# JIANNAN ZHANG (张剑南)

Associate Research Fellow at Sichuan University. I am also employed as a Post-doctoral Fellow in Wang yajun (王亚军) Lab at Sichuan University (四川大学).

I am broadly interested in Avian Physiology, Endocrinology and Metabolism, and Transgenesis in chicken.





### CONTACT

- **■** biozhangjn@gmail.com
- **y** Jiannan\_scu
- ngithub.com/biozhangjn
- **a** qq124975496
- **3** (86) 13540012368

For more information, please contact me via email.

## **SKILLS**

#### Wet-lab

- · Molecular cloning
- · Functional analysis
- · IHC/ISH/FISH/Co-IP/Chip-Sea...
- Gene-editing with CRISPR/Cas9
- PGCs culture and Microinjection

#### Dry-lab

- · RNA-Seq data analysis
- · scRNA-Seq data analysis
- · Highly skilled in R and Bash.

Made with the R package pagedown.

Last updated on 2021-12-26.

2021 2019 多不饱和脂肪酸调控家鸡肝脏脂肪生成的机制解析(省重)(2019YJ0017)

主持, CNY ¥100,000, 四川省科学技术厅-应用基础研究

家鸡GPR120受体介导多不饱和脂肪酸对肝脏脂质代谢的调节效应探究 (31802056)

主持, CNY ¥300,000, 国家自然科学基金青年项目

## PUBLICATIONS

2021

Neuropeptide S (NPS) and its receptor (NPSR1) in chickens: cloning, tissue expression, and functional analysis

*Poultry Science*. 2021, 100 (12), 101445. doi: 10.1016/j.psj.2021.101445

- · Chao Fang<sup>#</sup>, **Jiannan Zhang<sup>#</sup>**, Yiping Wan, Zejiao Li, Feiyang Qi, Yuanhao Dang, Juan Li, Yajun Wang<sup>\*</sup>;
- Molecular Cloning and Functional Characterization of Three 5-HT Receptor Genes (HTR1B, HTR1E, and HTR1F) in Chickens

*Genes*. 2021, 12(6): 891. doi: 10.3390/genes12060891

- · Caiyun Sun, Yang Qiu, Qin Ren, Xiao Zhang, Baolong Cao, Yi Zou, Juan Li, **Jiannan Zhang**\*, Yajun Wang:
- Single-Cell RNA Sequencing Analysis of Chicken Anterior Pituitary: A Bird's-Eye View on Vertebrate **Pituitary**

Frontiers in physiology. 2021, 12:. doi: 10.3389/fphys.2021.562817

- · Jiannan Zhang<sup>#</sup>, Can Lv<sup>#</sup>, Chunheng Mo, Meng Liu, Yiping Wan, Juan Li<sup>\*</sup>, Yaiun Wang<sup>\*</sup>;
- · Impact Factor = 4.566
- Characterization of Four Orphan Receptors (GPR3, GPR6, GPR12 and GPR12L) in Chickens and Ducks and Regulation of GPR12 Expression in Ovarian Granulosa Cells by Progesterone

Genes. 2021, 12(4): 489. doi: 10.3390/genes12040489

· Li, Z.; Jiang, B.; Cao, B.; Zhang, Z.; **Zhang, J.**; Li, J.; Huang, Y. \*; Wang, Y. \*;

Characterization of four urotensin II receptors (UTS2Rs) in chickens

Peptides. 2021, 138: 170482. doi: 10.1016/j.peptides.2020.170482

· Cui. L. \*, Lv. C. \*, **Zhang. J.**. Li. J. \*, & Wang. Y. \*;

2020

The Asp298Asn polymorphism of melanocortin - 4 receptor (MC4R) in pigs: evidence for its potential effects on MC4R constitutive activity and cell surface expression

Animal Genetics. 2020, 51(5):694-706. doi: 10.1111/age.12986

- · Zhang, J<sup>#</sup>, Li, J<sup>#</sup>, Wu, C; Hu, Z; An, L; Wan, Y; Fang, C; Zhang, X; Li, J<sup>\*</sup>, Wang, Y<sup>\*</sup>;
- · Impact Factor = 2.841

Melanocortin Receptor 4 (MC4R) Signaling System in Nile Tilapia *International Journal of Molecular Sciences*. 2020, 21(19):7036. doi: 10.3390/ijms21197036

