

BIOGRAPHICAL SKETCH

NAME: Richard Moriggl

eRA COMMONS USER NAME (credential, e.g., agency login): <http://orcid.org/0000-0003-0918-9463>

POSITION TITLE: Dr. (PhD) Full Prof. University of Veterinary Medicine, Vienna

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University of Freiburg, Institute of Experimental Cancer Research, Freiburg, Germany	PhD	1994-1997	Molecular Biology, Biochemistry
St. Jude Children's Research Hospital, Memphis, TN, U.S.A.	Postdoc	1997-2000	Immunology, Hematopoiesis
Institute of Molecular Pathology (IMP), Vienna, Austria	Postdoc	2000-2005	Cancer Research and Signaling Pathways
Ludwig Boltzmann Institute for Cancer Research (LBI-CR), Vienna, Austria	Director	2005 ongoing	Cancer Research and Cytokine Signaling
Dual Prof. Appointment: University of Veterinary Medicine, Vienna, Austria and Medical University Vienna, Vienna, Austria	Full Professor	2014-2018	Functional Cancer Genomics
University of Veterinary Medicine, Vienna, Austria	Full Professor	2019 and ongoing	Core Cancer Pathways Unit for Functional Cancer Genomics Targeting JAK-STAT

A. Personal Statement and Research Focus on JAK-STAT as well as Cancer Mouse Models

Dr. Moriggl studied biotechnology in Germany and did his PhD in 1997 working on cytokine signaling with Prof. Groner, Friedrich Miescher Institute, Basel, Switzerland and Institute of Experimental Cancer Research, Freiburg, Germany. He did a first Howard Hughes postdoc till 2000 on immunology with Prof. Ihle, St. Jude Children's Research Hospital, Memphis, USA and moved for a second postdoc with Prof. Beug, Institute for Molecular Pathology, Vienna, Austria to work on hematopoietic cancer. Moriggl served for 14 years as director of the Ludwig Boltzmann Institute for Cancer Research heading 6 research groups that got tenure tracked and integrated into medical research performing universities. The Moriggl lab explores targeting of STAT transcription factors and it performs basic and translational cancer research with focus on generation and utilization of gene targeted mouse models. Established cellular systems investigate neoplastic T-cell development and targeting. The Moriggl lab contributes to understanding of gene regulatory and chromatin landscape consequences in cancer upon hyperactivation of JAK-STAT3/5 action, a central core cancer pathway that drives and connects with other core cancer pathways. Unpublished work investigates T-cell development, targeting of STAT5 chromatin loops or SH2 domain inhibitors to understand hematopoietic cancer in association with fatal clinical problems.

B. Positions and Honors (Scientific Education and Career History):

1988 - 1993	Study of Biotechnology at the Technical College, Bingen, Germany and Diploma work, Institute of Cell and Molecular Biology, CNRS, Strasbourg, France
1993 - 1997	Doctoral thesis; First at the Friedrich Miescher Institute, Basel, Switzerland, then continuation at Department of Biology, University of Freiburg, Institute for Experimental Cancer Research, Germany
1997 - 2000	Postdoctoral Howard Hughes fellowship at St. Jude Children's Research Hospital, Memphis, TN, USA
2000 - 2002	Marie Curie Host Industry Fellowship, Institute of Molecular Pathology, Vienna, Austria
2002-2005	Postdoctoral fellow at Institute of Molecular Pathology, Vienna, Austria
since 2005	Director Ludwig Boltzmann Institute for Cancer Research, Vienna, Austria
since 2013	LBI-CR Renewal and second funding period with five long term Partner Institutes
since 2014	Functional Cancer Genomics (full professorship), Institute of Animal Breeding and Genetics, University of Veterinary Medicine Vienna, Medical University Vienna

Fellowships and Appointments:

1997 - 2000	Howard Hughes Medical Institute Postdoctoral Fellowship
2000 - 2002	Marie Curie Host Industry Fellowship
2003	"Habilitation/ <i>Venia Docendi</i> " for Molecular Biology, Medical University Vienna
2005	Offered group leader position, Leibniz Institute for Age Research, Jena
2005 till 12/2018	Director, Ludwig Boltzmann Institute for Cancer Research (LBI-CR)
since 2014	Full Prof. with the two medical research performing universities in Vienna: Medical University Vienna and the University of Veterinary Medicine, Vienna, Austria
since 2018	The LBI-CR fully merged and integrated into medical research performing universities

