Europe+ online survey on fundamental research

March 2018

Survey Data Analysis

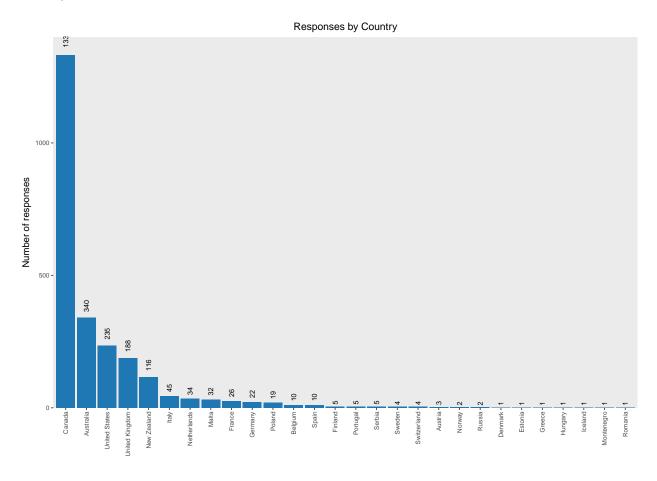
Note that numbers not all the same because respondents did not always answer every question

Results

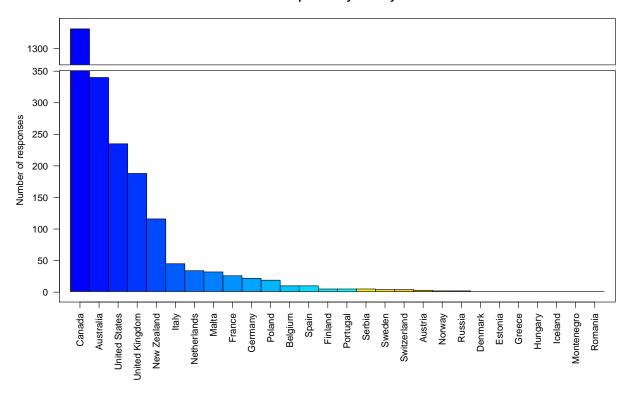
In total, 2445 researchers completed the online survey. Of these, almost xxxxx were male (71%) and xxxxx were female (29%); xxxx proportion either did not input their gender or selected other. xxxx of the survey respondents (92%) were either senior academics (64%), defined as those researchers with more than ten years experience applying for research grants since completion of their PhD, or early career academics (28%) (Figure 4.1). xxxxx also came from post-doctoral researchers (6%), non-academic researchers (2%), or those who did not indicate their career stage (0.4%).

Researchers from many different disciplines were represented in the survey. 52 percent of responses came from either the natural or physical sciences (Figure 4.2). The remaining responses were spread amongst the medical and life sciences (23%), engineering (10%), interdisciplinary research (6%), and social sciences and humanities (7%).

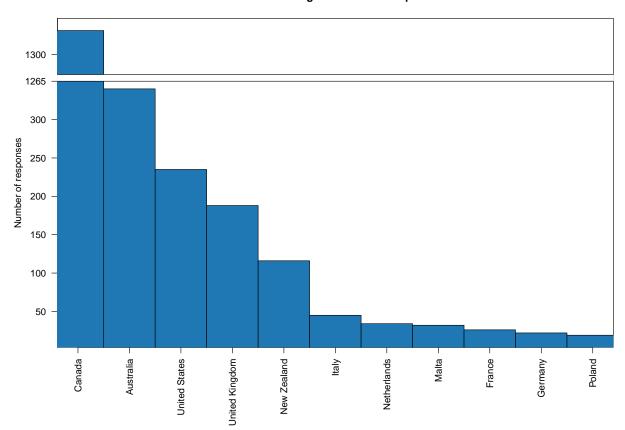
Figures of number of responses by country (these are also saved as individual PDFs)



