



## Caiyun Grace Li

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### Bio

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#### ACADEMIC APPOINTMENTS

- Member, Cardiovascular Institute

### Publications

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#### PUBLICATIONS

- **NUSAP1 Binds ILF2 to Modulate R-Loop Accumulation and DNA Damage in Prostate Cancer.** *International journal of molecular sciences*  
Chiu, C. L., Li, C. G., Verschueren, E., Wen, R. M., Zhang, D., Gordon, C. A., Zhao, H., Giaccia, A. J., Brooks, J. D.  
2023; 24 (7)
- **Dysregulated Smooth Muscle Cell BMPR2-ARRB2 Axis Causes Pulmonary Hypertension.** *Circulation research*  
Wang, L., Moonen, J. R., Cao, A., Isobe, S., Li, C. G., Tojais, N. F., Taylor, S., Marciano, D. P., Chen, P., Gu, M., Li, D., Harper, R. L., El-Bizri, et al  
2023
- **Developing high-affinity decoy receptors to treat multiple myeloma and diffuse large B cell lymphoma.** *The Journal of experimental medicine*  
Miao, Y. R., Thakkar, K., Cenik, C., Jiang, D., Mizuno, K., Jia, C., Li, C. G., Zhao, H., Diep, A., Xu, Y., Zhang, X. E., Yang, T. T., Liedtke, et al  
2022; 219 (9)
- **The Combination of Radiotherapy and Complement C3a Inhibition Potentiates Natural Killer cell Functions Against Pancreatic Cancer.** *Cancer research communications*  
Sodji, Q. H., Nambiar, D. K., Viswanathan, V., von Eyben, R., Colburg, D., Binkley, M. S., Li, C. G., Olcina, M. M., Chang, D. T., Le, Q., Giaccia, A. J.  
2022; 2 (7): 725-738
- **Regulation of the BCR signalosome by the class II peptide editor, H2-M, affects the development and repertoire of innate-like B cells.** *Cell reports*  
Ghosh, D., Pham, T. D., Nanaware, P. P., Sengupta, D., Adler, L. N., Li, C. G., He, X., O'Mara, M. E., Kantor, A. B., Nguyen, K. D., Yang, Y., Eisenlohr, L. C., Jensen, et al  
1800; 38 (4): 110200
- **C3aR Signaling Inhibits NK-cell Infiltration into the Tumor Microenvironment in Mouse Models.** *Cancer immunology research*  
Nandagopal, S., Li, C. G., Xu, Y., Sodji, Q. H., Graves, E. E., Giaccia, A. J.  
2021
- **Eliminating hypoxic tumor cells improves response to PARP inhibitors in homologous recombination & deficient cancer models** *JOURNAL OF CLINICAL INVESTIGATION*  
Mehibel, M., Xu, Y., Li, C. G., Moon, E., Thakkar, K. N., Diep, A. N., Kim, R. K., Bloomstein, J. D., Xiao, Y., Bacal, J., Saldivar, J. C., Le, Q., Cimprich, et al  
2021; 131 (11)
- **ALDH1A3 Coordinates Metabolism with Gene Regulation in Pulmonary Arterial Hypertension.** *Circulation*  
Li, D., Shao, N., Moonen, J., Zhao, Z., Shi, M., Otsuki, S., Wang, L., Nguyen, T., Yan, E., Marciano, D. P., Contrepois, K., Li, C. G., Wu, et al  
2021