C. Contribution to Science

Biographical Sketch and Key Data

Original articles, peer reviewed n>181 (including reviews/book chapters indexed in PubMed)

Citation Report based on Google Scholar:

h-index:	59
i10-index	136
total citations:	11414
Invited lectures	n>220
Funded grants (to RM or key group members)	n~17 (including grant renewals and subgroup grants)
<i>The total amount of external grant money (details below) acquired by the applicant and key group members since 2006 is ~>8 Million €, not including internal funding through the LBI-CR or any university supplied funding.</i>	
Memberships in societies	n=2 (AACR, ISICR)
Patenting	n=3 (Multi-Hit mice, 2007 and 2009 co-inventor)

Three selected research contribution areas and five key publications:

1. JAK-STAT and cytokine signaling, core cancer pathway analysis and functional cancer genomics
2. Basic and translational cancer research, metabolism and exploration of new therapies
3. Comparative cancer pathology with research on hematopoietic and solid cancers

- Kosack, L.*, Wingelhofer, B.*, Popa, A.*, Orlova, A.*, Agerer, B., Vilagos, B., Majek, P., Parapatics, K., Lercher, A., Ringler, A., Klughammer, J., Smyth, M., Khamina, K., Baazim, H., de Araujo, E.D., Rosa, D.A., Park, J., Tin, G., Ahmar, S., Gunning, P.T., Bock, C., Siddle, H.V., Woods, G.M., Kubicek, S., Murchison, E.P., Bennett, K.L., Moriggl, R.# & Bergthaler, A#. (2019) The ERBB-STAT3 Axis Drives Tasmanian Devil Facial Tumor Disease. **Cancer Cell**, doi: 10.1016/j.ccell.2018.11.018. *equal contribution; #equal correspondence
- Pham, H.T.T., Maurer, B., Prchal-Murphy, M., Grausenburger, R., Grundschober, E., Javaheri, T., Nivarthi, H., Boersma, A., Kolbe, T., Elabd, M., Halbritter, F., Pencik, J., Kazemi, Z., Grebien, F., Hengschläger, M., Kenner, L., Kubicek, S., Farlik, M., Bock, C., Valent, P., Müller, M., Rülcke, T., Sexl, V. & Moriggl, R. (2018) STAT5B^{N642H} is a driver mutation for T-cell neoplasia. **Journal of Clinical Investigation**, doi: 10.1172/JCI94509
- Freund, P., Kerényi, M.A., Hager, M., Wagner, T., Wingelhofer, B., Pham, H.T., Elabd, M., Han, X., Valent, P., Gouilleux, F., Sexl, V., Krämer, O.H., Groner, B. & Moriggl, R. (2017) O-GlcNAcylation of STAT5 controls tyrosine phosphorylation and oncogenic transcription in STAT5-dependent malignancies. **Leukemia**, doi: 10.1038/leu.2017.4
- Wingelhofer, B., Maurer, B., Heyes, E.C., Kumaraswamy, A.C., Berger-Becvar, A., Araujo, E.D., Orlova, A., Freund, P., Ruge, F., Jisung, P., Tin, G., Ahmar, S., Lardeau, C.H., Sadovnik, I., Bajusz, D., Keserü, G.M., Grebien, F., Kubicek, S., Valent, P., Gunning, P. & Moriggl, R. (2018) Pharmacologic inhibition of STAT5 in acute myeloid leukemia, **Leukemia**, doi: 10.1038/s41375-017-0005-9
- Müller, K.M., Hartmann, K., Kaltenecker, D., Vettorazzi, S., Bauer, M., Mauser, L., Amann, S., Jall, S., Fischer, K., Esterbauer, H., Müller, T.D., Magnes, C., Haybaeck, J., Scherer, J., Bordag, N., Tuckermann, J.P. & Moriggl, R. (2016) Adipocyte glucocorticoid receptor deficiency attenuates aging- or HFD-induced obesity and impairs the feeding-fasting transition. **Diabetes**, doi: 10.2337/db16-0381

Career-related Activities:

