Submitted by five early career researchers at the University of Cambridge:

Dr Corina Logan, Leverhulme Early Career Researcher
Dr Laurent Gatto, Senior Research Associate
Dr Ross Mounce, Open Access Grants Manager, Arcadia Fund (previously at Cambridge)
Dr Adrian Currie, Postdoctoral Research Associate
Dr Stephen Eglen, Reader

I. Several of us early career researchers (ECRs) at the University of Cambridge launched a campaign called Bullied into Bad Science (http://bulliedintobadscience.org). We are concerned about the desperate need for publishing reform to increase transparency, reproducibility, timeliness, and academic rigour of the production and dissemination of scholarly outputs (see Young et al. 2016, Smaldino & McElreath 2016). The campaign has now spread globally and, thus far, 124 ECRs (69 from the UK) are united in their drive for change and we are urging individuals and institutions to take eight actions (see Petition below) to improve academic culture for ECRs by positively valuing open research practices. Additionally, 69 non-ECRs, including senior academics, have endorsed the campaign and listed the actions they are taking to help change academic culture.

II. You are in a unique position to support a culture shift in academia because of your influential position in determining the direction of institutional policy. Our eight actions might be effective mechanisms to help improve Research Integrity in the UK. Indeed, four actions acknowledge that their implementation will help implement the UK Concordat on Research Integrity. For example, lowering the barriers that force early career scientists to publish against their ethics will make science more attractive to brilliant young people who will open avenues of research, which will remove boundaries to new discoveries, and, through these resources, aid in the public understanding of science. In turn, the leadership of Parliament would make our efforts much more effective, and would contribute an important step in creating an academic cultural change in the UK.

III. We are asking you to help us shape what happens next.

a. Would you be willing to use your position to implement some of the actions we propose?
b. Would you be willing to be interviewed by the press in connection with our efforts?

IV. We consider these eight actions (below) essential for enabling ECRs to do and disseminate our research as we intend it, in an open, modern, and rigorous way. Your support of ECRs, which are a vulnerable group, will make it possible for us to deliver outstanding, rigorous academic outputs, and become responsible academic leaders, which will foster public trust in research.

September 2017
THE PETITION

We, the undersigned, urge institutions and individuals to better support ECRs by taking these actions:

1) Sign the Declaration on Research Assessment (DORA) as an independent university/institution/individual (following the example of Imperial and UCL), indicating that you will: a) “Be explicit about the criteria used to reach hiring, tenure, and promotion decisions, clearly highlighting, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published; and b) For the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice” (http://www.ascb.org/dora). These concerns about access to data should not be narrowly construed as concerning the ‘hard sciences’. The increasing reliance on the analysis of digital information in the humanities and the arts means that such issues matter across academia. As digital humanities become more widespread, access to open data and publications become more crucial. *** ECRs will benefit more than other career stages from DORA being signed because there is more pressure to publish in journals with high impact factors earlier in their career.

2) Positively value a commitment to open research and publishing practices that keep profits inside academia when considering candidates for positions and promotions (in alignment with DORA).

3) Endorse immediate open publishing, favouring publications in journals that are 100% open access (see https://doaj.org for a list of high-quality 100% open access journals), which are more beneficial to universities and researchers because a) they avoid being overcharged by hybrid open access journals (Shamash 2016, Pinfield et al. 2015, Solomon & Björk 2016, Kingsley 2016), b) researchers retain the copyright to their work (University of Michigan Research Guide), and c) ECRs benefit from wider dissemination of their research, resulting in more citations (McKiernan et al. 2016). This action helps institutions implement the UK Concordat on Research Integrity.

4) Endorse posting of preprints in recognised preprint servers to avoid publishing delays that are detrimental to ECR career progress (http://asapbio.org; recognising that some disciplines will be restricted from doing so). This is particularly timely as funders, such as the MRC and the Wellcome Trust, now accept preprints in grant proposals (http://asapbio.org/funder-policies). This action helps institutions implement the UK Concordat on Research Integrity.

5) Endorse, support and promote the open publication of data and other scientific outputs such as software, which is inherent to modern scientific practice and results in an increase in citations for each open product (McKiernan et al. 2016). This action helps institutions implement the UK Concordat on Open Research Data.

6) Educate researchers about publishing practices via public statements, mandatory courses, and inductions that cover: open research/data/access, mandates, hidden costs of traditional publishing (e.g., publishing delays, page charges and color figure charges in addition to article processing charges), and how to protect ECRs against exploitative publishing practices (e.g., avoiding hybrid open access protects ECRs from being overcharged [Shamash 2016, Pinfield et al. 2015, Solomon & Björk 2016, Kingsley 2016]). This action helps institutions implement the UK Concordat to Support the Career Development of Researchers and the UK Concordat on Research Integrity.