- **The HIF target MAFF promotes tumor invasion and metastasis through IL11 and STAT3 signaling.** *Nature communications*  
Moon, E. J., Mello, S. S., Li, C. G., Chi, J., Thakkar, K., Kirkland, J. G., Lagory, E. L., Lee, I. J., Diep, A. N., Miao, Y., Rafat, M., Vilalta, M., Castellini, et al  
2021; 12 (1): 4308
- **Intracellular C4BPA Levels Regulate NF-kappaB-Dependent Apoptosis.** *iScience*  
Olcina, M. M., Kim, R. K., Balanis, N. G., Li, C. G., von Eyben, R., Graeber, T. G., Ricklin, D., Stucki, M., Giaccia, A. J.  
2020; 23 (10): 101594
- **PPAR#-p53-Mediated Vasculoregenerative Program to Reverse Pulmonary Hypertension.** *Circulation research*  
Hennigs, J. K., Cao, A. n., Li, C. G., Shi, M. n., Mienert, J. n., Miyagawa, K. n., Körbelin, J. n., Marciano, D. P., Chen, P. I., Roughley, M. n., Elliott, M. V., Harper, R. L., Bill, et al  
2020
- **PPARgamma Interaction with UBR5/ATMIN Promotes DNA Repair to Maintain Endothelial Homeostasis.** *Cell reports*  
Li, C. G., Mahon, C., Sweeney, N. M., Verschuere, E., Kantamani, V., Li, D., Hennigs, J. K., Marciano, D. P., Diebold, I., Abu-Halawa, O., Elliott, M., Sa, S., Guo, et al  
2019; 26 (5): 1333
- **Smooth Muscle Contact Drives Endothelial Regeneration by BMPR2-Notch1-Mediated Metabolic and Epigenetic Changes** *CIRCULATION RESEARCH*  
Miyagawa, K., Shi, M., Chen, P., Hennigs, J. K., Zhao, Z., Wang, M., Li, C. G., Saito, T., Taylor, S., Sa, S., Cao, A., Wang, L., Snyder, et al  
2019; 124 (2): 211–24
- **SMAD proteins directly suppress PAX2 transcription downstream of transforming growth factor-beta 1 (TGF-#1) signalling in renal cell carcinoma.** *Oncotarget*  
Kaur, G., Li, C. G., Chantry, A., Stayner, C., Horsfield, J., Eccles, M. R.  
2018; 9 (42): 26852-26867
- **Induced Pluripotent Stem Cell Model of Pulmonary Arterial Hypertension Reveals Novel Gene Expression and Patient Specificity** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*  
Sa, S., Gu, M., Chappe, J., Shao, N., Ameen, M., Elliott, K. A., Li, D., Grubert, F., Li, C. G., Taylor, S., Cao, A., Ma, Y., Fong, et al  
2017; 195 (7): 930-941
- **Amphetamines promote mitochondrial dysfunction and DNA damage in pulmonary hypertension.** *JCI insight*  
Chen, P., Cao, A., Miyagawa, K., Tojais, N. F., Hennigs, J. K., Li, C. G., Sweeney, N. M., Inglis, A. S., Wang, L., Li, D., Ye, M., Feldman, B. J., Rabinovitch, et al  
2017; 2 (2)
- **Upregulation of HERV-K is Linked to Immunity and Inflammation in Pulmonary Arterial Hypertension.** *Circulation*  
Saito, T. n., Miyagawa, K. n., Chen, S. Y., Tamosiuniene, R. n., Wang, L. n., Sharp, O. n., Samayoa, E. n., Harada, D. n., Moonen, J. A., Cao, A. n., Chen, P. I., Hennigs, J. K., Gu, et al  
2017
- **Loss of PPAR gamma in endothelial cells leads to impaired angiogenesis** *JOURNAL OF CELL SCIENCE*  
Vattulainen-Collanus, S., Akinrinade, O., Li, M., Koskenvuo, M., Li, C. G., Rao, S. P., Perez, V. D., Yuan, K., Sawada, H., Koskenvuo, J. W., Alvira, C., Rabinovitch, M., Alastalo, et al  
2016; 129 (4): 693-705
- **RNA Sequencing Analysis Detection of a Novel Pathway of Endothelial Dysfunction in Pulmonary Arterial Hypertension** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*  
Rhodes, C. J., Im, H., Cao, A., Hennigs, J. K., Wang, L., Sa, S., Chen, P., Nickel, N. P., Miyagawa, K., Hopper, R. K., Tojais, N. F., Li, C. G., Gu, et al  
2015; 192 (3): 356-366
- **Elafin Reverses Pulmonary Hypertension via Caveolin-1-Dependent Bone Morphogenetic Protein Signaling** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*  
Nickel, N. P., Spiekerkoetter, E., Gu, M., Li, C. G., Li, H., Kaschwich, M., Diebold, I., Hennigs, J. K., Kim, K., Miyagawa, K., Wang, L., Cao, A., Sa, et al  
2015; 191 (11): 1273-1286
- **BMPR2 Preserves Mitochondrial Function and DNA during Reoxygenation to Promote Endothelial Cell Survival and Reverse Pulmonary Hypertension** *CELL METABOLISM*  
Diebold, I., Hennigs, J. K., Miyagawa, K., Li, C. G., Nickel, N. P., Kaschwich, M., Cao, A., Wang, L., Reddy, S., Chen, P., Nakahira, K., Alcazar, M. A., Hopper, et al  
2015; 21 (4): 596-608

