

**SPRING/SUMMER 2024** 

## MAYO CLINIC HEPATOBILIARY SPORE RENEWED

We are proud to announce the Hepatobiliary SPORE has been renewed for 5 more years (2029) Congratulations to all for their outstanding hard work and for setting the standards of excellence



U.S. News & World Report ranks Mayo Clinic No. 1 in more specialties than any other hospital.

Mayo Clinic is again top-ranked in more specialties than any other hospital and has two hospitals recognized as Honor Roll members — the highest honor — in U.S. News & World Report's 2024-2025 "Best Hospitals" rankings. U.S. News continues to rank hospitals numerically within states. Once again, Mayo Clinic holds the No. 1 position in Minnesota, Arizona and Florida.

Mayo Clinic in Rochester has been included on the Honor Roll since it was first published in 1990, and Mayo Clinic in Arizona is an Honor Roll member for the eighth consecutive year. Mayo Clinic in Florida has ranked No. 1 in the state of Florida for eight of the past nine years. Mayo Clinic in Florida made impressive gains in the publication's national rankings, placing 24th, narrowly missing the top 20 Honor Roll. Mayo Clinic in Arizona and Florida are nationally ranked in 10 specialties.

U.S. News' Honor Roll of 20 top U.S. hospitals comprises the hospitals that earn the most <u>points</u> across 15 specialties and 20 procedures and conditions based on patient experience, patient survival, discharge outcomes, nurse staffing, advanced technology, patient services and reputation with other medical experts. Mayo Clinic in Rochester received more points than any other hospital.

In addition, Mayo Clinic Health System in Eau Claire, Wisconsin, has been recognized as a "Best Regional Hospital" in Northwestern Wisconsin. Mayo Clinic Health System in Mankato, Minnesota, has been named a "Best Regional Hospital" in Southwestern Minnesota.



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## New World Health Organization Guidelines for Hepatitis B Infection



<u>Dr. Lewis Roberts</u> (SPORE MPI) served on the <u>Guidelines Development Group for the new World Health Organization</u> guidelines for prevention, diagnosis, care, and treatment for people with <u>chronic hepatitis B infection</u>.

#### Florida Awards RNA Discovery and Translation Program Funding



Congratulations to <u>Tushar Patel</u>, <u>M.B.</u>, <u>Ch.B.</u> (Co-Leader, Project 3), the recipient of two awards entitled "RNA Therapeutics for Cholangiocarcinoma" and "Optimizing Targeted Cellular Delivery for RNA Therapeutics" Standard awards are \$300,000 per year for three years, for a total of \$900,000.

"RNA-based therapies are a promising area in the potential treatment of untreated diseases," says <u>Alfredo Quiñones-Hinojosa, M.D.</u>, Dean of Research at Mayo Clinic in Florida. "The pilot and the standard projects funded here represent an investment in our future and the future of our patients. We are excited to embark on this journey of discovery and transformation."

#### Cancer Stress Management Consults Now Available in Plummer Chart at Mayo Clinic



Congratulations, Shawna Ehlers, Ph.D., on this accomplishment.

Cancer specialists can now request cancer stress management consults in Plummer Chart. This consult option is offered as part of a new Onco-Psychology Program at Mayo Clinic Comprehensive Cancer Center. The team is building the Onco-Psychology Program based on principles we developed to ensure high-quality care called Best Evidence Science Translation (BEST). We recently conducted a study applying BEST principles as part of our comprehensive cancer care. You can read the results in the Journal of the National Comprehensive Cancer Network.

One tool commonly used in onco-psychology to manage distress is a type of talk therapy called cognitive behavioral therapy. Clinical trial results have shown that cognitive behavioral therapy for cancer distress (CBT-C) reduces stress, increases healthy lifestyle behaviors, and may even help prevent cancer recurrence and improve survival. The evidence is strong that onco-psychology can significantly reduce stress and improve the quality of life for cancer patients.

We're excited to bring this important service to cancer patients at Mayo Clinic.