7) Increase transparency by reporting to the public how much institutions pay for research to be published (i.e., journal subscriptions and article processing charges) to raise awareness about the significant drain on public funding. This will help researchers decide where to invest their future publishing efforts, especially because research funding is decreasing. This action helps institutions implement the UK Concordat on Research Integrity.

8) Make all postdocs voting members of their institutions. This will ensure that institutions increase diversity and stay connected to the changing needs of this underrepresented group that tends to be more connected to modern publishing practices. Increasing the diversity of career stages in decision making processes will result in higher group performance, particularly where innovation is concerned (Roberge & van Dick 2010). This advances two Athena SWAN Charter points (five and nine; because, for example, most female researchers at the University of Cambridge are ECRs [University of Cambridge Databook 2016, p.26]*) by removing obstacles faced by women at major points of career progression and by mainstreaming structural and cultural changes...
that advance gender equality. This will improve working conditions for researchers, which impacts research quality, and will help universities obtain or retain EC HR Excellence in Research awards. This action helps institutions implement the UK Concordat to Support the Career Development of Researchers. *ECR = Established (Reader, University Senior Lecturer, University Lecturer) and Unestablished (Research).

*Note: We defined an Early Career Researcher as a post-graduate student, or a researcher in academia, industry, or at a non-governmental organisation who is on a temporary contract, unemployed, or within ~10 years of obtaining a permanent post.

Signed:

Dr Corina Logan  Department of Zoology, University of Cambridge
Dr Dieter Lukas  Department of Zoology, University of Cambridge
Dr (Anonymous)  Kyoto University Primate Research Institution
Dr. Vinodh Ilangovan  Max Planck Institute for Biophysical Chemistry
Dr Sarah Jelbert  Department of Psychology, University of Cambridge
Dr Stephen Montgomery  University of Cambridge
Dr. Camille Troisi  University of Exeter
Dr Lewis MacKenzie  School of Biomedical Sciences, University of Leeds
Dr Rachael Miller  Department of Psychology, University of Cambridge
Ms Natalie Jones  Faculty of Law, University of Cambridge
Dr. Kiyoko Gotanda  Department of Zoology, University of Cambridge
Dr Adina Feldman  MRC Epidemiology Unit, University of Cambridge
Dr Matthew Bashton  Northern Institute for Cancer Research, Newcastle University
Daniel Booth  Philosophy, University of Western Ontario
Liam Kofi Bright  Philosophy, Carnegie Mellon University / London School of Economics
Dr Laurent Gatto  Department of Biochemistry, University of Cambridge
Ivan Gonzalez-Cabrera  School of Philosophy, Australian National University
Dr Adrian Currie  Centre for Research in the Arts, Social Sciences and Humanities, University of Cambridge
Dr Ana Prohaska  Department of Zoology, University of Cambridge
Ms Ghada Osman  Department of Medical Biochemistry, Medicinal and Aromatic Plants Research Institute (MAPRI), Sudan
Dr. Jonathan Tennant  Imperial College London
Dustin Eirdosh  University of Leipzig, Institute of Biology
Dr. Maanasa Raghavan  Department of Zoology, University of Cambridge
Written evidence submitted by Bullied into Bad Science (RES0002)

MR. Samiul Hossain
Department of Psychology, Macquarie University

Dr Paul Conduit
Department of Zoology, University of Cambridge

Dr Caroline C G Fabre
Department of Zoology, University of Cambridge

Lea Hildebrandt
University of Wuerzburg

Dr Dominic Cram
Department of Zoology, University of Cambridge

Dr. Christos Ioannou
Biological Sciences, University of Bristol

Ms Michelle Roper
Institute of Natural and Mathematical Sciences, Massey University

Hanna Stostad
Natural History Museum, University of Oslo

Laura Wise
Law School, University of Edinburgh

Dr Michael Heneise
The Kohima Institute, India

Dr Christos Pliatsikas
School of Psychology and Clinical Language Sciences, University of Reading

Dr. Peter Marchetto
Department of Bioproducts and Biosystems Engineering, University of Minnesota

Dr. Antonio Luque-Casado
Department of Experimental Psychology, University of Granada

