

Curriculum vitae

Song Ling Poon, Ph.D.

Medical Scientific Liaison/Project Manager
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EDUCATION AND TRAINING

- 2017-present Medical Scientific Liaison/Project Manager
ACT Genomics (Singapore) PTE LTD
Roles:
1. Liaise with KOL, actively deliver the latest update in the application of comprehensive genomic profiling in precision cancer management. Providing relevant scientific and clinical data which support the clinical benefits of NGS-based diagnostic testing in treatment selection.
2. Liaise with KOL to initiate clinical trials or translational research that can address the oncology-relevant questions in the field.
3. Liaise with internal stakeholders (sales and marketing teams) to ensure the accuracy and relevancy of the scientific/clinical-associated information.
4. Organizing molecular tumor board in the region.
- 2011-2016 Senior Research Fellow, Translational Research
Department of Medical Sciences, National Cancer Centre of Singapore-Van Andel Research Institute, Singapore
Supervisor: Bin T. Teh, M.D., Ph.D.
Project: Mutational landscape and the downstream mechanism of carcinogen-related cancer.
- 2006-2010 Ph.D., Reproductive & Developmental Sciences
Department of Obstetrics & Gynaecology, Child & Family Research Institute, University of British Columbia, Vancouver, British Columbia, Canada
Supervisor: Peter C.K. Leung, Ph.D.
Co-supervisor: Geoffrey L. Hammond, Ph.D.
Thesis: Human gonadotropin-releasing hormone-II regulation in ovarian cancer: mechanisms and potential functional role.
- 2003-2005 M.Sc., Reproductive Endocrinology
Department of Cell Biology and Anatomy, National Cheng Kung University, Tainan, Taiwan
Supervisor: Bu-Miin Huang, Ph.D.
Thesis: The effect of cordycepin on steroidogenesis in normal mouse Leydig cells.
- 1999-2003 B.Sc., Biology
National Cheng Kung University, Tainan, Taiwan

PROFESSIONAL ACTIVITIES

Invited Lecture (Selected)

1. **Poon SL.** Molecular diagnostic specialist: Participate in the molecular tumor board at Bumrungrad International Hospital, Thailand. Since 2017 (on-going in a monthly manner)
2. **Poon SL. Biotechnology Industry:** The Department of Pharmacology, National University of Singapore for academic year 2018/2019, Singapore
3. **Poon SL.** Future of Personalized & Precision Medicine Conference Panelists, Singapore, 2018
4. **Poon SL.** Reality or Fantasy: Using next generation sequencing to timely match the right patients with the right treatment in cancer care. International Cancer Conference, Vietnam, 2017
5. **Poon SL.** Towards precision medicine: the impact of next generation sequencing in medical oncology. Department of Pharmacology Seminar Series, NUS, Singapore, 2017
6. **Poon SL.** Next Generation Sequencing in Cancer management: Challenges and Promises, BDMS, Bangkok, 2017
7. **Poon SL.** The use of mutational signature in identifying carcinogen exposure. Illumina North Asia Webinar, 2013
8. **Poon SL.** The implication of genomic screening in cancer cell biology. Kyung Hee University, Seoul, Korea, 2013
9. **Poon SL.** Human gonadotropin-releasing hormone-II signaling in ovarian cancer. 2nd Singapore Ovarian Cancer Symposium, Singapore, 2012
10. **Poon SL.** Hormone and the progression of ovarian cancer. National Cheng Kung University, Taiwan, 2011

Grant proposal

1. International Cancer Genome Consortium, Co-PI
Examination of signatures of physical mutational processes to infer genotoxic exposures, 2012-2016
2. GlaxoSmithKline plc, U.S.A., Co-PI
Targeting tumors harboring high incidence loss-of-function mutations in epigenetic modulators, 2013-2015
3. National Kidney Foundation, Singapore, Co-PI
Characterization of Sarcomatoid renal cell carcinoma – Roles of epithelial mesenchymal transition and cancer stem cell in the progression and metastasis, 2011-2013

