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Employment

Department of Radiotherapy and Radiation Oncology
University Medical Center Hamburg-Eppendorf
01.01.2015 → gegenwärtig

Senior Scientific Group Leader

m Public Health England, Centre for Radiation Chemicals and Environmental Hazards , Chilton , Oxfordshire , UK.
01.01.2008 → 01.01.2015

CRUK Junior Group Leader

University of Oxford
Oxford, United Kingdom
01.01.2006 → 01.01.2008

Senior Scientist

Gray Cancer Institute, PO Box 100, Mount Vernon Hospital, Northwood, Middlesex HA6 2JR, UK.
01.01.2003 → 01.01.2006

Postdoc

Fachrichtung Biophysik, Universität des Saarlandes, Homburg/Saar, Germany.
01.01.1999 → 01.01.2003

Research outputs

USP7 Deregulation Impairs S Phase Specific DNA Repair after Irradiation in Breast Cancer Cells

Vogt, M., Classen, S., Krause, A. K., Peter, N. J., Petersen, C., Rothkamm, K., Borgmann, K. & Meyer, F., 29.03.2024, In: BIOMEDICINES. 12, 4, 762.

Mean global DNA methylation serves as independent prognostic marker in IDH wild type glioblastoma

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Impaired DNA double-strand break repair and effective radiosensitization of HPV-negative HNSCC cell lines through combined inhibition of PARP and Wee1

Oetting, A., Christiansen, S., Gatzemeier, F., Köcher, S., Bußmann, L., Böttcher, A., Stölzel, K., Hoffmann, A. S., Struve, N., Kriegs, M., Petersen, C., Betz, C., Rothkamm, K., Zech, H. B. & Rieckmann, T., 07.2023, In: CLIN TRANSL RAD ONCO. 41, p. 100630

The prognostic impact of B7-H3 and B7-H4 in head and neck squamous cell carcinoma

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Preclinical patient-derived modeling of castration-resistant prostate cancer facilitates individualized assessment of homologous recombination repair deficient disease

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G2 checkpoint targeting via Wee1 inhibition radiosensitizes EGFRvIII-positive glioblastoma cells

Cetin, M. H., Rieckmann, T., Hoffer, K., Riepen, B., Christiansen, S., Gatzemeier, F., Feyerabend, S., Schoof, M., Schüller, U., Petersen, C., Mynarek, M., Rothkamm, K., Kriegs, M. & Struve, N., 29.01.2023, In: RADIAT ONCOL. 18, 1, 19.

Src family kinase targeting in head and neck tumor cells using SU6656, PP2 and dasatinib

Vu, A. T., Akingunsade, L., Hoffer, K., Petersen, C., Betz, C. S., Rothkamm, K., Rieckmann, T., Busmann, L. & Kriegs, M., 01.2023, In: HEAD NECK-J SCI SPEC. 45, 1, p. 147-155 9 p.

Partial Reduction in BRCA1 Gene Dose Modulates DNA Replication Stress Level and Thereby Contributes to Sensitivity or Resistance

Classen, S., Rahlf, E., Jungwirth, J., Albers, N., Hebestreit, L. P., Zielinski, A., Poole, L., Groth, M., Koch, P., Liehr, T., Kankel, S., Cordes, N., Petersen, C., Rothkamm, K., Pospiech, H. & Borgmann, K., 01.11.2022, In: INT J MOL SCI. 23, 21, 13363.

Tissue Microarray Analyses Suggest Axl as a Predictive Biomarker in HPV-Negative Head and Neck Cancer

Busch, C-J., Hagel, C., Becker, B., Oetting, A., Möckelmann, N., Droste, C., Möller-Koop, C., Witt, M., Blaurock, M., Loges, S., Rothkamm, K., Betz, C., Münscher, A., Clauditz, T. S. & Rieckmann, T., 05.04.2022, In: CANCERS. 14, 7, 1829.

Increased replication stress and R-loop accumulation in EGFRvIII expressing glioblastoma present new therapeutic opportunities

Struve, N., Hoffer, K., Weik, A-S., Riepen, B., Krug, L., Cetin, M. H., Burmester, J., Ott, L., Liebing, J., Gatzemeier, F., Müller-Goebel, J., Bußmann, L., Parplys, A. C., Unger, K., Mansour, W. Y., Schüller, U., Rieckmann, T., Petersen, C., Rothkamm, K., Short, S. C. & Kriegs, M., 12.03.2022, In: NEURO-ONCOL ADV. 4, 1, p. vdab180 vdab180.

Patient derived ex vivo tissue slice cultures demonstrate a profound DNA double-strand break repair defect in HPV-positive oropharyngeal head and neck cancer

Zech, H. B., Berger, J., Mansour, W. Y., Nordquist, L., von Barga, C., Bußmann, L., Oetting, A., Christiansen, S., Möckelmann, N., Böttcher, A., Busch, C-J., Petersen, C., Betz, C., Rothkamm, K., Kriegs, M., Köcher, S. & Rieckmann, T., 03.2022, In: RADIOTHER ONCOL. 168, p. 138-146 9 p.

Efficient DNA repair mitigates replication stress resulting in less immunogenic cytosolic DNA in radioresistant breast cancer stem cells

Meyer, F., Engel, A. M., Krause, A. K., Wagner, T., Poole, L., Dubrovskaya, A., Peitzsch, C., Rothkamm, K., Petersen, C. & Borgmann, K., 22.02.2022, In: FRONT IMMUNOL. 13, p. 765284 765284.

