48th Annual Meeting for the Japanese Society of Developmental Biologists Program Book

June 2-5, 2015 Tsukuba

48th Annual Meeting of the

Japanese Society of Developmental Biologists

Co-sponsor: Asia-Pacific Developmental Biology Network

Program Book

第48回日本発生生物学会大会

June 2 (Tue) - 5 (Fri), 2015 International Congress Center (Tsukuba)

Chair:
Hiroshi Wada (University of Tsukuba)

Plenary Lectures:
Peter W. H. Holland (University of Oxford)
Yosuke Mukoyama (National Institutes of Health)
Keiko U. Torii (University of Washington)

Day 0 Workshop『発生生物学を語ろう』**(in Japanese) :**
Kiyokazu Agata (Kyoto University)
Shigeo Hayashi (RIKEN, CDB)
Yoshiko Takahashi (Kyoto University)
Hiroyuki Takeda (University of Tokyo)
Koji Tamura (Tohoku University)
Hirokazu Tsukaya (University of Tokyo)

http://jsdb.jp/kaisai/jsdb2015/index-e.php

Welcome to the 48th Annual Meeting of the JSDB in Tsukuba ！

Dear colleagues,

On behalf of the organizing committee, I would like to inform you that the 48th Annual Meeting for the Japanese Society of Developmental Biologists (JSDB) cosponsored by the Asia-Pacific Developmental Biology Network (APDBN) will be held in Tsukuba from June 2nd to 5th, 2015.

Tsukuba is conveniently accessible from within Japan and from abroad—less than one hour's travel from Tokyo by the Tsukuba Express train, and regular coach access from Narita International Airport. The meeting venue, Tsukuba International Congress Center, is just ten minutes on foot from Tsukuba station.

Tsukuba is a relatively young city, established in 1987 to facilitate scientific discovery. Presently, nearly 18,000 researchers are engaged at 300 research organizations, and one in 30 citizens possess a PhD! In this great atmosphere, I am sure you can enjoy stimulating scientific discussions, and find inspiration for your future research.

When creating the meeting program, we decided that "discussion" is a key for promoting science discovery. So we will prepare several opportunities to promote discussion at the meeting. I hope that you will find the meeting program very attractive and exciting.

We look forward to seeing you in Tsukuba in June.

Hiroshi Wada
Chairperson
Organizing Committee of the 48th Annual Meeting of the JSDB (2015)

ご　挨　拶

第 48 回日本発生生物学会大会（APDBN 共催）を 2015 年 6 月 2 日―5 日、つくば国際会議場で開催いたします。

つくばエキスプレスの開通で大変便利になった「つくば」、会場のつくば国際会議場は、「つくば」駅から徒歩 10 分でつくため、東京駅からは 1 時間程度で会場までたどりつくことができます。

ご存知の通り、つくばは科学の街として設立された若い都市です。今でも 300 程度の研究施設に、18,000 人の科学者が日夜科学に従事しており、市民の 30 人に一人が博士号をもっています。この科学の空気が充満した街で、発生生物学の議論に花をさかせていただけるよう、最大限の準備をして、皆さんをお迎えしたいと思います。

この大会を準備するにあたり、準備委員会で議論を重ねた結果、とにかく議論したい、議論の中から新しいものを産み出したいという意見で一致しました。この大会では、議論をうながすような仕掛けをいくつか準備しました。一つは、セッションの中での座長の役割を重視したいということです。座長を依頼する方には、特別なおねがいをさせていただく予定です。もちろん、議論を盛り上げるのは座長の力だけでは無理です。参加者の皆様にも、座長を盛り上げていただくよう是非ご協力をおねがいいたします。もう一つは、0 日目を、学会を代表する先生方に、ご自身の分野を概観いただき、発生学の魅力と展望を自由にお話しいただけるような時間として使わせていただくことにしました。こちらも、是非楽しみにしてください。0 日目の夜には、軽食を交えてのレセプションも予定しています。

6 月に、つくばで皆さんとお会いし、議論の花を咲かせることを楽しみにしています。

大会長

和田　　洋

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Acknowledgement of Sponsorship

The organizing committee of 48th Annual Meeting for JSDB gratefully acknowledges the generous financial support of the following:

Sponsors

The Naito Foundation

Suntory Institute for Bioorganic Research

ELSEVIER

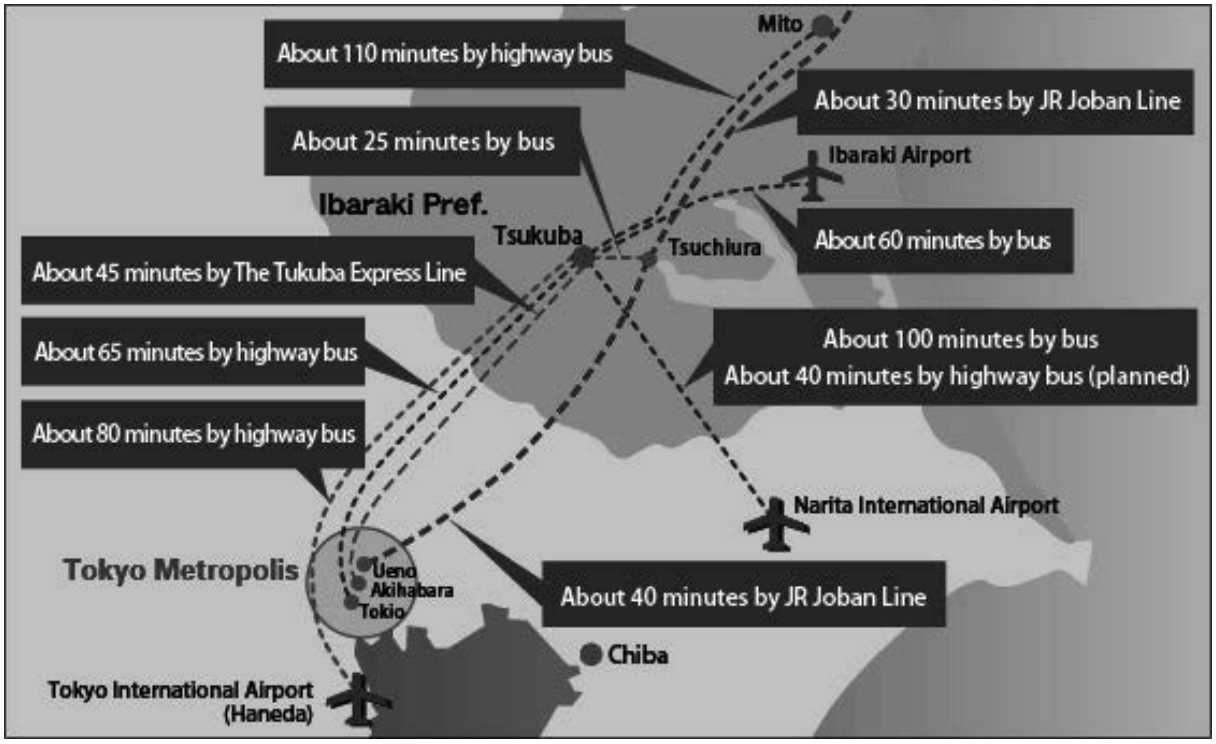
The Company of Biologists

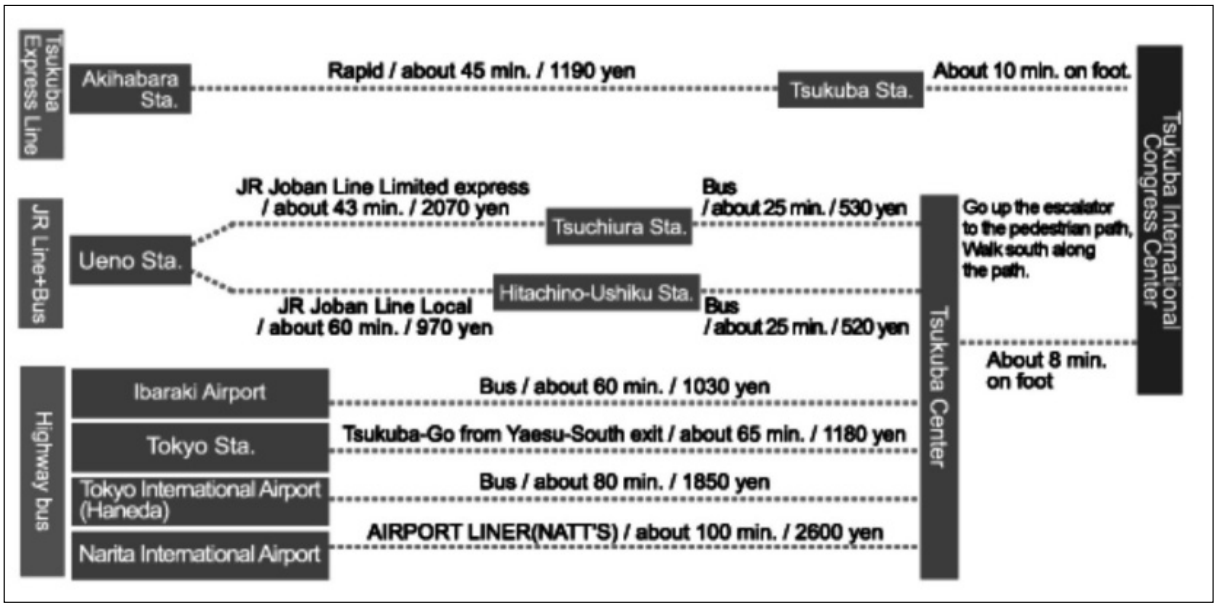
Organizing Committee

Chairperson:	
Hiroshi Wada	University of Tsukuba
Members:	
Hideko Urushihara	University of Tsukuba
Yasunori Sasakura	University of Tsukuba
Ryusuke Niwa	University of Tsukuba
Shunsuke Yaguchi	University of Tsukuba
Makoto Kobayashi	University of Tsukuba
Chikafumi Chiba	University of Tsukuba
Hidekazu Kuwayama	University of Tsukuba
Mami Takasaki (Matsuo)	University of Tsukuba
Kensuke Shiomi	University of Tsukuba

Access Guide to Tsukuba International Congress Center

Tsukuba International Congress Center
2-20-3 Takezono, Tsukuba, Ibaraki, 305-0032 Japan
Phone: +81-29(861)0001 Fax: +81-29(861)1209
URL: http://www.epochal.or.jp/eng/index.html





Area Map

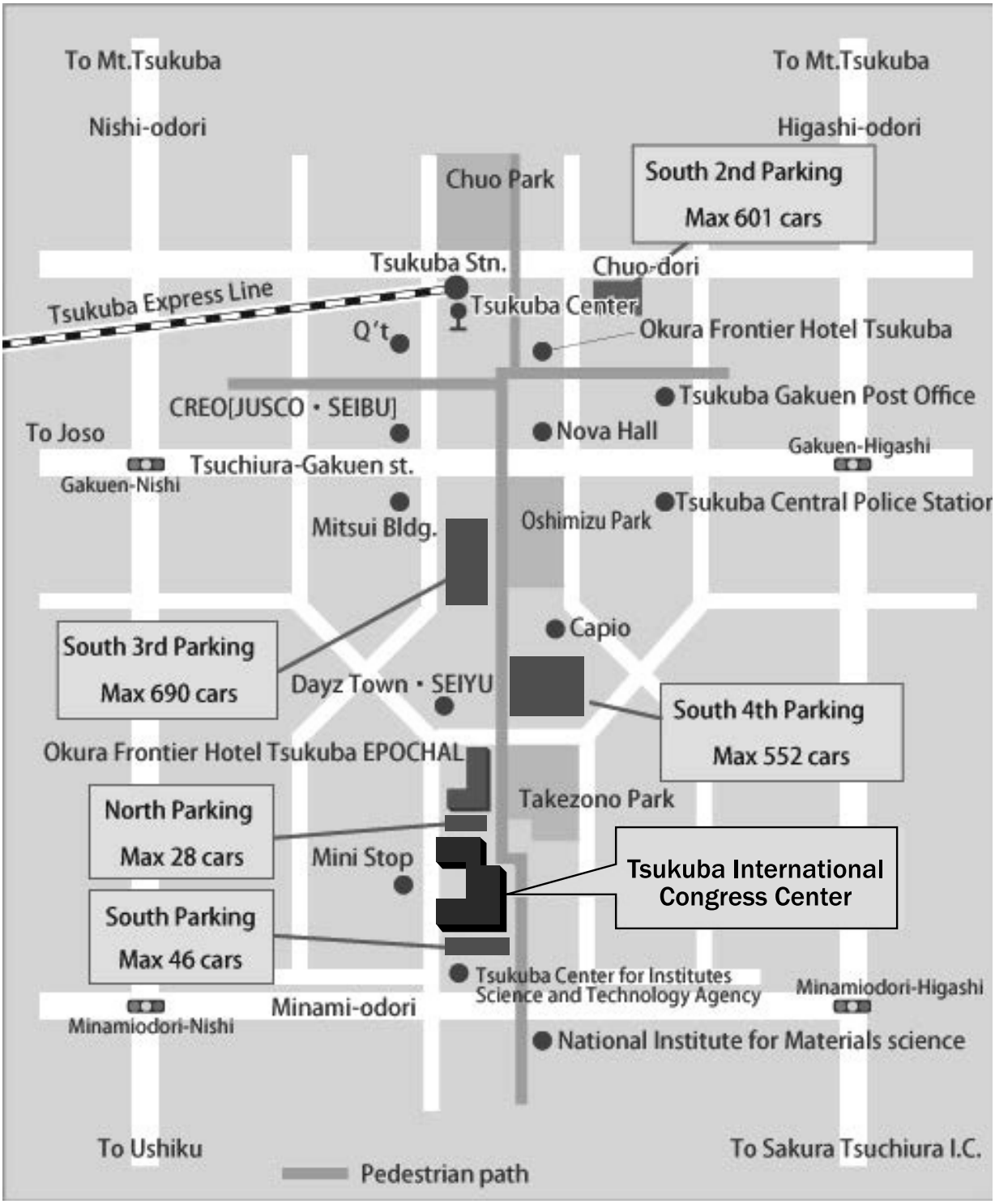

To Mt. Tsukuba
To Mito
125
Higashi-odori
408
Nishi-odori
Tsukuba University
Tsuchiura-Kita I.C.
Joban Expressway
To Mito
Tsuchiura-Gakuen st.
Tsukuba Express Line
Tsukuba Stn.
Tsukuba Center
Kenkyu-Gakuen Stn.
Tsuchiura Stn.
Tsukuba International Congress Center
Tsukuba-Chuou I.C.
JR Joban Line
Bampaku-Kinenkoen Stn.
Science-dori
408
Sakura Tsuchiura I.C.
354
6
Midorino Stn.
Arakawaoki Stn.
Tsukuba-Ushiku I.C.
To Misato
Yatabe I.C.
Kenodo
Hitachino-Ushiku Stn.
To Akihabara
To Ueno

Map & Parking

Go up the escalator at **Exit A3** (Tsukuba Station).

Turn right at a ticket office, then go up the front steps.

Go straight approximately for **800 m** (About 10 min on foot.).

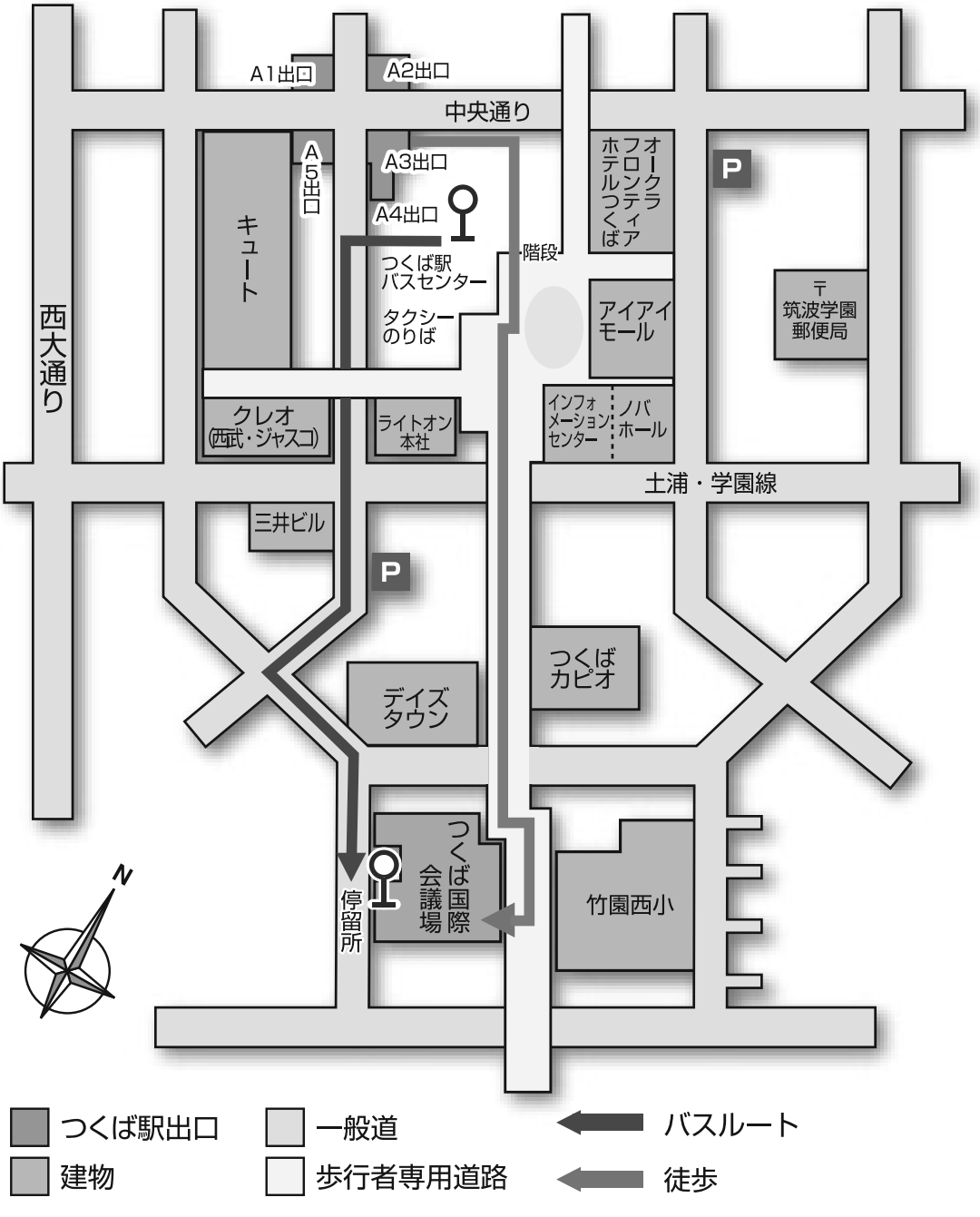


つくば国際会議場までのご案内

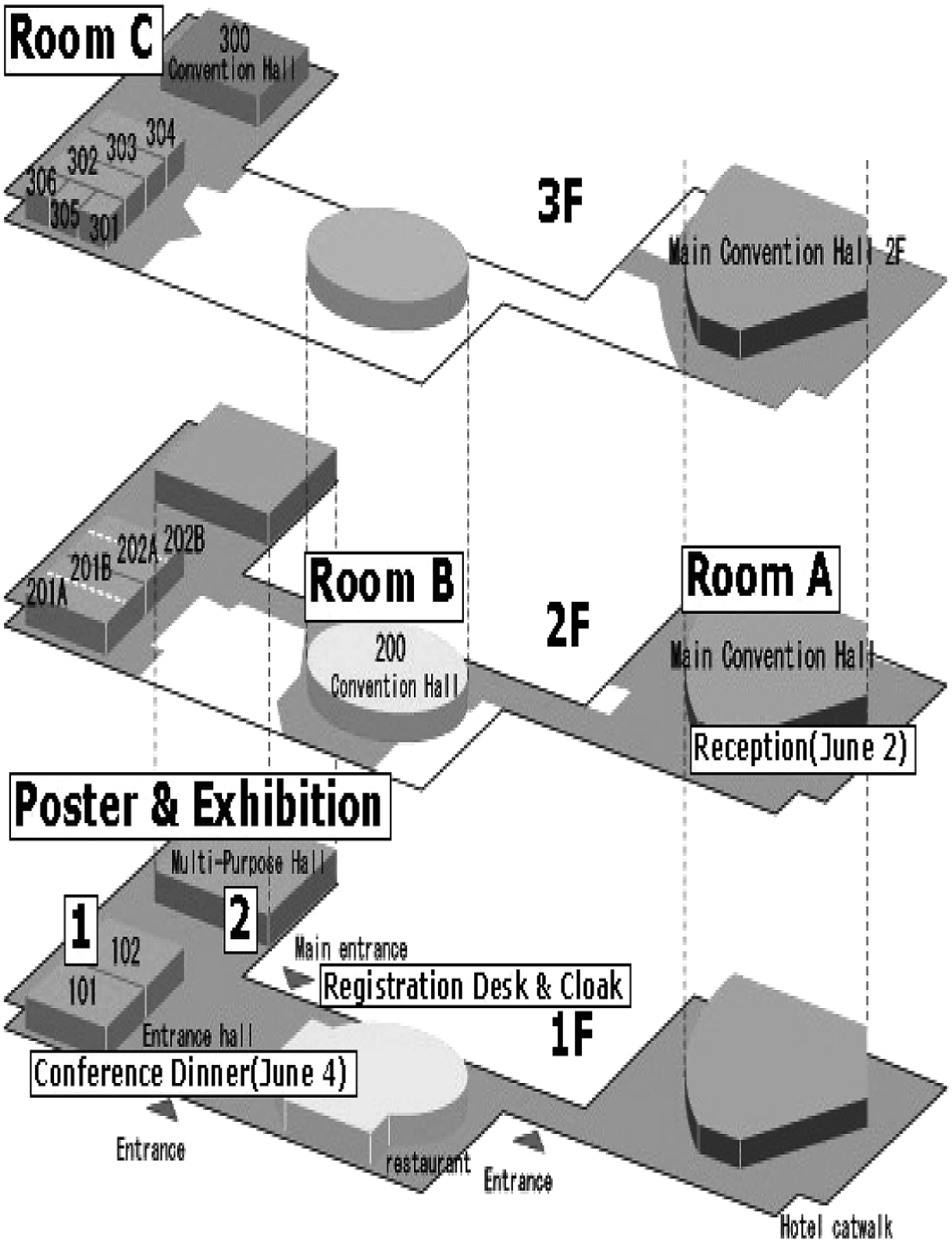
つくば駅から歩行者専用道路で10分

徒歩：A3出口前の券売所手前を右折してその後,つくば国際会議場まで直進

バス：乗車…つくばバスセンター④番のりば学園南循環
　　降車…つくば国際会議場停留所



Floor Maps of Tsukuba International Congress Center



Program at a Glance

Day 0 (June 2)

	12:00-14:00	15:00-19:05	19:20-20:15
Room A		**Workshop (in Japanese)** 「発生生物学を語ろう」	
Room A Lobby			**Reception**
Room D	DGD Editorial Meeting & JSDB Board Meeting		

Day 1 (June 3)

	9:00-10:30	10:45-12:15	12:30-13:15	13:30-15:00	15:15-16:45	17:00-18:30	18:45-20:15
Room A	**OP 1** Morphogenesis 1	**OP 4** Morphogenesis 2	**Luncheon** (Olympus Corporation) (in Japanese)	**OP 7** Morphogenesis 3	**OP 10** Morphogenesis 4		**OP 13** Morphogenesis 5
Room B	**OP 2** Regeneration 1 & Growth 1	**OP 5** Regeneration 2 & Growth 2		**OP 8** Organogenesis 1	**OP 11** Organogenesis 2		**OP 14** Organogenesis 3
Room C	**OP 3** Early Embryogenesis 1	**OP 6** Early Embryogenesis 2	**Luncheon** (Leica Microsystems) (in Japanese)	**OP 9** Neural Development 1 & Behavior	**OP 12** Neural Development 2		**OP 15** Reproduction & Gametogenesis
Poster Room	**Poster Mounting**		**Poster**			**Poster Discussion 1**	
	Exhibition (Equipment & Books)						

Day 2 (June 4)

	9:00-11:30	12:00-13:15	13:30-15:00	15:15-16:45	17:00-19:00	19:00-21:00
Room A	**Plenary Lectures**	**General Assembly** (in Japanese)	**OP 16** Early Embryogenesis 3	**OP 19** Early Embryogenesis 4		
Room B			**OP 17** Growth 3	**OP 20** Growth 4 & Metamorphosis		
Room C			**OP 18** Neural Development 3	**OP 21** Neural Development 4		
Poster Room	**Poster**				**Poster Discussion 2**	
	Exhibition (Equipment & Books)					
Entrance Hall						Conference Dinner

Day 3 (June 5)

<table>
<tr><th></th><th>9:00-12:15</th><th>12:30-13:15</th><th>13:30-16:45</th></tr>
<tr><td>Room A</td><td>Symposium 1
New horizon in developmental biology</td><td>Luncheon
(Elsevier)</td><td>Symposium 4
How do mathematical models contribute to understanding of developmental biology ?</td></tr>
<tr><td>Room B</td><td>Symposium 2
Vertebrate brains: Structure, Function and Evolution</td><td>Luncheon
(Gender-equal society)
(in Japanese)</td><td>Symposium 5
Topics in plant and animal development</td></tr>
<tr><td>Room C</td><td>Symposium 3
“Decodings” of the mouse by developmental genetics approaches</td><td></td><td>Symposium 6
Cell-cell interaction in tissue stem cell regulation</td></tr>
<tr><td rowspan="2">Poster Room</td><td colspan="2">Poster Removal (～ 13:30)</td><td rowspan="2"></td></tr>
<tr><td>Exhibition (Equipment & Books)</td></tr>
</table>

General Information for Attendance

Venue

Tsukuba International Congress Center
2-20-3 Takezono, Tsukuba, Ibaraki, 305-0032 Japan
Phone: +81-29(861)0001 Fax: +81-29(861)1209
URL: http://www.epochal.or.jp/eng/index.html

Official Language

English will be the official conference language, and no simultaneous translation will be provided.
The workshop (June 2nd) will be held in Japanese.

