

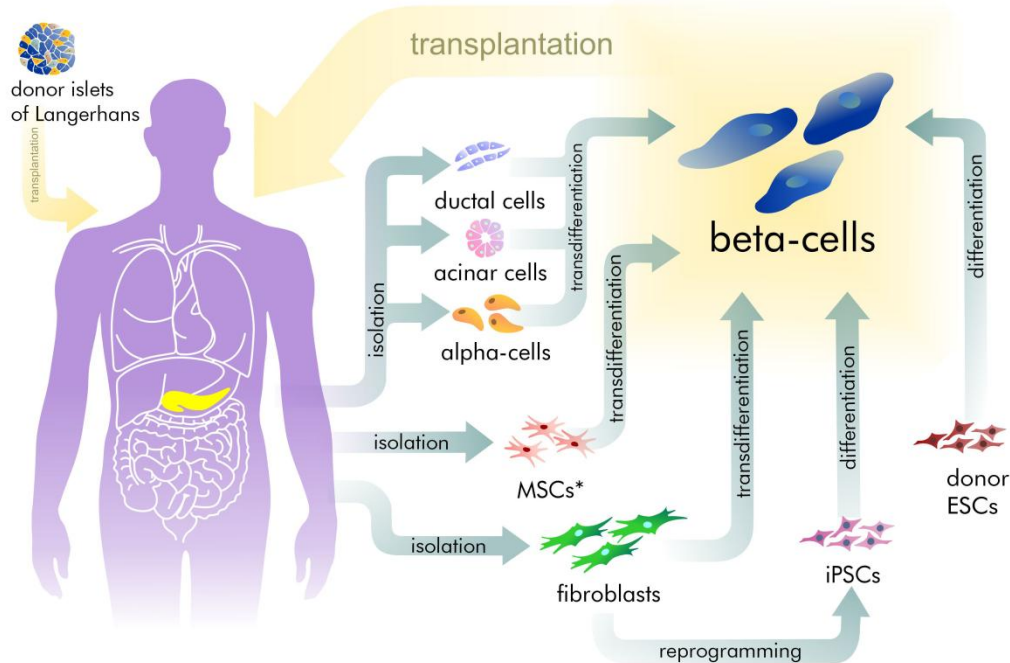
# Transcriptome (RNA-seq) analysis of human salivary gland cells with exogenous expression of human pancreas beta cells transcription factors PDX1, MAFA, NGN3

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**BGRS/SB-2020: 12th International Multiconference “Bioinformatics of Genome Regulation and Structure/Systems Biology”, 06-10 July 2020, Novosibirsk, Russia**

# Regenerative medicine for diabetes



\*Muscle-derived MSCs, adipose-derived MSCs, bone-marrow-derived MSCs

Up to 100% beta-cell deficiency in diabetes patients



Lack of *beta-cells* sensitivity during exogenously administered insulin



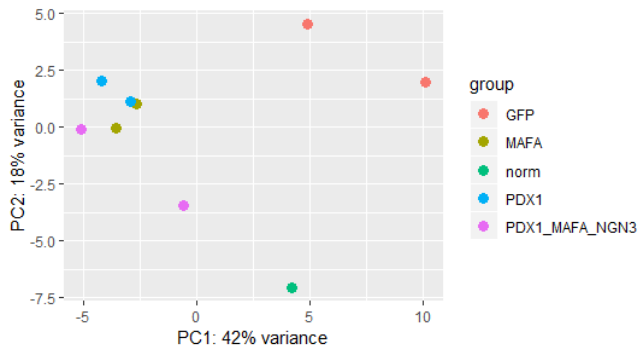
Search of new sources for beta-cell regeneration



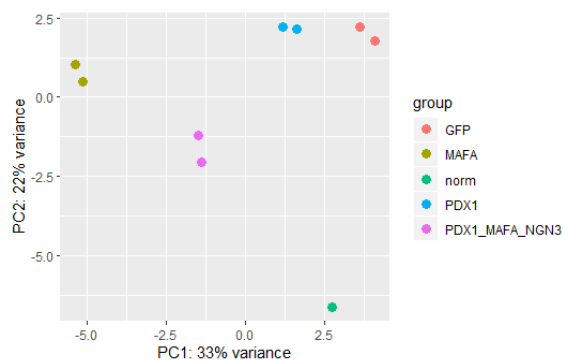
Salivary gland cells as one of such promising cell sources

# Transcriptome analysis of SGC and HuTu cell line transformation

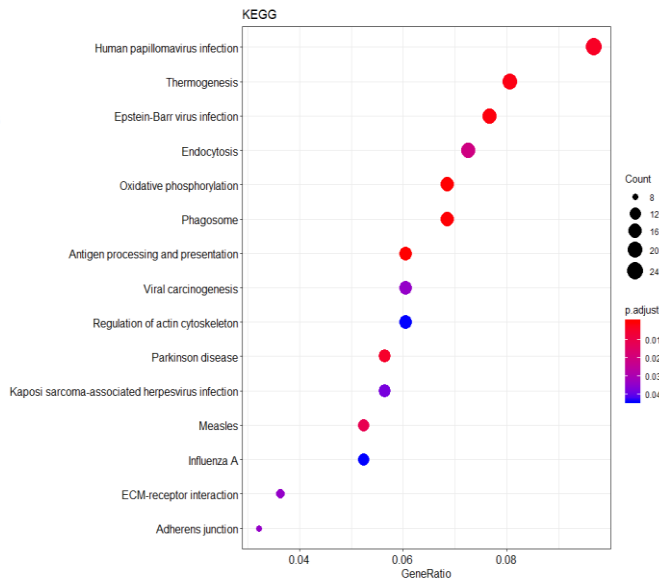
PCA plot of transformed SGC



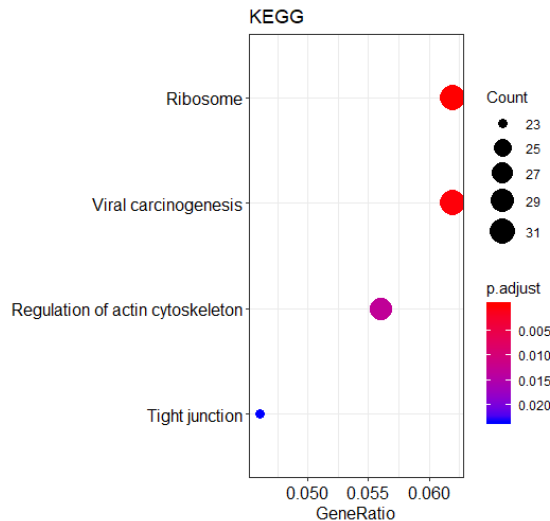
PCA plot of transformed HuTu cells



Top up- and down-regulated pathways in SGC



Top up- and down-regulated pathways in HuTu cells



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