# **Three-dimensional and two-dimensional relationships of gangliogenesis with folliculogenesis in mature mouse ovary: A Golgi-Cox staining approach**

**Running title:** 3D imaging of gangliogenesis in ovary

Mohammad Ebrahim Asadi Zarcha\*, Alireza Afsharb\*, Farhad Rahmanifarc\*, Mohammad Reza Jafarzadeh Shirazia†, Mandana Baghband, Mohammad Dadpasanda, Farzad Mohammad Rezazadeha, Arezoo Khoradmehrb, Hossein Baharvande,f, Amin Tamadonb†

a Department of Animal Sciences, College of Agriculture, Shiraz University, Shiraz, Iran

b The Persian Gulf Marine Biotechnology Research Center, The Persian Gulf Biomedical Sciences Research Institute, Bushehr University of Medical Sciences, Bushehr, Iran

c Department of Basic Sciences, School of Veterinary Medicine, Shiraz University, Shiraz, Iran

d Department of Obstetrics and Gynecology, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

e Department of Stem Cells and Developmental Biology, Cell Science Research Center, Royan Institute for Stem Cell Biology and Technology, ACECR, Tehran, Iran

f Department of Developmental Biology, University of Science and Culture, Tehran, Iran

# **Supplementary Figure**



## Fig. S1. Two-dimensional analysis of ovarian structures and ganglia in Golgi Cox staining.

A) Steps of measuring the diameter and area of the ovarian follicle with “line” and “Oval” tools in ImageJ. B) Segmentation of ganglia in the ovary to count and measure areas of ganglia with ImageJ “threshold” and “analyze particle” algorithms.