

Hello this is John Gullam from the Northern California Community Blood Bank with a Community Comment on KINS.

- In **1628** English physician William Harvey discovered the circulation of blood. Shortly afterward, the earliest known blood transfusion was attempted. It wasn't until **1665** that the first recorded successful blood transfusion occurred in England: Physician Richard Lower kept dogs alive by transfusion of blood from other dogs.
- It was an American physician Philip Physick who performed the first human blood transfusion more than a hundred years later in Philadelphia in **1795**
- By **1914** Long-term anticoagulants, among them sodium citrate, were developed, which allowed longer preservation of blood and in **1932** The first blood bank was established in a Leningrad hospital.
- In **1941** Isodor Ravdin, a prominent surgeon from Philadelphia, effectively treated victims of the Pearl Harbor attack with Cohn's albumin for shock. Injected into the blood stream, albumin (a pharmaceutical made from plasma), absorbs liquid from surrounding tissues, preventing blood vessels from collapsing
- By **1961** The role of platelet concentrates in reducing mortality from hemorrhage in cancer patients was recognized. Three years later Plasmapheresis was introduced as a means of collecting plasma for fractionation.
- Beginning in **1972** Apheresis was being used to extract one cellular component, returning the rest of the blood to the donor.

Blood transfusion and blood donation have evolved a lot over the last 400 years and continue to change. In the last 5 years the need for Red Blood Cells in the United States has remained relatively steady while new therapies using platelets have increased.

To make the most efficient use of our donor's valuable time the Northern California Community Blood Bank strive to collect the Right Component from the Right Donor at the Right Time. A cornerstone of this philosophy is donation by apheresis. Apheresis is a process during which a donor's blood is collected, centrifuged and separated into its main component parts. Based on patient need and donor eligibility the most needed components are collected and the other components are returned to the donor. This system allows us to collect Platelets from some donors - Red Blood Cells from others

In order to best serve our patients and our community the Northern California Community Blood Bank continues to introduce new technologies and new opportunities for a variety donations types and locations. By equipping one of our bloodmobiles with apheresis collection technology we are able to travel to areas in Humboldt and Del Norte counties where platelet donation has not been available.

There is no substitute for human blood and likely won't be for a very long time, but we do have the opportunity, and responsibility, to make the best use of each of the unique components of that blood. More information about platelet donation throughout Humboldt and Del Norte Counties is available on our website – [www.nccbb.org](http://www.nccbb.org) or by calling the blood bank at (707) 443-8004.

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