- **Whole-Exome Sequencing Reveals TopBP1 as a Novel Gene in Idiopathic Pulmonary Arterial Hypertension** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*  
Perez, V. A., Yuan, K., Lyuksyutova, M. A., Dewey, F., Orcholski, M. E., Shuffle, E. M., Mathur, M., Yancy, L., Rojas, V., Li, C. G., Cao, A., Alastalo, T., Khazeni, et al  
2014; 189 (10): 1260-1272
- **FK506 activates BMPR2, rescues endothelial dysfunction, and reverses pulmonary hypertension.** *journal of clinical investigation*  
Spiekerkoetter, E., Tian, X., Cai, J., Hopper, R. K., Sudheendra, D., Li, C. G., El-Bizri, N., Sawada, H., Haghighat, R., Chan, R., Haghighat, L., de Jesus Perez, V., Wang, et al  
2013; 123 (8): 3600-3613
- **Loss of adenomatous polyposis coli-a3 integrin interaction promotes endothelial apoptosis in mice and humans.** *Circulation research*  
de Jesus Perez, V. A., Yuan, K., Orcholski, M. E., Sawada, H., Zhao, M., Li, C. G., Tojais, N. F., Nickel, N., Rajagopalan, V., Spiekerkoetter, E., Wang, L., Dutta, R., Bernstein, et al  
2012; 111 (12): 1551-1564
- **PAX Genes in Cancer; Friends or Foes?** *Frontiers in genetics*  
Li, C. G., Eccles, M. R.  
2012; 3: 6-?
- **PAX8 promotes tumor cell growth by transcriptionally regulating E2F1 and stabilizing RB protein** *ONCOGENE*  
Li, C. G., NYMAN, J. E., Braithwaite, A. W., Eccles, M. R.  
2011; 30 (48): 4824-4834
- **PAX3 knockdown in metastatic melanoma cell lines does not reduce MITF expression.** *Melanoma research*  
He, S., Li, C. G., Slobbe, L., Glover, A., Marshall, E., Baguley, B. C., Eccles, M. R.  
2010

## PRESENTATIONS

- Gene Regulation By Pax2 In Autosomal Dominant Polycystic Kidney Disease - Department of Pathology, University of Otago (2004)
- A Role For Pax2 In Polycystic Kidney Disease - 175th Scientific Meeting of the Otago Medical School Research Society, University of Otago (2004)
- PAX Gene Regulation: Where Development and Cancer Meet - Department of Pathology, University of Otago (2010)
- PAX8 Gene Regulation – Where Development and Cancer Meet - The Cancer Satellite meeting of 20th Queenstown Molecular Biology Conference (2010)
- PPAR# Plays a Novel, Pivotal Role in DNA Damage Sensing and Repair, That is Perturbed in Pulmonary Arterial Hypertension - American Heart Association Scientific Sessions (2014)
- PPAR# controls the DNA damage response by modulating UBR5 interaction with the MRE11- RAD50-NBS1 complex, an impaired signaling in pulmonary arterial hypertension - American Thoracic Society Mini Symposium (2016)
- PPAR#-MRN complex maintains genome integrity and is perturbed in vascular disease - Chemistry, Engineering & Medicine for Human Health (ChEM-H) Postdoc Society Meeting, Stanford University (2016)
- A deep dive into pulmonary biology - from cardiovascular diseases to cancer metastasis - Pathology Departmental Seminar, University of Otago (2019)