

EMBO
Workshop

The endoplasmic reticulum – Guardian of cellular homeostasis

20 – 25 October 2024 | Barga, Italy

Meeting Program



<https://meetings.embo.org/event/24-er>



EMBO
reports

 EMBOpress

Venue

Renaissance Tuscany Il Ciocco Resort & Spa
Via Giovanni Pascoli
Castelvevchio Pascoli
Braga Lucca 5051, Italy

WiFi information

Network: EMBO 2024

Password: WelcomeBackEMBO24

Registration, Travel and Hospitality Desk

Diesenhaus -Unitours will operate the registration, travel, and hospitality desk throughout the meeting, as follows:

Sunday: 13:00-18:30 (main lobby) Monday-Thursday from 09:00 during session hours

Information for speakers

Speakers are required to meet the chairperson 10 -15 minutes prior to their session, in the conference room. It is important that the timetable be strictly adhered to. Do not depart from the announced times.

Information for poster presenters

Posters will be presented in 2 sessions as follows (see pages 13-16):

Poster Session I - P1-P52, Monday, 21 October 2024, 14:30 -16:30 + 20:30-22:30

Mount posters on Monday morning and remove by the end of the evening session.

Poster Session II - P1-P52, Tuesday 22 October 2024, 14:30 -16:30 + 20:30-22:30

Mount posters on Tuesday morning and remove by the end of the evening session.

Social Event: Guided bus tour to Pisa (optional) Upon arrival in Pisa, the guided tour will walk to Piazza dei Miracoli, the famous square of the leaning tower where guests will be introduced to all the monuments of the Piazza dei Miracoli including the Duomo, the Baptistery and the Cemetery. Following this, we will walk to the Piazza dei Cavalieri, another historic and famous square in Pisa. There will be plenty of time for pictures before returning back to the coach. The tour lasts around 2 - 2.5 hrs.

Departure: Wednesday, 23 October 2024, 13:00 from the hotel lobby

Price: €30 / person



Leaning Tower of Pisa

Conference Secretariat and Official Travel Agent



Diesenhaus-Unitours Travel Agency
Conventions Department
3, Hamelacha St
Tel Aviv, Israel
Tel: +972 733 945279
WhatsApp Messages & Calls: +972-52-2719794 (Orit Gilad)
E-mail: oritg@diesenhaus.com

Sponsors



Organizers

John Christianson (University of Oxford, UK)
Matthias Feige (TU Munich, DE)
Shirin Bahmanyar (Yale University)
Robert Ernst (Saarland University)

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<u>Sunday, 20 October 2024</u>	
13:00 - 18:30	Registration
18:30 - 19:30	Dinner Restaurant - La Veranda
19:45 - 20:00	OPENING Conference Room - Salone Pascoli
20:00 - 21:00	Keynote Lecture Conference Room - Salone Pascoli Chair/s: John Christianson
20:00 -21:00	Sun--Oral presentation-01 UFMylation and ER homeostasis <i>Ron Kopito, Stanford University</i>
<u>Monday, 21 October 2024</u>	
09:00 - 10:45	Session 1: ER protein targeting and translocation Conference Room - Salone Pascoli Chair/s: Manu Hegde
09:00 - 09:20	Mon--Oral presentation-01 Visualization of protein biogenesis at the ER membrane <i>Friedrich Forster, Utrecht University</i>
09:25 - 09:45	Mon--Oral presentation-02 Regulation of ER homeostasis by UFMylation <i>Yogesh Kulathu, University of Dundee</i>
09:50 - 10:00	Mon--Oral presentation (short)-03 Unraveling the role and mechanism of an EMC-ATPase super-complex in membrane protein targeting and insertion <i>Carolin J Klose, TU Munich</i>
10:05 - 10:25	Mon--Oral presentation-04 NEMF-mediated CAT-tailing defines distinct branches of translocation-associated quality control <i>Yihong Ye, NIDDK</i>