Editor for Cytokine since March 2020; Academic Editor for a *Cancers* Special Issue on "Targeting STAT3 and STAT5 in Cancer" 2019 and 2020

Accepted voluntary reviewer function for (in alphabetic order): *Bioconjugate Chemistry*, *BMC Cancer*, *Blood*, *British Journal of Cancer*, *Cancer Discovery*, *Cancer Medicine*, *Cancer Research*, *Cancers*, *Carcinogenesis*, *Cell Reports*, *Communications Biology*, *The EMBO Journal*, *EMBO Molecular Medicine*, *EMBO Reports*, *European Journal of Clinical Investigation*, *Genesis: The Journal of Genetics and Development*, *Haematologica*, *Journal of Cellular and Molecular Medicine*, *Journal of Clinical Investigation*, *Journal of Clinical Investigation Insight*, *Journal of Immunology*, *Journal of Immunology Research*, *Journal of Leucocyte Biology*, *Expert Review of Molecular Diagnostics*, *Expert Review of Endocrinology and Metabolism*, *FEBS Letters*, *Future Drugs Ltd.*,

Gut, International Journal of Molecular Sciences, JAK-STAT, Journal of Biological Chemistry, Journal of Leukocyte Biology, Genesis, Haematologica, Hepatology, Human Molecular Genetics, Leukemia, Medicine, Molecular and Cellular Biology, Molecular Cancer Research, Molecular and Cellular Endocrinology, Molecular Oncology, Molecular Metabolism, Nature Communications, Neoplasia, Oncogene, Oncotarget, Pharmacology & Therapeutics, Proceedings of the National Academy of Science USA, PLOS One, Scientific Reports, Swiss Medical Weekly, The Scientific World Journal, The Journal of Genetics and Development, and others.

External review on multiple NIH applications, advisory reviewer for the "Institute National Du Cancer" (France), multiple reviews for the French National Research Agency (ANR), France, several reviews for the Croatian Science Foundation, the Liddy Shriver Sarcoma Initiative (USA), the University Hospitals Case Medical Centre (USA), the German Research Foundations "Deutsche Forschungsgemeinschaft" or "Deutsche Krebshilfe" (Germany), the Heinrich Heine University (Düsseldorf, Germany), Health Research Council of New Zealand, the Paracelsus Medical University Salzburg (Austria), the "Volkswagenstiftung" (Germany), the "NÖ Forschungs- und Bildungsges.m.b.H." (Austria), the University Montreal (Canada), the Académie Louvain (Belgium), evaluator for the Molecular and Cellular Medicine Board, Medical Research Council MRC and for the Wellcome Trust, both United Kingdom, Basic Science Fund, Denmark, external evaluator on Institute Cochin, the Hospital Necker, both Paris, France, under guidance of AERES, two rounds scientific evaluation committee member for the TRANSCAN ERA-Net on Translational Cancer Research, scientific evaluation committee member for the FCT Scientific Research and Technological Development Projects – 2015 from the Ministry of Science and Education, Portugal; Review panel member for Flagship Project Proposals 2016 for the BioTechMed Graz initiative, Austria; Reviewer for the University of Michigan, USA 2017; external reviewer for PhD program – University of Salzburg Biomolecules 2018; Reviewer for Fondation Recherche Medicale – Chemistry for Medicine, France 2018, First TEAM reviewer for Foundation for Polish Science (FNP) 2018, Award SC – Renewing Programme Reviewer for Cancer Research UK 2018, external reviewer for an Assistant Professorship for orthopaedic Tumor Research, Balgrist, University Zürich 2019, multiple reviews for Kidney Research UK; scientific evaluator for the Austrian Ministry, scientific evaluator for Institute National Du Cancer, France 2019, Evaluator for the "Fonds der Stadt Wien" for Innovative Cancer Research 2019, Evaluator for the Olivia Hodson Cancer Fund 2019, Evaluator for the Technical University Munich, etc.

