

## **£5 Million UK-India Covid-19 Partnership Initiative to better the understanding of COVID-19 severity in South Asian population of India and the UK**

UK Research and Innovation and India's Department of Biotechnology and Ministry of Science and Technology have joined forces to support four collaborative bilateral research partnerships worth £5 million, aimed at providing deeper understanding COVID-19 severity in South Asian populations located in India and the UK. Projects will be funded in partnership between DBT and UKRI's Fund for International Collaboration.

Through the UK-India Covid-19 Partnership Initiative, DBT and UKRI will support world-leading UK-India research teams. The successful projects aim to understand the pandemic through the study of related ethnic groups in different environments in both countries. These projects have the potential to deliver public health impacts in mitigating the severity of the COVID-19 in both the UK and India.

Announcing these new joint projects, Dr. Renu Swarup, Secretary of India's Department of Biotechnology (DBT) said,

*"The fast track UK-India Covid-19 Partnership Initiative has been possible because of more than a decade long close association between India and the UK for biotechnology Research and Innovation. This partnership builds on the joint strengths of the Indian and UK research communities and I am very pleased that these high-quality projects have high potential for direct impact in the form of improved understanding of a rapidly evolving pandemic. These projects are likely to offer evidence-based solutions towards mitigating the severity of the outbreak in both the UK and India. This partnership also exemplifies the spirit of global partnerships in addressing global issues."*

UKRI International Champion, Professor Christopher Smith said:

*"The COVID-19 pandemic demonstrates the vital role of international science and innovation partnerships in collecting information, sharing knowledge and experiences and developing rapid solutions to tackle worldwide problems. These four new joint collaborative research projects build on the strong research and innovation links between the UK and India, bringing together world-leading research teams who are focused on mitigating the severity of COVID-19 in South Asian populations in the UK and India. "*

Details of the selected projects are as follows;

**Variation in innate immune activation and cardiovascular disease risk as drivers of COVID19 outcome in South Asians in UK and India**, Dr. Annapurna Vyakarnam, Indian Institute of Science and Dr. Adrian Hayday, King's College London and Francis Crick Institute, London.

This research intends to prove why COVID-19 affects South Asians in different countries in different ways to support the rapid identification of information that may allow development of new prevention steps, more targeted monitoring, and potentially new treatments to improve the outcome of COVID-19 in both India and the UK.

**CoV-Ind-UK: Prospective investigation of the determinants for COVID-19 outcomes amongst South Asians in India and the United Kingdom**, *Dr. Anurag Agrawal Institute of Genomics and Integrative Biology and Dr. John Chambers, Imperial College London*

This research aims to understand the reasons underlying the increased risk of COVID-19 amongst South Asians, and generate knowledge that informs interventions to reduce the burden of COVID-19 amongst South Asians who represent 25% of the world's population.

**Explaining the differential severity of COVID-19 between Indians in India and the UK**, *Dr. Giridhara Rathnaiah Babu, Public Health Foundation of India (PHFI) and Dr. Sanjay Kinra, London School of Hygiene and Tropical Medicine*

The project aims to generate the first ever like-for-like comparisons between Indian populations in the UK and India to rapidly assess whether risk of severe COVID-19 truly differs between Indian populations in the two countries and to test a range of hypothesized explanations.

**Role of the oral microbiome & mucosal immunity in COVID-19 disease: diagnostic/prognostic utility in South Asian populations**, *Dr. Priya Kannian, The Voluntary Health Services Hospital and Dr. Stephen Challacombe, King's College London*

The proposal is based on the hypothesis that mucosal immunity and the microbiome, as reflected in the oral cavity/oropharynx, plays a critical role in susceptibility to, and severity of COVID-19 and explains differences in mortality between similar populations in the UK and India.

#### **More information:**

##### **About DBT:**

**The Department of Biotechnology**, under the Ministry of Science and Technology, Govt. of India is the focal agency for biotechnology education, training, research, innovation, and entrepreneurship in India. DBT has laid emphasis on promotion of excellence and innovation for discovery, early and late stage translational research in the areas of agriculture, affordable healthcare & medical technology, food & nutritional security, animal biotechnology, environmental safety, clean energy & bio-fuel, bio-manufacturing, etc. Building and supporting capacity in cutting edge areas of research, developing world class infrastructure, development of products and their commercialization for a robust bio economy and establishment of India as a world-class bio-manufacturing hub for developing and developed markets are the major thrust of the Department. <http://dbtindia.gov.in/>

##### **About UKRI:**

**UK Research and Innovation** brings together the seven UK Research Councils, Innovate UK and Research England into a single organisation that maximises the contribution of each Council and creates the best environment for research and innovation to flourish.

**With a vision** for an outstanding research and innovation system in the UK that gives everyone the opportunity to contribute and to benefit, enriching lives locally, nationally and internationally, UKRI's **mission** is to convene, catalyse and invest in close collaboration with others to build a thriving, inclusive research and innovation system that connects discovery to prosperity and public good.

[www.ukri.org](http://www.ukri.org)

**UK Research and Innovation India**, based at the British High Commission in New Delhi, plays a key role in enhancing the UK-India relationship in research and innovation. Since 2008, when the office was established, the UK together with the government of India and third parties have together invested over £300 million in co-funded research and innovation programmes comprising over 140 individual projects, involving over 175 different UK and Indian research institutions and more than 100 industry partners. UKRI – India collaborative projects cover an array of themes, including, energy, environment, food security, health, next generation IT networks, social sciences, and humanities. [www.ukri.org/india](http://www.ukri.org/india)

**About FIC:**

**The Fund for International Collaboration (FIC)** is a £160 million fund supporting international collaborations. It enhances the UK's ability to build new, and strengthen existing, partnerships with global research and innovation leaders.

We have worked with the Department for Business, Energy and Industrial Strategy to identify key partner countries for collaboration including China, Canada, South Korea and USA. There are over 20 partner countries involved in our bilateral and multilateral programmes.

The fund has already supported more than 30 international collaborative research, innovation and infrastructure programmes across UKRI's remit.