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10:30 - 10:40	<p>Mon--Oral presentation (short)-05</p> <p>Maintenance of organelle protein homeostasis by membrane proteases and pseudoproteases</p> <p><i>Marius K. Lemberg, CECAD, University of Cologne</i></p>
10:45 - 11:10	<p>Coffee break:Terrace</p>
11:15 - 13:00	<p>Session 2: ER protein biogenesis and quality control</p> <p>Conference Room - Salone Pascoli Chair/s: Melissa Hoyer</p>
11:15 - 11:35	<p>Mon--Oral presentation-01</p> <p>Building a functional atlas of homologous ER membrane machineries through advanced interaction mapping</p> <p><i>Emma Fenech, Weizmann Institute of Science</i></p>
11:40 - 11:50	<p>Mon--Oral presentation (short)-02</p> <p>ERp44 affects Collagen folding and deposition</p> <p><i>Tiziana Anelli, IRCCS Ospedale San Raffaele</i></p>
11:55 - 12:15	<p>Mon--Oral presentation-03</p> <p>Structural basis of tail-anchor protein biogenesis</p> <p><i>Irmgard Sinning, Heidelberg University</i></p>
12:20 - 12:30	<p>Mon--Oral presentation (short)-04</p> <p>A cellular machinery required for GPI-anchor synthesis drives O-mannosylation of misfolded proteins for ERAD</p> <p><i>Veit Goder, University of Seville</i></p>
12:35 - 12:55	<p>Mon--Oral presentation-05</p> <p>Insertion and assembly of multipass membrane proteins</p> <p><i>Manu Hegde, MRC Laboratory of Molecular Biology</i></p>
13:00 - 14:00	<p>Lunch</p> <p>Restaurant - La Veranda</p>
14:30 - 16:30	<p>Poster Session 1</p> <p>Conference Room - Salone Pascoli</p>
17:00 - 18:45	<p>Session 3: ER protein quality control and degradation, part I</p> <p>Conference Room - Salone Pascoli Chair/s: Marius Lemberg</p>

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17:00 - 17:20	<p>Mon--Oral presentation-01</p> <p>Proteostasis and zinc homeostasis at the ER-Golgi interface</p> <p><i>Kenji Inaba, Kyushu University</i></p>
17:25 - 17:45	<p>Mon--Oral presentation-02</p> <p>Regulation of MHC-I surface expression by the RNF185/Membralin ERAD complex</p> <p><i>Pedro Carvalho, University of Oxford</i></p>
17:50 - 18:00	<p>Mon--Oral presentation (short)-03</p> <p>Fbxo42 promotes the degradation of ataxin-2 to trigger terminal Xbp1 signaling</p> <p><i>Pedro Domingos, ITQB-NOVA</i></p>
18:05 - 18:25	<p>Mon--Oral presentation-04</p> <p>Revealing the substrate recognition mechanism of ERAD-C ubiquitin ligase Doa10</p> <p><i>Eunyong Park, University of California, Berkeley</i></p>
18:30 - 18:40	<p>Mon--Oral presentation (short)-05</p> <p>To be or not to be an ISR kinase inhibitor: bidirectional kinase regulation by ATP-competitive compounds</p> <p><i>Maria Szaruga-Bracke, MRC Laboratory for Molecular Biology</i></p>
18:45 - 19:45	<p>Dinner</p> <p>Restaurant - La Veranda</p>
20:30 - 22:30	<p>Poster Session 1</p> <p>Conference Room - Salone Pascoli</p>
<p><u>Tuesday, 22 October 2024</u></p>	
09:00 - 10:45	<p>Session 4: ER protein quality control and degradation, part II</p> <p>Conference Room - Salone Pascoli</p> <p>Chair/s: Paolo Grumati</p>
09:00 - 09:20	<p>Tue--Oral presentation-01</p> <p>Unveiling the Mysteries of ER-Associated Degradation: One Mouse and Human at a Time</p> <p><i>Ling Qi, University of Virginia</i></p>

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09:25 - 09:45	<p>Tue--Oral presentation-02 Understanding and exploiting the specificity of protein quality control at the ER <i>Ryan Baldrige, University of Michigan</i></p>
09:50 - 10:00	<p>Tue--Oral presentation (short)-03 Fam134c and Fam134b shape axonal endoplasmic reticulum architecture in vivo <i>Francescopaolo Iavarone, TIGEM</i></p>
10:05 - 10:25	<p>Tue--Oral presentation-04 Combinatorial selective ER-phagy remodels the ER during neurogenesis <i>Melissa Hoyer, Van Andel Research Institute</i></p>
10:30 - 10:40	<p>Tue--Oral presentation (short)-05 A genome wide CRISPR/Cas9 screen identifies Calreticulin as a selective repressor of ATF6α <i>Adriana Ordóñez, CIMR, University of Cambridge</i></p>
10:45 - 11:10	<p>Coffee break: Terrace</p>
11:15 - 13:00	<p>Session 5: ER stress and disease Conference Room - Salone Pascoli Chair/s: Ling Qi</p>
11:15 - 11:35	<p>Tue--Oral presentation-01 Unique mechanisms for sensing protein folding stress in the endoplasmic reticulum <i>Elif Karagöz, Max Perutz Laboratories</i></p>
11:40 - 11:50	<p>Tue--Oral presentation (short)-02 The ER stress sensor IRE1 regulates collagen secretion through the enforcement of the proteostasis factor P4HB/PDIA1 contributing to liver damage and fibrosis <i>Claudio Hetz, University of Chile</i></p>
11:55 - 12:15	<p>Tue--Oral presentation-03 The Unfolded Protein Response and the regulation of conventional protein secretion <i>Eric Chevet, INSERM, University of Rennes</i></p>

