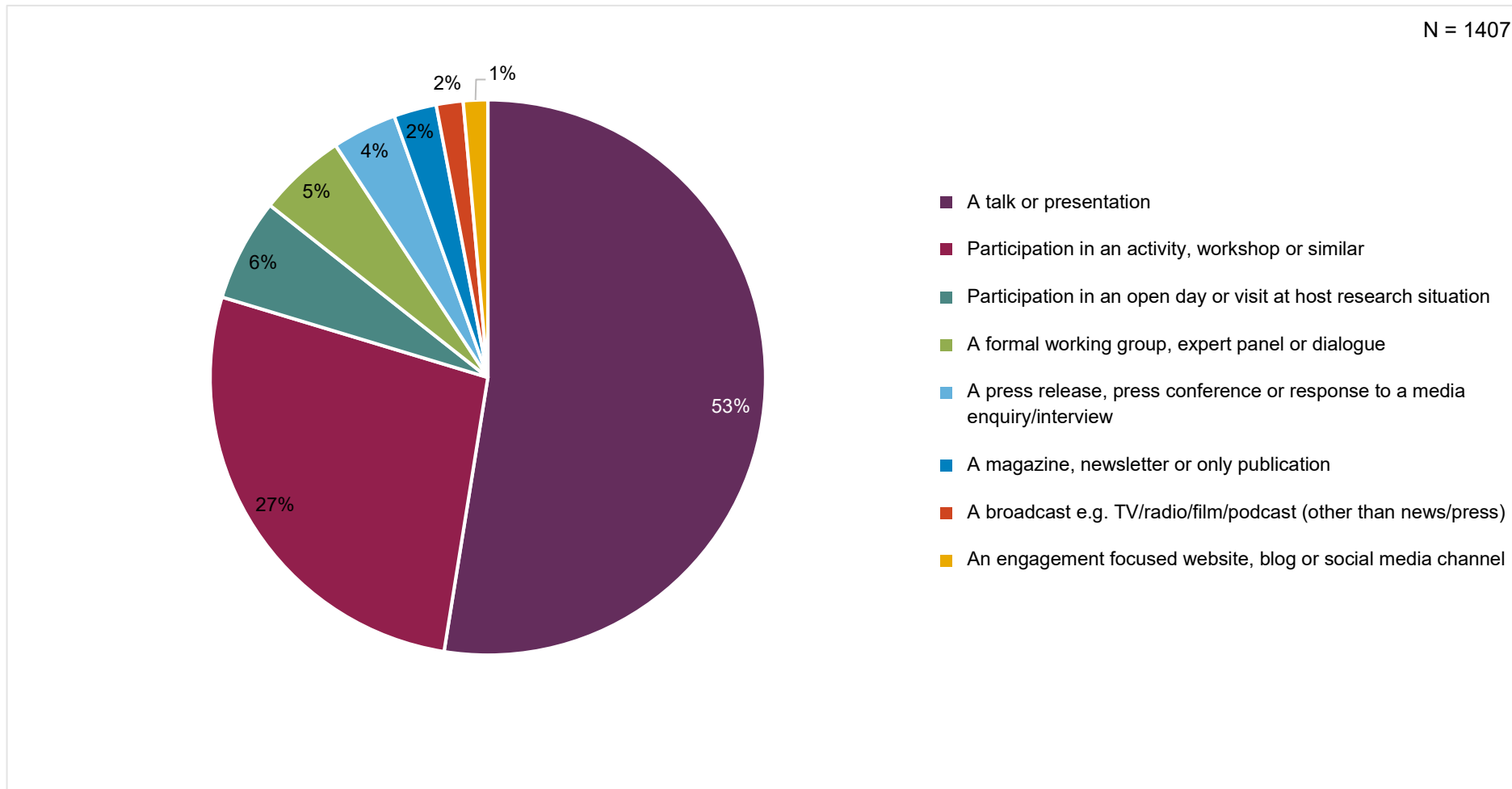
NC3Rs Grant holders report, on average, approximately 205 unique engagement activities a year*.



* The average is calculated from data for 2013 – 2018 as there is a complete dataset for these years. See page 1 for explanation.