PUBLICATIONS

Refereed journal articles

1. Ng AWT*, **Poon SL***, Huang MN, Lim JQ, Boot A, Yu W, Suzuki Y, Thangaraju S, Ng CCY, Tan P, Pang ST, Huang HY, Yu MC, Lee PH, Hsieh SY, Chang AY, Teh BT, Rozen SG.
Aristolochic acids and their derivatives are widely implicated in liver cancers in Taiwan and throughout Asia. *Sci Transl Med.* 2017 Oct 18;9(412). pii: eaan6446. [PMID: 29046434]
* denotes Co-first authors
Received Journal Cover Image and Focus Article
2. Ler LD, Ghosh S, Chai X, Thike AA, Heng HL, Siew EY, Dey S, Lim WK, Myint SS, Loh M, Ong P, Sam XX, Lim T, Tan PH, Nagarajan S, Cheng CW, Ho H, Ng LG, Yuen J, Lin PH, Chuang CK, Chang YH, Weng WH, Rozen SG, Tan P, Creasy CL, Pang ST, McCabe MT, **Poon SL***, Teh BT*.
KDM6A inactivation amplifies PRC2-regulated transcriptional repression and confers sensitivity to EZH2 inhibition in bladder cancer. *Sci Transl Med.* 2017 Feb 22;9(378). pii: eaai8312. [PMID: 28228601]
* denotes Co-corresponding authors
3. Huang MN, Yu W, Teoh WW, Ardin M, Jusakul A, Ng AWT, Boot A, Abedi-Ardekani B, Villar S,

- Myint SS, Othman R, **Poon SL**, Heguy A, Olivier M, Hollstein M, Tan P, Teh BT, Sabapathy K, Zavadil J, Rozen SG. Genome-scale mutational signature of aflatoxin in cells, mice and human tumors. *Genome Res.* 2017 Sep;27(9):1475-1486. doi: 10.1101/gr.220038.116. [PMID:28739859]
4. **Poon SL**, Huang MN, Choo Y, McPherson JP, Yu W, Heng HL, Gan A, Myint SS, Siew EY, Ler LD, Ng LG, Weng WH, Chuang CK, Yuen JS, Pang ST, Tan P, Teh BT, Rozen SG. Mutation signatures implicate aristolochic acid in bladder cancer development. *Genome Med.* 7(1):38, 2015 [PMID:26015808]
 5. Yu W, McPherson JR, Stevenson M, van Eijk R, Heng HL, Newey P, Gan A, Ruano D, Huang D, **Poon SL**, Ong CK, van Wezel T, Cavaco B, Rozen SG, Tan P, Teh BT, Thakker RV, Morreau H. Whole-exome sequencing studies of parathyroid carcinomas reveal novel PRUNE2 mutations, distinctive mutation spectra related to APOBEC-catalyzed DNA mutagenesis and mutational enrichment in kinases associated with cell migration and invasion. *J Clin Endocrinol Metab.* 100(2):E340-4, 2015 [PMID:25387265]
 6. Perrier-Trudova V, Huimin BW, Kongpetch S, Huang D, Ong P, LE Formal A, **Poon SL**, Siew EY, Myint SS, Gad S, Gardie B, Couvé S, Foong YM, Choudhury Y, Poh J, Ong CK, Toh CK, Ooi A, Richard S, Tan MH, Teh BT. Fumarate hydratase-deficient cell line NCCFH1 as a new in vitro model of hereditary papillary renal cell carcinoma type 2. *Anticancer Res* 35(12):6639-53, 2015 [PMID: 26637800]
 7. **Poon SL**, McPherson JR, Tan P, Teh BT, Rozen SG. Mutation signatures of carcinogen exposure: genome-wide detection and new opportunities for cancer prevention. *Genome Med.* 6(3):24, 2014 [PMID:25031618]
 8. **Poon SL**, Pang ST, McPherson JR, Yu W, Huang KK, Guan P, Weng WH, Siew EY, Liu Y, Heng HL, Chong SC, Gan A, Tay ST, Lim WK, Cutcutache I, Huang D, Ler LD, Nairismagi ML, Lee MH, Chang YH, Yu KJ, Chan-On W, Li BK, Yuan YF, Qian CN, Ng, KF, Wu CF, Hsu CL, Bunte RM, Stratton MR, Futreal A, Sung WK, Chuang CK, Ong CK, Rozen SG, Tan P, Teh BT. Genome wide mutational signatures of aristolochic acid and its application as a screening tool. *Sci Transl Med.* 5:197ra101, 2013 [PMID 23926199]
Received Journal Cover Image and Focus Article, also highlighted by Science Magazine, Nature Genetics and Nature Reviews Urology
 9. Zang ZJ, Cutcutache I, **Poon SL**, Zhang SL, McPherson JR, Tao J, Rajasegaran V, Heng HL, Deng N, Gan A, Lim KH, Ong CK, Huang D, Chin SY, Tan IB, Ng CC, Yu W, Wu Y, Lee M, Wu J, Poh D, Wan WK, Rha SY, So J, Salto-Tellez M, Yeoh KG, Wong WK, Zhu YJ, Futreal PA, Pang B, Ruan Y, Hillmer AM, Bertrand D, Nagarajan N, Rozen S, Teh BT, Tan P. Exome sequencing of gastric adenocarcinoma identifies recurrent somatic mutations in cell adhesion and chromatin remodeling genes. *Nat Genet.* 44:570-4, 2012 [PMID 22484628]
 10. Koo GC, Tan SY, Tang T, **Poon SL**, Allen GE, Tan L, Chong SC, Ong WS, Tay K, Tao M, Quek R, Loong S, Yeoh KW, Yap SP, Lee KA, Lim LC, Tan D, Goh C, Cutcutache I, Yu W, Ng CC, Rajasegaran V, Heng HL, Gan A, Ong CK, Rozen S, Tan P, Teh BT, Lim ST. Janus kinase 3-activating mutations identified in natural killer/T-cell lymphoma. *Cancer Discov.* 2:591-7, 2012 [PMID 22705984]
 11. **Poon SL**, Hammond GL, Klaussen C, Leung PC. 37-kDa laminin receptor precursor mediates GnRH-II-induced MMP-2 expression and invasiveness in ovarian cancer cells. *Mol Endocrinol* 25:327-38, 2011 [PMID 21193558]

