



GermanStemCellNetwork

5th Annual Conference

of the German Stem Cell Network (GSCN)
11 – 13 September 2017

Friedrich Schiller University Jena

www.gscn.org



Program & Abstracts

Supported by



Federal Ministry
of Education
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Technologiezentrum

Collaboration with



Leibniz Institute on Aging -
Fritz Lipmann Institute

MDC MAX DELBRÜCK CENTER
FOR MOLECULAR MEDICINE
IN THE HELMHOLTZ ASSOCIATION



Kompetenznetzwerk
Stammzellforschung NRW





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11 – 13 September 2017

Friedrich Schiller University Jena

Organizer:

German Stem Cell Network (GSCN)

c/o Max Delbrück Center (MDC)

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Welcome address

Dear Friends and Colleagues,



It is a great pleasure to welcome you to the **5th Annual Conference of the German Stem Cell Network (GSCN) in Jena**, which is hosted by the Leibniz Institute on Aging – Fritz Lipmann Institute e.V. (FLI). The conference will foster the interaction between researchers working on different types of stem cells, including pluripotent stem cells, stem cells during development and in adult organs as well as cancer stem cells. This year, we will have a particular focus on “stem cells and aging”, and a slightly different format with some more plenary sessions. Two poster sessions, meet-the-expert-tables, an industry exhibition and two evening events will offer you many opportunities for exciting discussions, academic exchange and reconnecting with old friends and new colleagues.

Since promotion of junior scientists is a particular aim of the GSCN, most speakers are selected from the best abstracts that have been submitted. Again, awardees of the GSCN prizes will present their results during the Presidential Symposium. The program will be completed by invited keynote lectures to present the international points of reference for this fast growing field of research. We are happy that Elaine Fuchs (New York), Margaret Goodell (Texas), Heinrich Jasper (Novato), Jürgen Knoblich (Vienna) and Maike Sander (San Diego) will present their most recent results. We will conclude the conference with a Joined Session with the Leibniz Institute on Aging – Fritz Lipmann Institute e.V. (FLI) followed by a public outreach event in the stylish scenery of the “Volksbad” in Jena.

I hope you will enjoy this conference and wish you an interesting and enjoyable stay in Jena!

Best wishes,

A handwritten signature in blue ink, appearing to be 'Ulrich Martin'.

Ulrich Martin (GSCN Acting president)

For the program committee

Daniel Besser (Berlin)

Ulrich Martin (Hannover)

Ana Martin-Villalba (Heidelberg)

Karl Lenhard Rudolph (Jena)

Julia von Maltzahn (Jena)

Claudia Waskow (Dresden)

EmbryoS@fe / StemS@fe

Working environment
(EN12469:2000; ISO 14644 CLASS 5)
dedicated to:

- human assisted reproduction techniques
- safe production and handling of iPS cells

SAFETY CONCEPTS



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Conference Information

Venue

Friedrich Schiller University Jena, Abbe Campus
Ernst-Abbe-Platz / Carl-Zeiss-Str. 3 | 07743 Jena

Date

Monday, 11 September to Wednesday, 13 September 2017

Registration

Regular fee:	570 €	Technical assistant fee:	120 €
Regular member fee:	280 €	Day ticket fee (onsite):	200 €
Student fee:	235 €	Day ticket member fee (onsite):	160 €
Student member fee:	140 €		

The registration fee includes the admission to all scientific sessions, poster and commercial exhibition, the get-together on 11 September and the networking evening on 12 September, lunch and coffee breaks, free internet access, conference documents including badge, final program and abstract book.

Internet

Internet access via Wireless LAN is free of charge. The login data is provided at the registration desk.

Poster exhibition

Posters will be displayed during the conference in two sessions on the ground floor. Authors are asked to be present at their poster during the poster session. You will find the number of your poster in this abstract volume. Posters in poster session I should be mounted on Monday, 10:00 – 17:00 h and removed latest on Tuesday at 14:00 h. Posters in poster session II should be mounted on Tuesday, 14:00 – 16:00 h and removed latest on Wednesday at 16:00 h.

Poster session I

Monday, 11 September 2017,
18:00 – 20:00 h

Even numbers will be presented
18:00 – 19:00 h and odd numbers
19:00 – 20:00 h.

- Stem cells in regenerative therapies (P001 – P028)
- Stem cells in disease modeling and drug development (P029 – P068)

Poster session II

Tuesday, 12 September 2017, 17:00 – 19:00 h

Even numbers will be presented 17:00 – 18:00 h and odd numbers 18:00 – 19:00 h.

- Stem cells in diseases: cancer stem cells (P069 – P076)
- Computational stem cell biology and systems biology (P077 – P084)
- Somatic stem cells and development (P085 – P103)
- Pluripotency and reprogramming (P104 – P124)
- Hematopoietic stem cells (P125 – P142)

supported by Thermo Fisher Scientific

ThermoFisher
SCIENTIFIC
The world leader in serving science

supported by Miltenyi Biotec GmbH



GSCN awards

Travel awards

The following participants have been selected for the GSCN travel awards.

