

CURRICULUM VITAE



Jarno Drost, PhD

21 March 1982, Elspeet, the Netherlands

**Group leader at the Princess Máxima Center for Pediatric Oncology and Oncode Institute
Professor in Models and Mechanisms of Pediatric Solid Tumorigenesis at Utrecht University**

Websites

<https://research.prinsesmaximacentrum.nl/en/research-groups/drost-group>

<https://www.oncode.nl/research/groups/jarno-drost-group>

<https://www.drost-lab.com>

Current Positions

June 2025 – present	Professor in Models and Mechanisms of Pediatric Solid Tumorigenesis Utrecht University Utrecht, the Netherlands
Jan 2023 – present	Senior Principal Investigator Oncode Institute
Jan 2023 – present	Platform Lead Organoids Oncode Accelerator
Nov 2016 – present	Group Leader (tenured in 2021) Princess Máxima Center for Pediatric Oncology Utrecht, the Netherlands

Education

2012	PhD Netherlands Cancer Institute, Amsterdam, the Netherlands Supervisor: Prof. R. Agami
2005	MSc in Biomedical Sciences (<i>with highest honors</i>) Free University, Amsterdam, the Netherlands
2003	BSc in Molecular Biology Institute of Life Sciences and Chemistry, Utrecht, the Netherlands

Past Positions

2019 – 2022	Junior Principal Investigator Oncode Institute
2012 – 2016	Post-doctoral researcher Hubrecht Institute (lab of Prof. H. Clevers) Utrecht, the Netherlands
2012	Post-doctoral researcher Netherlands Cancer Institute (lab of Prof. R. Agami) Amsterdam, the Netherlands

Career Description

Jarno obtained his MSc in Biomedical Sciences (*with highest honors*) from the Free University in Amsterdam, followed by a PhD in Prof. Reuven Agami's lab at the Netherlands Cancer Institute, where he studied genetic and epigenetic mechanisms of cellular transformation (first authorships in *Cell*, *Nature Cell Biology*, *Molecular Cell*, *Genome Biology*). During his postdoctoral training in Prof. Hans Clevers' lab at the Hubrecht Institute, he used CRISPR/Cas9-engineered organoids to model colorectal cancer and explore metastasis formation and mutational processes. He was involved in the establishment of prostate organoid cultures (first authorships in *Nature*, *Science*, *PNAS*, *Nature Protocols*, *Nature Reviews Cancer*, and *Molecular Cell*). This work earned him the NWO-Veni grant and the Dr. Patrick Hanlo Award for the best postdoctoral researcher at the Hubrecht Institute.

In 2016, Jarno established his independent research group at the Princess Máxima Center for Pediatric Oncology. His lab investigates the molecular mechanisms driving childhood solid tumors using cutting-edge preclinical models. The Drost group was the first to apply organoid technology to pediatric cancers and continues to develop innovative systems to study tumor biology and therapy resistance (*Nature Communications*, *Cell Reports*, *EMBO Molecular Medicine*, *Oncogene*). A major focus of the group is understanding how disrupted epigenetic regulation contributes to tumorigenesis (e.g., *Nature Communications* 2023). They integrate organoid models with (single-cell) multi-omics, metabolomics, CRISPR gene editing, and lineage tracing to uncover tumor origins, mechanisms of tumorigenesis, and to identify novel therapeutic strategies (e.g., *Nature Communications*, 2021; *Cell Reports Medicine*, 2025; *Neuro-Oncology*, 2025).

Jarno's research has been recognized with several prestigious awards, the Bas Mulder Young Investigator Award from the Dutch Cancer Society, the prestigious ERC Starting, ERC Consolidator, and NWO-Vidi grants, membership in the Dutch virtual cancer institute "Oncode," and the AACR/St. Baldrick's career development award for emerging leaders in the field of pediatric oncology. In 2025, he was appointed Professor in Models and Mechanisms of Pediatric Solid Tumorigenesis at Utrecht University.

