

## Researcher Information Form

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**Research Interest** (1-2 Sentences):

Breast cancer brain metastasis and role of glial autophagy in breast cancer colonization in new brain microenvironment.

**Unique Resources/Techniques:**

Microglial and astrocyte specific autophagy genes conditional knockout mouse models.

**Representative Publications** (5 Maximum, May use Hyperlink):

**Wang C\***, Haas MA, Yang F, Yeo S, Okamoto T, Chen S, Wen J, Sarma P, Plas DR, Guan JL\*. (2019) Autophagic lipid metabolism sustains mTORC1 activity in TSC-deficient neural stem cells. **Nature Metabolism** doi: 10.1038/s42255-019-0137-5. (\*: correspondence).

**Wang C**, Yeo S, Haas MA, and Guan JL. (2017) Autophagy gene FIP200 in neural progenitors non-cell autonomously controls differentiation by regulating microglia. **The Journal of Cell Biology** 216: 2581-2596.

Chen S, **Wang C**, Yeo S, Liang CC, Okamoto T, Sun S, Wen J, and Guan JL. (2016) Suppression of FIP200 canonical autophagy function by a knock-in mutation reveals its distinct roles in embryonic development, cell survival and tumor growth. **Genes and Development** 30: 856-869

**Wang C**, Chen S, Yeo S, **Karsli-Uzunbas G**, White E, Mizushima N, Virgin HW and Guan JL. (2016) Elevated p62/SQSTM1 Determines the Fate of Autophagy-Deficient Neural Stem Cells by Increasing Superoxide. **The Journal of Cell Biology** 212: 545-560.

**Wang C**, Liang CC, Bian ZC, Zhu Y, Guan JL (2013) FIP200 is required for maintenance and differentiation of postnatal neural stem cells. **Nature Neuroscience** 16: 532-542.