- *Claudia Bruedigam*, QIMR Berghofer Medical Research Institute Brisbane, Australia
- *Christina Galonska*, Max Planck Institute for Molecular Genetics Berlin
- *Vishal Menon*, University of Freiburg
- *Waseem Nasr*, University Hospital Leipzig
- *Eszter Szabo*, Research Center for Natural Sciences – Hungarian Academy of Science, Budapest

The travel awards are supported by the member company Eppendorf AG.



Poster awards

There will be two poster awards for each poster session. The awardees will receive 500 €. Authors are asked to be present at the poster award ceremony, which will take place on Wednesday, 13 September 2017, 16.30 – 17.00 h in the lecture hall 2.

The poster awards are supported by the member company Peprtech GmbH.



Scientific awards 2017

A top-class commission supported the GSCN in choosing this year's awardees. The three awardees will give a presentation in the Presidential Symposium on Tuesday, 12 September 2017, 14:30 – 16:45 h.

- **GSCN Young Investigator Award:**
Francesco Neri, Leibniz Institute on Aging – Fritz Lipmann Institute (FLI), Jena
- **GSCN Female Scientist Award:**
Elly Tanaka, Institute of Molecular Pathology (IMP), Vienna, Austria / Technical University Dresden
- **The GSCN Publication of the Year Award (July 2016 to June 2017)**
goes to *Gray Camp* and *Barbara Treutlein* of the Max Planck Institute for Evolutionary Anthropology, Leipzig together with *Keisuke Sekine* and *Takanori Takebe*, Cincinnati Children's Hospital Medical Center (Ohio, United States). Their publication "Multilineage communication regulates human liver bud development from pluripotency" appeared in the journal *Nature* (Camp, JG et al., 2017, *Nature* 546, 533-538, [doi:10.1038/nature22796](https://doi.org/10.1038/nature22796)).



Social events

Get-together

Monday, 11 September 2017

20:00 – 21:30 h

Mensa Ernst-Abbe-Platz

Ernst-Abbe-Platz 8

07743 Jena

All participants and exhibitors are invited to a **Get-together** with dinner buffet in the Mensa Ernst-Abbe-Platz.



Networking evening in the Volksbad

Tuesday, 12 September 2017

19:30 – 01:00 h

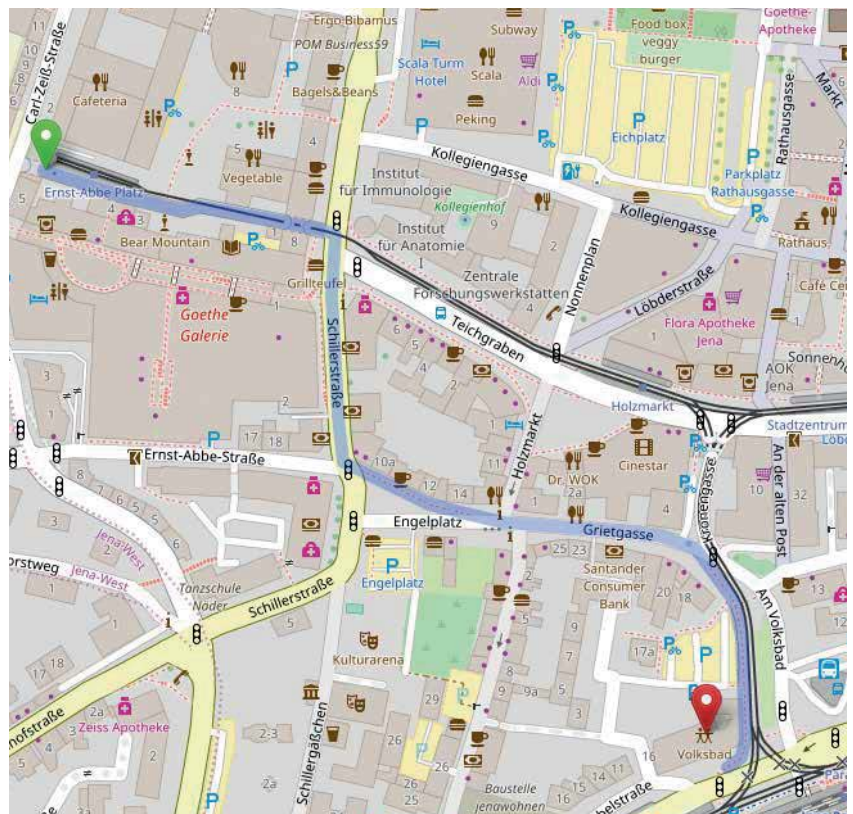
Volksbad

Knebelstraße 10 | 07743 Jena

Experience an extraordinary evening in the unique **Volksbad**, a 100 year old former bathing hall.

