

## Lars Bräutigam Publication List

### Peer-reviewed papers in scientific journals

1. Zhang J, Ye ZW, **Bräutigam L**, Chakraborty P, Luo Z, Culpepper J, Aslam M, Zhang L, Johansson K, Haeggström JZ, Xu J, Olsson M, Townsend DM, Mehrotra S, Morgenstern R, Tew KD. A role for microsomal glutathione transferase 1 in melanin biosynthesis and melanoma progression The Journal of biological chemistry 2023 299:8 104920-  
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2. Peng G, Sinkko HM, Alenius H, Lozano N, Kostarelos K, **Bräutigam L**, Fadeel B. Graphene oxide elicits microbiome-dependent type 2 immune responses via the aryl hydrocarbon receptor Nature nanotechnology 2023 18:1 42-48  
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3. Zisi A, Kanellis DC, Moussaud S, Karlsson I, Caren H, **Braeutigam L**, Bartek J, Lindstrom MS. Small molecule-mediated disruption of ribosome biogenesis synergizes with FGFR inhibitors to suppress glioma cell growth NEURO-ONCOLOGY 2023 25:6 1058-1072  
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4. Sondergaard JN, Sommerauer C, Atanasoai I, Hinte LC, Geng K, Guiducci G, **Brautigam L**, Aouadi M, Stojic L, Barragan I, Kutter C. CCT3-LINC00326 axis regulates hepatocarcinogenic lipid metabolism GUT 2022 71:10  
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5. Wilms C, Lepka K, Häberlein F, Edwards S, Felsberg J, Pudelko L, Lindenbergs TT, Poschmann G, Qin N, Volbracht K, Prozorovski T, Meuth SG, Kahlert UD, Remke M, Aktas O, Reifenberger G, **Bräutigam L**, Odermatt B, Berndt C. Glutaredoxin 2 promotes SP-1-dependent CSPG4 transcription and migration of wound healing NG2 glia and glioma cells: Enzymatic Taoism Redox biology 2022 49: 102221-  
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6. Karsten S, Fiskesund R, Zhang XM, Marttila P, Sanjiv K, Pham T, Rasti A, **Bräutigam L**, Almlöf I, Marcusson-Ståhl M, Sandman C, Platzack B, Harris RA, Kalderén C, Cederbrant K, Helleday T, Warpman Berglund U. MTH1 as a target to alleviate T cell driven diseases by selective suppression of activated T cells Cell death and differentiation 2022 29:1 246-261  
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7. Yang M, Johnsson P, **Bräutigam L**, Yang XR, Thrane K, Gao J, Tobin NP, Zhou Y, Yu R, Nagy N, Engström PG, Tuominen R, Eriksson H, Lundeberg J, Tucker MA, Goldstein AM, Egyhazi-Brage S, Zhao J, Cao Y, Höiom V. Novel loss-of-function variant in DENND5A impedes melanosomal cargo transport and predisposes to familial cutaneous melanoma Genetics in medicine : official journal of the American College of Medical Genetics 2022 24:1 157-169  
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8. Langa X, Neuhaus P, Lains D, Stewart TJ, Borel N, Cortal AC, Monteiro JF, Alestrom P, Diaz E, Piragyte I, **Brautigam L**, Vazquez R, Hlushchuk R, Gfeller L, Mestrot A, Bigalke M, Varga ZM, Mercader N. A Systematic Analysis of Metal and Metalloid Concentrations in Eight Zebrafish Recirculating Water Systems ZEBRAFISH 2021 18:4 252-264  
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9. Das I, Gad H, **Brautigam L**, Pudelko L, Tuominen R, Hoiom V, Almlof I, Rajagopal V, Hansson J, Helleday T, Brage SE, Berglund UW. AXL and CAV-1 play a role for MTH1 inhibitor TH1579 sensitivity in cutaneous malignant melanoma CELL DEATH AND DIFFERENTIATION 2020 27:7 2081-2098  
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10. Pudelko L, Rouhi P, Sanjiv K, Gad H, Kalderén C, Höglund A, Squatrito M, Schuhmacher AJ, Edwards S, Hägerstrand D, Berglund UW, Helleday T, **Bräutigam L**. Correction: Glioblastoma and glioblastoma stem cells are dependent on functional MTH1 Oncotarget 2020 11:8 827-  
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- 11.** Zhang SM, Desroses M, Hagenkort A, Valerie NCK, Rehling D, Carter M, Wallner O, Koolmeister T, Throup A, Jemth AS, Almlöf I, Loseva O, Lundback T, Axelsson H, Regmi S, Sarno A, Kramer A, Pudelko L, **Bräutigam L**, Rasti A, Gottmann M, Wiita E, Kutzner J, Schaller T, Kalderen C, Cazares-Korner A, Page BDG, Krimpenfort R, Eshtad S, Altun M, Rudd SG, Knapp S, Scobie M, Homan EJ, Berglund UW, Stenmark P, Helleday T. Development of a chemical probe against NUDT15 NATURE CHEMICAL BIOLOGY 2020 16:10 1120-1128  
