



28-31 October 2024
Reims, France



12th European
Elastin Meeting

Program

Monday 28 th	12:00	Registration opened
		Opening
	Chairs	Antonietta PEPE (Potenza, Italy) Manuel DAUCHEZ (Reims, France)
	14:00-14:10	Opening words Laurent DEBELLE, chair (Reims, France)
	14:10-15:00	Opening lecture Bob MECHAM (Saint Louis, MO, USA) <i>Paradigm or paradox: What (we think) we know about elastin.</i>
	15:00-15:30	Coffee break
		Young Investigators
	Chairs :	C. Sofia SALAZAR SILVA (Halle, Germany) Manon RAGOUILLIAUX (Reims, France)
Senior researchers are welcome.		
	15:30-15:50	Roman KRYMCHENKO (Nijmegen, The Netherlands) <i>Effects of solubilized elastin preparations on in vitro wound healing parameters</i>
	15:50-16:10	C. Sofia SALAZAR SILVA (Halle, Germany) <i>Investigating the regulation of elastogenesis by studying gene expression and crosslinking in an in vitro model system</i>
	16:10-16:30	Manon RAGOUILLIAUX (Reims, France) <i>Domain 36 of tropoelastin interacts with model membranes</i>
	16:30-16:50	Nawara OSMAN (Montréal, Canada) <i>Understanding the vascular pathophysiology caused by the dominant C19F mutation in matrix Gla protein</i>
	16:50-17:10	Camille DEPENVEILLER (Paris, France) <i>Deciphering the dynamic behavior of elastin polypeptides through mesoscopic simulations</i>
	17:10-17:30	Cassie PARKS (Baltimore, USA) <i>Pathogenic variation in fibrillin-2 confers susceptibility to spontaneous cerebrospinal fluid leaks through impairment of cellular adhesion</i>

Tuesday 29th

Fundamental research

- Chairs Stéphanie BAUD (Reims, France)
Christian SCHMELZER (Halle, Germany)
- 08:30-09:10 Plenary lecture
Sylvie RICARD-BLUM (Lyon, France)
Structure and interactions of the cross-linking enzyme lysyl oxidase and its propeptide
- 09:10-09:30 Featured communication
Régis POMÈS (Toronto, Canada)
Uncovering the structural and physical basis for the mechanical properties of elastin
- 09:30-09:50 Featured communication
Richard WITTEBORT (Louisville, USA)
Elastin Recoil Is Driven by the Hydrophobic Effect
- 10:00-10:20 Coffee break
- 10:20-10:40 Oral communication
Uliana BASHTANOVA (Cambridge, UK)
Investigation of elastin structure and dynamics by solid state NMR in native hydrated extracellular matrix
- 10:40-11:00 Oral communication
Pascal MAURICE (Reims, France)
Identification of C5aR as a new interaction partner of membrane sialidase NEU1: potential implication of the elastin receptor complex in the regulation of the complement system
- 11:00-11:20 Oral communication
Steffen LÜTKE (Cologne, Germany)
Characterization of new functional interactions of hemicentins within the elastin/ fibrillin microfibril network
- 11:20-11:40 Oral communication
Alexis DAVID (Tours, France)
New selective inhibition mechanism of cathepsin S elastolytic activity by exopolysaccharides from marine bacteria
- 11:40-12:00 Oral communication
Sean REICHHELD (Toronto, Canada)
An experimentally determined conformational ensemble reveals atomic-level details of structure and disorder in tropoelastin
- 12:00-13:15 Lunch
- 13:15-14:30 Poster session

Elastogenesis and diseases

- Chairs Beth KOZEL (Columbus, OH, USA)
Gerhard SENGLER (Cologne, Germany)
- 14:30-15:10 Plenary lecture
Dieter REINHARDT (Montréal, Canada)
Molecular mechanisms of accessory elastogenic proteins
- 15:10-15:30 Featured communication
Gilles FAURY (Grenoble, France)
Pharmacotherapeutic strategies to prevent or cure elastic fiber damages and improve arterial elasticity
- 15:30-15:50 Featured communication
Gert WENSVOORT (Koekange, The Netherlands)
Human C-peptide is a ligand of the elastin receptor complex
- 16:00-16:20 Coffee break
- 16:20-16:40 Oral communication
Carine LE GOFF (Paris, France)
Loss of function variants of ADAMTSX involved in a new syndrome related to Marfan syndrome
- 16:40-17:00 Oral communication
Carmen HALABI (Saint Louis, USA)
Cell-specific role of lysyl oxidase in the vasculature
- 17:00-17:20 Oral communication
Francesco Demetrio LOFARO (Modena, Italy)
Calcification of elastin: data from a cell-free model
- 17:20-17:40 Oral communication
Sara PROCKNOW (Saint Louis, USA)
Deletions upstream of eln cause elastin insufficiency
- 17:40-18:00 Oral communication
Mira Yasemin GÖKYILDIRIM (Giessen, Germany)
Lung elastin dysregulation leads to lung emphysema via induction of cell senescence
- 18:00-18:10 Patients point of view
Marie-Claude BOITEUX (Cutis Laxa Internationale, France)
- 19:00 Reception in Reims City Hall