The networking evening with dinner buffet and DJ is included in the registration fee and open for all participants and exhibitors.

The Volksbad is located within walking distance to the Abbe Campus.



Public outreach event (in German)

Moderne Zelltherapien – Stammzellen bei Alterung, Krebserkrankungen & Organoiden

Podiumsdiskussion zur aktuellen Forschung mit Wissenschaftlern und Ärzten

Mittwoch, 13. September, 18:30 – 21 Uhr

Ort: Volksbad
Knebelstraße 10
07743 Jena

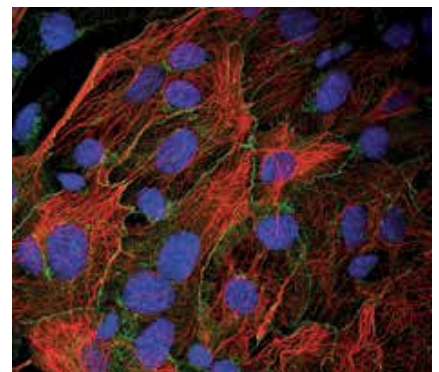
Programm: 18:30 Uhr: Einlass & Posterausstellung zu Stammzellen
19:00 Uhr: Podiumsdiskussion & Kurzfilme
20:30 Uhr: Ausklang mit Brezeln und Getränk
21:00 Uhr: Ende

Grundlagenforschung an Stammzellen bietet wichtige Erkenntnisse für die Entwicklung moderner Zelltherapien. Heute erhalten Sie Antworten auf Ihre Fragen:

- Wie laufen Alternsprozesse in Stammzellen ab?
- Warum nehmen Krankheiten mit steigendem Alter zu?
- Wie können Krankheitsverläufe z.B. bei Blutkrebs durch Stammzelltherapie verändert werden?
- Welche Forschungsmöglichkeiten bieten Organoiden aus Stammzellen?
- Wie ist der Stand der Forschung?
- Welche Aussichten zeichnen sich für die Klinik und die Anwendung ab?

Wissenschaftler und Ärzte aus Jena, Wien, Heidelberg und Dresden stellen den aktuellen Stand der Grundlagenforschung und den möglichen klinischen Einsatz moderner Zelltherapien vor. Kurze Filme veranschaulichen ihre Arbeit. Anschließend diskutieren die Experten Einsatzmöglichkeiten von Stammzellen bei Alternsprozessen und Erkrankungen und beantworten Fragen aus dem Publikum:

- *Prof. Dr. Florian Heidel*,
Universitätsklinikum Jena & Leibniz-Institut für Alternsforschung –
Fritz-Lipmann-Institut
- *Prof. Dr. Jürgen Knoblich*,
Institut für Molekulare Biotechnologie, Wien
- *Prof. Dr. Andreas Trumpp*,
Deutsches Krebsforschungszentrum, Heidelberg
- *Prof. Dr. Claudia Waskow*,
TU Dresden