#### Distinguished Fellow to the American Society for Cell Biology (ASCB)



Congratulations to Mark McNiven, Ph.D. (SPORE Director) for being chosen as a Distinguished Fellow to the American Society for Cell Biology (ASCB). This award goes to a select few of the ASCB 6,500 scientist membership annually in recognition of their research excellence, contributions to the field of cell biology, and support of their colleagues.



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#### **Unleashing CAR-T Cell Therapy to Destroy Solid Tumors**



Mayo Clinic researchers will jump four hurdles to apply chimeric antigen receptor-T cell therapy (CAR-T cell therapy) to solid tumors in thyroid cancer. This regenerative immunotherapy has shown promising results in blood cancers, and new research is focused on using this treatment on more types of malignancies.

"CAR-T cell therapy is unlike other therapeutics," says <u>Saad Kenderian, M.B., Ch.B.</u>, a hematologist and cancer researcher. "Other therapies may slow down cancer. CAR-T cell therapy has shown great promise in stopping B-cell

lymphomas and leukemias. Some of my patients have gone into complete remission that has lasted for years after just one treatment."

CAR-T cell therapy harnesses the power of the body's immune system to kill tumors. T cells are taken from a patient, then genetically modified and returned to the body to act as guardians against cancer.

In a team science approach, <u>Dr. Kenderian</u> and <u>John "Al" Copland III, Ph.D.</u> (Pictured; Co-Leader, Project 3), are collaborating as principal investigators on research to develop CAR-T technology for solid tumors in thyroid cancer. However, to do so they must address four challenges.

Read full article here

## **EVENTS**

#### **SAVE THE DATE**

#### **GIH Research Conference, C-SiG**

Sonya MacParland, Ph. D / University of Toronto, Canada

Date: Monday, September 30, 2024

Time: 12:15-1:00 p.m. CST

Location: Dubai Lecture Hall, Mayo Clinic, Rochester

ZOOM: To be announced

Co-Sponsored by the Liver SPORE

#### **SAVE THE DATE**

#### **Annual Live Spore Retreat**

Date: January 9-10, 2025

Location: UNC Chapel Hill, North Carolina

#### **SAVE THE DATE**

The <u>Blue Faery team</u> is excited to announce our upcoming Love Your Liver (LYL) Hispanic Heritage Month (HHM) events! Please help promote our events in your newsletter.

We will host two live Spanish-language webinars on September 16, 2024, and October 8, 2024, to promote the early detection and prevention of liver cancer in the Hispanic American community.

Event registration link: <u>Hispanic Americans and Liver Cancer - Love Your Liver</u>



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## **PAST EVENTS**

- Liver (LYL) Program had an in-person AAPI event on May 17, 2024, in Brooklyn, New York, for Chinese Americans. <a href="https://loveyourliver.us/">https://loveyourliver.us/</a>
- The Truth About Liver Cancer (TTALC) Program held a virtual event on May 18, 2024, via CrowdCast, featuring a panel of liver transplant recipients. <a href="https://crowdcast.io/c/truth-liver-cancer-liver-transplant">https://crowdcast.io/c/truth-liver-cancer-liver-transplant</a>
- The Health Fair Somali Community Event was held on May 26, 2024

#### COMMUNITY ENGAGEMENT AND DIVERSITY COUNCIL

Our SPORE continues to engage our patient communities in the catchment areas around Mayo Clinic-Rochester (Midwest), Mayo Clinic-FL, and Mayo Clinic-AZ via multiple initiatives.

Please contact Dr. Lewis Roberts at <u>roberts.lewis@mayo.edu</u> or Dr. Lionel Kankeu Fonkoua at <u>KankeuFonkoua.Lionel@mayo.edu</u> to get involved!

We value the participation of SPORE investigators, administrators, and especially our Patient Advocates.

#### OPPORTUNITIES AND STRATEGIES FOR COMMUNITY ENGAGEMENT MEETING

Opportunities and Strategies for Community Engagement meeting is the second Thursday of every month from 12:00-12:30 pm CST.

The next meeting is Thursday, September 12, 2024, 12:00-12:30 p.m. CST.