D. Main Research Support

Ongoing Research Grants (not including basic funding resources from university side or the LBI-CR):

- 1.) Austrian Science Funds: FWF-SFB F061, 2017-2021, Special research programme "Jak-Stat Monarchies and Hierarchies in Shaping Chromatin Landscapes"; www.jak-stat.at; Subproject (~130 k€/year)
- 2.) Austrian Science Funds: FWF-SFB F047-B13, 2013-2021, Special research programme "Myeloproliferative Neoplasms"; www.meduniwien.ac.at/sfb_mpn; Deputy coordinator and subproject (~110 k€/year)
- 3.) Cancer research grant Liechtenstein donation, 2008-2019, International donation for melanoma research, for cancer metabolism and colorectal cancer research, (~120 k€/year)
- 4.) ERA-NET TRANSCAN-2: Implementation of (epi)genetic and metabolic networks in the targeting of T-cell prolymphocytic leukemia, European Commission, 2019-2022 (~100 k€/year)
- 5.) ERAPERMED: JAKSTAT-TARGET - Novel individualized therapies in JAK/STAT driven T-cell malignancies for Dr. Heidi Neubauer within Functional Cancer Genomics Unit of R. Moriggl; European Commission, 2019-2022 (~100 k€/year)

Publications (years 2016 to 2020):

Original papers: >181 since 1995

1. Schmoellerl, J., Barbosa, I.A.M., Eder, T., Brandstoecker, T., Schmidt, L., Maurer, B., Troester, S., Pham, H.T.T., Sagarajit, M., Ebner, J., Manhart, G., Aslan, E., Terlecki-Zaniewicz, S., Van der Veen, C., Hoermann, G., Duploez, N., Petit, A., Lapillonne, H., Puissant, A., Itzykson, R.A., Moriggl, R., Heuser, M., Meisel, R., Valent, P., Sexl, V., Zuber, J. & Grebien, F. (2020) CDK6 is an essential target of NUP98-fusion proteins in acute myeloid leukemia. **Blood**, doi: 10.1182/blood.2019003267
2. Hadzijusufovic, E., Keller, A., Berger, D., Greiner, G., Wingelhofer, B., Witzeneder, N., Ivanov, D., Pecnard, E., Nivarthi, H., Schur, F.K.M., Filik, Y., Kornauth, C., Neubauer, H.A., Müllauer, L., Tin, G., Park, J., de Araujo, E.D., Gunning, P.T., Hoermann, G., Gouilleux, F., Kralovics, R., Moriggl, R. & Valent, P. (2020) STAT5 is expressed in CD34⁺/CD38⁺ stem cells and serves as a potential molecular target in Ph-negative myeloproliferative neoplasms. **Cancers**, doi: 10.3390/cancers12041021
3. Kadekar, D., Agerholm, R., Rizk, J., Neubauer, H.A., Suske, T., Maurer, B., Viñals, M.T., Comelli, E.M., Taibi, A., Moriggl, R. & Bekiaris, V. (2020) The neonatal microenvironment programs innate $\gamma\delta$ T cells through the transcription factor STAT5. **Journal of Clinical Investigation** doi: 10.1172/JCI131241
4. Abdeldayem, A., Raouf, Y.S., Constantinescu, S.N., Moriggl, R. & Gunning PT. (2020) Advances in covalent kinase inhibitors. **Chemical Society Reviews** doi: 10.1039/c9cs00720b
5. Orlova, A., Wagner, C., de Araujo E.D., Bajusz, D., Neubauer, H.A., Herling, M., Gunning, P.T., Keserü, G.M. & Moriggl, R. (2019) Direct targeting options for STAT3 and STAT5 in Cancer. **Cancers**, doi: 10.3390/cancers11121930

