The Rt Hon Theresa May MP
The Prime Minister
10 Downing Street
London
SW1A 2AA

19 October 2018

Dear Prime Minister May

Scientific research and innovation are crucial for tackling the many shared challenges we face, including treating disease, generating clean energy, building the digital industries of the future, protecting the environment and ensuring an adequate and affordable supply of food. However, to meet these challenges for everyone's benefit, science needs to flourish and that requires the flow of people and ideas across borders to allow the rapid exchange of ideas, expertise and technology.

Europe was the home of the enlightenment and the birthplace of modern science, but partly as a result of two devastating internecine wars in Europe in the 20th century, it suffered a decline relative to the USA. However, this decline has been reversed in the last few decades as a result of the ease of collaboration nurtured by the EU through its many initiatives and programmes, which have greatly benefited European science. Creating new barriers to such ease of collaboration will inhibit progress, to the detriment of us all. Many of us in the science community therefore regret the UK's decision to leave the European Union because it risks such barriers.

All parties in the negotiations on the UK's departure from the EU must now strive to ensure that as little harm as possible is done to research. It is widely recognised that investing in research and innovation are increasingly crucial for shaping a better European future. In your Jodrell Bank speech, you restated your desire for the UK to have a 'deep science partnership with the European Union'. We must not allow the UK or the EU to become more insular in our approach to each other.

By deciding to leave the EU, the UK has given up its right to participate in EU research and innovation programmes. It must now step up its commitment to those programmes if it wants to remain involved. For the EU it is vital that it makes international cooperation a trademark of its research and innovation programmes. That means acting on Pascal Lamy's report for the European Commission on maximizing the impact of EU research and innovation programmes which calls for opening up the programmes to 'association by the best and participation by all', based on a financial contribution that is fair to all.

The challenges we face must be tackled in a manner that benefits everyone and those challenges are better faced together. Only a deal which allows the closest possible cooperation between the UK and the EU, now and in the future, will make that possible.

Yours Sincerely

Jules Hoffmann	Paul Nurse
Nobel Prize in Physiology or Medicine	Nobel Prize in Physiology or Medicine

Christiane Nüsslein-Volhard

Nobel Prize in Physiology or Medicine

Klaus von Klitzing Nobel Prize in Physics

Claude Cohen-Tannoudji Nobel Prize in Physics

Jacques Dubochet Nobel Prize in Chemistry

Albert Fert

Nobel Prize in Physics

Timothy Gowers Fields Medal

Martin Hairer Fields Medal

Harald zur Hausen

Nobel Prize in Physiology and Medicine

Richard Henderson Nobel Prize in Chemistry

Gerardus 't Hooft Nobel Prize in Physics

Jean-Marie Lehn

Nobel Prize in Chemistry

Pierre-Louis Lions Fields Medalist

Edvard Ingjald Moser

Nobel Prize in Physiology or Medicine

Kostya Novoselov Nobel Prize in Physics

Christopher A. Pissarides

Nobel Memorial Prize in Economic Sciences

John E. Walker

Nobel Prize in Chemistry

Ada Yonath

Nobel Prize in Chemistry

Venki Ramakrishnan Nobel Prize in Chemistry

Michael Atiyah Fields Medal

Paul J Crutzen

Nobel Prize in Chemistry

Simon Donaldson Fields Medal

Gerhard Ertl

Nobel Prize in Chemistry

John Gurdon

Nobel Prize in Physiology or Medicine

Serge Haroche

Nobel Prize in Physics

Stefan W Hell

Nobel Prize in Chemistry

Avram Hershko

Nobel Prize in Chemistry

Robert Huber

Nobel Prize in Chemistry

Tomas Lindahl

Nobel Prize in Chemistry

Hartmut Michel

Nobel Prize in Chemistry

Erwin Neher

Nobel Prize in Physiology and Medicine

John O'Keefe

Nobel Prize in Physiology or Medicine

Peter Scholze Fields Medalist

Kurt Wüthrich

Nobel Prize in Chemistry

Address for correspondence: Venki Ramakrishnan, The Royal Society, 6-9 Carlton House Terrace, London SW1Y 5AG