Registrations

Advanced Registration is no longer available. Please register at the conference venue. (On-site registration is available throughout the conference period.)

Registration Fee (On-site) (JPY)

General JSDB/ISDB/APDBN members: ¥10,000 (early ¥8,000)
Student JSDB/ISDB/APDBN members: ¥5,000 (early ¥4,000)
General Non-members: ¥10,000 (early ¥9,000)
Student Non-members: ¥6,000 (early ¥5,000)
*Registration includes access to all scientific sessions and exhibits.
*Students should provide the name and affiliation of their supervisor.

JSDB General Assembly

June 4 (Thursday), 12:00-13:15, Room A

Payment

All payment must be made in Japanese yen, by credit card or by bank draft, payable to "The 48th Annual Meeting of the JSDB". Please send payment with the completed registration form to the secretariat. **No** checks or money orders will be accepted. All bank charges are to be borne by the remitter.

Name Tags

Name tags will be sent to advance registrants, or will be provided at the time of registration.
Participants are requested to wear their name tags at all times during the conference.

Lunch

June 3 (Wed) & June 5 (Fri): At the luncheon seminar, a limited number of free lunch boxes will be provided by sponsor.
June 4 (Thu) : Lunch boxes available (¥1,000).

Refreshments and Internet Access

Two break corners associated with Poster Room 1 and 2.

Free Wi-Fi is available at the Tsukuba International Congress Center.

DGD Editorial Meeting & JSDB Board Meeting

June 2 (Tue) 12:00-14:00

Tsukuba International Congress Center 2F Room D.

Reception

June 2 (Tue) 19:20-21:00

Tsukuba International Congress Center 2F **Room A (Main Hall) Foyer**

Reception fee (On-site) (JPY)

General JSDB/ISDB/APDBN members: ¥1,000 (early ¥1,000)

Student JSDB/ISDB/APDBN members: ¥1,000 (early ¥1,000)

General Non-members: ¥1,000 (early ¥1,000)

Student Non-members: ¥1,000 (early ¥1,000)

Conference Dinner

June 4 (Thu) 19:00-21:00

Tsukuba International Congress Center 1F **Entrance Hall**

Conference Dinner fee (On-site) (JPY)

General JSDB/ISDB/APDBN members: ¥8,000 (early ¥7,000)

Student JSDB/ISDB/APDBN members: ¥4,000 (early ¥3,000)

General Non-members: ¥8,000 (early ¥7,000)

Student Non-members: ¥4,000 (early ¥3,000)

Cloakroom

Cloakroom is available for your luggage. Please note that valuables and computers cannot be accepted. We are not responsible for any damage or loss at the cloakroom.

Open Hour:

June 2nd	June 3rd	June 4th	June 5th
14:00-21:30	8:30-20:45	8:30-21:30	8:30-17:30

Location: 1F Main Entrance

Luncheon Seminar

オリンパス株式会社　ランチョンセミナー
= Luncheon Seminar by **Olympus Corporation.** =
June 3 (Wed) 12:30-13:15, Room A

ライカマイクロシステムズ株式会社　ランチョンセミナー
= Luncheon Seminar by **Leica Microsystems K.K.** =
June 3 (Wed) 12:30-13:15, Room C

ELSEVIER　ランチョンセミナー
= Luncheon Seminar by **ELSEVIER** =
June 5 (Fri) 12:30-13:15, Room A

オリンパス株式会社　ランチョンセミナー

=Luncheon Seminar by **Olympus Corporation**.=

June 3 (Wed) 12:30-13:15, Room A

タイトル:「人工遺伝子ネットワークによる発生現象の再構成」

講演者: 戎家 美紀先生（独立行政法人理化学研究所生命システム研究センター再構成生物学研究ユニット ユニットリーダー）

－　戎家 美紀（えびすや みき）先生 略歴 －

1980 年大阪府生まれ。2003 年に京都大学理学部卒業。08 年に京都大学大学院生命科学研究科博士課程修了。京都大学生命科学系キャリアパス形成ユニットのグループリーダーを経て、13 年より理化学研究所発生・再生科学総合研究センターのユニットリーダー。13 年度文部科学大臣表彰若手科学者賞受賞。

－　主要論文 －

1.Matsuda M, Koga M, Woltjen K, Nishida E & Ebisuya M.
Synthetic lateral inhibition governs cell-type bifurcation with robust ratios.
Nat. Commun., 6, 6195, doi:10.1038/ncomms7195 (2015)

2.Imajo M, Ebisuya M & Nishida E.
Dual role of YAP and TAZ in renewal of the intestinal epithelium.
Nat. Cell Biol., 17, 7-19 (2015).

3.Koga M, Matsuda M, Kawamura T, Sogo T, Shigeno A, Nishida E and Ebisuya M.
Foxd1 is a mediator and indicator of the cell reprogramming process.
Nat. Commun., 5, 3197, doi:10.1038/ncomms4197 (2014)

4.Matsuda M, Koga M, Nishida E and Ebisuya M.
Synthetic Signal Propagation Through Direct Cell-Cell Interaction.
Sci. Signal., 5, ra31 (2012)

5.Ebisuya M, Yamamoto T, Nakajima M and Nishida E. Ripples from neighbouring transcription.
Nat. Cell Biol., 10, 1106-1113 (2008)

6.Yamamoto T*, Ebisuya M* (*Equal first authors), Ashida F, Okamoto K, Yonehara S and Nishida E.
Continuous ERK activation downregulates antiproliferative genes throughout G1 phase to allow cell-cycle progression.
Curr. Biol., 16, 1171-1182 (2006)

ライカマイクロシステムズ株式会社　ランチョンセミナー

=Luncheon Seminar by **Leica Microsystems K.K.**=

June 3 (Wed) 12:30-13:15, Room C

タイトル:「共焦点顕微鏡用ライトシートモジュール、ライカ DLS for TCS SP8」

講演者: 野中茂紀　先生
自然科学研究機構 基礎生物学研究所
イメージングサイエンス研究領域 時空間制御研究室

講演者：伊集院　敏
ライカマイクロシステムズ株式会社
ライフサイエンス事業本部

要旨

ライカマイクロシステムズがライトシートイメージングモジュール DLS for TCS SP8 を発表しました。DLS モジュールは、共焦点レーザー顕微鏡によるライトシート顕微鏡を実現し、従来のライトシート顕微鏡による低侵襲なイメージングに加え、高速でのタイムラプスイメージングや共焦点レーザーと組み合わせることで初めて実現するアプリケーションなどが可能となりました。更に、ガラスボトムディッシュを使用でき、簡単に試料調整ができるようにもなっております。

本講演では、ライカ DLS を実際に使用しての感触などをはじめ、最先端のライトシート顕微鏡イメージングについてご紹介いたします。

第 48 回日本発生生物学会年会　保育室のご案内

保育室の利用を希望される方は、以下の規定を御確認の上、所定の手続き方法に従って日本語でお申込ください。なお保育スタッフは英語を話せません。

託児時間	6 月 2 日（火）　14:30 ～ 21:15 6 月 3 日（水）　8:30 ～ 20:30 6 月 4 日（木）　8:30 ～ 19:15 6 月 5 日（金）　8:30 ～ 17:15 （＊原則としてお子様の昼食は、保護者が一緒におとりください。）
対象年齢	生後 3 ヶ月から 12 歳まで（大会参加者のお子様に限る）（首のすわっているお子様～）
託児場所	※セキュリティ確保の為、お申込者のみにご案内致します。
託児形態	ベビーシッター会社へ保育スタッフ派遣を依頼します。
委託先	株式会社　ママ MATE
託児料	500 円／時間／お子さま 1 名（1 時間未満は切上げ） 保育料のお支払いは、お子様をお預けの際にお願いします。 ＊申込みにより保育スタッフを依頼しますので、当日のキャンセルや、実際の利用時間が申込時間よりも短くなった場合は、申込時の保育料のお支払いをお願いします。また、利用時間をやむを得ず延長された場合には、延長分のお支払いをお願いします。
申込み先	「利用規約（PDF94KB）」を確認のうえ、必要事項を記入した「申込書（PDF84KB）」を FAX または E メールにてお申し込みください。 後日、詳細を記載しました「受領確認書」をお申し込み頂いた方法で返信します。お申し込み後一週間以内に受領確認書が届かない場合には、下記の「申し込み先・お問い合わせ先」まで必ずお問い合わせください。 ※　保育室の場所は、受領確認書に記載させていただきます。 ※　電話での受付は　078-306-3072（平日 9:00 ～ 17:00） ■申し込み先・お問い合わせ先 日本発生生物学会　事務局 担当 : 桃津 FAX: 078-306-3072　　E-mail: jsdbadmin@jsdb.jp TEL: 078-306-3072（平日 9:00 ～ 17:00）
申込締切	2015 年 5 月 15 日（金）17 時 00 分 ただし、定員になり次第締め切らせて頂きますのでお早めにお申込み下さい。
不測の事故に対応するために、株式会社ママ MATE が保険に加入しており、保険適用範囲で補償いたします、また第 48 回日本発生生物学会年会は、事故の責任は負わないことを申し添えます。	

Instruction for Presentations

大会発表についてのご注意

Oral presentation

1. Presentation time

   Oral presentation: **12 min** for presentation and **3 min** for discussion.

2. Computer for oral presentation

   Basically, presentation shall be given with your own laptop. Please do not forget to bring your laptop.

   - Make sure to bring any necessary electrical adaptors and connectors for your computer.
   - The meeting venue will provide a Mini D-sub15 pin cable for connecting to PC switchers. Macintosh and certain kinds of Windows computers require an appropriate connector to fit a Mini D-sub15 pin plug.
   - Electric power in Tsukuba is provided at 100 V, 50 Hz.

   Just in case your computer does not work properly, some back-up computers (both Win and Mac) will be prepared. Please make sure to bring a memory storage device including your presentation file.

3. Presentation registration

   Please come to your session room at **20 min** prior to the beginning of the talk and connect your PC to a PC switcher.

Flash Talk

1. Regarding flash talk

   In your Flash talk, please give a simple summary of what your poster is about. Please avoid presenting specific data.

2. Presentation time

   Flash talks are **3 min** in length. There is no Q & A. When three minutes are up, the slides will automatically be removed from the screen. We would appreciate your cooperation in keeping to the allotted time to ensure that the session runs smoothly.

3. Presentation data

   Please submit your presentation data in advance between May 21 (Thu) and May 28 (Thu). Submit to: jsdb2015@jsdb.jp

   - **Please make a PDF file of your presentation. Other file types, such as PowerPoint and Keynote, are NOT allowed.**
   - First slide should include your name, affiliation, presentation title, and subject number.
   - Your presentation should be **no more than three slides long**.
   - A name of the PDF file is "Subject number (Presenter name)" Example: FT01-01(Taro Nihon)
   - File size should be less than 5 MB.
   - Please do not lock your file with a password.

*The presentation data received for the Flash Talk will only be used on the day of the presentation. We will not upload it to the web or publish it in other media. The data will be deleted after the session.

**If presentation data is not received by the deadline, your slot will be canceled.

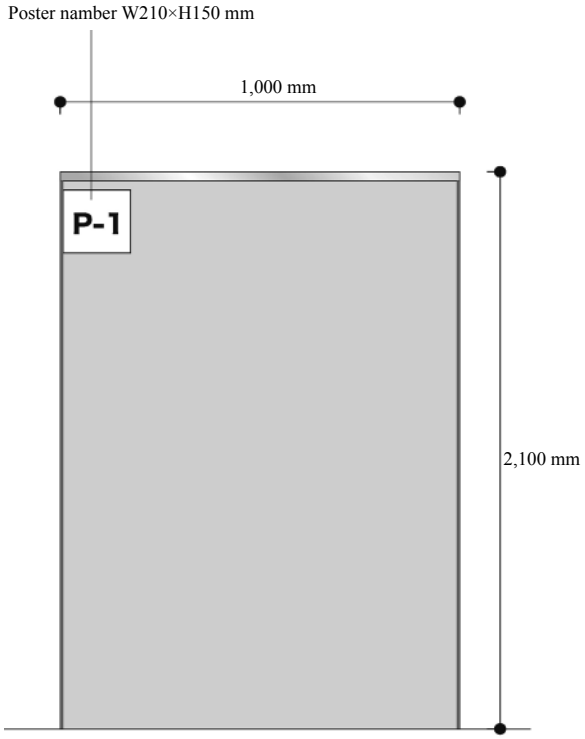
4. Presentation method

A computer will be prepared for the presentations. Presentation data submitted in advance will be pre-installed in the computer prepared for the presentations. You will not be able to use your own computers for the presentation. Please submit you presentation data by the deadline. Please come to the venue for the Flash Talks before your presentation starts.

Poster Presentations

Poster board size: 1,000 mm (width) × 2,100 mm (height)

- ✧ Please leave a 210 mm × 150 mm blank space at the top left corner for the organizing committee to indicate your poster number.
- ✧ Please stay (or stand) in the vicinity of your poster for explanation during your assigned discussion time. Be sure that every poster presenter is assigned to explain his/her poster on both Day 1 and Day 2.

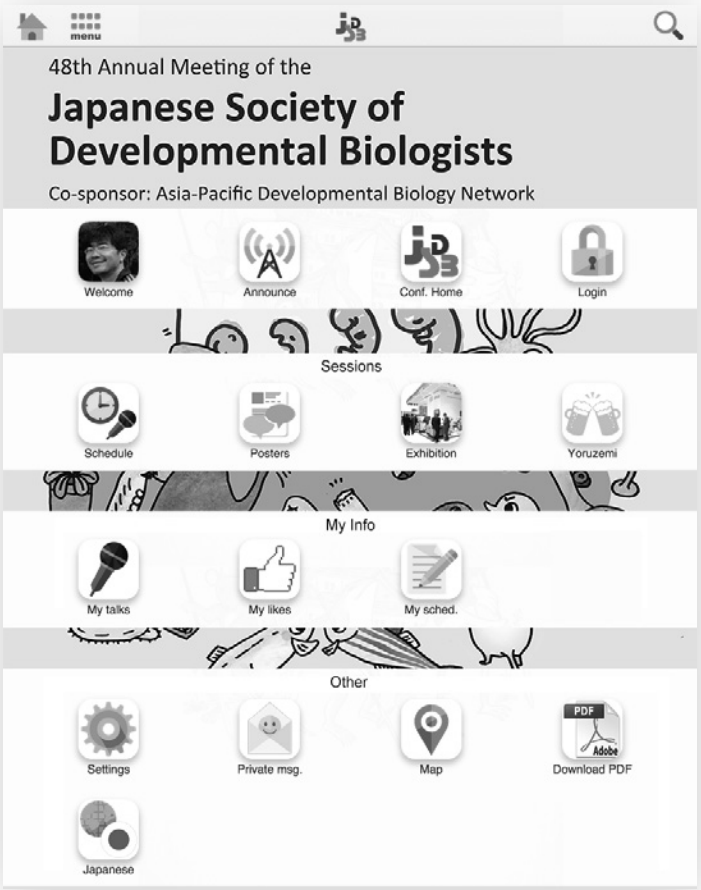


Mounting:	**9:00-12:00 on Day1 (June 3)**
Day1(June 3) Discussion:	17:00-18:30 17:00-17:45 for odd number posters 17:45-18:30 for even number posters
Day2(June 4) Discussion:	17:00-19:00 17:00-18:00 for even number posters 18:00-19:00 for odd number posters
Removal:	**9:00-13:30 on Day3 (June 5)**

Poster Awards

Eligible participants are students or young research scientists (received Ph.D. within last five years) who wish to be considered for the poster awards. Organizing committee members, and day0 special presenters and the Dean of JSDB will vote. **The award ceremony will be held during conference dinner on Day2 (June 4).**

iWAB (Web Abstract Book)



Lots to “Like”

Use the “Like” feature in iWAB to encourage and show appreciation for other scientist’s work.

iWAB allows authors to see who “liked” their work and what work they are doing. You can see what presentations they will give at this conference. This could lead to a new collaboration.

We **respect your privacy**, hence “Likes” in iWAB are only visible to authors. We also have **“secret likes”** which are invisible to even authors.

PC in the office
Smartphone at the venue

iWAB is available on PCs, smartphones and tablets, and even on feature phones!

Prepare on your office PC with a comfortable large-size screen. Use our fast and powerful search and recommendation capabilities. “Like” and “schedule” the presentations that interest you.

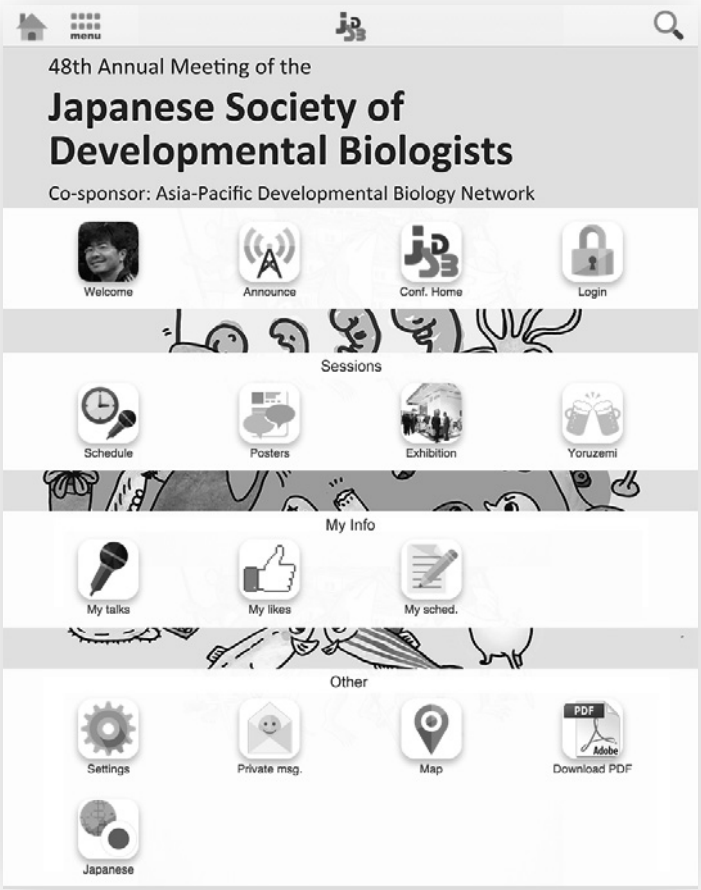
At the venue, use your smartphone. All your “likes” and “schedules” are always with you to assist efficient use of your time. We also send notifications for upcoming presentations.

Communicate more

The face-to-face discussions and communications are what makes conferences uniquely fun.

iWAB has a “Yoruzemi” feature which helps you organize and attend parties. It also has a private messages feature to allow you to directly communicate with other participants.

iWAB (Web Abstract Book)



「いいね！」をしよう

「いいね！」は研究者同士の交流を深め、エールを交換するためのツールです。

誰が「いいね！」をしてくれたか、その人がどのような研究をして、どの発表をしているのかがすぐにわかるようになっていますので、共同研究のきっかけにもなります。

プライバシー保護のため、iWABの「いいね！」は著者にしか見えません。だれが「いいね！」したかは第三者には見えません。さらに著者にも見えない**「秘密のいいね！」**も用意していますので、ぜひご活用ください。

予習はパソコン、会場はスマートフォン

iWABはパソコン、スマートフォン、タブレットのいずれからも全く同じように使えます。

予習はオフィスのパソコンでiWABをご利用ください。広々した大画面でiWABの高速・高性能検索機能やレコメンド機能を活用し、興味のある演題を探してください。そして「いいね！」や「マイスケジュール」に登録してください。

会場ではスマートフォンやタブレットをご利用ください。パソコンで入力した「いいね！」「マイスケジュール」が確認できますので、効率よく会場が廻れます。しかも発表の数分前に通知が来ますので、発表の聞き忘れがありません。

もっと交流をしよう

学会の醍醐味は研究者同士の交流とディスカッションです。

iWABでは飲み会を企画するための「夜ゼミ」機能、さらにプライベートに連絡がとれる「プライベートメッセージ」機能を用意し、参加者同士の交流の手助けをしています。

ぜひご活用ください。

Useful iWAB functions and tips

【To ask questions regarding a specific abstract】
When you open an abstract, there will be a comment box where you can enter your comments or questions freely. These comments will be visible to the authors as well as co-authors. You can also reply to a comment or question you have received.

【To contact a meeting participant】
When you open the abstract of interest, the name of the author(s) will also appear on the screen. Click on the author's name which will bring up a message: Send a private message to XXXX. This function will allow you to send a message directly to another participant even if you do not know their e-mail address. You can send messages such as, "I would like to hear more about XX. Are you available to talk now?", etc. You can view your message history by going to Private Message from the main menu.

【Recommended functions】
Under "Settings" from the main menu, you can create a profile page where you can register your Twitter, Facebook, Read & Research Map ID, and links to your lab or personal website. You can also enter a short introduction about yourself. Authors can get to know who clicked "Like" for their posters, and perhaps go on to start new discussions and collaborations.