Wednesday 30th

Biomaterials and repair

- Chairs Katja SCHENKE-LAYLAND (Tübingen, Germany)
José Carlos RODRIGUEZ CABELLO (Valladolid, Spain)
- 08:30-09:10 Plenary lecture
Christian SCHMELZER (Halle, Germany)
Engineering Elastin: a biomimetic approach to materials design
- 09:10-09:30 Featured communication
Willeke DAAMEN (Nijmegen, The Netherlands)
Designing biomaterials that induce elastic fibre regeneration
- 09:30-09:50 Featured communication
Antonietta PEPE (Potenza, Italy)
Multicomponent bioactive electrospun scaffold as versatile toolbox for biomedical applications
- 10:00-10:20 Coffee break
- 10:20-10:40 Oral communication
Shan LU (London, UK)
Effect of elastin-derived peptides on tenocytes behaviour and collagen production
- 10:40-11:00 Oral communication
Julio FERNANDEZ-FERNANDEZ (Valladolid, Spain)
Molecular interactions governing the assembly and phase behavior of elastin-like recombinamers
- 11:00-11:20 Oral communication
Michael SHERRATT (Manchester, UK)
Tetra-peptide matrikines modulate epithelial cell migration and gene expression
- 11:20-11:40 Oral communication
Elisabeth GARANGER (Pessac, France)
Post-modifications of recombinant elastin-like polypeptides towards bioactive (nano)materials and self-assemblies
- 11:40-12:00 Oral communication
Desiré VENEGAS BUSTOS (Valladolid, Spain)
Advancing regenerative therapies: elastin-like recombinamer hydrogels for degenerative joint diseases
- 12:00-13:00 Lunch
- 13:00-14:00 Poster session
- 14:30-19:00 Social events
Visit of VRANKEN-POMMERY domain &
Visit of the Notre-Dame cathedral
or free afternoon
- 19:00-20:30 Champagne tasting
- 21:00 Gala diner
Communications and posters prizes ceremony

Thursday 31st

**Workshops for future directions &
Young investigators meeting**

09:00-10:15 **Topic #1 Funding opportunities and networking**

Chairs Philippine HENRY (Reims, France)
Laurent DUCA (Reims, France)

10:15-10:45 Coffee break

10:45-12:00 **Topic #2 Educational network**

Chairs Vanessa FENEUIL (Reims, France)
Michael SHERRATT (Manchester, United Kingdom)

12:00-12:15 Conclusion words

12:15-13:15 Lunch

13:30 Departures

Conference Chair

Laurent DEBELLE, University of Reims Champagne Ardenne, France

International Organizing Committee

Katja SCHENKE-LAYLAND, University of Tuebingen, Germany

Brigida BOCHICCHIO, University of Potenza, Italy

Michael J. SHERRATT, University of Manchester, United Kingdom

José Carlos RODRIGUEZ CABELLO, University of Valladolid, Spain

Laurent DEBELLE, University of Reims Champagne Ardenne, France

Local Organizing Committee

Stéphanie BAUD

Nicolas BELLOY

Sébastien BLAISE

Manuel DAUCHEZ

Laurent DEBELLE

Laurent DUCA

Stéphane JAISSON

Jessica JONQUET-PREVOTEAU

Pascal MAURICE

Location

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Site

<https://elastin2024.sciencesconf.org/>

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matrihealth

matrihealth is a start-up company based in Halle, Germany, focused on producing high-quality elastin and elastin derivatives from natural resources. Our products offer the ideal complement for advanced biomaterials, tissue engineering, and the development of elastin-based products. Our mission is to make elastin accessible to the market at reasonable prices and high quality through an industrial production process to further enable cosmetics, food, and medical applications.