Awards and Personal Grants

2025	Children Cancer-free Foundation (KiKa) Research Grant
2025	Oncode-Accelerator Demonstrator Project
2025	Twinning program Máxima-KiTZ (<i>with K. Pajtlér (KiTZ Heidelberg)</i>)
2024	European Research Council (ERC) Consolidator Grant
	<i>Prestigious European grant to support excellent Principal Investigators to consolidate their research lines</i>
2024	Children Cancer-free Foundation (KiKa) Research Grant
2024	Cancer Research Horizons CYP Therapeutic Catalyst Grant
2024	Children Cancer-free Foundation (KiKa) Research Grant
2023	Twinning program Máxima-KiTZ (<i>with A. Banito (KiTZ Heidelberg)</i>)
2023	Oncode Institute member
	<i>Selected to participate as a senior Oncode Investigator</i>
2023	CoFund Butterfly consortium
	<i>Funded under the Marie Skłodowska-Curie Actions (MSCA)</i>
2023	Oncode Accelerator (National Growth Fund)
	<i>Co-lead of the Organoid Platform</i>
2022	Twinning program Máxima-KiTZ (<i>with N. Jaeger (KiTZ Heidelberg)</i>)
2022	Project "The Virtual Child" shortlisted in the CRUK Grand Challenges competition
2021	Twinning program Máxima-KiTZ (<i>with M. Kool (KiTZ Heidelberg)</i>)
2021	Oncode Technology Development Fund
2021	NWO-Vidi grant
	<i>Grant part of the Netherlands Organization for Scientific Research (NWO) Talent Program for experienced researchers performing innovative research</i>
2021	Achieved tenure at the Princess Máxima Center for Pediatric Oncology
2021	CoFund VAGABOND consortium
	<i>Funded under the Marie Skłodowska-Curie Actions (MSCA)</i>
2021	Children Cancer-free Foundation (KiKa) Research Grant
2020	AACR St. Baldrick's career development award
	<i>Inaugural award for emerging leaders in the field of pediatric oncology</i>

- 2019 European Research Council (ERC) Starting Grant
Prestigious European grant to support excellent junior Principal Investigators
- 2019 Children Cancer-free Foundation (KiKa) Pilot Grant
- 2019 Oncode Institute member
Selected to join Oncode Institute as junior Oncode Investigator
- 2018 Children Cancer-free Foundation (KiKa) Research Grant
- 2017 Children Cancer-free Foundation (KiKa) Research Grant
- 2017 Dr. Patrick Hanlo Award
Award for best post-doctoral researcher of the Hubrecht Institute
- 2016 Bas Mulder/Young Investigator Award from the Dutch Cancer Society (KWF)
Prestigious national award for talented junior researchers
- 2014 NWO-Veni grant
Grant part of the Netherlands Organization for Scientific Research (NWO) Talent Program for talented post-doctoral researchers

PhD Supervisor

- Present Paula Ruiz Duran (expected graduation 2029)
Aleksandra Nenova (expected graduation 2028)
Rugile Januskeviciute (expected graduation 2028)
Giulia Perticari (expected graduation 2028)
Carla Rios Arceo (expected graduation 2028)
Charlotte op 't Hoog (expected graduation 2027)
Anastasia Spinou (expected graduation 2026)
Jiayou He (expected graduation 2026)
Marjolein Kes (expected graduation 2026)
Alissa Groenendijk (expected graduation 2026)
- Past (graduation date) Jeff DeMartino (14 Nov 2024), Irene Paassen (20 Sep 2024), Camilla Calandrini (25 Nov 2022), Lars Custers (15 Oct 2021), Ariadne Ooms (12 Nov 2019).

