

### INTRODUCTION

On the 5<sup>th</sup> January 2020 the World Health Organisation (WHO) published its first global media report declaring the emergence of a potential new virus from Wuhan, China [1]. The new disease COVID-19 was caused by SARS-CoV-2. The first case of COVID-19 announced in Ireland was on the 26<sup>th</sup> February 2020 [2]. COVID-19 would ultimately lead to a catastrophic loss of lives globally with the elderly and those with pre-existing medical complications to be the most at risk of mortality.

As of the 23<sup>rd</sup> of February 2021 the WHO reports over 111 million cases of the virus and over 2.4 million deaths [3]. COVID-19 research was commenced worldwide as a matter of urgency. It was identified that it was imperative to correlate as much data as possible in an attempt to understand and control this novel virus.

### AIM & OBJECTIVES

The COVID-19 Bioresource Partnership was established through a collaboration between STTAR- St. James's Hospital, Tallaght University Hospital, Trinity College Dublin and Dublin Allied Researchers. The aim of the COVID-19 Bioresource Partnership was to collect highly annotated blood samples and medical data on all confirmed positive SARS-CoV-2 inpatients and staff who were willing to provide informed consent.

The recruitment of participants to the COVID-19 Bioresource Partnership presented many obstacles. These ranged from delayed regulatory approvals, increased research staff requirements and a colossal amount of organisation and administrative work. All these obstacles had to be addressed, and strategic solutions were necessary to implement at various timepoints during the project.

This poster will provide insight into some of the strategies that were implemented to maintain the successful running of the COVID-19 Bioresource Partnership project.

### METHODS

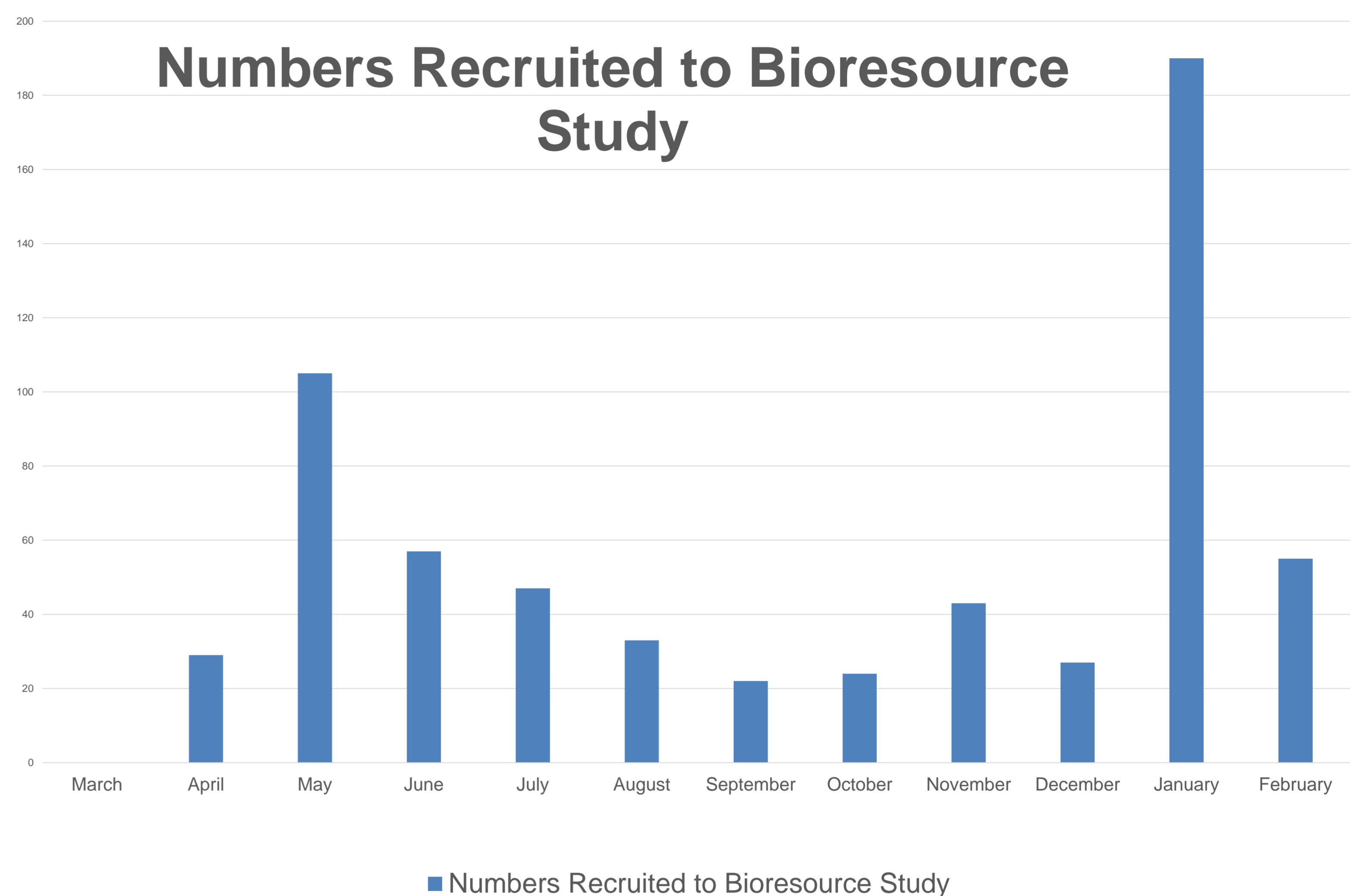
A retrospective review of the Bioresource recruitment log was undertaken to ascertain numbers of patients recruited over time. Numbers recruited in the first months of the study were compared to those recruited in later months when changes were made to recruitment practices. Reasons for changes in recruitment numbers were looked at and studied.