Moderation: *Dr. Stefanie Seltmann*

Floor plan

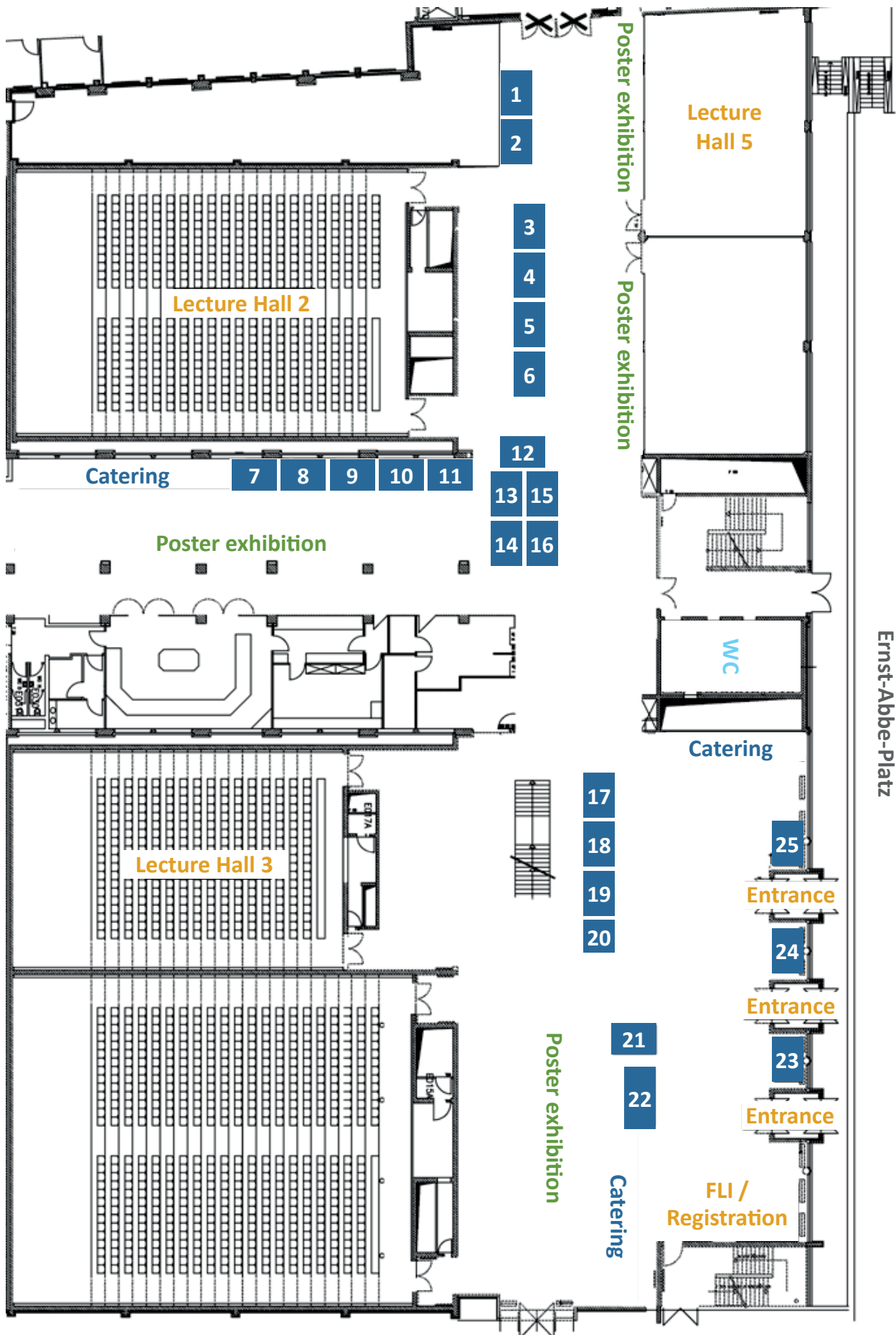
Sorted in alphabetical order

COMPANY**NUMBER**

Sorted by booth number

COMPANY

Sorted in alphabetical order COMPANY	NUMBER	Sorted by booth number COMPANY
ALS Automated Lab Solutions	25	1 Bioquell UK
Becton Dickinson	21	2 BioTek Instruments
BioLamina AB	6	3 Lonza Cologne
Biological Industries	9	4 Corning B.V. Life Sciences
Bioquell UK	1	5 OLS OMNI Life Science
BioSpherix	23	6 BioLamina AB
BioTek Instruments	2	7 La Vision BioTec
ChemoMetec A/S	10	8 PELOBiotech / ReproCELL Europe
Consarctic	16	9 Biological Industries / neoFroxx
Corning B.V. Life Sciences	4	10 ChemoMetec A/S
Cygenia	20	11 Eppendorf
Eppendorf	11	12 Thermo Fisher Scientific
I&L Biosystems	22	13 Miltenyi Biotec
La Vision BioTec	7	14 PeproTech
Lonza Cologne	3	15 Sarstedt
Maco Pharma International	19	16 Consarctic
Miltenyi Biotec	13	17 STEMCELL Technologies
neoFroxx	9	18 Takara Bio Europe, SAS
OLS OMNI Life Science	5	19 Maco Pharma International
PELOBiotech	8	20 Cygenia
PeproTech	14	21 Becton Dickinson
PromoCell	24	22 I&L Biosystems
ReproCELL Europe	8	23 BioSpherix
Sarstedt	15	24 PromoCell
STEMCELL Technologies	17	25 ALS Automated Lab Solutions
Takara Bio Europe, SAS	18	
Thermo Fisher Scientific	12	



Program overview

MONDAY, 11 September 2017

	Lecture hall 2	Lecture hall 3	Lecture hall 5
10:00 – 11:00	Registration		
11:00 – 11:30	Opening		
11:30 – 12:15	Keynote lecture I <i>Elaine Fuchs</i>		
12:15 – 13:00	Keynote lecture II <i>Heinrich Jasper</i>		
13:00 – 14:30	Lunch break / Industry exhibition		
14:30 – 16:20	Scientific working group session I <i>Federico Calegari</i> Pluripotency and reprogramming Somatic stem cells and development		
16:30 – 16:45	Scientific working group discussions I		
	Pluripotency and reprogramming		Somatic stem cells and development
16:30 – 17:00	Coffee break / Industry exhibition		
17:00 – 18:00		GSCN Members Meeting	
18:00 – 20:00	Poster session I (P001 – P068)		
18:00 – 19:00	posters with even numbers		
19:00 – 20:00	posters with uneven numbers		
20:00 – 21:30	Informal GSCN get-together with dinner buffet in the Mensa Ernst-Abbe-Platz		

