Davy Ouyang, PhD

Senior Vice President, Innovation

EDUCATION/TRAINING

Institution and Location	Degree & Field of Study
The University of Hong Kong, Hong Kong May 1998 - Nov 2001	PhD in Cancer Biology
West China University of Medical Sciences, Chengdu, China, Sept 1991 - Jul 1994	MS in Genetics
East China University of Chemical Technology, Shanghai, China Sept 1987 - Jul 1991	BS in Biochemistry

PERSONAL STATEMENT

Davy Ouyang is a seasoned biotech executive and scientific leader with over 20 years of experience in drug discovery and preclinical development across oncology, immuno-oncology, and autoimmune diseases. Davy serves as SVP of Innovation at Crown Bioscience following roles as Executive Vice President of R&D at Sidewinder Therapeutics and Vice President of Biology at InnoCare Pharma. Earlier in his career, Davy held research scientist positions at Merck & Co. and the Cancer Institute of New Jersey.

Dr. Ouyang has significant experience driving first-in-class ADC and biologics programs and a strong track record of advancing innovative drug candidates, including more than 20 IND-enabling molecules and 10 IND approvals across small molecules and biologics. Davy has extensive research experience, particularly in the areas of translational oncology, preclinical pharmacology, and platform development with a strong academic foundation and 44 peer-reviewed publications.

He received his PhD in Cancer Biology from the University of Hong Kong and completed postdoctoral training in oncology pharmacology with Dr. Cory Abate-Shen at Rutgers University.

SCIENTIFIC APPOINTMENTS

2025 – present	Senior Vice President, Innovation, Crown Bioscience
2023 – 2025	Executive Vice President, Research & Development, Sidewinder Therapeutics
2021 – 2023	Vice President, Head of Biology, InnoCare Pharma LTD.
2015 – 2021	Vice President, Scientific Research & Innovation Executive, Crown Bioscience
2014 – 2015	Research Assistant Professor, Medical Oncology Department, Rutgers Cancer Institute of New Jersey
2007 – 2014	Associate Principal Scientist, Oncology & CNS Biology, Merck & Co.
2002 – 2007	Instructor, Center for Advanced Biotechnology and Medicine UMDNJ-Rutgers University
1998 – 2001	Ph.D. Student, Department of Anatomy, The University of Hong Kong

INDUSTRY ACHIEVEMENTS / HONORS

2022 Guangzhou High-tech District Innovation Leading Talent

2016 Jiangsu Province Innovation Leading Talent

2015 Taicang City Science and Technology Leading Talent

2015 Suzhou Innovation Leading Talent

2013 Biologics Development, Merck Polytechnic Institute

2012 Pharmacology of Drug Discovery, Merck Polytechnic Institute

2012 Merck Initiatives for New Target (MINT) Program

2012 Corporate Merck Sigma Yellow Belt

2011 Neuroscience Courses, Merck Polytechnic Institute

2009 Merck Early Drug Development Program

2008 Merck LEAP Path to Professional Success Program

2008 Merck Action Management Program

2006 Genome Access Course, Cold Spring Harbor Laboratory

2005 Gallo Award, Cancer Institute of New Jersey

2003-2005 Postdoctoral Traineeship Award, Department of Defense

2001 Scholar-in-training Award, American Association for Cancer Research

2000-2001 Wong Ching Yee Medical Postgraduate Scholarship, the University of Hong Kong

2000 Young Investigator Award, Hong Kong International Cancer Congress

1998-2001 Postgraduate Studentship, the University of Hong Kong

RELEVANT PUBLICATIONS

Ouyang, X.S., Wang, X., Lee, D.T.W., Tsao, S.W., Wong, Y.C. Upregulation of TRPM-2, MMP-7 and Id-1 during sex hormone-induced prostate carcinogenesis in the Noble rat. Carcinogenesis 22, 965-973 (2001).

Ouyang, X.S., Wang, K., Xu, K., Jin, D.Y., Cheung, A.L., Tsao, S.W., Wong, Y.C. Effect of p53 on centrosome amplification in prostate cancer cells. Biochim Biophys Acta. 1541, 212-20 (2001).

Liu, B., Qu, Y., Liu, S., **Ouyang, X.S.** Inhibition of telomerase in tumor cells by ribozyme targeting telomerase RNA component. Science in China (Series C) 45(1), 87-95 (2002).

Ouyang, X.S., Wang, X., Lee, D.T.W., Tsao, S.W., Wong, Y.C. Overexpression of Id-1 in prostate cancer. Journal of Urology 167, 2598-602 (2002).

RELEVANT PUBLICATIONS

Ouyang, X.S., Wang, X., Ling, M-T., Tsao, S.W., Wong, Y.C. Id-1 stimulates serum independent prostate cancer cell proliferation through inactivation of p16INK4a / pRB pathway. Carcinogenesis 23, 721-5 (2002).

Ling, M-T., Wang, X., **Ouyang, X.S.**, Lee, T.K.W., Fan., T-Y., Xu, K., Tsao, S.W., Wong, Y.C. Activation of MAPK signaling pathway is essential for Id-1 induced serum independent prostate cancer cell growth. Oncogene 21, 8498-505 (2002).

