

# 2019

# SNU BIOSCIENCE SYMPOSIUM ON SIGNALING AND CHROMATIN



DECEMBER  
2nd - 3rd

Bldg. 25-1  
International  
Conference Hall,  
Seoul National Univ.

## DEC 2 | DAY 1

- 09:30 Opening Remark
- 09:40 **Plenary talk** (Chair : Sung Hee Baek)  
-10:40 Role of Hypoxia-Inducible Factors in Breast Cancer Progression  
**Gregg L. Semenza** (Johns Hopkins University, USA)  
(The 2019 Nobel Laureate in Physiology or Medicine)
- 10:40 **Group Photo & Coffee Break**  
-11:00

### SESSION 1

#### Hypoxia signaling from development to evolution (Chair : Jin-Hong Kim)

- 11:00 Detecting past and ongoing natural selection among ethnically Tibetan women at  
-11:30 high altitude in Nepal  
**Choongwon Jeong** (Seoul National University, Korea)
- 11:30 A systems approach reveals HIF-2 $\alpha$  as a critical regulator of chondrosarcoma  
-12:00 progression  
**Jin-Hong Kim** (Seoul National University, Korea)
- 12:00 **Lunch**  
-13:30

### SESSION 2

#### Autophagy and Senescence (Chair : Chanhee Kang)

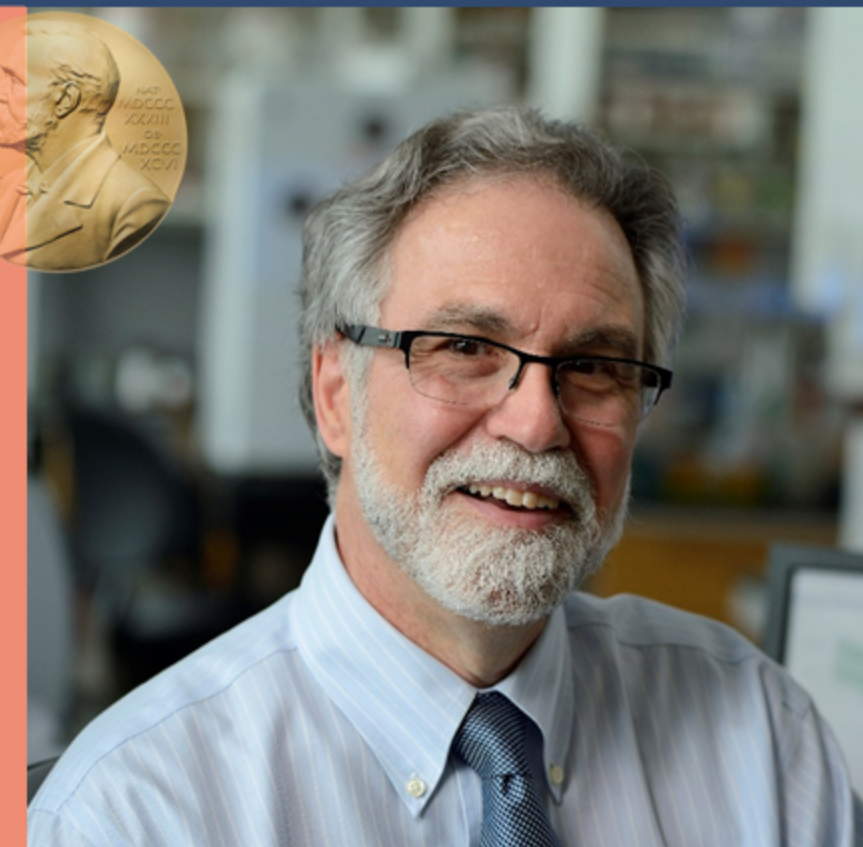
- 13:30 Phase separation specifies autophagic degradation and stress adaptation of  
-14:10 protein condensates  
**Hong Zhang** (Chinese Academy of Sciences, China)
- 14:10 Selective turnover of p62/SQSTM1-liquid droplets by autophagy  
-14:50 : The molecular mechanism and physiological significance  
**Masaaki Komatsu** (Juntendo University, Japan)
- 14:50 Selective autophagy networks during cellular senescence  
-15:20 **Chanhee Kang** (Seoul National University, Korea)
- 15:20 **Coffee Break**  
-15:50

### SESSION 3

#### Phase Separation and Macromolecular Assembly (Chair : Junseock Koh)

- 15:50 Using light to control phase separation in living cells  
-16:20 **Yongdae Shin** (Seoul National University, Korea)
- 16:20 Selective Transport Control at the Nuclear Pore Complex  
-17:00 **Roderick Lim** (University of Basel, Switzerland)
- 17:00 Allosteric coupling mediated by intrinsically disordered regions in  
-17:30 macromolecular assemblies  
**Junseock Koh** (Seoul National University, Korea)

**Gregg L. Semenza**  
The 2019 Nobel Laureate  
In Physiology or Medicine  
(Johns Hopkins University, USA)



**Robert G. Roeder**  
(Rockefeller University, USA)



## DEC 3 | DAY 2

- 09:40 **Plenary talk** (Chair : Sung Hee Baek)  
-10:40 Transcriptional regulatory mechanisms in animal cells  
**Robert G. Roeder** (Rockefeller University, USA)
- 10:40 **Coffee Break**  
-11:00

### SESSION 4

#### Chromatin and Epigenetic Regulation (Chair : Daehee Hwang)

- 11:00 Role of Histone Methylation Signaling in Tumorigenesis  
-11:40 **Or Gozani** (Stanford University, USA)
- 11:40 Cracking the Epigenetic Code in Health and Disease  
-12:10 **Sung Hee Baek** (Seoul National University, Korea)
- 12:10 **Lunch**  
-13:30

### SESSION 5

#### Chromatin and Emerging Technology (Chair : Kyoung-Jae Won)

- 13:30 Arginine Methylation: Redundancies and Vulnerabilities  
-14:10 **Mark T. Bedford** (MD Anderson Cancer Center, USA)
- 14:10 Establishment and maintenance of epigenetic information  
-14:50 **Bing Zhu** (Chinese Academy of Sciences, China)
- 14:50 Insight into V-ATPase rotary motor dynamics  
-15:20 **Soung-Hun Roh** (Seoul National University, Korea)
- 15:20 **Coffee Break**  
-15:50

### SESSION 6

#### Single Cell Omics (Chair : Sung Hee Baek)

- 15:50 Unveiling cellular heterogeneity in early beige adipogenesis  
-16:20 by single cell RNA-seq  
**Daehee Hwang** (Seoul National University, Korea)
- 16:20 Gene network reconstruction using single cell transcriptomic data reveals key  
-16:50 factors for condition specific autophagic process  
**Kyoung-Jae Won** (BRIC, Denmark)
- 16:50 **Closing Remark**
- 17:00 **Meet the speakers**  
-18:00



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<https://biosci.snu.ac.kr/sbaek/2019snubiosym>