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# Transcriptome-wide m6A methylation profiling of Wuhua yellow-feathered chicken ovary revealed regulatory pathways underlying sexual maturation and low egg-laying performance

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RNA N6-melthyladenosine (m6A) can play an important role in regulation of various biological processes. Chicken ovary development is closely related to egg laying performance, which is a process primarily controlled by complex gene regulations. In this study, transcriptome-wide m6A methylation of the Wuhua yellow-feathered chicken ovaries before and after sexual maturation was profiled to identify the potential molecular mechanisms underlying chicken ovary development. The results indicated that m6A levels of mRNAs were altered dramatically during sexual maturity. A total of 1,476 differential m6A peaks were found between these two stages with 662 significantly upregulated methylation peaks and 814 downregulated methylation peaks after sexual maturation. A positive correlation was observed between the m6A peaks and gene expression levels, indicating that m6A may play an important role in regulation of chicken ovary development. Functional enrichment analysis indicated that apoptosis related pathways could be the key molecular regulatory pathway underlying the poor reproductive performance of Wuhua yellow-feathered chicken. Overall, the various pathways and corresponding candidate genes identified here could be useful to facilitate molecular design



Original Study

# Characterization of Canine Gingival-Derived Mesenchymal Stem Cells and Their Exosomes



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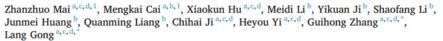
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#### Protection efficacy of the H1 and H3 bivalent virus-like particle vaccine against swine influenza virus infection



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Research Article

#### Self-Assembled Biofunctionalized Chitosan-Derived Nanocomposite for Long-Lasting Antibacterial Packaging at Room Temperature

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动物保健品研究

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# 中兽類想花器聚颗粒抗菌。抗线及 抗氧化君性研究

吉艺宽,邹导夫,李少方,曾富兰,熊雁青,李美娣\* (广东梅州职业技术学院 梅州市中兽药工程技术研究中心,广东 梅州 514011)

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(广东梅州职业技术学院机电工程学院,广东 梅州 514000)

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徐炜琳1,2,李美娣1,2,贾聪俊1,2,朱琼1,2,黄日豪1,2,刘婷3,尹会方# 1.广东梅州职业技术学院,广东梅州 514000; 2.梅州市中兽药工程技术研究中心,广东梅州 514000; 3. 汕头市潮阳区动物疫病预防控制中心,广东汕头 515100:4. 龙岩学院生命科学学院,福建龙岩 364012 乡村振兴是当前我国的关键战略之一乡村旅游已成为促进乡村振兴的重要抓手而缺乏专业人才制约了乡村旅游业高质量发展。对 此,乡村旅游业对职业院校的教学提出了更高的要求,教师要及时转变教学思路,完善教学模式,提高教学策略的有效性,文章针对职 业院校旅游管理专业的有效教学策略进行初步探究,以期为推进中国式现代化贡献教育力量。

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