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Monitoring very low dose radiation damage in DNA using "field-friendly" biomarkers

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Kinomic comparison of snap frozen and ex vivo-cultured head and neck tumors

Berger, J., Zech, H. B., Hoffer, K., von Barga, C. M., Nordquist, L., Busmann, L., Gatzemeier, F., Busch, C-J., Möckelmann, N., Münscher, A., Betz, C. S., Petersen, C., Rothkamm, K., Rieckmann, T., Köcher, S. & Kriegs, M., 12.2021, In: ORAL ONCOL. 123, 105603.

X-ray-Fluorescence Imaging for In Vivo Detection of Gold-Nanoparticle-Labeled Immune Cells: A GEANT4 Based Feasibility Study

Ungerer, A., Staufer, T., Schmutzler, O., Körnig, C., Rothkamm, K. & Grüner, F., 17.11.2021, In: *CANCERS*. 13, 22, 5759.

Analyzing tyrosine kinase activity in head and neck cancer by functional kinomics: Identification of hyperactivated Src-family kinases as prognostic markers and potential targets

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Feasibility of Monitoring Tumor Response by Tracking Nanoparticle-Labelled T Cells Using X-ray Fluorescence Imaging-A Numerical Study

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Investigating the impact of long term exposure to chemical agents on the chromosomal radiosensitivity using human lymphoblastoid GM1899A cells

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TP53 modulates radiotherapy fraction size sensitivity in normal and malignant cells

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X-ray-Based Techniques to Study the Nano-Bio Interface

Sanchez-Cano, C., Alvarez-Puebla, R. A., Abendroth, J. M., Beck, T., Blick, R., Cao, Y., Caruso, F., Chakraborty, I., Chapman, H. N., Chen, C., Cohen, B. E., Conceição, A. L. C., Cormode, D. P., Cui, D., Dawson, K. A., Falkenberg, G., Fan, C., Feliu, N., Gao, M., Gargioni, E., Glüer, C.-C., Grüner, F., Hassan, M., Hu, Y., Huang, Y., Huber, S., Huse, N., Kang, Y., Khademhosseini, A., Keller, T. F., Körnig, C., Kotov, N. A., Koziej, D., Liang, X.-J., Liu, B., Liu, S., Liu, Y., Liu, Z., Liz-Marzán, L. M., Ma, X., Machicote, A., Maison, W., Mancuso, A. P., Megahed, S., Nickel, B., Otto, F., Palencia, C., Pascarelli, S., Pearson, A., Peñate-Medina, O., Qi, B., Rädler, J., Richardson, J. J., Rosenhahn, A., Rothkamm, K., Rübhausen, M., Sanyal, M. K., Schaak, R. E., Schlemmer, H.-P., Schmidt, M., Schmutzler, O., Schotten, T., Schulz, F., Sood, A. K., Spiers, K. M., Staufer, T., Stemer, D. M., Stierle, A., Sun, X., Tsakanova, G., Weiss, P. S., Weller, H., Westermeier, F., Xu, M., Yan, H., Zeng, Y., Zhao, Y., Zhao, Y., Zhu, D., Zhu, Y. & Parak, W. J., 23.03.2021, In: *ACS NANO*. 15, 3, p. 3754-3807 54 p.

DNA Damage Response during Replication Correlates with CIN70 Score and Determines Survival in HNSCC Patients

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DNA Damage Repair Deficiency and Synthetic Lethality for Cancer Treatment

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Dual Inhibition of PARP and the Intra-S/G2 Cell Cycle Checkpoints Results in Highly Effective Radiosensitization of HPV-Positive HNSCC Cells

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Exploiting Chromosomal Instability of PTEN-Deficient Triple-Negative Breast Cancer Cell Lines for the Sensitization against PARP1 Inhibition in a Replication-Dependent Manner

Rieckhoff, J., Meyer, F., Classen, S., Zielinski, A., Riepen, B., Wikman, H., Petersen, C., Rothkamm, K., Borgmann, K. & Parplys, A. C., 29.09.2020, In: CANCERS. 12, 10

Second-Generation Antiandrogen Therapy Radiosensitizes Prostate Cancer Regardless of Castration State through Inhibition of DNA Double Strand Break Repair

Elsesy, M. E., Oh-Hohenhorst, S. J., Löser, A., Oing, C., Mutiara, S., Köcher, S., Meien, S., Zielinski, A., Burdak-Rothkamm, S., Tilki, D., Huland, H., Schwarz, R., Petersen, C., Bokemeyer, C., Rothkamm, K. & Mansour, W. Y., 31.08.2020, In: CANCERS. 12, 9

Improving the Efficacy of Tumor Radiosensitization Through Combined Molecular Targeting

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The Role of Telomerase in Radiation-Induced Genomic Instability

Nuta, O., Rothkamm, K. & Darroudi, F., 05.2020, In: RADIAT RES. 193, 5, p. 451-459 9 p.

EGFRvIII upregulates DNA mismatch repair resulting in increased temozolomide sensitivity of MGMT promoter methylated glioblastoma

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Prevention of DNA Replication Stress by CHK1 Leads to Chemoresistance Despite a DNA Repair Defect in Homologous Recombination in Breast Cancer

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Establishment of a Transformation Coupled in vitro End Joining Assay to Estimate Radiosensitivity in Tumor Cells

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Capabilities of the RENEb network for research and large scale radiological and nuclear emergency situations

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Uncertainty of fast biological radiation dose assessment for emergency response scenarios

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Analyzing the influence of kinase inhibitors on DNA repair by differential proteomics of chromatin-interacting proteins and nuclear phospho-proteins

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Impaired 53BP1/RIF1 DSB mediated end-protection stimulates CtIP-dependent end resection and switches the repair to PARP1-dependent end joining in G1

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Web based scoring is useful for validation and harmonisation of scoring criteria within RENE B

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