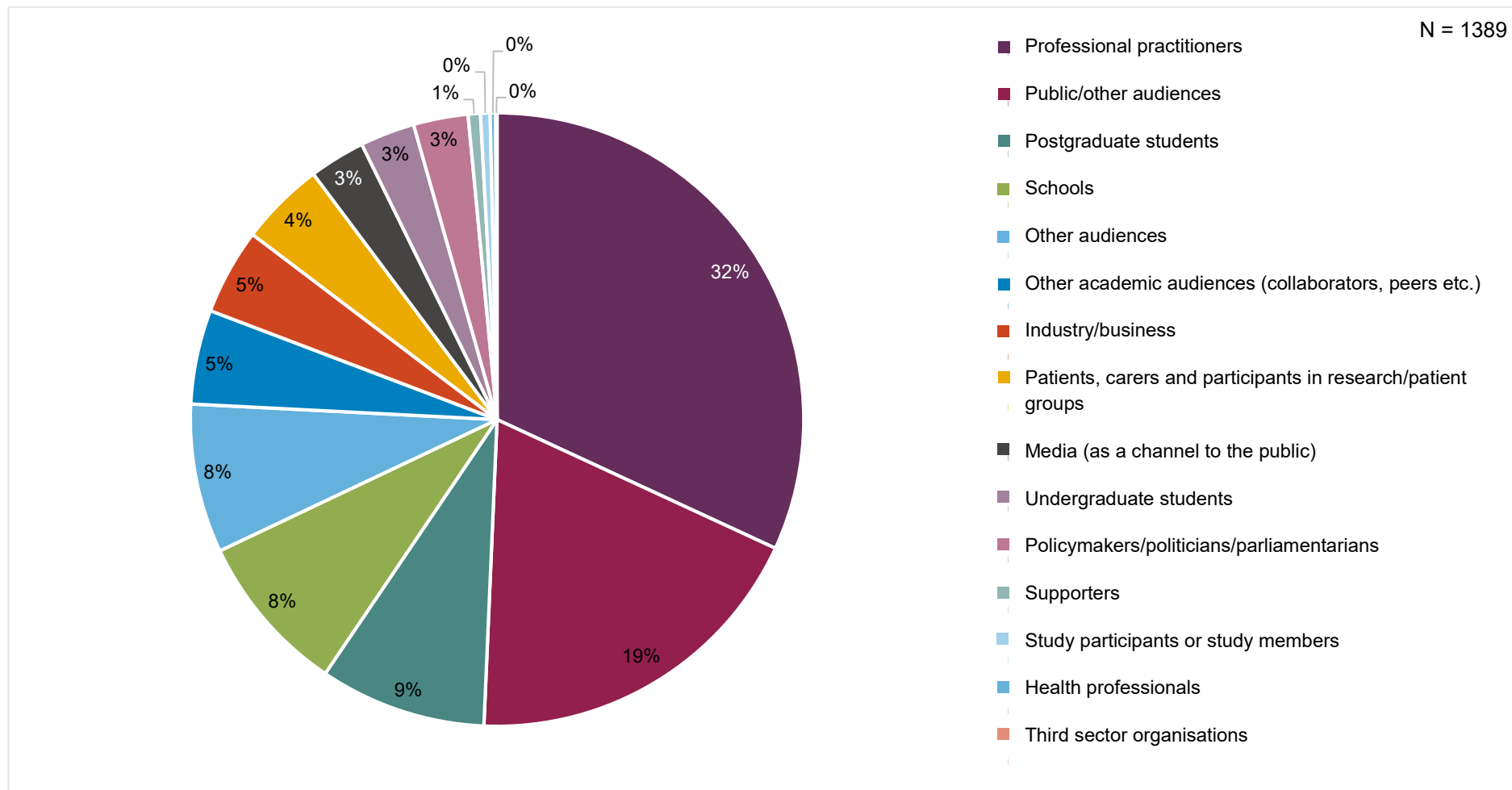
3.2. Engagement activity types

While NC3Rs Grant holders most commonly give talks or presentations they also actively participate in workshops, open days and working groups.



3.3. Engagement audience types

The majority of NC3Rs Grant holders engagement is with scientific audiences but 47% are non-specialist audiences.



4. Further funding

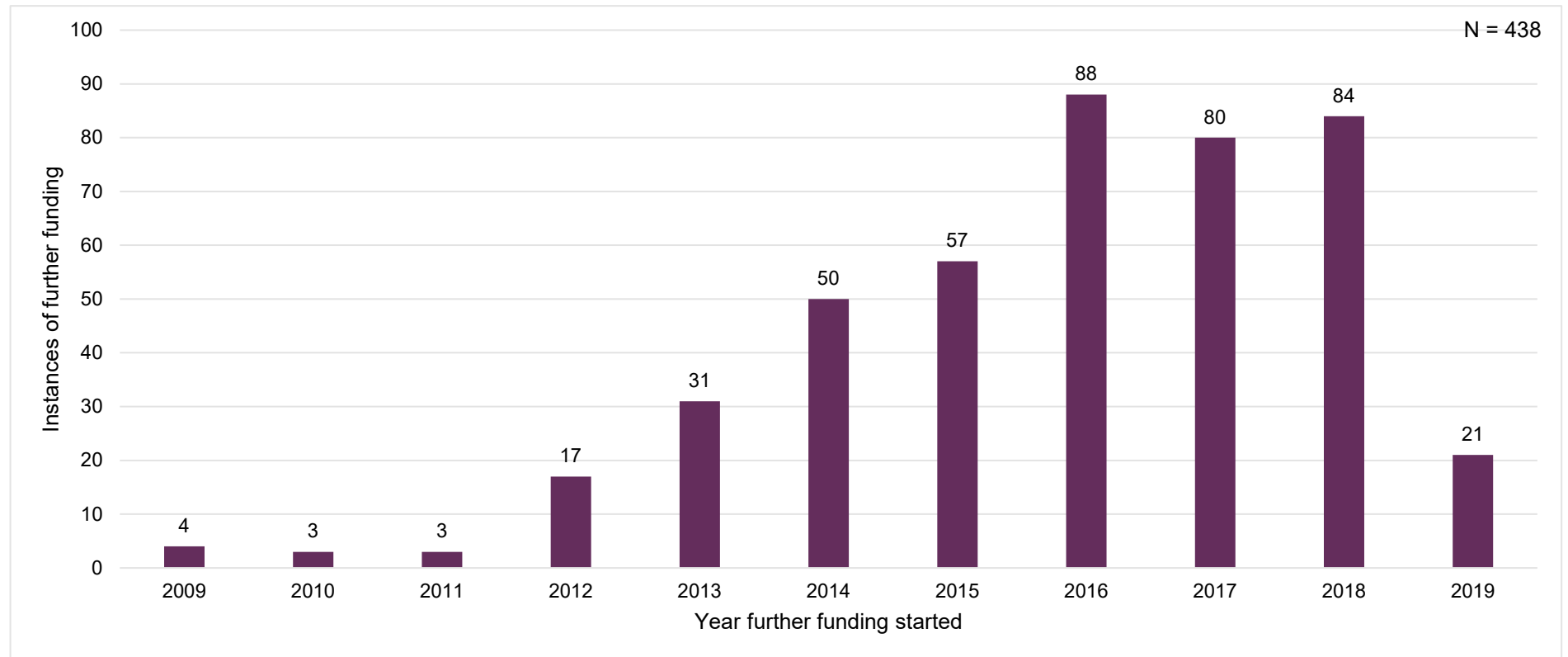
The analysis below highlights the number of instances of further funding secured by Grant holders including the award type, funding source and amount.

From 126 Grant holders reporting on 140 grants

- A total of 438 unique instances of further funding were reported
- Average of 3 further funding sources reported per grant

4.1. Number of instances of further funding reported per year

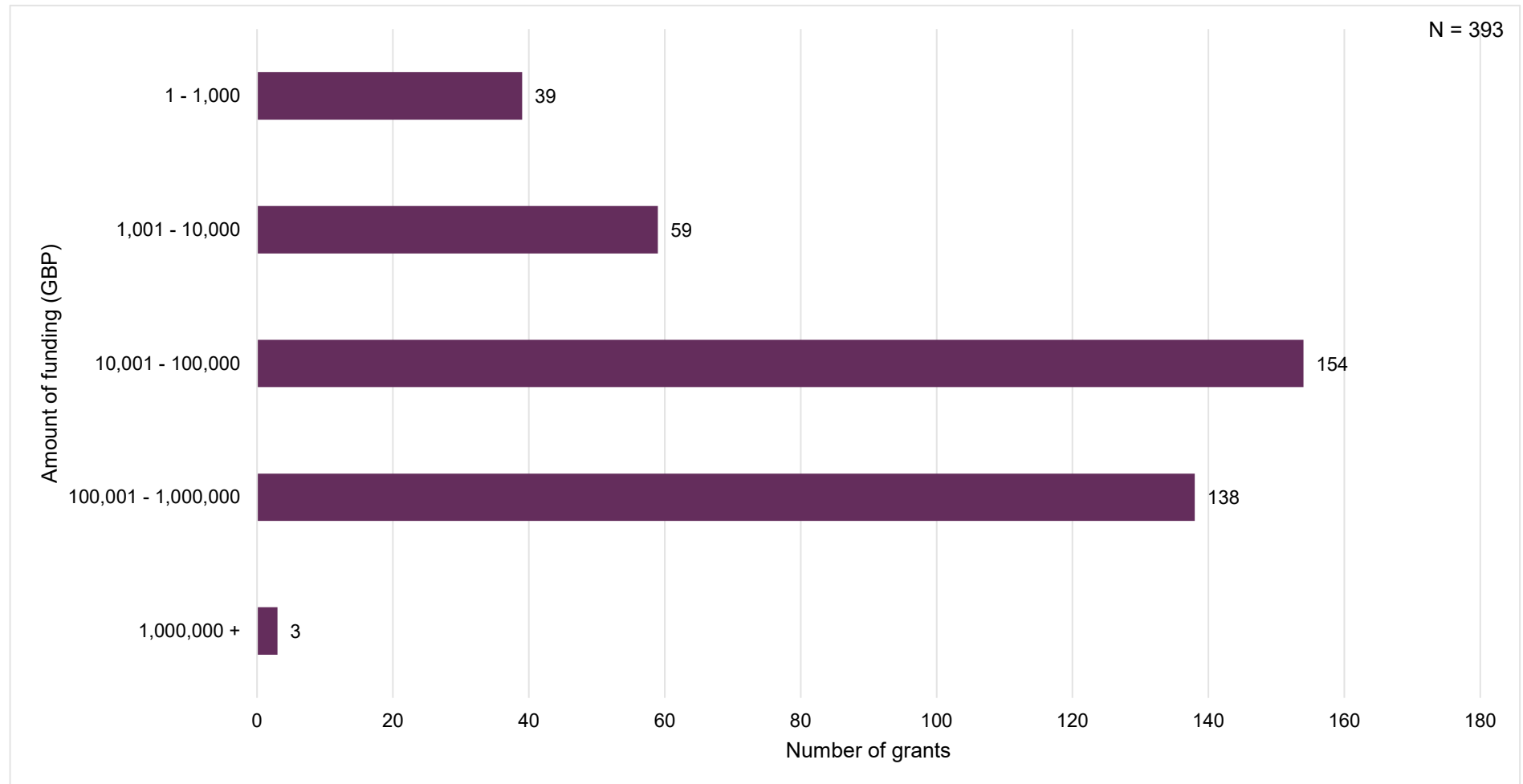
NC3Rs Grant holders report an average of 65 instances of further funding per year*.