TUESDAY, 12 September 2017

	Lecture hall 2	Lecture hall 3	Lecture hall 5
09:00 – 11:00	Scientific working group session II <i>Thomas Höfer</i> Hematopoietic stem cells Computational stem cell biology Stem cells in diseases: cancer stem cells		
11:00 – 11:15	Scientific working group discussions II		
	Hematopoietic stem cells	Computational stem cell biology	Stem cells in diseases: cancer stem cells
11:00 – 11:30	Coffee break / Industry exhibition		
11:30 – 13:00	Industry session: “Technologies from GSCN industry partners”		
	PeproTech GmbH Thermo Fisher Scientific Eppendorf AG	Miltenyi Biotec GmbH Takara Bio Europe, SAS Biological Industries	BioSpherix, Ltd. Corning B.V. Life Sciences STEMCELL Technologies GmbH
13:00 – 14:30	Lunch break / Industry exhibition / Poster viewing		
13:15 – 14:15	Meet-the-expert tables in the 1 st floor (limited to 10 participants each)		
	Seminar room 121 <i>Thomas Höfer</i>	Seminar room 122 <i>Thomas Braun</i>	Seminar room 131 <i>Claudia Waskow</i>

	Lecture hall 2	Lecture hall 3	Lecture hall 5
14:30 – 16:45	Presidential Symposium		
14:30 – 15:15	<i>Jürgen Knoblich</i>		
15:15 – 15:45	Female Scientist Award <i>Elly Tanaka</i>		
15:45 – 16:15	Young Investigator Award <i>Francesco Neri</i>		
16:15 – 16:45	Publication of the Year Award <i>Gray Camp</i>		
16:45 – 17:00	Coffee break / Industry exhibition		
17:00 – 19:00	Poster session II (P069 – P142)		
17:00 – 18:00	posters with even numbers		
18:00 – 19:00	posters with uneven numbers		
19:30 – 01:00	GSCN networking evening with dinner buffet and DJ at the Volksbad		

WEDNESDAY, 13 September 2017

	Lecture hall 2	Lecture hall 3	Lecture hall 5
09:00 – 11:00	Scientific working group session III <i>Bert Klebl</i> Stem cells in regenerative therapies Stem cells in disease modeling and drug development		
11:00 – 11:15	Scientific working group discussions III		
	Stem cells in regenerative therapies		Stem cells in disease modeling and drug development
11:00 – 11:30	Coffee break / Industry exhibition		
11:30 – 13:00	Concurrent strategic working group session		
	Career development	Technologies in stem cell research	Clinical trials and regulatory affairs
13:00 – 14:30	Lunch break / Industry exhibition / Poster viewing		
13:15 – 14:15	Meet-the-expert tables in the 1 st floor (limited to 10 participants each)		
	Seminar room 121 <i>Ralf Sanzenbacher</i>	Seminar room 122 <i>Andreas Bosio</i>	Seminar room 131 <i>Bert Klebl</i>
14:30 – 16:30	Joined session with FLI		
14:30 – 15:15	Keynote lecture III <i>Maike Sander</i>		
15:15 – 15:30	FLI talk I <i>Florian Heidel</i>		
15:30 – 16:15	Keynote lecture IV <i>Margaret Goodell</i>		
16:15 – 16:30	FLI talk II <i>Julia v. Maltzahn</i>		
16:30 – 17:00	Poster award ceremony and closing remarks		
	End of conference		
18:30 – 21:00	GSCN public outreach event with panelists in the Volksbad (in German) Moderne Zelltherapien – Stammzellen bei Alterung, Krebserkrankungen & Organoiden		

■ Opening | Evening events | Members meeting | FLI session
 ■ Keynote lectures | GSCN awardees
 ■ Scientific working group sessions

■ Poster sessions and Poster award ceremony
 ■ Strategic working group sessions | Meet-the-expert tables
 ■ Industry session

