

CURRICULUM VITAE (2022)

Name: Carl Martin Sadowski
Date and Place of Birth: 22.01.1971, Bergisch-Gladbach, Germany
Nationality: German
Family status: Married, two children
Academic degrees: PhD, MSc
Languages: German (native), English (fluent)
Address: Institute of Pathology
Division Endocrine Pathology
University of Bern
Murtenstrasse 31, 3008 Bern
Phone: 031 632 4991
Email: martin.sadowski@pathology.unibe.ch



Education:

PhD

1998-2002: Doctor of Philosophy and Master of Science (April 2002). PhD thesis: "Molecular characterisation of subunits involved pre-messenger RNA 3'-end processing and its coupling to RNA polymerase II transcription in the yeast *Saccharomyces cerevisiae*" under the supervision of Prof W. Keller, Department of Cell Biology, Biozentrum Basel, University of Basel

MSc BSc Hons (1st)

1992-1998: Graduate and undergraduate studies in Biology (Dipl. Biol.), Diploma thesis under the supervision of Prof. Wahle, Department of Biochemistry, Justus-Liebig-University of Giessen, Germany.

Employment history and research stays:

since Aug 2020 **Group leader Cancer Metabolism**, Endocrine Pathology, Institute of Pathology, University of Bern, **Bern, Switzerland**

Jan 2019-Jun 2020 **Group leader Cancer Metabolism**, Cancer and Ageing Research Program, Queensland University of Technology, **Brisbane, Australia**

Jan 2018-Dec 2019 Group leader Cancer Metabolism & Drug Discovery, Australian Prostate Research Centre – Queensland, Queensland University of Technology, **Brisbane, Australia**

Oct 2010-Dec 2017 Senior Postdoctoral Scientist, Australian Prostate Research Centre – Queensland, Queensland University of Technology, **Brisbane, Australia**

Jan 2005-Sep 2009 Move of laboratory, Postdoctoral research continued, Cell Cycle Unit, St. Vincent's Institute of Medical Research, **Melbourne, Australia**

Oct 2002- Dec 2004 Post-doctoral research, Cell Cycle Unit, Cancer Program, Garvan Institute of Medical Research, **Sydney, Australia**

Jul 2001 Training course in transcription termination. Prof Nicholas Proudfoot, Sir William Dunn School of Pathology, Oxford University, **Oxford, United Kingdom**

Career interruptions: Paternity leave, 100% carer from Oct 2009 until Sept 2010

Administrative roles:

since 2022	Committee member of the Microscopy Imaging Center (MIC), University of Bern, Switzerland
2018-2020	Workshop organiser: High-content imaging, Translational Research Institute, Brisbane, Australia
2010-2019	Movember fundraising team, Australian Prostate Research Centre – Queensland, Queensland University of Technology, Brisbane, Australia
2011-2017	Lab management and external ordering

Current Teaching:

Selected Topics in Molecular Pathology 4544 (Cancer Metabolism)
Tumour Biology Block Course (Cancer Metabolism)
Topics in Tumour Biology (Cancer Metabolism)
High Content Analysis & Advanced Microscopy (KSL 9256)

Mentorship activities:

2021-	MSc, Kristyna Filipova
2019-	PhD, Charles Bidgood
2018-2022	PhD, Reuben Young, SAGE Higher Degree Research Publication Prize Competition for 2021 for Faculty of Science
2020-2021	MSc, Viktoriia Ovcharova
2016-2019	PhD, Mahmudul Haque
2016-2019	PhD, Kaylyn Touignant, Winner of Cancer Metabolism Meeting poster award, Sydney, Australia
2013-2016	PhD, Claire Levrier, IHBI Carla Patterson Award–Winner of the Overall QUT IHBI Award for best publication in 2018
2015	MSc, Dr. med. Cheryl Nicholson
2012-2014	PhD, Michelle Liberio

Reviewer:

Journals: Clinical & Translational Medicine, Scientific Reports, The Prostate, Clinical and Experimental Pharmacology and Physiology, Toxicology Research, PLoS ONE.
Funding schemes: Swiss Cancer League, NH&MRC, PCFA.
PhD candidatures & confirmations since 2015

