

ASCA ASTANA WORKSHOP

MAY 22-24, 2024





**Association
for Single Cell
Analysis**

SCAN ME



ASCA
WEBSITE

JOIN US!

The ASCA is a global community of professionals who use different methods of single-cell analysis.

The ASCA mission is "The increase in educational level and scientific communication in the field of single-cell analysis in order to accelerate investigations of biological objects and to understand mechanisms of disease development".



SCAN ME



ASCA ASTANA
WORKSHOP
WEBSITE

Through 3-day ASCA ASTANA Workshop participants will get information about different methods of single-cell sequencing and digital PCR.

The program includes presentations of expert users and technology developers and practical works.

Participants will have the opportunity to network with leading experts on the round table "Experience in Single-Cell Analysis".

ASCA ASTANA WORKSHOP ORGANIZERS



Association
for Single Cell
Analysis



NAZARBAYEV
UNIVERSITY
NATIONAL
LABORATORY ASTANA



DPA



TOMSK NRMC



CANCER
RESEARCH INSTITUTE
TOMSK NRMC



RUDN
university

CHAIRPERSONS

Dos Sarbassov

National Laboratory Astana,
Nazarbayev University,
Kazakhstan



Evgeny Denisov

Cancer Research Institute,
Tomsk NRMC;
RUDN University, Russia



Ainur Akilzhanova

National Laboratory Astana,
Nazarbayev University,
Kazakhstan



Tatiana Gerashchenko

Cancer Research Institute,
Tomsk NRMC;
RUDN University, Russia

ASCA ASTANA WORKSHOP ORGANIZERS

ORGANISING COMMITTEE

Assan Abdrakhmanov
National Laboratory Astana,
Nazarbayev University,
Kazakhstan



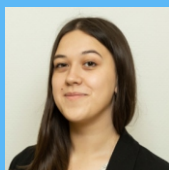
Maxim Menyailo
Cancer Research Institute,
Tomsk NRCM;
RUDN University,
Russia



Ustinya Bokova
Cancer Research Institute,
Tomsk NRCM,
Russia



Anastasia Korobeynikova
Cancer Research Institute,
Tomsk NRCM;
RUDN University,
Russia



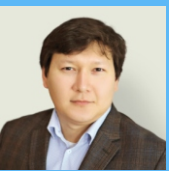
Marina Patysheva
Cancer Research Institute,
Tomsk NRCM,
Russia



Anton Fedorov
Cancer Research Institute,
Tomsk NRCM,
Russia



Aleksei Sleptsov
Research Institute of
Medical Genetics,
Tomsk NRCM,
Russia



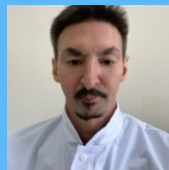
Mirgul Bayanova
University Medical Center,
Kazakhstan



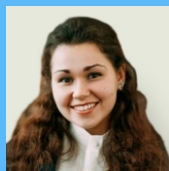
Maria Tretyakova
Cancer Research Institute,
Tomsk NRCM,
Russia



Nikolai Barlev
School of Medicine,
National Laboratory Astana,
Nazarbayev University,
Kazakhstan



Anastasia Frolova
Cancer Research Institute,
Tomsk NRCM,
Russia



Kristina Kuanysheva
Cancer Research Institute,
Tomsk NRCM,
Russia



ASCA ASTANA WORKSHOP PROGRAM

MAY 22, 2024 WEDNESDAY

National Laboratory Astana, Nazarbayev University,
Kabanbai Batyr St., 53, Block S1, Conference Room

09.00 – 09.30 REGISTRATION

09.30 – 09.45 WELCOME

Dos Sarbassov, General Director of National Laboratory
Astana, Kazakhstan

Evgeny Choyznov, Director of Cancer Research
Institute of Tomsk NRMC, Russia

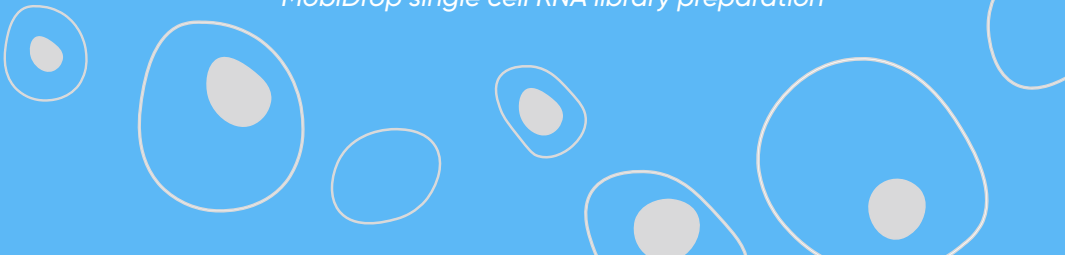
Timur Fatkhudinov, Director of Research Institute of
Molecular and Cellular Medicine, RUDN University, Russia