We hope that you take advantage of iWAB to expand your research network.

iWAB の便利な使い方をご紹介します。

【要旨について質問がしたい場合】
要旨を開くと「COMMENTS」欄があり演題について自由にコメントを入れることができます。このコメントは、発表者はもちろん、共著者も見ることができます。質問やご意見などコメントしてみてください。
コメントには、reply ができますので、いただいた質問やご意見に reply をしてみましょう。

【大会参加者にコンタクトを取りたい場合】
同じく要旨を開いた時に Author が表示されています。Author の名前をクリックすると「Send a private message to XXXX」が表示されます。E-mail アドレスがわからなくてもメッセージを伝えたい人に自由に送信ができます。「いついつポスターの前に行くので説明してください」、「XX について教えてほしいのですが、いまどこにいますか？」などなど伝えたい人、話したい人にメッセージを送ってみてください。
トップメニューの Private Message から履歴を確認することもできます。

【お勧めの機能】
トップメニュー「Settings」の中には、プロフィールページがあり、そこに Twitter、Facebook、Read & Research Map の ID および個人・研究室ホームページへのリンクも登録できますので、自己 PR も可能です。
著者は自分の演題に「いいね！」をしてくれた参加者を知り、新たな議論や共同研究につなげることもできます。

ぜひ、iWAB を活用して、研究者の輪を広げてみてください。

iWAB instructions

The iWAB is only available for viewing for meeting participants.

== Log-in directions ==

1. Go to: https://jsdb2015.castle104.com/

2. To log-in, enter the Registration ID (en000XXX or kn000XXX) and password sent to you

3. Once logged in, go to “Settings” to change the password to one of your own.

4. Go to “My talks” to see how your presentation has been listed.

5. Next review the program. To search for oral presentations, first go to the Oral presentation page to get an overview of the program, and then enter the name of a speaker or key word of interest in the search box. If any of the results interest you, you can click the “like” button to add it to your schedule. For posters, you can view where in the poster room the posters of interest are located. Finally, go to “My schedule” to confirm that your customized program has been created.

6. Abstracts are best viewed by downloading the PDF file of the abstract book to your computer. For iPad users, we recommend downloading the PDF to iBook. This will improve searching for and viewing abstracts.

7. After you arrive in Tsukuba, find a good restaurant, decide on a discussion theme, and invite new friends to your Yoruzemi for a lively evening of talking science.

   The philosophy behind Yoruzemi is to get to know as many faces as possible. There will be opportunities to meet and talk to people that you would otherwise have difficulties contacting. We hope that all of the participants enjoy this new meeting style, which places an emphasis on creating ties with other people.

iWAB　ログイン方法

iWAB は、大会参加者のみが閲覧できます。

1. まずは、以下の URL にアクセスして
   URL: https://jsdb2015.castle104.com/

2. 配信されている Registration ID (en000XXX or kn000XXX)/Password でログインしてください。

3. ログインできましたら、まずは Setting で Password を自分のものに変更ください。

4. そして、My talks で自分の発表がどのように掲載されているかを確認ください。

5. いよいよプログラムのチェックです。まずは Oral 発表を検索します。
   Oral のページで Oral 全体のプログラムの概観をつかみ、次に検索マークに自分の調べたい人名やキーワードを入れて検索し、興味のあるものがあれば like ボタンをおして my schedule に入れると自分のプログラムがカスタマイズできます。
   Poster をチェックすると、ポスター会場に自分が見たいポスターがどのように配置されているかを見ることができます。そして、my schedule に自分のプログラムがまとめられていることを確認ください。

6. 要旨の美しさと見やすさを堪能してもらうには、pdf を自分のパソコンにダウンロードすることをお奨めします。iPad の方は是非とも iBook にダウンロードしてみてください。検索も見やすさも最高です。

7. つくばに着きましたら､美味しいお店を探して､テーマを決めて新しい友人を Yoruzemi（夜ゼミ）で誘って、サイエンスの話で盛り上がって欲しいところです。

できるだけ人の顔がわかることを哲学として作り込まれています。
今まで、連絡がなかなか取りにくかった人とのディスカッションやこんな人がいたのかという発見があると思います。人と人とのつながりを大切にした新しい学会の楽しみ方を堪能してください。

Scientific Programs

Plenary Lectures

June 4 (Thu) 9:00-11:30 Room A

Chairperson: Hidetoshi Saiga (Tokyo Mteropolitan Univ.)

PL-01 09:00-09:50 From genomes to diversity: gene duplication, developmental biology and animal evolution

○Peter W.H. Holland (Department of Zoology, University of Oxford)

The discovery of developmentally-important genes paved the way for a science in which embryonic development could be compared between divergent evolutionary lineages at the molecular level. A picture has emerged of highly conserved genes orchestrating developmental processes, with fundamental and shared molecular mechanisms dating back to the dawn of bilaterian animals or even earlier. Yet there is a danger in this view of evolution and development. Overemphasizing similarities between species can lead us to ignore the differences. One common way in which developmentally-important genes can change in evolution is by gene duplication, to generate small families of very similar genes or to spawn more divergent new genes. I will describe how gene duplication has contributed to the functional evolution of Hox, ParaHox and other homeobox genes, using examples from insects, molluscs and vertebrates. Even within groups of genes as generally conserved as homeobox genes, duplication leads to genetic diversity that ultimately contributes to organismal diversity in evolution.

Chairperson: Yoshiko Takahashi (Kyoto Univ.)

PL-02 09:50-10:40 Patterning Mechanisms Underlying Neuro-Vascular Branching Networks

○Yoh-suke Mukouyama (National Heart, Lung, and Blood Institute)

Branching morphogenesis is a fundamental program used by many organ systems to create spatial ramified networks during organogenesis. Research interests in my laboratory focus on understanding how the vascular and nervous systems develop the architectural and stereotypical patterns of tubular branching networks, which are often patterned similarly in peripheral tissues. This complex developmental process requires a series of special cues, which progressively lead to dramatic changes in cell-cell organization. During angiogenesis, a primary capillary network undergoes intensive vascular remodeling and develops into a hierarchical vascular branching network. We have shown that peripheral sensory nerves control arterial branching pattern in the developing skin. This alignment facilitates access to oxygen and nutrients for the nerves. At the molecular level, two distinct mechanisms underlie the congruence of sensory nerve and arterial vessel branching: nerve-derived VEGF-A controlling arterial differentiation, and nerve-derived CXCL12 controlling vessel branching and alignment with nerves. After the hierarchical vascular network is thoroughly

covered with mural cells such as vascular smooth muscle cells (VSMCs), sympathetic nerves extend along and innervate large vessels to control vascular tone and participate in blood pressure regulation. We have found that in the developing heart, coronary veins serve as an intermediate conduit within the subepicardium that guides distal sympathetic axon projections via local secretion of NGF by coronary VSMCs. These studies demonstrate that a coordinated local action of pattering and differentiation mechanisms underlies organ-specific neuro-vascular branching patterns. The presentation will describe our recent progress towards understanding cellular dynamics and molecular machinery that regulate the correct timing of these guidance and differentiation signals.

Chairperson: Hirokazu Tsukaya (Univ. of Tokyo)

PL-03 10:40-11:30 Patterning Plant Epidermis: Cell Fate and Communication

○Keiko U. Torii (Howard Hughes Medical Institute and Department of Biology, University of Washington)

Multicellular organisms produce complex tissues with specialized cell types for functionality. Our group is interested in understanding the molecular mechanism of how a cell constituting a multicellular organism communicates with each other to execute decision-making processes. Specifically we are focusing on stomatal patterning on developing epidermis as a model for two-dimensional spatial patterning for its simplicity, accessibility, and availability of molecular-genetic and imaging tools. Stomatal patterning occurs according to positional cues and requires critical cellular decision-making steps of whether or not to become stomata. During development of photosynthetic organs, a selected population of undifferentiated protodermal cells undergoes asymmetric cell divisions that initiate the stomatal cell lineage. A stomatal precursor cell reiterates asymmetric cell division and eventually differentiates into guard cells. Recent progress by our group and others has led to the discovery of key molecules and pathways controlling stomatal patterning and differentiation: Sequential and combinatorial actions of five bHLH transcription factors specifying stomatal precursor cell state transitions; A ligand-receptor system enforcing frequency and orientation of asymmetric cell division, and; Intrinsic polarity and cellular constituents that are required for creating and maintaining asymmetry. The next challenge is to understand how these regulatory components are put together in the context of two-dimensional tissue patterning in the plant epidermis. Our recent studies further revealed that signaling components are shared with other developmental and environmental processes. This raises an important question of how individual peptide signal triggers distinct developmental responses using the same receptors and how their biological specificities determined. Combining live imaging, biochemistry, mathematical modeling, and large-scale biology, we seek to unravel multi-scale regulatory mechanisms coordinating stomatal patterning in time and space.

Workshop (in Japanese)

June 2 (Tue) 15:00 ～ 19:05 Room A

15:00-15:05　Opening 1

WS-01　15:05-15:40　TBA

○Shigeo Hayashi (RIKEN CDB)

WS-02　15:40-16:15　Organogenesis in vertebrates～listen to embryo's whisper～
脊椎動物の器官形成　～細胞の声を聞きながら～

○Yoshiko Takahashi (Grad. Sch. of Sci., Kyoto Univ.)

16:15-16:25　Break

16:25-16:30　Opening 2

WS-03　16:30-17:05　40 years in Regeneration Biology
発生生物学会のあしたのジョーを目指して

○Kiyokazu Agata (Dept. Biophys., Kyoto Univ.)

WS-04　17:05-17:40　TBA

○Hirokazu Tsukaya (Univ. of Tokyo)

17:40-17:50　Break

17:50-17:55　Opening 3

WS-05　17:55-18:30　Logic for epigenetic gene regulation during vertebrate development
脊椎動物の発生におけるエピジェネティック制御のロジック

○Hiroyuki Takeda (Dept. of Biol. Sci., University of Tokyo)

WS-06　18:30-19:05　TBA

○Koji Tamura (Tohoku Univ.)

Chairpersons:

Naoto Ueno
(NIBB)

Hiroshi Wada
(Univ. of Tsukuba)

Makoto Kobayashi
(Univ. of Tsukuba)

Symposia

Symposium 1: New horizon in developmental biology

June 5 (Fri) 9:00 ～ 12:15 Room A

Organizers:

Yoshiko Takahashi
(Kyoto University)

Hiroshi Wada
(University of Tsukuba)

We will hear five speakers who are pursuing original researches in morphogenesis and organogenesis. The topics include neural crest cells, tail development, rotating organ, self-organizing tissues, and hormone-regulated neural network. We will discuss how we explore new horizons in developmental biology, where interdisciplinary studies are critical.

S01-1 09:00-09:30 Self-organized formation of complex tissues from stem cells
○Mototsugu Eiraku (RIKEN Center for Developmental Biology)

S01-2 09:30-10:00 Neuronal controls of developmental transition via modulating steroid hormone biosynthesis in the fruit fly *Drosophila melanogaster*
ショウジョウバエにおけるステロイドホルモン生合成調節を介した発育タイミングの神経支配
○Yuko Shimada-Niwa[1], Eisuke Imura[2], Ryusuke Niwa[1,3] (Faculty of Life and Environmental Sciences, Univ. of Tsukuba[1], Graduate School of Life and Environmental Sciences, Univ. of Tsukuba[2], PRESTO, JST[3])

S01-3 10:00-10:50 Gene regulatory network underlying neural crest formation and EMT
○Marianne Bronner (Caltech)

S01-4 10:50-11:20 Left-right asymmetric planar cell polarity controls directional epithelial cell migration in *Drosophila*
ショウジョウバエ生殖器の回転形成を制御する細胞平面の左右非対称性
○Erina Kuranaga (Lab Histogenetic Dynamics, RIKEN CDB)

S01-5 11:20-11:50 What is the tail?
しっぽを知る
○Yoshiko Takahashi (Grad. Sch. of Sci., Kyoto Univ.)

11:50-12:15 Discussion

Symposium 2: Vertebrate brains: Structure, Function and Evolution

June 5 (Fri) 9:00 ～ 12:15 Room B

Organizers:

Koichi Kawakami
(National Institute of Genetics)

Yasunori Murakami
(Ehime University)

The brain is the most complex organ in a vertebrate's body. This symposium aims to discuss how such a complex organ is formed and functions by providing a comparative and evolutionary overview of the vertebrate brain.

S02-1 09:00-09:27 The role of Fgf signaling in the developing lamprey pallium
ヤツメウナギの終脳パターニングにおける FGF シグナルの役割
○Yasunori Murakami (Ehime Univ.)

S02-2 09:27-10:00 The Forebrain of Zebrafish − A Radical Paradigm
○Thomas Mueller (KSU)

S02-3 10:00-10:27 Functional dissection of the zebrafish telencephalon by the Gal4-UAS approach
Gal4-UAS 法によるゼブラフィッシュ終脳の機能的解剖
○Koichi Kawakami[1,2], Pradeep Lal[1], Hideyuki Tanabe[1] (Div. Mol. & Dev. Biol., NIG[1], Dep. Genet., Sokendai[2])

S02-4 10:27-10:54 Evolution and development of cerebellar neural circuitry in teleosts
真骨魚類における小脳の発生と進化
○Masahiko Hibi[1,2], Miki Takeuchi[1], Shingo Yamaguchi[2], Koji Matsuda[2], Takuto Hayashi[2], Yuichiro Hara[3], Tetsutaro Hayashi[3], Yoshimasa Sakakibara[2], Masayuki Yoshida[4], Shigehiro Kuraku[3], Takashi Shimizu[1,2] (BBC, Nagoya Univ.[1], Grad. Sch. Science, Nagoya Univ.[2], RIKEN CLST[3], Grad Sch. Biosphere Sci., Hiroshima Univ.[4])

S02-5 10:54-11:21 Evolution of progenitor dynamics and transcriptional regulation in amniote brains
羊膜類脳における前駆細胞の動態と転写制御機構の進化
○Tadashi Nomura (Dev Neurobiol, Kyoto Pref Univ Med)

S02-6 11:21-11:48 Origin of the neurogenetic program in the mammalian neocortex
哺乳類大脳皮質における神経発生プログラムの起源
○Tatsumi Hirata (Div. of Brain Function, Nat'l Inst. of Genetics)

S02-7 11:48-12:15 Neuronal fate specification in establishing the neocortex
大脳新皮質構築を担う細胞分化決定機構
Takuma Kumamoto[1], ○Carina Hanashima[1,2] (RIKEN CDB[1], Dept. Biol., Grad. Sch. Sci., Kobe Univ.[2])

Symposium 3: “Decodings” of the mouse by developmental genetics approaches

June 5 (Fri) 9:00 ～ 12:15 Room C

Organizer:

Hiroshi Masuya
(RIKEN BioResource Center)

Mouse has a long history for model organism for genetics studies. In present day, the movement of mouse genetics toward the forefront of modern biomedical researches remarkably contributes the developmental biology, where genetics is used as a tool for unraveling (“decoding”) of system of life which is “coded” by genes and genetic systems. In this symposium, with talks of cutting-edge studies of mouse genetics, I hope audience will find experimental approaches to “decode” biological systems underlies morphogenesis, neurogenesis and evolution.

09:00-09:10 Introduction

S03-1 09:10-09:45 Development of CT imaging technology for the mouse phenotyping
Micro-CT イメージングによる高速・高精細マウス表現型解析法の開発
○Masaru Tamura (Tech. Dev. Mouse Phenotyping, RIKEN BRC)

S03-2 09:45-10:20 The temporal-codes of neural stem cells underlying the cell diversity and the tumorigenesis in mice
脳細胞の多様性形成および脳腫瘍発生に関わる神経幹細胞の時間特性を生み出す分子メカニズム
○Yoshinobu Sugitani[1,2], Reiko Sugitani-Yoshida[2], Katsuyuki Yaginuma[1], Shigeyasu Nakai[1], Osamu Minowa[1], Masaharu Ogawa[2], Tetsuo Noda[1] (Cell Biol., JFCR ― Cancer Inst.[1], BSI, Riken[2])

S03-3 10:20-10:55 *t*w5 and mouse early embryogenesis: developmental genetics of *t*-complex
*t*w5 遺伝子とマウス初期発生：*t*-コンプレックスの発生遺伝学
○Kuniya Abe[1,2], Karen Artzt[3], Michihiko Sugimoto[1,4] (RIKEN BRC[1], Grad. Sch. Life and Environ. Sci., Univ. Tsukuba[2], Inst. Cell. Mol. Biol., Univ. Texas at Austin[3], Inst. Res. Dev. and Anal., Kumamoto Univ.[4])

S03-4 10:55-11:30 Evolution of a *Shh* endoderm enhancer in the transition from lungs to non-respiratory gas bladder
肺から非呼吸性浮き袋への形態進化に伴った *Shh* エンドダーム　エンハンサーの進化
○Tomoko Sagai (Mammal. Genet., Natl. Inst. Genet.)

S03-5 11:30-12:05 Forward genetics of sleep in Mice
○Masashi Yanagisawa (International Institute for Integrative Sleep Medicine (WPI-IIIS), University of Tsukuba)

Symposium 4: How do mathematical models contribute to understanding of developmental biology ?

June 5 (Fri) 13:30 ～ 16:45 Room A

Organizers:

Toshihiko Fujimori
(National Institute for Basic Biology)

Tatsuo Shibata
(RIKEN Center for Developmental Biology)

We would like to discuss advantages of mathematical approaches to understanding of developmental biology in this session. As you may know most of JSDB members are experimental biologists, and we are not always familiar with mathematical models. Organizers hope that we can provide an opportunity to discuss pros and cons of this type of approaches for the advance in developmental biology with general audience.

13:30-13:35 Introduction

S04-1 13:35-14:05 Cell lineage tracing in invading cell populations: superstars revealed!
○Kerry Landman[1], Bevan Cheeseman[1], Ben Binder[2], Dongcheng Zhang[3], Donald Newgreen[3] (Uni Melb, Australia[1], Uni Adelaide, Australia[2], MCRI, Victoria, Australia[3])

S04-2 14:05-14:35 Cell shape homeostasis against heterogeneous proliferation in epithelium
細胞増殖の乱れに対する上皮細胞の形の恒常性
Alice Tsuboi[1], Shizue Ohsawa[2], Tatsushi Igaki[2], ○Koichi Fujimoto[1] (Osaka Univ. Dept. of Biol. Sci.[1], Kyoto Univ., Grad. Sch. Biostudies[2])

S04-3 14:35-15:05 Local increases in mechanical tension guide cell sorting along compartment boundaries by biasing cell intercalations
○Daiki Umetsu (RIKEN CDB)

S04-4 15:05-15:35 Mechanics of luminal epithelial fold pattern formation and its relationship to cell geometries in mouse oviduct
マウス卵管における管腔側上皮のヒダの形態パターン形成の力学と細胞の幾何学的形態との関係
○Hiroshi Koyama[1,2], Dongbo Shi[1,3], Kouji Komatsu[1,5], Makoto Suzuki[2,4], Naoto Ueno[2,4], Tadashi Uemura[3], Toshihiko Fujimori[1,2] (Div. Embryology, NIBB[1], SOKENDAI[2], Grad. Sch. Biostudies, Kyoto Univ.[3], Div. Morphogenesis, NIBB[4], Grad. Sch. Med., Nagoya Univ.[5])

S04-5 15:35-16:05 Reaction-diffusion pattern in shoot apical meristem of plants
植物茎頂分裂組織における反応拡散パターン
○Hironori Fujita (National Institute for Basic Biology)

S04-6 16:05-16:35 Mechanism of Scaling in DV-patterning of *Xenopus* embryo
○Tatsuo Shibata[1], Hidehiko Inomata[2] (Laboratory for Physical Biology, RIKEN Quantitative Biology Center[1], Laboratory for Axial Pattern Dynamics, RIKEN Center for Developmental Biology[2])

16:35-16:45 General Discussion & Closing Remarks

Symposium 5: Topics in plant and animal development

June 5 (Fri) 13:30 〜 16:45 Room B

Organizers:

Hirokazu Tsukaya
(University of Tokyo)

Hiroki Nishida
(Osaka University)

This symposium is aimed at facilitating communication and discussion between plant and animal developmental biologists to share cutting-edge researches in both fields. We invite established and young researchers who are actively studying to understand developmental phenomena from fertilization to organ formation in the two kingdoms. We hope that the symposium provides a nice opportunity to enhance relationship between plant and animal developmental biologists and to create totally novel field of developmental biology.

Co-organized by: Multidimentional Exploration of Logics of Plant Development, MEXT, Japan

13:30-13:45 Introduction

S05-1 13:45-14:15 Molecular Control of Gametophyte Development and Fertilization
Lena Müller, Heike Lindner, Sharon Kessler, Michael Raissig, Hiroko Shimosatz-Asano, ○Ueli Grosniklaus (UZH)

S05-2 14:15-14:45 Self/nonself-recognition in ascidian fertilization: Common mechanisms with angiosperm self-incompatibility
ホヤの受精における自己非自己認識：被子植物における自家不和合性との共通機構
○Hitoshi Sawada (Sugashima MBL, Grad. Sch. Sci., Nagoya Univ.)

S05-3 14:45-15:15 Rootcap derived auxin prepatterns the longitudinal root axis
○Tom Beeckman (PSB-VIB, Ugent)

S05-4 15:15-15:45 Birds of a feather: genetics and development of diversity in pigeons
○Michael Shapiro[1], Eric Domyan[1], Anna Vickrey[1], Zev Kronenberg[2], Mark Yandell[2] (Biology, Univ. of Utah[1], Human Genetics, Univ. of Utah[2])

S05-5 15:45-16:15 The endodermis – a tale of two cell types
○Niko Geldner (DBMV, FBM, UNIL)

S05-6 16:15-16:45 Evolution and development of the bifurcated axial skeleton in the twin-tail goldfish
二叉した尾鰭を持つ金魚の尾部骨格の進化と発生
Gembu Abe, Shu-Hua Lee, Ing-Jia Li, Chun-Ju Chang, ○Kinya Ota (Lab of Aquatic Zoology, MRS, ICOB, Academia Sinica)

Symposium 6: Cell-cell interaction in tissue stem cell regulation

June 5 (Fri) 13:30 〜 16:45 Room C

Organizers:

Hideki Enomoto
(Kobe University)

Hironobu Fujiwara
(RIKEN Center for Developmental Biology)

This symposium introduces cell-cell interactions that play a principal role in regulating the function and maintenance of tissue stem cells.

S06-1 13:30-14:09 The role of extracellular matrix heterogeneity in regulating hair follicle stem cell-niche interactions
毛包幹細胞とニッチの相互作用における細胞外マトリックスのヘテロジェネイティの役割
○Hironobu Fujiwara (RIKEN CDB)

S06-2 14:09-14:48 Neuronal differentiation from the Schwann cell lineage
シュワン細胞系譜からの神経細胞分化
○Hideki Enomoto (Kobe Univ Grad Sch Med)

S06-3 14:48-15:27 Lympho-hematopoietic microenvironment regulated by inter-organ communication
多臓器間ネットワークに支えられる免疫造血環境
○Yoshio Katayama (Hematology, Kobe University Hospital)

S06-4 15:27-16:06 What Can We Learn by Exploring the Interstitial Space of Skeletal Muscle during Development and Regeneration?
発生・再生過程に骨格筋内の間葉スペースを研究すると何がわかる？
Fuminori Sato[1], Daigo Nishimura[1], Shinpei Hori[1], Hiroyuki Arai[1], Yosuke Hiramuki[1], Maina Sogabe[1], Mao Kuriki[1], Minyong Choi[1], Zi Wang[1], Atsuo Kawahara[2], Koichi Kawakami[3], ○Atsuko Sehara[1] (Kyoto Univ.[1], Univ. Ymanashi[2], Nat. Inst. Genet.[3])

S06-5 16:06-16:45 Creating the kidney in vitro
試験管内で腎臓を創る
○Ryuichi Nishinakamura, Atsuhiro Taguchi (IMEG, Kumamoto Univ.)