* The average is calculated from data for 2013 – 2018 as there is a complete dataset for these years. See page 1 for explanation.

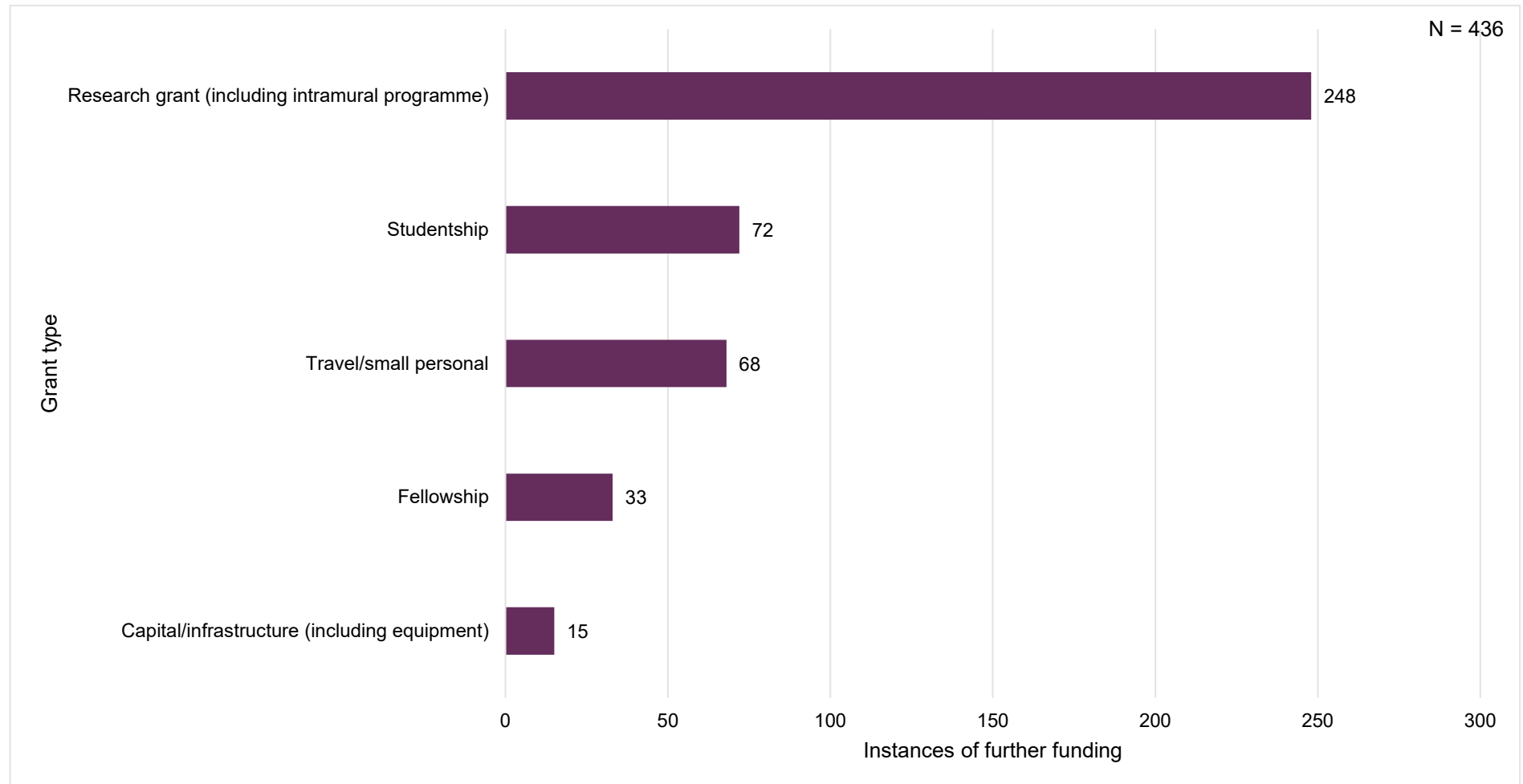
4.2. Instances of further funding by award value

NC3Rs Grant holders receive on average £483,431 of further funding in connection with their NC3Rs grant.