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12:20 - 12:30	<p>Tue--Oral presentation (short)-04 Rapireon, a new macrocycle molecular glue that selectively activates the IRE1 branch of the ER unfolded protein response <i>Ville Paavilainen, University of Helsinki</i></p>
12:35 - 12:55	<p>Tue--Oral presentation-05 ER-Associated RNA Silencing (ERAS): A Novel Pathway for ER-Quality Control <i>Thorsten Hoppe, CECAD, University of Cologne</i></p>
13:00 - 14:00	<p>Lunch Restaurant - La Veranda</p>
14:30 - 16:30	<p>Poster Session 2 Conference Room - Salone Pascoli</p>
17:00 - 18:45	<p>Session 6: Manipulating ER lipids and lipid flux Conference Room - Salone Pascoli Chair/s: Maria Bohnert</p>
17:00 - 17:20	<p>Tue--Oral presentation-01 Identification of a specific inhibitor of Scap, the ER cholesterol sensor, that blocks cellular lipid synthesis <i>Arun Radhakrishnan, UT Southwestern</i></p>
17:25 - 17:45	<p>Tue--Oral presentation-02 Shaping the Endoplasmic Reticulum With Photoswitchable Lipids <i>Dirk Trauner, University of Pennsylvania</i></p>
17:50 - 18:00	<p>Tue--Oral presentation (short)-03 Lipid scrambling is a general feature of protein insertases <i>Stefano Vanni, University of Fribourg</i></p>
18:05 - 18:25	<p>Tue--Oral presentation-04 Sphingomyelin transbilayer dynamics in membrane repair and osteogenesis <i>Joost Holthuis, Osnabrück University</i></p>
18:30 - 18:40	<p>Tue--Oral presentation (short)-05 Reconstruction of lipid droplet nucleation events <i>Jennica Träger, l'École Normale Supérieure</i></p>
18:45 - 19:45	<p>Dinner Restaurant - La Veranda</p>

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20:30 - 22:30	Poster Session 2 Conference Room - Salone Pascoli
<u>Wednesday, 23 October 2024</u>	
09:00 - 10:45	Session 7: Lipids and organelle organization part I Conference Room - Salone Pascoli Chair/s: James Olzmann
09:00 - 09:20	Wed--Oral presentation-01 The Lipid Droplet Organization (LDO) machinery – a multi-functional player in organelle communication <i>Maria Bohnert, University of Münster</i>
09:25 - 09:45	Wed--Oral presentation-02 Exploiting divergent biology of two fission yeasts to understand membrane function <i>Snezhana Oliferenko, King's College London The Francis Crick Institute</i>
09:50 - 10:00	Wed--Oral presentation (short)-03 Deciphering Endoplasmic Reticulum Functions in Organelle Distribution and Genomic Stability During Mitosis <i>Nuria Ferrandiz, University of Salamanca</i>
10:05 - 10:25	Wed--Oral presentation-04 Lateral compartmentalization of the ER-membrane: Role and mechanisms <i>Yves Barral, ETH Zürich</i>
10:30 - 10:40	Wed--Oral presentation (short)-05 ER-mediated cross-compartmental interplay in mitotic progression and catastrophe <i>Ilana Berlin, Leiden University</i>
10:45 - 11:10	Coffee break: Terrace
11:15 - 13:00	Session 8: Lipids and organelle organization part II Conference Room - Salone Pascoli Chair/s: Joost Holthuis
11:15 - 11:35	Wed--Oral presentation-01 Mechanisms of ER neutral lipid flux: Hepatic lipid storage and secretion <i>James Olzmann, University of California, Berkeley</i>