Oral Presentations & Flash Talk (in English)

Oral Presentation & Flash Talk 1：Morphogenesis 1

June 3 (Wed) 9:00 ～ 10:30 Room A

Chairperson:

Yumiko Saga
(NIG)

OP01-1 09:05-09:20 The RED domain of Paired is specifically required for Drosophila accessory gland maturation
○Li Li[1], Lei Xue[1,2], Ping Li[1] (SLST, Tongji Univ[1], Institute of Intervention Vessel, Shanghai 10th People's Hospital[2])

OP01-2 09:20-09:35 Mesodermal origin of median fin mesenchyme and tail muscle in amphibian larvae
両生類幼生におけるヒレ間充織細胞と尾部筋肉は中胚葉由来である
○Yuka Taniguchi[1,2], Thomas Kurth[1], Daniel Meulemans Medeiros[3], Akira Tazaki[1], Robert Ramm[4], Hans-Henning Epperlein[1,2] (CRTD[1], TU, Dresden[2], EBIO[3], LEBAO, MHH[4])

OP01-3 09:35-09:50 Toward understanding color pattern formation and evolution in Drosophila
ショウジョウバエの模様形成と進化の理解に向けて
○Shigeyuki Koshikawa[1], Matt Giorgianni[2], Kathy Vaccaro[2], Victoria Kassner[2], John Yoder[3], Thomas Werner[4], Sean Carroll[2] (Hakubi Center, Kyoto University[1], Howard Hughes Medical Institute[2], University of Alabama[3], Michigan Technological University[4])

OP01-4 09:50-10:05 Somite compartments in amphioxus and the origin of vertebrate mineralized tissues
Tsai-Ming Lu[1], Song-Wei Huang[1], Che-Huang Tung[1], ○Jr-Kai Yu[1,2] (ICOB, Academia Sinica, Taiwan[1], IONTU, Nat. Taiwan Univ.[2])

OP01-FT1 (P062) 10:05-10:08 Evolutionary relevance between mating behavior and LR asymmetric rotation of male genitalia in Diptera
双翅目昆虫における生殖行動と雄生殖器の左右非対称な回転の間の進化的な関連
○Momoko Inatomi, Kenji Matsuno (Dept. of Biol. Sci., Grad School of Sci., Osaka Univ.)

OP01-FT2 (P067) 10:08-10:11 Efficient embryonic culture method for the Japanese striped snake, Elaphe quadrivirgata, and its early developmental stages
シマヘビ胚のステージ表の作成と体外培養法の確立
Yoshiyuki Matsubara[1], Atsushi Sakai[2], Atsushi Kuroiwa[1], ○Takayuki Suzuki[1] (Div. of Biol. Sci., Nagoya Univ.[1], Japan Snake Institute[2])

OP01-FT3 (P063) 10:11-10:14 A non-coding sequence conserved specifically in avian lineage acts as a *cis*-regulatory element during wing development
翼の発生過程においてシス制御因子としてはたらく、鳥類特異的ノンコーディング配列の特定
○Ryohei Seki[1], Cai Li[2], Tomohiko Sato[3], Mao Kondo[3], Haruka Matsubara[3], Daisuke Saito[3,4], Shiro Egawa[3], Jiang Hu[2], Luohao Xu[2], Hailin Pan[2], Naoki Irie[5], Guojie Zhang[2], Koji Tamura[3], Toshihiko Shiroishi[1] (Mamm. Genet. Lab., NIG[1], China National Gene-

bank, BGI-Shenzhen[2], Grad. Sch. of Life Sci., Tohoku Univ.[3], Front. Res. Inst. for Interdis. Sci., Tohoku Univ.[4], Grad. Sch. of Sci., Univ. of Tokyo[5])

OP01-FT4 (P029) 10:14-10:17 P2Y4 receptor is involved in head formation in *Xenopus laevis* embryo
P2Y4 受容体はアフリカツメガエル胚の頭部形成に関連する
○Ayano Harata[1], Haruka Nishida[1], Takashi Yamamoto[2], Chikara Hashimoto[1] (BRH[1], Department of Mathematical and Life Sciences, Graduate School of Science, Hiroshima University[2])

OP01-FT5 (P044) 10:17-10:20 Oikoplastic epidermal patterning in the trunk of the appendicularian, *Oikopleura dioica*
ワカレオタマボヤ *Oikopleura dioica* におけるハウス形成表皮細胞のパターン形成
○Kanae Kishi, Momoko Hayashi, Takeshi Onuma, Hiroki Nishida (Osaka University)

OP01-FT6 (P045) 10:20-10:23 Internal and external structures of the appendicularian, Oikopleura dioica
走査型電子顕微鏡による脊索動物ワカレオタマボヤの外部構造・内部構造の観察
○Takeshi Onuma, Miho Isobe, Hiroki Nishida (Dep. Biol. Sci., Osaka Univ.)

Oral Presentation & Flash Talk 2: Regeneration 1 & Growth 1

June 3 (Wed) 9:00 〜 10:30 Room B

Chairperson:

Shoen Kume
(Tokyo Tech.)

OP02-1 09:05-09:20 LIF Responsiveness confers robust self-renewal of ESCs in conventional context
129 系統由来 ES 細胞における血清条件での安定的な自己複製の遺伝的要因
○Satoshi Ohtsuka, Histoshi Niwa (Lab for Pluripotent Stem Cell Studies, CDB RIKEN)

OP02-2 09:20-09:35 Analysis of the role of *interleukin 11* in tail regeneration of *Xenopus laevis* tadpoles
アフリカツメガエル幼生の尾再生におけるインターロイキン 11 の役割の解析
○Hiroshi Tsujioka[1], Takekazu Kunieda[1], Yuki Katou[2], Katsuhiko Shirahige[2], Takeo Kubo[1] (Dept. Biol. Sci. Grad. Scl. Sci. Univ. Tokyo[1], IMCB Univ. Tokyo[2])

OP02-3 09:35-09:50 Importance of PIWI inherited by the differentiated cells from the pluripotent stem cells in planarian
プラナリアにおける全能性幹細胞から分化細胞へ継承される PIWI タンパク質の重要性
○Makoto Kashima[1], Haruhiko Siomi[2], Mikkiko Siomi[2], Kuniaki Saito[2], Osamu Nishimura[3], Kiyokazu Agata[1], Norito Shibata[1] (DBGSS, Kyoto Univ.[1], DMBSM, Keio Univ[2]., gCOE, DBS, Kyoto Univ.[3])

OP02-4 09:50-10:05 Generation of neural crest cells by direct lineage conversion
直接転換法による神経堤細胞の誘導
○Tsutomu Motohashi[1], Natsuki Watanabe[1], Masahiro Nishioka[1], Yuhki Nakatake[2],

Minoru Ko[2], Naoki Goshima[3], Takahiro Kunisada[1] (RAMS, Gifu Univ.[1], Department of Systems Medicine, Sakaguchi Laboratory, Keio University School of Medicine[2], Molecular Profiling Research Center for Drug Discovery, National Institute of Advanced Industrial Science and Technology[3])

OP02-5 10:05-10:20 Efficient induction of presomitic mesodermal cells from human iPSCs
ヒト iPS 細胞から未分節中胚葉細胞の効率的な分化誘導
○Taiki Nakajima[1], Mitsuaki Shibata[1], Satoru Takayama[1], Makoto Fukuta[1], Hidetoshi Sakurai[1], Junya Toguchida[1,2,3], Makoto Ikeya[1] (Center for iPS Cell Research and Application, Kyoto University[1], Department of Tissue Regeneration, Institute for Frontier Medical Sciences, Kyoto University[2], Department of Orthopaedic Surgery, Graduate School of Medicine, Kyoto University[3])

OP02-FT1 (P053) 10:20-10:23 Zebrafish model revealed the pathogenesis of POLR1C Type 3 Treacher Collins Syndrome
○Ernest ML Kwong, William KF Tse (Dept. of Biol., HKBU)

OP02-FT2 (P131) 10:23-10:26 Differential roles for the H3K27 methylase and demethylases in Xenopus tail regeneration
ツメガエルの尾部再生における H3K27 メチル化因子と脱メチル化因子の異なる役割
○Akane Kawaguchi, Hajime Ogino (n-bio)

OP02-FT3 (P136) 10:26-10:29 Gene expression profile of pluripotent stem cells activated for differentiation during regeneration in planarian
○Hayoung Lee[1], Kiyokazu Agata[1], Norito Shibata[2] (Dept. of Biophysics, Grad. School of Science, Kyoto Univ[1], Regenerative Biology, Grad. School of Science, Kyoto Univ[2])

Oral Presentation & Flash Talk 3: Early Embryogenesis 1

June 3 (Wed) 9:00 ～ 10:30 Room C

Chairperson:

Daisuke Kurokawa
(Univ. of Tokyo)

OP03-1 09:20-09:35 A novel plasma membrane structure capturing centrosome determines the orientation of cell division in ascidian epidermal cells
ホヤ表皮細胞における中心体に伸長する新奇膜構造の構造と機能の解析
○Takefumi Negishi[1,4], Naoyuki Myazaki[2], Kazuyoshi Murata[2], Hitoyoshi Yasuo[3], Naoto Ueno[1] (NIBB[1], NIPS[2], LBDV[3], JSPS[4])

OP03-2 09:20-09:35 Mechanism that creates the polarity important for mesoderm and endoderm fate separation
中内胚葉運命分離に重要な細胞極性を作り出す機構の解析
○Naohito Takatori, Hidetoshi Saiga (Tokyo Met. Univ.)

OP03-3 09:35-09:50 Regulation of undifferentiated state in chicken blastoderms by Jak/Stat signaling
Jak/Stat シグナルによるニワトリ胚盤葉の未分化状態の制御
○Shota Nakanoh, Kiyokazu Agata (Kyoto University, Science)

OP03-4 09:50-10:05 Ancestral mesodermal reorganization and the evolution of vertebrate head
祖先的中胚葉の再構築による脊椎動物の頭部の進化
○Takayuki Onai[1], Toshihiro Aramaki[2], Hidehiko Inomata[3], Tamami Hirai[1], Shigeru Kuratani[1] (Evolutionary Morphology Laboratory, RIKEN, Kobe, 650-0047, Japan[1], Pattern Formation Group, Graduate School of Frontier Biosciences, Osaka University, 1-3 Yamadaoka, Suita, Osaka 565-0871, Japan[2], Laboratory for Axial Pattern Dynamics, RIKEN Center for Developmental Biology, Kobe 650-0047, Japan[3])

OP03-5 10:05-10:20 Polarization of the mouse node cells by asymmetric distribution of Wnt5a/5b and their inhibitors
ノードの細胞極性は Wnt5a/5b と Wnt のインヒビターの非対称な分布によって決められている
○Katsura Minegishi[1], Masakazu Hashimoto[1], Rieko Ajima[2], Yasunobu Igarashi[3], Kyosuke Shinohara[1], Hidetaka Shiratori[1], Hiroshi Hamada[1] (Osaka University FBS[1], National Institute of Genetics[2], OLYMPUS software technology[3])

OP03-FT1 (P015) 10:20-10:23 Larval fin formation in amphibians is interfered with the GABA signaling
両生類幼生のヒレ構造形成は GABA シグナリングに阻害される
○Yuki Yamasaki[1], Tomoyo Furukawa[2], Hiroki Kuroda[1] (IAB, Keio Univ[1], Shizuoka Univ[2])

OP03-FT2 (P016) 10:23-10:26 Phosphatase of regenerating liver-3 is essential for the early development of zebrafish embryos
○Ting-Fang Wang[1], Te-Hsien Liu[1], Yau-Hung Chen[2], Ming-Der Lin[1,3] (Dept LS, TCU, Taiwan[1], Dept Chemistry, TKU, Taiwan[2], Dept MBHG, TCU, Taiwan[3])

Oral Presentation & Flash Talk 4：Morphogenesis 2

June 3 (Wed) 10:45 ～ 12:15 Room A

Chairperson:

Shinji Takada
(NIBB)

OP04-1 10:50-11:05 Keep calm and Go with the flow
神経堤細胞は水の如く器に従う
○Sei Kuriyama (Akita University)

OP04-2 11:05-11:20 Relative cellular motion in vertebrate somitogenesis
脊椎動物体節形成期における細胞移動
○Koichiro Uriu[1], Bhavna Rajasekaran[2], Luis Morelli[3], Andrew Oates[4] (Theoretical Biology Laboratory, RIKEN[1], MPI-PKS[2], FCEyN UBA and IFIBA, CONICET[3], MRC-NIMR[4])

OP04-3 11:20-11:35 Segmental border is defined by Ripply2-mediated Tbx6 repression independent of Mesp2
○Wei Zhao[1,2], Rieko Ajima[1,3], Youichirou Ninomiya[1], Yumiko Saga[1,2,3] (NIG[1], UTokyo[2], SOKENDAI[3])

OP04-4 11:35-11:50 Multiple genome modifications induced by crRNAs, tracrRNA and Cas9 protein in zebrafish
Cas9 タンパク質、tracrRNA および複数の crRNA を用いたゼブラフィッシュにおける多重遺伝子改変
○Kiyohito Taimatsu, Hirohito Kotani, Rie Ohga, Satoshi Ota, Atsuo Kawahara (Labo-

ratory for Developmental Biology, University of Yamanashi)

OP04-5 11:50-12:05 Nucleocytoplasmic Shuttling of a GATA Transcription Factor Functions as a Development Timer
○Tetsuya Muramoto[1,2], Masahiro Ueda[2] (Toho University[1], RIKEN QBiC[2])

OP04-FT1 (P041) 12:05-12:08 O-Fucosyltransferase activity of Pofut1 is essential to control its own protein stability and regulate Notch1 signaling activity during somitogenesis
Pofut1 糖鎖修飾活性は体節形成時の Pofut1 タンパク質の安定化と Notch シグナルの活性化に必要である
○Rieko Ajima, Yumiko Saga (NIG)

OP04-FT2 (P059) 12:08-12:11 Insulation of *Lmbr1* expression from *Shh* enhancers in the mouse embryo
Shh 遺伝子の組織特異的エンハンサーから遮蔽された *Lmbr1* の発現
○Takanori Amano, Toshihiko Shiroishi (NIG)

OP04-FT3 (P042) 12:11-12:14 Heterochrony in initiation of *Gdf11* expression specifies unique posterior appendage positioning in vertebrates
Gdf11 の発現開始タイミングのヘテロクロニーが脊椎動物の腹鰭・後肢の位置の多様性を生み出す
○Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Toshihiko Ogura[2], Atsushi Kuroiwa[1], Takayuki Suzuki[1,3] (Div. of Biol. Sci., Grad. Sci. of Sci., Nagoya Univ.[1], IDAC, Tohoku Univ.[2], JST PRESTO[3])

Oral Presentation & Flash Talk 5: Regeneration 2 & Growth 2

June 3 (Wed) 10:45 ～ 12:15 Room B

Chairperson:

Atsushi Kawakami
(Tokyo Tech.)

OP05-1 10:50-11:05 Regeneration of functional joint reintegrating the remaining and regenerated tissues in newts and frogs
イモリとカエル四肢における、残存部と再生部の調和による機能的な関節再生の解析
○Rio Tsutsumi[1], Takeshi Inoue[1], Shigehito Yamada[2,3], Kiyokazu Agata[1] (Dept. of Biophys., Grad. Sch. of Sci., Kyoto Univ.[1], Human Health Science, Grad. Sch. of Med., Kyoto Univ.[2], Congenital Anomaly Research Center, Grad. Sch. of Med., Kyoto University[3])

OP05-2 11:05-11:20 The planarian *Dugesia japonica* acts as a new model animal to understand molecular mechanisms underlying stable body proportioning
○Kazutaka Hosoda[1], Osamu Nishimura[2], Shigenobu Yazawa[1], Tetsutaro Hayashi[3], Kiyokazu Agata[1], Yoshihiko Umesono[4] (Dept. of Biophys., Kyoto Univ.[1], GCOE, Kyoto Univ.[2], RIKEN ACCC[3], Grad. Sch. of Life Sci., Univ. of Hyogo[4])

OP05-3 11:20-11:35 Acquisition of motility of planarian pluripotent stem cells requires *MTA1* homologs
MTA1 相同遺伝子によるプラナリア全能性幹細胞の移動性の獲得
○Yuki Sato, Kiyokazu Agata, Norito Shibata (KU)

OP05-4 11:35-11:50 The potential of the neural stem cells in axolotl spinal cord
○Akira Tazaki, Elly Tanaka (CRTD, TU Dresden)

OP05-5 11:50-12:05 A functional expression cloning approach to identify molecules involved in initiating regeneration
発現クローニング法による再生開始に関連する分子の同定
○Takuji Sugiura[1,2], Rico Barsacchi[2], Akira Tazaki[1,2], Elly Tanaka[1,2] (CRTD / TU Dresden[1], MPI-CBG[2])

OP05-FT1 (P047) 12:05-12:08 Elevated CO_2 promotes satellite stomatal production via DNA replication in *Arabidopsis* cotyledons
高 CO_2 環境下における気孔発生の空間配置制御機構の解析
○Takumi Higaki, Kae Akita, Seiichiro Hasezawa (GSFS, The Univ. Tokyo)

OP05-FT2 (P050) 12:08-12:11 Revealing the function of EPF-peptides
EPF ペプチドの機能解析
○Rene H. Wink[1], Naoyuki Uchida[1], Keiko U. Torii[1,2] (ITbM Nagoya University[1], HHMI-GBMF[2])

OP05-FT3 (P128) 12:11-12:14 Gene expression analysis of apical epidermal cap during tail regeneration in xenopus tadpole
アフリカツメガエル幼生尾部再生時に形成される apical epidermal cap における遺伝子発現解析
○Akinori Okumura, Yoshihiko Umesono, Makoto Mochii (Grad Sch of Life Sci, Univ of Hyogo)

Oral Presentation & Flash Talk 6：Early Embryogenesis 2

June 3 (Wed) 10:45 ～ 12:15 Room C

Chairperson:

Mikiko Tanaka
(Tokyo Tech.)

OP06-1 10:50-11:05 Subfunctionalization of two *brachyury* genes in *Xenopus* reveals Brachyury functions in the vertebrate notochord
Xenopus における二つの *brachyury* 遺伝子の機能分化から脊索における Brachyury の役割を解明する
○Yuuri Yasuoka, Ryo Koyanagi, Nori Satoh (OIST)

OP06-2 11:05-11:20 Recruitment of Sox9 to the neural border specification program in marsupial cranial neural crest development
有袋類の頭部神経堤発生における Sox9 遺伝子の神経境界形成プログラムへの移行
○Yoshio Wakamatsu[1], Noriko Osumi[1], Kunihiro Suzuki[2] (Dept. Dev. Neurosci., Tohoku Univ. Grad. Sch. Med.[1], Dept. Biol., Nihon Univ. Sch. Dent. Matsudo[2])

OP06-3 11:20-11:35 Conserved and novel BMP/Admp circuits control dorsoventral axis in ambulacrarians
Yi-Cheng Chang[1,2], Chih-Yu Pai[1], Yi-Chih Chen[1], Hsiu-Chi Ting[1], Pedro Martinez[3], Maximilian Telford[4], Jr-Kai Yu[1], ○Yi-Hsien Su[1,2] (ICOB, Academia Sinica[1], Department of Bioscience and Biotechnology, NTOU[2], Department de Gentica, UB[3], Department of Genetics, Evolution and Environment, UCL[4])

OP06-4 11:35-11:50 The NFκB transcription factor Rel fine-tunes dorsal-ventral pattern of zebrafish early embryos

NFκB ファミリーの転写因子 Rel は、ゼブラフィッシュ初期胚の背腹軸形成を調節する
Satoshi Anai[1], Satoshi Ota[1,2], Shizuka Ishitani[1], ○Tohru Ishitani[1] (Div. of Cell Reg. Sys., Med. Ins. of Bioreg., Kyushu Univ.[1], Lab. for Dev. Biol., Center for Med. Edu. Sci., Grad. Sch. of Med. Sci., Univ. of Yamanashi[2])

OP06-5 11:50-12:05 Functional analysis of a Hox gene, *abdominal-A*, using CRISPR/Cas9 system in the cricket *Gryllus bimaculatus*
フタホシコオロギにおける CRISPR/Cas9 システムを用いた Hox 遺伝子 abdominal-A の機能解析
○Yuji Matsuoka[1], Takahito Watanabe[2], Chinami Kurita[1], Sayuri Tomonari[1], Sumihare Noji[2], Taro Mito[1] (Dept. Life Syst., Inst. Tech. Sci., Tokushima Univ.[1], Cent. Collab. Agri. Indust. Commer. Tokushima Univ.[2])

OP06-FT1 (P027) 12:05-12:08 The deep roots of vertebrate genomic evolution: insights from the embryonic transcriptome and Hox genes of the hagfish
○Juan Pascual-Anaya[1], Antonio Perez-Pulido[2], Fumiaki Sugahara[3], Shigeru Kuratani[1] (RIKEN[1], CABD, UPO-CSIC-JA[2], HCM[3])

OP06-FT2 (P028) 12:08-12:11 Hox gene cluster structure in *Halocynthia roretzi* genome
マボヤの Hox 遺伝子クラスター
○Yuka Sekigami[1], Asao Fujiyama[2], Nori Satoh[3], Hidetoshi Saiga[1] (TMU[1], NIG[2], OIST[3])

Oral Presentation & Flash Talk 7：Morphogenesis 3

June 3 (Wed) 13:30 〜 15:00 Room A

Chairperson:

Hidehiko Inomata
(RIKEN CDB)

OP07-1 13:35-13:50 Dynein arms assembly and transport in mammal
マウスにおける軸糸ダイニンの組み立てと繊毛への輸送
○Yasuko Asai[1], Kyosuke Shinohara[1], Tetsuya Nakamura[2], Ryo Nabeshima[1], Hiroshi Hamada[1] (FBS, Osaka Univ.[1], University of Chicago[2])

OP07-2 13:50-14:05 Novel gene Scafold negatively regulates JNK signaling
○Ying Sun, Lei Xue (SKSD, Tongji Univ)

OP07-3 14:05-14:20 A genetic screen identifies modifiers of human APP in Drosophila
○Pu Ren, Lei Xue (SLST, Tongji Univ)

OP07-4 14:20-14:35 Quantitative live imaging unravels periodic regulatory mode of cell cycling in embryonic body axis development
定量的ライブイメージングによる体軸発生における細胞周期の周期的調節の解明
○Takashi Saitou[1,2], Takeshi Imamura[1,2,3], Tadahiro Iimura[3] (Graduate School of Medicine, Ehime Univ.[1], TRC, Ehime Univ.[2], PROS, Ehime Univ.[3])

OP07-FT1 (P048) 14:35-14:38 Impaired Hippo signaling promotes Rho1-JNK-dependent growth
○Yujun Chen, Xianjue Ma, Wenyan Xu, Nana Wu, Lei Xue (SLST, Tongji Univ.)

