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Research

Indira is a bioinformatician who obtained a Ph.D. degree from the Department of Translational Medicine of Lund University, Sweden in 2022. She also has a master's degree in Biotechnology. In 2016 she started a career at Lund University as a data scientist in the fields of proteogenomics associated with cancer and reproductive medicine. Fields in which she is currently focused.

Employment

Statistician

Clinical Chemistry, Malmö
Lund University
Malmö, Sweden
2016 Jan 13 → present

Bioinformatician

Clinical Protein Science and Imaging
Lund University
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2017 Jun 14 → present

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Research outputs

Proteogenomic Profiling of Treatment-Naïve Metastatic Malignant Melanoma

Kuras, M., Betancourt, L. H., Hong, R., Szadai, L., Rodriguez, J., Horvatovich, P., Pla, I., Eriksson, J., Szeitz, B., Deszcz, B., Welinder, C., Sugihara, Y., Ekedahl, H., Baldetorp, B., Ingvar, C., Lundgren, L., Lindberg, H., Oskolas, H., Horvath, Z. & Rezeli, M. & 11 others, Gil, J., Appelqvist, R., Kemény, L. V., Malm, J., Sanchez, A., Szasz, A. M., Pawłowski, K., Wieslander, E., Fenyö, D., Nemeth, I. B. & Marko-Varga, G., 2025 Feb 27, In: *Cancers*. 17, 5, p. 1-35 832.

Comprehensive biobanking strategy with clinical impact at the European Cancer Moonshot Lund Center

Oskolas, H., Nogueira, F. C. N., Domont, G. B., Yu, K.-H., Semenov, Y. R., Sorger, P., Steinfelder, E., Corps, L., Schulz, L., Wieslander, E., Fenyö, D., Kárpáti, S., Holló, P., Kemény, L. V., Döme, B., Megyesfalvi, Z., Pawłowski, K., Nishimura, T., Kwon, H. & Encarnación-Guevara, S. & 16 others, Szasz, A. M., Veréb, Z., Gyulai, R., Németh, I. B., Appelqvist, R., Rezeli, M., Baldetorp, B., Horvatovich, P., Malmström, J., Pla, I., Sanchez, A., Knudsen, B., Kiss, A., Malm, J., Marko-Varga, G. & Gil, J., 2025, In: *Journal of Proteomics.* 316, 105442.

Short-term effects of follicle-stimulating hormone on immune function, lipid, and vitamin metabolism in transiently castrated men

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Regulation of human oocyte maturation in vivo during the final maturation of follicles

Cadenas, J., Poulsen, L. C., Nikiforov, D., Grøndahl, M. L., Kumar, A., Bahnu, K., Englund, A. L. M., Malm, J., Marko-Varga, G., Pla, I., Sanchez, A., Pors, S. E. & Yding Andersen, C., 2023 Apr 1, In: *Human Reproduction.* 38, 4, p. 686-700 15 p.

Plasma metabolome study reveals metabolic changes induced by pharmacological castration and testosterone supplementation in healthy young men

de Siqueira Guedes, J., Pla, I., Sahlin, K. B., Monnerat, G., Appelqvist, R., Marko-Varga, G., Giwercman, A., Domont, G. B., Sanchez, A., Nogueira, F. C. S. & Malm, J., 2022 Dec, In: *Scientific Reports.* 12, 1, 15931.

Novel protein markers of androgen activity in humans: proteomic study of plasma from young chemically castrated men

Giwercman, A., Sahlin, K. B., Pla Parada, I., Pawłowski, K., Fehniger, C., Lundberg Giwercman, Y., Leijonhufvud, I., Appelqvist, R., Marko-Varga, G., Sanchez, A. & Malm, J., 2022 Mar 1, In: *eLife.* 11

Proteomic Alterations in Follicular Fluid of Human Small Antral Follicles Collected from Polycystic Ovaries—A Pilot Study

Pla, I., Sanchez, A., Pors, S. E., Kristensen, S. G., Appelqvist, R., Sahlin, K. B., Marko-Varga, G., Andersen, C. Y. & Malm, J., 2022 Mar, In: *Life.* 12, 3, 391.

