

# DKTK SCIENTIFIC COMMUNITY MEETING

DKFZ, HEIDELBERG | MARCH 24-25, 2025

## March 24th (Monday)

- 10:00 - 10:15 Welcome and setting the scene
- 10:15 - 11:00 **Introduction to DKTK strategic positioning 2026 - 2030** (Stefan Pfister)
- 11:00 - 12:00 **Ad-hoc working group (WG) presentations** (Melanie Börries)
- 12:00 - 13:00 Lunch
- 13:00 - 14:30 **Parallel Ad-hoc WG sessions** (WGs 1-8)
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|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------|
| <b>■ Ad-hoc WG 1</b><br>Synthetic & Generative Data for Cancer Research | <b>■ Ad-hoc WG 2</b><br>Organoids and 3D Models in Oncology                          | <b>■ Ad-hoc WG 3</b><br>Personalized Approaches for Immunotherapies              | <b>■ Ad-hoc WG 4</b><br>Metabolic Imaging |
| <b>■ Ad-hoc WG 5</b><br>Targeting RAS and related resistance mechanisms | <b>■ Ad-hoc WG 6</b><br>Bridging Preclinical and Clinical Small Molecule Development | <b>■ Ad-hoc WG 8</b><br>Biobanking for DKTK-Research including industry outreach |                                           |
- 14:30 - 15:00 Coffee break
- 15:00 - 16:30 **Parallel Ad-hoc WG sessions** (WGs 9-15)
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|--------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>● Ad-hoc WG 9</b><br>AI based Imaging and bioinformatics  | <b>● Ad-hoc WG 10</b><br>Harmonization of Diagnostic & Research Methods | <b>● Ad-hoc WG 11</b><br>Clonal Hematopoiesis and Cancer Prevention | <b>● Ad-hoc WG 12</b><br>Development of Novel Screening Strategies |
| <b>● Ad-hoc WG 13</b><br>Data Management and FAIR Principles | <b>● Ad-hoc WG 14</b><br>Functional Precision Oncology                  | <b>● Ad-hoc WG 15</b><br>Proteomics                                 |                                                                    |
- 16:30 - 18:00 **Session Debrief from Ad-hoc WGs** (WG Chairs & Moderators)
- 18:00 **Informal Get-together**

## March 25th (Tuesday)

- 08:00 - 09:00 **Short wrap-up day 1 and outlook on day 2** (Stefan Pfister)
- 09:00 - 10:00 **Support by DKTK technology platforms**
- Clinical Communication Platform (CCP)
  - RadPlanBio
- 10:00 - 10:30 Coffee break
- [!] 10:00 - 11:00 **DKTK Steering Committee Meeting (DKTK Spokepersons only)**
- 10:30 - 12:00 **Parallel Ad-hoc WG sessions** (WGs 17-24)
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|---------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <b>▲ Ad-hoc WG 16</b><br>AI in Translational Oncology   | <b>▲ Ad-hoc WG 17</b><br>Epigenetics in Cancer Diagnosis & Therapy                          | <b>▲ Ad-hoc WG 18</b><br>Harnessing the microbiome for cancer prevention and therapy | <b>▲ Ad-hoc WG 19</b><br>Theranostics & Advanced Radiotherapy |
| <b>▲ Ad-hoc WG 20</b><br>New Pharmacological Modalities | <b>▲ Ad-hoc WG 21</b><br>From Research to Access: Translational Medicine & Health Economics |                                                                                      |                                                               |
- 12:00 - 13:00 **Session Debrief from Ad-hoc WGs** (Chairs & Melanie Börries, Mechthild Krause)
- 13:00 - 13:30 **Wrap-up and next steps** (Stefan Pfister)
- 13:30 End of the Meeting

# OVERVIEW OF THE **AD-HOC WG** SESSIONS

 Each participant may attend three ad-hoc WG sessions. **Pre-registration** is required, and spots are limited and will be allocated on a first-come, first-served basis. Sessions will be moderated by chair(s) who will structure the discussion and provide a debrief afterward. We require all participants to engage actively in these focused discussions.

## □ Ad-hoc WGs 1-8 (March 24)

### ■ Ad-hoc WG 1

**Synthetic & Generative Data for Cancer Research**, Chair: M. Schneider

This WG explores how generative AI can create synthetic datasets to boost preclinical and early-stage precision oncology research and how advanced AI-driven classifiers can accelerate multi-omics applications.

### ■ Ad-hoc WG 2

**Organoids and 3D Models in Oncology**, Chairs: H. Farin, M. Reichert, M. Wobus

This WG explores the clinical translation of patient-derived organoids (PDOs), enhancing 3D models for precision oncology, and advancing the DKTK Organoid Platform for personalized therapy and drug testing.

### ■ Ad-hoc WG 3

**Personalized Approaches for Immunotherapies**, Chairs: M. Bornhäuser, M. Klatt

This WG explores multiomic profiling, engineered cellular therapies, and novel immunotherapy strategies to enhance cancer treatment and early immune tolerance detection.