OP07-FT2 (P068) 14:38-14:41 Regulation of asymmetric cell division by three distinct Wnt pathways in *C. elegans*

C. elegans における 3 つの異なる Wnt シグナル伝達経路による非対称性細胞分裂の調節
○Yinhua Jin, Masako Yokoo, Hitoshi Sawa (NIG)

OP07-FT3 (P056) 14:41-14:43 Dlx5-overexpression mice show a homeotic transformation in the upper jaw into lower jaw-like structures
Dlx5 過剰発現マウスにおける上顎の下顎構造へのトランスフォーメーション
○Miki Shimizu[1], Taro Kitazawa[1], Yumiko Kawamura[1], Nicolas Narboux-Nme[2], Giovanni Levi[2], Yasunobu Uchijima[1], Yukiko Kurihara[1], Hiroki Kurihara[1] (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo[1], UMR7221 CNRS-MNHN[2])

OP07-FT4 (P069) 14:43-14:46 ChIP-Atlas: Comprehensive database for visualizing all published ChIP-seq data
ChIP-Atlas: 既報の ChIP-seq 実験を全て可視化するためのデータベース
○Shinya Oki[1], Tazro Ohta[2], Go Shioi[3], Chikara Meno[1] (Grad. Sch Med. Sci., Kyushu Univ.[1], DBCLS, ROIS[2], RIKEN CLST[3])

OP07-FT5 (P043) 14:46-14:49 Anisotropic cell growth causes looping of the developing heart
心臓ループの形成は細胞の異方的増殖による
○Hisao Honda[1,2] (Kobe Univ. Medicine[1], RIKEN CDB[2])

OP07-FT6 (P031) 14:49-14:52 Blood flow and vascular remodeling: *in vivo* live-imaging analyses of individual endothelial cells
生体内血管リモデリング：ライブイメージング解析による血管内皮細胞の挙動と血流との関係
○Yuta Takase, Yoshiko Takahashi (Dept. of Zoology, Grad. Sch. of Sci. Kyoto Univ.)

Oral Presentation & Flash Talk 8: Organogenesis 1

June 3 (Wed) 13:30 〜 15:00 Room B

Chairperson:

Jun Takeuchi
(Univ. of Tokyo)

OP08-1 13:35-13:50 The expression and function of Sox2 and CdxA in the pre-boundary region between the stomach and intestine
胃、小腸の予定境界領域における Sox2 と CdxA の発現と機能
Daizo Kurishita, ○Kimiko Fukuda (Dept. Biol., Tokyo Metropol. Univ.)

OP08-2 13:50-14:05 Spontaneous dorsal-ventral polarity formation in mouse ESC-derived retina
マウス ES 細胞由来網膜における自発的な背腹軸の形成
○Yuiko Hasegawa, Mototsugu Eiraku (In Vitro Histogenesis, CDB, RIKEN)

OP08-3 14:05-14:20 GFP-tagged glomerular podocytes generated from human iPS cells possess slit diaphragms and resemble the transcriptional state of podocytes in vivo
○Sazia Sharmin[1], Atsuhiro Taguchi[1], Yasuhiro Yoshimura[1,2], Tomoko Ohmori[1], Yusuke Kaku[1], Tetsushi Sakuma[3], Masashi Mukoyama[2], Takashi Yamamoto[3], Hidetake Kurihara[4], Ryuichi Nishinakamura[1,5] (Kidney Dev., Kumamoto Univ.[1], Nephrology Lab., Kumamoto Univ.[2], Hiroshima Univ.[3], Juntendo Univ.[4], CREST, Kumamoto[5])

OP08-4 14:20-14:35 Initiation of chicken gonadogenesis is orchestrated by Hedgehog-BMP signaling in lateral plate mesodermal cells
生殖巣の形成開始を担う多様な細胞の振る舞いを引き起こす Hedgehog-BMP シグナル
○Takashi Yoshino[1], Daisuke Saito[2], Katsuhiko Hayashi[1], Yoshiko Takahashi[3] (Stem Cell Biol., Grad. Sch. of Med., Kyushu Univ.[1], FRIS, Tohoku Univ.[2], Grad. Sch. of Sci., Kyoto Univ.[3])

OP08-5 14:35-14:50 Heartbeat regulates cardiac gene expression via nuclear shuttling of MKL2
○Atsushi Kubo, Takahiro Niida, Masato Kimura, Kota Miyasaka, Yusuke Watanabe, Toshihiko Ogura (Institute of Development, Aging and Cancer, Tohoku University (IDAC))

OP08-FT1 (P072) 14:50-14:53 Roles of sox10 and its possible interaction with sox5 in pigment cell development of medaka
メダカの色素細胞発生において sox10 とその sox5 との相互作用が担う役割
Yusuke Nagao[1], Hiroyuki Takada[1,2], Ryoko Seki[1], Yasuhiro Kamei[3], Ikuyo Hara[4], Yoshihito Taniguchi[5], Kiyoshi Naruse[4], Robert Kelsh[6], Masahiko Hibi[1,2], ○Hisashi Hashimoto[1,2] (Biosci. & Biotechnol. Ctr., Nagoya Univ.[1], Grad. Sch. of Sci., Nagoya Univ.[2], Spectrography Bioimaging Facility, NIBB[3], Lab. of Biores., NIBB[4], Dept. of Preventive Medicine Public Health, Sch. of Med., Keio Univ.[5], Dept. of Biol. Biochem., Univ. of Bath[6])

OP08-FT2 (P073) 14:53-14:56 Four-dimensional imaging of lung epithelial stem cell in mouse development
発生過程におけるマウス肺幹細胞の 4 次元イメージング
○Masafumi Noguchi, Mitsuru Morimoto (RIKEN CDB)

OP08-FT3 (P074) 14:56-14:59 A non-proliferating tissue enlargement controlling the trachea tubulogenesis
細胞増殖に依存しないマウス気管発生
○Keishi Kishimoto, Mitsuru Morimoto (RIKEN CDB)

Oral Presentation & Flash Talk 9: Neural Development 1 & Behavior

June 3 (Wed) 13:30 〜 15:00 Room C

Chairperson:

Akinao Nose
(Univ. of Tokyo)

OP09-1 13:35-13:50 An L-type lectin VIPL is necessary for the activation of the hindbrain reticulospinal neuron in zebrafish
L 型レクチン VIPL は、後脳網様体脊髄路ニューロンの活動に必要である
○Kazuhide Asakawa[1], Koichi Kawakami[1] (NIG[1], SOKENDAI[2])

OP09-2 13:50-14:05 Anterior-posterior alignment of Rohon-Beard neurons convey spatial information to hindbrain for eliciting coordinated escape behavior
ゼブラフィッシュ Rohon-Beard ニューロンが認識した前後軸方向の空間情報は後脳に伝達されることによって適正な逃避行動を実現する
○Keiko Umeda, Wataru Shoji (FRIS, Tohoku Univ.)

OP09-3 14:05-14:20 Establishment of a novel Drosophila AD model
○Xingjun Wang, Yu Zhao, Yujia Hu, Lei Xue (SKLSDR)

OP09-4 14:20-14:35 Mechanisms on modulation of Drosophila courtship choice
○Yujia Hu, Yi Han, Lei Xue (SLST, Tongji Univ.)

OP09-5 14:35-14:50 Molecular remodeling of the presynaptic active zone of Drosophila photoreceptors via activity-dependent WNT signaling
神経活性依存的な WNT シグナルによるショウジョウバエ視神経の前シナプス活性部位の分子的リモデリング
○Takashi Suzuki[1], Atsushi Sugie[2], Satoko Hakeda[1,4], Emiko Suzuki[3], Mai Shimozono[1], Gaia Tavosanis[2] (Dept. Biosci, & Biotech., Titech[1], DZNE, Bonn, Germany[2], NIG, Mishima, Japan[3], JSPS Fellow[4])

OP09-FT1 (P103) 14:50-14:53 Investigating mechanisms underlying lens differentiation from embryonic neural retina
ニワトリ胚神経性網膜から水晶体への分化遷移の機構
○Hideaki Iida[1], Yasuo Ishii[2], Hisato Kondoh[2] (DBGSE, Kyoto Sangyo Univ.[1], DMBFLS, Kyoto Sangyo Univ.[2])

OP09-FT2 (P110) 14:53-14:56 *Mab21l2* is required for development of the preBötC neurons involved in respiratory rhythmogenesis
○Chung Man Chan, King Lau Chow (LIFS, HKUST)

Oral Presentation & Flash Talk 10: Morphogenesis 4

June 3 (Wed) 15:15 〜 16:45 Room A

Chairperson:

Atsushi Kuroiwa
(Nagoya Univ.)

OP10-1 15:20-15:35 On a Mechanism of Adaptive Cellular Behavior Achieving Stable Radial Size of a Developing Epithelial Tubule
成長する上皮管の径サイズを維持する適応的な細胞挙動の機構について
○Tsuyoshi Hirashima, Taiji Adachi (Dept Biomechanics, Inst Front Med Sci, Kyoto Univ)

OP10-2 15:35-15:50 The role of FGF signaling in tracheal branch fusion in *Drosophila*
○Guangxia Miao[1,2], Shigeo Hayashi[1,2] (RIKEN CDB[1], Kobe University[2])

OP10-3 15:50-16:05 Pontin negatively regulates Egr-JNK induced cell death
○Xirui Huang, Lei Xue (SLST, Tongji Univ)

OP10-4 16:05-16:20 Theoretical analysis of asymmetric branched structures in dissected leaves
分裂葉で見られる非対称な枝分かれ構造の理論的研究
○Akiko Nakamasu[1,2,4], Nobuhiko Suematsu[2,3], Seisuke Kimura[4] (Kyushu Univ.[1], MIMS[2], Meiji Univ.[3], Kyo-San Univ.[4])

OP10-5 16:20-16:35 Using *Juncus* (Juncaceae) as a Model System to Study the Development of Unifacial Leaf
○Xiaofeng Yin[1], Takahiro Yamaguchi[2], Hirokazu Tsukaya[1] (Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo[1], ACEL[2])

OP10-FT1 (P032) 16:35-16:38 Wnt signal regulates morphological change of cells in the mouse spinal cord
○Takuma Shinozuka[1,2], Ritsuko Takada[2], Shinji Takada[1,2] (Dept. Basic Biology, SOKENDAI[1], NIBB[2])

OP10-FT2 (P064) 16:38-16:41 Infrared lase-evoked gene operator (IR-LEGO) method is applicable to study organ morphogenesis in developing and regenerating amphibian
IR-LEGO（赤外線による局所遺伝子発現法）の両生類における発生・再生研究への応用
○Aiko Kawasumi[1,2], Toshinori Hayashi[3], Sinichi Hayashi[2,4], Yasuhiro Kamei[5,6], Yoshihiro Morishita[1], Koji Tamura[2], Hitoshi Yokoyama[2,7] (RIKEN QBiC[1], Tohoku University[2], Tottori University[3], University of Minnesota[4], NIBB[5], SOKENDAI[6], Hirosaki University[7])

OP10-FT3 (P057) 16:41-16:44 Switchback of the spicule transport during local retraction of basal epithelium in BIO-treated sponges
阻害剤 BIO 存在下の培養で生じるカワカイメン個体の部分的な退縮において骨片はスイッチバック後に立てられる
○Kouji Kishimoto, Kiyokazu Agata, Noriko Funayama (Grad. School of Sci. Kyoto University)

Oral Presentation & Flash Talk 11: Organogenesis 2

June 3 (Wed) 15:15 〜 16:45 Room B

Chairperson:

Kimiko Fukuda
(Tokyo Metropolitan Univ.)

OP11-1 15:20-15:35 Molecular mechanisms to convert segmental clock into somite structure in zebrafish
ゼブラフィッシュ体節形成において分節時計によって作られる時間情報は ripply によって空間パターへと変換される
○Taijiro Yabe[1], Chimwar Wanglar[1], Kazuyuki Hoshijima[2], Takashi Yamamoto[3], Shinji Takada[1] (NIBB[1], Univ. of Utah[2], Hiroshima Univ.[3])

OP11-2 15:35-15:50 Multiple developmental timers coordinate vertebrate organ morphogenesis
脊椎動物の器官形成におけるタイミング制御
Hikeaki Iida, Tiantian Yang, Sadao Yasugi, ○Yasuo Ishii (Fac. Life Sci., Kyoto Sangyo Univ.)

OP11-3 15:50-16:05 A feedback loop involving Wnt/β-catenin, FGF/ERK and SOSTDC1 modulates the self-patterning of bioengineered feather buds in a developmental timing-dependent manner
Wnt/β-catenin、FGF/ERK、SOSTDC1 フィードバックループは発生時期依存的に再生羽毛原基の自律的なパターン形成を調節する
○Kentaro Ishida, Toshiyuki Mitsui (Dept. of Phys. & Math., Coll. of Sci. & Eng., Aoyama Gakuin Univ.)

OP11-4 16:05-16:20 Reverse genetics in *Xenopus tropicalis* as a model for understanding human genetic diseases involved in eye and brain formation
Xenopus tropicalis に於ける逆遺伝学：眼や脳の形成不全を起こすヒト遺伝疾患病の解明の為のモデル生物を目指して
○Takuya Nakayama, Robert Grainger (Dept Bio, UVA, USA)

OP11-5 16:20-16:35 DMRT1 is required for Müllerian duct development in the chicken embryo
○Craig Smith[1], Katie Ayers[2], Andrew Cutting[2], Kelly Roeszler[2], Andrew Sinclair[2] (Department of Anatomy and Development Biology, Monash Univeristy, Melbourne, Victoria, Australia[1], Murdoch Childrens Research Institute (MCRI), Melbourne, Victoria, Australia[2])

OP11-FT1 (P075) 16:35-16:38 Neofunctionalization of *elastin* gene demarcates teleost heart outflow tract by regulating cell fate determination via YAP
elastin 遺伝子の重複と新規機能獲得による心臓の進化
○Yuuta Moriyama[1], Kazuko Koshiba-Takeuchi[1] (IMCB, Univ. of Tokyo[1], IMCB, Univ. of Tokyo[2])

OP11-FT2 (P083) 16:38-16:41 Histone demethylase LSD1 is required for normal development of endodermal organs in zebrafish
○Christina-Sylvia Andrea, Yuji Fuse, Makoto Kobayashi (Fac. Med., Univ. Tsukuba)

OP11-FT3 (P082) 16:41-16:44 Foxp4 is critical for acinar cell development in mouse pancreas
○Chi Kin Chung[1], Wing Yip Tam[1], Wang Chi Lau[1], Chiu Yi Leung[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], RGC-AoE COBF, CUHK[2], PSKLA (CUHK) [3])

Oral Presentation & Flash Talk 12: Neural Development 2

June 3 (Wed) 15:15 ～ 16:45 Room C

Chairperson:

Masahiko Hibi
(Nagoya Univ.)

OP12-1 15:20-15:35 Human cell reprogramming by defined factors isolated from lactic acid bacteria
乳酸菌由来精製分子を用いたヒト細胞の初期化
○Naofumi Ito, Kunimasa Ohta (Kumamoto University, Dev. Neurobiol.)

OP12-2 15:35-15:50 ENTERIC NEURAL CELLS FROM HIRSCHSPRUNG DISEASE PATIENTS FORM GANGLIA AUTOLOGOUSLY IN ANEURONAL COLON MUSCLE TISSUE
○Donald Newgreen[1], Benjamin Rollo[2], Dongcheng Zhang[3], Lincon Stamp[4], Mark Denham[5], John Hutson[6] (MCRI[1], MCRI[2], MCRI[3], Department of Anatomy and Neuroscience, University of Melbourne, Parkville, Australia[4], DRITM[5], Department of Paediatrics, University of Melbourne, Parkville, Australia[6])

OP12-3 15:50-16:05 Hedgehog and PTCHD genes couple reactivation of neural progenitors to the nutritional state in C. elegans
C. elegans においてヘッジホッグと PTCHD 遺伝子は神経前駆細胞の栄養状態に応答した活性化を制御する
○Masamitsu Fukuyama, Masahiko Kume, Kenji Kontani, Toshiaki Katada (Dept. of Physiological Chem, Grad. Sch. of Pharmaceutical Sci., Univ. of Tokyo)

OP12-4 16:05-16:20 Deep-tissue super-resolution imaging using an optimized clearing agent, SeeDB2
改良型透明化試薬 SeeDB2 を用いた深部超解像イメージング
Meng-Tsen Ke[1], Shuhei Yoshida[1], Rie Takayama[2], Tomoya Kitajima[1], Makoto Sato[2,3], ○Takeshi Imai[1,4] (RIKEN CDB[1], Grad Sch of Medical Sciences, Kanazawa Univ[2], CREST, JST[3], PRESTO, JST[4])

OP12-5 16:20-16:35 Development of patterned activity in the motor circuits of Drosophila embryos
ショウジョウバエ胚の神経回路における協調的活動の発達の研究
○Tappei Kawasaki[1], Sawako Niki[1], Yuki Itakura[1], Akinao Nose[1,2] (Dept of Complexity Sci and Eng, Grad Sch of Frontier Sci, Univ of Tokyo, Chiba, Japan[1], Dept of Complexity Sci and Eng, Grad Sch of Frontier Sci, Univ of Tokyo[2])

OP12-FT1 (P123) 16:35-16:38 Synaptic specificity and loci determination in the Drosophila photoreceptor
ショウジョウバエの視神経を用いた中枢神経シナプスの分布・可塑性制御機構の解析
○Fumio Takahashi[1], Atsushi Sugie[2], Satoko Hakeda-Suzuki[1], Takashi Suzuki[1] (TITech[1], DZNE, Bonn, Germany[2])

OP12-FT2 (P121) 16:38-16:41 Species-specific repertories of promoter-associated non-coding RNAs may contribute to the diversification of gene expression profile
長鎖ノンコーディング RNA を介した遺伝子発現制御の生物種間多様性
○Masahiro Uesaka[1,2,3], Kinichi Nakashima[2], Kiyokazu Agata[1], Takuya Imamura[2] (Grad. Sch. of Sci., Kyoto Univ.[1], Grad. Sch. of Med. Sci., Kyushu Univ.[2], Grad. Sch. of Sci., Univ. of Tokyo[3])

Oral Presentation & Flash Talk 13: Morphogenesis 5

June 3 (Wed) 18:45 ～ 20:15 Room A

Chairperson:

Hiroki Oda
(JT BRH)

OP13-1 18:50-19:05 Identification of genetic modifiers that interact with *pecanex*, encoding a component of Notch signaling in *Drosophila*
Notch シグナル伝達系構成因子、Pecanex と遺伝的に相互作用する調節遺伝子の網羅的探索
○Tomoko Yamakawa, Shiori Kubo, Kenji Matsuno (Dept. of Biol. Sci., Grad. School of Sci., Osaka Univ.)

OP13-2 19:05-19:20 Spatial regulation of Wnt proteins and convergent extension movements during *Xenopus* early embryogenesis
アフリカツメガエル初期発生における Wnt 蛋白質の空間的制御と収斂伸張運動
○Yusuke Mii[1,2], Shinji Takada[1,2] (NIBB[1], OIIB[2])

OP13-3 19:20-19:35 dFoxO promotes Wingless signaling in Drosophila
○Shiping Zhang, Xiaowei Guo, Yujun Chen, Changyan Chen, Yang Yang, Wenzhe Li, Lei Xue (SKSD, Tongji Univ.)

OP13-4 19:35-19:50 Protein Kinase A Coordinates Dorsoventral Polarity Signals Driving Inner Ear Regional Patterning
○Sho Ohta[1], Gary Scoenwolf[2] (Univ. Utah SOM[1], Univ. Utah SOM[2])

OP13-5 19:50-20:05 Relative coordinate representation of tissue deformation dynamics and its application
組織変形動態の相対座標表現とその応用（ニワトリ四肢発生を例に）

○Yoshihiro Morishita (RIKEN QBiC)

OP13-FT1 (P035) 20:05-20:08 *Six4* and *Six5* are required for ventral body wall closure and morphogenesis of the primary body wall
転写制御因子 Six4/Six5 は腹壁閉鎖と一次腹壁の形態形成に必須である
○Masanori Takahashi, Kiyoshi Kawakami (Div. of Biol. Cent. for Mol. Med. Jichi Med. Univ.)

OP13-FT2 (P060) 20:08-20:11 Observation of FGF response in lung epithelium and modeling for branching morphogenesis
マウス肺の分岐構造を形成する FGF 応答の観察とモデル化
○Hisako Imamura-Takigawa, Takashi Miura (Dept. Anat. Cell Biol., Grad. Sch. Med., Kyushu Univ.)

OP13-FT3 (P061) 20:11-20:14 Establishment of spicule mechanical wobbling system in E. fluviatilis
カワカイメンにおける骨片を機械的に揺らす実験系の構築
○Sota Takagi, Kotoe Kawai, Kiyokazu Agata, Noriko Funayama (Dep. Biophysics, Grad. School of Science, Kyoto Univ.)

Oral Presentation & Flash Talk 14: Organogenesis 3

June 3 (Wed) 18:45 ～ 20:15 Room B

Chairperson:

Mitsuru Morimoto
(RIKEN CDB)

OP14-1 18:50-19:05 How sponges adjust their skeleton construction to their plastic and indeterminate growth
可変的で持続的なカイメンの成長に合わせた骨格形成を可能にする仕組み
○Noriko Funayama, Chihiro Inui, Kouji Kishimoto, Kiyokazu Agata (Dept. of Biophys., Graduate School of Science, Kyoto Univ.)

OP14-2 19:05-19:20 Different regulation of limb development by p63 transcript variants
p63 transcript variants による四肢発生の多様な制御機構
○Manabu Kawata[1], Yuki Taniguchi[1], Daisuke Mori[2], Fumiko Yano[2], Keita Okada[1], Yoshifumi Mori[1], Chang Song Ho[1], Kazuhito Soma[1], Yuma Makii[1], Fengjun Xuan[1], Sakae Tanaka[1], Taku Saito[1,2] (Dept. of Orthop. Surg., Grad. Sch. of Med., Univ. of Tokyo[1], Dept. of Bone & Cart. Reg. Med., Univ. of Tokyo[2])

OP14-3 19:20-19:35 Tissue-specific roles of FGF signaling in external genitalia development
外生殖器形成における組織特異的な FGF シグナルの役割
○Masayo Harada[1], Akiko Omori[2], Keiichi Akita[1], Gen Yamada[2] (TMDU[1], WMU[2])

OP14-4 19:35-19:50 Mib1 controls cell migration via negative regulation of Ctnnd1 activity
○Takamasa Mizoguchi[1], Shoko Ikeda[1], Saori Watanabe[1], Sasa Yang[1], Kazuya Hirose[2], Motoyuki Itoh[1] (Grad. Sch. of Pharm. Sci., Chiba Univ.[1], Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.[2])

OP14-5 19:50-20:05 Control of Wnt5b Secretion by Wntless modulates Chondrogenic Cell Proliferation through fine-tuning fgf3 Expression during Jaw Cartilage Development

Bo-Tsung Wu[1,2], Shih-Hsien Wen[1,2], Sheng-Ping L. Hwang[3], Chang-Jen Huang[1,2], ○Yung-Shu Kuan[1,2,4] (IBS, Nat'l Taiwan Univ., Taiwan[1], IBC, Academia Sinica, Taiwan[2], ICOB, Academia Sinica, Taiwan[3], GSB, Nat'l Taiwan Univ., Taiwan[4])

OP14-FT1 (P076) 20:05-20:08 *cis*-regulatory elements and *trans*-acting factors regulating *Fgf10* expression in the presumptive limb field
予定肢芽領域における *Fgf10* 発現を制御する *cis* 制御エレメントと *trans* 因子
○Yo-ichi Yamamoto-Shiraishi, Ami Uemura, Yu-hei Kohara, Taishi Ueta, Atsushi Kuroiwa (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.)