Selected Conferences and Presentations

- 2025 Seminar at University Medical Center Groningen (UMCG), Groningen, the Netherlands. ***Invited speaker.***
- 2025 ETMR & ATRT Strategy Forum, Playa del Carmen, Mexico. ***Invited speaker.***
- 2025 Institute for Research in Biomedicine (IRB) seminar series “Barcelona Biomed Plenary Seminars”, Barcelona, Spain. ***Invited speaker.***
- 2024 Oncode Accelerator Summit, Amsterdam, the Netherlands. ***Invited speaker.***
- 2024 Master course “Model organisms in cancer drug discovery and development”, Leiden University, Leiden, the Netherlands. ***Invited speaker.***
- 2024 PEDIAC symposium “Pediatric cancers: from origins and causes to therapeutic perspectives”, Paris, France. ***Invited speaker.***
- 2024 Paediatric Committee Strategic Review and Learning Meeting held under the Belgian Presidency 2024 of the Council of the European Union, Leuven, Belgium. ***Invited speaker.***
- 2024 Medicines Evaluation Board (MEB) Science Day 2024, Utrecht, the Netherlands. ***Invited speaker.***
- 2024 American Association for Cancer Research (AACR) Annual conference, San Diego, US. ***Invited speaker.***
- 2024 Innovation for Health, Rotterdam, the Netherlands. ***Invited speaker.***
- 2024 The Science of Childhood Cancers seminar series “Rising Stars of Cancer Research”, St. Jude Children’s Research Hospital, Memphis, US. ***Invited speaker.***
- 2023 American Association for Cancer Research (AACR) Special conference on “Advances in Kidney Cancer Research”, Austin, US. ***Invited speaker.***
- 2023 European Association for Cancer Research (EACR) Annual conference, Turin, Italy. ***Invited speaker.***
- 2023 SMARCB1 Hope 2023 Symposium, Saint-Paul-de-Vence, France. ***Invited speaker.***

- 2023 Master course “Model organisms in cancer drug discovery and development”, Leiden University, Leiden, the Netherlands. **Invited speaker.**
- 2023 Pediatric Grand Rounds seminar series, Memorial Sloan Kettering Cancer Center, New York, US. **Invited speaker.**
- 2023 Neurobiology and Brain Tumor Cancer Center Program seminar series, St. Jude Children’s Research Hospital, Memphis, US. **Invited speaker.**
- 2022 International seminar at the Cancer Research Center of Lyon, Lyon, France. **Invited speaker (virtual).**
- 2021 SIOP (International Society of Pediatric Oncology) - RTSG (Renal Tumor Study Group) annual meeting. **Invited speaker (virtual).**
- 2021 French Society of Immunotherapy, Paris, France. **Invited speaker (virtual).**
- 2021 Organoids: Advances and Applications 2021 conference. Wellcome Genome Campus Advanced Courses and Scientific Conferences, Hinxton, UK. **Invited speaker (virtual).**
- 2021 Applications of Organoid Technology Symposium. **Invited speaker (virtual).**
- 2020 International seminar at University of Ghent, Ghent, Belgium. **Invited speaker (virtual).**
- 2020 International seminar at Institut Curie, Paris, France. **Invited speaker.**
- 2019 OncoCode – CGC Annual Conference “Fundamental Cancer Biology”, Amsterdam, the Netherlands. **Invited speaker.**
- 2019 German Cancer Consortium (DKTK) mini-retreat “Molecularly Targeted Therapy”, Frankfurt, Germany. **Invited speaker.**
- 2019 Société Internationale d’Oncologie Pédiatrique (SIOP) 2019 international congress, Lyon, France. **Invited speaker.**
- 2019 American Association for Cancer Research (AACR) Special conference on “Advances in Pediatric Cancer Research”, Montreal, Canada. **Invited speaker.**
- 2019 Société Internationale d’Oncologie Pédiatrique (SIOP) Europe annual meeting, Prague, Czech Republic. **Invited speaker.**
- 2019 Comprehensive Cancer Center Developmental Biology and Solid Tumor Program, St. Jude Children’s Research Hospital, Memphis, US. **Invited speaker.**
- 2018 IRI Life Sciences Colloquium series “Organoids - Life in 3D”, Humboldt University, Berlin, Germany. **Invited speaker.**
- 2018 SIOP (International Society of Pediatric Oncology) - RTSG (Renal Tumor Study Group) Committee meeting, Copenhagen, Denmark. **Invited speaker.**
- 2018 Eurolife Summer School “Molecular Mechanisms in Cancer – Translating Discoveries into Personalized Therapies” Leids University Medical Center (LUMC), Leiden, the Netherlands. **Invited speaker.**
- 2018 International Rhabdoid Tumor Meeting. Lake Louise, Canada. **Selected speaker.**
- 2018 2nd Precision Cancer Medicine (PreCanMed) project meeting and workshop, Udine, Italy. **Invited speaker.**
- 2018 International seminar at PhD program in Molecular Biomedicine, University of Trieste, Trieste, Italy. **Invited speaker.**
- 2018 ITCC-P4 International Workshop “Improving pediatric oncology drug development through preclinical research”, Amsterdam, the Netherlands. **Invited speaker.**
- 2017 National Cancer Research Institute (NCRI) Cancer Conference, Liverpool, United Kingdom. **Invited speaker.**
- 2017 Organoid Workshop, Dresden, Germany. **Invited speaker.**
- 2017 26th meeting of the KWF society for Cancer Biology, Lunten, the Netherlands. **Selected speaker.**
- 2016 CancerGenomiCs.nl annual scientific meeting, Utrecht, the Netherlands. **Invited speaker.**
- 2016 Young Scientist Meeting “Host-Microbial Interactions and Mucosal Immunity”, Bern, Switzerland. **Invited speaker.**
- 2016 PhD course “Cancer and Cancer Stem Cells” Karolinska Institutet, Stockholm, Sweden. **Invited speaker.**
- 2015 CancerGenomiCs.nl annual scientific meeting, Utrecht, the Netherlands. **Invited speaker.**