6. Lercher, A., Bhattacharya, A., Popa, A.M., Caldera, M., Schlapansky, M.F., Baazim, H., Agerer, B., Gürtl, B., Kosack, L., Májek, P., Brunner, J.S., Vitko, D., Pinter, T., Genger, J.W., Orlova, A., Pikor, N., Reil, D., Oszvár-Kozma, M., Kalinke, U., Ludewig, B., Moriggl, R., Bennett, K.L., Menche, J., Cheng, P.N., Schabbauer, G., Trauner, M., Klavins, K. & Bergthaler A. (2019) Type I interferon signalling disrupts the hepatic urea cycle and alters systemic metabolism to suppress T cell function. **Immunity**, doi: 10.1016/j.immuni.2019.10.014
7. de Araujo E.D., Orlova, A., Neubauer, H.A., Bajusz, D., Seo, H.S., Dhe-Paganon, S., Keserü, G.M., Moriggl, R. & Gunning, P.T. (2019) Structural implications of STAT3 and STAT5 SH2 domain mutations. **Cancers**, doi: 10.3390/cancers11111757
8. Unterleuthner, D., Neuhold, P., Schwarz, K., Janker, L., Neuditschko, B., Nivarthi, H., Crncec, I., Kramer, N., Unger, C., Hengstschläger, M., Eferl, R., Moriggl, R., Sommergruber, W., Gerner, C., & Dolznig, H. (2019) **Angiogenesis**, doi: 10.1007/s10456-019-09688-8
9. Orlova, A., Neubauer, H.A. & Moriggl, R. (2019) The stromal microenvironment provides an escape route from FLT3 inhibitors through the GAS6-AXL-STAT5 axis. **Haematologica**, doi:10.3324/haematol.2019.225862
10. Mohrherr, J., Haber, M., Breitenecker, K., Aigner, P., Moritsch, S., Voronin, V., Eferl, R., Moriggl, R., Stoiber, D., Györfy, B., Brcic, L., László, V., Döme, B., Moldvay, J., Dezsó, K., Bilban, M., Popper, H., Moll, H.P. & Casanova, E. (2019) JAK-STAT inhibition impairs K-RAS-driven lung adenocarcinoma progression. **International Journal of Cancer**, doi: 10.1002/ijc.32624
11. Aigner, P., Mizutani, T., Horvath, J., Eder, T., Heber, S., Lind, K., Just, V., Moll, H.P., Yeroslaviz, A., Fischer, M.J.M., Kenner, L., Györfy, B., Sill, H., Grebien, F., Moriggl, R., Casanova, E. & Stoiber, D. (2019) STAT3 β is a tumor suppressor in acute myeloid leukemia. **Blood Advances**, doi: 10.3390/cancers11070929
12. Boutillon, F., Pigat, N., Sala, L.S., Reyes-Gomez, E., Moriggl, R., Guidotti, J.E. & Goffin, V. (2019) STAT5a/b Deficiency Delays, but does not Prevent, Prolactin-Driven Prostate Tumorigenesis in Mice. **Cancers**, doi: 10.3390/cancers11070929
13. Araujo, E.D.de*, Erdogan, F.*, Neubauer, H.*, Meneksedag-Erol, D., Manaswiyoungkul, P., Eram, M.S., Seo, H.S., Qadree, A.K., Israelian, J., Orlova, A., Suske, T., Pham, H.T.T., Boersma, A., Tangermann, S., Kenner, L., Rüllicke, T., Dong, A., Ravichandran, M., Brown, P.J., Audette, G.F., Rauscher, S. Dhe-Paganon, S.#, Moriggl, R.# & Gunning, P.T.# (2019) Structural and functional consequences of the STAT5BN642H driver mutation. **Nature Communications**, doi: 10.1038/s41467-019-10422-7*equal contribution; #equal correspondence
14. Maurer, B., Nivarthi, H., Wingelhofer, B., Pham, H.T.T., Schleder, M., Suske, T., Grausenburger, R., Schiefer, A.-I., Prchal-Murphy, M., Chen, D., Winkler, S., Merkel, O., Kornauth, C., Hofbauer, M., Hochgatterer, B., Hörmann, G., Hölbl-Kovacic, A., Prochazkova, J., Lobello, C., Cumaraswamy, A.A., Eder, J., Kitzwögerer, M., Chott, A., Janikova, A., Pospisilova, S., Loizou J.I., Kubicek, S., Valent, P., Kolbe, T., Grebien, F., Kenner, L., Gunning, P.T., Kralovics, R., Herling, M., Müller, M., Rüllicke, T., Sexl, V. & Moriggl, R. (2019) High activation of STAT5A drives Peripheral T-Cell Lymphoma and Leukemia. **Haematologica**, doi: 10.3324/haematol.2019.216986