OP14-FT2 (P077) 20:08-20:11 A novel concept of organogenesis: an essential role of platelets in lung development
血小板と肺発生の関連から提唱される器官形成の新しいメカニズム
○Nagaharu Tsukiji[1], Osamu Inoue[2], Shogo Tamura[1], Toshiaki Shirai[1], Tomoyuki Sasaki[1], Kaneo Satoh[1], Katsue Suzuki-Inoue[1], Yukio Ozaki[1] (Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi[1], Infection Control Office, University Of Yamanashi Hospital, Facaluty of Medicene, University of Yamanashi[2])

OP14-FT3 (P084) 20:11-20:14 Real time imaging of Neuregulin 1 ectodomain-shedding in the developing zebrafish embryos
ゼブラフィッシュ胚における増殖因子 Neuregulin 1 の切断の可視化
○Aosa Kamezaki[1,2], Fuminori Sato[1], Kazuhiro Aoki[3], Koichi Kawakami[4], Shigetomo Fukuhara[5], Naoki Mochizuki[5], Atsuko Sehara-Fujisawa[1] (Department of Growth Regulation, IFMS, Kyoto university[1], Graduate School of Biostudies, Kyoto University[2], Laboratory of Bioimaging and Cell Signaling, Graduate School of Biostudies, Kyoto University[3], Division of Molecular and Developmental Biology, NIG[4], Department of Cell Biology, NCVC[5])

Oral Presentation & Flash Talk 15：Reproduction & Gametogenes

June 3 (Wed) 18:45 ～ 20:15 Room C

Chairperson:

Satoru Kobayashi
(Univ. of Tsukuba)

OP15-1 18:50-19:05 Dosage of FGF5 in a subset lymphatic endothelial cells controls mouse spermatogenic stem cell pool size
精子幹細胞のプールサイズはリンパ内皮細胞の一部で発現する FGF5 により調節されている
○Yu Kitadate, Ayumi Maruyama, Shosei Yoshida (NIBB)

OP15-2 19:05-19:20 Neuroendocrine control of mating-induced germline stem cell proliferation in female *Drosophila melanogaster*
キイロショウジョウバエにおける交尾によって誘導されるメス生殖幹細胞増殖の神経内分泌制御
○Tomotsune Ameku[1], Ryusuke Niwa[1,2] (Grad. Sch. of Life and Environ. Sci., Univ. of Tsukuba[1], PRESTO, JST, Japan[2])

OP15-3 19:20-19:35 Analysis of oocyte-specific enhancer in *Xenopus* linker histone *B4*
ツメガエルリンカーヒストン B4 遺伝子の卵母細胞特異的発現にか

かわるエンハンサーの解析
Takumi Kondo, ○Mitsugu Maeno (Gra. Sch. Sci. Tech., Niigata Univ.)

OP15-4 19:35-19:50 Six1 and Six4 homeodomain proteins regulate mouse primordial germ cell formation
転写因子 Six1/Six4 は、マウス始原生殖細胞の形成を制御する
○Satomi Tanaka[1], Yasuka Yamauchi[1], Yuka Fujimoto[1], Kiyoshi Kawakami[2], Ryuichi Nishinakamura[1] (IMEG, Kumamoto Univ.[1], CMM, Jichi Medical Univ.[2])

OP15-FT1 (P090) 19:50-19:53 Screening and treatment of asthenozoospermia caused by a *GALNTL5* gene mutation
ヒト *GALNTL5* 遺伝子変異を原因とする精子無力症患者の同定と治療
○Nobuyoshi Takasaki[1], Jun Hagiuda[1,2], Hiromichi Ishikawa[2], Hisashi Narimatsu[1] (GTRC, AIST[1], Ichikawa General Hosp. Tokyo Dent. Colle.[2])

OP15-FT2 (P091) 19:53-19:56 Identification, localization, and functional analysis of CABS1 protein in porcine testis
○Hossam H. Shawki[1,2], Akihiro Kawashima[1], Takumi Kigoshi[1], Satoru Takahashi[2], Naomichi Okamura[1] (Laboratory of Reproductive Biochemistry, Graduate School of Comprehensive Human Sciences, University of Tsukuba[1], Department of Anatomy and Embryology, Faculty of Medicine, University of Tsukuba[2])

OP15-FT3 (P092) 19:56-19:59 Structural plasticity of the mature egg-coating envelope accompanied by the extrinsic control of fertilization success in *Xenopus laevis*
ダイカルシンと gp41 の相互作用を基盤とする受精率制御に伴う卵保護膜構造変化
○Naofumi Miwa, Mayu Hanaue, Ken Takamatsu (Toho Univ., Dept. Physiol.)

OP15-FT4 (P093) 19:59-20:02 Gain of function mutations in two paralogous Androgen receptor (AR) genes of teleosts : Implications for evolution of AR gene function
○Yukiko Ogino[1], Shigehiro Kuraku[2], Hiroshi Ishibashi[3], Hitoshi Miyakawa[1], Shinichi Miyagawa[1], Gen Yamada[4], Michael E. Baker[5], Taisen Iguchi[1] (Div. Molecular Environmental Endocrinology, NIBB, Okazaki Institute for Integrative Bioscience, SOKENDAI[1], Phyloinformatics Unit, RIKEN CLST[2], Faculty of Agriculture, Ehime Univ.[3], Dept. Developmental Genetics, Wakayama Medical Univ.[4], Division of Nephrology-Hypertension, Univ. of California, San Diego[5])

OP15-FT5 (P097) 20:02-20:05 Functional analyses of Nanos3 in mouse spermatogenesis
精子形成過程における Nanos3 の機能解析
○Takayuki Sakurai[1,2], Yumiko Saga[1,2,3] (NIG[1], Department of Genetics, SOKENDAI[2], Department of Biological Sciences, Graduate School of Science, University of Tokyo[3])

OP15-FT6 (P098) 20:05-20:08 Biogenesis of Drosophila stress granules and its interaction with P-bodies in female germline
○Chia-Ying Liu[1], Szu-Jing Huang[2], Ming-Der Lin[1,2] (Dept MBHG, Tzu Chi Univ. Taiwan[1], Dept LS, Tzu Chi Univ. Taiwan[2])

OP15-FT7 (P099) 20:08-20:11 The oogenesis and transcriptome analysis of Forcipomyia taiwana (Diptera: Ceratopogonidae)
○Szu-Chieh Wang[1], Anna Shiny Radhakrishnan[1,2], Hsien-Min Lee[3], Cheng-Nan Wu[4], Chuen-Fu Lin[5], Ming-Der Lin[1] (Dept MBHG, TCU, Taiwan[1], Dept GE, SRM, India[2], IBT, CTUST, Taiwan[3], Dept MLSB, CTUST, Taiwan[4], Dept VM, NCU, Taiwan[5])

Oral Presentation & Flash Talk 16: Early Embryogenesis 3

June 4 (Thu) 13:30 〜 15:00 Room A

Chairperson:

Toru Ishitani
(Kyushu Univ.)

OP16-1 13:35-13:50 Indispensable roles of Lrrc15 for proper tissue morphogenesis during mouse development

○Ahmed Abo-Ahmed[1], Dong-Soo Lee[2], Masatake Osawa[3] (Graduate School of Med., Gifu Univ., Japan[1], Graduate School of Med., Gifu Univ., Japan[2], Graduate School of Med., Gifu Univ., Japan[3])

OP16-2 13:50-14:05 Roles of glypicans and NDST1 in the formation of two distinct types of heparan sulfate nanostructures involved in extracellular distributions of Wnt and sFRP

Wnt と sFRP の細胞外分布に関わる 2 つの異なるヘパラン硫酸ナノ構造の形成におけるグリピカンと NDST1 の役割

○Takayoshi Yamamoto[1], Yusuke Mii[2], Shinji Takada[2], Masanori Taira[1] (Lab. of Mol. Biol., Dept. of Biol. Scis., Grad. Sch. of Sci., Univ. of Tokyo[1], Div. of Mol. Dev. Biol., NIBB[2])

OP16-3 14:05-14:20 Analysis of the role of Tsukushi during chick somitogenesis

○Uzzal Acharjee[1,2], Ryu Gejima[1], Athary Felemban[1], M. Ashrafuzzaman Riyadh[1], Yoshiko Takahashi[3], Hideaki Tanaka[1], Kunimasa Ohta[1] (Kumamoto Univ.[1], Kumamoto Univ.[2], Kyoto Univ.[3])

OP16-4 14:20-14:35 Gene activation-associated long noncoding RNAs function in mouse preimplantation development

長鎖ノンコーディング RNA によるマウス胚性遺伝子活性化メカニズム

○Nobuhiko Hamazaki[1,2], Masahiro Uesaka[1,2,3], Kinichi Nakashima[2], Kiyokazu Agata[1], Takuya Imamura[2] (Grad. Sci., Univ. of Kyoto[1], Grad. Med., Univ. of Kyushu[2], Grad. Sci., Univ. of Tokyo[3])

OP16-5 14:35-14:50 Quantitative reconstruction of three types of stripe-forming processes that occur in a dynamic epithelium of the spider embryo

クモ胚の動的上皮で起こる 3 つのストライプ形成過程の定量的再構成

Natsuki Hemmi[1,2], Yasuko Akiyama-Oda[1], ○Hiroki Oda[1,2] (JT BRH[1], Osaka Univ.[2])

OP16-FT1 (P020) 14:50-14:53 A disintegrin and metalloprotease 12 (ADAM12) involves to the body growth at juveline stage in zebrafish

膜型メタロプロテアーゼ ADAM12 は稚魚期のゼブラフィッシュの発育に関与する

○Yudai Tokumasu[1], Atsuo Iida[1], Zi Wang[1], Atsuko Sehara-Fujisawa[1] (Ins. for Front. Med. Sci., Kyoto Univ.[1], Atsuo Iida[2], Zi Wang[3], Atsuko Sehara-Fujisawa[4])

OP16-FT2 (P012) 14:53-14:56 The Nodal signaling pathway controls left-right asymmetric development in amphioxus

Vladimir Soukup[2], ○Luok Wen Yong[1], Tsai-Ming Lu[1], Song-Wei Huang[1], Zbynek Kozmik[2], Jr-Kai Yu[1,3] (ICOB, AS[1], IMG, ASCR[2], IONTU[3])

Oral Presentation & Flash Talk 17: Growth 3

June 4 (Thu) 13:30 ～ 15:00 Room B

Chairperson:

Masayuki Miura
(Univ. of Tokyo)

OP17-1 13:35-13:50 Biological timer in fat body determines pupation timing in Drosophila melanogaster
キイロショウジョウバエの蛹化タイミングを決定する生物タイマーは脂肪体に存在する
○Haruka Nishida[1], Abdel-Rahman Sultan[1], Kazutaka Akagi[1], Moustafa Sarhan[1], Takumi Nakayama[1], Azusa Koie[1], Hitoshi Ueda[1,2] (Grad. Sch. of Natl. Sci. Tech., Okayama Univ.[1], Dept. Biol., Faulty of Sci., Okayama Univ.[2])

OP17-2 13:50-14:05 Nutrient-sensitive hormone CCHamide-2 controls growth through insulin/IGF production in the brain of Drosophila melanogaster
ショウジョウバエの新規栄養応答性ホルモン CCHa2 による insulin/IGF を介した成長制御
○Hiroko Sano[1], Akira Nakamura[2], Michael Texada[3], James Truman[3], Hiroshi Ishimoto[4], Azusa Kamikouchi[4,5], Naoki Tani[2], Yutaka Nibu[6], Kazuhiko Kume[7], Takanori Ida[8], Masayasu Kojima[1] (Inst. of Life Science, Kurume Univ.[1], Inst. of Molecular Embryology and Genetics, Kumamoto Univ.[2], Janelia Research Campus, HHMI[3], Graduate School of Science, Nagoya Univ.[4], PRESTO[5], Weil Medical College of Cornell Univ.[6], Graduate School of Pharmaceutical Sciences, Nagoya City Univ.[7], Frontier Science Research Center, Miyazaki Univ.[8])

OP17-3 14:05-14:20 Ensuring developmental robustness by “cell-turnover” in Drosophila epithelium
発生ロバストネスを制御する「細胞ターンオーバー」の遺伝学的解析
○Shizue Ohsawa[1], Nanami Akai[1], Tatsushi Igaki[1,2] (Lab. Genetics, Grad. Sch. Biostudies, Kyoto Univ.[1], PRESTO, JST[2])

OP17-4 14:20-14:35 Pelle Modulates dFoxO-Mediated Cell Death in Drosophila
○Chenxi Wu (Tongji Uni)

OP17-5 14:35-14:50 Metabolic and developmental catastrophe of PPi excess *in vivo* − First unraveled in plants
○Ali Ferjani[1], Shizuka Gunji[1], Kensuke Kawade[2], Akira Oikawa[2,3], Mariko Asaoka[4], Kazuki Takahashi[1], Masanori Ishida[1], Masayoshi Maeshima[4], Masami Hirai Y[2], Kazuki Saito[2,5], Hirokazu Tsukaya[6] (Tokyo Gakugei Univ.[1], RIKEN, CSRS[2], Facul. Agric., Yamagata Univ.[3], Grad. Sch. Bioagr. Sci., Nagoya Univ.[4], Grad. Sch. Pharm. Sci., Chiba Univ.[5], Grad. Sch. Sci., Tokyo Univ.[6])

OP17-FT1 (P146) 14:50-14:53 Inhibiting autophagy enhanced anticancer efficacy of recombinant human arginase in melanoma cells
○Ziyu Wang, Dianwen Ju (SP, Fudan Univ)

OP17-FT2 (P147) 14:53-14:56 Targeting hedgehog signaling pathway and autophagy overcomes drug-resistance of BCR-ABL positive chronic myeloid leukemia
○Li Yubin, Zeng Xian, Fan Jiajun, Wang Ziyu, Wang Shaofei, Song Ping, Ju Dianwen (DBSP, Fudan Univ.)

OP17-FT3 (P149) 14:56-14:59 Role of Autophagy in Quantum Dots-induced Nanotoxicity
○Jiajun Fan, Sun Yun, Wang Shaofei, Ju Dianwen (DOB FDU)

Oral Presentation & Flash Talk 18: Neural Development 3

June 4 (Thu) 13:30 ～ 15:00 Room C

Chairperson:

Yoshio Wakamatsu
(Tohoku Univ.)

OP18-1 13:35-13:50 Loss of Polo ameliorates APP-induced Alzheimer's disease-like symptoms in Drosophila
○Fei Peng[1,2], Xirui Huang[1,2], Yu Zhao[1,2], Xingjun Wang[1,2], Ying Sun[1,2], Pu Ren[1,2], Lei Xue[1,2] (SKSD, Tongji Univ[1], Department of Interventional Radiology, Shanghai 10th People's Hospital, Shanghai[2])

OP18-2 13:50-14:05 Block of Stathmin4 inhibits G2-M transition and promote neuronal differentiation in dorsal midbrain
○Meng-Ju Lin, Shyh-Jye Lee (Dept. LS, NTU)

OP18-3 14:05-14:20 Cell cycle-dependent phosphorylation of Otx2 couples with the repression of cell-cycle inhibitor p27 by Otx2 in early Xenopus development
Xenopus の初期発生における転写活性調節に関わる細胞周期依存的な Otx2 のリン酸化修飾の役割
○Yueko Satou[1], Erina Hosono[1], Kohei Minami[1], Takashi Shibano[1], Shuji Takahashi[2], Makoto Asashima[3], Masanori Taira[1] (Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Tokyo[1], KOMEX[2], AIST[3])

OP18-4 14:20-14:35 Disruption of Tsukushi function result in aberrant neurogenesis in mouse
○Md. Asrafuzzaman Riyadh[1], Ayako Ito[1], Yohei Shinmyo[2], Athary Felemban[1], Jun Hatakeyama[3], Kenji Shimamura[3], Kazunobu Sawamoto[4], Kunimasa Ohta[1] (Dev. Neurobiology Lab. Kumamoto Univ.[1], Bio. Genetics Lab. Kanazawa Univ.[2], Brain Morphogenesis Lab. Kumamoto Univ.[3], Dev. Regenerative Bio. Lab. Nagoya City Univ.[4])

OP18-5 14:35-14:50 Piwi plays a role in regulating cell differentiation in the ascidian central nervous system
ホヤ中枢神経系における Piwi の細胞分化制御
○Kotaro Shimai[1], Takeo Horie[2], Rui Yokomori[3], Koki Nishitsuji[4], Kenta Nakai[3], Takehiro Kusakabe[1,5] (Inst. Integr. Neurobio., Konan Univ.[1], Shimoda Marine Research Center, Univ. of Tsukuba[2], HGC, Ins. Med. Sci., Univ. of Tokyo[3], OIST[4], Dep. Bio., Fac. Sci. Eng., Konan Univ.[5])

OP18-FT1 (P113) 14:50-14:53 A nuclear protein Cfdp1 regulates differentiation of granule cells in zebrafish cerebellum
ゼブラフィッシュ小脳顆粒細胞の分化における Cfdp1 の役割
○Takashi Shimizu[1], Shuichi Kani[2], Young-Ki Bae[2,3], Xiaoding Sun[1], Hibi Masahiko[1] (BBC, Nagoya Univ.[1], CDB, RIKEN[2], NCC, Korea[3])

OP18-FT2 (P120) 14:53-14:56 GAD in the AER
外胚様性堤防のグルタミン酸脱炭酸酵素
Nozomi Onodera[2], Hiroshi Nakata[1], ○Satomi Sasaki[1], Isato Araki[2] (DCBFE, Iwate Univ.[1], UGAS, Iwate Univ[2])

Oral Presentation & Flash Talk 19: Early Embryogenesis 4

June 4 (Thu) 15:15 〜 16:45 Room A

Chairperson:

Noriyuki Kinoshita
(NIBB)

OP19-1 15:20-15:35 Two classes of Sox2-partner factor interactions involved in developmental gene regulation, as indicated by genome-wide ChIP-seq analysis
発生過程での Sox2 の制御標的にはパートナー因子との相互作用のし方が異なる 2 つのタイプがあることが、Sox2 結合領域の網羅的な解析で明らかになった
○Hisato Kondoh[1], Kazunari Matsuda[2], Tomoyuki Mikami[2], Andrabi Munazah[2,3], Katsushi Yamaguchi[4], Shuji Shigenobu[4] (Kyoto SU[1], Osaka U, FBS[2], RIKEN CDB[3], NIBB[4])

OP19-2 15:35-15:50 Fibrillar adhesion and vascular constriction regulate patterned deposition of fibronectin pillars that bridge somites and the endoderm
体節―内胚葉間のピラー様フィブロネクチンの蓄積は線維結合および血管収縮により制御される
○Yuki Sato[1,2], Kei Nagatoshi[1], Yuko Imamura[3] (Grad. Sch. of Med., Kyushu Univ.[1], JST PRESTO[2], Grad. Sch. of Sci., Kumamoto Univ.[3])

OP19-3 15:50-16:05 Quantitative analysis for individual variations in C. elegans embryogenesis by an image integration method
画像統合法を利用した線虫 C. elegans 胚発生における個体差の定量解析
○Yusuke Azuma[1], Shuichi Onami[1,2] (RIKEN QBiC[1], JST, NBDC[2])

OP19-4 16:05-16:20 Analysis of Hedgehog signaling in the early spider embryo using RNAi and RNA-seq techniques
RNA 干渉と RNA-seq を利用したオオヒメグモ初期胚におけるヘッジホッグ・シグナルの解析
○Yasuko Akiyama-Oda, Sawa Iwasaki, Hiroki Oda (JT Biohistory Res. Hall)

OP19-FT1 (P013) 16:20-16:23 Efficient Genome Editing in Chicken by CRISPR-Targeted Homologous Recombination
○Kwaku Dad Abu-Bonsrah[1,2], Dongcheng Zhang[1,2], Don Newgreen[2] (UoM[1], MCRI[2])

OP19-FT2 (P006) 16:23-16:26 CRISPR/Cas on RNA in Xenopus laevis; antisense morpholino oligomers may not be required any more
Xenopus laevis における RNA を対象とした CRISPR/Cas 法 ; アンチセンスモルフォリノオリゴマーはもういらない
○Kenta Morimoto, Hiroki Kuroda (Environment & Info. Studies, Keio Univ.)

OP19-FT3 (P018) 16:26-16:29 Effects of light conditions on the development of circadian rhythm in the suprachiasmatic nuclei and pineal in embryos of a marine fish, flounder (*Paralichthys olivaceus*)
海産魚ヒラメの胚を使った、視交叉上核と松果体における概日リズムの発生と光条件の影響の解析
○Makoto Mogi[1], Susumu Uji[2], Hayato Yokoi[1], Tohru Suzuki[1] (Grad. Sch. Agr. Sci., Tohoku Univ.[1], Nati. Res. Ins. Aqua., Fis. Res. Age.[2])

OP19-FT4 (P026) 16:29-16:32 A simple and robust method for establishing homogeneous mouse EpiSC lines by Wnt inhibition
Wnt シグナル抑制による簡便な高品質マウス EpiSC 樹立法の確立
○Michihiko Sugimoto[1,2], Masayo Kondo[2], Yumiko Koga[2], Hirosuke Shiura[2], Rieko Ikeda[2], Susana Chuva de Sousa Lopes[3], Kuniya Abe[2] (IRDA, Kumamoto Univ.[1], BRC, RIKEN[2], Anat. Embryol., Leiden Univ. Med. Ctr.[3])

OP19-FT5 (P005) 16:32-16:35 Store-operated calcium entry (SOCE) regulates mesodermal cell motility through the regulation of basal calcium concentration during *Xenopus laevis* gastrulation
アフリカツメガエル胚の原腸陥入における、ストア作動性カルシウム流入の機能解析
○Kentaro Hayashi[1,2], Naoto Ueno[1,2] (NIBB[1], SOKENDAI[2])

OP19-FT6 (P001) 16:35-16:38 Maternal and zygotic transcriptomes in the appendicularian, Oikopleura dioica: Novel protein-encoding genes, intra-species sequence variations, and trans-spliced RNA leader
オタマボヤを用いた母性と胚性の RNAseq: 新規遺伝子、種内変異、トランススプライシング
○Kai Wang, Tatsuya Omotezako, Kanae Kishi, Hiroki Nishida, Takeshi Onuma (Dept of Biol Sci, Osaka Univ)

Oral Presentation & Flash Talk 20: Growth 4 & Metamorphosis

June 4 (Thu) 15:15 〜 16:45 Room B

Chairperson:

Takashi Nishimura
(RIKEN CDB)

OP20-1 15:20-15:35 Role of bone stem cells in growth, maintenance and regeneration of calcified tissues in zebrafish
ゼブラフィッシュの石灰化組織の成長、維持および再生における骨幹細胞の役割
○Kazunori Ando[1], Genbu Abe[2], Koichi Kawakami[2], Akira Kudo[1], Atsushi Kawakami[1] (Tokyo Tech[1], NIG[2])

OP20-2 15:35-15:50 An ancient role for Notch in the evolution of cellular transformation in animals
○Nagayasu Nakanishi[1], Gemma Richards[2], Sandie Degnan[1], Bernie Degnan[1] (Univ of Queensland[1], Univ of Bergen[2])

OP20-3 15:50-16:05 Life cycle regulation in Cnidaria and the origin of a jellyfish body plan
○Konstantin Khalturin[1], Chuya Shinzato[1], Maria Khalturina[1], Manabu Fujie[2], Ryo Koyanagi[2], Hiroki Goto[2], Noriyuki Satoh[1] (Marine Genomics Unit, Okinawa Institute of Science and Technology Graduate University, Onna, Okinawa 904-0495, Japan[1], DNA Sequencing Section, Okinawa Institute of Science and Technology Graguate University, Onna, Okinawa 904-0495, Japan[2])

OP20-4 16:05-16:20 Optimal growth schedule of holometabolous insects
完全変態昆虫の最適成長スケジュール
○Ken-ichi Hironaka[1,2], Yoshihiro Morishita[1] (RIKEN QBiC[1], JSPS Research Fellowships for Young Scienteist[2])