Mr Farid Anvari
Psychology, Flinders University of South Australia

Dr Thomas Pollet
Social and Organisational Psychology Unit, Leiden University

Sonia Alguacil
Department of Experimental Psychology, University of Granada

Mr. Luis Ciria
Experimental Psychology, University of Granada

Dr Nathan Jacobs
Office of Information Technology, UCLA

Dr Grian A. Cutanda
Department of Pedagogy, University of Granada

Mr Alexander Morley
MRC Brain Network Dynamics Unit, University of Oxford

Dr Marco Chiapello
Department of Biochemistry, University of Cambridge

Dr Ana Duarte
College for Life and Environmental Sciences, University of Exeter

Dr Catherine Rhodes
Centre for the Study of Existential Risk, University of Cambridge

Dr Shahar Avin
Centre for the Study of Existential Risk, University of Cambridge

Dr David Wright
Chemistry, University College London

Dr Paul Jarvis
Department of Applied Mathematics and Theoretical Physics, University of Cambridge

Dr Anna Gogleva
Sainsbury Laboratory, University of Cambridge

Dr Johannes Carmesin
University of Cambridge, Emmanuel College

Dr Claudia Wascher
Department of Life Sciences, Anglia Ruskin University, UK

Dr. Dasapta Erwin Irawan
Faculty of Earth Sciences and Technology, Institut Teknologi Bandung,
Written evidence submitted by Bullied into Bad Science (RES0002)

Ms Tejasvini Chalikonda
Department of Zoology, University of Cambridge

Dr Constance Dubuc
Department of Zoology, University of Cambridge

Mr (Anonymous)
University of Manchester alum.

Dr Ljerka Ostojic
Department of Psychology, University of Cambridge

Mr Stuart Watson
School of Psychology & Neuroscience, University of St Andrews

Athina Karatzogianni
University of Leicester

Jorge Peña
GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany

Dr. Mark D. Roberts
University of Cape Town

Robin Niels Kok
Department of Psychology, University of Southern Denmark

Dr Monica Battini
Department of Veterinary Medicine, University of Milan

Dr Etienne P. LeBel
Department of Psychology, Western University, Canada

Dr. Peter Woodford
University of Cambridge

Dr Sepideh Keshavarzi
Sainsbury Wellcome Centre (SWC), University College London

Dr Eva Ringler
Messerli Research Institute, University of Veterinary Medicine Vienna

Dr. Alessandro Esposito
MRC Cancer Unit, University of Cambridge

Dr Nicola Nadeau
Animal and Plant Sciences, University of Sheffield

Maria Niedernhuber
Department of Psychology, University of Cambridge

Shane Timmons
School of Psychology and Institute of Neuroscience, Trinity College Dublin

Katharina Brecht
University of Tübingen

Dr Linus Schumacher
Life Sciences, Imperial College London

MSc. Chris Hartgerink
Methods and Statistics, Tilburg University

Dr Luca Magri
Engineering Department, University of Cambridge

Dr Kirsty Wan
Department of Applied Mathematics and Theoretical Physics, University of Cambridge

Ikenna Christopher Okwara
University of Nigeria Nsukka

Miss Rachael Andrews
Clinical Research Facility, Cambridge University Hospitals NHS Foundation Trust

Dr Ernesto Priego
Personal capacity

Jesse Geerts, MSc
Sainsbury Wellcome Centre, University College London

Jorge Aurelio Menendez
Gatsby Computational Neuroscience Unit, University College London