Memberships:

since 2021	European Neuroendocrine Tumor Society
since 2021	European Association for Cancer Research
since 2014	Endocrine Society
2009-2020	Australian – Canadian Prostate Cancer Research Alliance
2003-2020	Australian Cell Cycle Community

Awards and prizes:

2019	QUT Cancer Program Initiative: Cancer Metabolism and Metabolic Endocrinology; 15'000 CHF
2019	IHBI Near-miss HERDC Category 1 Support Scheme: Dynamic interplay of lipid supply from uptake and synthesis in prostate cancer progression 13'100 CHF
2019	Winner of Cancer Metabolism Meeting poster award, Sydney, Australia (senior author), 650 CHF
2018	IHBI Carla Patterson Award–Winner of the Overall QUT IHBI Award for best publication in 2018 (co-author & supervisor), 2'000 CHF
2018	QUT Cancer Program Initiative: The role of PLA2G2A in prostate cancer and therapy resistance; 5'500 CHF
2018	QUT Cancer Program Initiative: Targeting the dynamic interplay of lipid uptake and synthesis in prostate cancer; 4'200 CHF

2018	QUT Publication Grant: Lipid uptake is an androgen-regulated supply pathway associated with prostate cancer disease progression and bone metastasis; 4'200 CHF
2017	Finalist Oral Presentation "Targeting lipid metabolism in prostate cancer: New therapeutic concepts with old drugs", Princess Alexandra Hospital Research Symposium
2015	Winner of the Presidential Poster Competition, 97th Annual Endocrinology Meeting, San Diego, USA
2007	Winner St. Vincent's Research Week poster award, Melbourne, Australia

Research funding:

2017-2019	PCFA, Movember Foundation: Extension of Adaptive Response to Targeting the Androgen Axis – A Strategic Offensive on Resistance. Movember Foundation Revolutionary Team Award, co-applicant, 1'110'000 CHF
2017-2018	PCFA: High-content screening of small molecule inhibitors from nature that target prostate cancer metabolism; 66'000 CHF
2014-2017	PCFA, Movember Foundation: Adaptive Response to Targeting the Androgen Axis – A Strategic Offensive on Resistance. Movember Foundation Revolutionary Team Award, co-applicant, 2'780'000 CHF
2014-2015	Princess Alexandra Research Foundation: Targeting leptin in prostate cancer progression; linking metabolic dysfunction and castrate resistance; co-applicant, 196'000 CHF
2014-2015	Cancer Council Queensland: Characterising insulin signalling in androgen-deprived prostate cancer cells; co-applicant, 131'000 CHF
2003-2004	Recipient of DFG international fellowship, 37'000 CHF

Publications (10 years)

Google Scholar: CJtum1UAAAAJ

ORCID: 0000-0002-5267-1442

1. Aquaporin 9 induction in human iPSC-derived hepatocytes facilitates modeling of ornithine transcarbamylase deficiency. Laemmle A, Poms M, Hsu B, Borsuk M, Rüfenacht V, Robinson J, **Sadowski MC**, Nuoffer JM, Häberle J, Willenbring H. Hepatology. 2021 Nov 16. doi: 10.1002/hep.32247.
2. Isomer-Resolved Imaging of Prostate Cancer Tissues Reveals Specific Lipid Unsaturation Profiles Associated With Lymphocytes and Abnormal Prostate Epithelia. Young, Reuben S E; Claes, Britt S R; Bowman, Andrew P; Williams, Elizabeth D; Shepherd, Benjamin; Perren, Aurel; Poad, Berwyck L J; Ellis, Shane R; Heeren, Ron M A; **Sadowski, Martin C.**; Blanksby, Stephen J (2021). Frontiers in endocrinology, 12, S. 689600. Frontiers Research Foundation 10.3389/fendo.2021.689600
3. EZH2 Inhibition as New Epigenetic Treatment Option for Pancreatic Neuroendocrine Neoplasms (PanNENs). April-Monn, Simon Leonhard; Andreasi, Valentina; Schiavo Lena, Marco; **Sadowski, Martin Carl**; Kim-Fuchs, Corina; Buri, Michelle Claudine; Ketkar, Avanee; Maire, Renaud; Di Domenico, Annunziata; Schrader, Jörg; Muffatti, Francesca; Doglioni, Claudio; Partelli, Stefano; Falconi, Massimo; Perren, Aurel; Marinoni, Ilaria (2021). Cancers, 13(19) MDPI AG 10.3390/cancers13195014
4. Leptin antagonism inhibits prostate cancer xenograft growth and progression. Philp, Lisa K; Rockstroh, Anja; **Sadowski, Martin C**; Taherian Fard, Atefeh; Lehman, Melanie; Tevz,