- · Liu, Tianqiang; Deng, Yue; Zhang, Zheng; Cao, Baolong; Li, Jing; Sun, Caiyun; Hu, Zhixing; **Zhang, Jiannan**; Li, Juan; Wang, Yajun;
- · Impact Factor = 4.556
- Characterization of a novel thyrotropin-releasing hormone receptor, TRHR3, in chickens *Poultry Science*. 2020, 99(3):1643-1654. doi: 10.1016/j.psj.2019.10.062
  - · Li, Xiaoxiao<sup>#</sup>; Li, Zhengyang<sup>#</sup>; Deng, Yue; **Zhang, Jiannan**; Li, Juan <sup>\*</sup>; Wang, Yajun <sup>\*</sup>;
- Characterization of the neuropeptide FF (NPFF) gene in chickens: evidence for a single bioactive NPAF peptide encoded by the NPFF gene in birds

Domestic Animal Endocrinology. 2020, :106435. doi: 10.1016/j.domaniend.2020.106435

· Chen, J<sup>#</sup>; Huang, S<sup>#</sup>; **Zhang, J**; Li, J<sup>\*</sup>; Wang, Y<sup>\*</sup>;

Arginine vasotocin (AVT)/mesotocin (MT) receptors in chickens: Evidence for the possible involvement of AVT-AVPR1 signaling in the regulation of oviposition and pituitary prolactin expression *General and Comparative Endocrinology.* 2019, 281:91-104. doi: 10.1016/j.ygcen.2019.05.013

· Wu, Chao; Lv, Can; Wan, Yiping; Li, Xiaoxiao; **Zhang, Jiannan**\*; Li, Juan; Wang, Yajun\*;

 Regulation of Pituitary Cocaine-and Amphetamine-Regulated Transcript Expression and Secretion by Hypothalamic Gonadotropin-Releasing Hormone in Chickens

Frontiers in physiology. 2019, 10:. doi: 10.3389/fphys.2019.00882

- · Mo, Chunheng; Lv, Can; Huang, Long; Li, Zhengyang; **Zhang, Jiannan**; Li, Juan \*; Wang, Yajun \*;
- Endothelins (EDN1, EDN2, EDN3) and their receptors (EDNRA, EDNRB, EDNRB2) in chickens: Functional analysis and tissue distribution

General and comparative endocrinology. 2019, 283:113231. doi: 10.1016/j.ygcen.2019.113231

- · Liu, Haikun; Luo, Qin; **Zhang, Jiannan**; Mo, Chunheng; Wang, Yajun \*; Li, Juan \*;
- Identification of a Novel Functional Corticotropin-Releasing Hormone (CRH2) in Chickens and Its Roles in Stimulating Pituitary TSHβ Expression and ACTH Secretion

Frontiers in Endocrinology. 2019, 10:595. doi: 10.3389/fendo.2019.00595

- · Bu, Guixian<sup>#</sup>; Fan, Jie<sup>#</sup>; Yang, Ming; Lv, Can; Lin, Yin; Li, Jinxuan; Meng, Fengyan; Du, Xiaogang; Zeng, Xianyin \*; **Zhang, Jiannan**; Juan Li; Yajun Wang \*
- Characterization of the Apelin/Elabela Receptors (APLNR) in Chickens, Turtles, and Zebrafish:
   Identification of a Novel Apelin-Specific Receptor in Teleosts

Frontiers in endocrinology. 2018, 9:756. doi: 10.3389/fendo.2018.00756

· **Zhang, Jiannan**; Zhou, Yawei; Wu, Chenlei; Wan, Yiping; Fang, Chao; Li, Jing; Fang, Wenqian; Yi, Ran; Zhu, Guoqiang; Li, Juan \*; Yajun Wang \*

