

# 个人简历

## 个人信息:

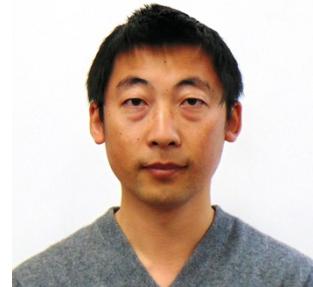
姓名: 云彦

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## 教育背景及工作经历:

- 9/2020-至今** 助理研究员 (Assistant Project Scientist)  
加州大学戴维斯分校 (University of California Davis)
- 9/2015-8/2020** 博士后  
霍华德·休斯医学研究所 (Howard Hughes Medical Institute)  
加州大学戴维斯分校 (University of California Davis) 微生物分子遗传学系  
指导老师: Neil Hunter 教授  
研究课题及方向: 哺乳动物生殖细胞同源重组及染色体分离调控; 肥胖及环境毒素暴露对卵子质量的影响; DNA 损伤及修复
- 3/2014-5/2015** 博士后  
澳大利亚昆士兰大学 (University of Queensland) 生物医学学院  
指导老师: Peter Thorn 教授  
研究课题及方向: 胰岛素分泌调控及 II 型糖尿病发病机制
- 10/2010-2/2015** 博士 (人体生理学)  
澳大利亚纽卡斯尔大学 (University of Newcastle) 生物医学及药理学院  
主要指导老师: Keith Jones 教授  
研究课题及方向: 哺乳动物卵母细胞染色体分离调控及衰老对卵子质量的影响
- 9/2007-7/2010** 硕士 (细胞生物学)  
西北农林科技大学动物医学学院  
指导老师: 雷安民教授  
研究课题及方向: 牛卵子体外成熟调控及体细胞核移植效率探索
- 9/2003-7/2007** 本科 (生物科学)  
西北农林科技大学动物科技学院

## 主要研究成果:

- 通过高分辨率活细胞照相技术对小鼠卵母细胞体外成熟分裂的全过程实时监控，确认了染色体上黏连蛋白复合体的丢失是卵母细胞衰老中染色体错误分离的主要原因之一。更为重要的是，首次直接证实了衰老卵母细胞中的染色体错误分离通常发生在第二次减数分裂而非人们通常认为的第一次减数分裂，为在人卵母细胞中检查到的错误表型提供了更合理的解释。相关成果发表在‘Development’杂志上，并受邀于‘the NODE’上跟踪报道。以后将继续探究卵母细胞衰老导致染色体分离异常的机制及挽救措施。
- 与加州大学戴维斯分校的合作导师 Neil Hunter 教授共同申请了美国 NIEHS (National Institute of Environmental Health Sciences)的项目并得到资助。该研究首次直接全面地检测了农田中大量使用的除草剂 Atrazine 对哺乳动物卵母细胞同源重组，染色体分离及其早期胚胎发育的影响，并对可能的机制进行了探索。目前该课题已完成，相关论文正在投稿。以后将继续研究各类环境污染物，生活习惯等对卵母细胞质量及女性生殖的影响。
- 男性生殖细胞减数分裂过程中有较低的染色体分离异常，而对应的过程在女性卵母细胞的异常率很高。其原因除了衰老会导致卵中染色体上黏连蛋白复合体的逐渐丢失，减数分裂前期哺乳动物雌雄配子同源重组调控的差异亦起到关键作用。目前的课题重点围绕哺乳动物雌雄配子同源重组及蛋白翻译后调控的异同进行。

### 主要发表论文：

- Yan Yun, Zijie Wei, and Neil Hunter. 2019. Maternal Obesity Enhances Oocyte Chromosome Abnormalities Associated With Aging. **Chromosoma.** <https://doi.org/10.1007/s00412-019-00716-6> (JCR Q1, 3 区, IF = 3.4, 引用 3 次)
- Huanyu Qiao, Prasada Rao, Yan Yun, Sumit Sandhu, JaredH. Fong, Manali Sapre, Michael N guyen, Addy Tham, Benjamin W. Van, Tiffany Y.H. Chng, Amy Lee, Neil Hunter. 2018. Impeding DNA Break Repair Enables Oocyte Quality Control. **Molecular Cell.** 72(2):211-221 (JCR Q1, 1 区, IF = 15.6, top 期刊, 引用 23 次)
- Yan Yun, Simon Lane, and Keith Jones. 2014. Premature dyad separation in meiosis II is the major segregation error with maternal age in mouse oocytes. **Development.** 141:199-208 (F1000 recommendations) (JCR Q1, 1 区, IF = 5.6, top 期刊, 引用 74 次)
- Yan Yun, Janet Holt, Simon Lane, Eileen McLaughlin, Julie Merriman-Jones, and Keith Jones. 2014. Reduced ability to recover from spindle disruption and loss of kinetochore spindle assembly checkpoint proteins in oocytes from aged mice. **Cell cycle.** 13:1938-1947 (JCR Q2, 3 区, IF = 3.7, 引用 48 次)
- Yan Yun\*, Peng An\*, Jing Ning\*, Guiming Zhao, Wenlin Yang, and Anming Lei. 2014. H1foo is essential for in vitro meiotic maturation of bovine oocytes. **Zygote**:1-10 (\*共同一作, 4 区, IF = 1.3, 引用 15 次)
- Simon Lane, Yan Yun, and Keith Jones. 2012. Timing of anaphase-promoting complex activation in mouse oocytes is predicted by microtubule-kinetochore attachment but not by

bivalent alignment or tension. **Development**. 139:1947-1955 (**F1000 recommendations**) (**JCR Q1, 1 区, IF = 5.6, top 期刊, 引用 125 次**)

