

# 学位授权点建设年度报告 (2022 年)

学位授予单位

名称: 苏州大学

代码: 10285

3205000118812

授权学科

名称: 生物学

(类别)

代码: 0710

授权级别

博士

硕士

2022 年 12 月 31 日

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	32222025		2023.01-2025.12	200	2022

B	82241202		2023. 01-2025. 12	200	2022
	32150710523		2022. 01-2023. 12	160	2022
GPIba	82230003		2023. 01-2027. 12	261	2022
SnRK2	42276100		2023. 01-2026. 12	56	2022
B3	32270162		2023. 01-2026. 12	54	2022
	32271292		2023. 01-2026. 12	54	2022
	32271424		2023. 01-2026. 12	54	2022
YIPPEE/YPEL5	32271206		2023. 01-2025. 12	54	2022
ZC3H13/m6A/UFL1 T	82270191		2023. 01-2026. 12	52	2022
METTL3 RNA m6A	82270211		2023. 01-2026. 12	52	2022
Pxr CdTe	22206141		2023. 01-2025. 12	30	2022

Cl pX “ ”	82202465		2023. 01-2025. 12	30	2022
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### 3. 2022

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Structural characterization of a neutralizing nanobody with broad activity against SARS-CoV-2 variants	Frontiers in Microbiology	2	2022	/	Dimitri Lavillette
The requirement of phosphoenolpyruvate carboxykinase 1 for angiogenesis in vitro and in vivo	Science Advances	1	2022	eabn6928	
TIMM44 is a potential therapeutic target of human glioma	Theranostics	1	2022	7586-7602	

Identification of G i3 as a novel molecular therapeutic target of cervical cancer	Int J Biol Sci	2	2022	5667-5680	
An immunometabolic patch facilitates mesenchymal stromal/stem cell therapy for myocardial infarction through a macrophage-dependent mechanism	Bioeng Transl Med	1	2022	e10471	
Glucosamine facilitates cardiac ischemic recovery via recruiting Ly6C <sup>low</sup> monocytes in a STAT1 and O-GlcNAcylation dependent fashion	Clin Transl Med	2	2022	e762	
Calming egress of inflammatory monocytes and related septic shock by therapeutic CCR2 silencing using macrophage-derived extracellular vesicles	Nanoscale	2	2022	4935-4945	
Yeast-derived nanoparticles remodel the immunosuppressive microenvironment in tumor and tumor-draining lymph nodes to suppress tumor growth	Nature Communications	1	2022	110	

Transmembrane serine protease TMPRSS2 implicated in SARS-CoV-2 infection is autoactivated intracellularly and requires N-glycosylation for regulation.	Journal of Biological Chemistry	2	2022	102643	
Renal corin is essential for normal blood pressure and sodium homeostasis	Int J Mol Sci.	2	2022	11251	
CD320 expression and apical membrane targeting in renal and intestinal epithelial cells	Int J Biol Macromol.	1	2022	85-92	
IgG immunocomplexes drive the differentiation of a novel subset of osteoclasts independent of RANKL and inflammatory cytokines	JOURNAL OF BONE AND MINERAL RESEARCH	1	2022		
Generation of specialized blood vessels via lymphatic transdifferentiation	Nature	1	2022	570-575	
Nutraceuticals for the treatment of IBD: current progress and future directions	Front Nutr	1	2022	794169	



IL-39 promotes chronic graft-versus-host disease by increasing T and B cell pathogenicity	Experimental Hematology & Oncology	2	2022		
The critical role of nanoparticle sizes in the interactions between gold nanoparticles and ABC transporters in zebrafish embryos	AQUATIC TOXICOLOGY	2	2022	106286	
Retinoic acid inhibits the angiogenesis of human embryonic stem cell-derived endothelial cells by activating FBP1-mediated gluconeogenesis	Stem Cell Res Ther.	1	2022	239	
Requirements for human cardiomyocytes	Cell Prolif.	1	2022	13150	
Strategies to improve the therapeutic effect of pluripotent stem cell-derived cardiomyocytes on myocardial infarction	Front Bioeng Biotechnol.	1	2022	973496	
Ascorbic acid derived carbon dots promote circadian rhythm and contribute to attention deficit hyperactivity disorder	nano research	1	2022	8247–8254	