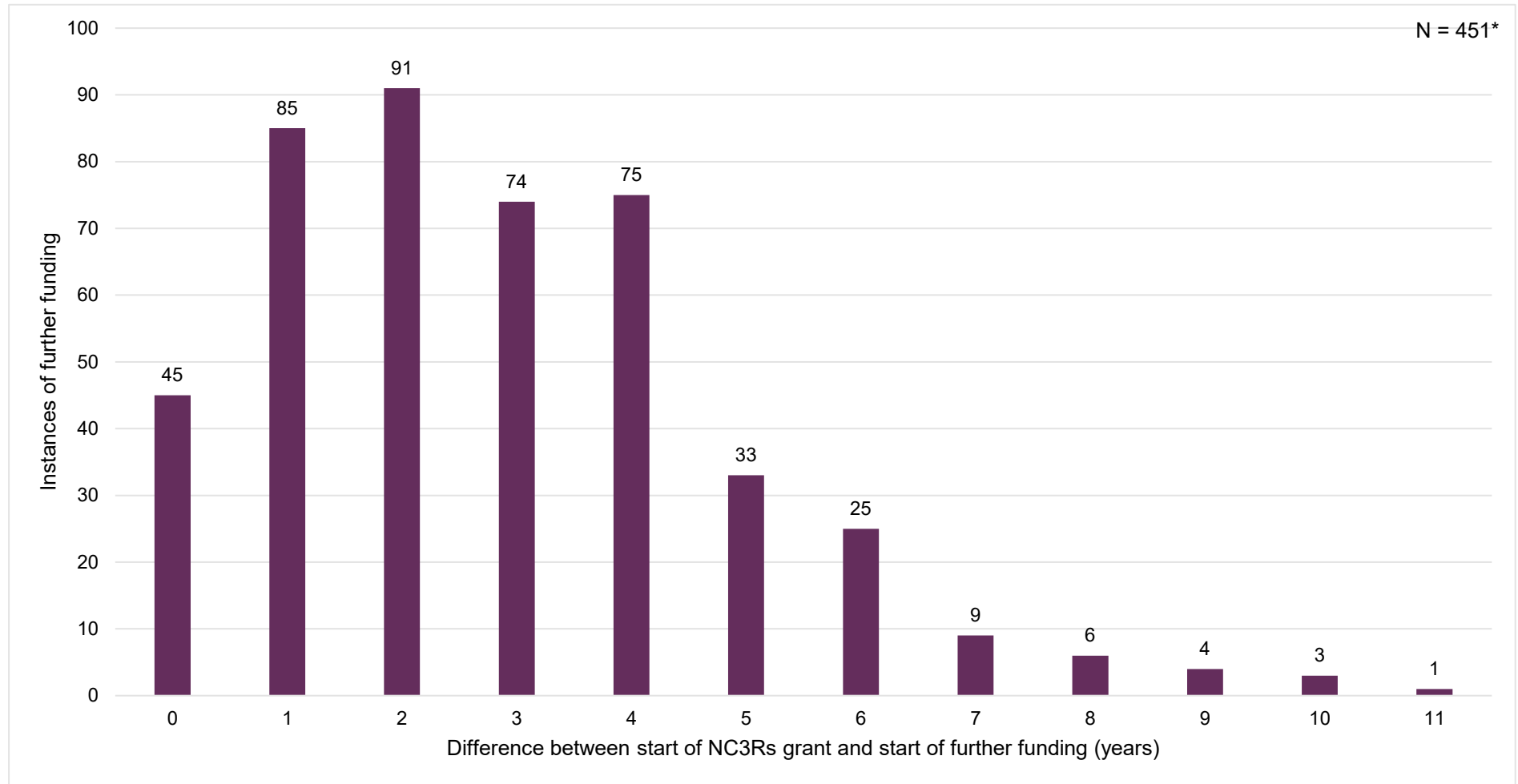
4.3. Instances of further funding by grant type

Research grants are the most frequently reported further funding type received by NC3Rs Grant holders.



4.4. Time taken for instance of further funding to be reported

On average, NC3Rs Grant holders report receiving further funding three years after the start date of their NC3Rs grant.



* This includes further funding attributed to multiple grants, instance of further funding may have been counted multiple times in this analysis.

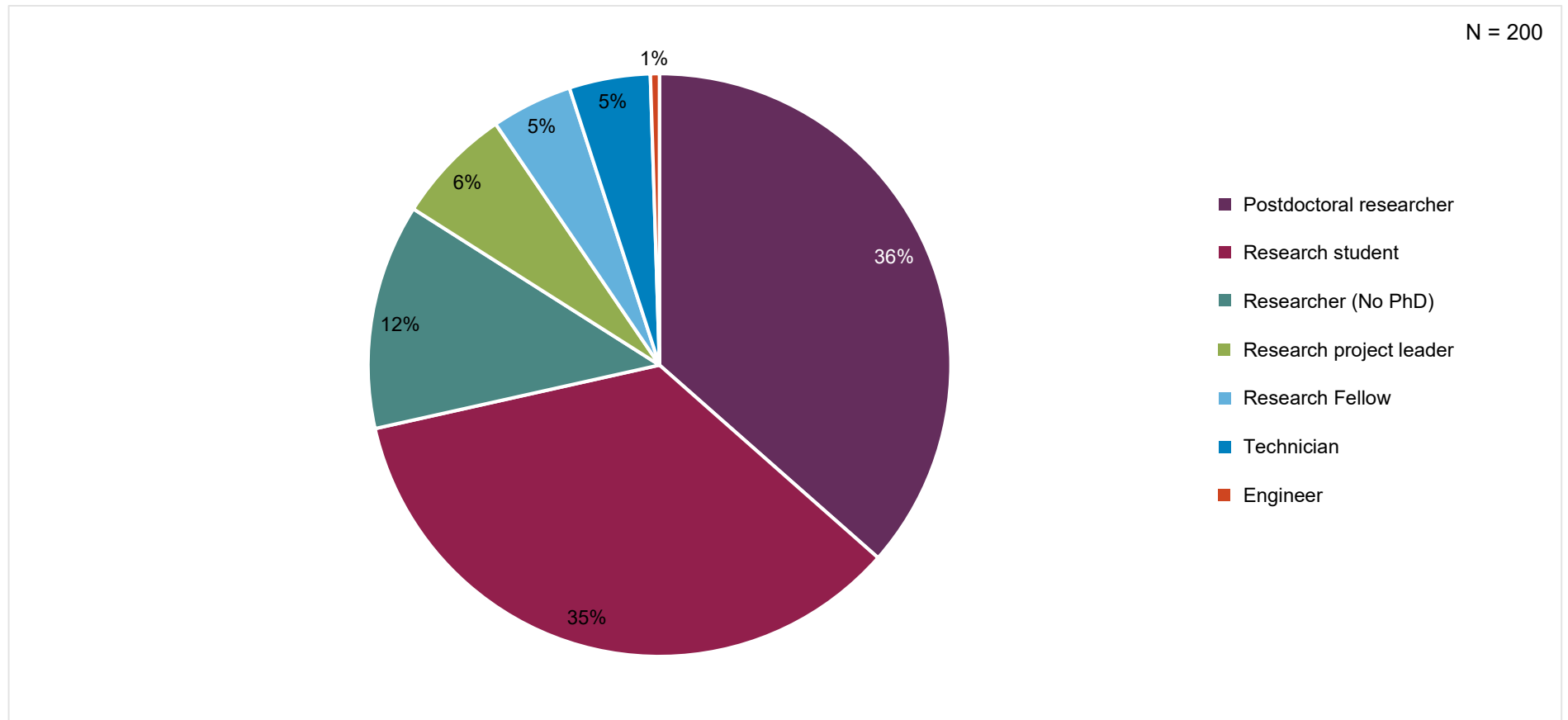
5. Next destinations

Grant holders are asked to report next destinations for researchers working on the project. The analysis below highlights researchers who have moved on to a new role and what sector the new role is in.