Dr Olivia Maynard
School of Experimental Psychology, University of Bristol
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution/University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Antonio Rojas Castro</td>
<td>Cologne Center for eHumanities</td>
</tr>
<tr>
<td>Mr Graham Watson</td>
<td>Cancer Research UK</td>
</tr>
<tr>
<td>Heather Plumpton</td>
<td>Department of Geography and Environmental Science, University of Reading</td>
</tr>
<tr>
<td>Dr Alexander Gil</td>
<td>Columbia University</td>
</tr>
<tr>
<td>Dr. Camille Troisi</td>
<td>University of St Andrews</td>
</tr>
<tr>
<td>Dr Jacqueline Robbins</td>
<td>Department of Psychiatry, University of Oxford</td>
</tr>
<tr>
<td>Dr. Silvio Peroni</td>
<td>Department of Computer Science and Engineering, University of Bologna</td>
</tr>
<tr>
<td>Dr Jaigris Hodson</td>
<td>College of Interdisciplinary Studies, Royal Roads University</td>
</tr>
<tr>
<td>Dr Paola Masuzzo</td>
<td>Department of Biochemistry, Ghent University</td>
</tr>
<tr>
<td>Dr Andrew Dunning</td>
<td>Western Heritage Collections, British Library</td>
</tr>
<tr>
<td>Mr. James Bartlett</td>
<td>Health and Life Sciences, Coventry University</td>
</tr>
<tr>
<td>Dr Güleda DoÂŸan</td>
<td>Department of Information Management, Hacettepe University, Turkey</td>
</tr>
<tr>
<td>Dr. Gerald Carter</td>
<td>Smithsonian Tropical Research Institute</td>
</tr>
<tr>
<td>Dr. Ibrahim Atakan Kubilay</td>
<td>Dokuz Eylul University, Turkey</td>
</tr>
<tr>
<td>Bhavani Shankar Sahu</td>
<td>CIMR, University of Cambridge</td>
</tr>
<tr>
<td>Dr Eva Reindl</td>
<td>University of Birmingham</td>
</tr>
<tr>
<td>Dr. David Gonzalez-Ãlvarez</td>
<td>Department of Archaeology, Durham University / Institute of Heritage Sciences (Incipit), CSIC</td>
</tr>
<tr>
<td>Dr Dave Gerrard</td>
<td>University of Manchester</td>
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<tr>
<td>Dr Caspar Addyman</td>
<td>Psychology, Goldsmiths, University of London</td>
</tr>
<tr>
<td>Miss Rebecca Wheeler</td>
<td>Psychology Department, Goldsmiths, University of London</td>
</tr>
<tr>
<td>Dr Camilla Benfield</td>
<td>Royal Veterinary College, University of London</td>
</tr>
<tr>
<td>Bianca Elena Ivanof</td>
<td>Department of Psychology, Goldsmiths, University of London</td>
</tr>
<tr>
<td>Dr Gabriel Aughey</td>
<td>Department of Life Sciences, Imperial College London</td>
</tr>
<tr>
<td>Dr Matthew Benton</td>
<td>Institute for Developmental Biology, University of Cologne</td>
</tr>
<tr>
<td>Dr Tony Southall</td>
<td>Department of Life Sciences, Imperial College London</td>
</tr>
<tr>
<td>Dr Kirstie Whitaker</td>
<td>Alan Turing Institute for Data Science &amp; Department of Psychiatry at University of Cambridge</td>
</tr>
<tr>
<td>Dr. Lorena Saelices</td>
<td>Biological Chemistry, UCLA</td>
</tr>
<tr>
<td>Dr. Varadhan SKM</td>
<td>Department of Applied Mechanics, Indian Institute of Technology Madras, Chennai, India</td>
</tr>
<tr>
<td>Dr Rebecca Willén</td>
<td>The Globally Distributed Institute for Open Research and Education (IGDORE), Indonesia</td>
</tr>
<tr>
<td>Name</td>
<td>Affiliation</td>
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<tr>
<td>Dr Gillian Shorter</td>
<td>Ulster University</td>
</tr>
<tr>
<td>Dr AÃ da Cancel</td>
<td>CHU Nimes and INT Marseille, France</td>
</tr>
<tr>
<td>Felipe Lopes de Freitas</td>
<td>Department of Physics, Instituto Tecnológico de Aeronáutica, Brazil</td>
</tr>
<tr>
<td>Dr. Warren Francis</td>
<td>Department of Biology, University of Southern Denmark</td>
</tr>
<tr>
<td>Dr Verena Heise</td>
<td>Nuffield Department of Population Health, University of Oxford</td>
</tr>
<tr>
<td>Jan Hoeber</td>
<td>Department of Neuroscience, Uppsala University</td>
</tr>
<tr>
<td>Shaman Narayanasamy</td>
<td>Luxembourg Centre for Systems Biomedicine, University of Luxembourg</td>
</tr>
<tr>
<td>Dr Sung Sam Gong</td>
<td>Department of Obstetric and Gynaecology, School of Clinical Science,</td>
</tr>
<tr>
<td></td>
<td>University of Cambridge</td>
</tr>
<tr>
<td>Dr. Benjamin Carter</td>
<td>Sociology and Anthropology, Muhlenberg College</td>
</tr>
<tr>
<td>Dr. Sze Huei Yek</td>
<td>Department of Ecology and Evolution, University of Lausanne</td>
</tr>
<tr>
<td>Dr Alecia Carter</td>
<td>Institut des Sciences de l'Évolution, Université de Montpellier</td>
</tr>
<tr>
<td>Alberto Antonietti</td>
<td>Department of Electronics, Information and Bioengineering, Politecnico di</td>
</tr>
<tr>
<td></td>
<td>Milano</td>
</tr>
<tr>
<td>Dr Corrado Nai</td>
<td>Technische Universität Berlin</td>
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