## **RECENT PUBLICATIONS**

Articles were identified through a PubMed search of Mayo investigators.

Syngeneic Murine Models with Distinct Immune Microenvironments Represent Subsets of Human Intrahepatic Cholangiocarcinoma. Tomlinson JL, Li B, Yang J, Loeuillard E, Stumpf HE, Kuipers H, Watkins R, Carlson DM, Willhite J, O'Brien DR, Graham RP, Chen X, Smoot RL, Dong H, Gores GJ, Ilyas SI. J Hepatol. 2024 Mar 6:S0168-8278(24)00127-2. doi: 10.1016/j.jhep.2024.02.008. Epub ahead of print. PMID: 38458319.

Fighting rare cancers: lessons from fibrolamellar hepatocellular carcinoma | Nature Reviews Cancer Simon, S.M. Fighting rare cancers: lessons from fibrolamellar hepatocellular carcinoma. *Nat Rev Cancer* 23, 335–346 (2023). <a href="https://doi.org/10.1038/s41568-023-00554-w">https://doi.org/10.1038/s41568-023-00554-w</a>

Von Willebrand Factor Antigen Improves Risk Stratification for Patients with a Diagnosis of Resectable Hepatocellular Carcinoma. Pereyra D, Mandorfer M, Santol J, Gregory L, Koeditz C, Ortmayr G, Schuetz C, Rumpf B, Ammon D, Laengle J, Schwarz C, Jonas JP, Pinter M, Lindenlaub F, Tamandl D, Thiels C, Warner S, **Smoot R**, Truty M, Kendrick M, Nagorney D, Cleary S, Gruenberger T, Reiberger T, Starlinger P. Ann Surg Oncol. 2024 Jun 19. doi: 10.1245/s10434-024-15618-w. Epub ahead of print. PMID: 38896229.

Metabolome-wide association identifies altered metabolites and metabolic pathways in the serum of patients with cholangiocarcinoma. Jackson LE, Tomlinson JL, Alva-Ruiz R, Gregory LA, Byeon SK, Abdelrahman AM, Mun DG, Grant CW, Fogarty ZC, Wang C, Roberts LR, Graham RP, Borad MJ, Ilyas SI, Gores GJ, Pandey A, Athreya AP, Smoot RL. JHEP Rep. 2024 Mar 18;6(6):101068. doi: 10.1016/j.jhepr.2024.101068. PMID: 38882601; PMCID: PMC11179355.



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## **RECENT PUBLICATIONS (CONTINUED)**

Comparison of Octreotide and Vasopressors as First-Line Treatment for Intraoperative Carcinoid Crisis. Ammann M, Kinney MAO, Gudmundsdottir H, Santol J, Thiels CA, Warner SG, Truty MJ, Kendrick ML, **Smoot RL**, Anderson AL, Halfdanarson TR, Nagorney DM, Starlinger PP. Ann Surg Oncol. 2024 Jun;31(6):3976-3977. doi: 10.1245/s10434-024-15264-2. Epub 2024 Apr 15. PMID: 38619707.

Ethanol disrupts hepatocellular lipophagy by altering Rab5-centric LD-lysosome trafficking. Schott MB, Rozeveld CN, Bhatt S, Crossman B, Krueger EW, Weller SG, Rasineni K, Casey CA, **McNiven MA**. Hepatol Commun. 2024 May 22;8(6):e0446. doi: 10.1097/HC9.0000000000000446. PMID: 38780316; PMCID: PMC11124685.

Increased Protein Kinase A Activity Induces Fibrolamellar Hepatocellular Carcinoma Features
Independent of DNAJB1. Shirani M, Levin S, Shebl B, Requena D, Finkelstein TM, Johnson DS, Ng D,
Lalazar G, Heissel S, Hojrup P, Molina H, de Jong YP, Rice CM, Singhi AD, **Torbenson MS**, Coffino P,
Lyons B, **Simon SM**. Cancer Res. 2024 Jun 18. doi: 10.1158/0008-5472.CAN-23-4110. Epub ahead of
print. PMID: 38888469.