From 103 Grant holders reporting from 111 grants:

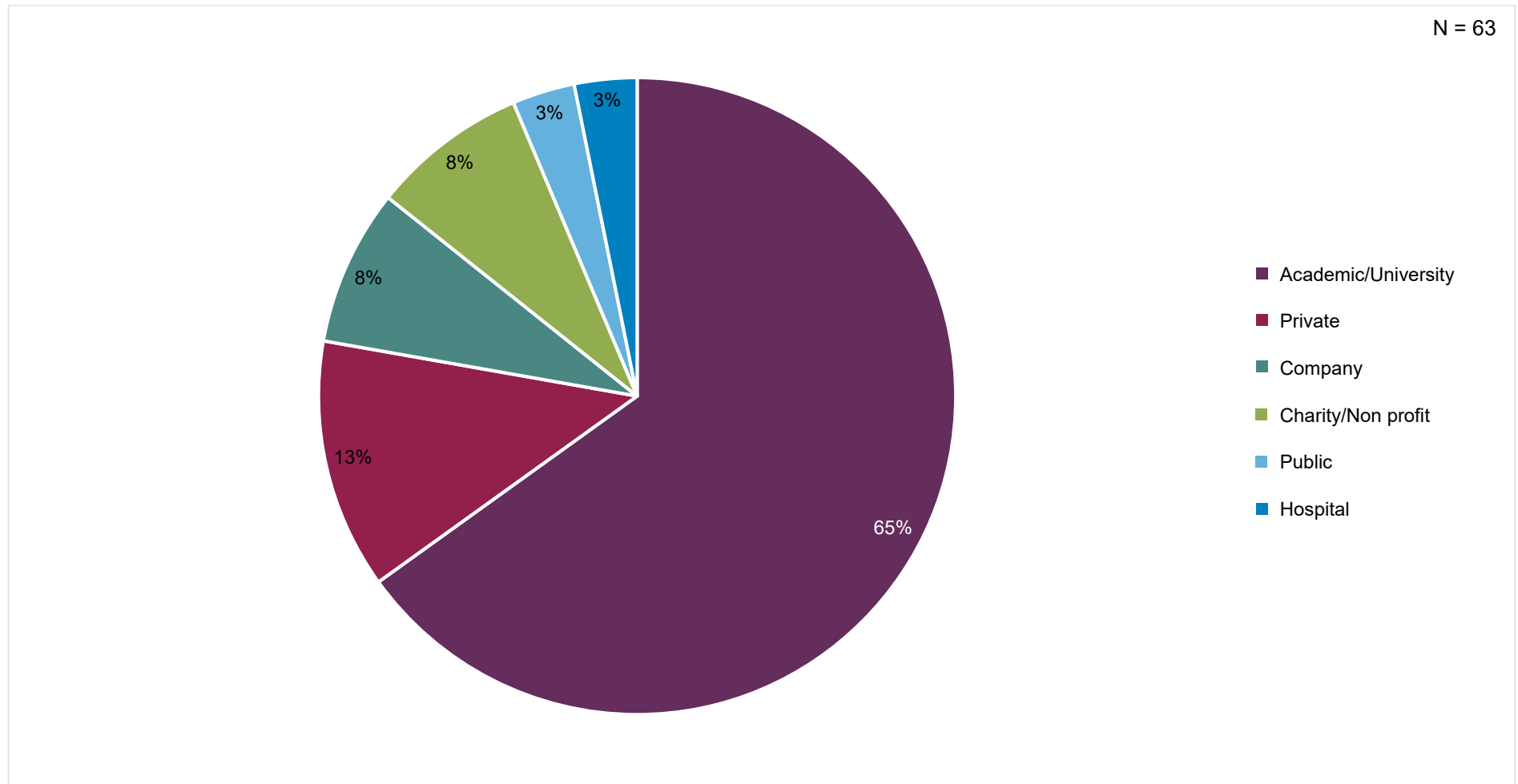
- 200 people on NC3Rs grants moved to a new role

5.1. Types of role leaving NC3Rs support



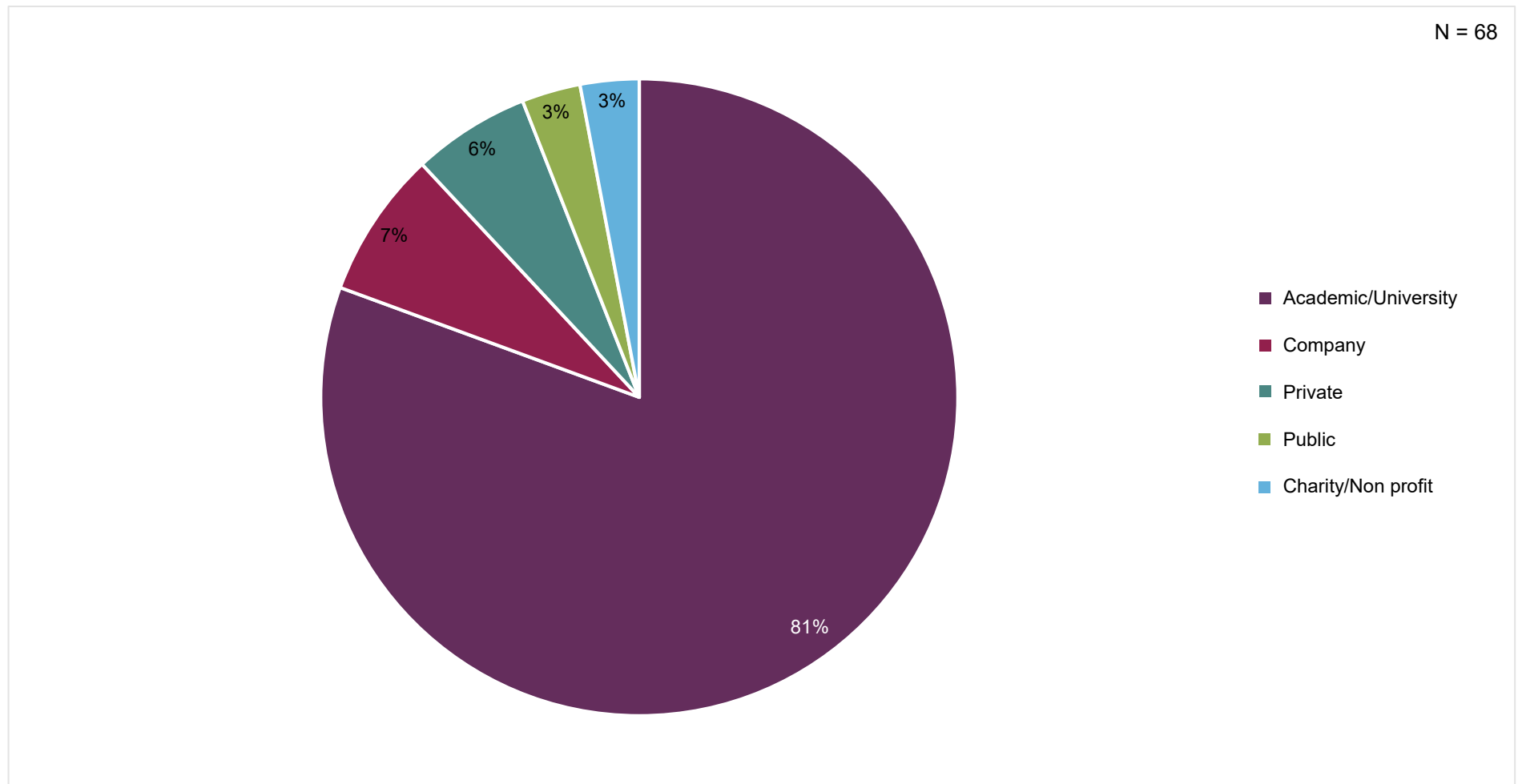
5.2. Next destination of research students (PhDs, masters, undergraduates)

65% of research students report moving to a role in academia.