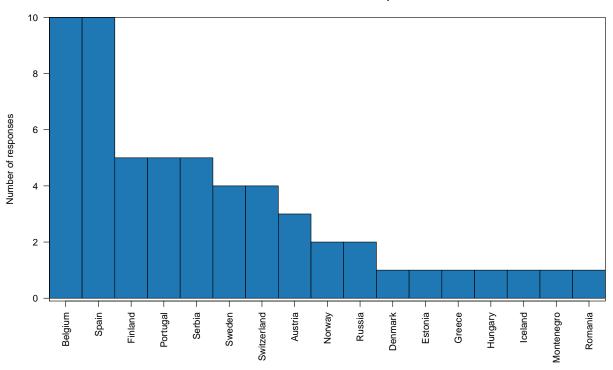
Responses by country

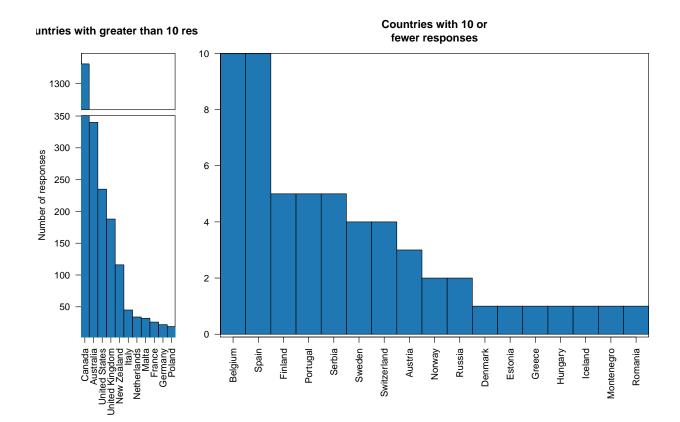


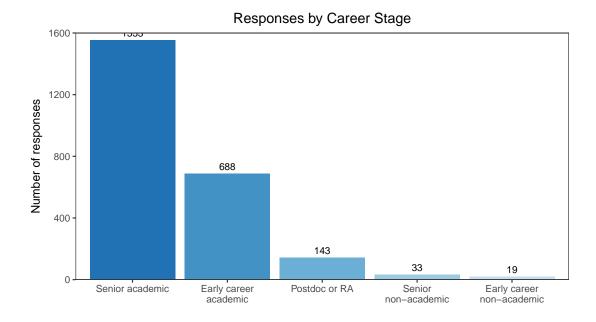
Countries with greater than 10 responses



Countries with 10 or fewer responses







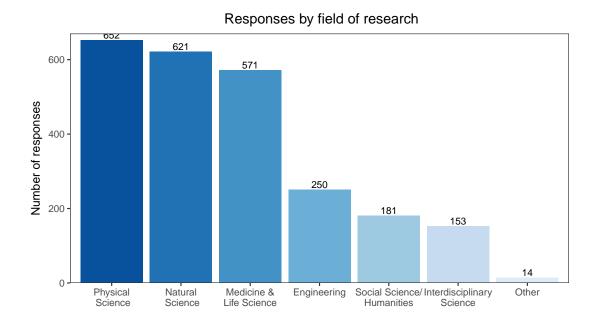


Figure 2: Figure 4.2 Survey responses by field of research 7

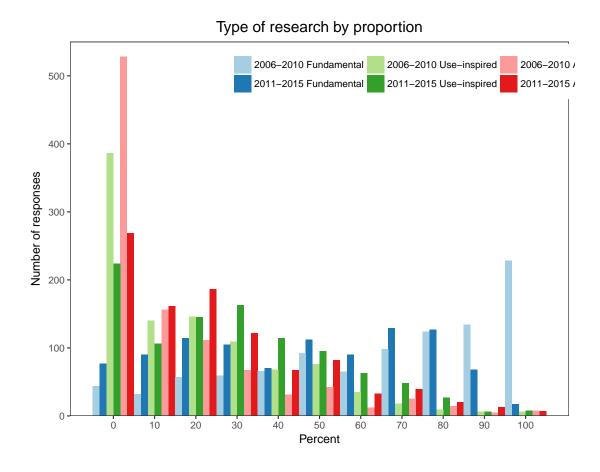


Figure 3: Figure 4.3 Respondents type of research describe in proportal amounts of fundamental use-inspired and applied research. Researchers were questioned about the percentage of funding allocated to Fundamental Use-inspired or Applied research in the past and in their current research.

