

# Inaugural Muscle Biology and Cachexia Conference (Preliminary Program)



## Sunday, May 18, 2025

Houston Room (220)

Student Center South, University of Houston

### Time

**1:00-1:45 pm** Registration and badge pick up

**1:45-2:00 pm** Welcome and opening remarks

<b>02:00-3:30 pm</b>	<b>Session 1</b>	<b>Muscle progenitors, Regeneration, and Rhabdomyosarcoma</b>
	Chairs:	TBD
2:00-02:15	<b>Atsushi Asakura</b> University of Minnesota	Muscle stem cell niche and regeneration by Notch-signal
2:15-2:30	<b>Hamed Jafar-Nejad</b> Baylor College of Medicine	Regulation of satellite cell development and maintenance by O-linked glycosylation
2:30-2:45	<b>Feng Yue</b> University of Florida	CRTCs regulate muscle stem cell homeostasis via FAHD2A-mediated metabolism
2:45-3:00	<b>Laszlo Nagy</b> John Hopkins All Children's Hospital, Florida	Macrophage controlled regenerative inflammation in acute and chronic muscle injury

3:00-3:15	<b>Reshma Taneja</b> National University of Singapore	Interrogating the epigenetic landscape in rhabdomyosarcoma
3:15-3:30	TBD	TBD

**3:30-3:45** Coffee and light refreshment break

<b>3:45 -5:20 pm</b>	<b>Session 2</b>	<b>Aging and Sarcopenia</b>
	Chairs:	TBD
3:45-4:00	<b>Christopher Fry</b> University of Kentucky	Renovating This Old House: Remodeling the Extracellular Matrix Infrastructure to Enable Muscle Adaptation with Aging
4:00-4:15	<b>Shih-Yin Tsai</b> National University of Singapore	EIF4EBP1 Activation as a Therapeutic Strategy to Improve Muscle Proteostasis in Sarcopenia
4:15-4:30	<b>Marco Brotto</b> The University of Texas at Arlington	Unraveling the Aging Puzzle: The Role of Lipidomics and Metabolomics in Musculoskeletal Disease
4:30-4:45	<b>Blake Rasmussen</b> UTHealth, San Antonio	Human Skeletal Muscle Disuse Atrophy has Profound and Negative Effects on the Muscle Transcriptome, Metabolome, and Lipidome
4:45-5:00	<b>Jianjie Ma</b> University of Virginia School of Medicine	A 30-Plus-Year Journey with Those Amazing Mitsugumins – Report from a Recent Symposium in Honor of Dr. Hiroshi Takeshima
5:00-5:10	<b>Taejeong Song</b> University of Arizona College of Medicine, Tucson	Fast Myosin Binding Protein-C is a Vital Regulator in Young and Aged Fast Skeletal Muscle Homeostasis
5:10-5:20	TBD	TBD

**5:20-5:30** Break

<b>5:30-6:25 pm</b>		<b>Keynote Talk 1</b>
	Chairs:	TBD
	<b>Denis C. Guttridge</b> Medical University of South Carolina, South Carolina, USA	NF- $\kappa$ B Signaling in Skeletal Muscle Pathologies: What we've Learned from the Tumor Microenvironment

**7:00-9:00 pm** Dinner for invited speakers only (Hilton Hotel, University of Houston)

## **MONDAY May 19, 2025**

Houston Room (220)

Student Center South, University of Houston

**8:00-8:30 am** Breakfast

<b>8:30-9:25 am</b>		<b>Keynote Talk 2</b>
	Chairs:	TBD
	<b>Marco Sandri</b> Veneto Institute of Molecular Medicine, University of Padova, Italy	Novel Insights in the control of muscle mass and force generation

<b>9:30-11:00 am</b>	<b>Session 3</b>	<b>Mechanisms of Cancer Cachexia-I</b>
	Chairs:	Yi-Ping Li and James Carson
09:30-09:45	<b>Min Li</b> University of Oklahoma Health Sciences Center	Battling a Powerful Enemy: Understanding Pancreatic Cancer Cachexia
09:45-10:00	<b>Pankaj Singh</b> University of Oklahoma Health Sciences Center	Metabolic regulation of cachexia in pancreatic cancer
10:00-10:15	<b>Paola Costelli</b> University of Turin	Immunomodulation as a tool to counteract experimental cancer cachexia
10:15-10:30	<b>Andrew Judge</b> University of Florida	Cancer cachexia: Role of the complement System
10:30-10:45	<b>Gustavo Nader</b> Penn State University, College Park	Anabolic deficits in cancer-associated muscle wasting: the ribosome as a focal point
10:45-11:00	3-5 minutes talks with no questions	Will be picked from submitted abstracts

**11:00-11:15 am** Coffee and light refreshment break

<b>11:30-12:30 pm</b>	<b>Session 4</b>	<b>Cardiac Biology and Disease</b>
	Chairs:	Bradley McConnell and Yu Liu
11:30-11:45	<b>Robert Schwartz</b> University of Houston	TBD
11:45-12:00	<b>Tamer Mohamed</b> Baylor College of Medicine	Cracking the Code for Cardiomyocyte Proliferation

12:00-12:15	<b>Joseph M Metzger</b> University of Minnesota Medical School	Shrunken heart cardiomyopathy and failure in cancer cachexia remission
12:15-12:30	<b>Leonardo Ferreira</b> Duke University School of Medicine	Diaphragm myopathy in heart failure and ATF3 deficiency

