



Bringing the honeybee blood-brain barrier into focus

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A honeybee's behavior is influenced by her nutritional status as well as the pesticides and parasites she comes into contact with throughout her life. Nevertheless, we do not know how endocrine signals and foreign chemicals enter the honeybee brain. Elucidating this pathway requires an exploration of the honeybee blood-brain barrier, the thin layer of glial cells that physically separates brain circuits from the surrounding hemolymph. Here, I share my never-before-seen 3D reconstructions of honeybee blood-brain barrier glial cells, describe how pesticide, parasites, and age influence barrier integrity, and discuss the role the barrier may play in modulating pro-social signals between body and brain.