

# Biochemistry and Molecular Biology of Cholangiocarcinoma



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## Group members



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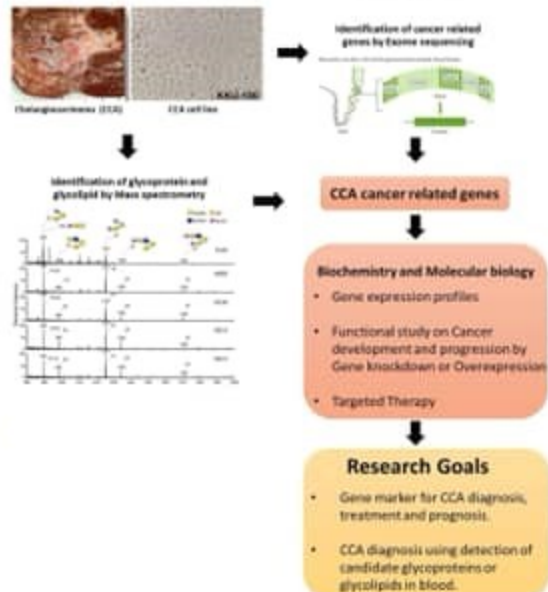
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## Research topics

- Molecular mechanisms of cancer-related genes in CCA development and progression.
- Anti-tumor activity of natural compounds for applying in CCA treatment.
- Identification of glycoproteins and glycolipids in CCA  
 Role of glycoproteins and glycolipids in CCA development and progression.

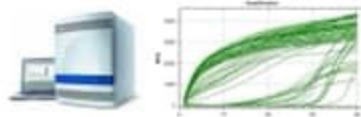


## Research techniques

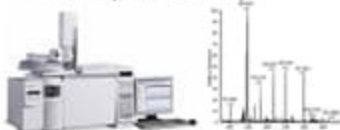
- Mammalian cell culture



- Real-time PCR



- RNA interference
- Gene cloning and expression
- Mass spectrometry



- Western blot
- Immunohistochemistry



## Funding resources

- National Research Council of Thailand (NRCT)
- The Thailand Research Fund (TRF)
- External Grants and Scholarships for Graduate Students (OROG),  
 Suranaree University of Technology

## Selected publications

- TALABNIN, Chutima, et al. Ring finger protein 43 expression is associated with genetic alteration status and poor prognosis among patients with intrahepatic cholangiocarcinoma. *Human pathology*, 2016, 52: 47-54.
- Thongsom, S., Chaocharoen, W., Silsirivanit, A., Wongkham, S., Sripa, B., Choe, H., ... & Talabnin, C. (2016). YKL-40/chitinase-3-like protein 1 is associated with poor prognosis and promotes cell growth and migration of cholangiocarcinoma. *Tumor Biology*, 37(7), 9451-9463.
- Talabnin, K., Talabnin, C., Ishihara, M., Azadi, P., Wongkham, S., & Sripa, B. (2016). Differential expression of O-glycoprotein glycans in cholangiocarcinoma cell lines. *Asian Pacific Journal of Cancer Prevention: APJCP*, 17(2), 691.
- Subimerb, C., Wongkham, C., Khuntikeo, N., Leelayuwat, C., McGrath, M. S., & Wongkham, S. (2014). Transcriptional profiles of peripheral blood leukocytes identify patients with cholangiocarcinoma and predict outcome. *Asian Pac J Cancer Prev*, 15(10), 4217-24.
- Ong, C. K., Subimerb, C., Pairojkul, C., Wongkham, S., Cutcutache, I., Yu, W., ... & Myint, S. S. (2012). Exome sequencing of liver fluke-associated cholangiocarcinoma. *Nature genetics*, 44(6), 690.