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- 12.** Scaletti ER, Vallin KS, **Bräutigam L**, Sarno A, Warpman Berglund U, Helleday T, Stenmark P, Jemth AS. MutT homologue 1 (MTH1) removes N6-methyl-dATP from the dNTP pool The Journal of biological chemistry 2020 295:15 4761-4772  
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- 13.** Peng GT, Montenegro MF, Ntola CNM, Vranic S, Kostarelos K, Vogt C, Toprak MS, Duan TB, Leifer K, **Bräutigam L**, Lundberg JO, Fadeel B. Nitric oxide-dependent biodegradation of graphene oxide reduces inflammation in the gastrointestinal tract NANOSCALE 2020 12:32 16730-16737  
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- 14.** He X, Yin X, Wu J, Wickström SL, Duo Y, Du Q, Qin S, Yao S, Jing X, Hosaka K, Wu J, Jensen LD, Lundqvist A, Salter AI, **Bräutigam L**, Tao W, Chen Y, Kiessling R, Cao Y. Visualization of human T lymphocyte-mediated eradication of cancer cells in vivo Proceedings of the National Academy of Sciences of the United States of America 2020 117:37 22910-22919  
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- 15.** Corman A, Jung BM, Haggblad M, **Bräutigam L**, Lafarga V, Lidemalm L, Huhn D, Carreras-Puigvert J, Fernandez-Capetillo O. A Chemical Screen Identifies Compounds Limiting the Toxicity of C9ORF72 Dipeptide Repeats CELL CHEMICAL BIOLOGY 2019 26:2 235-243.e5  
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- 16.** Filipek-Górniok B, Ledin J, Aleström P, **Braeutigam L**. The Nordic Zebrafish and Husbandry Meeting 2018 Zebrafish 2019 16:3 329-330  
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- 17.** Pudelko L, Edwards S, Balan M, Nyqvist D, Al-Saadi J, Dittmer J, Almlöf I, Helleday T, **Bräutigam L**. An orthotopic glioblastoma animal model suitable for high-throughput screenings NEURO-ONCOLOGY 2018 20:11 1475-1484  
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- 18.** **Bräutigam L**, Zhang J, Dreij K, Spahiu L, Holmgren A, Abe H, Tew KD, Townsend DM, Kelner MJ, Morgenstern R, Johansson K. MGST1, a GSH transferase/peroxidase essential for development and hematopoietic stem cell differentiation Redox biology 2018 17: 171-179  
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- 19.** Jemth AS, Gustafsson R, **Bräutigam L**, Henriksson L, Vallin KSA, Sarno A, Almlöf I, Homan E, Rasti A, Berglund UW, Stenmark P, Helleday T. MutT homologue 1 (MTH1) catalyzes the hydrolysis of mutagenic O6-methyl-dGTP NUCLEIC ACIDS RESEARCH 2018 46:20 10888-10904  
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- 20.** Pudelko L, Rouhi P, Sanjiv K, Gad H, Kalderén C, Höglund A, Squatrito M, Schuhmacher AJ, Edwards S, Hägerstrand D, Berglund UW, Helleday T, **Bräutigam L**. Glioblastoma and glioblastoma stem cells are dependent on functional MTH1 Oncotarget 2017 8:49 84671-84684  
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- 21.** Tsüber V, Kadomov Y, **Bräutigam L**, Berglund UW, Helleday T. Mutations in Cancer Cause Gain of Cysteine, Histidine, and Tryptophan at the Expense of a Net Loss of Arginine on the Proteome Level Biomolecules 2017 7:3  
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- 22.** Bekeschus S, **Bräutigam L**, Wende K, Hanschmann EM. Oxidants and Redox Signaling: Perspectives in Cancer Therapy, Inflammation, and Plasma Medicine Oxidative medicine and cellular longevity 2017 2017: 4020253-  
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- 23.** **Bräutigam L**, Pudelko L, Jemth AS, Gad H, Narwal M, Gustafsson R, Karsten S, Puigvert JC, Homan E, Berndt C, Berglund UW, Stenmark P, Helleday T. Hypoxic Signaling and the Cellular Redox Tumor Environment Determine Sensitivity to MTH1 Inhibition CANCER RESEARCH 2016 76:8 2366-75  
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**24.** Warpman Berglund U, Sanjiv K, Gad H, Kalderén C, Koolmeister T, Pham T, Gokturk C, Jafari R, Maddalo G, Seashore-Ludlow B, Chernobrovkin A, Manoilov A, Pateras IS, Rasti A, Jemth AS, Almlöf I, Loseva O, Visnes T, Einarsdottir BO, Gaugaz FZ, Saleh A, Platzack B, Wallner OA, Vallin KS, Henriksson M, Wakchaure P, Borhade S, Herr P, Kallberg Y, Baranczewski P, Homan Ej, Wiita E, Nagpal V, Meijer T, Schipper N, Rudd SG, **Bräutigam L**, Lindqvist A, Filppula A, Lee TC, Artursson P, Nilsson JA, Gorgoulis VG, Lehtio J, Zubarev RA, Scobie M, Helleday T. Validation and development of MTH1 inhibitors for treatment of cancer Annals of oncology : official journal of the European Society for Medical Oncology 2016; 27:12 2275-2283

