

University of Oxford Immunology Network: Bringing together the amazing immunology research at Oxford

Over the last 18 months, the Immunology Network has been invaluable to the academic and clinical community in Oxford, providing strategic coordination, project management and information sharing on COVID-19 research. The Network organised weekly 'COVID-19 Immunology' meetings to share information between work packages, including vaccines, serology, immune phenotyping, inflammation and T cell responses (figure 1), helping to prevent duplication of effort, making sure precious patient samples were used most effectively and speeding up our response to the COVID-19 pandemic. The Immunology Network also supported the development of a COVID-19 Immunology Literature Initiative, a group of students and post-docs who reviewed the COVID-19 pre-print literature and provided concise, critical review for the immunology community.

In December 2020, we held a call for proposals for funding through the Human Immune Discovery Initiative (HIDI) Internal Fund. HIDI was set up with funding from the NIHR Oxford BRC and aims to generate novel collaborations with immunologists and to pump prime projects. We received 17 applications and funded 8 projects. Since HIDI's inception in June 2018, we have held five calls to the HIDI Internal Fund and in total have allocated £437,887 to 38 projects across 8 Departments, covering areas such as vaccines, oncology, metabolism, neuroscience, orthopaedics, inflammation and transplantation. Projects we have supported include;

- *Determining correlates of protection for a novel malaria vaccine strategy*
- *Characterising immune cell subsets in frozen shoulder*
- *The single cell transcriptome of B cells in cerebrospinal fluid: towards therapeutic markers for the treatment of CNS autoimmunity*
- *The role of the immune system and of host and bacterial metabolic functions in the pathogenesis of obesity and the response to bariatric surgery*
- *Characterising the immune landscape of pancreatic cancer*

Outcomes from 13 completed projects include 8 follow-on funding awards, 2 publications, 19 new collaborations and 13 presentations (figure 2). We are currently researching routes for continued funding for HIDI.

In April 2021 we held a free, three-day, online Oxford Immunology Symposium that was attended by over 200 people each day and included international keynote speakers: Professor Judi Allen, University of Manchester, Professor Annette Oxenius, UTH Zurich and Professor John Wherry, University of Pennsylvania, and showcased the amazing immunology research at Oxford. Next year, we are planning an in-person event in Oxford and look forward to bringing the Oxford immunology community together.

In July 2021, the Immunology Network, with the grateful support of the Oxford Academic Health Partners (OAHP), was able to recruit a part-time communications officer for two years to help promote the activities of the Network and build further relationships with local

immunologists. We are currently working to update the Immunology Network website (www.immunology.ox.ac.uk), develop a strategy for our communications (@OxImmuno and newsletter) and a broader strategy for the Network’s future. None of this would be possible without the continued support of the OAHF.

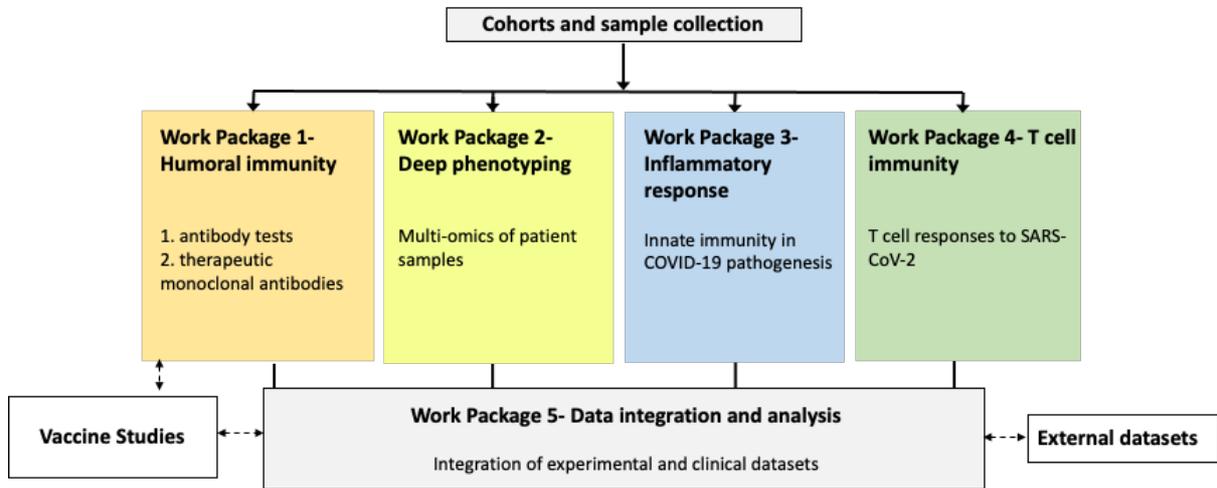


Figure 1. Overview of the COVID-19 immunology work packages at Oxford

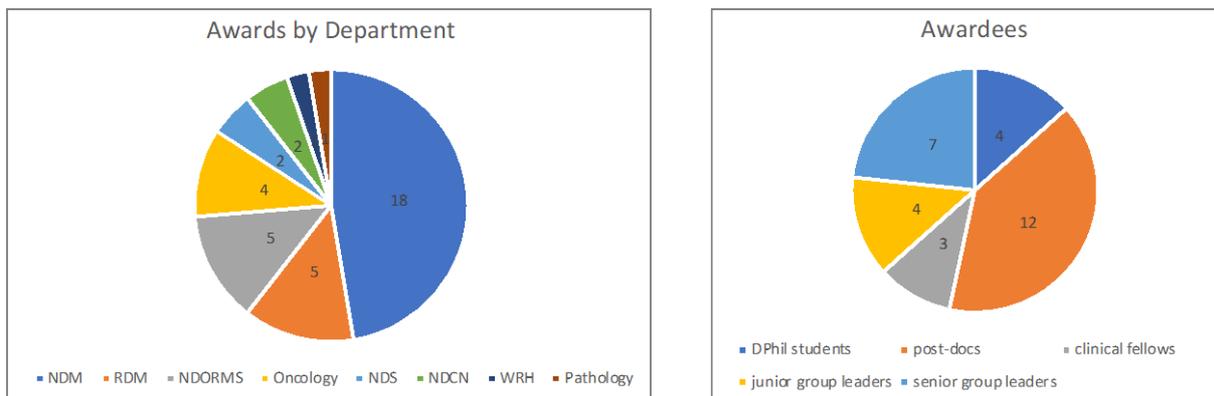


Figure 2. Overview of how funding has been allocated through HIDi