2019

2018

```
The orphan G protein-coupled receptor 25 (GPR25) is activated by Apelin and Apela in non-mammalian
vertebrates
Biochemical and Biophysical Research Communications. 2018, 501(2):408-414. doi: 10.1016/j.bbrc.2018.04.229
 · Zhang, Jiannan<sup>#</sup>; Wan, Yiping<sup>#</sup>; Fang, Chao; Chen, Junan; Ouyang, Wangan; Li, Juan<sup>*</sup>; Wang, Yajun<sup>*</sup>;
Characterization of neuromedin U (NMU), neuromedin S (NMS) and their receptors (NMUR1, NMUR2) in
chickens
Peptides. 2018, 101:69-81. doi: 10.1016/j.peptides.2017.12.022
· Wan, Yiping<sup>#</sup>; Zhang, Jiannan<sup>#</sup>; Fang, Chao; Chen, Junan; Li, Jing; Li, Juan <sup>*</sup>; Wu, Chenlei; Wang, Yajun <sup>*</sup>;
The interaction of MC3R and MC4R with MRAP2, ACTH, α-MSH and AgRP in chickens
Journal of Endocrinology. 2017, 234(2):155-174. doi: 10.1530/JOE-17-0131
 · Zhang, Jiannan; Li, Xin; Zhou, Yawei; Cui, Lin; Li, Jing; Wu, Chenlei; Wan, Yiping; Li, Juan *; Wang, Yajun *;
 · Impact Factor = 4.706
Molecular characterization of neuropeptide Y (NPY) receptors (Y1, Y4 and Y6) and investigation of the
tissue expression of their ligands (NPY, PYY and PP) in chickens
General and comparative endocrinology. 2017, 240:46-60. doi: 10.1016/j.ygcen.2016.09.005
 · Gao, Shunyu<sup>#</sup>; Zhang, Jiannan<sup>#</sup>; He, Chen; Meng, Fengyan; Bu, Guixian; Zhu, Guoqiang; Li, Juan <sup>*</sup>; Wang.
 Yajun<sup>*</sup>;
Characterization of melanin-concentrating hormone (MCH) and its receptor in chickens: Tissue
expression, functional analysis, and fasting-induced up-regulation of hypothalamic MCH expression
Gene. 2017, 615:57-67. doi: 10.1016/j.gene.2017.03.009
 · Cui, Lin; Lv, Can; Zhang, Jiannan; Mo, Chunheng; Lin, Dongliang; Li, Juan *; Wang, Yajun *;
Molecular characterization of three NPY receptors (Y2, Y5 and Y7) in chickens: Gene structure, tissue
expression, promoter identification, and functional analysis
General and Comparative Endocrinology. 2016, 236:24-34. doi: 10.1016/j.ygcen.2016.04.019
· He, Chen<sup>#</sup>; Zhang, Jiannan<sup>#</sup>; Gao, Shunyu; Meng, Fengyan; Bu, Guixian; Li, Juan <sup>*</sup>; Wang, Yajun <sup>*</sup>;
Identification and characterization of the free fatty acid receptor 2 (FFA2) and a novel functional FFA2-
like receptor (FFA2L) for short-chain fatty acids in pigs: Evidence for the existence of a duplicated FFA2
gene (FFA2L) in some mammalian species
Domestic animal endocrinology. 2014, 47:108-118. e1. doi: 10.1016/j.domaniend.2013.10.004
 · Zhang, J; Cheng, S; Wang, Y, Yu, X; Li, J;
Synthesis and biological evaluation of novel benzamide derivatives as potent smoothened antagonists
Bioorganic & medicinal chemistry letters. 2014, 24(5):1426-1431. doi: 10.1016/j.bmcl.2014.01.006
 · Wu, Tian-Ming; Wang, Dao-Cai; Xiang, Pu; Zhang, Jian-Nan; Sang, Ya-Xiong; Lin, Hong-Jun; Chen, Jie; Xie,
 Gang; Song, Hang; Zhao, Ying-Lan,
```

2017

2016

2014

Glucagon-like peptide (GCGL) is a novel potential TSH-releasing factor (TRF) in Chickens: I) Evidence for its potent and specific action on stimulating TSH mRNA expression and secretion in the pituitary *Endocrinology*. 2014, 155(11):4568-4580. doi: 10.1210/en.2014-1331

· Huang, Guian; He, Chen; Meng, Fengyan; Li, Juan; **Zhang, Jiannan**; Wang, Yajun \*;

## **CONFERENCE PRESENTATIONS**

2017

2011

● **黑皮质素系统在家鸡能量平衡中的作用机理解析** 四川省细胞生物学会2017年度学术大会

**♀** Chengdu, CN

● **家鸡促甲状腺激素受体(cTSHR)的克隆、剪切变体鉴定及其功能分析** 第十六次全国动物遗传育种学术讨论会系列学术报告会

**♀** Yangzhou, CN