OP20-5 16:20-16:35 A new Zn-finger transcriptional factor is essential for developmental transition via regulating steroid hormone biosynthesis in the fruit fly *Drosophila melanogaster*
ショウジョウバエにおけるステロイドホルモン生合成に関わる新規ジンクフィンガー転写因子の機能解析
○Outa Uryu[1], Tatsuya Komura-Kawa[2], Ryusuke Niwa[1] (Fac. Sch. Life and Env. Sci., Univ. Tsukuba[1], Grad. Sch. Life and Env. Sci., Univ. Tsukuba[2])

OP20-FT1 (P055) 16:35-16:38 A theoretical study on mechanisms of cell extrusion process in growing epithelial tissues
○Sangwoo Lee, Yoshihiro Morishita (RIKEN QBiC)

OP20-FT2 (P141) 16:38-16:41 Prenatal regression of the trophotaenial placenta in a viviparous fish, *Xenotoca eiseni*
グーデア科胎生魚ハイランドカープの栄養リボンは出生前に細胞死により退縮する
○Atsuo Iida[1], Toshiyuki Nishimaki[2], Atsuko Sehara-Fujisawa[1] (Ins. for Front. Med. Sci., Kyoto Univ.[1], Kitasato Univ. Sch. of Med.[2])

OP20-FT3 (P144) 16:41-16:44 Understanding the mechanisms of dimorphic leaf development of aquatic plants
水草の二面的な葉形態形成メカニズムの解明
○Hiroyuki Koga, Hirokazu Tsukaya (Univ. Tokyo)

Oral Presentation & Flash Talk 21: Neural Development 4

June 4 (Thu) 15:15 〜 16:45 Room C

Chairperson:

Tatsumi Hirata
(NIG)

OP21-1 15:20-15:35 Dynamic migratory behaviors of *gbx2*-expressing cells during brain compartmentalization—4D imaging in zebrafish embryos—
脳領域化における *gbx2* 発現細胞のダイナミックな挙動—ゼブラフィッシュを用いた 4 次元イメージング解析—
○Sachiko Tsuda[1], Kyo Yamasu[2] (R&D Bureau, Saitama Univ.[1], Grad. Sch. of Sci. and Tech., Saitama Univ.[2])

OP21-2 15:35-15:50 Blood vessel-guided cell migration in the developing cerebral cortex
発生期大脳皮質における血管に沿った細胞移動の解析
Hidenori Tabata[1,2], Megumi Sasaki[1], Yutaka Inaguma[2], Hidenori Ito[2], Hirohide Takebayashi[3], Masatsugu Ema[4], Kazuhiro Ikenaka[5], Koh-ichi Nagata[2], ○Kazunori Nakajima[1] (Dept. of Anat., Keio Univ. Sch. of Med.[1], Department of Molecular Neurobiology, Institute for Developmental Research, Aichi Human Service Center[2], Division of Neurobiology and Anatomy, Graduate School of Medical and Dental Sciences, Niigata University[3], Department of Stem Cells and Human Disease Models, Research Center for Animal Life Science, Shiga University of Medical Science[4], Division of Neurobiology and Bioinformatics, National Institute for Physiological Sciences[5])

OP21-3 15:50-16:05 Novel mechanism for Interkinetic Nuclear Migration of neural progenitor cell
大脳原基の神経系前駆細胞動態に関わる新規メカニズム

○Tomoyasu Shinoda[1], Arata Nagasaka[1], Ryo Higuchi[2], Yoshiaki Minami[2], Takashi Miura[3], Yugo Fukazawa[4], Yasuhiro Inoue[5], Taiji Adachi[5], Masaharu Nagayama[2], Takaki Miyata[1] (Nagoya Univ. Graduate School of Medicine[1], RIES, Hokkaido Univ.[2], Dept. Anatomy, Kyusyu Univ.[3], Fac. Med. Science, Univ. of Fukui[4], Dept. Biomechanics, Inst. Frontier Science, Kyoto Univ.[5])

OP21-4 16:05-16:20 HEARs: Is it chicken-specific, or a general phenomenon?

○Nozomi Onodera[1], Hiroshi Nakata[2], Isato Araki[1,2] (UGAS, Iwate Univ[1], Dept Chem Bioeng, Fac Eng, Iwate Univ[2])

OP21-5 16:20-16:35 Wnt7b expressed by neurons born on embryonic day 11.5 of mouse brain is necessary for the normal brain morphogenesis

マウス胎生 11.5 日生まれの神経細胞に発現している Wnt7b は、正常な脳の形態形成において必要である

○Mitsuhiro Hashimoto[1,2] (Dep of Neuroanat Fukushima Med Univ[1], Dep of Cell Biol Med Nagoya Univ[2])

OP21-FT1 (P104) 16:35-16:38 Functional interaction between Latrophilin-2 and Teneurin-2/4 in the migration of neural crest cells

Latrophilin-2 と Teneurin-2/4 の神経堤細胞遊走における機能的相互作用

○Kousuke Tanegashima[1], Natsumi Yokote[1,2], Marianna Suzuki[1,2], Tatsuo Michiue[3], Takahiko Hara[1,2] (Stem Cell Project, Tokyo Metropol. Inst. Med. Sci.[1], Grad. Sch. of Tokyo Med. Dent Univ.[2], Dep. of Life Sci., Grad. Sch. of Arts and Sci., Univ. of Tokyo[3])

OP21-FT2 (P112) 16:38-16:41 Hydra peduncle nervous system has primitive functions of the brain

ヒドラ柄部の神経系は原始的な脳機能をもっている

○Hiroshi Shimizu[1], Xiaoming Zhang[2], Takashi Gojobori[1] (KAUST[1], KUMC[2])

Poster Sessions

PXXX is Poster Award candidate.

June 3 (Wed) 12:00-June 5 (Fri) 13:30
Discussion 1: June 3 (Wed) 17:00-17:45 odd number, 17:45-18:30 even number
Discussion 2: June 4 (Thu) 17:00-18:00 even number, 18:00-19:00 odd number

P001 (OP19-FT6) Maternal and zygotic transcriptomes in the appendicularian, Oikopleura dioica: Novel protein-encoding genes, intra-species sequence variations, and trans-spliced RNA leader
オタマボヤを用いた母性と胚性の RNAseq: 新規遺伝子、種内変異、トランススプライシング
○Kai Wang, Tatsuya Omotezako, Kanae Kishi, Hiroki Nishida, Takeshi Onuma (Dept of Biol Sci, Osaka Univ)

P002 G protein-coupled receptors Xflop1 and Xflop2 are essential for head formation by inhibiting Wnt/β-catenin signaling in the Xenopus embryo
カエル胚において Xflop1 と Xflop2 は Wnt/β-catenin シグナルを抑制し頭部形成に寄与する
○Asuka Miyagi[1], Takefumi Negishi[2], Takamasa Yamamoto[2], Naoto Ueno[1,2] (SOKENDAI[1], NIBB[2])

P003 Regulation of Wnt signaling pathway by mediating Dishevelled for degradation during Xenopus development
○Hyeyoon Lee, Seong-Moon Cheong, Tabinda Sidrat, Byeongrak Keum, Jin-Kwan Han (Dept. of Life Sciences, POSTECH, Republic of Korea)

P004 Identification of a novel tail organizing factor that integrates morphogen signaling pathways in Xenopus
モルフォゲンシグナルの統合に働く新しい尾部オーガナイザー因子の同定と解析
○Hitoshi Yoshida[1], Maya Okada[1], Kimiko Takebayashi-Suzuki[1], Naoto Ueno[2], Atsushi Suzuki[1] (Inst. Amphibian Biol., Grad. Sch. Sci., Hiroshima Univ.[1], Div. Morph., NIBB, Japan[2])

P005 (OP19-FT5) Store-operated calcium entry (SOCE) regulates mesodermal cell motility through the regulation of basal calcium concentration during *Xenopus laevis* gastrulation
アフリカツメガエル胚の原腸陥入における、ストア作動性カルシウム流入の機能解析
○Kentaro Hayashi[1,2], Naoto Ueno[1,2] (NIBB[1], SOKENDAI[2])

P006 (OP19-FT2) CRISPR/Cas on RNA in Xenopus laevis; antisense morpholino oligomers may not be required any more
Xenopus laevis における RNA を対象とした CRISPR/Cas 法 ; アンチセンスモルフォリノオリゴマーはもういらない
○Kenta Morimoto, Hiroki Kuroda (Environment & Info. Studies, Keio Univ.)

P007 Characterization of the insulin-like growth factor binding protein family in Xenopus tropicalis
ネッタイツメガエルにおけるインスリン様成長因子結合タンパク質 (Igfbp) の解析
○Yoshikazu Haramoto[1], Tomomi Oshima[1], Shuji Takahashi[2], Yuzuru Ito[1] (SCRC, AIST[1], Inst. for Amphibian Biol., Hiroshima Univ.[2])

P008 MicroRNA 145 mediates PGRN signaling in zebrafish liver outgrowth
○Ya-Wen Li[1,2], Keng-Yu Chiang[2], Yen-Hsing Li[2], Jen-Leih Wu[2] (GILS, NDMC[1], ICOB, Academia Sinica[2])

P009 Isolation and culture of chicken primordial germ cells
○Chiao-Yun Lou[1], Yu-che Chiu[1], Jenn-Fa Liou[2], Lih-Ren Chen[2], Chih-Feng Chen[1], Pin-Chi Tang[1] (DAS, Chung Hsing Univ.[1], Physiology Division, Livestock Research Institute[2])

P010 The role of maternal Nodal signaling in mouse embryos
マウス胚における母性因子 Nodal シグナルの役割
○Katsuyoshi Takaoka, Keniti Matsubara, Hiroshi Hamada (Osaka university FBS)

P011 Mouse Inscuteable regulates cell fate decision during mouse ES cells differentiation
マウス Inscuteable による ES 細胞の分化制御
○Riki Ishibashi[1,2], Satoshi Kozuki[1,2], Fumiko Toyoshima[1,2] (Dept. of Cell and Dev., Grad. Shc. of Bio., Kyoto Univ.[1], Inst. Virus Res., Kyoto Univ.[2])

P012 (OP16-FT2) The Nodal signaling pathway controls left-right asymmetric development in amphioxus
Vladimir Soukup[2], ○Luok Wen Yong[1], Tsai-Ming Lu[1], Song-Wei Huang[1], Zbynek Kozmik[2], Jr-Kai Yu[1,3] (ICOB, AS[1], IMG, ASCR[2], IONTU[3])

P013 (OP19-FT1) Efficient Genome Editing in Chicken by CRISPR-Targeted Homologous Recombination
○Kwaku Dad Abu-Bonsrah[1,2], Dongcheng Zhang[1,2], Don Newgreen[2] (UoM[1], MCRI[2])

P014 Oct60 expression in blood cells of *Xenopus laevis*
アフリカツメガエルの血液中における Oct60 発現細胞の解析
○Rena Sato, Fumika Kouno, Tsutomu Kinoshita (Dept. Life. Sci., Rikkyo Univ.)

P015 (OP23-FT1) Larval fin formation in amphibians is interfered with the GABA signaling
両生類幼生のヒレ構造形成は GABA シグナリングに阻害される
○Yuki Yamasaki[1], Tomoyo Furukawa[2], Hiroki Kuroda[1] (IAB, Keio Univ[1], Shizuoka Univ[2])

P016 (OP03-FT2) Phosphatase of regenerating liver-3 is essential for the early development of zebrafish embryos
○Ting-Fang Wang[1], Te-Hsien Liu[1], Yau-Hung Chen[2], Ming-Der Lin[1,3] (Dept LS, TCU, Taiwan[1], Dept Chemistry, TKU, Taiwan[2], Dept MBHG, TCU, Taiwan[3])

P017 Cdk12 deficiency causes mouse embryonic lethality during pre-gastrula stage
○Hsien-Chia Juan, Yung Lin, Ming-Ji Fann (Department of Life Sciences and Institute of Genome Sciences, National Yang-Ming University, Taipei, Taiwan)

P018 (OP19-FT3) Effects of light conditions on the development of circadian rhythm in the suprachiasmatic nuclei and pineal in embryos of a marine fish, flounder (*Paralichthys olivaceus*)
海産魚ヒラメの胚を使った、視交叉上核と松果体における概日リズムの発生と光条件の影響の解析
○Makoto Mogi[1], Susumu Uji[2], Hayato Yokoi[1], Tohru Suzuki[1] (Grad. Sch. Agr. Sci., Tohoku Univ.[1], Nati. Res. Ins. Aqua., Fis. Res. Age.[2])

P019 RNA-Seq-based transcriptome analysis of early embryos in the common house spider *Parasteatoda*
RNA-Seq を用いたオオヒメグモ初期胚のトランスクリプトーム解析
○Sawa Iwasaki, Yasuko Akiyama-Oda, Hiroki Oda (BRH)

P020 (OP16-FT1) A disintegrin and metalloprotease 12 (ADAM12) involves to the body growth at juveline stage in zebrafish

膜型メタロプロテアーゼ ADAM12 は稚魚期のゼブラフィッシュの発育に関与する

○Yudai Tokumasu, Atsuo Iida, Zi Wang, Atsuko Sehara-Fujisawa (Ins. for Front. Med. Sci., Kyoto Univ.)

P021 Xenopus Ubiquitin carboxy-terminal hydrolase 37 (XUch37) regulates transcriptional activity of XTcf1 in the Wnt/b-catenin pathway

○Wonhee Han, Seungjoon Lee, Jin-Kwan Han (Department of Life Sciences, POSTECH, South Korea)

P022 Formation and function of vegetal microtubules for zebrafish dorsal determination
ゼブラフィッシュ背腹決定における植物極微小管の形成とその機能

○Hiromu Hino[1], Tsubasa Aoki[1], Akiko Nakanishi[2], Ryoko Seki[2], Takashi Shimizu[1,2], Masahiko Hibi[1,2] (Grad. Sch. Sci., Nagoya Univ.[1], BBC, Nagoya Univ.[2])

P023 The establishment of the determination of left-right asymmetry in sea urchin embryo
バフンウニ胚における左右非対称性決定機構

○Ayumi Takemoto[1], Tatsuo Miyamoto[2], Akinori Awazu[1,3], Takashi Yamamoto[1,3], Naoaki Sakamoto[1,3] (Dept. of Math. and Life Sci., Hiroshima Univ.[1], Dept. of Genet. and cell Biol., Res. Inst. for Eadiation Biol. and Med., Hiroshima Univ.[2], RcMcD, Hiroshima Univ.[3])

P024 Anterior-posterior (A-P) axis formation in soft-shelled turtle and gecko
スッポンとヤモリにおける前後軸形成

○Eriko Kajikawa[1], Michio Yoshida[1], Daisuke Kurokawa[1,2], Daisuke Yamamoto[1,4], Miyuki Noro[1], Shigehiro Kuraku[3], Kensaku Kobayashi[4], Hiroshi Kiyonari[4], Shinichi Aizawa[1] (Lab. for Vertebrate Body Plan, RIKEN CDB[1], MMBS, Univ. of Tokyo[2], Phyloinformatics Unit, RIKEN CLST[3], Animal Resource Development Unit, RIKEN CLST[4])

P025 Anterior-Posterior Axis Formation in the marsupial, Monodelphis domestica
有袋類ハイイロジネズミオポッサムにおける前後軸形成機構の解析

○Daisuke Yamamoto[1], Michio Yoshida[2], Eriko Kajikawa[2], Kunihiro Suzuki[3], Setsunosuke Ihara[4], Hiroshi Kiyonari[1], Shinichi Aizawa[2] (Animal Resource Development Unit, CLST RIKEN[1], VBP, CDB RIKEN[2], Nihon Univ. Sch. of Dentistry at Matsudo[3], Fac. life & Environ. Sci. Shimane Univ.[4])

P026 (OP19-FT4) A simple and robust method for establishing homogeneous mouse EpiSC lines by Wnt inhibition
Wnt シグナル抑制による簡便な高品質マウス EpiSC 樹立法の確立

○Michihiko Sugimoto[1,2], Masayo Kondo[2], Yumiko Koga[2], Hirosuke Shiura[2], Rieko Ikeda[2], Susana Chuva de Sousa Lopes[3], Kuniya Abe[2] (IRDA, Kumamoto Univ.[1], BRC, RIKEN[2], Anat. Embryol., Leiden Univ. Med. Ctr.[3])

P027 (OP06-FT1) The deep roots of vertebrate genomic evolution: insights from the embryonic transcriptome and Hox genes of the hagfish

○Juan Pascual-Anaya[1], Antonio Perez-Pulido[2], Fumiaki Sugahara[3], Shigeru Kuratani[1] (RIKEN[1], CABD, UPO-CSIC-JA[2], HCM[3])

P028 (OP06-FT2) Hox gene cluster structure in *Halocynthia roretzi* genome
マボヤの Hox 遺伝子クラスター

○Yuka Sekigami[1], Asao Fujiyama[2], Nori Satoh[3], Hidetoshi Saiga[1] (TMU[1], NIG[2], OIST[3])

P029 (OP01-FT4) P2Y4 receptor is involved in head formation in *Xenopus laevis* embryo
P2Y4 受容体はアフリカツメガエル胚の頭部形成に関連する

○Ayano Harata[1], Haruka Nishida[1], Takashi Yamamoto[2], Chikara Hashimoto[1] (BRH[1], Department of Mathematical and Life Sciences, Graduate School of Science, Hiroshima University[2])

P030 Regulation of cell adhesion by paraxial protocadherin (PAPC) ubiquitination during Xenopus gastrulation
アフリカツメガエル原腸形成における paraxial protocadherin (PAPC) ユビキチン化による細胞接着制御
○Noriyuki Kinoshita[1], Masatake Kai[2] (Dept. of Dev. Biol., NIBB[1], Grad. Sch. of Med., Osaka City Univ.[2])

P031 (OP07-FT6) Blood flow and vascular remodeling: *in vivo* live-imaging analyses of individual endothelial cells
生体内血管リモデリング：ライブイメージング解析による血管内皮細胞の挙動と血流との関係
○Yuta Takase, Yoshiko Takahashi (Dept. of Zoology, Grad. Sch. of Sci. Kyoto Univ.)

P032 (OP10-FT1) Wnt signal regulates morphological change of cells in the mouse spinal cord
○Takuma Shinozuka[1,2], Ritsuko Takada[2], Shinji Takada[1,2] (Dept. Basic Biology, SOKENDAI[1], NIBB[2])

P033 Study of Pax6-deficient mosaic mice generated by the CRISPR/Cas system
CRISPR/Cas システムによる Pax6 モザイク欠損マウスの解析
○Akihiro Yasue[1], Hitomi Kono[2], Tetsuya Bando[2], Yoshiyasu Ishimaru[3], Junji Inoue[2], Takahito Watanabe[3], Seiichi Oyadomari[4], Sumihare Noji[5], Taro Mito[3], Hideyo Ohuchi[2], Eiji Tanaka[1] (Dept. of Orthod., Inst. of Health Biosci., Tokushima Univ.[1], Dept. of Cytol and Histol., Okayama Univ.[2], Dept. of Life Syst., Inst. of Tech. and Sci., Tokushima Univ.[3], Div. of Mol. Biol., Inst. for Gen. Res., Tokushima Univ.[4], Tokushima Univ.[5])

P034 Semaphorin3E-PlexinD1 signaling is important for coronary artery formation
Semaphorin3E-PlexinD1 シグナルは冠動脈形成に重要である
○Kazuaki Maruyama[1], Sachiko Miyagawa-Tomita[2], Yuichiro Arima[3], Daiki Seya[1], Rieko Asai[1], Akiyoshi Uemura[4], Yutaka Yoshida[5], Mann Fanny[6], Yukiko Kurihara[1], Hiroki Kurihara[1] (Dept. of Physiological Chemistry and Metabolism, Graduate School of Med., The Univ. of Tokyo[1], Dept. of Pediatric Cardiology, Tokyo Women's Medical Univ[2], Dept. of Cardiovascular Medicine, Faculty of Life Sci., Kumamoto Univ.[3], Dept of Retinal vessels Biology, Graduate School of Med., Nagoya City Univ.[4], Div. of Developmental Biology, Cincinnati Children's Hospital Medical Center[5], Dept. of Developmental Biology, Univ. Aix-Marseille[6])

P035 (OP13-FT1) *Six4* and *Six5* are required for ventral body wall closure and morphogenesis of the primary body wall
転写制御因子 Six4/Six5 は腹壁閉鎖と一次腹壁の形態形成に必須である
○Masanori Takahashi, Kiyoshi Kawakami (Div. of Biol. Cent. for Mol. Med. Jichi Med. Univ.)

P036 Interaction between lymphatic vasculature and peripheral nerve during development of medaka
メダカの発生過程におけるリンパ管と神経の相互作用
○Tomonori Deguchi[1], Sumio Isogai[2], Hiroshi Shimoda[3], Takashi Kawasaki[1], Shunsuke Yuba[1] (AIST[1], Department of Anatomy, School of Medicine, Iwate Medical University[2], Department of Anatomical Science, Hirosaki University Graduate School of Medicine and School of Medicine[3])

P037 Genetic analysis of mouse Hammer toe (*Hm*) mutant reveals long-range enhancer modulation
マウス突然変異体 Hammer toe (*Hm*) によって明らかになる長距離エンハンサーの調節メカニズム
○Kousuke Mouri, Tomoko Sagai, Takanori Amano, Toshihiko Shiroishi (NIG)

P038 Functional analysis of the limb mesenchymal enhancer R3 of *Fgf10* and the regulation of transcription

Fgf10 の肢芽間充織エンハンサー R3 の機能と転写制御
○Atsushi Kuroiwa, Chisa Andoh, Ami Uemura, Yo-Ichi Shiraishi (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.)

P039 The role of LGR4 in tooth development
歯胚発生における LGR4 の機能解析
○Yukiko Yamakami, Tomoyo Kida, Kazunori Oyama, Yasuaki Mohri, Katsuhiko Nishimori (Lab. of Mol. Biol., Grad. Sch. of Agri. Sci., Tohoku Univ.)

P040 Analysis on the suppressors of *as2 rpl4d* reveals relationship among genes involved in the ribosomal protein-dependent regulation of leaf polarity
as2 rpl4d の抑制変異体の解析から示唆されるリボソーム遺伝子を介した葉の背腹性制御に関与する因子間の関係性
○Masahiro Takahara[1], Hirokazu Tsukaya[2], Gorou Horiguchi[1,3] (Dep. Life Sci., Coll. Sci., Rikkyo Univ.[1], Grad. Sch. Sci., Univ. Tokyo[2], Res. Cntr. Life Sci., Coll. Sci., Rikkyo Univ.[3])

P041 (OP04-FT1) O-Fucosyltransferase activity of Pofut1 is essential to control its own protein stability and regulate Notch1 signaling activity during somitogenesis
Pofut1 糖鎖修飾活性は体節形成時の Pofut1 タンパク質の安定化と Notch シグナルの活性化に必要である
○Rieko Ajima, Yumiko Saga (NIG)

P042 (OP04-FT3) Heterochrony in initiation of *Gdf11* expression specifies unique posterior appendage positioning in vertebrates
Gdf11 の発現開始タイミングのヘテロクロニーが脊椎動物の腹鰭・後肢の位置の多様性を生み出す
○Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Toshihiko Ogura[2], Atsushi Kuroiwa[1], Takayuki Suzuki[1,3] (Div. of Biol. Sci., Grad. Sci. of Sci., Nagoya Univ.[1], IDAC, Tohoku Univ.[2], JST PRESTO[3])

P043 (OP07-FT5) Anisotropic cell growth causes looping of the developing heart
心臓ループの形成は細胞の異方的増殖による
○Hisao Honda[1,2] (Kobe Univ. Medicine[1], RIKEN CDB[2])

P044 (OP01-FT5) Oikoplastic epidermal patterning in the trunk of the appendicularian, *Oikopleura dioica*
ワカレオタマボヤ *Oikopleura dioica* におけるハウス形成表皮細胞のパターン形成
○Kanae Kishi, Momoko Hayashi, Takeshi Onuma, Hiroki Nishida (Osaka University)

P045 (OP01-FT6) Internal and external structures of the appendicularian, Oikopleura dioica
走査型電子顕微鏡による脊索動物ワカレオタマボヤの外部構造・内部構造の観察
○Takeshi Onuma, Miho Isobe, Hiroki Nishida (Dep. Biol. Sci., Osaka Univ.)

