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## Short presentation

My primary research interest is focused on metabolic syndrome, metabolomics and liver diseases. I have 10 years of experience in working in highly international, culturally and professionally diverse research groups. My current research interest lies in role of metabolic syndrome in development of primary liver cancer and impact on tumor microenvironment.

## Qualifications

Molecular Biology, PhD, University of Ljubljana  
Award Date: 21 Jan 2014  
Biotechnology, MSc Eng, Gdansk University of Technology  
Award Date: 24 Jun 2010

## Employment

### Postdoc

Harvard University  
Cambridge, United States  
1 Sep 2014 → 1 Sep 2016

### Guest Researcher

University of Iowa  
Iowa City, United States  
1 Aug 2011 → 1 Dec 2011

### Researcher

University of Ljubljana  
Slovenia  
1 Sep 2010 → 1 Jan 2014

## Research outputs

### **Fatty Acid Synthase expression promotes the malignant features of cholangiocarcinoma cells and predicts shorter survival in patients**

Lori, G., Raggi, C., Piombanti, B., Pastore, M., Booiijink, R., Navari, N., Rovida, E., Gastaldelli, A., Andersen, J., Lewinska, Monika & Marra, F., 2023, In: Digestive and Liver Disease. 55, p. S14 1 p.

### **Fibroblast-Derived Lysyl Oxidase Increases Oxidative Phosphorylation and Stemness in Cholangiocarcinoma**

Lewinska, M., Zhuravleva, E., Satriano, L., Martinez, M. B., Bhatt, D. K., Oliveira, D. V. N. P., Antoku, Y., Keggenhoff, F. L., Castven, D., Marquardt, J. U., Matter, M. S., Erler, J. T., Oliveira, R. C., Aldana, B. I., Al-Abdulla, R., Perugorria, M. J., Calvisi, D. F., Perez, L. A., Rodrigues, P. M., Labiano, I. & 2 others, Banales, J. M. & Andersen, Jesper Bøje, 2023, (E-pub ahead of print) In: Gastroenterology.

### **MicroRNA-27a-3p targets FoxO signalling to induce tumour-like phenotypes in bile duct cells**

Duwe, Lea, Munoz-Garrido, P., Lewinska, Monika, Lafuente Barquero, Juan Francisco, Satriano, L., Høgdall, Dan Taksony Solyom, Taranta, A., Nielsen, B. S., Ghazal, A., Matter, M. S., Banales, J. M., Aldana, Blanca, Gao, Y., Marquardt, J. U., Roberts, L. R., Oliveira, R. C., Koshiol, J., O'Rourke, Colm & Andersen, Jesper Bøje, 2023, In: Journal of

**Semaglutide reduces tumor burden in the GAN diet-induced obese and biopsy-confirmed mouse model of NASH-HCC with advanced fibrosis**

Hansen, H. H., Pors, S., Andersen, M. W., Vyberg, M., Nøhr-Meldgaard, J., Nielsen, M. H., Oró, D., Madsen, M. R., Lewinska, Monika, Møllerhøj, M. B., Madsen, A. N. & Feigh, M., 2023, In: Scientific Reports. 13, 1, 23056.

**miR-21-5p promotes NASH-related hepatocarcinogenesis**

Rodrigues, P. M., Afonso, M. B., Simão, A. L., Islam, T., Gaspar, M. M., O'Rourke, Colm, Lewinska, Monika, Andersen, Jesper Bøje, Arretxe, E., Alonso, C., Santos-Laso, Á., Izquierdo-Sanchez, L., Jimenez-Agüero, R., Eizaguirre, E., Bujanda, L., Pareja, M. J., Prip-Buus, C., Banales, J. M., Rodrigues, C. M. P. & Castro, R. E., 2023, In: Liver International. 43, 10, p. 2256-2274 19 p.

**Back in person, back to the races**

Fatehi, S., Heim, A. B., da Silva, C. F. A., Lewinska, Monika, Uzonyi, A., Cardinal, B. J., Atondo, D., Richter, W. E., Cao, B. & Kothapalli, N. R., 2022, In: Science. 375, 6576, p. 20-21 2 p.

**Lipid alterations in chronic liver disease and liver cancer**

Paul, Bichitra, Lewinska, Monika & Andersen, Jesper Bøje, 2022, In: JHEP Reports. 4, 6, 18 p., 100479.