- Yan Yun, Guiming Zhao, Sujun Wu, Wei Li, and Anming Lei. 2012. Replacement of H1 linker histone during bovine somatic cell nuclear transfer. **Theriogenology**. 78:1371-1380 (**JCR Q1, 2 区, IF = 2.1, top 期刊, 引用 13 次**)
- Wenqiang Liu, Jiqing Yin, Guiming Zhao, Yan Yun, Sujun Wu, Keith Jones, and Anming Lei. 2012. Differential regulation of cyclin B1 degradation between the first and second meiotic divisions of bovine oocytes. **Theriogenology**. 78:1171-1181 (**JCR Q1, 2 区, IF = 2.1, top 期刊, 引用 7 次**)

### 专著章节:

- Yan Yun, Masaru Ito, Sumit Sandhu, and Neil Hunter. 2021. Cytological monitoring of meiotic recombination in mouse spermatocytes and oocytes. In: Aguilera A., Carreira A. (eds) Homologous Recombination. **Methods in Molecular Biology**, vol 2153. Humana, New York, NY. [https://doi.org/10.1007/978-1-0716-0644-5\\_19](https://doi.org/10.1007/978-1-0716-0644-5_19)

### 撰写及待发表论文:

- Yan Yun, Christina So, Rushali Manhas, Sunkyung Lee, Tabitha Wibowo, Michael Hori, Carol Kim, Richard Schultz and Neil Hunter. The herbicide atrazine exposure causes oocyte chromosome missegregation and impairs early embryo development in mice. (投稿中)
- Yan Yun and Neil Hunter. Mammalian oocyte quality control (导师修改中; 受邀综述文章 *Trends in Cell Biology*)
- Yan Yun and Neil Hunter. Rapid cohesin loss during puberty is essential for chromosome segregation fidelity in mammalian oocytes (整理撰写中)
- Prasada Rao\*, Yan Yun\*, and Neil Hunter. Sumoylation modulates synaptonemal complex length and recombination rate in mammalian spermatocytes and oocytes. (\*Co-first author; 整理撰写中)

### 研究经费:

- 与合作导师 Neil Hunter 教授申请的试点项目得到美国国立卫生研究院 (National Institute of Environmental Health Sciences)资助; 研究项目: Effects of Atrazine on the Developing Ovary; 2017 – 2018

### 学术相关会员及担任审稿人

- The Society for Reproductive Biology (SRB), Australia, 2012-2014
- American Society for Cell Biology (ASCB), American, 2014
- 担任 **Cell Reports, PLOS Genetics, Biology of Reproduction, Med One, Acta Histochemica, Systems Biology in Reproductive Medicine** 等多个 SCI 期刊审稿人

### 指导学生经历:

- 博士后期间指导 20 余名本科生参与实验室培训及研究 2015 - 2021
- 指导 1 名学生完成毕业论文 (UC Davis Honors Thesis) 2015 - 2018
- 指导 1 名学生获得学术杰出表现奖 2017 - 2018
- 指导 1 名学生获得 Schilling 本科生研究奖 2018

### 主要学术会议:

- Yan Yun, Simon I. R. Lane, Janet E. Holt and Keith T. Jones. Premature Separation of Dyads is the origin for maternal age related aneuploidy in mammalian eggs found from chromosome tracking. The Society for Reproductive Biology (SRB), **Gold Coast, Australia (2012)**, Oral presentation
- Yan Yun, Simon I. R. Lane, Janet E. Holt and Keith T. Jones. Live imaging shows pre-division during meiosis II as the leading cause of chromosome mis-segregation in oocytes from old mice. EMBO conference on Meiosis, **Dresden, Germany (2013)**, Poster presentation
- Yan Yun, Janet E. Holt, Simon I. R. Lane, Eileen A. McLaughlin, Julie A. Merriman and Keith T. Jones. Reduced spindle assembly checkpoint in oocytes from aged mice. The Society for Reproductive Biology (SRB), **Melbourne, Australia (2014)**, Oral presentation (Oozoa award finalists)
- Yan Yun, Simon I. R. Lane, Janet E. Holt and Keith T. Jones. N-terminal modification of Ndc80 can induce a spindle assembly checkpoint arrest in mouse oocytes. American Society for Cell Biology (ASCB), **Philadelphia, United States (2014)**, Poster presentation
- Yan Yun, and Neil Hunter. Female Reproduction is Disrupted by the Common Herbicide Atrazine. HHMI Science Meeting, **Janelia Research Campus, United States (2018)**, Poster presentation

### 奖学金及其他荣誉

- 国家留学基金委公派留学及澳大利亚纽卡斯尔大学联合奖学金 2010-2014
- 硕士优秀论文奖
- 硕士优秀研究生称号
- 硕士优秀毕业论文二等奖
- 第一届数学中国杯数学建模网络挑战赛第一阶段比赛一等奖

- 硕士研究生一等奖学金 2007-2010
- 本科成绩优秀于 2007 年被学校免试推荐攻读硕士学位