

The Complex Physiology of the Intramembrane Proteases PARL and Gamma-secretase

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PARL (Pink1 associated rhomboid protease) and gamma-secretase are two highly interesting intramembrane proteases with strong medical relevance. In the seminar we will provide an update on our research on these two enzymes. PARL is crucial for the maintenance of the homeostasis of brain mitochondria and its deficiency leads to a severe Leigh syndrome in the mice. Gamma-secretases are a family of proteases involved in Notch signaling. Mutations in the catalytic site of these enzymes are the major cause of familial Alzheimer's Disease.