5.3. Next destination of postdoctoral researchers

81% of postdoctoral researchers move on to positions within a university.



6. Awards and recognition

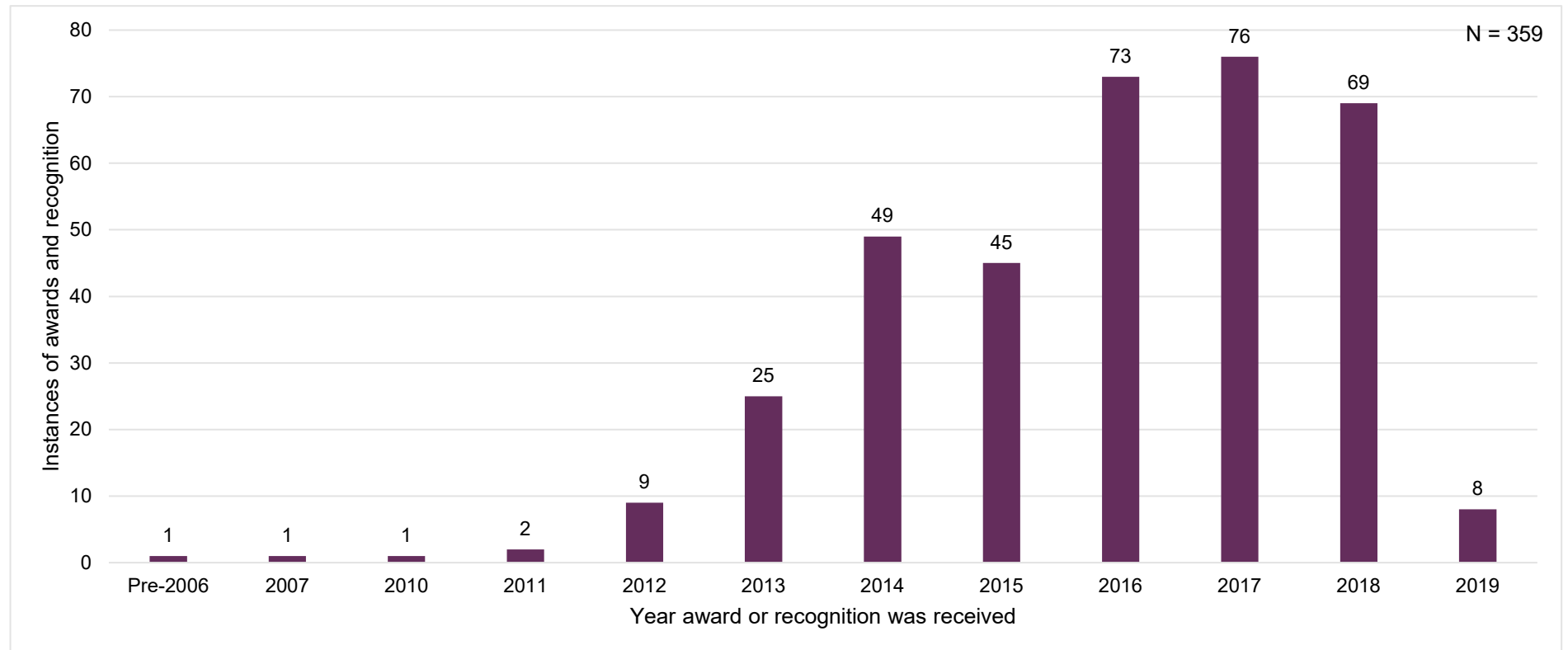
Many NC3Rs Grant holders are recognised for their research either in the form of a prize or being appointed to a prestigious position. This section highlights achievements arising from NC3Rs funding.

From 111 Grant holders reporting on 102 grants

- 363 unique awards and recognitions reported

6.1. Number of awards or recognition received by year

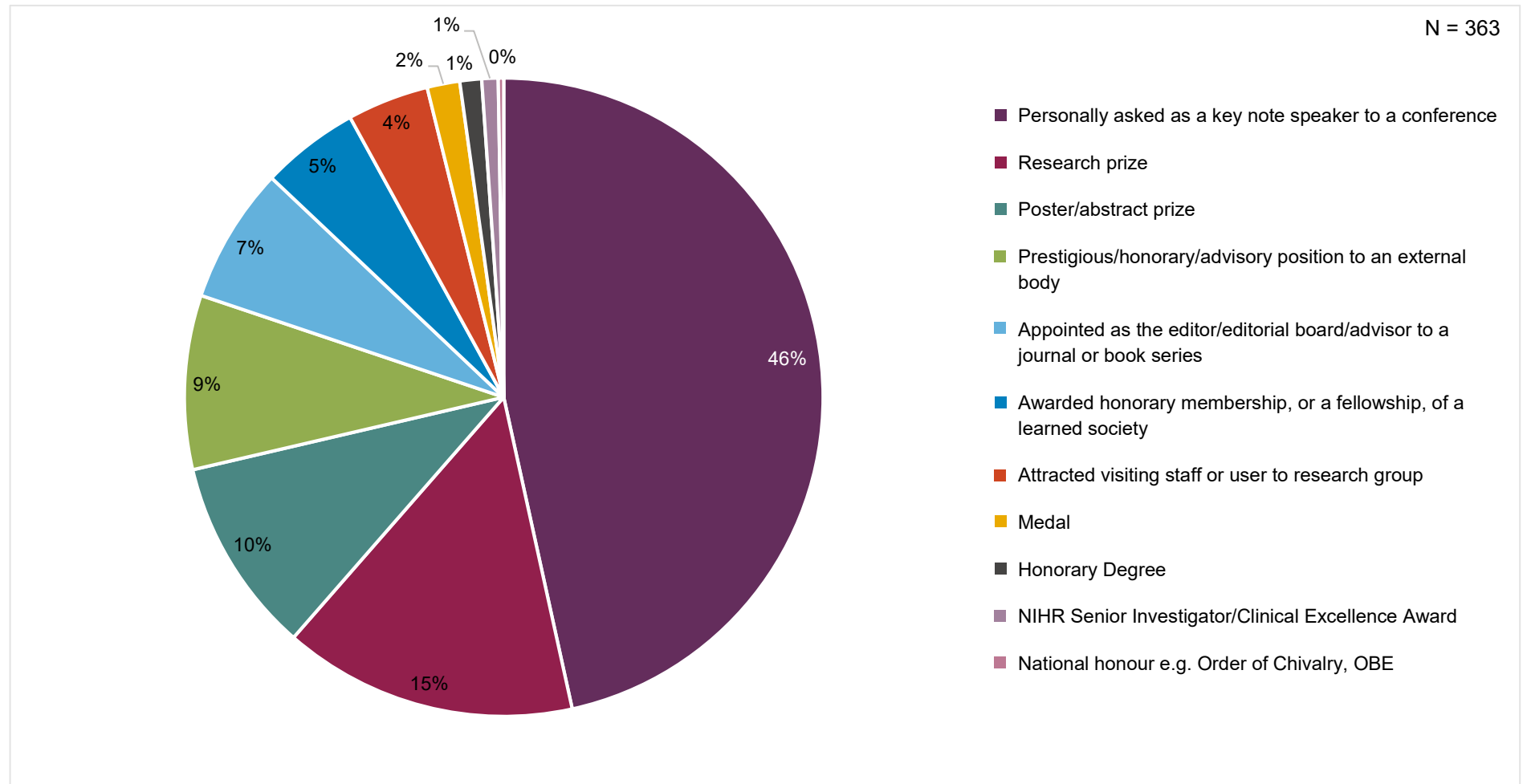
An average of 56 awards and recognitions have been reported each year by NC3Rs Grant holders*.



