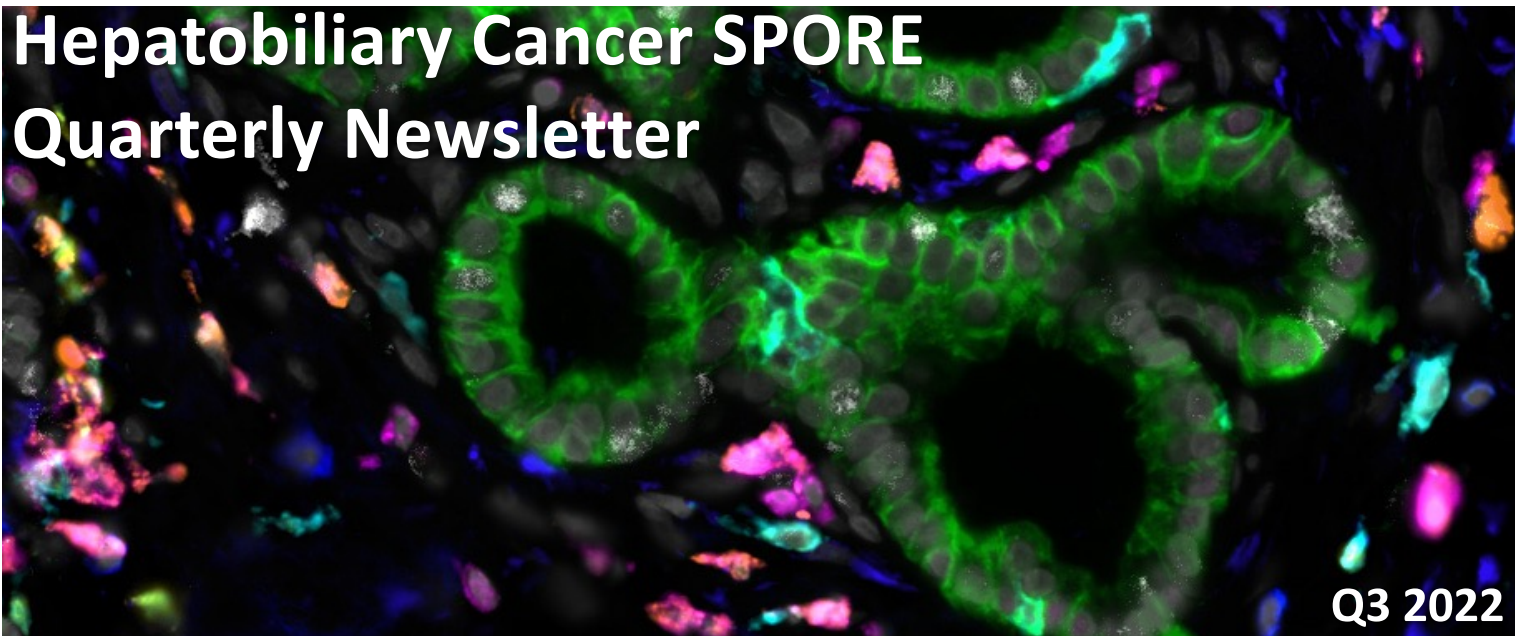


# Hepatobiliary Cancer SPORE Quarterly Newsletter



Q3 2022

*Immune cells surrounding bile duct tumors – Dr. Sumera Ilyas and colleagues*

## Achievements

**Project 1:** See four new articles by Dr. Sandy Simon and colleagues published in *JCI Insight*, *Hepatology Commun*, *Clin Cancer Res*, and *Cancers* (page 2).

**Project 2:** Dr. Rory Smoot and colleagues have a new paper published in *J Hepatology* (page 2).

**Biospecimen and Pathology Core:** The first shipments of frozen hepatobiliary cancer tissue samples from African decent populations in both North America and Africa are being added to our biorepository, which continues to represent a unique contribution from our SPORE to the national and global research community.

**Admin Core:** Our first SPORE competitive renewal application was submitted to NCI in Q3 2022. The Year 4 progress report also has been completed. Thank You All!

## Key Dates

- ★ *AASLD Meeting – Washington D.C.*  
November 4-8, 2022
- ★ *GI/Pancreas/NET/Liver Cancer SPORE Investigators' Meeting*  
November 14-15, 2022

AND

January 13, 2023

Congratulations Dr. Al Copland and Project 3 colleagues on their successful and significant

**\*\*\* New NCI-Funded SBIR Grant! \*\*\***

Title: *Modulation of cancer induced immune suppression via inhibition of SCD1*. This important scientific collaboration with Dr. Karen E. Hayes (PI) and Modulation Therapeutics, Inc. is IND enabling and will fund an early phase clinical trial.



## A Productive Biannual SPORE Retreat – July 20, 2022

Our 2<sup>nd</sup> SPORE retreat of the year in Rochester welcomed many familiar faces from the Arizona and Florida campuses in person, along with the attendees who joined virtually. Hepatobiliary investigators throughout the Mayo Foundation participated as well as the External Advisory Board and the SPORE Advocacy Group, who reviewed the new CEP and DRP applications during the retreat, as is typically done each year. Additionally, SPORE leadership and External Advisory Board members reviewed the full translational research Projects 1-4 in preparation for the competitive renewal application.

## Recent Publications

**1. Shebl B, Ng D, Lalazar G..., Simon SM.** Targeting BCL-XL in fibrolamellar hepatocellular carcinoma. *JCI Insight*. 2022 Sep 08; 7 (17), e161820. doi: 10.1172/jci.insight.161820; PMID: 36073545.