**The protease-inhibitor SerpinB3 as a critical modulator of the stem-like subset in human cholangiocarcinoma**

Correnti, M., Cappon, A., Pastore, M., Piombanti, B., Lori, G., Oliveira, D. V. P. N., Munoz-Garrido, P., Lewinska, M., Andersen, J. B., Coulouarn, C., Sulpice, L., Peraldo Neia, C., Cavalloni, G., Quarta, S., Biasiolo, A., Fassan, M., Ramazzotti, M., Parri, M., Recalcati, S., di Tommaso, L. & 6 others, Campani, C., Invernizzi, P., Torzilli, G., Marra, F., Pontisso, P. & Raggi, C., 2022, In: Liver International. 42, 1, p. 233-248

**Mitochondrial oxidative metabolism contributes to a cancer stem cell phenotype in cholangiocarcinoma**

Raggi, C., Taddei, M. L., Sacco, E., Navari, N., Correnti, M., Piombanti, B., Pastore, M., Campani, C., Pranzini, E., Iorio, J., Lori, G., Lottini, T., Peano, C., Cibella, J., Lewinska, M., Andersen, J. B., di Tommaso, L., Viganò, L., Di Maira, G., Madiari, S. & 5 others, Ramazzotti, M., Orlandi, I., Arcangeli, A., Chiarugi, P. & Marra, F., 2021, In: Journal of Hepatology. 74, 6, p. 1373-1385 13 p.

**The altered serum lipidome and its diagnostic potential for Non-Alcoholic Fatty Liver (NAFL)-associated hepatocellular carcinoma: Diagnosis of NAFLD-HCC utilising serum lipidomics**

Lewinska, M., Santos-Laso, A., Arretxe, E., Alonso, C., Zhuravleva, E., Jimenez-Agüero, R., Eizaguirre, E., Pareja, M. J., Romero-Gómez, M., Jimenez, M. A., Suppli, M. P., Knop, F. K., Oversoe, S. K., Villadsen, G. E., Decaens, T., Carrilho, F. J., de Oliveira, C. PMS., Sangro, B., Macias, R. I. R., Banales, J. M. & 1 others, Andersen, Jesper Bøje, 2021, In: EBioMedicine. 73, 103661.

**Seeking career clarity**

Antoniou, C., Burnette, K., Christensen-Quick, A., Lewinska, Monika, Ji, Y., Khalifa, M. M., Nikolaou, A., Srivastava, P., Hollingsworth, B. A., van Rhijn, N., Saurabh, S., Konstantinides, N., Heim, A. B., Moore, E. B., Strong, M., Kosanic, A., Kirshner, S. N., Halder, A. & Waiho, K., 3 Apr 2020, In: Science (New York, N.Y.). 368, 6486, p. 26-28 3 p.

**Mitochondrial oxidative metabolism contributes to maintain a cancer stem cell phenotype in cholangiocarcinoma**

Raggi, C., Taddei, M. L., Sacco, E., Navari, N., Correnti, M., Piombanti, B., Pastore, M., Iorio, J., Lori, G., Peano, C., Cibella, J., Lewinska, Monika, Andersen, Jesper Bøje, Di Maira, G., Ramazzotti, M., Orlandi, I., Chiarugi, P. & Marra, F., 1 Feb 2020, In: Digestive and Liver Disease. 52, p. e47 1 p.

**Therapeutic Rationale to Target Highly Expressed Aurora kinase A Conferring Poor Prognosis in Cholangiocarcinoma**

Ding, X., Huang, T., Peng, C., Ahn, K. S., Andersen, Jesper Bøje, Lewinska, Monika, Cao, Y., Xu, G., Chen, G., Kong, B., Friess, H., Shen, S., Roberts, L. R., Wang, L. & Zou, X., 2020, In: Journal of Cancer. 11, 8, p. 2241-2251 11 p.

**NextGen advises "Trying to Manage"**

Steinhauff, D., Ellwanger, J. H., Lewinska, Monika, Sanganyado, E., Ji, Y., Karawdeniya, B. I., Bochatay, N., Moore, E. B., Coulibaly, A., Ibrahim, S., Jansen, D. S., James, J. I., Cole, D. M., Lipkin, A., Adamowicz, B. M. K., Cohen, C. M., Fatehi, S., Holmstrom, M. H. & Li, R., 4 Oct 2019, In: Science (New York, N.Y.). 366, 6461, p. 28-30 3 p.