Ling, M-T., Wang, X., **Ouyang, X.S.**, Xu, K., Tsao, S.W., Wong, Y.C. Id-1 expression promotes cell survival through activation of NF-kB signaling pathway in prostate cancer cells. Oncogene 22, 4498-508 (2003).

Ouyang, X.S., Gao, H., Banach-Petrosky, W., Borowsky, A.D., Lin, Y., Kim, M., Lee, H., Sun, X., Shih, W.J., Cardiff, R.D., Shen, M.M., Abate-Shen, C. A critical role for p27kip1 gene dosage in a mouse model of prostate carcinogenesis. Proc Natl Acad Sci USA 101, 17204-9 (2004). (*co-first author)

Wong, Y.C., Wang, X.H., Ling, M.T., **Ouyang, X.S.**, Chan, F.L. Prostate cancer: the Id-1 story. Acta Histochem et Cytochem 37, 331-7 (2004). (Review)

Wong, Y.C., Ling, M.T., Wang, X.H., **Ouyang, X.S.**, Cheung, A.L.M., Chan, F.L. Id-1 protein as a new marker for prostate cancer. In Hormonal Carcinogenesis IV, JJ Li, SA Li and A Llombart-Bosch, eds. Springer Science Inc. pp. 197-208. (2005).

Kuzmichev, A., Margueron, R., Vaquero, A., Preissner, T.S., Scher, M., Kirmizis, A., **Ouyang, X.**, Brockdorff, N., Abate-Shen, C., Famham, P., Reinberg, D. Composition and histone substrates of polycomb repressive group complexes change during cellular differentiation. Proc Natl Acad Sci USA 102, 1859-64 (2005).

Ouyang, X., DeWeese, T.L., Nelson, W.G., Abate-Shen, C. Loss-of-function of Nkx3.1 promotes increased oxidative damage in prostate carcinogenesis. Cancer Research 65, 6773-9 (2005).

Gao, H., **Ouyang, X.**, Banach-Petrosky, W.A., Shen, M.M., Abate-Shen, C. Emergence of androgen- independence at early stages of prostate cancer progression in Nkx3.1; Pten mice. Cancer Research 66, 7929-33 (2006).

Gao, H., **Ouyang, X.**, Banach-Petrosky, W.A., Gerald, W.L., Shen, M.M., and Abate-Shen, C. Combinatorial activities of Akt and B-Raf/Erk signaling in a mouse model of androgen-independent prostate cancer. Proc Natl Acad Sci USA 103, 14477-82 (2006).

Ouyang, X., Banach-Petrosky, W.A., Gao, H., Nader, K., Ji, Y., Suh, N., DiPaola, R.S, and Abate-Shen, C. Vitamin D inhibits the formation of prostatic intraepithelial neoplasia in Nkx3.1; Pten mutant mice. Clinical Cancer Research 12, 5895-901 (2006). (*co-first author)

Banach-Petrosky, W., Jessen, W.J., **Ouyang, X.**, Gao, H., Quinn, J., Aronow, B., Abate-Shen, C. Low androgen levels accelerate prostate cancer progression in Nkx3.1; Pten mutant mice. Cancer Research 67, 9089-96 (2007).

Ouyang, X., Jessen, W.J., Al-Ahmadie, H., Serio, A.M., Lin, Y., Shih, W.J., Reuter, V.E., Scardino, P.T., Shen, M.M., Aronow, B.J., Vickers, A.J., Gerald, W.L., Abate-Shen, C. Activator protein-1 transcription factors are associated with progression and recurrence of prostate cancer. Cancer Research 68, 2132-44 (2008).

Kinkade, C.W., Castillo-Martin, M., Puzio-Kuter, A., Yan, Y., Foster, T.H., Gao, H., Sun, Y., **Ouyang, X.**, Gerald, W.L., Cordon-Cardo, C., Abate-Shen, C. Targeting AKT/mTOR and ERK MAPK signaling inhibits hormone-refractory prostate cancer in a preclinical mouse model. J. Clin., Invest 118, 3051-64 (2008).

Jeong, J.H., Wang, Z., Guimaraes, A.S., **Ouyang, X.**, Figueiredo, J.L., Ding, Z., Jiang, S., Guney, I., Kang, G.H., Shin, E., Hahn, W.C., Loda, M.F., Abate-Shen, C., Weissleder, R., Chin, L. BRAF activation initiates but does not maintain invasive prostate adenocarcinoma. PLoS ONE 3, e3949 (2008)

Castro-Perez, J.M., Roddy, T.P., Shah, V., Wang, S.P., **Ouyang, X.**, Ogawa, A., McLaren, D.G., Tadin-Strapps, M., Robinson, M.J., Bartz, S.R., Ason, B., Chen, Y., Previs, S.F., Wong, K.K., Vreeken, R.J., Johns, D.G., Hubbard, B.K., Hankemeier, T., Mitnaul, L. Attenuation of Slc27a5 gene expression followed by LC-MS measurement of bile acid reconjugation using metabolomics and a stable isotope tracer strategy. J. Proteome. Res. 10(10):4683-91 (2011)