15. Liu, R., Moriggl, R., Zhang, D., Li, H., Karns, R., Ruan, H.B., Niu, H., Mayhew, C., Watson, C., Bangar, H., Cha, S.W., Haslam, D. Zhang, T., Gilbert, S., Li, N., Helmrich, M., Wells, J., Denson, L. & Han, X. (2019) Constitutive STAT5 activation regulates Paneth and Paneth-like cells to control *Clostridium difficile* colitis. **Life Science Alliance**, doi: 10.26508/lsa.201900296
16. Klein, K., Wittlitz-Siepracka, A., Maurer, B., Prinz, D., Heller, G., Leidenfrost, N., Prchal-Murphy, M., Suske, T., Moriggl, R. & Sexl, V. (2019) STAT5BN642H drives transformation of NKT cells: a novel mouse model for CD56+ T-LGL leukemia. **Leukemia**, doi: 10.1038/s41375-019-0471-3
17. Rauth, M., Freund, P., Orlova, A., Grünert, S., Tasic, N., Han, X., Ruan, H.B., Neubauer, H.A. & Moriggl, R. (2019) Cell Metabolism Control Through O-GlcNAcylation of STAT5: A Full or Empty Fuel Tank Makes a Big Difference for Cancer Cell Growth and Survival. **International Journal of Molecular Sciences**, doi: 10.3390/ijms20051028.
18. Kosack, L.*, Wingelhofer, B.*, Popa, A.*, Orlova, A.*, Agerer, B., Vilagos, B., Majek, P., Parapatics, K., Lercher, A., Ringler, A., Klughammer, J., Smyth, M., Khamina, K., Baazim, H., de Araujo, E.D., Rosa, D.A., Park, J., Tin, G., Ahmar, S., Gunning, P.T., Bock, C., Siddle, H.V., Woods, G.M., Kubicek, S., Murchison, E.P., Bennett, K.L., Moriggl, R.# & Bergthaler, A.#. (2019) The ERBB-STAT3 Axis Drives Tasmanian Devil Facial Tumor Disease. **Cancer Cell**, doi: 10.1016/j.ccell.2018.11.018. *equal contribution; #equal correspondence
19. Interplay of transcription factors STAT3, STAT1 and AP-1 mediates activity of the matrix metallo-proteinase-1 promoter in colorectal carcinoma cells. Muller, A., Gasch, J., Albring, K.F., Aberger, F., Nivarthi, H., Khemeri, M., Moriggl, R. & Friedrich, K.H. (2019) **Neoplasma**, doi: 10.4149/neo_2018_180731N560
20. Ilangumaran, S., Moriggl, R. & Kalvakolanu, D.V. (2018) Editorial: Cytokines in liver diseases. **Cytokine**, doi: 10.1016/j.cyto.2018.12.001
21. Duvigneau, J.C., Luis, A., Gorman, A.M., Samali, A., Kaltenecker, D., Moriggl, R. & Kozlov, A.V. (2018) Crosstalk between inflammatory mediators and endoplasmic reticulum stress in liver diseases. **Cytokine**, doi: 10.1016/j.cyto.2018.10.018
22. Golob-Schwarzl, N., Bettermann, K., Mehta, A.K., Kessler, S.M., Unterluggauer, J., Krassnig, S., Kojima, K., Chen, X., Hoshida, Y., Bardeesy, N.M., Müller, H., Svendova, V., Schimek, M.G., Diwoky, C., Lipfert, A., Mahajan, V., Stumptner, C., Thüringer, A., Fröhlich, L.F., Stojakovic, T., Nilsson, K.P.R., Kolbe, T., Rüllicke, T., Magin, T.M., Strnad, P., Kierner, A.K., Moriggl, R. & Haybaeck, J. (2018) High keratin 8/18 ratio predicts aggressive hepatocellular cancer phenotype. **Translational Oncology**, doi: 10.1016/j.tranon.2018.10.010
23. Kleinegger, F., Hofer, E., Wodlej, C., Golob-Schwarzl, N., Birkl-Toegelhofer, A.M., Stallinger, A., Petzold, J., Orlova, A., Krassnig, S., Reihls, R., Niedrist, T., Mangge, H., Park, Y.N., Thalhammer, M., Aigelsreiter, A., Lax, S., Garbers, C., Fickert, P., Rose-John, S., Moriggl, R., Rinner, B. & Haybaeck, J. (2018) Pharmacologic IL-6R α inhibition in cholangiocarcinoma promotes cancer cell growth and survival. **Biochimica et Biophysica Acta (BBA) Molecular Basis of Disease**, doi: 10.1016/j.bbdis.2018.11.006