Type of research by proportion **Fundamental** 2006-2010 Number of responses 2011–2015 Use-inspired 2006-2010 Number of responses 2011-2015 **Applied** 2006-2010 Number of responses 2011–2015 Percent

Figure 4: Figure 4.3 (different layout) Respondents type of research describe in proportal amounts of fundamental, use-inspired and applied research. Researchers were questioned about the percentage of funding allocated to Fundamental, Use-inspired or Applied research in the past and in their current research.

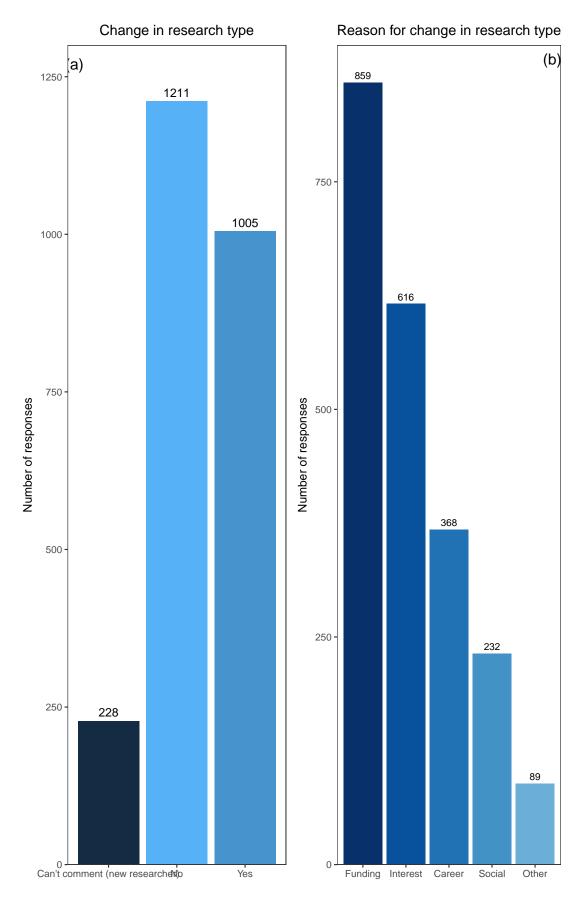


Figure 5: Figure 4.4a&b Change in research type proportions and the reasons. Researchers were asked to answer yes, no, or can't comment on if their type of research had changed in the last 10 years and to select what reasons for the change applied to them.

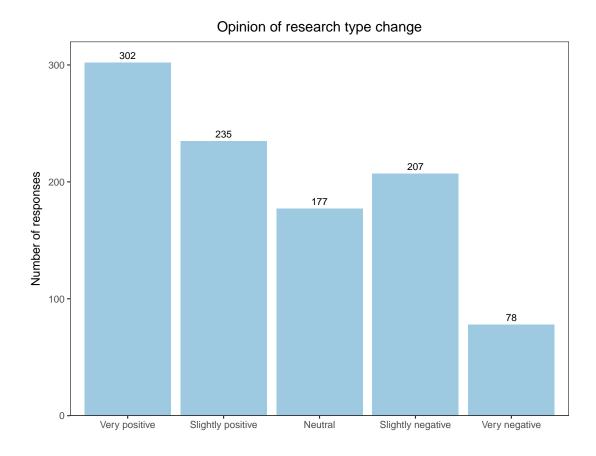


Figure 6: Figure 4.5 View of change in proportion of research. Researchers were asked how they viewed the change in the type of research they conduct/supervise!