**Metabolic rearrangements in primary liver cancers: cause and consequences**

Satriano, L., Lewinska, Monika, Rodrigues, P. M., Banales, J. M. & Andersen, Jesper Bøje, 2019, In: Nature Reviews. Gastroenterology & Hepatology. 16, 12, p. 748-766 17 p.

**THU-491-The role of alanine glyoxylate aminotransferase in hepatocellular carcinoma**

Satriano, L., Lewinska, Monika, Rourke, C. O., Oliveira, D. V., Bhatt, D. K., Taranta, A., Herr, M., Straub, B., Conner, D. E. A., Budhu, D. A., Pomyen, Y., Ma, Tao, Gerhart-Hines, Zach, Stjernegaard, D. C. S., Matter, M., Crocoll, D. C., Wang, X. W., Marquardt, J. & Andersen, Jesper Bøje, 2019, p. e377.

**The protein kinase CK2 contributes to the malignant phenotype of cholangiocarcinoma cells**

Di Maira, G., Gentilini, A., Pastore, M., Caligiuri, A., Piombanti, B., Raggi, C., Rovida, E., Lewinska, Monika, Andersen, Jesper Bøje, Borgo, C., Salvi, M., Ottaviani, D., Ruzzene, M. & Marra, F., 2019, In: Oncogenesis. 8, 11, p. 61-72 12 p.

**Desmoplastic Tumor Microenvironment and Immunotherapy in Cholangiocarcinoma**

Høgdall, Dan Taksony Solyom, Lewinska, Monika & Andersen, Jesper Bøje, Mar 2018, In: Trends in Cancer. 4, 3, p. 239-255 17 p.

**ZBTB7A governs estrogen receptor alpha expression in breast cancer**

Molloy, M. E., Lewinska, Monika, Williamson, A. K., Nguyen, T. T., Kuser-Abali, G., Gong, L., Yan, J., Little, J. B., Pandolfi, P. P. & Yuan, Z. M., 2018, In: Journal of Molecular Cell Biology. 10, 4, p. 273-284 12 p.

**PRR14 is a novel activator of the PI3K pathway promoting lung carcinogenesis**

Yang, M., Lewinska, Monika, Fan, X., Zhu, J. & Yuan, Z. M., 2016, In: Oncogene. 35, 42, p. 5527-5538 12 p.

**Lessons from Hepatocyte-Specific Cyp51 Knockout Mice: Impaired Cholesterol Synthesis Leads to Oval Cell-Driven Liver Injury**

Lorbek, G., Perše, M., Jeruc, J., Juvan, P., Gutierrez-Mariscal, F. M., Lewinska, Monika, Gebhardt, R., Keber, R., Horvat, S., Björkhem, I. & Rozman, D., 2015, In: Scientific Reports. 5, 8777.

**Hidden disease susceptibility and sexual dimorphism in the heterozygous knockout of Cyp51 from cholesterol synthesis**

Lewinska, Monika, Juvan, P., Perse, M., Jeruc, J., Kos, S., Lorbek, G., Urlep, Z., Keber, R., Horvat, S. & Rozman, D., 13 Nov 2014, In: PLoS ONE. 9, 11, e112787.

**Polymorphisms of CYP51A1 from cholesterol synthesis: Associations with birth weight and maternal lipid levels and impact on CYP51 protein structure**

Lewinska, Monika, Zelenko, U., Merzel, F., Grdadolnik, S. G., Murray, J. C. & Rozman, D., 17 Dec 2013, In: PLoS ONE. 8, 12, e82554.

**Low nucleotide variability of CYP51A1 in humans: Meta-Analysis of cholesterol and bile acid synthesis and xenobiotic metabolism pathways**

Lewinska, Monika, Zmrzljak, U. P. & Rozman, R., 1 Dec 2013, In: Acta Chimica Slovenica. 60, 4, p. 875-883 9 p.

**Novel variants in the CYP51 gene found in Caucasian mothers and neonates with potential to contribute to spontaneous preterm birth**

Lewinska, Monika, Jun 2012, In: European Journal of Human Genetics. 20, Supp 1

**Cytochrome P450s in the synthesis of cholesterol and bile acids - From mouse models to human diseases**

Lorbek, G., Lewinska, Monika & Rozman, D., 1 May 2012, In: FEBS Journal. 279, 9, p. 1516-1533 18 p.