* The average is calculated from data for 2013 – 2018 as there is a complete dataset for these years. See page 1 for explanation.

6.2. Instances of awards and recognition by type

46% of reported awards and recognitions are NC3Rs Grant holders being asked to present as a key note speaker at a conference.



7. Influence on policy and practice

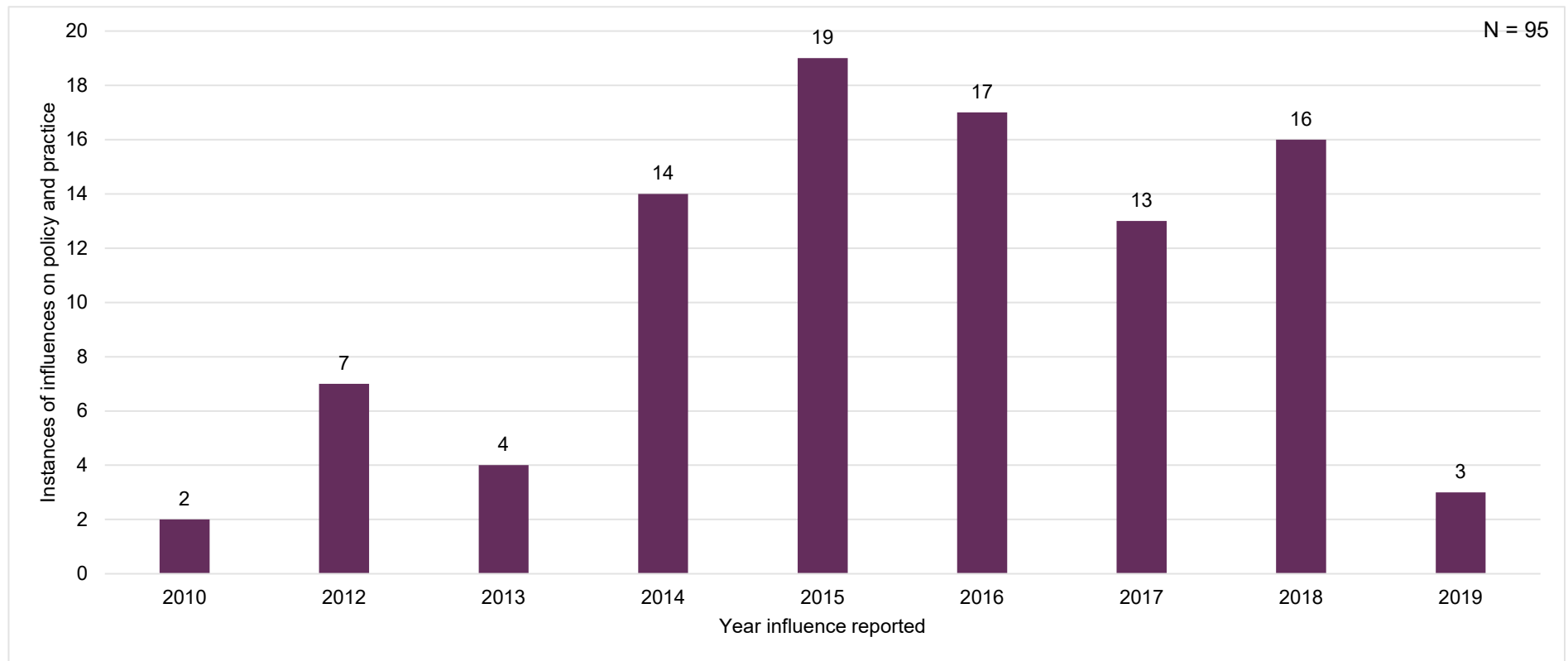
Influences on policies and practices that affect society or the economy can happen at many levels including locally, regionally, nationally or internationally. Data are included where projects are shaping recommendations in a systematic review, guidelines or policy documents.

From 41 Grant holders reporting on 44 grants:

