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The role of E-cadherin/ β -catenin signalling in the development of an asthmatic airway epithelial phenotype

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The role of E-cadherin/ β -catenin signalling in the development of an asthmatic airway epithelial phenotype

1. Loss of E-cadherin from adherens junctions and subsequent activation of β -catenin/CBP signalling induces similar changes as observed in asthmatic airway epithelial cells. *This Thesis*
2. Disruption of β -catenin/CBP signalling by ICG-001 improves epithelial barrier function, promotes its repair upon damage, and reduces house dust mite-induced pro-inflammatory responses in airway epithelial cells. *This Thesis*
3. Conditional knockout of E-cadherin in mice is sufficient to induce an airway inflammatory response but does not lead to aggravated immune responses upon chronic house dust mite treatment. *This Thesis*
4. Airway epithelial cells from asthmatic donors display prolonged β -catenin activity and delayed differentiation compared to those from non-asthmatic donors. *This Thesis*
5. β -catenin/CBP and Notch signalling independently promote goblet cell differentiation in airway epithelial cells by decreasing *FOXA2* expression and increasing *SPDEF* expression, respectively. *This Thesis*
6. Inhibition of β -catenin/CBP signalling using ICG-001 attenuates HDM-induced goblet cell metaplasia in mice. *This Thesis*
7. “The greatest enemy of knowledge is not ignorance; it is the illusion of knowledge” – Stephen Hawking.
8. “Success is a lousy teacher. It seduces smart people into thinking they can’t lose” – Bill Gates.
9. The ultimate unchanging metaphysical reality is identical to an individual’s true self. The ever-changing physical world is an illusion – Advaita Vedantam, c. 500 BCE.