- Gregor; Libério, Michelle S; Bidgood, Charles L; Gunter, Jennifer H; McPherson, Stephen; Bartonicek, Nenad; Wade, John D; Otvos, Laszlo; Nelson, Colleen C (2021). Endocrine-related cancer, 28(5), S. 353-375. BioScientifica Ltd. 10.1530/ERC-20-0405
5. Genome instability and pressure on non-homologous end joining drives chemotherapy resistance via a DNA repair crisis switch in triple negative breast cancer. Wiegman, Adrian P; Ward, Amber; Ivanova, Ekaterina; Duijf, Pascal H G; Adams, Mark N; Najib, Idris Mohd; Van Oosterhout, Romy; **Sadowski, Martin C**; Kelly, Greg; Morrical, Scott W; O'Byrne, Ken; Lee, Jason S; Richard, Derek J (2021). NAR cancer, 3(2), zcab022. Oxford University Press 10.1093/narcan/zcab022
 6. Apocryphal FADS2 activity promotes fatty acid diversification in cancer. Reuben S.E. Young, Andrew P. Bowman, Elizabeth D. Williams, Kaylyn D. Tousignant, Charles L. Bidgood, Venkateswara R. Narreddula, Rajesh Gupta, David L. Marshall, Berwyck L.J. Poad, Colleen C. Nelson, Shane R. Ellis, Ron M.A. Heeren, **Martin C. Sadowski***, Stephen J. Blanksby* *co-senior author, Cell Rep 2021 Feb 9;34(6):108738. doi: 10.1016/j.celrep.2021.108738
 7. Adiponectin receptor activation inhibits prostate cancer xenograft growth. Lisa K Philp, Anja Rockstroh, Melanie Lehman, **Martin C Sadowski**, Nenad Bartonicek, John D Wade, Laszlo Otvos, Colleen C Nelson. Endocrine-Related Cancer 27 (12), 711-729, 2020
 8. Therapy-induced lipid uptake and remodeling underpin ferroptosis hypersensitivity in prostate cancer. Kaylyn D Tousignant, Anja Rockstroh, Berwyck LJ Poad, Ali Talebi, Reuben SE Young, Atefeh Taherian Fard, Rajesh Gupta, Tuo Zang, Chenwei Wang, Melanie L Lehman, Johan V Swinnen, Stephen J Blanksby, Colleen C Nelson, **Martin C Sadowski**. Cancer & Metabolism 8 (1), 1-21, 2020
 9. Fatty acid oxidation is an adaptive survival pathway induced in prostate tumors by HSP90 inhibition. Zeyad D Nassar, Chui Yan Mah, Margaret M Centenera, Swati Irani, **Martin C Sadowski**, Julia S Scott, Elizabeth V Nguyen, Shilpa R Nagarajan, Max Moldovan, David J Lynn, Roger J Daly, Andrew J Hoy, Lisa M Butler. Molecular Cancer Research 18 (10), 1500-1511, 2020
 10. Synthesis of a Unique Psammaphysin F Library and Functional Evaluation in Prostate Cancer Cells by Multiparametric Quantitative Single Cell Imaging. Rohitsh Kumar, Charles L Bidgood, Claire Levrier, Jennifer H Gunter, Colleen C Nelson, **Martin C Sadowski**, Rohan A Davis. Journal of Natural Products 83 (8), 2357-2366, 2020
 11. Fatty acid oxidation is an adaptive survival pathway induced in prostate tumors by HSP90 inhibition. Zeyad D Nassar, Chui Yan Mah, Margaret M Centenera, Swati Irani, **Martin C Sadowski**, Julia S Scott, Elizabeth V Nguyen, Shilpa R Nagarajan, Max Moldovan, David J Lynn, Roger J Daly, Andrew J Hoy, Lisa M Butler. Molecular Cancer Research 18 (10), 1500-1511, 2020
 12. Synthesis of a Unique Psammaphysin F Library and Functional Evaluation in Prostate Cancer Cells by Multiparametric Quantitative Single Cell Imaging. Rohitsh Kumar, Charles L Bidgood, Claire Levrier, Jennifer H Gunter, Colleen C Nelson, **Martin C Sadowski**, Rohan A Davis. Journal of Natural Products 83 (8), 2357-2366, 2020
 13. Lipid uptake is an androgen-enhanced lipid supply pathway associated with prostate cancer disease progression and bone metastasis. Kaylyn D Tousignant, Anja Rockstroh, Atefeh Taherian Fard, Melanie L Lehman, Chenwei Wang, Stephen J McPherson, Lisa K Philp, Nenad Bartonicek, Marcel E Dinger, Colleen C Nelson, **Martin C Sadowski**. Molecular Cancer Research 17 (5), 1166-1179, 2019
 14. A molecular portrait of epithelial–mesenchymal plasticity in prostate cancer associated with clinical outcome. Nataly Stylianou, Melanie L Lehman, Chenwei Wang, Atefeh Taherian Fard, Anja Rockstroh, Ladan Fazli, Lidija Jovanovic, Micheal Ward, **Martin C Sadowski**, Abhishek S Kashyap, Ralph Buttyan, Martin E Gleave, Thomas F Westbrook, Elizabeth D Williams, Jennifer H Gunter, Colleen C Nelson, Brett G Hollier. Oncogene 38 (7), 913-934, 2019