- 2015 Symposium Berlin Institute for Medical Systems Biology, Max Delbrück Center for Molecular Medicine, Berlin, Germany. **Invited speaker.**
- 2015 Seminar at the Netherlands Cancer Institute, Amsterdam, the Netherlands. **Invited speaker.**
- 2015 EMBO|EMBL Symposium “Frontiers in Stem Cells and Cancer”, Heidelberg, Germany. **Selected speaker.**

Reviewing Activities

- Advisory Board of Review Commons, which provides a new platform offering high-quality peer review independent of journal submission.
- Reviewer for Nature, Nature Genetics, Nature Materials, Nature Methods, Nature Protocols, Nature Communications, Cancer Cell, Cell Reports, PNAS, Nature Reviews Cancer, EMBO Reports, Neuro-Oncology, European Journal of Cancer.
- Reviewer for multiple national and international funding organizations, including KWF, NWO, European Research Council, Medical Research Council (UK), French National Cancer Institute (France), Swiss Cancer League (Switzerland), German Research Foundation DFG (Germany), and Fight Kids Cancer.

Memberships of Scientific Boards and Societies

- 2025 – European Association for Cancer Research (EACR) – Member
- 2024 – Paris Kids Cancer (PKC) center – Scientific Advisory Board
- 2023 – Onco Accelerator (National Growth Fund) – Program Board
- 2022 – The Wilms Cancer Foundation – Advisory Board
- 2021 – ITCC Solid Tumor Committee – Member
- 2019 – Société Internationale d'Oncologie Pédiatrique Europe (SIOPE) Atypical Teratoid Rhabdoid Tumor (ATRT) working group – Member
- 2019 – SIOP Renal Tumor Study Group (RTSG) relapsed Wilms Tumor Committee – Member
- 2018 – 2021 ITCC (Innovative Therapies for Children with Cancer in Europe) Biology group – Member

Organization of Scientific Conferences and Workshops

- 2025 Onco Annual Meeting (Amersfoort, the Netherlands). Scientific committee member.
- 2023 Onco Annual Conference (Amsterdam, the Netherlands). Scientific committee member.
- 2022 The 11th International Pediatric Renal Tumour Biology Conference (Marseille, France). Scientific committee member.
- 2022 Onco Masterclass “Gene editing and its applications” (Utrecht, the Netherlands). Organizer, with Ruben van Boxtel.
- 2019 Onco Masterclass “Gene editing and its applications” (Utrecht, the Netherlands). Organizer, with Ruben van Boxtel.

