# BIBLIOGRAPHY OF RESEARCH PUBLICATIONS

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NEWEST RELEASES

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Genome Wide Expression Profiling of Cancer Cell Lines Cultured in Microgravity Reveals Significant Dysregulation of Cell Cycle and MicroRNA Gene Networks
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**CARDIOVASCULAR**

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FLUID MECHANICAL PRINCIPLES OF RCCS


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**INSECT**


**LIVER/PANCREAS**

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Rotational co-culture of clonal β-cells with endothelial cells: effect of PPAR-γ agonism in vitro on insulin and VEGF secretion.


Sainz B Jr, TenCate V, Uprichard SL. Three-dimensional Huh7 cell culture system for the study of Hepatitis C virus infection. Virol J 6:103, 2009


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MICROBIOLOGY

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Effect of Microgravity on Fungistatic Activity of an α-Aminophosphonate Chitosan Derivative against Aspergillus niger
K.Devarayan , Y. Sathishkumar , Y.Soo Lee , B.-Suhe Kim, Published: October 15, 2015
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Simulated microgravity affects ciprofloxacin susceptibility and expression of acrAB-tolC genes in E. coli ATCC25922.

Bacteria in the vaginal microbiome alter the innate immune response and barrier properties of the human vaginal epithelia in a species-specific manner.


Modeled microgravity cultivation modulates N-acylhomoserine lactone production in Rhodospirillum rubrum S1H independently of cell density. Microbiology. 2013 Sep 11. [Epub ahead of print]


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NEURAL/NEUROENDOCRINE

Engineering three dimensional micro nerve tissue using postnatal stem cells from human dental apical papilla.

Effects of simulated microgravity on human brain nervous tissue.

3D tissue-like assemblies: A novel approach to investigate virus-cell interactions.

RCCS Bioreactor-Based Modelled Microgravity Induces Significant Changes on In Vitro 3D Neuroglial Cell Cultures.


Bi L, Qu LN, Huang ZM, Wang CY, Li Q, Tan YJ, Li YH. Effects of parabolic flight on redox status in SH-SY5Y cells Sheng Li Xue Bao. 61: 445-50,2009


### PROSTATE


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Effect of Culture in Simulated Microgravity on the Development of Mouse Embryonic Testes.


A major effect of simulated microgravity on several stages of preimplantation mouse development is lethality associated with elevated phosphorylated SAPK/JNK.


SALIVARY GLAND

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Spaceflight and simulated microgravity cause a significant reduction of key gene expression in early t-cell activation.

The impact of simulated real microgravity on bone cells and mesenchymal stem cells

Experimental study on effect of simulated microgravity on structural chromosome instability of human peripheral blood lymphocytes.

Integration Analysis of MicroRNA and mRNA Expression Profiles in Human Peripheral Blood Lymphocytes Cultured in Modeled Microgravity.

Conservation of the Low-shear Modeled Microgravity Response in Enterobacteriaceae and Analysis of the trp Genes in this Response.

Growing tissues in real and simulated microgravity - new methods for tissue engineering.

Microgravity control of autophagy modulates osteoclastogenesis.

Simulated microgravity increases heavy ion radiation-induced apoptosis in human B lymphoblasts.
Impact of simulated microgravity on the normal developmental time line of an animal-bacteria symbiosis.

Treatment of hydrogen molecule abates oxidative stress and alleviates bone loss induced by modeled microgravity in rats.

Expression of Multiple Stress Response Genes by Escherichia Coli Under Modeled Reduced Gravity.

The effects of simulated microgravity on intervertebral disc degeneration.

Destrin deletion enhances the bone loss in hindlimb suspended mice.

Analysis of miRNA and mRNA expression profiles highlights alterations in ionizing radiation response of human lymphocytes under modeled microgravity.

Rotating wall vessel exposure alters protein secretion and global gene expression in Staphylococcus aureus.

Transcriptional and proteomic responses of Pseudomonas aeruginosa PAO1 to spaceflight conditions involve Hfq regulation and reveal a role for oxygen.

Spaceflight and modeled microgravity effects on microbial growth and virulence.

Response of Pseudomonas aeruginosa PAO1 to low shear modeled microgravity involves AlgU regulation.

Microarray profile of gene expression during osteoclast differentiation in modelled microgravity.

Differential translocation of nuclear factor-kappaB in a cardiac muscle cell line under gravitational changes.

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Simulated microgravity decreases DNA repair capacity and induces DNA damage in human lymphocytes.
Media Ion Composition Controls Regulatory and Virulence Response of Salmonella in Spaceflight.

Osteoblast and Osteoclast Differentiation in Modeled Microgravity.

The effect of simulated microgravity on osteoblasts is independent of the induction of apoptosis.

Modeled microgravity stimulates osteoclastogenesis and bone resorption by increasing osteoblast RANK/OPG ratio.


Space flight alters bacterial gene expression and virulence and reveals a role for global regulator Hfq.

Gene expression alterations in activated human T-cells induced by modeled microgravity.

Impact of modeled microgravity on microvascular endothelial cells.

Impact of Modeled Microgravity on Migration, Differentiation, and Cell Cycle Control of Primitive Human Hematopoietic Progenitor Cells.

Low-Shear Modeled Microgravity: A Global Environmental Regulatory Signal Affecting Bacterial Gene Expression

Effect of Simulated Microgravity on the Production of IL-12 by PBMC’s.

Low-Shear Modeled Microgravity Alters the Salmonella Enterica Serovar Typhimurium Stress Response in an RposIndependent Manner.

Microarray Analysis Identifies Salmonella Genes Belonging to the Low-Shear Modeled Microgravity Regulon
Proliferation of Human Hematopoietic Bone Marrow Cells in Simulated Microgravity.

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Fridley KM, Fernandez I, Li MT, Kettlewell RB, Roy K. **Unique Differentiation Profile of Mouse Embryonic Stem Cells in Rotary and Stirred Tank Bioreactors.** *Tissue Eng Part A.* 16: 3285-3298, 2010

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**TISSUE ENGINEERING**


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MISCELLANEOUS