15. Discovery of thalichtherine as a novel antimetabolic agent from nature that disrupts microtubule dynamics and induces apoptosis in prostate cancer cells. Claire Levrier, Anja Rockstroh, Brian Gabrielli, Maria Kavallaris, Melanie Lehman, Rohan A Davis, **Martin C Sadowski***, Colleen C Nelson. *co-senior author, *Cell Cycle* 17 (5), 652-668, 2018
16. Identification of gibberellic acid derivatives that deregulate cholesterol metabolism in prostate cancer cells. Folake A Egbewande, **Martin C Sadowski**, Claire Levrier, Kaylyn D Tousignant, Jonathan M White, Mark J Coster, Colleen C Nelson, Rohan A Davis. *Journal of natural products* 81 (4), 838-845, 2018
17. Dysregulated fibronectin trafficking by Hsp90 inhibition restricts prostate cancer cell invasion. Heather K Armstrong, Joanna L Gillis, Ian RD Johnson, Zeyad D Nassar, Max Moldovan, Claire Levrier, **Martin C Sadowski**, Mei Yieng Chin, Emma S Tomlinson-Guns, Gerard Tarulli, David J Lynn, Douglas A Brooks, Luke A Selth, Margaret M Centenera, Lisa M Butler. *Scientific reports* 8 (1), 1-14, 2018
18. 6 α -Acetoxyanopterin: a novel structure class of mitotic inhibitor disrupting microtubule dynamics in prostate cancer cells. Claire Levrier, **Martin C Sadowski**, Anja Rockstroh, Brian Gabrielli, Maria Kavallaris, Melanie Lehman, Rohan A Davis, Colleen C Nelson. *Molecular cancer therapeutics* 16 (1), 3-15, 2017
19. Bioactive Dihydro- β -agarofuran Sesquiterpenoids from the Australian Rainforest Plant *Maytenus bilocularis*. Mario Wibowo, Claire Levrier, **Martin C Sadowski**, Colleen C Nelson, Qian Wang, Jeff Holst, Peter C Healy, Andreas Hofmann, Rohan A Davis. *Journal of natural products* 79 (5), 1445-1453, 2016
20. Cytotoxic C20 Diterpenoid Alkaloids from the Australian Endemic Rainforest Plant *Anopterus macleayanus*. C Levrier, **MC Sadowski**, CC Nelson, RA Davis. *Journal of natural products* 78 (12), 2908-2916, 2015
21. The ascidian natural product eusynstyelamide B is a novel topoisomerase II poison that induces DNA damage and growth arrest in prostate and breast cancer cells. Michelle S Liberio, **Martin C Sadowski**, Rohan A Davis, Anja Rockstroh, Raj Vasireddy, Melanie L Lehman, Colleen C Nelson. *Oncotarget* 6 (41), 43944, 2015
22. Advances in hormonal therapies for hormone naïve and castration-resistant prostate cancers with or without previous chemotherapy. T Pham, **MC Sadowski**, H Li, DJ Richard, MC d'Emden, K Richard. *Experimental hematology & oncology* 5 (1), 1-11, 2015
23. Targeting ASCT2-mediated glutamine uptake blocks prostate cancer growth and tumour development. Qian Wang, Rae-Anne Hardie, Andrew J Hoy, Michelle Van Geldermalsen, Dadi Gao, Ladan Fazli, **Martin C Sadowski**, Seher Balaban, Mark Schreuder, Rajini Nagarajah, Justin J-L Wong, Cynthia Metierre, Natalia Pinello, Nicholas J Otte, Melanie L Lehman, Martin Gleave, Colleen C Nelson, Charles G Bailey, William Ritchie, John EJ Rasko, Jeff Holst. *The Journal of pathology* 236 (3), 278-289, 2015
24. Design and synthesis of a screening library using the natural product scaffold 3-chloro-4-hydroxyphenylacetic acid. Rohitesh Kumar, **Martin C Sadowski**, Claire Levrier, Colleen C Nelson, Amy J Jones, John P Holleran, Vicky M Avery, Peter C Healy, Rohan A Davis. *Journal of natural products* 78 (4), 914-918, 2015
25. Denhaminols A–H, Dihydro- β -agarofurans from the Endemic Australian Rainforest Plant *Denhamia celastroides*. C Levrier, **MC Sadowski**, CC Nelson, PC Healy, RA Davis. *Journal of natural products* 78 (1), 111-119, 2015
26. Differential effects of tissue culture coating substrates on prostate cancer cell adherence, morphology and behaviour. MS Liberio, **MC Sadowski**, C Soekmadji, RA Davis, CC Nelson. *PLoS One* 9 (11), e112122, 2014
27. The fatty acid synthase inhibitor triclosan: repurposing an anti-microbial agent for targeting prostate cancer. **MC Sadowski**, RH Pouwer, JH Gunter, AA Lubik, RJ Quinn, CC Nelson. *Oncotarget* 5 (19), 9362, 2014