Examiner International PhD Theses

- 2017 Amanda Andersson Rolf, University of Cambridge, UK.

Publications

1. Equihua, C.M., Molenaar, J.J., Areso, I., Biegel, J.A., Blanc, P., Chi, S.N., Deams, S., Danielson, L., **Drost, J.**, Franke, N.E., Frühwald, M.C., Gajjar, A., Geller, J.I., Huang, A., Johann, P.D., Kearns, P., Nysom, K., O'Connor, S., Ortiz, M.V., Parker, J., Patel, S., Patel, S., Roberts, C.W.M., Williamson, D., Yi, J.S., Pearson, A.D.J., Jenkinson, D., Kool, M., Bourdeaut, F. Paediatric Therapeutic Development Workshop on Rhabdoid Tumours. *British Journal of Cancer* 2025 (accepted for publication).
2. Ortiz, M.V., Wens, F.S.P.L., Hong, A.L., Quarello, P., Verschuur, A.C., Tracy, E.T., Daw, N.C., Dome, J.S., Walz, A.L., Sprokkerieft, J., Tytgat, G.A.M., Kentsis, A., Libes-Bander, J., Schoettler, P.J., Perotti, D., **Drost, J.**, Venkatramani, R., Geller, J.I., van den Heuvel-Eibrink, M.M. Relapsed Rhabdoid Tumors and other Non-Nephroblastoma Childhood and Adolescent Kidney Tumors: Perspectives from the HARMONICA Collaboration. *Nature Reviews Urology* 2026 Jan 2. doi: 10.1038/s41585-025-01117-4..