Received Journal Cover Image

12. **Poon SL**, Lau, MT, Hammond GL, Leung PC. Gonadotropin-releasing hormone-II increases membrane type-I metalloproteinases production via beta-catenin signaling in ovarian cancer cells. *Endocrinology* 152:764-72, 2011 [PMID 21239435]
13. **Poon SL**, Hammond GT, Leung PC. Epidermal growth factor induced GnRH-II synthesis contributes to ovarian cancer cell invasion. *Mol Endocrinol* 10:1646-56, 2009 [PMID 19608641]
14. **Poon SL**, An BS, So WK, Hammond GL, Leung PC. Temporal recruitment of transcription 6 promoter. *Endocrinology* 149:5162-71, 2008 [PMID 18599546]
15. Leu SF*, **Poon SL***, Pao HY, Huang BM. The in vivo and in vitro stimulatory effects of Cordycepin on mouse Leydig cell steroidogenesis. *Biosci Biotechnol Biochem* 75:723-31, 2011 [PMID 21512251]
* Leu SF and Poon SL are co-first author.
16. Lin Q*, **Poon SL***, Chen JL, Cheng LN, HoYuen B, Leung PC. Leptin interferes with 3',5'-cyclic adenosine monophosphate (cAMP) signaling to inhibit steroidogenesis in human granulosa cells. *Reprod Biol Endocrinol* 2009 [PMID 19849856]
* Lin Q and Poon SL are co-first author.
17. An BS*, **Poon SL***, So WK, Hammond GL, Leung PC. Rapid effect of GnRH-I on follicle-stimulating hormone β gene expression in L β T2 mouse pituitary cells requires the progesterone receptor. *Biol Reprod* 81(2):243-9, 2009 [PMID 19357364]
*An BS and Poon SL are co-first author.
18. Choi JH, Chen CL, **Poon SL**, Wang HS, Leung PC. Gonadotropin-stimulated EGFR expression in human ovarian surface epithelial cells: involvement of cyclic AMP-dependent Epac pathway. *Endocr Relat Cancer* 16:179-88, 2009 [PMID 19022848]
19. So WK, Cheng JC, **Poon SL**, Leung PC (2008) Gonadotropin-releasing hormone and ovarian cancer: a functional and mechanistic overview. *FEBS J* 275:5496-511 [PMID 18959739]
20. Lin YM, **Poon SL**, Choi JH, Lin JS, Leung PC, Huang BM. Transcripts of testicular gonadotropin releasing hormone, steroidogenic enzymes, and intratesticular testosterone levels in infertile men. *Fertil Steril* 90:1761-8, 2008 [PMID 18082732]
21. Lin YM, Liu MY, **Poon SL**, Huang BM. Gonadotropin releasing hormone-I and II stimulate steroidogenesis in prepubertal murine Leydig cells in vitro. *Asian J Androl* 10:929-36, 2008 [PMID 18958357]
22. **Poon SL**, Leu SF, Hsu HK, Liu MY, Huang BM. Regulatory mechanism of *Toona sinensis* on mouse Leydig cell steroidogenesis. *Life Science* 13:1473-1487, 2005 [PMID 15680312]
23. Lo HC, Yang JG, Liu BC, Huang YL, Chen YW, **Poon SL**, Liu MY, Huang BM. The Effects of *Tremella aurantia* on testosterone and corticosterone productions in normal and diabetic rats. *Archives of Andrology* 6:395-404, 2004 [PMID 15669604]

