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Keywords: [VCSCB](#) [SPRING](#) [seminars](#)

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Meeting Details

Start Date / Time	November 20, 2019 at 9:00 AM
End Date / Time	November 20, 2019 at 10:00 AM
Duration	1 hour(s)
Location	9455 MRB IV
Presenter Name	Jim Goldenring, Ph.D.
Presentation Title	Plasticity in gastric chief cells: a model for generation of reparative and pre-neoplastic lineages
Status	This meeting has already occurred

Meeting Agenda/Notes

Loss of parietal cells from the gastric corpus (oxyntic atrophy) leads to transdifferentiation of protein secreting chief cells into mucous cell metaplasia know as Spasmolytic Polypeptide-expressing Metaplasia (SPEM). The process of transdifferentiation occurs in an orderly process with down regulation of zymogen granule maturation (loss of Mist1 transcription factor), up-regulation of CD44v9 and xCT to deal with ROS and ER stress, upregulation of autophagy to consume zymogen granules and reprogramming of the transcriptome to upregulate mucous granule production. In addition, under the influence of inflammatory regulators, SPEM can adopt a more proliferative and intestinalizing phenotypes that may act as a pre-neoplastic precursor. These studies constitute a model for plasticity among differentiated protein-secreting lineages to deal with severe mucosal damage.

Attachment

 [Fall_2019_Goldenring_11.20.pdf](#) - Added on November 19, 2019 at 10:32 AM by Pam Uttz