Program

MONDAY, 11 September

10:00 – 11:00	Registration
Lecture hall 2	Opening
11:00 – 11:10	Welcome to Friedrich Schiller University (FSU), Jena <i>Walter Rosenthal</i> , President FSU
11:10 – 11:20	Welcome to Jena and Thuringia <i>Wolfgang Tiefensee</i> , State Minister of Economy, Science and the Digital Society of Thuringia
11:20 – 11:25	Leibniz Institute on Aging – Fritz Lipmann Institute (FLI) <i>Daniela Barthel</i> , Administrative Director
11:25 – 11:30	GSCN Annual Conference 2017 <i>Ulrich Martin</i> , President GSCN
11:30 – 12:15	Keynote lecture I K1 – Stem cells in silence, action and cancer <i>Elaine Fuchs</i> , Howard Hughes Medical Institute, Rockefeller University, New York, USA (Chair: <i>Ana Martin-Villalba</i>)
12:15 – 13:00	Keynote lecture II K2 – Age-related stem cell dysfunction: causes and consequences <i>Heinrich Jasper</i> , Buck Institute, Novato, USA (Chair: <i>Hartmut Geiger</i>)
13:00 – 14:30	Lunch break / Industry exhibition
Lecture hall 2	Scientific working group session I (Chairs: <i>Micha Drukker</i> / <i>Thomas Braun</i>)
14:30 – 14:50	T01 – Control of mammalian neurogenesis <i>Federico Calegari</i> , Center for Regenerative Therapies / TU Dresden
14:50 – 15:35	Pluripotency and reprogramming
14:50 – 15:05	T02 – FACT is a reprogramming barrier in <i>C. elegans</i> and human cells <i>Baris Tursun</i> , Max Delbrück Center for Molecular Medicine (MDC), Berlin
15:05 – 15:20	T03 – A novel molecular mechanism of cell-fusion mediated reprogramming <i>Karthik Arumugam</i> , Centre for Genomic Regulation (CRG), Barcelona, Spain
15:20 – 15:35	T04 – Directing cell fates with artificially evolved transcription factors <i>Ralf Jauch</i> , Guangzhou Institutes of Biomedicine and Health, China
15:35 – 16:20	Somatic stem cells and development
15:35 – 15:50	T05 – Single-cell RNA sequencing reveals aging-induced quiescence in neural stem cells of the subventricular zone <i>Georgios Kalamakis</i> , German Cancer Research Center (DKFZ), Heidelberg

- 15:50 – 16:05 T06 – Vitamin A in stem cell aging
Simon Schwörer, Leibniz Institute on Aging / Fritz Lipmann Institute (FLI), Jena
- 16:05 – 16:20 T07/P – Regulation of epidermal stem cells by flightless I protein during wound repair
Nanxing Yang, University of South Australia, Adelaide
- 16:30 – 16:45 **Scientific working group discussions I**
- Lecture hall 2** Pluripotency and reprogramming
- Lecture hall 5** Somatic stem cells and development
- 16:30 – 18:00 **Coffee break / Industry exhibition**
- Lecture hall 3**
- 17:00 – 18:00 **GSCN General membership meeting**
- 18:00 – 20:00 **Poster session I** supported by Thermo Fisher Scientific
Stem cells in regenerative therapies (P001 – P028)
Stem cells in disease modeling and drug development (P029 – P068)
Even numbers: please present your poster from 18:00 – 19:00
Odd numbers: 19:00 – 20:00
- 20:00 – 21:30 **Informal GSCN get together for all participants**
with dinner buffet at the Mensa Ernst-Abbe-Platz

TUESDAY, 12 SEPTEMBER

- Lecture hall 2** **Scientific working group session II**
(Chairs: *Andreas Trumpp / Claudia Waskow*)
- 09:00 – 09:20 T08 – Learning hematopoietic stem cell dynamics from fate mapping
Thomas Höfer, German Cancer Research Center (DKFZ), Heidelberg
- 09:20 – 09:50 **Hematopoietic stem cells**
- 09:20 – 09:35 T09 – Human haematopoietic stem cell differentiation follows a continuous Waddington-like landscape
Simon Haas, German Cancer Research Center (DKFZ) / HI-STEM, Heidelberg
- 09:35 – 09:50 T10 – Paraoxonase-2 and its effects on hematopoietic stem cell proliferation and differentiation
Lisa Spiecker, University Medical Center of the Johannes Gutenberg-University Mainz
- 09:50 – 10:20 **Computational stem cell biology**
- 09:50 – 10:05 T11 – A computational systems biology approach to identify niche determinants of stem cell identity
Srikanth Ravichandran, University of Luxembourg
- 10:05 – 10:20 T12 – Adult neural stem cells increase the rate of asymmetric divisions during aging
Lisa Bast, TU Munich, Helmholtz Zentrum Munich