- 96 unique instances of influence on policy and practice were reported

7.1. Number of policy influences by year

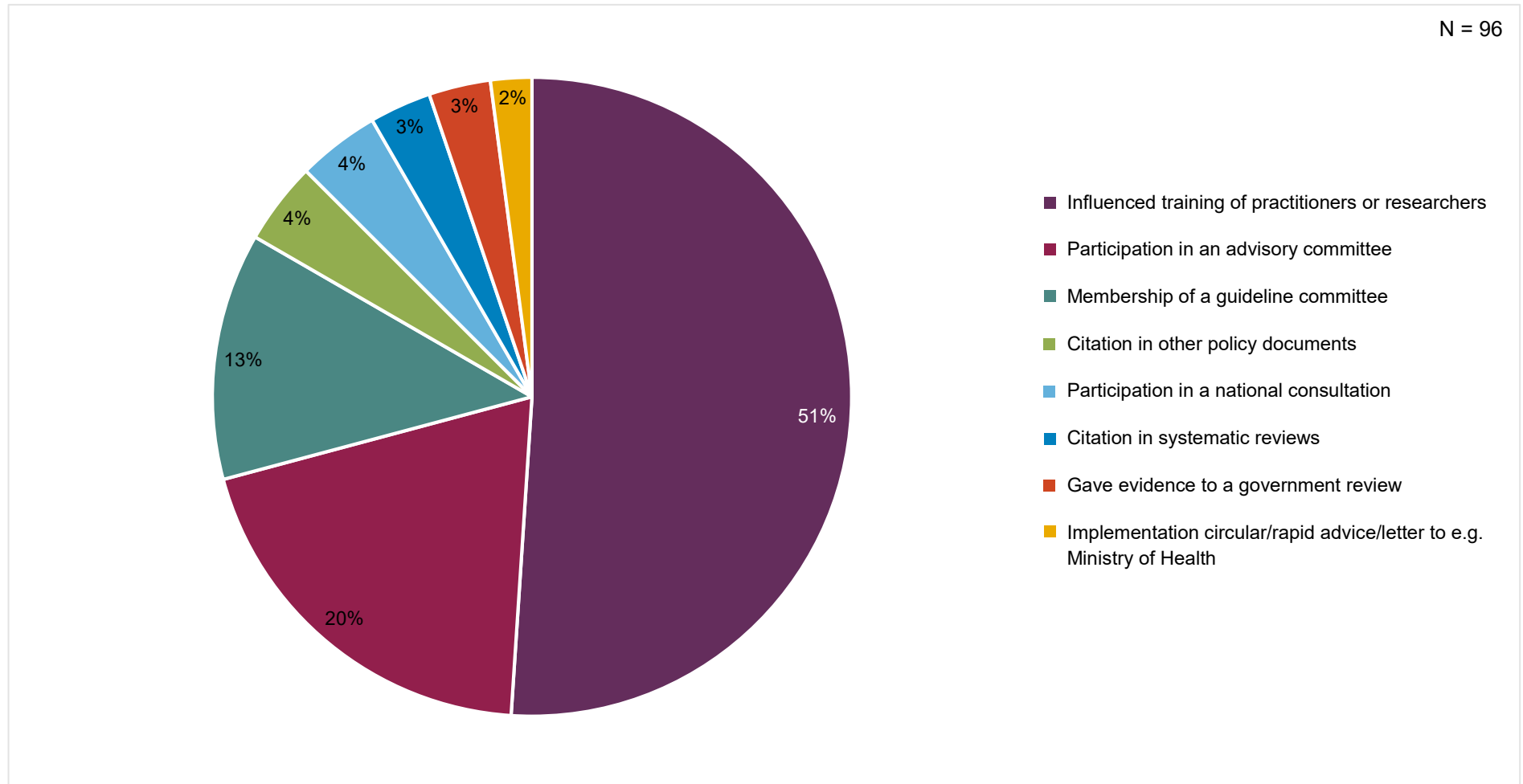
An average of 14 instances of policy influence are reported each year by NC3Rs Grant holders*.



* The average is calculated from data for 2013 – 2018 as there is a complete dataset for these years. See page 1 for explanation.

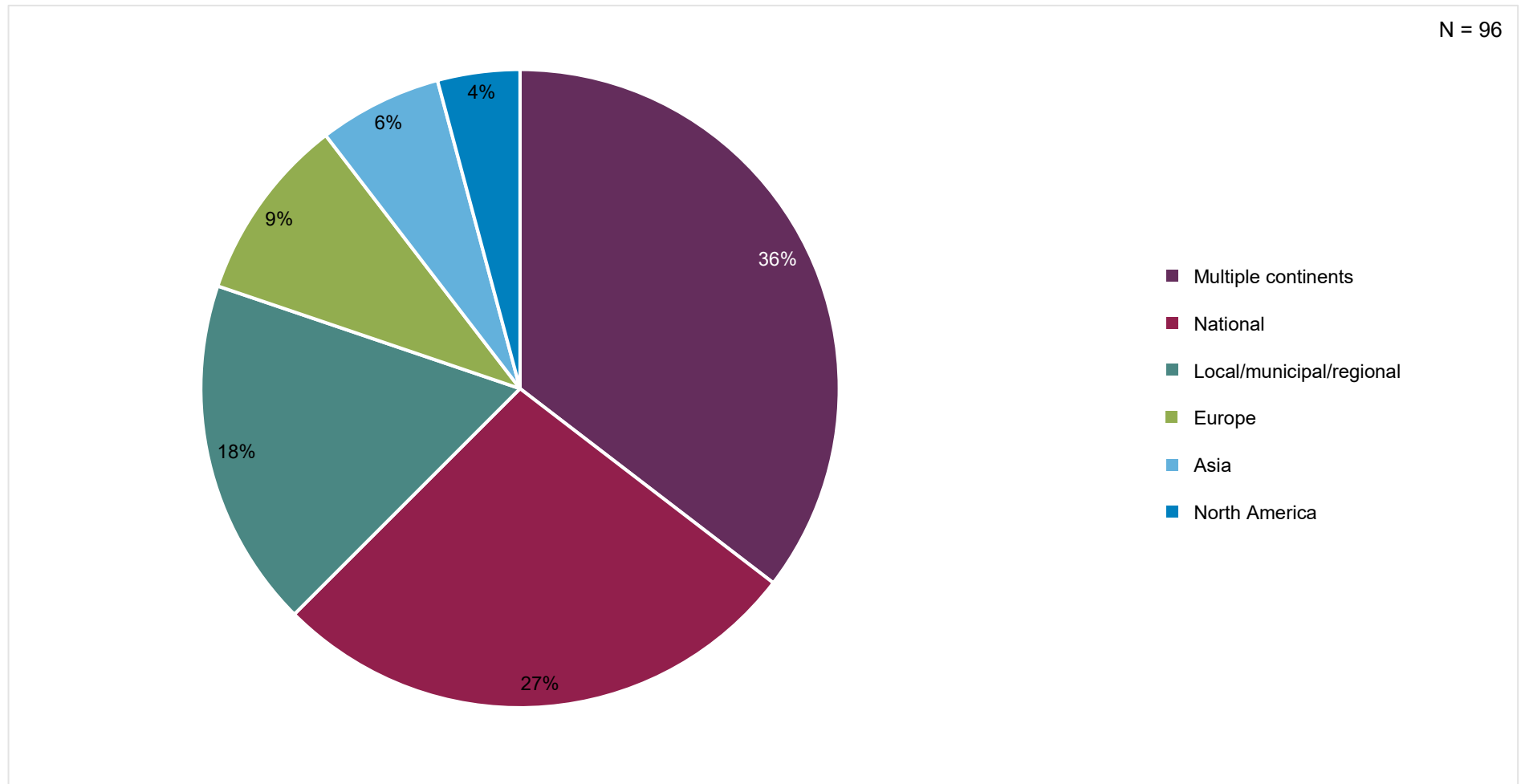
7.2. Instances of policy influence by type

51% of policy influences are Grant holders directly influencing the training of other practitioners or researchers.



7.3. Instances of policy influence by location

55% of instances of policy influence reported by NC3Rs Grant holders are international.



8. Research Materials

As part of a research project, new materials can be developed that can have an impact on the project, or research of others. These may be new models, new cell lines or the development of new software. This section highlights the materials developed through NC3Rs grants.

From 115 Grant holders reporting from 122 grants:

- 213 instances of research materials developed were reported

8.1. Instances of research methods by type

43% of the research methods generated by NC3Rs Grant holders are assays or reagents, *in vitro* models or cell lines.

