GASTRIC ACID SECRETION Chief cell (Pepsinogen) / Mucous neck cell / Enterochromaffin cell (ANP) / Enterochromaffin-like cell (Histamine) / D cell (Somatostatin) / Surface mucous cell Tight junction Interstitium Basolateral membrane Tight junction Gastric parietal cell Vagal nerve DAG **→**O MB PKC Ach Gq PLC Apical membrane Gastrin-cell Ezrin ► CCK2R IP3R CaM Gastric gland lumen Calcium signaling Endoplasmic reticulum (ER) Histamine • ECL-cell pathway CaMKII MLCK E2/Q1 H2R $K_{\mathcal{O}}^{\tau}$ Histamine GsTranslocation PKA Ezrin Η/К Η/К cAMP H+, K+-ATPase H+, K+-ATPase D cell Acid (HCl) Gi SST SSTR2 CFTR Tubulovesicle Protein digestion and absorption H^{+} **→**0 H,0 H,CO3 ÇO CO₂ HCO, CO_2 Tight junction Chief cell (Pepsinogen) / Mucous neck cell / Enterochromaffin cell (ANP) / Enterochromaffin-like cell (Histamine) / D cell (Somatostatin) / Surface mucous cell