10:20 – 10:50	Stem cells in disease: cancer stem cells
10:20 – 10:35	T13 – Myeloid leukemia stem cells depend on phospholipase C gamma 1 (Plcg1) signaling <i>Tina Schnöder</i> , University Hospital & Leibniz Institute on Aging, Jena
10:35 – 10:50	T14 – C/EBP β -LIP regulates the let-7/Lin28 circuit to control cellular metabolism <i>Tobias Ackermann</i> , European Research Institute for the Biology of Ageing (ERIBA), Groningen, The Netherlands
11:00 – 11:15	Scientific working group discussions II
Lecture hall 2	Hematopoietic stem cells
Lecture hall 3	Computational stem cell biology
Lecture hall 5	Stem cells in disease: cancer stem cells
11:00 – 11:30	Coffee break / Industry exhibition
11:30 – 13:00	Industry session: "Technologies from GSCN industry partners"
Lecture hall 2	Main supporter (Chair: <i>Jan Lohmann</i>)
11:30 – 12:00	C1 – Tissue engineering of primary human in vitro models – influence of mechanical and biochemical stimulation on tissue functionality <i>Antje Appelt-Menzel</i> , University Hospital & Fraunhofer IGB Würzburg, representing PeproTech GmbH
12:00 – 12:30	C2 – Evolving media systems for modern stem cell applications <i>David Kuninger</i> , Thermo Fisher Scientific
12:30 – 13:00	C3 – Current challenges in stem cell production for regenerative medicine and drug development <i>Christof Knocke</i> , Eppendorf AG
Lecture hall 3	Supporter (Chair: <i>Benedikt Berninger</i>)
11:30 – 12:00	C4 – Novel technologies for the cultivation and quality control of iPSCs and their derivatives <i>Sebastian Knöbel</i> , Miltenyi Biotec GmbH
12:00 – 12:30	C5 – A novel maintenance medium extends the life-span and enables long term applications for both human primary hepatocytes and human pluripotent stem cell derived hepatocytes in conventional 2D cultures <i>Barbara Küppers-Munther</i> , Takara Bio Europe, SAS
12:30 – 13:00	C6 – Novel serum-free, xeno-free vitronectin-based culture system for hPSC <i>Suzanne Badoux</i> , Biological Industries
Lecture hall 5	Supporter (Chair: <i>Insa Schröder</i>)
11:30 – 12:00	C7 – Avoid irrelevant, non-reproducible data – the neglected variable: physiologic oxygen <i>Paul Michaels</i> , BioSpherix, Ltd.
12:00 – 12:30	C8 – Systems and solutions for culture and scale up of human pluripotent stem cells <i>Florent Bornes</i> , Corning B.V. Life Sciences

- 12:30 – 13:00 C9 – Highly efficient single-cell human pluripotent stem cell cloning and robust cardiomyocyte differentiation
Katharina Debowski, STEMCELL Technologies GmbH
- 13:00 – 14:30 Lunch break / Industry exhibition / Poster viewing supported by STEMCELL Technologies GmbH
- 13:15 – 14:15 **Meet-the-expert tables**
(in the 1st floor, please register at registration desk, limited to 10 participants)
- Seminar room 121** *Thomas Höfer*, DKFZ Heidelberg (Bioinformatic tools in stem cell research)
- Seminar room 122** *Thomas Braun*, MPI Bad Nauheim (Stem cell approaches in heart and lung development)
- Seminar room 131** *Claudia Waskow*, TU Dresden (Hematopoietic stem cells)
- Lecture hall 2** **Presidential Symposium**
(Chair: *Ulrich Martin*)
- 14:30 – 15:15 PS1 – Cerebral organoids: modelling human brain development and tumorigenesis in stem cell derived 3D culture
Jürgen Knoblich, IMBA, Vienna, Austria
- 15:15 – 15:45 **Female Scientist Award 2017**
PS2 – Unraveling the cellular and molecular basis of limb regeneration
Elly Tanaka, Institute of Molecular Pathology (IMP), Vienna, Austria / Technical University Dresden
- 15:45 – 16:15 **Young Investigator Award 2017**
PS3 – DNA methylation and demethylation dynamics in stem cells
Francesco Neri, Leibniz Institute on Aging – Fritz Lipmann Institute (FLI), Jena
- 16:15 – 16:45 **Publication of the Year 2017 Award**
PS4 – Multilineage communication regulates human liver bud development from pluripotency
J. Gray Camp, Max Planck Institute for Evolutionary Anthropology, Leipzig
- 16:45 – 17:00 Industry exhibition
- 17:00 – 19:00 **Poster session II** supported by Miltenyi Biotech GmbH
Stem cells in diseases: cancer stem cells (P069 – P076)
Computational stem cell biology and systems biology (P077 – P084)
Somatic stem cells and development (P085 – P103)
Pluripotency and reprogramming (P104 – P124)
Hematopoietic stem cells (P125 – P142)
Even numbers: please present your poster from 17:00 – 18:00
Odd numbers: 18:00 – 19:00
- 19:30 – 01:00 **GSCN networking evening for all participants**
with dinner buffet and DJ at the Volksbad

