## **Korbinian Brodmann**

Korbinian Brodmann (17 November 1868 – 22 August 1918) was a German neurologist who became famous for his definition of the cerebral cortex into 52 distinct regions from their cytoarchitectonic (histological) characteristics, known as Brodmann areas.

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Brodmann was born in Liggersdorf, Province of Hohenzollern, and studied medicine in Munich, Würzburg, Berlin and Freiburg, where he received his medical diploma in 1895. Subsequently he studied at the Medical School in the University of Lausanne in Switzerland, and then worked in the University Clinic in Munich. He got a doctor of medicine degree from the University of Leipzig in 1898, with a thesis on chronic ependymal sclerosis. He worked also in the Psychiatric Clinic in the University of Jena, with Ludwig Binswanger, and in the Municipal Mental Asylum in Frankfurt, from 1900 to 1901. There, he met Alois Alzheimer, who was influential in his decision to pursue neuroscientific basic research.

Following this, Brodmann started to work in 1901 with Cécile and Oskar Vogt at the private institute "Neurobiologische Zentralstation" in Berlin, and in 1902 in the Neurobiological Laboratory of the University of Berlin. In 1915 he joined the Kaiser-Wilhelm-Institut für Hirnforschung (Institute for Brain Research).

In 1909 he published his original research on cortical cytoarchitectonics in "Vergleichende Lokalisationslehre der Großhirnrinde in ihren Prinzipien dargestellt auf Grund des Zellenbaues" (Comparative Localization Studies in the Brain Cortex, its Fundamentals Represented on the Basis of its Cellular Architecture).

In the following years he worked at the University of Tübingen, where he was habilitated and made a full professor in 1913, and from 1910 to 1916 as physician and chairman of the Anatomical Laboratory at the University Psychiatric Clinic. In 1916 he moved to Halle in order to work in the Nietleben Municipal Hospital. Finally, in 1918, he accepted an invitation from the University of Munich to direct the group of histology at Psychiatric Research Center.

He died in Munich rather suddenly of a generalized septic infection following pneumonia, at just under 50 years of age on 22 August 1918.

When Brodmann <sup>1)</sup> defined a map of the cerebral cortex in 1909, he summarized 43 distinct cytoarchitectonic areas of the brain. His work in defining these histologically derived parcels set the framework for understanding the cerebral cortex. Since then, strategies to revise and improve the mapping of the cerebral cortex have been elusive. Even though Brodmann created a map based on postmortem histological characteristics of the cerebrum, he lacked the element of in vivo characterization of function.

## 1)

Brodmann K. Vergleichende Lokalisationslehre der Grosshirnrinde in ihren Prinzipien dargestellt auf Grund des Zellenbaues: Leipzig, Germany: Barth; 1909.

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