**12:30-1:30 pm** Lunch and Posters Viewing

<b>1:30-3:00 pm</b>	<b>Session 5</b>	<b>Muscle Signaling and Metabolism</b>
	Chairs:	Vihang Narkar and TBD
1:30-1:45	<b>Erin Seifert</b> Thomas Jefferson University	Mitochondrial phosphate carrier-dependence of mitochondrial matrix calcium chelation in skeletal muscle
1:45-2:00	<b>Shihuan Kuang</b> Duke University School of Medicine	Regulation of mitochondrial Metabolism and Signaling in Muscle
2:00-2:15	<b>Mattia Quattrocchi</b> Cincinnati Children's Hospital	Glucocorticoids and clock interplay: There's a flip side to every coin
2:15-2:30	<b>Zheng (Jake) Chen</b> McGovern Medical School, UTHealth	Regulatory role of the circadian oscillator in skeletal muscle bioenergetics and function
2:30-2:45	<b>Longhou Fang</b> Houston Methodist Research Institute	Lipid Metabolism in Vascular Health and Disease

**2:45-3:00 pm** Coffee and light refreshment break

<b>3:00-4:30 pm</b>	<b>Session 6</b>	<b>Exercise Physiology</b>
	Chairs:	Marc Hamilton and TBD
3:00-3:15	<b>David Harrison</b> Boston Children's Hospital	Surviving with a single ventricle: the role of contractions by a strong soleus muscle for plantarflexion
3:15-3:30	<b>Zhen Yan</b> Fralin Biomedical Research Institute at VTC	mitoAMPK in exercise-induced mitochondrial remodeling in skeletal muscle
3:30-3:45	<b>Chunru Lin</b> University of Texas MD Anderson Cancer Center	Modulating Tumor Microenvironment in Prostate Cancer Through Exercise
3:45-4:00	<b>John M. Lawler</b> Texas A&M University	TBD
4:00-4:15	TBD	TBD

4:15-4:30	3-5 minutes talks with no questions	Will be picked from submitted abstracts
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**4:30-5:00 pm**                      **Industry presentation (TBD)**

**5:00-6:30 pm**                      **Poster Presentation**

**6:30-8:00 pm**                      Dinner reception for all attendees, Ball room 210, Student Center South

**TUESDAY May 20, 2025**

Houston Room (220)

Student Center South, University of Houston

**8:00-8:30 am**                      **Breakfast**

<b>8:30-10:00 am</b>	<b>Session 7</b>	<b>Mechanisms of Cancer Cachexia -II</b>
	Chairs:	TBD
8:30-8:45	<b>Serkan Kir</b> Koç University, Turkey	Cancer-associated muscle wasting: the role of EDA2R-NIK signaling
8:45-9:00	<b>Andrea Bonetto</b> University of Colorado Anschutz Medical Campus	Characterization of cachexia in head and neck cancer: new insights from patients and mouse models
9:00-9:15	<b>James Carson</b> Texas A&M University	Effects of exercise and chemotherapy in the investigation of cancer cachexia
9:15-9:30	<b>Jason Doles</b> Indiana University School of Medicine	Delineating the contribution of muscle wasting to tumor progression
9:30-9:45	<b>Joseph Rupert</b> Institute of Molecular Medicine, UTHealth	Targeting the IL6R-CD36 axis in skeletal muscle to attenuate cachexia in pancreatic cancer
9:45-10:00	3-5 minutes talks with no questions	Will be picked from submitted abstracts

**10:00-10:15 am**                      Coffee and light refreshment break

<b>10:15–12:00 pm</b>	<b>Session 8</b>	<b>Muscle Diseases and Therapies-I</b>
	Chairs:	TBD
10:15-10:30	<b>Jingsong Zhou</b> University of Texas at Arlington	Deficient Sarcolemma Repair in ALS

10:30-10:45	<b>Matthew Alexander</b> University of Alabama at Birmingham	Generation and corrective drug screening for models of X-linked myopathy with excessive autophagy (XMEA)
10:45-11:00	<b>Jyoti Jaiswal</b> Children's National Research Institute, Washington, DC	Examining the role and therapeutic potential of muscle stromal cells in muscular dystrophy
11:00-11:15	<b>Darko Bosnakovski</b> University of Minnesota Medical School	Therapeutic strategies to counter fibroadipogenic dystrophic processes in FSHD
11:15-11:30	<b>George Rodney</b> Baylor College of Medicine	Role of SR calcium leak in the pathogenesis of Malignant Hyperthermia
11.30-11.45	<b>Dil Afroze</b> Sher-I-Kashmir Institute of Medical Sciences, INDIA	Spinal Muscular Atrophy: Molecular Mechanisms and Emerging Therapeutic Strategies
11:45-12:00	3-5 minutes talks with no questions	Will be picked from submitted abstracts

**12:00-1:30 pm** Lunch and Poster Viewing and judging

<b>1:30 -3:00 pm</b>	<b>Session 9</b>	<b>Muscle Diseases and Therapies-II</b>
	Chairs:	TBD
1:30-1:45	<b>Terence Ryan</b> University of Florida	Understanding and targeting myopathy in peripheral artery disease
1:45-2:00	<b>Sajedah Hindi</b> Cincinnati Children's Hospital, Cincinnati	Interrogating muscle biology for muscle therapy and muscle therapy for muscle biology
2:00-2:15	<b>Shahid Baba</b> University of Louisville School of Medicine	Endogenous histidyl dipeptide therapy for peripheral arterial disease
2:15-2:30	TBD	TBD
2:30-2:45	TBD	TBD
2:45-3:00	3-5 minutes talks with no questions	Will be picked from submitted abstracts

**3:00-3:15 pm** Award ceremony for trainees

**3:15-3:30 pm** Vote of thanks and departure

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