

## Five years of collaboration towards achieving voluntary non-remunerated blood donation in Trinidad and Tobago

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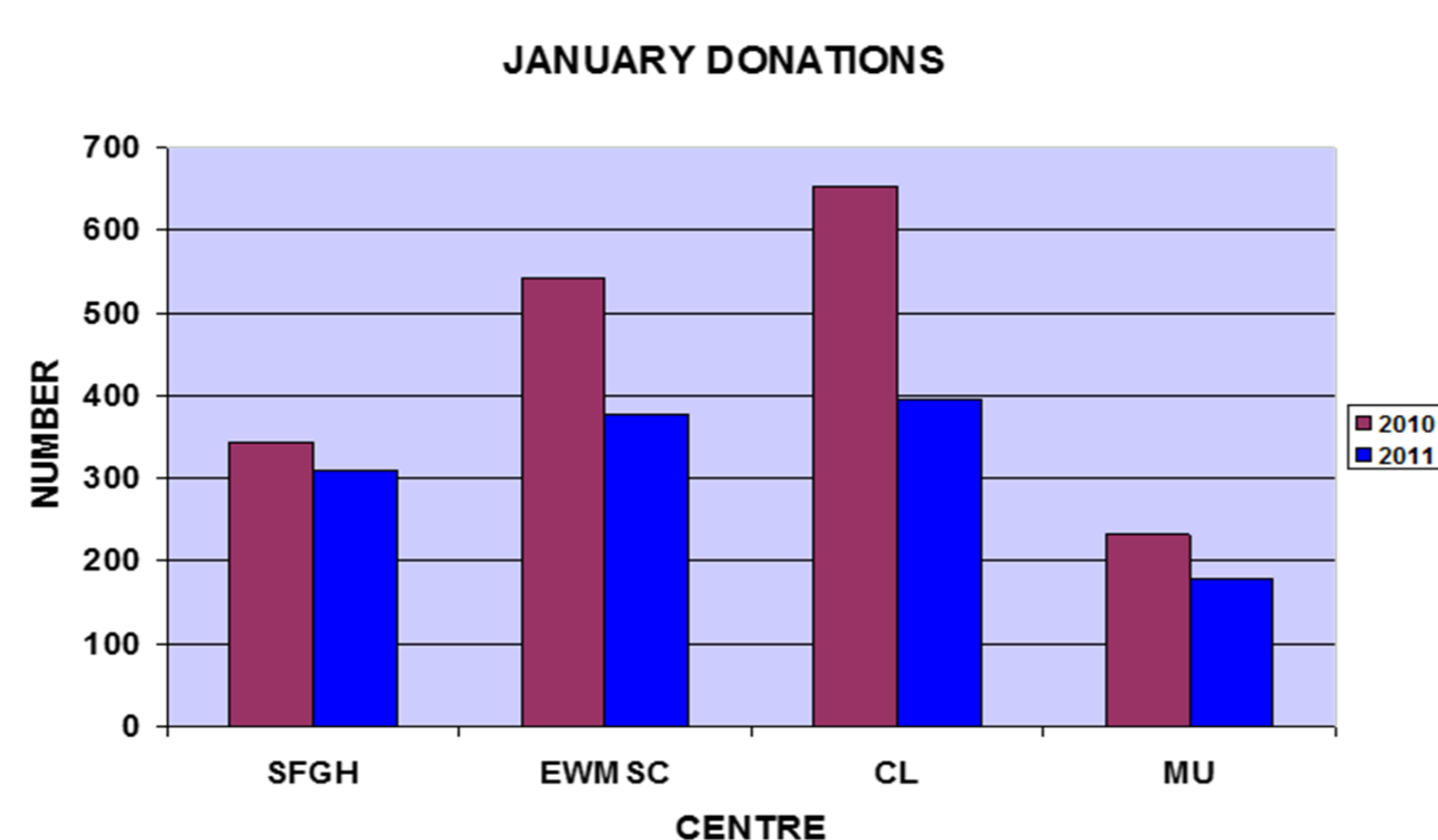
### INTRODUCTION

Trinidad and Tobago (TTO) is a high income developing Caribbean country with advanced medical services but a limited blood supply. Over 80% of blood donors are family replacement donors (FRD) at six hospital-based blood donation centres. The remainder make donations on a mobile unit and retain the right to reclaim their donations, constituting remunerated donors. The Faculty of Medical Sciences of The University of the West Indies is located at the Eric Williams Medical Sciences Complex (EWMSC) which also contains a blood donation centre managed by the North Central Health Authority (NCRHA). Policy for the national blood service is determined by the Ministry of Health (MOH) and TTO is a member state in the Pan American Health Organization (PAHO) Region of the Americas. In contrast with Curacao (CUW), a country in the same region with 100% voluntary non-remunerated donors (VNRDs), TTO's blood service is plagued by low annual donation rates, high deferrals and high donor transfusion transmissible infections (TTIs, 3.04%). Donation is lowest among the 18-25 year age group and females constitute < 30% of prospective donors.