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Mapping the melanoma plasma proteome (MPP) using single-shot proteomics interfaced with the WiMT database

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A biobanking turning-point in the use of formalin-fixed, paraffin tumor blocks to unveil kinase signaling in melanoma

Velasquez, E., Szadai, L., Zhou, Q., Kim, Y., Pla, I., Sanchez, A., Appelqvist, R., Oskolas, H., Marko-Varga, M., Lee, B., Kwon, H. J., Malm, J., Szász, A. M., Gil, J., Betancourt, L. H., Németh, I. B. & Marko-Varga, G., 2021, In: *Clinical and Translational Medicine.* 11, 8, p. 1-6 e466.

Proteome of fluid from human ovarian small antral follicles reveals insights in folliculogenesis and oocyte maturation

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The Human Melanoma Proteome Atlas—Complementing the melanoma transcriptome

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Kwon, H. J., Rezeli, M., Malm, J., Horvath, P., Horvatovich, P., Miliotis, T., Ekedahl, H., Marko-Varga, G. & et al., 2021, In: Clinical and Translational Medicine. 11, 7, p. 1-25 e451.

The human melanoma proteome atlas-Defining the molecular pathology

Betancourt, L. H., Gil, J., Kim, Y., Doma, V., Çakir, U., Sanchez, A., Murillo, J. R., Kuras, M., Parada, I. P., Sugihara, Y., Appelqvist, R., Wieslander, E., Welinder, C., Velasquez, E., de Almeida, N. P., Woldmar, N., Marko-Varga, M., Pawłowski, K., Eriksson, J. & 37 others, Baldetorp, B., Ingvar, C., Olsson, H., Lundgren, L., Lindberg, H., Oskolas, H., Lee, B., Berge, E., Sjögren, M., Eriksson, C., Kim, D., Kwon, H. J., Knudsen, B., Rezeli, M., Hong, R., Horvatovich, P., Miliotis, T., Nishimura, T., Kato, H., Steinfelder, E., Oppermann, M., Miller, K., Florindi, F., Zhou, Q., Domont, G. B., Pizzatti, L., Nogueira, F. C. S., Horvath, P., Szadai, L., Timar, J., Karpati, S., Szasz, A. M., Malm, J., Fenyö, D., Ekedahl, H., Németh, I. B. & Marko-Varga, G., 2021, In: Clinical and Translational Medicine. 11, 7, p. 1-20 e473.

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Proteomic analysis enables distinction of early- versus advanced-stage lung adenocarcinomas

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A pilot proteomic study reveals different protein profiles related to testosterone and gonadotropin changes in a short-term controlled healthy human cohort

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Short-term effect of pharmacologically induced alterations in testosterone levels on common blood biomarkers in a controlled healthy human model

Sahlin, K. B., Pla, I., Sanchez, A., Pawłowski, K., Leijonhufvud, I., Appelqvist, R., Marko-Varga, G., Giwercman, A. & Malm, J., 2020, In: Scandinavian Journal of Clinical and Laboratory Investigation. 80, 1, p. 25-31 7 p.

Alpha-1-acid glycoprotein 1 is upregulated in pancreatic ductal adenocarcinoma and confers a poor prognosis

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Improved survival prognostication of node-positive malignant melanoma patients utilizing shotgun proteomics guided by histopathological characterization and genomic data

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Progressive changes in human follicular fluid composition over the course of ovulation: quantitative proteomic analyses
Poulsen, L. L. C., Pla, I., Sanchez, A., Grøndahl, M. L., Marko-Varga, G., Yding Andersen, C., Englund, A. L. M. & Malm, J., 2019, In: *Molecular and Cellular Endocrinology*. 495, Sept., 110522.

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Mendonça, C. F., Kuras, M., Nogueira, F. C. S., Plá, I., Hortobágyi, T., Csiba, L., Palkovits, M., Renner, É., Döme, P., Marko-Varga, G., Domont, G. B. & Rezeli, M., 2019, In: *Neurobiology of Disease*. 130, 104509.

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