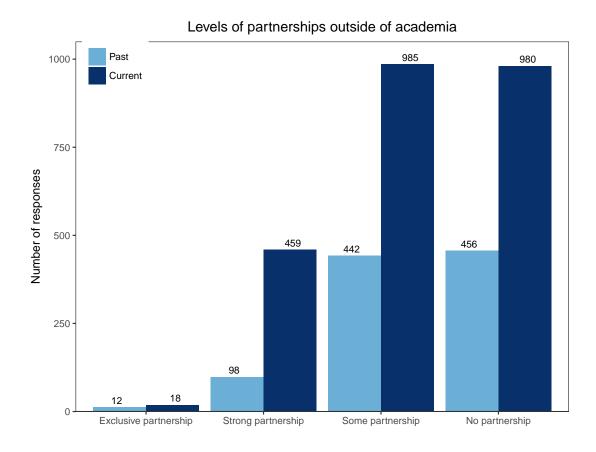
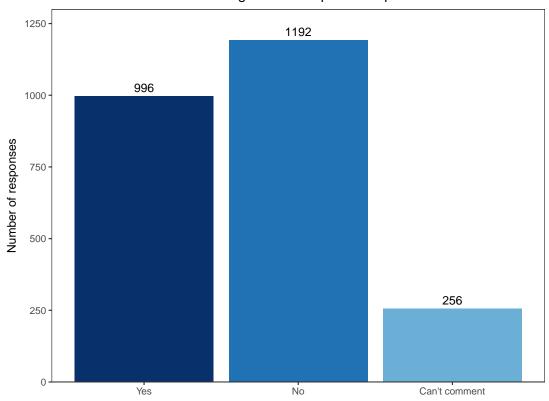


Figure 7: Figure 4.6 Current vs past level of partnership outside of academia. Researchers indicated the level of partnership that their current and past (10 years ago) research program had outside of academia).

Change in level of partnership



Reason for change in level of partnership

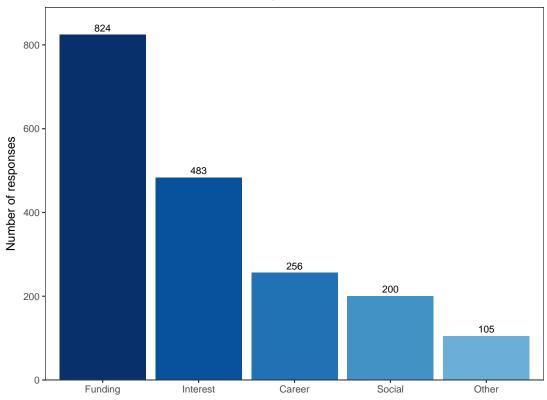


Figure 8: Figure 4.7a&b Did it change and reasons for change in level of external research partnerships over the past decade. 13

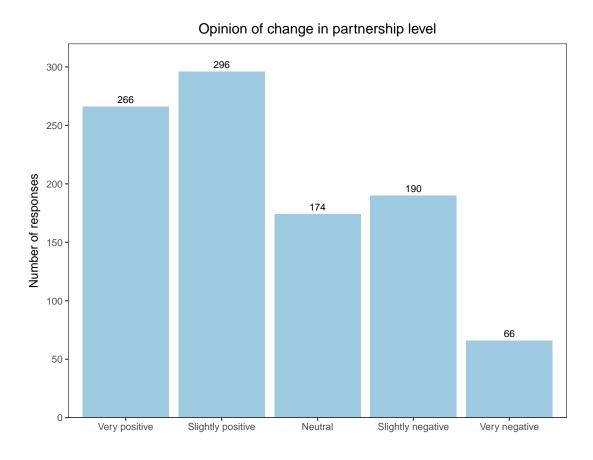


Figure 9: Figure 4.8 View of change in external partnerships. Researchers were asked how they viewed the change in the level of partnership with external groups.

