











First Announcement

e:Med Summer School

24.-28.6.2019 in Halle (Saale)/Germany

CLONE - Clinical Trials in Oncology in the New Era of Omics, Big Data, and Modeling



(with kind permission acknowledging Shewangzaw Tamerat, Makush Galery Ethiopia; makushgallery@gmail.com) Dear colleagues,

the wealth of innovative data emerging from cancer biology, bioinformatics, and epidemiology is revolutionizing our understanding of cancer. These advances have profound implications for the design and conduct of clinical trials in oncology with new ethical and legal challenges arising. The Summer School of the Krukenberg Cancer Center Halle (KKH) with its talks, round table discussions, workshops, and poster walks will bring physicians and researchers from various disciplines in Systems Medicine together to illuminate personalized medicine in oncology. The interdisciplinary programs needed for the analysis of vast amounts of data from multiple research platforms and how to translate these results into prognostic biomarkers and tailored clinical studies with targeted therapies will be discussed.



Dr. Eva Johanna Kantelhardt

Ga Karellant

Date: 24.06.2019-28.06.2019

Location: DORMERO Hotel Halle, Leipziger Straße 76, 06108 Halle (Saale),

Germany

Language: English

Costs: travel, accommodation, and meals are covered by the Summer School

Organisation: Krukenberg Cancer Center Halle; University Hospital Halle (Saale);

Ernst-Grube-Straße 40; 06120 Halle (Saale); Germany

Contact: E-mail: kkhalle@uk-halle.de; Telefon: +49 (0)345 557-7712

Participants: Around 20 physicians and researchers from different disciplines of

Systems Medicine from Germany and abroad will be competitively selected by a panel of experts based on a submitted abstract along

with a curriculum vitae per mail to kkhalle@uk-halle.de

Submission timeline: 01.02.19-20.03.2019

Application requirements are listed after the program.

Preliminary Program

	.6.	
3:00-14:00		Arrival of participants/lunch
	Format	Title
14:00-15:30		Welcome
		Introduction to the Summer School
	Discussion	Introduction of participants/ Expectations and personal view about Systems Medicine
	"Use-case"	Introduction to myeloid leukemias (acute and chronic) as 'Use case' accompanying the cours
	"Use-case"	Introduction to pancreatic cancer as 'Use case' accompanying the course
5:30-16:00		Coffee break
C.00 10:1F	Tall	The nethural from traditional to stratified concer medicine
16:00-18:15	Talk	The pathway from traditional to stratified cancer medicine
	Talk	What is personalized cancer medicine?
	Talk	Emerging developments in Omics
	Talk	Emerging developments in Big Data Analytics in the Life Sciences
	Round table	Why do we need Systems Medicine for clinical trials in oncology today?
0.00		Summary of day one
9:00		Evening programm and dinner
Tuesday 25.0	06	Omics & Bioinformatics
Genomics		
	Talk	PCR-based and deep sequencing technologies
08:00-10:00	Talk	Analysis and integration of deep sequencing readouts to identify regulatory networks and establish genomic
	Idik	libraries in cancer
	"Use-case"	Translation of deep sequencing results into (pre)clinical studies and clinical applications in pancreatic cance
	"Use-case"	Translation of deep sequencing results into (pre)clinical studies and clinical applications in myeloid leukemia
10:00-10:30	Round table	Do we need tissue banking in clinical trials? Coffee break
Epigenomics		соттее ргеак
.0:30:12:30	Talk	
10.50.12:50		DNA methylation in cancer
	Talk	DNA methylation in cancer Chromatin modification in cancer
	Talk	Chromatin modification in cancer
	Talk Talk "Use-case" "Use-case"	Chromatin modification in cancer RNA splicing in cancer Translation of epigenetics into (pre)clinical studies and clinical applications in pancreatic cancer Translation of epigenetics into (pre)clinical studies and clinical applications in myeloid leukemias
	Talk Talk "Use-case"	Chromatin modification in cancer RNA splicing in cancer Translation of epigenetics into (pre)clinical studies and clinical applications in pancreatic cancer Translation of epigenetics into (pre)clinical studies and clinical applications in myeloid leukemias The impact of genomics and epigenomics in clincal trials
12:30-13:15 13:15-14:00	Talk Talk "Use-case" "Use-case"	Chromatin modification in cancer RNA splicing in cancer Translation of epigenetics into (pre)clinical studies and clinical applications in pancreatic cancer Translation of epigenetics into (pre)clinical studies and clinical applications in myeloid leukemias The impact of genomics and epigenomics in clincal trials Lunch
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12:30-13:15 13:15-14:00 Proteomics 14:00-15:00 Bioinformati	Talk Talk "Use-case" "Use-case" Round table Talk Talk "Use-case" CS Talk	Chromatin modification in cancer RNA splicing in cancer Translation of epigenetics into (pre)clinical studies and clinical applications in pancreatic cancer Translation of epigenetics into (pre)clinical studies and clinical applications in myeloid leukemias The impact of genomics and epigenomics in clinical trials Lunch Refreshments & Posterwalk I Introduction to proteomics Proteomics, post-translational modifications in cancer Translation of results into (pre)clinical studies and clinical applications in breast cancer Predicting the sequence specificities of DNA- and RNA-binding proteins by deep learning
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12:30-13:15 13:15-14:00 Proteomics 14:00-15:00 Bioinformati 15:00-15:45	Talk Talk "Use-case" "Use-case" Round table Talk Talk "Use-case" CS Talk	Chromatin modification in cancer RNA splicing in cancer Translation of epigenetics into (pre)clinical studies and clinical applications in pancreatic cancer Translation of epigenetics into (pre)clinical studies and clinical applications in myeloid leukemias The impact of genomics and epigenomics in clinical trials Lunch Refreshments & Posterwalk I Introduction to proteomics Proteomics, post-translational modifications in cancer Translation of results into (pre)clinical studies and clinical applications in breast cancer Predicting the sequence specificities of DNA- and RNA-binding proteins by deep learning Proteomics and bioinformatics in cancer