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**25.** Jensen LD, Nakamura M, **Bräutigam L**, Li X, Liu Y, Samani NJ, Cao Y. VEGF-B-Neuropilin-1 signaling is spatiotemporally indispensable for vascular and neuronal development in zebrafish Proceedings of the National Academy of Sciences of the United States of America 2015; 112:44 E5944-53

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**26.** Gad H, Koolmeister T, Jemth AS, Eshtad S, Jacques SA, Ström CE, Svensson LM, Schultz N, Lundbäck T, Einarsdottir BO, Saleh A, Göktürk C, Baranczewski P, Svensson R, Berntsson RP, Gustafsson R, Strömberg K, Sanjiv K, Jacques-Cordonnier MC, Desroses M, Gustavsson AL, Olofsson R, Johansson F, Homan Ej, Loseva O, **Bräutigam L**, Johansson L, Höglund A, Hagenkort A, Pham T, Altun M, Gaugaz FZ, Vikingsson S, Evers B, Henriksson M, Vallin KS, Wallner OA, Hammarström LG, Wiita E, Almlöf I, Kalderén C, Axelsson H, Djureinovic T, Puigvert JC, Häggblad M, Jeppsson F, Martens U, Lundin C, Lundgren B, Granelli I, Jensen AJ, Artursson P, Nilsson JA, Stenmark P, Scobie M, Berglund UW, Helleday T. MTH1 inhibition eradicates cancer by preventing sanitation of the dNTP pool Nature 2014; 508:7495 215-21

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**27.** Berndt C, Poschmann G, Stühler K, Holmgren A, **Bräutigam L**. Zebrafish heart development is regulated via glutaredoxin 2 dependent migration and survival of neural crest cells Redox biology 2014; 2: 673-8

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**28.** **Bräutigam L**, Johansson C, Kubsch B, McDonough MA, Bill E, Holmgren A, Berndt C. An unusual mode of iron-sulfur-cluster coordination in a teleost glutaredoxin Biochemical and biophysical research communications 2013; 436:3 491-6

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**29.** Haunhorst P, Hanschmann EM, **Brautigam L**, Stehling O, Hoffmann B, Muhlenhoff U, Lill R, Berndt C, Lillig CH. Crucial function of vertebrate glutaredoxin 3 (PICOT) in iron homeostasis and hemoglobin maturation MOLECULAR BIOLOGY OF THE CELL 2013; 24:12 1895-903

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**30.** **Bräutigam L**, Jensen LD, Poschmann G, Nyström S, Bannenberg S, Dreij K, Lepka K, Prozorovski T, Montano SJ, Aktas O, Uhlén P, Stühler K, Cao Y, Holmgren A, Berndt C. Glutaredoxin regulates vascular development by reversible glutathionylation of sirtuin 1 Proceedings of the National Academy of Sciences of the United States of America 2013; 110:50 20057-62

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**31.** Jensen LD, Cao Z, Nakamura M, Yang Y, **Bräutigam L**, Andersson P, Zhang Y, Wahlberg E, Länne T, Hosaka K, Cao Y. Opposing effects of circadian clock genes bmal1 and period2 in regulation of VEGF-dependent angiogenesis in developing zebrafish Cell reports 2012; 2:2 231-41

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**32.** **Brautigam L**, Schutte LD, Godoy JR, Prozorovski T, Gellert M, Hauptmann G, Holmgren A, Lillig CH, Berndt C. Vertebrate-specific glutaredoxin is essential for brain development PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 2011; 108:51 20532-7

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**33.** **Brautigam L**, Hillmer JM, Soll I, Hauptmann G. Localized Expression of Urocortin Genes in the Developing Zebrafish Brain JOURNAL OF COMPARATIVE NEUROLOGY 2010; 518:15 2978-95

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#### Indicators summary for verified articles and reviews

|              |        |   |
|--------------|--------|---|
| P            | 30     | Number of verified publications                                       |
| Sum JIF      | 418.27 | Sum of Latest Known Journal Impact Factor                             |
| C            | 1101   | Total number of citations   |
| Avg C top5   | 133.6  | Average number of citations for the 5 highest cited publications      |
| Avg JIF top5 | 38.8   | Average Journal Impact Factor for the 5 publications with highest JIF |

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