24. Kaltenecker, D., Themanns, M., Mueller, K.M., Spirk, K., Suske, T., Merkel, O., Kenner, L., Luis, A., Kozlov, A., Haybaeck, J., Müller, M., Han, X., & Moriggl, R. (2018) Hepatic growth hormone-JAK2-STAT5 signalling: Metabolic function, non-alcoholic fatty liver disease and hepatocellular carcinoma progression. **Cytokine**, doi: 10.1016/j.cyto.2018.10.010
25. Kaltenecker, D., Themanns, M., Mueller, K.M., Spirk, K., Golob-Schwarzl, N., Friedbichler, K., Kenner, L., Haybaeck, J. & Moriggl, R. (2018) STAT5 deficiency in hepatocytes reduces diethylnitrosamine-induced liver tumorigenesis in mice. **Cytokine**, doi: 10.1016/j.cyto.2018.10.014
26. Abu Eid, S., Hackl, M.T., Kaplanian, M., Winter, M.P., Kaltenecker, D., Moriggl, R., Luger, A., Scherer, T. & Fürsinn, C. (2018) Life under hypoxia lowers blood glucose independently of effects on appetite and body weight in mice. **Frontiers Endocrinology**, doi: 10.3389/fendo.2018.00490
27. Prutsch, N., Gurnhofer E, Suske T, Liang HC, Schleder M, Roos S, Wu LC, Simonitsch-Klupp I, Alvarez-Hernandez A, Kornauth C, Leone DA, Svinika J, Eferl R, Limberger T, Aufinger A, Shirsath N, Wolf P, Hielscher T, Aberger F, Schmoellerl J, Stoiber D, Strobl B, Jäger U, Staber PB, Grebien F, Moriggl, R., Müller, M., Inghirami, G.G., Sanda, T., Look, A.T., Turner, S.D., Kenner, L. & Merkel, O. (2018) Dependency on the TYK2/STAT1/MCL1 axis in anaplastic large cell lymphoma. **Leukemia**, doi: 10.1038/s41375-018-0239-1.
28. Valent, P., Büsche, G., Theurl, I., Uras, I.Z., Germing, U., Stauder, R., Sotlar, K., Füreder, W., Bettelheim, P., Pfeilstöcker, M., Oberbauer, R., Sperr, W.R., Geissler, K., Schwaller, J., Moriggl, R., Béné, M.C., Jäger, U., Horny, H.P. & Hermine, O. (2018) Normal and pathological erythropoiesis in adults: from gene regulation to targeted concepts. **Haematologica**, doi: 10.3324/haematol.2018.192518
29. Moll, H.P., Pranz, K., Musteanu, M., Grabner, B., Hruschka, N., Mohrherr, J., Aigner, P., Stiedl, P., Brcic, L., Laszlo, V., Schramek, D., Moriggl, R., Eferl, R., Moldvay, J., Dezsó, K., Lopez-Casas, P.P., Stoiber, D., Hidalgo, M., Penninger, J., Sibilía, M., Györfy, B., Barbacid, M., Dome, B., Popper, H. & Casanova, E. (2018) Afatinib restrains K-RAS-driven lung tumorigenesis. **Science Translational Medicine**, doi: 10.1126/scitranslmed.aao2301
30. Sternberg, C., Gruber, W., Eberl, M., Tesanovic, S., Stadler, M., Elmer, D.P., Schleder, M., Grund, S., Roos, S., Wolff, F., Kaur, S., Mangelberger, D., Lehrach, H., Hache, H., Wierling, C., Laimer, J., Lackner, P., Wiederstein, M., Kasper, M., Risch, A., Petzelbauer, P., Moriggl, R., Kenner, L. & Aberger, F. (2018) Synergistic cross-talk between hedgehog and interleukin-6 signaling drives growth in basal cell carcinoma. **International Journal of Cancer**, doi: 10.1002/ijc.31724

31. Pham, H.T.T., Hengstschläger, M. & Moriggl, R. (2018) A haunted beast: Targeting STAT5B^{N642H} in T-cell neoplasia. **Molecular Cellular Oncology**, doi: 10.1080/23723556.2018.1435181
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