Number of research grant applications

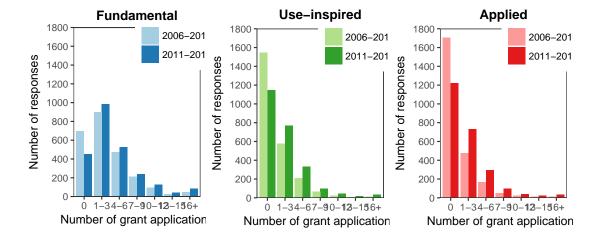
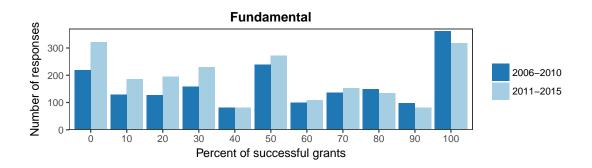
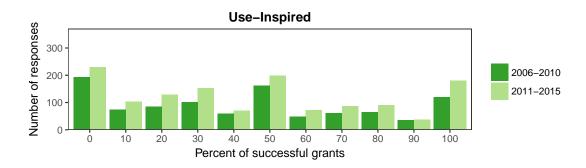


Figure 10: Fig. 4.9 Number of research grant applications by research category in 2006-2010 and 2011-2015. 15





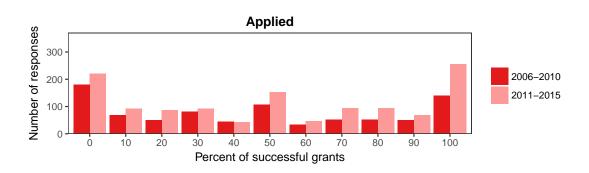


Figure 11: Fig 4.10 Research grant application success over the past 10 years. Researchers were asked to estimate the percentage of their research grant applications that were successful, in 2006-2010 and in 2011-2015. Respondents also had the choice to answer No need for applications for this research type.

Change in grant success rates **Fundamental** 993 950 900 600 260 300 184 32 6 0 -Use-inspired Number of responses 900 656 560 600 442 392 300 129 120 0 **Applied** 900 622 601 600 547 269 300 223 83 0 -Can't Increased Increased Stayed the Decreased Decreased considerably slightly same slightly considerably comment

Figure 12: Fig 4.11 Change in grant success rates over the past 10 years. Researchers were asked if they thought that grant success rates have changed in the 17 past 10 years, for each research category.

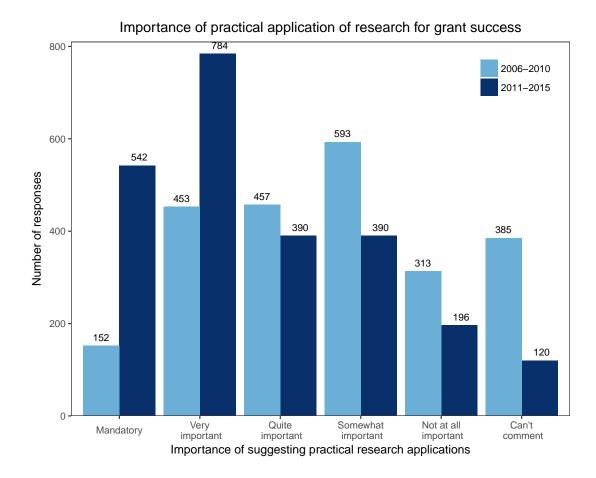


Figure 13: Fig 4.12 Importance of practical application of research over the past 10 years. Researchers were asked how important it was to suggest practical applications of their research to ensure that the grant was successful, in 2006-2010 and in 2011-2015.

