

**ASMB 2027 Workshop: Fibroblasts in Context: Disentangling Identity, State,
and Crosstalk in Health and Disease**

February 21-23, 2027

Cincinnati Children's Hospital Medical Center (Cincinnati, Ohio, USA)

Meeting Chairs: Anne-Karina Perl, PhD

Professor, Cincinnati Children's Hospital Medical Center and

Davy Vanhoutte, PhD

Assistant Professor, Cincinnati Children's Hospital Medical Center

All events will be in the William Cooper Procter Pavilion

Sunday, February 21

6:00 – 8:00 pm

Registration and Reception

Location: S1.205

Monday, February 22

8:00 - 9:00 am

**Continental Breakfast and Career Development
Networking**

Breakfast: S1.205

9:00 - 10:30 am

**Session I: Fibroblast Identity Across Tissues and
Organs**

*Focus: Fibroblast subpopulations in development
and normal tissue homeostasis*

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

9:00 am **Cross tissue organization of the
fibroblast lineage**, Matthew Buechler,
University of Toronto

9:30 am 3 x Selected talk from abstracts

10:15am Round-up Discussion

10:30 - 10:45 am **Coffee Break**

10:45 am - 12:15 pm

Session II: Fibroblast Niche Interactions

*Focus: Fibroblast interactions with epithelial,
endothelial, immune, and other stromal cells during
development and tissue homeostasis*

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

10:45 am **Metabolic and mechanical regulation
of fibroblasts**, Valerie Horsley, *Yale
University*

11:15 am 3 x Selected talk from abstracts

12:00 pm **Round-up Discussion**

12:15 - 1:45 pm

Lunch and Poster Viewing

ODD number posters present during this session.

Lunch: S1.205

Poster Location: Atrium

1:45 - 3:15 pm

**Session III: Fibroblasts in Tissue Injury and
Disease**

*Focus: Fibroblast responses to genetic,
inflammatory, and tissue injury across organ
systems, including how disease context alters
fibroblast identity and function (e.g., TBX4-related
disease, Marfan syndrome, scleroderma, cardiac
disease, keloids, dermal wound healing)*

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

1:45 pm **Unlocking the secrets of fibroblast
biology: their role in cardiac tissue
homeostasis**, Jennifer Davis, *University of
Washington*

2:15 pm 3 x Selected talk from abstracts

3:00 pm **Round-up Discussion**

3:15-3:30 pm **Coffee Break**

3:30-5:00 pm

Session IV: State Transitions and Plasticity

Focus: Mechanisms regulating fibroblast state

transitions, plasticity, and fate during tissue injury, repair, and resolution.

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

- 3:30 pm **Fate and plasticity of lung fibroblasts in injury and resolution**, Tatsuya Tsukui, *University of California San Francisco*
- 4:00 pm 3 x Selected talk from abstracts
- 4:45 pm Round-up Discussion

5:00 - 6:30 pm

Reception, Poster Viewing and Judging

EVEN number posters present during this session.

Light refreshments will be provided.

Poster Location: Atrium

Tuesday, February 23

8:00 - 9:00 am

Continental Breakfast and Career Development Networking

Location: William Cooper Procter Pavilion S1.205

9:00 - 10:30 am

Session V: Crosstalk with Immune and Vascular Systems in Disease

Focus: Fibroblast interactions with immune, vascular, epithelial, and parenchymal cells during disease

Location: S1.203/204

Moderators: TBA

Trainee Co-Chair: TBA

- 9:00 am **Fibroblasts coordinate the growth and morphogenesis of the renal parenchyma**, Tom Carroll, *University of Texas Southwestern*
- 9:30 am 3 x Selected talk from abstracts
- 10:15am Round-up Discussion

10:30 - 10:45 am Coffee Break

10:45 am - 12:15 pm

Session VI: Fibroblasts as Drivers of Pathological Tissue Remodeling

Focus: Mechanisms by which fibroblasts drive persistent tissue remodeling, including extracellular

matrix deposition and organization, altered tissue mechanics, fibrosis, and failure of normal repair and resolution.

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

- 10:45 am **Mechanisms of intestinal fibrosis**, Florian Rieder, *Cleveland Clinic Foundation*

11:15 am 3 x Selected talk from abstracts

12:00 pm **Round-up Discussion**

12:15 - 1:30 pm

Lunch and Discussion

Select a topic and join colleagues at the table of your choice for a lively discussion!

Location: S1.205

1:30 - 3:00 pm

Session VII: Technologies to Interrogate Fibroblast Biology

Focus: Novel approaches including imaging, single-cell and spatial technologies, fibroblast isolation and culture, AAV and nanoparticle delivery, and organoid models

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

- 1:30 pm **Engineering and Scaling Human Organoid Platforms for Mechanistic and Translational Research**, Magdalena Kasendra, *Cincinnati Children's Hospital*
- 2:00 pm 3 x Selected talk from abstracts
- 2:45 pm Round-up Discussion

3:00 - 3:15 pm Coffee Break

3:15 - 4:45 pm

Session VIII: Fibroblasts as Therapeutic Entry Points

Focus: Translational and therapeutic strategies in skin repair, cardiac disease, pulmonary hypertension, and fibrotic disorders

Location: S1.203/204

Moderator: TBA

Trainee Co-Chair: TBA

3:15 pm **Talk Title**, Tom Barker, *University of Virginia*

3:45 pm 3 x Selected talk from abstracts

4:30 pm Round-up Discussion

4:45 – 5:00 pm

Wrap-up Session and Closing Remarks

6:00 pm **Optional Group Dinner**

(Details TBA)