WEDNESDAY, 13 SEPTEMBER

Lecture hall 2	Scientific working group session III (Chairs: <i>Bert Klebl, Richard Schäfer</i>)	supported by Takara Bio Europe, SAS
09:00 – 09:20	T15 – Stem cell based assays as the next generation phenotypic drug screens <i>Bert Klebl, Lead Discovery Center (LDC), Dortmund</i>	
09:20 – 10:05	Stem cells in regenerative therapies	
09:20 – 09:35	T16 – Human iPSC-derived phagocytes as a cellular therapeutic to treat bacterial infections <i>Nico Lachmann, REBIRTH / Hannover Medical School (MHH)</i>	
09:35 – 09:50	T17 – HMGB1 accelerates regeneration of multiple tissues by transitioning stem cells to G(Alert) <i>Ana Isabel Espirito Santo, University of Oxford, UK</i>	
09:50 – 10:05	T18 – Metabolic targeting by mesenchymal stem cells in a mouse model of diet-induced NASH <i>Bruno Christ, University Hospital Leipzig</i>	
10:05 – 10:50	Stem cells in disease modeling and drug development	
10:05 – 10:20	T19 – Genetically encoded calcium indicators for drug screening in human engineered heart tissues <i>Umer Saleem, University Medical Center Hamburg-Eppendorf (UKE)</i>	
10:20 – 10:35	T20 – Establishment of murine 3D bronchoalveolar lung organoids from adult somatic stem cells for organ development and disease modeling <i>Ana Ivonne Vazquez Armendariz, Universities Giessen & Marburg Lung Center (UGMLC)</i>	
10:35 – 10:50	T21 – A xenotransplantation approach using human pluripotent stem cell-derived pancreatic organoids <i>Meike Hohwieler, University Medical Center Ulm</i>	
11:00 – 11:15	Scientific working group discussions III	
Lecture hall 2	Stem cells in regenerative therapies	
Lecture hall 5	Stem cells in disease modeling and drug development	
11:00 – 11:30	Coffee break / Industry exhibition	
11:30 – 13:00	Concurrent strategic working group session	
Lecture hall 2	Career development (Chairs: <i>Hartmut Geiger, Insa Schröder</i>)	
11:30 – 12:15	S1 – Options and opportunities for scientists in science communication <i>Tobias Maier, National Institute for Science Communication (NaWik), Karlsruhe</i>	
12:15 – 13:00	S2 – Tips and tools for efficient science communication in the public and private sector <i>Stefanie Seltmann, Pfizer Deutschland GmbH, Berlin</i>	
Lecture hall 3	Technologies in stem cell research (Chairs: <i>Andreas Bosio, Michael Cross</i>)	
11:30 – 12:00	S3 – Reconstructing human neurogenesis using single-cell transcriptomics <i>Barbara Treutlein, Max Planck Institute for Evolutionary Anthropology, Leipzig</i>	

- 12:00 – 12:30 S4 – Multimodal single cell genomics
Sascha Sauer, Max Delbrück Center Berlin
- 12:30 – 13:00 S5 – tba
tbd
- Lecture hall 5** **Clinical trials and regulatory affairs**
(Chairs: *Zoltan Ivics*, *Ralf Sanzenbacher*, *Torsten Tonn*)
- 11:30 – 12:00 S6 – Development of (stem) cell-based medicinal products: Regulatory aspects
Ralf Sanzenbacher, Paul Ehrlich Institute, Langen
- 12:00 – 12:30 S7 – Development of (stem) cell-based medicinal products: Turning research into GMP
Martin Hildebrandt, TUMCells Interdisciplinary Center for Cellular Therapies, Munich
- 12:30 – 13:00 S8 – Development of (stem) cell-based medicinal products: Clinical considerations for cell-based therapies
Mohamed Abou-El-Enein, Berlin-Brandenburg Center for Regenerative Therapies (BCRT)
- 13:00 – 14:30 **Lunch break / Industry exhibition / Poster viewing**
- 13:15 – 14:15 **Meet-the-expert tables**
(in the 1st floor, please register at registration desk, limited to 10 participants)
- Seminar room 121** *Ralf Sanzenbacher*, PEI, Langen (ATMPs and GMP)
- Seminar room 122** *Andreas Bosio*, Miltenyi, Bergisch Gladbach (Technologies and private sector)
- Seminar room 131** *Bert Klebl*, LDC, Dortmund (Disease modeling and translation)
- Lecture hall 2** **Joined session with FLI**
- 14:30 – 15:15 **Keynote lecture III**
K3 – Deconstructing pancreatic development and disease with human pluripotent stem cells
Maike Sander, University of San Diego, California, USA
(Chair: *Julia v. Maltzahn*)
- 15:15 – 15:30 FLI01 – Maintenance of Jak-inhibitor treated MPN depends on cold shock protein Ybx1
Florian Heidel, University Hospital Jena
- 15:30 – 16:15 **Keynote lecture IV**
K4 – DNA methylation: from stem cell differentiation to chromatin organisation
Margaret Goodell, Baylor College of Medicine, Texas, USA
(Chair: *Claudia Waskow*)
- 16:15 – 16:30 FLI02 – Functional relevance of Klotho for maintenance and regeneration of skeletal muscle
Julia v. Maltzahn, Leibniz Institute on Aging / Fritz Lipmann Institute (FLI), Jena
- Lecture hall 2** **Closing ceremony**
- 16:30 – 16:45 Poster award ceremony and announcement of industry quiz winners
Daniel Besser, GSCN
- 16:45 – 17:00 **GSCN Outlook 2018**
Daniel Besser, GSCN