

Program:

**Nov.
24AM**

08:30-09:30 Registration

09:30-09:40 Introduction (I)

Session I

Kiyokazu Agata (Kyoto Univ.)

Wound Healing/Skin Regeneration

Chair: Atsushi Kawakami

09:40-10:10

Enrique Amaya (The Univ. of
Manchester)

An Essential Role of ROS during
Tissue Repair and Appendage
Regeneration in *Xenopus*
Coordinated Activation of Wnt in
Epithelial and Melanocyte Stem
Cells Initiates Pigmented Hair
Regeneration

10:10-10:40

Makoto Takeo (New York Univ.)

10:40-11:00 *Coffee Break*

Session II

Heart Regeneration

Chair: Takashi Takeuchi

11:00-11:30

Juan Carlos Izpisua Belmonte (Salk
Inst.)

Cellular Basis of Regeneration

11:30-12:00

Toshinori Hayashi (Tottori Univ.)

Spatiotemporal Distribution of
Proliferating Cardiomyocytes in the
Regeneration of Newt Hearts

12:00-12:30

Teruo Okano (Tokyo Women's
Medical Univ.)

Cell Sheet Tissue Engineering for
Clinical Application

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12:30-13:30 *Lunch*

Session III

Retinal Regeneration

Chair: Chikafumi Chiba

13:30-14:00

Masasuke Araki (Nara Women's
Univ.)

Retinal Regeneration in
Amphibians

14:00-14:30

Yoshiki Sasai (RIKEN CDB)

Self-Organization of Neural
Patterns and Structures in 3D
Culture of ES Cells

14:30-15:00

Masayo Takahashi (RIKEN CDB)

Retinal Regeneration - Intrinsic
Progenitor Cells vs Grafted Cells

15:00-15:15 *Coffee Break*

Session IV

Brain Regeneration

Chair: Yusuke Kamachi

15:15-15:45

Yoshihiko Umesono (RIKEN CDB)

Brain Regeneration in the Planarian
Dugesia japonica

15:45-16:15

Takeshi Inoue (Kyoto Univ.)

Development of Strategies for
Future Brain Therapy: Lessons from
Planarian and Newt Brain

16:15-16:30 *Coffee Break*

16:30-17:00

Andr as Simon (Karolinska Inst.)

Chair: Masaaki Kitada
Reversible Suppression of
Neurogenesis in the Adult
Vertebrate Brain

17:00-17:30

Hideyuki Okano (Keio Univ.)

Regeneration of the damaged CNS
using human iPSCs-derived neural
progenitor cells

17:30-20:30

Poster Session I

Nov. 25AM

08:30-09:00 Registration

09:00-09:10 Introduction (II)

Session V

Kiyokazu Agata (Kyoto Univ)

Whole Body Regeneration

Chair: Noriko Funayama

09:10-09:40

Brigitte Galliot (Univ. of Geneva)

From the Stress of Amputation to a 3D Reconstruction in *Hydra*

09:40-10:10

Thomas W. Holstein (Univ. of Heidelberg)

Wnt Signaling in *Hydra* Regeneration

10:10-10:40

Alejandro Sánchez Alvarado (HHMI, Stowers Inst. for Medical Research)

Stem Cells, Regeneration and the Planarian *Schmidtea mediterranea*10:40-11:00 *Coffee Break*

Chair: Emili Salo

11:00-11:30

Francesc Cebrià (Univ. of Barcelona)

The Role of EGFR Signaling during Planarian Regeneration

11:30-12:00

Kiyokazu Agata (Kyoto Univ.)

How to Convert Non-regenerative Animals to Regenerative Ones?

12:00-12:30

Shigeo Hayashi (RIKEN CDB)

Regeneration of Polychaete Annelide, *Perinereis nuntia*

Suggests a Homeogenetic Mechanisms of Sequential Segmentation Involving Wingless

Nov. 25PM12:30-13:30 *Lunch***Session VI****Appendage/Limb Regeneration**

Chair: Takahiko Sato

13:30-14:00

Sumihare Noji (Univ. of Tokushima)

Molecular Mechanisms underlying Regeneration of Insect Legs:

Involvement of the JAK-STAT and Dachous-Fat Signaling Pathways

14:00-14:30

Florenci Serras (Univ. de Barcelona)

Regeneration of *Drosophila* Wing Imaginal Discs

14:00-15:00

Duoja Pan (HHMI, Johns Hopkins Univ.)

Control of Organ Size and Tumorigenesis by the Hippo Signaling Pathway

15:00-15:15 *Coffee Break*

Chair: Yoshihiro Morishita

15:15-15:45

Eugeniu Nacu (Center for Regenerative Therapies Dresden)

Understanding Patterning in Axolotl Limb regeneration

15:45-16:15

Jeremy Brockes (Univ. College of London)

Tumor Suppressor Genes and Limb Regeneration

16:15-16:30 *Coffee Break*

Chair: Akira Satoh

16:30-17:00

Hitoshi Yokoyama (Tohoku Univ.)

Limb Regeneration of *Xenopus* as a Model for Three-dimensional Appendage/ Organ Regeneration

17:00-17:30

Tetusya Endo (Aichi-Gakuin Univ.)

Conceptual Shift of Limb Regeneration –From Amphibians to Mammalians–

17:30-20:30

Poster Session II**Nov. 26AM**

10:00-12:00

Discussion & future prospects

12:00-12:10

Closing remarks (Kiyokazu Agata)