Application number/Title: **44610** - Genetic and environmental risk factors in colorectal cancer

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**Keywords provided by the Applicant PI to describe the research project:** colorectal-cancer, environment, gene-environment-interaction, genetics-genotyping, patient-reported-outcome-measurement, single-nucleotide-polymorphism

**Application Lay Summary:**

Biliary tract cancers are a clinically heterogeneous group of uncommon but highly a transcriptome-wide and a phenome-wide association analysis using data from International Biliary Tract Cancer Consortium and UK Biobank. To address the issue, we propose to include the UK Biobank data as part of International Biliary Tract Cancer Consortium and perform the above-mentioned analyses regularly (i.e., once per year) in the next three years. We will start analyses as soon as data are available and plan to finish this project and send manuscripts to authors for review within 36 months after we receive the data. We hope that this study will facilitate our understanding of the genetic basis of biliary tract cancers and may help identify new biological pathways and therapeutic targets for improving prevention and treatment of these uncommon but highly lethal cancers.