



Heartland Science

Ohio's Legacy of Discovery & Innovation



Medicine, Health & Science

From the Heimlich Maneuver
to the Speed of Light

First Genetics Doctorate

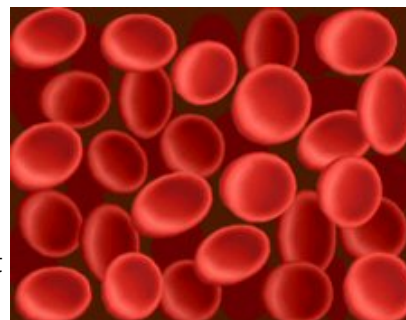
Dr. Harriet Hyman Parker was a pioneering researcher in human genetics and was the first person to get a doctorate in that field, conferred by The Ohio State University in 1936.

Dr. Parker's work on blood groups and Rh factor led her to discover that multiple blood groups are present at birth. This provided the scientific basis for safely transfusing jaundiced newborns, resolving cases of uncertain identity of infants in hospitals, and establishing legal evidence of nonpaternity.



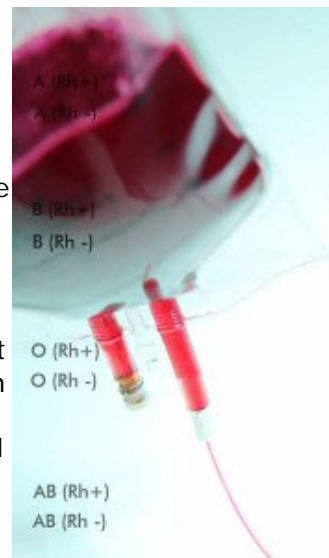
What is the Rh Factor?

Red blood cells carry proteins on their surfaces. The Rhesus factor, or Rh, is a protein carried by some individuals. If a person's red blood cells carry Rh, they are considered to be "Rh Positive." If not, they are "Rh Negative." The Rhesus factor is named for the Rhesus monkey, in which it was first discovered.



Rh and Pregnancy

Pregnant women are often given a blood test to determine whether their blood is Rh Positive or Negative. An Rh Negative mother who is carrying an Rh Positive baby may produce antibodies against the baby's red blood cells. While this has no impact on the first pregnancy, it can cause complications in future pregnancies as the antibodies can cross the placenta and destroy the red blood cells of a developing fetus. In 1968, this problem was addressed by the introduction of Rhogam (Rh immunoglobulin). The medication is given to women who are Rh-negative to help prevent them from generating antibodies against the red blood cells of their babies. As a result, the incidence of Rh sensitisation has fallen drastically since 1968. The procedure is not a 100% solution. About 2 out of 100 Rh-negative women will still develop antibodies before delivery.



Find out more...

- [About Rh Factor in Pregnancy](http://pregnancy.about.com/cs/rhfactor/a/aa050601a.htm)
(<http://pregnancy.about.com/cs/rhfactor/a/aa050601a.htm>)
- [What it Means to be Rh Negative](http://www.babycenter.com/refcap/1480.html)
(www.babycenter.com/refcap/1480.html)