Activation of primary hepatic stellate cells and liver fibrosis induced by targeting TGF- 1/Smad signaling in schistosomiasis in mice	Parasites & Vectors	2	2022	online	
Different requirements of CBFβ and RUNX2 in skeletal development among calvaria, limbs, vertebrae and ribs	International Journal of Molecular Sciences	2	2022	13299	
Synergistic protective effects of folic acid and resveratrol against fine particulate matter-induced heart malformations in zebrafish embryos	Ecotoxicol Environ Saf	2	2022		
Fine particulate matter induces heart defects via AHR/ROS-mediated endoplasmic reticulum stress	Chemosphere	2	2022		
Paternal acrylamide exposure induces transgenerational effects on sperm parameters and learning capability in mice	Food Chem Toxicol	2	2022		
Lung fibroblasts facilitate pre-metastatic niche formation by remodeling the local immune	Immunity	1	2022	55(8):1483-1500	

microenvironment					
Lipid metabolism and neutrophil function	Cell Immunol	2	2022	377:104546	
The secretion profile of mesenchymal stem cells and potential applications in treating human diseases	Signal Transduct Target Ther	1	2022	7(1):92	
Satellite cell-specific deletion of Cipc alleviates myopathy in mdx mice.	Cell Rep	1	2022	110939	
circHIPK3 prevents cardiac senescence by acting as a molecular glue to recruit ubiquitin ligase to degrade HuR	Theranostics	1	2022	7550-7566	
Ribosome biogenesis in disease: new players and therapeutic targets.	Signal Transduction and Targeted Therapy	1	2022	15	
SDH, a novel diarylheptane compound, is a potential treatment for inflammatory bowel disease by restoring epithelial barrier function	BIOMEDICINE & PHARMACOTHERAPY	2	2022	113080	

Diterpenoid DGA induces apoptosis via endoplasmic reticulum stress caused by changes in glycosphingolipid composition and inhibition of STAT3 in glioma cells	BIOCHEMICAL PHARMACOLOGY	2	2022	115254	
ADAP restraint of STAT1 signaling regulates macrophage phagocytosis in immune thrombocytopenia	Cellular and Molecular Immunology	1	2022	898-912	
Reducing Nav1.6 expression attenuates the pathogenesis of Alzheimer's disease by suppressing BACE1 transcription	Aging Cell	1	2022	e13593	
TRIM32 deficiency impairs the generation of pyramidal neurons in developing cerebral cortex	Cells	2	2022	449	
SARS-CoV-2 spike engagement of ACE2 primes S2' site cleavage and fusion initiation.	PNAS	1	2022	/	
Characterization of circular RNAs with advanced sequencing technologies in human complex diseases	Wiley Interdisciplinary Reviews: RNA	2	2022	e1759	

Multi omics characterization of synthetic lethality related molecular features: implications for SL based therapeutic target screening	FEBS Journal	2	2022	/	
Anastasis confers ovarian cancer cells increased malignancy through elevated p38 MAPK activation	Cell Death Differ	1	2022	Online	
Mesenchymal stem cells alleviate systemic sclerosis by inhibiting the recruitment of pathogenic macrophages	Cell Death Discov	2	2022	8(1):466	
Mesenchymal stem/stromal cells primed by inflammatory cytokines alleviate psoriasis-like inflammation via the TSG-6-neutrophil axis	Cell Death Dis	2	2022	13(11):996	
Splicing factor BUD31 promotes ovarian cancer progression through sustaining the expression of anti-apoptotic BCL2L12	Nat Commun	1	2022	13(1):6246	
TNF and IFN rapidly activate PI3K-AKT signaling to drive glycolysis that confers	Stem Cell Res Ther	2	2022	13(1):491	

mesenchymal stem cells enhanced anti-inflammatory property					
Bud31-mediated alternative splicing is required for spermatogonial stem cell self-renewal and differentiation	Cell Death Differ	1	2022	Online ahead of print	
Neutrophils in the tumor microenvironment and their functional modulation by mesenchymal stromal cells	Cell Immunol	2	2022	379:104576	
Cullin 4b-RING ubiquitin ligase targets IRGM1 to regulate Wnt signaling and intestinal homeostasis	Cell Death Differ	1	2022	29(9):1673-1688	
RAD51 is essential for spermatogenesis and male fertility in mice	Cell Death Discov	2	2022	8(1):118	
Ablation of ORMDL3 impairs adipose tissue thermogenesis and insulin sensitivity by increasing ceramide generation	Mol Metab	2	2022	56:101423	

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of melanoma cells					
Disrupted mitochondrial homeostasis coupled with mitotic arrest generates antineoplastic oxidative stress	Oncogene	1	2022	41(3):427-443	
Purification identification and function analysis of ACE inhibitory peptide from <i>Ulva prolifera</i> protein	Food Chemistry	1	2022	134127	
Indole-3-carbinol in vitro antiviral activity against SARS-Cov-2 virus and in vivo toxicity	Cell Death Discov	2	2022	8(1):491	
SCD1 Sustains Homeostasis of Bulge Niche via Maintaining Hemidesmosomes in Basal Keratinocytes	Adv Sci (Weinh)	1	2022	Online ahead of print	
Reciprocal regulation of mesenchymal stem cells and immune response	Cell Stem Cell	1	2022	29(11):1515-1530	
N-acetyltransferase 10 promotes colon cancer progression by inhibiting ferroptosis through N4-acetylation and stabilization of ferroptosis suppressor protein 1	Cancer Commun (Lond)	1	2022	42(12):1347-1366	