Severe acute liver disease in adults: Contemporary role of histopathology. Clouston AD, Gouw ASH, Tiniakos D, Bedossa P, Brunt EM, Callea F, Dienes HP, Goodman ZD, Hubscher SG, Kakar S, Kleiner DE, Lackner C, Park YN, Roberts EA, Schirmacher P, Terracciano L, **Torbenson M**, Wanless IR, Zen Y, Burt AD. Histopathology. 2024 May 21. doi: 10.1111/his.15212. Epub ahead of print. PMID: 38773813.

Morphological findings in different subtypes of hepatic amyloid. Yasir S, Chen ZE, Hartley C, Zhang L, **Torbenson M**. Hum Pathol. 2024 Apr;146:35-42. doi: 10.1016/j.humpath.2024.03.001. Epub 2024 Mar 7. PMID: 38460799.

Expression of tumor antigens within an oncolytic virus enhances the anti-tumor T cell response. Webb MJ, Sangsuwannukul T, van Vloten J, Evgin L, Kendall B, Tonne J, Thompson J, Metko M, Moore M, Chiriboga Yerovi MP, Olin M, Borgatti A, McNiven M, Monga SPS, Borad MJ, Melcher A, Roberts LR, Vile R. Nat Commun. 2024 Jun 27;15(1):5442. doi: 10.1038/s41467-024-49286-x. PMID: 38937436; PMCID: PMC11211353.

<u>Bintrafusp alfa and chemotherapy as first-line treatment in biliary tract cancer: A randomized phase 2/3 trial.</u> Oh DY, Ikeda M, Lee CK, Rojas C, Hsu CH, Kim JW, Shen L, Furuse J, Park JO, **Borad M**, de Braud F, Bridgewater J, Lee SS, Moehler M, Audhuy F, Osada M, Sato M, Yoo C. Hepatology. 2024 Jun 14. doi: 10.1097/HEP.00000000000000965. Epub ahead of print. PMID: 38875119.

COMPANION-002 A clinical trial of investigational drug CTX-009 plus paclitaxel vs paclitaxel in second line advanced BTC. Azad N, Hu Z, Sahin I, Iyer R, Aranha O, Hochster H, Pathak P, Paulson AS, Kalyan A, Liao CY, Tran N, Kelley RK, Heestand G, Cosgrove D, El-Khoueiry A, **Borad M**, Gabrail NY, Majeed U, Du L, Kamath S, Shumway N, Shroff R, Goyal L, Rosales M, Javle M. Future Oncol. 2024 Jun 4:1-8. doi: 10.1080/14796694.2024.2351351. Epub ahead of print. PMID: 38861293.

<u>Utility of methylated DNA markers for the diagnosis of malignant biliary strictures.</u> Cooley MA, Schneider AR, Barr Fritcher EG, Milosevic D, Levy MJ, Bridgeman AR, Martin JA, Petersen BT, Abu Dayyeh BK, Storm AC, Law RJ, Vargas EJ, Garimella V, Zemla T, Jenkins SM, Yin J, **Gores GJ, Roberts LR**, Kipp BR, Chandrasekhara V. Hepatology. 2024 Jun 21. doi: 10.1097/HEP.00000000000000970. Epub ahead of print. PMID: 38905442.



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Dietary intake, obesity, and physical activity in association with biliary tract cancer risk: Results from meta-analyses of individual-level data from prospective cohort studies of 723,326 adults. Gunchick V, Wen W, Jia G, Roberts LR, Koshiol J, Shu XO, Zheng W. Int J Cancer. 2024 Jun 7. doi: 10.1002/ijc.35048. Epub ahead of print. PMID: 38847561.

Progressive Familial Intrahepatic Cholestasis: Is It Time to Transition to Genetic Cholestasis? Squires RH, Monga SP. J Pediatr Gastroenterol Nutr. 2021 May 1;72(5):641-643. doi: 10.1097/MPG.000000000003111. PMID: 33661247.

## **REMINDERS**

Acknowledge the HBC SPORE **P50 CA210964** in your abstracts, presentations, and publications.

## **LIVER SPORE CONTACTS**

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