Abstracts (* denotes oral presentation)

1. **Poon SL**, Pang ST, McPherson JR, Yu W, Rozen SG, Tan P, Teh BT. Genome-wide mutational signatures of Aristolochic Acid, a Health Supplement Related Carcinogen, in urothelial cancer. American Association for Cancer-Chromatin and Epigenetics in Cancer, Atlanta, 2013.
2. **Poon SL**, Hammond GL, Leung PC. GnRH-II stimulates the production of matrix metalloproteinases to enhance ovarian cancer cell invasiveness. International Symposium on Reproductive Endocrinology and Genetics, Hangzhou, China, 2010.
3. **Poon SL**, Hammond GL, Leung PC. GnRH-II promotes EGF-induced invasion of ovarian cancer cell through induction of 37-kDa laminin receptor precursor. Child & Family Research Institute, Student research forum, Vancouver, Canada, 2009.
4. **Poon SL**, Hammond GL, Leung PC. GnRH-II promotes EGF-induced invasion of ovarian cancer cell through induction of 37-kDa laminin receptor precursor. American Association for Cancer Research Annual meeting, Denver, USA, 2009.
5. **Poon SL**, Qing Lin, Basil HY, Leung PC. The role of leptin in granulosa cells steroidogenesis in human ovary. Canadian Health service research foundation, Winepeg, Canada, 2008.
6. **Poon SL**, Leung PC. The transcriptional regulation of human gonadotropin releasing hormone-II in ovarian cancer cells. 4th Canadian Conference on Ovarian Cancer Research, Montreal, Canada 2008.
7. ***Poon SL**, Qing Lin, Basil HY, Leung PC. The role of leptin in SVOG-4M human immortalized granulosa cells steroidogenesis. Obstetrics & Gynaecology Academic day, Vancouver, Canada, 2008
8. **Poon SL**, Leung PC. The transcriptional regulation of GnRH-II in ovarian cancer cells. The international ovarian conference, Hakone, Japan, 2007
9. **Poon SL**, An BS, Leung PC. The transcriptional regulation of GnRH-II promoter by cAMP. Child & Family Research Institute Student Research Forum, Vancouver, Canada, 2007.
10. **Poon SL**, Huang BM. The Effect of Cordycepin on Steroidogenesis in Normal Mouse Leydig Cells. Society for the Study of Reproduction, 38th annual meeting, Quebec City, Quebec, Canada 2005.
11. **Poon SL**, Huang BM. The Effect of Cordycepin on Steroidogenesis in Normal Mouse Leydig Cells. The 20th Joint Annual Conference of Biomedical Science, Taipei, Taiwan, 2005.
12. **Poon SL**, Hsu HK, and Huang BM. Regulatory mechanism of *Toona sinensis* on mouse Leydig cell steroidogenesis. The 37th Annual Meeting of the Society for the Study of Reproduction, Vancouver, Canada, 2004.
13. **Poon SL**, Hsu HK and Huang BM. Regulatory mechanism of *Toona sinensis* on mouse Leydig cell steroidogenesis. The 19th Joint Annual Conference of Biomedical Science, Taipei, Taiwan, 2004.

