



**The Adipose Tissue Niche:  
Role in Health & Disease**

November 29 – 30, 2016

National Institutes of Health  
Lister Hill Auditorium, Building 38A, Bethesda, MD

NIH National Institute of Diabetes and Digestive and Kidney Diseases

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**Day 1: Tuesday, November 29, 2016**

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- 7:30 a.m. **Registration and Continental Breakfast**  
(Lister Hill Auditorium, NIH Campus)
- 8:15–8:30 a.m. **Opening Remarks/Meeting Overview**
- 8:30–9:15 a.m. **Keynote 1: Perivascular Cells, Plasticity and Organ Fibrosis**  
*Benjamin Humphreys, M.D., Washington University*
- 9:15–10:00 a.m. **Keynote 2: Stiffness and Stress Relaxation: Impact on Adipogenesis**  
*David J. Mooney, Ph.D., Harvard University*

**10:00-10:30 a.m. Break**

**Session I: Adipose Tissue Remodeling and Fibrosis**  
*Valerie Horsley (Moderator)*

- 10:30–11:00 a.m. **Adipogenic Signaling in Fibrosis and Systemic Sclerosis; Potential Clinical Implications**  
*John Varga, Ph.D., Northwestern University*
- 11:00–11:30 a.m. **Adipose Tissue Fibrosis: Progenitors Contribution**  
*Karine Clement, M.D., Ph.D., Institute of Cardio-metabolism and Nutrition, Paris*
- 11:30–12:00 noon **Transcriptional Control of White Adipose Tissue Remodeling**  
*Stephen Farmer, Ph.D., Boston University School of Medicine*
- 12:00–12:30 p.m. **8 to 10 people presenting posters give 1 or 2 slide summaries (2 min max) or two hot topic talks**
- 12:30–2:00 p.m. **Poster Session and Lunch in Atrium**

**Session II: Adipose Tissue Support Cells: Role of Pericytes, Vascular Smooth Muscle Cells, Stem Cells and Other Stromal Cells**  
*Stephen Farmer (Moderator)*

- 2:00–2:30 p.m. **Contribution of Mural Cells to Adipose Tissue Remodeling**  
*Rana Gupta, Ph.D., UT Southwestern University*

- 2:00–3:00 p.m.      **Nutrient-Sensing Signaling Mechanisms that Control Adipocyte Expansion and Function**  
*David Guertin, Ph.D., University of Massachusetts Medical School, Worcester*
- 3:00–3:30 p.m.      **Adipocytes Regulate Skin Regeneration**  
*Valerie Horsley, Ph.D., Yale University*
- 3:30–3:45 p.m.      **Hot Topic- Chosen from submitted Abstracts**  
*TBD*
- 3:45–4:15 p.m.**      **Break**
- 4:15–4:45 p.m.      **Transcellular and Inter-Organ Trafficking of Adipose Tissue-Derived Particles**  
*Clair Crewe, Ph.D., UT Southwestern University*
- 5:00–5:15 p.m.      **Bone Marrow Adipose: Tissue Engineered and in vivo Models**  
*Michaela Reagan, Ph.D., Maine Medical Center Research Institute*
- 5:15–5:30 p.m.      **Hot Topic-Chosen from submitted Abstracts**  
*TBD*
- 5:30 p.m.              **Adjourn**

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**Day 2:              Wednesday, November 30, 2016**

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- 7:30–8:00 a.m.      **Registration and Continental Breakfast**  
(Lister Hill Auditorium, NIH Campus)

<b>Session III:</b> <b>Depot Specific Extracellular Matrix Components and Mechano-transduction</b> <i>Kevin Healy (Moderator)</i>
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- 8:00–8:30 a.m.      **Title**  
*Christopher Chen, M.D., Ph.D., Boston University*
- 8:30–9:00 a.m.      **Heat and Tension in the Adipose Niche**  
*Andreas Stahl, Ph.D., University of California, Berkeley*
- 9:00– 9:30 a.m.      **Extracellular Matrix Control of Adipocyte Progenitor Differentiation and Fibrosis**  
*Matthew Layne, Ph.D., Boston University School of Medicine*
- 9:30– 9:45 a.m.      **Hot Topic--Chosen from submitted Abstracts**  
*TBD*
- 9:45 – 10:15 a.m.**      **Break**
- 10:15–10:45 a.m.      **Pericellular Collagenolysis and the Regulation of the Adipocyte Transcriptome**  
*Steve Weiss, M.D., University of Michigan*

<b>Session IV:</b> <b>Building Fat for Soft Tissue Reconstruction</b> <i>TBD (Moderator)</i>
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- 10:45–11:15 a.m. **Title**  
*Trivia Frazier, Ph.D., Dillard University*
- 11:15–11:45 a.m. **Adipose Derived Stromal Cells for Soft and Hard Tissues: Perspective of a Cranial Facial Surgeon**  
*Michael Longaker, M.D., Stanford University School of Medicine*
- 11:45–12:15 p.m. **Our hASC History: Tissue Engineering, Donor-to-Donor Differences, and Translating Textiles to Tissues**  
*Elizabeth Lobo, Ph.D., University of Missouri*
- 12:15–12:30 p.m. **Hot Topic-**  
*TBD*
- 12:30–2:00 p.m. **Poster Session and Lunch**

<b>Session V:</b>	<b>Building Fat Depots on a Chip</b> <i>Christopher Chen (Moderator)</i>
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- 2:00–2:30 p.m. **Vascularizing Fat on a Chip**  
*Leah Bellas, Ph.D., Boston University*
- 2:30–3:00 p.m. **Microengineered Physiological Biomimicry: Human Organs-on-a-Chips**  
*David Huh, Ph.D., University of Pennsylvania*
- 3:00–3:30 p.m. **Title**  
*Kevin Healy, Ph.D., University of California, Berkeley*
- 3:30–3:45 p.m. **Hot Topic- Chosen from submitted Abstracts**  
*TBD*
- 3:45–4:00 p.m. **Closing Remarks**
- 4:00 p.m. **Adjournment**