

Neuronal-astrocytic network of the mouse hippocampus

Hrvoje Jakovac

Department of Physiology and Immunology, Medical Faculty, University of Rijeka, Brace Branchetta 20, 51000 Rijeka, Croatia

The figures show a microscopic immunofluorescent images of mouse hippocampal tissue, labeled with antibodies against specific neuronal marker neurofilament H (red) and astrocytic marker glial fibrillary acidic protein (GFAP, green). Astrocytes are particularly abundant in the periventricular and perivascular areas, where they are

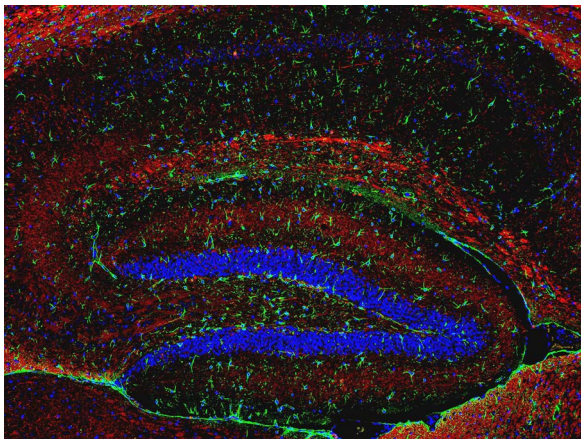


Figure A

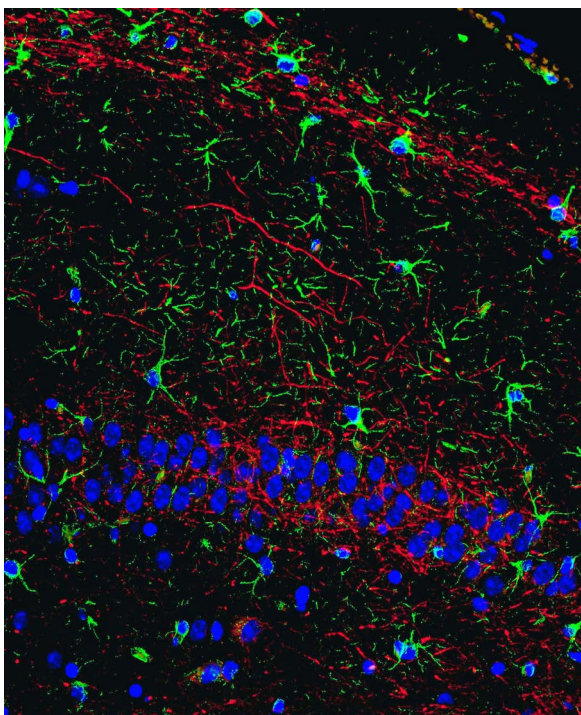


Figure B

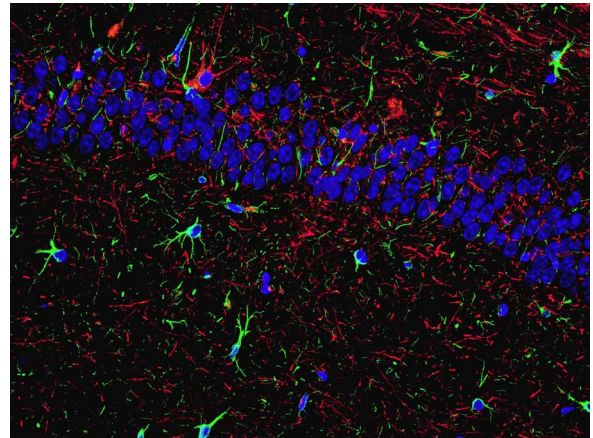


Figure C

one of the key components that form a blood-brain barrier (figure a; magnification x 100). Interweaving of axons and astrocytic processes can be seen at larger magnification (figures b and c; magnification x 1000). Recent researches clearly show active regulatory role of astrocytes in various homeostatic and adaptive processes, such as neuronal firing, neurotransmitter metabolism, synaptogenesis and neuroplasticity [1].

References

1. Blanco-Suárez E, Caldwell AL, Allen NJ (2017) Role of astrocyte-synapse interactions in CNS disorders. *J Physiol* 595: 1903-1916. [[Crossref](#)]

Copyright: ©2018 Jakovac H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

***Correspondence to:** Jakovac H, Department of Physiology and Immunology, Medical Faculty, University of Rijeka, Brace Branchetta 20, 51000 Rijeka, Croatia, E-mail: hrvoje.jakovac@medri.uniri.hr

Received: March 20, 2018; **Accepted:** April 17, 2018; **Published:** April 19, 2018