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85137493639&origin=inward&txGid=5648a53ad82e68142dc2359d3f4f3d3b>

**2. Berkovitz A, Migler RD, Qureshi A..., Simon SM.** Clinical and demographic predictors of survival for fibrolamellar carcinoma patients – a patient community, registry-based study. *Hepatol Commun*. 2022 Oct 17; HEP42105; doi: 10.1002/hep4.2105.

<https://aasldpubs.onlinelibrary.wiley.com/doi/full/10.1002/hep4.2105>

**3. Neumayer C, Ng D, Jiang CS..., Simon SM.** Oncogenic addiction of fibrolamellar hepatocellular carcinoma to the fusion kinase DNAJB1-PRKACA. *Clin Cancer Res*. 2022 Oct 27; CCR-22-1851. doi: 10.1158/1078-0432.CCR-22-1851. <https://pubmed.ncbi.nlm.nih.gov/36302174/>

**4. Chen KY, Poppovic A, Hsiehchen D..., Yarchoan M.** Clinical outcomes in fibrolamellar hepatocellular carcinoma treated with immune checkpoint inhibitors. *Cancers*. 2022 Oct 30; 14 (21), 5347. doi: 10.3390/cancers14215347. <https://www.mdpi.com/2072-6694/14/21/5347/htm#>

**5. Conboy CB, Yonkus JA, Buckarma EH..., Smoot RL.** LCK inhibition downregulates YAP activity and is therapeutic in patient-derived models of cholangiocarcinoma. *J Hepatol*. 2022 Sep 23:S0168-8278(22)03121-X. doi: 10.1016/j.jhep.2022.09.014. Epub ahead of print. PMID: 36162702.

<https://aasldpubs.onlinelibrary.wiley.com/doi/full/10.1002/hep4.2105>

## Career Enhancement and Developmental Research Programs: Year 5 New Awardees

Jessica Lancaster, Ph.D. is Assistant Professor of Immunology with expertise in advanced 2-photon microscopy and biomedical engineering. Her CEP project is investigating tumor-immune interactions in the unique tumor environment of the liver. The mentoring team includes Drs. Mitesh Borad, Diane Jelinek, and Richard Vile.

Davide Povero, Ph.D. is Assistant Professor of Biochemistry and Molecular Biology with strong training and experience in the pathobiology of chronic liver diseases, including nonalcoholic steatohepatitis (NASH). His CEP project is entitled *AKR1C3 operates as a metabolic checkpoint during NASH-related HCC*. Mentors include Drs. Sumera Ilyas (former CEP awardee), Nick LaRusso, and Lewis Roberts.

Susanne Warner, M.D. is Associate Professor of Surgery. Her DRP project is comparing and combining viroimmunotherapies for intrahepatic cholangiocarcinoma.

## Diversity and Community Engagement Council

- SPORE wide membership from all three Mayo Clinic campuses
- Represents racial/ethnic diverse populations within our patient community
- Activities include focus group discussions and community forums to assess community needs
- Provides knowledge about hepatitis virus infection and chronic hepatobiliary diseases, including hepatobiliary cancer and nonalcoholic fatty liver disease, and their risk factors
- Educates the community on risk factors of hepatobiliary cancer and fosters community-based participatory research across all campuses

The goal is to leverage deep connections that Mayo investigators at all three campuses have developed with community organizations, such as the American Legion Posts in Jacksonville, FL and local churches to carry out these community-based activities. **Please contact Dr. Lionel Kankeu Fonkoua to get involved!**

## Upcoming Presentations by SPORE Investigators

### GI/Pancreas/NET/Liver Cancer SPORE Investigator's Meeting:

- Dr. Sandy Simon (Rockefeller University), Project 1. Title: *Therapeutics for fibrolamellar hepatocellular carcinoma*. Tuesday 11/15/2022; 1:45 PM – 2:05 PM ET.
- Dr. Al Copland (Mayo Clinic Florida), Project 3. Title: *SDC1 inhibitors as a strategy to target therapeutic resistance in hepatocellular carcinoma*. Tuesday 11/15/22; 3:20 – 3:40 PM ET.
- Dr. NingLing Kang (University of Minnesota/Hormel Institute), Developmental Research Program. Title: *PKC $\zeta$  regulation of metabolism and myofibroblastic activation of hepatic stellate cells*. Monday 11/14/2022; 2:20 – 2:40 PM ET.
- Dr. Richard Vile (Mayo Clinic Rochester), Project 4. Title: *Viroimmunotherapy for hepatocellular carcinoma*. Friday 01/13/2023; 2:00 – 2:20 PM ET.

### Hepatobiliary Neoplasia Research Meeting:

- Dr. Rory Smoot, Project 2: 11/18/2022
- Dr. Vinay Chandrasekhara, Developmental Research Program: 12/16/2022

## Liver SPORE Contacts

Mark McNiven, Ph.D., SPORE Director

Mike Torbenson, M.D.

Co-Director, Biospecimen & Pathology Core

John Henley, Ph.D. & Michelle Van Hee, Co-Administrators

Michelle Van Hee, Biospecimen Requests

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Lewis Roberts, M.B., Ch.B., Ph.D., SPORE Co-Director

Chen Wang, Ph.D. & Vivien Yin, Ph.D.

Co-Directors, Biostatistics and Bioinformatics Core

Fowsiyi Ahmed, M.B.B.S., Biospecimen Coordinator

Amanda Bedard, Administrative Assistant