### ■ Ad-hoc WG 4

**Metabolic Imaging**, Chairs: A. Schmidt, A. Martins

This WG advances metabolic imaging for oncology, aiming to integrate non-invasive techniques into clinical practice to enhance tumor characterization, therapy planning, and personalized treatment strategies.

### ■ Ad-hoc WG 5

**Targeting RAS and related resistance mechanisms**, Chairs: B. Papke, D. Saur

This WG explores therapeutic strategies for RAS-mutant cancers, focusing on resistance evolution, treatment before and after resistance onset, and optimizing diagnostics and therapeutic approaches.

### ■ Ad-hoc WG 6

**Bridging Preclinical and Clinical Small Molecule Development**, Chairs: S. Knapp

Aligning preclinical findings with clinical drug development pipelines.

### ■ Ad-hoc WG 8

**Biobanking for DKTK-Research including industry outreach**, Chairs: H. Altmann, K. Steiger

This WG addresses your (researchers) requests in terms of biosample types, requirements and availability. Ethical topics and biosample related data challenges, harmonizing patient consents, optimizing biosample exchange between DKTK sites, and fostering industry engagement for translational research will also be addressed.

## ○ Ad-hoc WGs 9-15 (March 24)

### ● Ad-hoc WG 9

**AI based Imaging bioinformatics**, Chairs: H.P. Schlemmer, K. Maier-Hein

This WG focuses on AI-driven imaging and predictive modeling to improve cancer diagnosis and personalized treatment by integrating imaging biomarkers with clinical and laboratory data.

### ● Ad-hoc WG 10

**Harmonization of Diagnostic & Research Methods**, Chairs: I. Tinhofer-Keilholz, C. Winter

This WG advances liquid biopsy diagnostics within the DKTK network for use in NCT studies, focusing on therapy monitoring, early detection, prevention, and harmonizing lab processes and technologies.

### ● Ad-hoc WG 11

**Clonal Hematopoiesis and Cancer Prevention**, Chair: M. Bornhäuser

This WG explores chronic inflammation as a cancer precursor and aims to establish biomarkers for early intervention and personalized prevention strategies.

### ● Ad-hoc WG 12

**Development of Novel Screening Strategies**, Chair: I. Kurth

This WG explores functional genomics to identify vulnerabilities and novel drug targets using high-throughput techniques like CRISPR screens, RNA sequencing, and proteomics for precision therapy.

### ● Ad-hoc WG 13

**Data Management and FAIR Principles**, Chair: W. Hadiwikarta

This WG explores strategies for preserving data and insights from past DKTK trials and future translational studies, focusing on data management, FAIR principles, and knowledge infrastructure.

### ● Ad-hoc WG 14

**Functional Precision Oncology**, Chairs: C. Ball, S. Knapp

This WG focuses on standardizing validation frameworks and integrating molecular profiling with preclinical testing to accelerate the clinical translation of functional precision oncology for personalized cancer therapy.

### ● Ad-hoc WG 15

**Proteomics**, Chairs: U. Keilholz, B. Küster

This WG will briefly review the current status of applying proteomics in DKTK followed by in-depth discussions on how the recent quantum leap in bulk, single cell and spatial proteomics can be meaningfully integrated into future NCT clinical trials.

## △ Ad-hoc WGs 16-22 (March 25)

### ▲ Ad-hoc WG 16

**AI in Translational Oncology**, Chairs: F. Büttner, C. Marr

This WG explores how AI can accelerate translational research, facilitate clinical translation of basic research insights, and ensure safe, efficient implementation of AI models in clinical settings.

### ▲ Ad-hoc WG 17

**Epigenetics in Cancer Diagnosis & Therapy**, Chair: M.Timmers

This WG explores targeting chromatin-modifying pathways for novel therapies and developing DNA-methylation-based classifiers for tumor stratification to advance cancer epigenetics in translational research.

### ▲ Ad-hoc WG 18

**Harnessing the microbiome for cancer prevention and therapy**, Chairs: D. Saur, C. Thöringer

The aim of the WG is to establish novel pipelines that harness the microbiome and its metabolites for early cancer detection, as well as preventive and combinatorial therapeutic approaches.

### ▲ Ad-hoc WG 19

**Theranostics & Advanced Radiotherapy**, Chairs: M. Eder, M. Krause

This WG explores the development of radiopharmaceuticals and next-generation radiotherapy to advance personalized (radio)theranostics for precise cancer imaging and targeted treatment.

### ▲ Ad-hoc WG 20

**New Pharmacological Modalities**, Chair: S. Knapp

tba

### ▲ Ad-hoc WG 21

**From Research to Access: Translational Medicine & Health Economics**, Chair: K. Berger-Thürmel

This WG bridges research and patient care through economic models and interdisciplinary platforms, ensuring innovative therapies are scientifically sound, economically sustainable, and accessible.