09.45 – 10.00 Evgeny Denisov, Cancer Research Institute,
Tomsk NRMC; RUDN University, Russia
*Single cell and spatial analysis: opportunities and
applications*

10.00 – 10.25 INTRODUCTION TO WET LAB PRACTICES
Marina Patysheva, Cancer Research Institute,
Tomsk NRMC, Russia
Sample preparation from RWD Life Science

Maxim Menyailo, Cancer Research Institute,
Tomsk NRMC; RUDN University, Russia
SeekGene single cell RNA library preparation

Tatiana Gerashchenko, Cancer Research Institute,
Tomsk NRMC; RUDN University, Russia
MobiDrop single cell RNA library preparation



ASCA ASTANA WORKSHOP PROGRAM

MAY 22, 2024 WEDNESDAY

Anton Fedorov, Cancer Research Institute,
Tomsk NRMС, Russia
10x Genomics single cell RNA library preparation

Aleksei Sleptsov, Research Institute of Medical Genetics,
Tomsk NRMС, Russia
Bio-Rad Droplet Digital PCR

10.25 - 11.00 Break, free time

11.00 - 20.00 WET LAB PRACTICES

11.00 - 16.00 **Sample preparation: solutions from RWD Life Science**
Venue: Nazarbayev University, Core Facilities, Block C4.
Practice leader - Marina Patysheva

11.00 - 14.00 **Bio-Rad Digital Droplet PCR & ATILA Biosystems**
Venue: National Laboratory Astana, Nazarbayev University, Block C4, Room 609.
Practice leader - Aleksei Sleptsov

16.00 - 20.00 **SeekGene single cell RNA library preparation**
Venue: Nazarbayev University, Core Facilities, Block C4.
Practice leader - Maxim Menyailo

16.00 - 20.00 **10x Genomics single cell RNA library preparation**
Venue: National Laboratory Astana, Nazarbayev University, Block C4, Room 606.
Practice leader - Anton Fedorov

16.00 - 20.00 **MobiDrop single cell RNA library preparation**
Venue: National Laboratory Astana, Nazarbayev University, Block C4, 609.
Practice leader - Tatiana Gerashchenko

ASCA ASTANA WORKSHOP PROGRAM

MAY 23, 2024 THURSDAY

10.00 - 19.00 WET LAB PRACTICES (continuation)

10.00 - 15.00 SeekGene single cell RNA library preparation

Venue: Nazarbayev University, Core Facilities, Block C4.

Practice leader - Maxim Menyailo

10.00 - 15.00 10x Genomics single cell RNA library preparation

Venue: National Laboratory Astana, Nazarbayev University, Block C4, Room 606.

Practice leader - Anton Fedorov

10.00 - 15.00 MobiDrop single cell RNA library preparation

Venue: National Laboratory Astana, Nazarbayev University, Block C4, Room 609.

Practice leader - Tatiana Gerashchenko

15.00 - 19.00 Bio-Rad Digital Droplet PCR & ATILA Biosystems

Venue: National Laboratory Astana, Nazarbayev University, Block C4, Room 609.

Practice leader - Aleksei Sleptsov

15.00-16.00 Master-class on Oxford Nanopore DNA sequencing

Venue: National Laboratory Astana, Nazarbayev University, Block C4, Room 606.

