

# Heterogeneities of size and sexual dimorphism between the subdomains of the lateral-innervated accessory olfactory bulb (AOB) of *Octodon degus* (Rodentia: Hystricognathi)

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The vomeronasal system (VNS) of rodents participates in the regulation of a variety of social and sexual behaviours related to semiochemical communication. All rodents studied so far possess two parallel pathways from the vomeronasal organ (VNO) to the accessory olfactory bulb (AOB). These segregated afferences express either Gi2 or Go protein  $\alpha$ -subunits and innervate the rostral or caudal half of the AOB, respectively. In muroid rodents, such as rats and mice, both subdivisions of the AOB are of similar proportions; as there is no anatomical feature indicative of the segregation, histochemical detection has been required to portray its boundary. We studied the AOB of *Octodon degus*, a diurnal caviomorph rodent endemic to central Chile, and found several distinctive traits not reported in a rodent before: (i) the vomeronasal nerve innervates the AOB from its lateral aspect, in opposition to the medial innervation described in rabbits and muroids, (ii) an indentation that spans all layer