28. Identification of eusynstyelamide B as a potent cell cycle inhibitor following the generation and screening of an ascidian-derived extract library using a real time cell analyser. MS Liberio, **MC Sadowski**, CC Nelson, RA Davis. *Marine drugs* 12 (10), 5222-5239, 2014
29. Isolation, structure determination and cytotoxicity studies of tryptophan alkaloids from an Australian marine sponge *Hyrtios* sp. Shahan Khokhar, Yunjiang Feng, Marc R Campitelli, Merrick G Ekins, John NA Hooper, Karren D Beattie, **Martin C Sadowski**, Colleen C Nelson, Rohan A Davis. *Bioorganic & medicinal chemistry letters* 24 (15), 3329-3332, 2014
30. Phenotypic characterization of prostate cancer LNCaP cells cultured within a bioengineered microenvironment. Shirley Sieh, Anna V Taubenberger, Simone C Rizzi, **Martin Sadowski**, Melanie L Lehman, Anja Rockstroh, Jiyuan An, Judith A Clements, Colleen C Nelson, Dietmar W Hutmacher. *PloS one* 7 (9), e40217, 2012
31. Protein monoubiquitination and polyubiquitination generate structural diversity to control distinct biological processes. **M Sadowski**, R Suryadinata, AR Tan, SNA Roesley, B Sarcevic. *IUBMB life* 64 (2), 136-142, 2012