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11:40 - 11:50	<p>Wed--Oral presentation (short)-02</p> <p>Dysregulation of IRE1-Mediated Responses in Aged Cells Subjected to Lipid Bilayer Stress</p> <p><i>Guillaume Thibault, Nanyang Technological University</i></p>
11:55 - 12:15	<p>Wed--Oral presentation-03</p> <p>Cholesterol esterification in ER subdomains</p> <p><i>Elina Ikonen, University of Helsinki</i></p>
12:20 - 12:30	<p>Wed--Oral presentation (short)-04</p> <p>The endoplasmic reticulum connects to the nucleus by constricted junctions that mature after mitosis</p> <p><i>Helena Bragulat-Teixidor, Max Perutz Labs, University of Vienna</i></p>
12:35 - 12:55	<p>Wed--Oral presentation-05</p> <p>Harnessing the mevalonate pathway by modulating HMG-CoA synthase1</p> <p><i>Heeseon An, Memorial Sloan Kettering Cancer Center</i></p>
13:00 - 14:00	<p>Lunch</p> <p>Restaurant - La Veranda</p>
13:00 - 18:00	<p>Activity - Outing to Pisa (DEPART 1PM, packed lunch)</p> <p>Pisa Outing - Coach Bus</p>
18:15 - 19:15	<p>Dinner</p> <p>Restaurant - La Veranda</p>
19:20 - 21:05	<p>Session 9: ER contacts</p> <p>Conference Room - Salone Pascoli</p> <p>Chair/s: Francesca Bottanelli</p>
19:20 - 19:40	<p>Wed--Oral presentation-01</p> <p>Bridge-like lipid transport proteins: facts and open questions</p> <p><i>Pietro De Camilli, HHMI and Yale University</i></p>
19:45 - 20:05	<p>Wed--Oral presentation-02</p> <p>A Journey on the Interorganelle Lipid Transportation Network</p> <p><i>Benoît Kornmann, University of Oxford</i></p>
20:10 - 20:20	<p>Wed--Oral presentation (short)-03</p> <p>Ca²⁺-mediated ER-mitochondria crosstalk during plasma membrane damage-dependent senescence</p> <p><i>Kojiro Suda, Okinawa Institute of Science and Technology</i></p>

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20:25 - 20:45	<p>Wed--Oral presentation-04 The molecular architecture of membrane contact sites <i>Wanda Kukulski, University of Bern</i></p>
20:50 -21:00	<p>Wed--Oral presentation (short)-05 Remodeling of ER and Mitochondria Contact Sites via selective autophagy <i>Adriana Covarrubias-Pinto, Goethe University Frankfurt</i></p>
<h3><u>Thursday, 24 October 2024</u></h3>	
09:00 - 10:45	<p>Session 10: ER in high resolution Conference Room - Salone Pascoli Chair/s: Pietro De Camilli</p>
09:00 - 09:20	<p>Thu--Oral presentation-01 New super-resolution microscopy techniques to interrogate the organization of the ER <i>Joerg Bewersdorf, Yale University</i></p>
09:25 - 09:45	<p>Thu--Oral presentation-02 Integrating dynamic and cryogenic imaging technologies to map the endoplasmic reticulum membrane <i>Christopher Obara, UC San Diego</i></p>
09:50 - 10:00	<p>Thu--Oral presentation (short)-03 ER ultrastructure defines luminal transport and calcium supply to organelles <i>Cecile Crapart, University of Cambridge</i></p>
10:05 - 10:25	<p>Thu--Oral presentation-04 Exploring the mechanisms of ER-Golgi transport with live-cell STED nanoscopy <i>Francesca Bottanelli, Freie Universitat Berlin</i></p>
10:30 - 10:40	<p>Thu--Oral presentation (short)-05 The nanoscale architecture of ER-LD contact sites suggests a pressure-gated mechanism to control LD growth <i>Veijo T Salo, EMBL, Heidelberg</i></p>
10:45 - 11:10	<p>Coffee break: Terrace</p>
11:15 - 13:00	<p>Session 11: ER domains Conference Room - Salone Pascoli Chair/s: Smita Yadav</p>

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11:15 - 11:35	<p>Thu--Oral presentation-01 Organization of heterochromatin by membrane proteins of the nuclear envelope <i>Ulrike Kutay, ETH Zurich</i></p>
11:40 - 11:50	<p>Thu--Oral presentation (short)-02 Investigating the role of the Endoplasmic Reticulum regulating focal adhesion dynamics in mechanosensing. <i>Jonathan Townson, University of Oslo</i></p>
11:55 - 12:15	<p>Thu--Oral presentation-03 Nomo1 is a force-bearing protein sustaining ER morphology <i>Christian Schlieker, Yale University</i></p>
12:20 - 12:30	<p>Thu--Oral presentation (short)-04 The role of endoplasmic reticulum in synaptic individualization <i>Leena-Stiina Kontturi, HiLIFE, University of Helsinki</i></p>
12:35 - 12:55	<p>Thu--Oral presentation-05 The small GTPase Arf1, the endoplasmic reticulum and the regulation of metabolism <i>Anne Spang, Biozentrum, University of Basel</i></p>
13:00 - 14:00	<p>Lunch Restaurant - La Veranda</p>
14:00 - 15:30	<p>Mentoring Session Conference Room - Salone Pascoli</p>
17:30 - 18:00	<p>Business Meeting Conference Room - Salone Pascoli</p>
18:00 - 19:00	<p>Keynote Lecture Conference Room - Salone Pascoli Chair/s: Matthias Feige</p>
18:00	<p>Thu--Oral presentation-01 The complex structure and function of the tubular ER <i>Gia Voeltz, HHMI and University of Colorado, Boulder</i></p>
19:00 - 19:15	<p>Closing Notes Room: Conference Room - Salone Pascoli</p>
19:30 - 23:45	<p>Banquet/Party Room: Restaurant - La Veranda</p>