### RESULTS

The Bioresource Study has to date recruited 632 patients. These are inpatients and staff who have tested positive for the virus. In the month of March there were no patients consented to the study. Recruitment began in April with 29 patients. In the following months recruitment increased with May (105 patients), June (57 patients), July (47 patients), August (33 patients), September (22 patients), October (24 patients), November (43 patients), December (27 patients), January (190 patients).

The variations in recruitment from April to January reflects the national trend in COVID-19 community transmission rates [4]. There was an increase in patients recruited to the study in January 2021. This coincided with an increase in staffing levels. Other factors noted were experience of staff working on the project, involvement of multidisciplinary team members and improvement in communication between groups.

### Numbers Recruited to Bioresource Study



### CONCLUSION

#### Ethical Approval

The COVID-19 Bioresource Partnership experienced numerous challenges from the initial set-up phase. There were regulatory setbacks that meant recruitment was delayed until April 2020 in St. James's Hospital. This delay highlights the need for urgent review and approval of ethics applications pertaining to public health research as they are time sensitive. The recruitment of eligible patients was delayed and none were recruited in March 2020 for this reason.

#### Multidisciplinary Approach

The pandemic caused a large surge of patients requiring hospital admission. To deal with the sudden increase, we identified that further support was required to recruit and sample eligible patients. The medical teams were educated regarding the research and assisted when available in the informed consent process. The phlebotomy department in the hospital were approached and agreed to obtain COVID-19 research bloods whilst they were performing the patient's routine blood draw. The involvement of these multi-disciplinary teams allowed for a larger proportion of patients to be captured for research purposes. As non-covid work within the CRF was reduced, staff were redeployed onto Covid-19 research projects. A flexible, dynamic and nimble system was required to facilitate this particularly during covid surges.

#### Communication

In January 2021 there was an unprecedented increase in COVID-19 admissions to the hospital. In response to this we liaised with our laboratory colleagues and doubled our laboratory capacity, allowing us to recruit greater numbers of patients to the study. This collaboration between clinical staff and laboratory colleagues resulted in over 100 patients being recruited in a 14 day period. This shows the importance of communication and teamwork in response to an ever changing public health emergency. Working together allowed us to collect time sensitive data despite difficult and precarious circumstances in the world of research and the community at large.

### REFERENCES

- [1] WHO Media Report, 5<sup>th</sup> January 2020
- [2] Perumal Vi, Curran T, & Hunter M. (2020) First Case of COVID-19 in Ireland *Ulster Med J.* Sep; 89(2): 128
- [3] WHO Dashboard, accessed 23<sup>rd</sup> of February 2021, <https://covid19.who.int/>
- [4] Health Service Executive, accessed 23<sup>rd</sup> of February 2021, [Ireland's Health Services - HSE.ie](https://www.hse.ie/eng/our-services/acute-services/ambulance-and-emergency/communicable-diseases/covid-19/)