Lin, H.V., Chen, D., Shen, Z., Zhu, L., **Ouyang, X.**, Vongs, A., Kan, Y., Levorse, J.M., Kowalik, E.J. Jr, Szeto, D.M., Yao, X., Xiao, J., Chen, S., Liu, J., Garcia-Calvo, M., Shin, M.K., Pinto, S. Diacylglycerol acyltransferase-1 (DGAT1) inhibition perturbs postprandial gut hormone release. PLoS One. 8(1):e54480 (2013)

Song, L., Lu, S., **Ouyang, X.**, Laverty, M., Maguire, M., Melchor, J., Lee, J., Terracina, G., Levitan, D., Hyde, L., Hess, F., Parker, E.M., Zhang, L. Post-translational modifications of tau during disease progression in rTg4510 mice, a model of tau pathology. Mol Neurodegener. 10:14 (2015)

RELEVANT PUBLICATIONS

Dutta, A., Le Magnen, C., Mitrofanova, A., **Ouyang, X.**, Califano, A., Abate-Shen, C. Identification of an NKX3.1-G9a-UTY transcriptional regulatory network that controls prostate differentiation. Science, 352 (6293):1576-80 (2016)

Hastings, N.B., Wang, X., Song, L., Mahadomrongkul, V., Stanton, M., Hong, K., Lu, S., Lee, J., Rosahl, T.W., Hyde, L., Laverty, M., Levitan, D., Wang, G., Grotz, D., Terracina, G., **Ouyang, X.**, Selnick, H., Duffy, J., Parker, E.M., Hess, F., Zhang, L. Inhibition of O-GlcNAcase leads to elevation of O-GlcNAc tau and reduction of tauopathy and cerebrospinal fluid tau in rTg4510 mice. Mol Neurodegener, 12:39 (2017)

Li, Q-X, Feuer, G., **Ouyang, X.**, An, X. Experimental animal modeling for immuno-oncology (Review). Pharmacology & Therapeutics, 173:34–46 (2017)

Wu, T., Chen, W., Zhong, Y., Hou, X., Fang, S., Liu, C-Y., Wang, G., Yu, T., Huang, Y-Y., **Ouyang, X.**, Li, Q-X., Cui, L., Yang, Y. Nuclear export of ubiquitinated proteins determines the sensitivity of colorectal cancer to proteasome inhibitor. Mol Cancer Ther. 16(4): 717-28 (2017)

An, X., **Ouyang, X.**, Zhang, H., Li, T., Huang, Y-Y., Li, Z., Zhou, D., Li, Q-X. Immunophenotyping of orthotopic homograft (syngeneic) of murine primary KPC pancreatic ductal adenocarcinoma by flow cytometry. JOVE, 140: e57460 (2018)

Chen, D., An, X., **Ouyang, X.**, Cai, J., Zhou, D., Li, Q-X. In Vivo Pharmacology Models for Cancer Target Research. In Target Identification and Validation in Drug Discovery J Moll and S Carotta eds. Humana Press. pp 183-211. (2019)

Xu, X., Wang, S., Zhou, J., Chen, J., Huang, Y., Kumari, R., Mao, B., Zheng, M., Wang, J., Tu, X., An, X., Chen, X., Zhang, L., Tian, X., Wang, H., Dong, X., Bao, Z., Guo, S., **Ouyang, X.**, Shan, L., Wang, F., Yan, X., Li, Z., Zhang, R., Zhang, H., Meiler, S., Vries, R., Clevers, H., Li, Q-X. A living biobank of matched pairs of patient- derived xenografts and organoids for cancer pharmacology. Research Square. https://doi.org/10.21203/rs.3.rs-63366/v1 (2020)

Xu, X., Shang, L., Wang, S., Zhou, J., **Ouyang, X.**, Zheng, M., Mao, B., Zhang, L., Chen, X., Wang, J., Chen, J., Qian, W., Guo, S., Huang, Y., Li, Q-X. Creating Matched In vivo/ In vitro Patient-Derived Model Pairs of PDX and PDX-Derived Organoids for Cancer Pharmacology Research. JOVE, 171: e61382 (2021)

Jin, Y., An, X., Mao, B., Sun, R., Kumari, R., Chen, X., Shan, Y., Zang, M., Xu, L., Muntel, J., Beeler, K., Bruderer, R., Reiter, L., Guo, S., Zhou, D., Li, Q-X., **Ouyang, X.** Different Syngeneic Tumors Show Distinctive Intrinsic Tumor-Immunity and Mechanisms of Actions (MOA) of Anti-PD-1 Treatment. Scientific Report, 12:3278 (2022)

Xu, X., Kumari, R., Zhou, J., Chen, J., Mao, B., Wang, J., Zheng, M., Tu, X., An, X., Chen, X., Zhang, L., Tian, X., Wang, H., Dong, X., Bao, Z., Guo, S., **Ouyang, X.**, Shang, L., Wang, F., Yan, X., Zhang, R., Vries, R., Clevers, H., Li, Q-X. A living biobank of matched pairs of patient derived xenografts and organoids for cancer pharmacology. Plos One 18(1):e0279821 (2023)