Wednesday 26.06		Big Data
Bioinformatics		
08:00-10:00	Talk	Watchdog – a workflow management system to analyse large-scale experimental data
	Talk Talk	Artificial neural network Smart Medical Information Technology for Healthcare (SMITH)
	Round table	Physicians versus computational biology!
10:00-10:30	(2.20.2)	Coffee break
Modeling and Simulation 10:30-12:30	(M&S) Talk	Introduction to M&S
10.30-12.30	Talk	The traditional RECIST-based approach in clinical oncology
	Talk	Statistical modeling and image analysis in cancer
	Talk Round table	Could liquid biopsy data be used for modeling in cancer? Physicians versus computational modeling!
12:30-13:15		Lunch
13:15-14:00		Refreshments & Posterwalk II
Real world Data & more	Talk & "Use-ca	se" Could data from registries be translated into clinical applications and trials
14.00 10.00	Talk	Could registries be used to create models for cancer management?
	Talk	What is the benefit of a meta-analysis?
16:00-16:30	Round table	Advances in the management of cancer: Do they come from real world data or clinical trials? Coffee break
Real world data & clinical	applications	correct steak
16:30-18:15	Talk	Status and impact of cancer registries globally
	"Use-case"	Translations of results of registries for breast cancer into clinical applications and trials
	Round table	The future of oncology: computational biology, real world data, or clinical trials? Summary of day three
19:00		Dinner
Thursday 27.06		Clinical trials in the era of "big data"
Planing and designing	g a clinical	
08:00-10:00	Talk	How to translate an idea into a clinical trial
50.00 20.00	Talk	Phases of clinical trials
	Talk	Project design considerations: biometry, statistics and more
	Talk	The impact of omics and "big data" on the design of clinical trials in cancer
R	ound table	Pitfalls when designing clinical trials
10:00-10:30		Coffee break
Preparing a clinical to	rial	
10:30-12:30	Talk	Why do we need a coordinating center for clinical trials?
	Talk	Sponsoring and funding of a clinical trial
	Talk	Regulatory requirements of a scientific project / clinical trial: ICH-GCP and Clinical Trials
		European Directive
	Talk H	ow informed are our patients? Do biomarkers help idenify the right trial population?
12:30-13:15		Lunch
13:15-14:00		Refreshments and Posterwalk III
Science & regulation	s	
14:00-15:25	Talk	EMA and FDA filing of clinical trials
III	Use-case"	Planing and conducting an investigator initiated trial in acute myeloid leukemia
Ro	ound table	Planing a study in reality: How difficult is an investigator initiated trial (IIT)?
		Summary of day four
15:25-16:00		Departure to the Workshops
16:00-18:00		Workshop I: Epidemiology - NAKO
		Workshop II: clinical trials
19:00		Cultural evening program & dinner
Eriday 28 06 2010		Engaging protecting and communicating with nationts
Friday 28.06.2019	Cormet	Engaging, protecting, and communicating with patients Title
Ethical & legal considerations	Format	nue
08:00-10:00	Talk	Ethical requirements of a clincal trial
	Talk	Legal concerns in the era of big data
	Talk	The informed consent: What must be considered?
	Round table	Ethical and legal challenges in oncology today
10:00-10:30		Coffee break
Patients' perspectives		
10:30-12:40	Talk	Symptom management and patient-reported outcome in clinical trials
	Talk	Clinical trials in the genomic era from a patient's perspective
	Round table	Where is the patient in systeme medicine in oncology today?
	Discussion	Personal view of the participants about Systems Medicine at the end of the summer school
12:40		Summary of the results of the summer school Lunch & farewell
12:40		Lunch & rarewell

Application Requirements

Submission timeline: 01.02.19-20.03.2019

A) Abstract (background, methods, results, and conclusions) 2,000 characters

- All types of oncology-related research (not older than two years) are eligible for submission. Abstracts should address scientific questions, clinical observations, or contain primary scientific data in one of the following areas:
 - ♣ Omics (genomics, epigenomics, proteomics)
 - Bioinformatics and big data analytics
 - Epidemiology and registries
 - Themes related to clinical trials such as results, biometry, informatics, statistics, regulation, funding..etc.
 - **↓** Ethical and legal considerations in oncology research
 - ♣ Themes related to patient reported outcomes and patients' perspectives
- The abstract should not exceed 2,000 characters for the title and body including section titles, and tables. The character count does not include spaces or author name, address, institutions, disclosures, and funding information. A maximum of one illustration, one data table, and/or two figures are permitted.

B) Cover page

- Full name, academic degree(s), institution, address, and email address should be provided.
- The information provided upon submission must belong to the applicant.
- Disclosure information for all authors & funding source (if present) at the end of the abstract are required.

C) Curriculum vitae (CV)

The CV should contain information to:

- available publications with impact factors (those related to oncology should be bold)
- experience in the conduct and design of research projects
- experience in the conduct and design of clinical trials
- available national and international co-operations
- active participation (oral presentation/poster) in national and international meetings
- research grants and experience in funding

The language of the abstract and CV is English.

Abstract & CV should be submitted per email to kkhalle@uk-halle.de. Each applicant will receive a letter of notification via email from the organisor regarding the application by 30 April, 2019.