Master-class leader - Timur Yagudin, SkyGen

ASCA ASTANA WORKSHOP PROGRAM

MAY 24, 2024 FRIDAY

- 10.00 - 18.00 **ROUND TABLE "EXPERIENCE IN SINGLE-CELL ANALYSIS"**
Venue: National Laboratory Astana, Nazarbayev University,
Kabanbai Batyr St., 53, Block S1, Conference Room
- 10.00 - 10.20 **Pavel Yamshikov, TSU; Cancer Research Institute,
Tomsk NRMC, Russia**
*Basic analysis of spatial and single-cell transcriptomics
towards ready-to-use results*
- 10.20 - 10.30 **Koen De Gelas, 10x Genomics**
*Unravel biological complexity with powerful single cell
solutions of 10x Genomics*
- 10.30 - 10.50 **Suzanne Turner, University of Cambridge, UK**
*Applying single cell transcriptomics towards deciphering
the origins and therapeutic vulnerabilities of T cell
lymphoma*
- 10.50 - 11.10 **Evgeny Choynzonov, Cancer Research Institute,
Tomsk NRMC, Russia**
*Cancer research and clinical oncology directions:
experience of the Cancer Research Institute of Tomsk
NRMC*
- 11.10 - 11.30 **Nikolay Skryabin, Research Institute of Medical Genetics,
Tomsk NRMC, Russia**
*Early human embryogenesis: cytogenetics and
transcriptomics using single cell analysis*
- 11.30 - 12.10 **Coffee-break, Partner exhibition**
- 12.10 - 12.20 **Yanquan Lua, MobiDrop**
MobiDrop single-cell microbiome

ASCA ASTANA WORKSHOP PROGRAM

MAY 24, 2024 FRIDAY

- 12.20 – 12.40 **Tatiana Gerashchenko, Cancer Research Institute, Tomsk NRMС; RUDN University, Russia**
Immune-related transcriptomic predictors of chemotherapy response in triple negative breast cancer patients
- 12.40 – 12.50 **Tatiana Bukanova, SkyGen**
The new long song in innovation single cell performance
- 12.50 – 13.10 **Egor Volchkov, Dmitry Rogachev NMRC, RUDN University, Russia**
Study of Juvenile Myelomonocytic Leukemia using single-cell methods
- 13.10 – 13.20 **PENG Tiankui, SeekGene**
SeekGene - Innovative single cell technology accessing analysis from Expression to Mutation
- 13.20 – 13.40 **Marina Patysheva, Elena Kolegova, Cancer Research Institute, Tomsk NRMС, Russia**
Revealing molecular mechanisms of early-onset tongue cancer by spatial transcriptomics
- 13.40 – 15.00 **Lunch break (on your own)**
- 15.00 – 15.20 **Dana Mustafa, Erasmus MC, Netherlands**
Unveiling the hidden dimension of pancreatic cancer: navigating the world of spatial biology
- 15.20 – 15.30 **Bert A.G. de Boer, Atila Biosystems**
Advanced technologies from Atila Biosystems for oncology and medicine
- 15.30 – 15.50 **Roman Sankowski, University of Freiburg, Germany**
Multiomic analysis of brain macrophages reveals distinct responses during development and brain tumors (online)

ASCA ASTANA WORKSHOP PROGRAM

MAY 24, 2024 FRIDAY

- 15.50 - 16.10 Maxim Menyailo, Cancer Research Institute, Tomsk NRMС; RUDN University, Russia
Deciphering intratumoral heterogeneity by single cell RNA sequencing
- 16.10 - 16.30 Timur Fatkhudinov, RUDN University, Russia
Digital research platforms
- 16.30 - 16.50 Coffee-break, Partner exhibition
- 16.50 - 17.00 Ivan Bodoev, Sesana
SURFSeq 5000 – The optimal solution for single cell sequencing
- 17.00 - 17.20 Chuan Xu, The Wellcome Sanger Institute, UK
CellTypist & CellHint: towards assembling the Human Cell Atlas (online)
- 17.20 - 17.50 **SEMINAR "LIFE SCIENCE AND ORGANOID BIOLOGY: SOLUTIONS FROM RWD LIFE SCIENCE"**
Venue: National Laboratory Astana, Nazarbayev University, Kabanbai Batyr St., 53, Block S1, Conference Room
- Closing
- 19.00 - 22.00 **Party**
Venue: Aisha bibi Apart Hotel & Spa, Aisha bibi St., 38, Astana.

ASCA ASTANA WORKSHOP

ascanet.org/events/
asca-astana-workshop-2024
+7 3822 282676 (ext. 3375)
+7 3822 282676 (ext. 3358)

ascanet.org



research.nu.edu.kz/en

tnimc.ru/en



TOMSK NRMС



onco.tnimc.ru/en

rudn.ru



dpa-workshop.ru

PARTNERS

PLATINUM



SEEKGENE



ZALMA

10x
GENOMICS®



MOBIDROP

RWD



Algimed

GOLD

SkyGen

SE:ANA

SILVER

adtrena

Life Sciences & Biotechnology