

## KARL LANDSTEINER

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Article originally published in *News/letter* Number 55 (February 2000)

The 10<sup>th</sup> of February this year marks the 100<sup>th</sup> anniversary of the first announcement in which Landsteiner intimated his great discovery. This was of the physiological - as opposed to pathological - agglutination of human red cells by serum from different human individuals - the phenomena associated with what he later called the 'ABC' blood groups. This landmark event was announced as a footnote to an article in the 'Centralblatt für Bakteriologie, volume 27' entitled 'Antienzymatic, lytic and agglutinating properties of blood serum and lymph'. This does not yet mention the AB classification, the announcement of which had to wait until the definitive article was published the following year in the 'Weiner klinische Wochenschrift'.

Hence, although 1901 is the year in which the A and B blood groups were first announced, the preliminary announcement predates it by one year. At the time, Landsteiner was working as Assistant in the Vienna University Institute of Pathological Anatomy, under Anton Weichselbaum who was one of the early bacteriologists (he discovered the meningococcus). Much of Landsteiner's routine work was spent in conducting autopsies. However, he had previously gained experience with antibacterial sera and had already shown that animal sera could agglutinate other animals' red cells. For several years, the agglutinative reaction of a mixture of red cells and serum was assumed to be a primary property of the serum rather than the cells.

More about Landsteiner, the significance of his work and its extension by his colleagues will be given in later editions of this Newsletter.

Abdruck aus dem  
**Centralblatt f. Bakteriologie, Parasitenkunde u. Infektionskrankheiten.**  
I. Abteilung.  
Herausgeg. von Dr. O. Uhlworm in Cassel. — Verlag von Gustav Fischer in Jena.  
XXVII. Bd. 1900. No. 10/11.

*Nachdruck verboten.*

### **Zur Kenntnis der antifermentativen, lytischen und agglutinierenden Wirkungen des Blutserums und der Lymphe.**

[Aus dem pathol.-anat. Univ.-Institute des Prof. Weichselbaum  
in Wien.]

Von Dr. Karl Landsteiner in Wien.

1) Das Serum gesunder Menschen wirkt nicht nur auf tierische Blutkörperchen agglutinierend, sondern öfters auch auf menschliche, von anderen Individuen stammende. Es bleibt zu entscheiden, ob diese Erscheinung durch ursprüngliche individuelle Verschiedenheiten oder durch die erfolgte Einwirkung von Schädigungen etwa bakterieller Natur bedingt ist. Thatsächlich fand ich das erwähnte Verhalten bei Blut, das von Schwerkranken herrührte, besonders ausgeprägt. Es könnte diese Erscheinung mit dem von Maragliano geschilderten Lösungsvermögen des Serums für Blutkörperchen bei verschiedenen Krankheiten zusammenhängen. (IX. Congr. f. inn. Med. 1892.)

The editor understands that this can be translated - fairly loosely - as:

‘Serum from healthy people is not only active on animal blood cells but also, as often as not, on human cells from other individuals. It remains to be seen whether this phenomenon arises from individual diversity or is conditioned by damage possibly of a bacterial nature. This is quite distinct from the suppressive effects of blood in serious illness, which can be linked to the lytic activity of serum on blood cells in different illnesses - as described by Maragliano (IX Congress of Internal Medicine, 1892).’