3. Ge, J., Hirosue, S., Castillon, L., Patel, S.A., Wesolowski, L., Dyas, A., Yong, C., de Haan, S., **Drost, J.**, Stewart, G.D., Obenauf, A.C., Munoz-Espin, D., Vanharanta, S. Mechanisms of resistance to VHL loss-induced genetic and pharmacological vulnerabilities. *EMBO Molecular Medicine* 2025 Dec 19. doi: 10.1038/s44321-025-00361-w.
4. Spinou, A., Gremmen, R., **Drost, J.**, Kemmeren, P. A pathway-informed mutual exclusivity framework to detect genetic interactions in pediatric cancer. *BMC Medical Genomics* 2025 Dec 12. doi: 10.1186/s12920-025-02289-z.
5. Ríos Arceo, C., **Drost, J.#**. Organoids in pediatric cancer research. *FEBS Letters*. 2025 Oct 14. doi: 10.1002/1873-3468.70188.
6. Barisa, M., Muller, H.P., Zappa, E., Shah, R., Buhl, J.L., Draper, B., Himsworth, C., Bowers, C., Munnings-Tomes, S., Nicolaidou, M., Morlando, S., Birley, K., Leboreiro-Babe, C., Vitali, A., Privitera, L., O'Sullivan, K., Greppi, A., Buschhaus, M., Román, M.B., de Blank, S., van den Ham, F., van 't Veld, B.R., Ferry, G., Fisher, J., Shome, D., Nadafi, R., Ansari, I.H., Reijmers, R., Giuliani, S., Sondel, P., Donovan, L.K., Chesler, L., Molenaar, J., **Drost, J.**, Rios, A.C., Chester, K., Wienke, J., Anderson, J. Functional avidity of anti-B7H3 CAR-T constructs predicts antigen density thresholds for triggering effector function. *Nature Communications* 2025 Aug 5; 16, 7196. doi: 10.1038/s41467-025-61427-4.
7. Blanco-Carmona, E.*, Paassen, I.*, He, J.*, DeMartino, J., Bülesbach, A., Anderson, N., Buhl, J.L., Federico, A., Mauermann, M., Brok, M., Straathof, K., Behjati, S., Vibhakar, R., Donson, A.M., Foreman, N.K., Shaw, M., Frühwald, M.C., Korshunov, A., Hasselblatt, M., Thomas, C., Franke, N., Kranendonk, M.E.G., Hoving, E.W., Jäger, N., Johann, P.D., Pfister, S.M., Filbin, M.G., Kool, M.#, **Drost, J.#**. A cycling, progenitor-like cell population at the base of atypical teratoid rhabdoid tumor subtype differentiation trajectories. *Neuro-Oncology* 2025 Jul 28;noaf179. doi: 10.1093/neuonc/noaf179. Online ahead of print.
8. Groenendijk, A., van Tinteren, H., de Krijger, R.R., Vujanic, G., Al-Saadi, R., Pritchard-Jones, K., Ramírez-Villar, G.L., Melchior, P., Godzinski, J., Schenk, J.P., Graf, N., Segers, H., Sudour-Bonnange, H., Verschuur, A.C., **Drost, J.**, Perotti, D., Al-Jilaihawi, S., Brok, J., van den Heuvel-Eibrink, M.M., Spreafico, F., Mavinkurve-Groothuis, A.M.C. Outcome of patients with a first relapse after intermediate- or high-risk Wilms tumor, treated according to SIOP WT 2001/UK-IMPORT study; A report from the SIOP renal tumor study group. *Urologic Oncology* 2025 June 21; S1078-1439(25)00214-5. doi: 10.1016/j.urolonc.2025.05.018.
9. Lee-Six, H., Treger, T.D., Dave, M., Coorens, T.H.H., Anderson, N.D., Tiersma, Y., Derakshan, S., de Haan, S., van den Heuvel-Eibrink, M.M., Wang, Y., Wenger, A., Al-Saadi, R., Lawford, A., Letunovska, A., Wegert, J., Parks, C., Morcrette, G., Gessler, M., Vujanic, G., Chowdhury, T., O'Sullivan, M.J., de Krijger, R.R., Stratton, M.R., Pritchard-Jones, K., Hutchinson, J.C.#, **Drost, J.#**, Behjati, S.#. High resolution clonal architecture of hypomutated Wilms tumours. *Nature Communications* 2025 May 29; 16, 4647. doi: 10.1038/s41467-025-59854-4.
10. Groenendijk, A., **Drost, J.**, Mavinkurve-Groothuis, A.M.C., van Grotel, M., Janssens, G.O., Littooij, A.S., van der Steeg, A.F.W., van den Heuvel-Eibrink, M.M., Kester, L., de Krijger, R.R. Gene Expression Analysis of (Paired) Primary and Relapsed Wilms Tumor Samples to Unravel the Underlying Factors Driving Tumor Recurrence. *Cancer Medicine* 2025 Jun;14(11):e70969. doi: 10.1002/cam4.70969.
11. Ganpat, M.M.P.*, Morales-Rodriguez, F.*, Pham, N., Lijnzaad, P., de Souza, T., Derakshan, S., Fumagalli, A., Zeller, P., Balwierz, A., Ayyildiz, D., van den Heuvel-Eibrink, M.M., de Krijger, R.R., van Oudenaarden, A., Margaritis, T., Chuva de Sousa Lopes, S.M., **Drost, J.#**. An engineered tumor organoid model reveals cellular identity and signaling trajectories underlying SFPQ-TFE3 driven translocation RCC. *iScience* 2025 Apr 18; 28 (4): 112122. doi: 10.1016/j.isci.2025.112122.
12. Nguyen, N.T.B., Gevers, S., Kok, R.N.U., Burgering, L.M., Neikes, H., Akkerman, N., Betjes, M.A., Ludikhuize, M.C., Gulersonmez, C., Stigter, E.C.A., Vercoulen, Y., **Drost, J.**, Clevers, H., Vermeulen, M., van Zon, J.S., Tans, S.J., Burgering, B.M.T., Rodríguez Colman, M.J. Lactate controls cancer stemness and plasticity through epigenetic regulation. *Cell Metabolism* 2025 Feb 4:S1550-4131(25)00002-6. doi: 10.1016/j.cmet.2025.01.002.
13. Perotti, D., O'Sullivan, M.J., Walz, A.L., Davick, J., Al-Saadi, R., Benedetti, D.J., Brzezinski, J., Ciceri, S., Cost, N.G., Dome, J.S., **Drost, J.**, Evageliou, N., Furtwängler, R., Graf, N., Maschietto, M., Mullen, E.A., Murphy, A.J., Ortiz, M.V., van der Beek, J.N., Verschuur, A., Wegert, J., Williams,