(FSP1) mRNA					
An International Society for Cell and Gene Therapy Mesenchymal Stromal Cells Committee editorial on overcoming limitations in clinical trials of mesenchymal stromal cell therapy for coronavirus disease-19: time for a global registry	Cytotherapy	2	2022	24(11):1071-1073	
A novel long noncoding RNA SP100-AS1 induces radioresistance of colorectal cancer via sponging miR-622 and stabilizing ATG3	Cell Death Differ	1	2022	Online ahead of print	
Immune response in COVID-19: what is next?	Cell Death Differ	2	2022	29(6):1107-1122	
Mesenchymal stromal cells equipped by IFN empower T cells with potent anti-tumor immunity	Oncogene	1	2022	41(13):1866-1881	
N6-methyladenosine demethylase FTO promotes growth and metastasis of gastric cancer via m6A modification of caveolin-1 and	Cell Death Dis	2	2022	13(1):72	



metabolic regulation of mitochondrial dynamics					
Novel SARS-CoV-2 therapeutic targets: RNA proofreading complex and virus-induced senescence	Cell Death Differ	1	2022	29(2):263-265	
The histone demethylase Kdm6b regulates the maturation and cytotoxicity of TCR <sup>+</sup> CD8 <sup>+</sup> intestinal intraepithelial lymphocytes	Cell Death Differ	1	2022	29(7):1349-1363	
Bcl-3 promotes TNF-induced hepatocyte apoptosis by regulating the deubiquitination of RIP1	Cell Death Differ	1	2022	29(6):1176-1186	
GRAd-COV2, a gorilla adenovirus-based candidate vaccine against COVID-19, is safe and immunogenic in younger and older adults	Sci Transl Med	1	2022	14(627):eabj1996	
3D Ti3C2Tx MXene-M atrigel with Electroacoustic Stimulation to Promote the Growth of Spiral Ganglion Neurons	ACS Nano	1	2022	16744-16756	

2D Ti3C2TxMXene couples electrical stimulation to promote proliferation and neural differentiation of neural stem cells	Acta Biomaterialia	1	2022	105-117	
Super-aligned carbon nanotubes and GelMA hydrogel composite scaffolds promote spiral ganglion neuron growth and orientation	Materials Today Nano	1	2022	100181	
Cardiomyocyte Maturation-the Road is not Obstructed	Stem Cell Reviews and Reports	2	2022	2966-2981	
2D MXene interfaces preserve the basal electrophysiology of targeted neural circuits	Nanoscale	2	2022	10992-11002	
Superparamagnetic iron oxide nanoparticles and static magnetic field regulate neural stem cell proliferation	Frontiers in Cellular Neuroscience	2	2022	815280	
Mechanism of hyperproteinemia-induced blood cell homeostasis imbalance in an animal model.	Zoological Research	2	2022	301-318	
Altered phenotype and enhanced antibody-producing ability of peripheral B cells in mice with Cd19-driven Cre expression.	Cells	2	2022	700	

The interaction between the soluble programmed death ligand-1(sPD-1) and PD-1+ regulator B cells mediates immunosuppression in triple negative breast cancer	Frontiers in Immunology	2	2022	1-19	
Reassessing acetyl CoA supply and NADPH availability for mevalonate biosynthesis from glycerol in Escherichia coli	Biotechnology and Bioengineering	2	2022	2868-2877	
Endogenous cathelicidin is required for protection against ZIKV-caused testis damage via inactivating virons.	Antiviral Research	2	2022	105248	
A cathelicidin antimicrobial peptide from Hydrophis cyanocinctus inhibits Zika virus infection by downregulating expression of a viral entry factor	Journal of Biological Chemistry	2	2022	102471	
A non-bactericidal cathelicidin provides prophylactic efficacy against bacterial infection by driving phagocyte influx.	eLife	2	2022	e72849	
Renal corin is essential for normal blood pressure and sodium homeostasis.	International Journal of Molecular Sciences	2	2022	11251	