Mentorship**Post-doctoral training:**

1. I am the Ph.D. mentor of Dr. Ler Lian Dee, who has graduated from National University of Singapore. Her Ph.D. My role is to train her into an independent scientist. A portion of her Ph.D. thesis has been published in Science Translational medicine.
2. I lead the urogenital program in Prof. Teh's group. I have a team member of three who are the researcher officers involved in conducting the experiments in the program.

Doctoral training:

1. I was involved in the supervision of a summer student, Mr. Gareth Hammond, and the project he involved has been published in *Molecular Endocrinology*.
2. I was involved in mentoring two visiting scholars in their projects. In particular, Dr. Lin Q's project was published in *Reproductive Biology and Endocrinology* while Dr. Chen CL's project was published in *Endocrine Related Cancer*.

Master training:

1. I was involved in the training of two graduate students for their respective Master projects.

Teaching Experience

Teaching Assistant: National Cheng Kung University

Taught laboratory sessions ranging from simple observations to more complex labs requiring surgical procedures and grading 40% of the final exam.

September-December, 2004: Gross Anatomy (T95010)

September-December, 2004: Histology (T95020)

Committees/Leadership

- 2013 Organizer for the Mini Symposium on Asian Cancer Genomics, National Cancer Centre Singapore & Chang Gung Memorial Hospital, Taiwan, 2013
- 2009-2010 Graduate Student committee, Faculty of Medicine, University of British Columbia, Canada
- 2009 Graduate student representative for external review of Department of Obstetrics & Gynecology, University of British Columbia, Canada
- 2009 Graduate student committee representative for external review of Faculty of Medicine, University of British Columbia, Canada.
- 2007 Organizer for the workshop entitled “Ovarian Function in Health & Disease” for the Interdisciplinary Women’s Reproductive Health Research Training Program
- 2006-2010 Graduate student representative in the Reproductive & Developmental Science Program, University of British Columbia, Canada

AWARDS AND HONOURS

- 2013 4th DUNES Scientific Symposium, Duke-NUS, Best Oral Presentation, Singapore
- 2009-2010 Four Year Doctoral Fellowship, University of British Columbia, Canada
- 2009 Child & Family Research Institute Outstanding Achievement of a Doctoral Student, Canada
- 2009 Child & Family Research Institute Student Research Forum Best Poster Award, Canada
- 2009 Ovarian Cancer Research of British Columbia (OvCaRe) travel award for participating American Association for Cancer Research Forum, Denver, USA
- 2008-2010 Cordula and Gunter Paetzold Fellowship, Canada
- 2008-2010 Shaughnessy Hospital Volunteer Society Fellowship in Health Care (declined), Canada
- 2008-2010 University of BC Graduate Fellowship (declined), Canada
- 2008 Honorable mentioned in poster presentation in the Canadian Student Health Research Forum, Winepeg, Canada
- 2008 Institute of Human Development, Child and Youth Health (IHDCYH), Canadian Institute of Health Research, Travel Award
- 2008 Ovarian Cancer Research of British Columbia (OvCaRe) Travel Award for participating 4th Canadian Conference on Ovarian Cancer Research, Canada
- 2008 Honorable mentioned in oral presentation in the Obstetrics and Gynaecology Academic Day, Vancouver, Canada
- 2007 Outstanding Poster Award in International Ovarian Conference, Hakone, Japan
- 2007 Interdisciplinary Women’s Reproductive Health Research (IWRH) Travel Award for participating International Ovarian Conference, Hakone, Japan
- 2006-2009 Ph.D. tuition fee Award, University of British Columbia, Canada
- 2006-2008 Interdisciplinary Women’s Reproductive Health Research (IWRH) Training Program Graduate Studentship Award, Canada
- 2005 Outstanding Research Award in College of Medicine, National Cheng Kung University, Tainan, Taiwan
- 2005 First place in the 9th Association of Anatomists of Taiwan (AAT) Graduate Student Thesis Competition, Taiwan
- 2004 Excellent Academic Performance Studentship in Department of Cell Biology and Anatomy, National Cheng Kung University, Taiwan
- 2003 Oversea Chinese Affairs Commission Studentship Award, Taiwan
- 1999-2003 Excellent Academic Performance Award in the Department of Biology, National Cheng Kung University, Taiwan