- R., Spreafico, F., Geller, J.I., van den Heuvel-Eibrink, M.M., Hong, A.L. Hallmark discoveries in the biology of non-Wilms tumour childhood kidney cancers. *Nature Reviews Urology* 2025 Jan 29. doi: 10.1038/s41585-024-00993-6.
14. Götz, L., Wegert, J., Paikari, A., Appenzeller, S., Bausenwein, S., Vokuhl, C., Treger, T.D., Drost, J., Linderkamp, C., Schneider, D.T., Ernestus, K., Warman, S.W., Fuchs, J., Welter, N., Graf, N., Behjati, S., Furtwängler, R., Gessler, M. Wilms tumor primary cultures capture phenotypic heterogeneity and facilitate preclinical screening. *Translational Oncology* 2025 Feb;52:102263. doi: 10.1016/j.tranon.2024.102263.
 15. Kes, M.M.G.*, Morales-Rodriguez, F.*, Zaal, E.A., de Souza, T., Proost, N., van de Ven, M., van den Heuvel-Eibrink, M.M., Jansen, J.W.A., Berkers, C.R.#, **Drost, J.#**. Metabolic profiling of patient-derived organoids reveals nucleotide synthesis as a metabolic vulnerability in malignant rhabdoid tumors. *Cell Reports Medicine* 2025 Jan 21;6(1):101878. doi: 10.1016/j.xcrm.2024.101878.
 16. Treger, T.D., Wegert, J., Wenger, A., Coorens, T.H.H., Al-Saadi, R., Kemps, P., Kennedy, J., Parks, C., Anderson, N.D., Hodder, A., Letunovska, A., Jung, H., Ogbonnah, T., Trinh, M., Lee-Six, H., Morcrette, G, van den Heuvel-Eibrink, M.M., **Drost, J.**, van Boxtel, R., Bertrums, E., Goemans, B.F., Antoniou, E., Reinhardt, D., Streitenberger, H., Ziegler, B., Bartram, J., Hutchinson, J.C., Vujanic, G., Vokuhl, C., Chowdhury, T., Furtwängler, R., Graf, N., Pritchard-Jones, K., Gessler, M., Behjati, S. Somatic development of Wilms tumour via normal kidneys in predisposed children. *Cancer Discovery* 2024 Dec 12. doi: 10.1158/2159-8290.CD-24-0878.
 17. Mizutani, T., Boretto, M., Lim, S., **Drost, J.**, Gonzáles, D.M., Oka, R., Geurts, M.H., Begthel, H., Korving, J., van Es, J.H., van Boxtel, R., Clevers, H. Recapitulating the adenoma-carcinoma sequence by selection of four spontaneous oncogenic mutations in mismatch repair-deficient human colon organoids. *Nature Cancer* 2024 Nov 1. doi: 10.1038/s43018-024-00841-x.
 18. Van Belzen, I.A.E.M., van Tuil, M., Badloe, S., Janse, A., Verwiël, E.T.P., Santoso, M., de Vos, S., Baker-Hernandez, J., Kerstens, H.H.D., Solleveld-Westerink, N., Meister, M.T., **Drost, J.**, van den Heuvel-Eibrink, M.M., Merks, J.H.M., Molenaar, J.J., Peng, W.C., Tops, B.B.J., Holstege, F.C.P., Kemmeren, P., Hehir-Kwa, J.Y. Complex structural variation is prevalent and highly pathogenic in pediatric solid tumors. *Cell Genomics* 2024 Oct 10. 100675. doi: 10.1016/j.xgen.2024.100675.