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Friday, 25 October 2024

06:00 - 11:00

Departure

POSTER SESSSION I

MONDAY, October 21st, 2024

14:30-16:30 & 20:30-22:00

Board number

P1	Alsayyah	Cynthia
P2	Archambeau	Jérôme
P3	Babursah	Ela
P4	Bantug	Glenn Robert
P5	Benitez-Ramirez	Fatima E.
P6	Bregu	Gresy
P7	Cavieres	Viviana A.
P8	Coelho	João
P9	Da Graça	Juliane
P10	Dai	Anbang
P11	Dezi	Manuela
P12	El Mossadeq	Layla
P13	Fabre	Lucien
P14	Gaeta	Giorgia
P15	Grimanelli	Zoé
P16	Gupta	Swarnima
P17	Ji	Zhe
P18	Kamińska	Joanna
P19	Kasberg	William
P20	Korn	Friederike
P21	Kroschewski	Ruth
P22	Lajoie	Patrick
P23	Lee	Jason
P24	Li	Wenjing
P25	Maduka	Austin
P26	Mehra	Chahat
P27	Naughton	Brigitte
P28	Neve	Ashish
P29	Nir	Saar
P30	O'Kane	Cahir
P31	Oehlert	Franziska Valentina
P32	Palazzo	Federica Cecilia
P33	Panda	Bapin Kumar

P34	Pearson	Guy
P35	Platzek	Anna
P36	Prokisch	Simon
P37	Ren	Kaike
P38	Riobó	Isidora
P39	Rudinskiy	Mikhail
P40	Sabari	Samudra
P41	Santalla	Manuela
P42	Scholz	Julia
P43	Steigleder	Susanne S.
P44	Sugisawa	Ami
P46	Veldsink	Annemiek C
P47	Venditti	Rossella
P48	Wu	Haoxi
P49	Yadav	Smita
P50	Yang	Tzu-Jing
P51	Yang	Yutong
P52	Yang / Gao	Shaobo / Bo

POSTER SESSSION II

TUESDAY, October 22nd, 2024

14:30-16:30 & 20:30-22:00

Board number

P1	Amodio	Giuseppina
P2	Avci	Dönem
P3	Bailey	Andrew
P4	Becuwe	Michel
P5	Block	Emma
P6	Cannata Serio	Magda
P7	Cillo	Michele
P8	Cook	Katelyn
P9	Dahlberg	Lina
P10	Dalla Torre	Marco
P11	Eisenack	Tom Joshua
P12	Eyyuboglu	Tayfun Hazar
P13	Fossati	Matteo
P14	Garg	Lovleen
P15	Grumati	Paolo
P16	Hirschberg	Koret
P17	Kaether	Christoph
P18	Kanemura	Shingo
P19	Khroud	Prabhsimran
P20	Kors	Suzan
P21	Kuramochi	Tsubura
P22	Heidary Arash	Emad
P23	Lévy	Daniel
P24	Liu	Xiaotian
P25	Mansuri	Shabnam
P26	Montes	Iris
P27	Naumann	Christin
P28	Newstead	Simon
P29	Nüchel	Julian
P30	Odehnalova	Klara
P31	Okumura	Masaki
P32	Palmiero	Jonathan
P33	Paulmann	Max

P34	Pierre	Arvin
P35	Pons-Lanau	Roger
P36	Rea	Antonio
P37	Ricciardi	Simona
P38	Rowe	Katherine
P39	Saad	Haddas
P40	Saulle	Irma
P41	Schaeffer	Céline
P42	Simmen	Thomas
P43	Steilberg / Plug	Simone / Martijn
P44	Sun	Shengyi
P45	Tran	Ngoc Han
P46	Ushioda	Ryo
P47	von der Malsburg	Alexander
P48	Wu	Jianping
P49	Yamsek	Melvin
P50	Yang	Neil Victor
P51	Yang	Chian
P52	Ye	Zhi