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Regulatory  
network-based  
imputation of  
dropouts in  
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Targeting GATA1 and p2x7r locus binding capability in spinal astrocytes suppresses chronic visceral pain by promoting DNA demethylation	Neuroscience Bulletin	2	2022	359-372	
Overexpression of GRK6 alleviates chronic visceral hypersensitivity through downregulation of P2Y6 receptors in anterior cingulate cortex of rats with prenatal maternal stress	CNS Neurosci & Therap	2	2022	851-861	
High-resolution 3D demonstration of regional heterogeneity in the glymphatic system	J Cereb Blood Flow Metab	2	2022	2017-2031	
Analysis of diurnal variations in heart rate: potential applications for chronobiology and cardiovascular medicine	Frontiers in Physiology	2	2022	13:835198	
Human-specific gene CT47 blocks PRMT5 degradation to lead to meiosis arrest.	CELL Death Discovery	2	2022	8(1):345	
Time-restricted feeding entrains long-term behavioral changes through the IGF2-KCC2 pathway	iScience	2	2022	25(5):104267	

Extensive identification of genes involved in congenital and structural heart disorders and cardiomyopathy	Nature Cardiovascular Research	1	2022	0008-6363	
Oncogenic potential of BEST4 in colorectal cancer via activation of PI3K/Akt signaling	Oncogene	1	2022	1166-1177	
E3 ubiquitin ligase MID1 ubiquitinates and degrades type-I interferon receptor 2	Immunology	2	2022	398-412	
The metabolic genomic atlas reveals potential drivers and clinically relevant insights into the etiology of esophageal squamous cell carcinoma	Theranostics	1	2022	6061-6178	
A liquid biopsy signature predicts lymph node metastases in T1 oesophageal squamous cell carcinoma: implications for precision treatment strategy	Br J Cancer	2	2022	2052-2059	
Identification of RNA-splicing factor Lsm12 as a novel tumor-associated gene and a potent biomarker in Oral Squamous Cell Carcinoma (OSCC)	Journal of Experimental & Clinical Cancer Research	1	2022	150	

The m6A-induced lncRNA CASC8 promotes proliferation and chemoresistance via upregulation of hnRNPL in esophageal squamous cell carcinoma	International Journal of Biological Sciences	2	2022	4824-4836	
Tumor-associated macrophage (TAM)-derived CCL22 induces FAK addiction in esophageal squamous cell carcinoma (ESCC)	Cellular & Molecular Immunology	1	2022	1054-1066	
PAFR/Stat3 axis maintains the symbiotic ecosystem between tumor and stroma to facilitate tumor malignancy	Acta Pharmaceutica Sinica B	1	2022		
Nuclear genome-derived circular RNA circPUM1 localizes in mitochondria and regulates oxidative phosphorylation in esophageal squamous cell carcinoma	Signal Transduction and Targeted Therapy	1	2022		
Characterization of somatic structural variations in 528 Chinese individuals with Esophageal squamous cell carcinoma	Nature communications	1	2022		
Bidirectional regulation of structural damage on	Autophagy	1	2022	2731-2745	

autophagy in the <i>C. elegans</i> epidermis					
A One-step strategy to target essential factors with auxin-inducible degron system in mouse embryonic stem cells	Front Cell Development Biology	2	2022	10:964119	
An injectable alginate/fibrin hydrogel encapsulated with cardiomyocytes and VEGF for myocardial infarction treatment	Journal of Materials Science & Technology	1	2022	198–206	
Dual-functional bacterial cellulose modified with phase-transitioned proteins and gold nanorods combining antifouling and photothermal bactericidal properties	Journal of Materials Science & Technology	1	2022	14-23	
A multifunctional coating with anti-adhesion, bacteria-killing and anti-quorum sensing properties for preventing biofilm formation of <i>pseudomonas aeruginosa</i>	Acta Biomaterialia	1	2022	254-263	
A photothermal nanoplatform with sugar-triggered cleaning ability for high-efficiency intracellular delivery	ACS Applied Materials & Interfaces	2	2022	2618-2628	



SDF-1-loaded injectable decellularized extracellular matrix hydrogel promotes transplanted cardiomyocyte engraftment and functional regeneration after myocardial infarction	ACS Applied Materials & Interfaces	2	2023	DOI: 10.1021/acsami.2c16682	
Fibrin-based cardiac patch containing neuregulin-1 for heart repair after myocardial infarction	Colloids and Surfaces B: Biointerfaces	2	2023	112936	
A compendium of 32,277 metagenome-assembled genomes and over 80 million genes from the early-life human gut microbiome	Nature Communications	1	2022	/	
Enterobase: hierarchical clustering of 100 000s of bacterial genomes into species/subspecies and populations	Philosophical Transactions of the Royal Society B: Biological Sciences	2	2022	/	
Nerve growth factor-Laden anisotropic silk nanofiber hydrogels to regulate neuronal/astroglial differentiation for scarless spinal cord repair	ACS Applied Materials & Interfaces	2	2022	3701-3715	

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	BXMAS1		202210361858.5
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			ZL202220195490.5
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			202210050871.9
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