Index	TTO	CUW
Donations/1000	15.6	39.5
VNRD%	0	100
HIV in donors%	0.2	0
HBV in donors%	0.3	0
HCV in donors (%)	0.3	0
Syphilis donors (%)	1.4	0
HTLV I/II in donors (%)	0.2	0
Donor Deferrals (%)	43.6	0.05

PAHO, 2016

Switching to 100% VNRD at the end of 2010 resulted in an acute fall in already insufficient donations with exacerbation of shortage and disruption of health services.



SFGH (San Fernando General Hospital), EWMSC (Eric Williams Medical Sciences Complex), CL (Central Laboratories, Port of Spain) are fixed hospital donation centres and MU is the Mobile Unit.

### AIM

To describe an approach to developing a pool of voluntary non-remunerated donors to prevent acute exacerbation of blood shortage in transitioning from replacement blood donation.

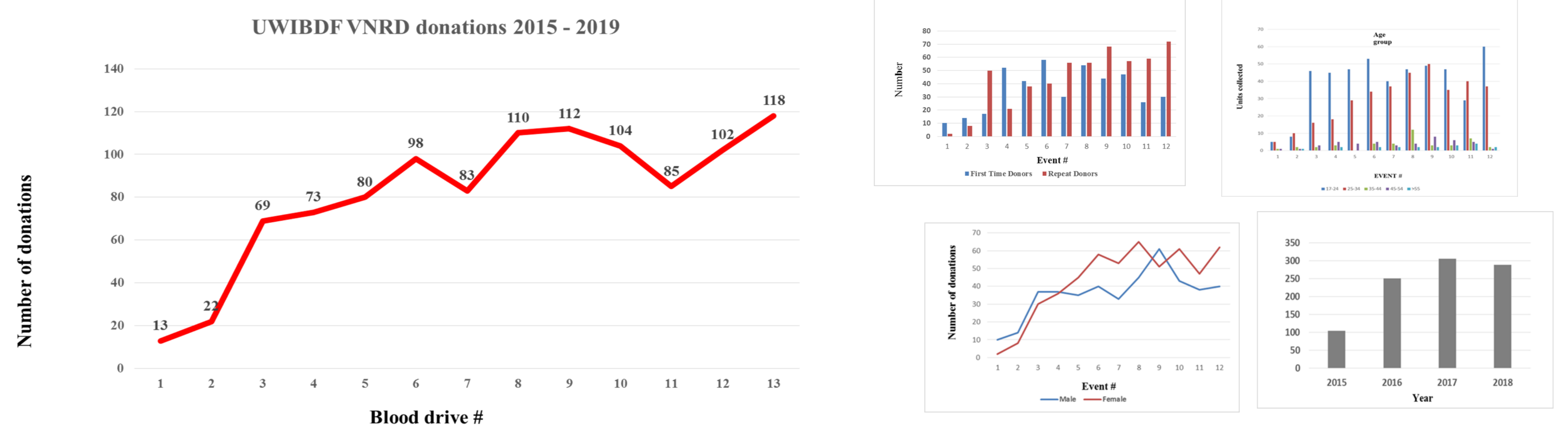
### METHODS

The University of the West Indies Blood Donor Foundation (UWIBDF) was established in 2011 and officially launched in 2013 with the Chancellor of the UWI as its patron. Based in the FMS, its members participated in activities to promote voluntary non-remunerated blood donation:

- Research into history of blood donation in collaboration with Department of History, The UWI
- Intensified blood donation and transfusion education in undergraduate medical training
- Community blood donation projects undergraduate and postgraduate
- Blood utilization audits by postgraduate trainees
- Sensitization visits to schools, places of worship, military organizations
- Development of website and donor database
- Annual World Blood Donor Day Symposium for secondary school students
- From 2015 it collaborated with the North Central Health Authority (NCRHA) in tri-annual VNRD-only blood drives at the EWMSC Blood Donation Centre.



### RESULTS



The programme has advanced rapidly in five years averaging 89 units per blood drive with 52% young (18-25), 54% female and 51% repeat donors. Donor deferrals and initially reactive microbiological tests were lower than most recently published by PAHO for FRD and remunerated donors in the national blood system (8% vs 43.6%,  $p < 0.001$  and 1.2% vs 3.04%,  $p < 0.05$  respectively). The UWIBDF VNRD programme was accepted by the MOH and PAHO as the model for implementing voluntary non-remunerated blood donation nationally.

### CONCLUSION

A university/health authority collaboration has used research, sensitization and example to prove the feasibility of voluntary non-remunerated blood donation and provide a model for blood safety and adequacy in a developing country.

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