CGA/19/16 - Lung megakaryocyte and platelet function in response to air pollution exposure

Blood clotting is needed to stop bleeding after injury. However, excessive clotting is harmful in many lung and heart diseases. Inhalation of pollutants increases blood clotting, and this is likely to play an important part in the high levels of heart disease and early death linked to air pollution. Platelets are blood cells that are made in the bone marrow and have a key role in blood clotting. Recently it has been shown that a large proportion of platelets are made in the lung. This study will investigate the role of platelets from the lung to see if these cells are responsible for the blood clotting associated with exposure to air pollution.