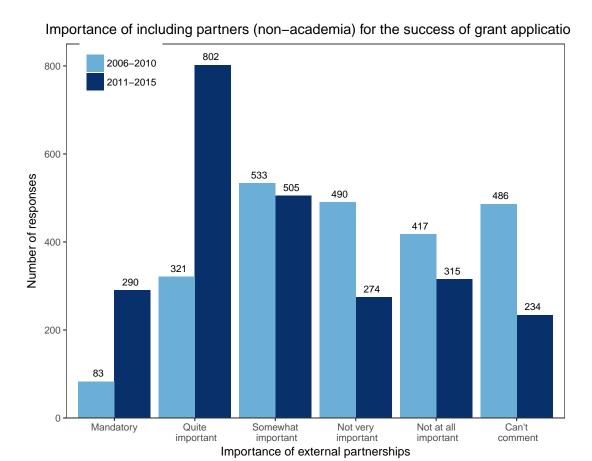
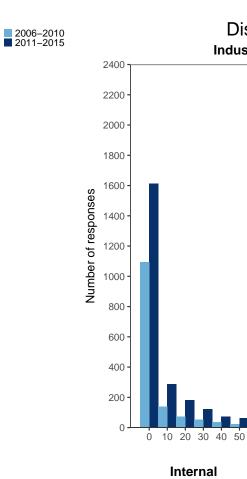
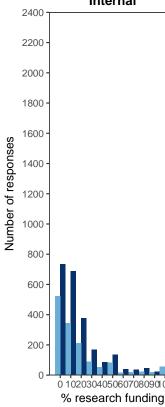


Figure 14: Fig 4.13 Importance of including partners from for-profit or non-governmental sectors in grant success. Researchers were asked how important it $\frac{19}{2}$ to include external partnerships in their research to ensure that the grant was successful, in 2006-2010 and in 2011-2015.





Perceived importance of fundamental research to their government 750 632 622 Number of responses 500 250 156 40 0 -Very important Somewhat important Not very important Not at all important Can't comment

Figure 15: Fig 4.15 Perceived importance of fundamental research to their government. Researchers were asked how important they thought fundamental research was to the their government. Responses were/were not significantly different between genders.

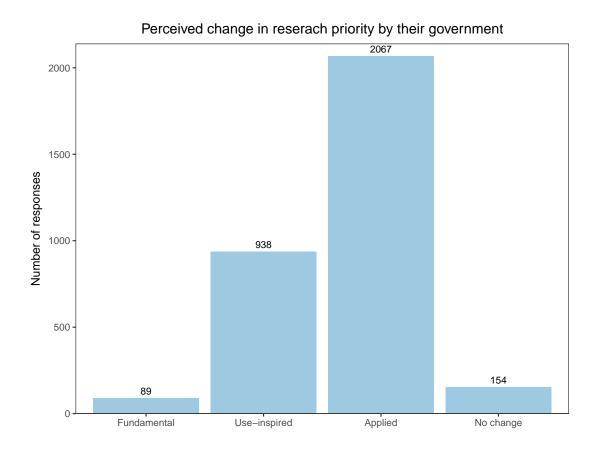


Figure 16: Fig 4.16 Perceived change in research priority by their government. Researchers were asked whether any types of research had become higher priority for the their government. Responses were/were not significantly different between genders.

Anticipated change in research funding **Fundamental** 0 -Use-inspired Number of responses **Applied** 0 -Can't Increase Increase Decrease Decrease Stay the same considerably slightly slightly considerably comment

Figure 17: Fig 4.17 Anticipated change in research funding in next five years. Researchers were asked whether the availability of research funding would change in $\frac{2}{100}$ next five years.

Effect of funding changes on the next generation of researchers

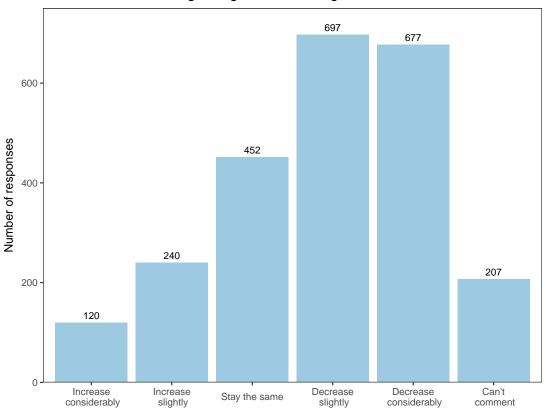


Figure 18: Fig 4.18 Effect of change in research funding on research careers of next generation. Researchers were asked if they though that changes in funding availability would influence the likelihood of the next generation pursuing careers in research. Responses were/were not significantly different between genders.