 19. Kes, M.M.G., Berkers, C.R.#, **Drost, J.#**. Bridging the Gap: Advancing Cancer Cell Culture to Reveal Key Metabolic Targets. *Frontiers in Oncology* 2024 Sep 17. doi: 10.3389/fonc.2024.1480613.
 20. Al-Jilaihawi, S., Spreafico, F., Mavinkurve-Groothuis, A., **Drost, J.**, Perotti, D., Koenig, C., Brok, J. Bevacizumab-containing treatment for relapsed or refractory Wilms tumor. *Expert Review of Anticancer Therapy* 2024 Jul 17. doi: 10.1080/14737140.2024.2381537.
 21. De Munter, S., Buhl, J.L., De Cock, L., Van Parys, A., Daneels, W., Pascal, E., Deseins, L., Ingels, J., Goetgeluk, G., Jansen, H., Billiet, L., Pille, M., Van Duyse, J., Bonte, S., Vandamme, N., Van Dorpe, J., Offner, F., Leclercq, G., Taghon, T., Depla, E., Tavernier, J., Kerre, T., **Drost, J.**, Vandekerckhove, B. Knocking out CD70 rescues CD70-specific nanoCAR T-cells from antigen-induced exhaustion. *Cancer Immunology Research* 2024 Jun 14. doi: 10.1158/2326-6066.CIR-23-0677.
 22. Gilbertson, R.J., Behjati, S., Böttcher, A.L., Bronner, M.E., BurrIDGE, M., Clausing, H., Clifford, H., Danaher, T., Donovan, L.K., **Drost, J.**, Eggermont, A.M.M., Emerson, C., Flores, M.G., Hamerlik, P., Jabado, N., Jones, A., Kaessmann, H., Kleinman, C.L., Kool, M., Kutscher, L.M., Lindberg, G., Linnane, E., Marioni, J.C., Maris, J.M., Monje, M., Macaskill, A., Niederer, S., Northcott, P.A., Peeters, E., Plieger-van Solkema, W., Preußner, L., Rios, A.C., Rippe, K., Sandford, P., Sgourakis, N.G., Shlien, A., Smith, P., Straathof, K., Sullivan, P.J., Suvà, M.L., Taylor, M.D., Thompson, E., Vento-Tormo, R., Wainwright, B.J., Wechsler-Reya, R.J., Westermann, F., Winslade, S., Al-Lazikani, B., Pfister, S.M. The Virtual Child. *Cancer Discovery* 2024 Apr 4;14(4):663-668. doi: 10.1158/2159-8290.CD-23-1500.
 23. Cornel, A.M., van der Sman, L., van Dinter, J.T., Arrabito, M., Dunnebach, E., van Hoesel, M., Kluiver, T.A., Lopes, A.P., Dautzenberg, N.M.M., Dekker, L., van Rijn, J.M., van den Beemt, D.A.M.H., Buhl, J.L., du Chatinier, A., Barne, F., Lu, Y., Lo Nigro, L., Krippner-Heidenreich, A., Sebestyén, Z., Kuball, J., Hulleman, E., **Drost, J.**, van Heesch, S., Heidenreich, O.T., Peng, W.C.,

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Patents and Patent Applications

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| 2016 | WO2016/083613; Culture medium for epithelial stem cells and Organoids comprising stem cells. |
| 2016 | WO2016/083612; Culture medium for expanding breast epithelial stem cells. |
| 2025 | DHODH inhibitors in SMARCB1 mutant tumors. 2025. Patent pending. |
| 2025 | Gene therapy for curing pediatric tumor. 2025. Patent pending. |