P046 On the mechanisms that generate morphological diversity of retinal photoreceptor cells: possible contribution of opsin subtypes
メダカ視細胞の形態多様性を生み出す要因の検討：オプシンが及ぼす影響について
○Erika Hosokawa, Natsumi Akazawa, Hiroki Kashiwagi, Yutaka Daido, Atsushi Kuhara, Daiske Honda, Takehiro Kusakabe (Inst. Integr. Neurobiol., Grad. Sch. Nat. Sci., Konan Univ.)

P047 (OP05-FT1) Elevated CO_2 promotes satellite stomatal production via DNA replication in *Arabidopsis* cotyledons
高 CO_2 環境下における気孔発生の空間配置制御機構の解析

○Takumi Higaki, Kae Akita, Seiichiro Hasezawa (GSFS, The Univ. Tokyo)

P048 (OP07-FT1) Impaired Hippo signaling promotes Rho1-JNK-dependent growth
○Yujun Chen, Xianjue Ma, Wenyan Xu, Nana Wu, Lei Xue (SLST, Tongji Univ.)

P049 *In vivo* analysis of competitive apoptosis during epidermal replacement of *Drosophila*
ショウジョウバエ表皮入れ替わりにおける競合的なアポトーシスの *In vivo* 解析
○Yuka Hayashi[1,2], Erina Kuranaga[1] (RIKEN CDB[1], Grad. Sch. of Biostudies, Kyoto Univ.[2])

P050 (OP05-FT2) Revealing the function of EPF-peptides
EPF ペプチドの機能解析
○Rene H. Wink[1], Naoyuki Uchida[1], Keiko U. Torii[1,2] (ITbM Nagoya University[1], HHMI-GBMF[2])

P051 *SUZAKU1*, a NAC-domain transcription factor gene promotes leaf abaxialization in response to *as2*-enhancer mutations in *Arabidopsis thaliana*
シロイヌナズナの NAC 型転写因子遺伝子 *SUZAKU1* は *as2* エンハンサー変異による葉の背軸化の促進に関わる
○Gorou Horiguchi[1,2], Mikito Inoue[1], Hidenori Masuda[1], Miyuki Nakata[2], Hirokazu Tsukaya[3] (Dept. Life Sci., Coll. Sci., Rikkyo Univ.[1], Res. Centr. Life Sci, Coll. Sci., Rikkyo Univ.[2], Grad. Sch. Sci., Univ. Tokyo[3])

P052 Transcriptome analysis of zebrafish *polr1c* mutant revealed the importance of p53 pathway in Treacher Collins Syndrome
Ernest ML Kwong, ○William KF Tse (Dept. of Biol, HKBU)

P053 (OP02-FT1) Zebrafish model revealed the pathogenesis of POLR1C Type 3 Treacher Collins Syndrome
○Ernest ML Kwong, William KF Tse (Dept. of Biol, HKBU)

P054 Cell shape homeostasis against heterogeneous proliferation during epithelial cell competition
細胞競合の数理モデル：分裂速度の差により生じる恒常性の破綻とその維持
○Arisu Tsuboi[1], Shizue Ohsawa[2], Tatsushi Igaki[2], Koichi Fujimoto[1] (Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Osaka[1], Grad. Sch. of Biostudies, Univ. of Kyoto[2])

P055 (OP20-FT1) A theoretical study on mechanisms of cell extrusion process in growing epithelial tissues
○Sangwoo Lee, Yoshihiro Morishita (RIKEN QBiC)

P056 (OP07-FT3) Dlx5-overexpression mice show a homeotic transformation in the upper jaw into lower jaw-like structures
Dlx5 過剰発現マウスにおける上顎の下顎構造へのトランスフォーメーション
○Miki Shimizu[1], Taro Kitazawa[1], Yumiko Kawamura[1], Nicolas Narboux-Nme[2], Giovanni Levi[2], Yasunobu Uchijima[1], Yukiko Kurihara[1], Hiroki Kurihara[1] (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo[1], UMR7221 CNRS-MNHN[2])

P057 (OP10-FT3) Switchback of the spicule transport during local retraction of basal epithelium in BIO-treated sponges
阻害剤 BIO 存在下の培養で生じるカワカイメン個体の部分的な退縮において骨片はスイッチバック後に立てられる
○Kouji Kishimoto, Kiyokazu Agata, Noriko Funayama (Grad. School of Sci. Kyoto University)

P058 Mechanism of restricted initial activation of sonic hedgehog expression in the limb bud
四肢における Sonic hedgehog 遺伝子発現開始の限局メカニズム
○Haruka Matsubara[1], Daisuke Saito[2], Koji Tamura[1] (GSLS, Tohoku Univ.[1], Frontier Research Institute for Interdisciplinary Sciences, Tohoku University[2])

P059 (OP04-FT2)

Insulation of *Lmbr1* expression from *Shh* enhancers in the mouse embryo

Shh 遺伝子の組織特異的エンハンサーから遮蔽された *Lmbr1* の発現

○Takanori Amano, Toshihiko Shiroishi (NIG)

P060 (OP13-FT2)

Observation of FGF response in lung epithelium and modeling for branching morphogenesis

マウス肺の分岐構造を形成する FGF 応答の観察とモデル化

○Hisako Imamura-Takigawa, Takashi Miura (Dept. Anat. Cell Biol., Grad. Sch. Med., Kyushu Univ.)

P061 (OP13-FT3)

Establishment of spicule mechanical wobbling system in E. fluviatilis

カワカイメンにおける骨片を機械的に揺らす実験系の構築

○Sota Takagi, Kotoe Kawai, Kiyokazu Agata, Noriko Funayama (Dep. Biophysics, Grad. School of Science, Kyoto Univ.)

P062 (OP01-FT1)

Evolutionary relevance between mating behavior and LR asymmetric rotation of male genitalia in Diptera

双翅目昆虫における生殖行動と雄生殖器の左右非対称な回転の間の進化的な関連

○Momoko Inatomi, Kenji Matsuno (Dept. of Biol. Sci., Grad School of Sci., Osaka Univ.)

P063 (OP01-FT3)

A non-coding sequence conserved specifically in avian lineage acts as a *cis*-regulatory element during wing development

翼の発生過程においてシス制御因子としてはたらく、鳥類特異的ノンコーディング配列の特定

○Ryohei Seki[1], Cai Li[2], Tomohiko Sato[3], Mao Kondo[3], Haruka Matsubara[3], Daisuke Saito[3,4], Shiro Egawa[3], Jiang Hu[2], Luohao Xu[2], Hailin Pan[2], Naoki Irie[5], Guojie Zhang[2], Koji Tamura[3], Toshihiko Shiroishi[1] (Mamm. Genet. Lab., NIG[1], China National Genebank, BGI-Shenzhen[2], Grad. Sch. of Life Sci., Tohoku Univ.[3], Front. Res. Inst. for Interdis. Sci., Tohoku Univ.[4], Grad. Sch. of Sci., Univ. of Tokyo[5])

P064 (OP10-FT2)

Infrared lase-evoked gene operator (IR-LEGO) method is applicable to study organ morphogenesis in developing and regenerating amphibian

IR-LEGO（赤外線による局所遺伝子発現法）の両生類における発生・再生研究への応用

○Aiko Kawasumi[1,2], Toshinori Hayashi[3], Sinichi Hayashi[2,4], Yasuhiro Kamei[5,6], Yoshihiro Morishita[1], Koji Tamura[2], Hitoshi Yokoyama[2,7] (RIKEN QBiC[1], Tohoku University[2], Tottori University[3], University of Minnesota[4], NIBB[5], SOKENDAI[6], Hirosaki University[7])

P065

Mechanism of shortcut prevention during retinal blood vessel development

網膜血管発生における短絡防止のメカニズム

Atsushi Tero[3], Akiyoshi Uemura[2], ○Takashi Miura[1] (Dept. of Anat. & Cell Biol., Kyushu Univ. Grad. Sch. of Med.[1], Grad. Sch. Med. Sci., Nagoya City Univ.[2], IMI, Kyushu Univ.[3])

P066

Mathematical analysis of neural tube closure based on pulsed apical constriction

パルス性の頂端収縮に基づく神経管閉鎖の数理解析

○Makoto Suzuki[1], Hiroshi Koyama[2], Toshihiko Fujimori[2], Naoto Ueno[1] (NIBB[1], NIBB[2])

P067 (OP01-FT2)

Efficient embryonic culture method for the Japanese striped snake, Elaphe quadrivirgata, and its early developmental stages

シマヘビ胚のステージ表の作成と体外培養法の確立

Yoshiyuki Matsubara[1], Atsushi Sakai[2], Atsushi Kuroiwa[1], ○Takayuki Suzuki[1] (Div. of Biol. Sci., Nagoya Univ.[1], Japan Snake Institute[2])

P068 (OP07-FT2)
Regulation of asymmetric cell division by three distinct Wnt pathways in *C. elegans*
C. elegans における 3 つの異なる Wnt シグナル伝達経路による非対称性細胞分裂の調節
○Yinhua Jin, Masako Yokoo, Hitoshi Sawa (NIG)

P069 (OP07-FT4)
ChIP-Atlas: Comprehensive database for visualizing all published ChIP-seq data
ChIP-Atlas: 既報の ChIP-seq 実験を全て可視化するためのデータベース
○Shinya Oki[1], Tazro Ohta[2], Go Shioi[3], Chikara Meno[1] (Grad. Sch Med. Sci., Kyushu Univ.[1], DBCLS, ROIS[2], RIKEN CLST[3])

P070
Secondary neurulation: stem cell-like behavior of caudal neural tube-forming cells
Secondary neurulation: 尾部神経管を形成する細胞たちの幹細胞様の挙動
Teruaki Kawachi[1], Eisuke Shimokita[2], ○Yoshiko Takahashi[1] (Kyoto Univ[1], NAIST[2])

P071
Role of *Six1* for cell proliferation in the periodontal ligament tissue
歯根膜の細胞増殖における *Six1* の役割
○Tatsuki Kawasaki[1,2], Masanori Takahashi[2], Yoshiyuki Mori[1], Kiyoshi Kawakami[2] (Oral and Maxillo-facial Surgery, Jichi Med[1], Div of Biol, CMM, Jichi Med[2])

P072 (OP08-FT1)
Roles of sox10 and its possible interaction with sox5 in pigment cell development of medaka
メダカの色素細胞発生において sox10 とその sox5 との相互作用が担う役割
Yusuke Nagao[1], Hiroyuki Takada[1,2], Ryoko Seki[1], Yasuhiro Kamei[3], Ikuyo Hara[4], Yoshihito Taniguchi[5], Kiyoshi Naruse[4], Robert Kelsh[6], Masahiko Hibi[1,2], ○Hisashi Hashimoto[1,2] (Biosci. & Biotechnol.Ctr., Nagoya Univ.[1], Grad. Sch. of Sci., Nagoya Univ.[2], Spectrography Bioimaging Facility, NIBB[3], Lab. of Biores., NIBB[4], Dept. of Preventive Medicine Public Health, Sch. of Med., Keio Univ.[5], Dept. of Biol. Biochem., Univ. of Bath[6])

P073 (OP08-FT2)
Four-dimensional imaging of lung epithelial stem cell in mouse development
発生過程におけるマウス肺幹細胞の 4 次元イメージング
○Masafumi Noguchi, Mitsuru Morimoto (RIKEN CDB)

P074 (OP08-FT3)
A non-proliferating tissue enlargement controlling the trachea tubulogenesis
細胞増殖に依存しないマウス気管発生
○Keishi Kishimoto, Mitsuru Morimoto (RIKEN CDB)

P075 (OP11-FT1)
Neofunctionalization of *elastin* gene demarcates teleost heart outflow tract by regulating cell fate determination via YAP
elastin 遺伝子の重複と新規機能獲得による心臓の進化
○Yuuta Moriyama[1], Kazuko Koshiba-Takeuchi[1] (IMCB, Univ. of Tokyo[1], IMCB, Univ. of Tokyo[2])

P076 (OP14-FT1)
cis-regulatory elements and *trans*-acting factors regulating *Fgf10* expression in the pre-sumptive limb field
予定肢芽領域における *Fgf10* 発現を制御する *cis* 制御エレメントと *trans* 因子
○Yo-ichi Yamamoto-Shiraishi, Ami Uemura, Yu-hei Kohara, Taishi Ueta, Atsushi Kuroiwa (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.)

P077 (OP14-FT2)
A novel concept of organogenesis: an essential role of platelets in lung development
血小板と肺発生の関連から提唱される器官形成の新しいメカニズム
○Nagaharu Tsukiji[1], Osamu Inoue[2], Shogo Tamura[1], Toshiaki Shirai[1], Tomoyuki Sasaki[1], Kaneo Satoh[1], Katsue Suzuki-Inoue[1], Yukio Ozaki[1] (Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi[1], Infection Control Office, University Of Yamanashi Hospital, Facaluty of Medicene, University of Yamanashi[2])

P078 Multi-gene knockouts by the CRISPR/Cas9 system in mouse ES cells: an approach to phenotyping of embryonic lethal mutants in F0 embryos
○Takaya Abe[1], Yui Yamashita[1,2], Yoshiko Mukumoto[1], Atsumi Denda[1], Mari Kaneko[1,2], Emi Watase[1], Hiroshi Kiyonari[1,2], Yasuhide Furuta[1,2] (GET, RIKEN CLST[1], ARDU, RIKEN CLST[2])

P079 Inhibition of plastid translation alters expression of stem cell-regulatory genes in lateral roots of Arabidopsis thaliana
シロイヌナズナの側根においてプラスチドの翻訳抑制が引き起こす幹細胞制御因子の遺伝子発現変化
○Miyuki Nakata[1], Hirokazu Tsukaya[2], Gorou Horiguchi[1,3] (Res. Cntr. Life Sci., Coll., Rikkyo Univ.[1], Grad. Sch. Sci., Univ. Tokyo[2], Dep. Life Sci., Coll. Sci., Rikkyo Univ.[3])

P080 Visualization of *Arabidopsis* lateral root organogenesis using 3D time-lapse imaging
3 次元タイムラプスイメージングによるシロイヌナズナの側根発生の解析
○Tatsuaki Goh[1,2], Hidehiro Fukaki[1], Malcolm J. Bennett[2] (Grad. Sch. Sci., Kobe Univ.[1], CPIB, Univ. Nottingham[2])

P081 Functional study of GJB3 gene mutation in nonsyndromic deafness using cell model
○Swee Hee Wong, Jiann Jou Yang, Shuan Yow Li (IM, CSMU)

P082 (OP11-FT3) Foxp4 is critical for acinar cell development in mouse pancreas
○Chi Kin Chung[1], Wing Yip Tam[1], Wang Chi Lau[1], Chiu Yi Leung[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], RGC-AoE COBF, CUHK[2], PSKLA (CUHK) [3])

P083 (OP11-FT2) Histone demethylase LSD1 is required for normal development of endodermal organs in zebrafish
○Christina-Sylvia Andrea, Yuji Fuse, Makoto Kobayashi (Fac. Med., Univ. Tsukuba)

P084 (OP14-FT3) Real time imaging of Neuregulin 1 ectodomain-shedding in the developing zebrafish embryos
ゼブラフィッシュ胚における増殖因子 Neuregulin 1 の切断の可視化
○Aosa Kamezaki[1,2], Fuminori Sato[1], Kazuhiro Aoki[3], Koichi Kawakami[4], Shigetomo Fukuhara[5], Naoki Mochizuki[5], Atsuko Sehara-Fujisawa[1] (Department of Growth Regulation, IFMS, Kyoto University[1], Graduate School of Biostudies, Kyoto University[2], Laboratory of Bioimaging and Cell Signaling, Graduate School of Biostudies, Kyoto University[3], Division of Molecular and Developmental Biology, NIG[4], Department of Cell Biology, NCVC[5])

P085 Dynamics of Distribution of Tannin Cells during the Flower and Fruit Development of Medinilla magnifica Lindl (Melastomataceae)
○Jan Lorie Robil[1], Vivian Tolentino[2] (AdMU[1], UPD[2])

P086 Morphological analysis of seminal receptacles of species in genus Drosophila
ショウジョウバエ属の雌受精嚢の形態学的解析
○Tatsuhiko Noguchi (NDMC, Biology)

P087 Analysis of the mechanisms that promote the reprogramming in Akt-activated primordial germ cells
Akt 活性化 PGC における再プログラム化促進メカニズムの解析
○Asuka Takehara[1,2], Yuko Tokitake[1], Yasuhisa Matsui[1] (CRCBR. IDAC, Tohoku Univ.[1], Kyono ART Clinic, Sendai[2])

P088 An attempt of direct reprogramming of mouse embryonic fibroblasts into primordial germ cells
マウス胎仔線維芽細胞から始原生殖細胞を直接誘導する試み
○Tamotsu Sekinaka[1], Toshiaki Noce[2], Yasuhisa Matsui[1] (CRCBR, IDAC, Tohoku Univ.[1], School of

Med., Keio Univ.[2])

P089 An RNAi screen for histone modifier genes involved in primordial germ cell fate determination in mice
マウス始原生殖細胞の運命決定に関わるヒストン修飾調節因子の RNAi スクリーニング
○Kentaro Mochizuki, Yasuhisa Matsui (CRCBR, IDAC, Tohoku Univ.)

P090 (OP15-FT1) Screening and treatment of asthenozoospermia caused by a *GALNTL5* gene mutation
ヒト *GALNTL5* 遺伝子変異を原因とする精子無力症患者の同定と治療
○Nobuyoshi Takasaki[1], Jun Hagiuda[1,2], Hiromichi Ishikawa[2], Hisashi Narimatsu[1] (GTRC, AIST[1], Ichikawa General Hosp. Tokyo Dent. Colle.[2])

P091 (OP15-FT2) Identification, localization, and functional analysis of CABS1 protein in porcine testis
○Hossam H. Shawki[1,2], Akihiro Kawashima[1], Takumi Kigoshi[1], Satoru Takahashi[2], Naomichi Okamura[1] (Laboratory of Reproductive Biochemistry, Graduate School of Comprehensive Human Sciences, University of Tsukuba[1], Department of Anatomy and Embryology, Faculty of Medicine, University of Tsukuba[2])

P092 (OP15-FT3) Structural plasticity of the mature egg-coating envelope accompanied by the extrinsic control of fertilization success in *Xenopus laevis*
ダイカルシンと gp41 の相互作用を基盤とする受精率制御に伴う卵保護膜構造変化
○Naofumi Miwa, Mayu Hanaue, Ken Takamatsu (Toho Univ., Dept. Physiol.)

P093 (OP15-FT4) Gain of function mutations in two paralogous Androgen receptor (AR) genes of teleosts : Implications for evolution of AR gene function
○Yukiko Ogino[1], Shigehiro Kuraku[2], Hiroshi Ishibashi[3], Hitoshi Miyakawa[1], Shinichi Miyagawa[1], Gen Yamada[4], Michael E. Baker[5], Taisen Iguchi[1] (Div. Molecular Environmental Endocrinology, NIBB, Okazaki Institute for Integrative Bioscience, SOKENDAI[1], Phyloinformatics Unit, RIKEN CLST[2], Faculty of Agriculture, Ehime Univ.[3], Dept. Developmental Genetics, Wakayama Medical Univ.[4], Division of Nephrology-Hypertension, Univ. of California, San Diego[5])

P094 Released and exposed proteins via calcium ionophore-induced sperm reaction in the ascidian Ciona intestinalis
カタユウレイボヤ精子においてカルシウムイオノフォア誘導精子反応時に放出・露出される因子の探索
○Shiori Nakazawa, Kei Otsuka, Maki Shirae-Kurabayashi, Hitoshi Sawada (SMBL, Nagoya Univ.)

P095 Functional analysis of *NHP2*, a candidate gene downstream of *Sex lethal* in *Drosophila*
ショウジョウバエにおける *Sex lethal* 下流候補遺伝子：*NHP2* の機能解析
○Shumpei Morita[1,2], Ryoma Ota[2], Satoru Kobayashi[1,2] (SOKENDAI[1], Okazaki Institute for Integrative Bioscience, National Institute for Basic Biology, National Institutes of Natural Sciences[2])

P096 5-Hydroxytryptophan acts as an ovary-inducing substance in asexual worms of the planarian *Dugesia ryukyuensis*
5-ハイドロキシトリプトファンはプラナリア無性個体において卵巣誘導因子として働く
○Nanna Nagao[1], Takanobu Maezawa[2], Hiroyuki Tanaka[3], Kazuya Kobayashi[1] (Hirosaki University[1], Tsuyama National College of Technology[2], Shiga University of Medical Science[3])

P097 (OP15-FT5) Functional analyses of Nanos3 in mouse spermatogenesis
精子形成過程における Nanos3 の機能解析
○Takayuki Sakurai[1,2], Yumiko Saga[1,2,3] (NIG[1], Department of Genetics, SOKENDAI[2], Department of

Biological Sciences, Graduate School of Science, University of Tokyo[3])

P098 (OP15-FT6) Biogenesis of Drosophila stress granules and its interaction with P-bodies in female germline

○Chia-Ying Liu[1], Szu-Jing Huang[2], Ming-Der Lin[1,2] (Dept. MBHG, Tzu Chi Univ. Taiwan[1], Dept. LS, Tzu Chi Univ. Taiwan[2])

P099 (OP15-FT7) The oogenesis and transcriptome analysis of Forcipomyia taiwana (Diptera: Ceratopogonidae)

○Szu-Chieh Wang[1], Anna Shiny Radhakrishnan[1,2], Hsien-Min Lee[3], Cheng-Nan Wu[4], Chuen-Fu Lin[5], Ming-Der Lin[1] (Dept MBHG, TCU, Taiwan[1], Dept GE, SRM, India[2], IBT, CTUST, Taiwan[3], Dept MLSB, CTUST, Taiwan[4], Dept VM, NCU, Taiwan[5])

P100 Foxp2 is required for morphological development of medium-sized spiny neurons in the mouse striatum

Yi-Chuan Chen, ○Fu-Chin Liu (INS, NYMU)

P101 Effects of shRNA-mediated FoxP1 knockdown on the spinal motor neuron development in chick embryo

ニワトリ胚脊髄運動ニューロンの発生に対する FoxP1 ノックダウンの影響

○Katsuki Mukaigasa, Chie Sakuma, Hiroyuki Yaginuma (Fukushima Med. Univ.)

P102 Semaphorin 5A is a permissive and attractive guidance cue for dorsal root ganglion axons in higher vertebrate embryos

セマフォリン 5A は脊髄神経節ニューロンの軸索に対して許容性のガイド因子である

○Tomoyuki Masuda[1], Chie Sakuma[2], Shuichi Ueda[3], Takashi Shiga[1], Hiroyuki Yaginuma[2], Masahiko Taniguchi[4] (Dept Neurobiol, Fac Med, Univ of Tsukuba, Ibaraki, Japan[1], Dept Neuroanat Embryol, Fukushima Med Univ Sch Med, Fukushima, Japan[2], Dept Histol Neurobiol, Dokkyo Med Univ Sch Med, Tochigi, Japan[3], Dept Cell Sci, Res Inst Front Med, Sapporo Med Univ, Hokkaido, Japan[4])

P103 (OP09-FT1) Investigating mechanisms underlying lens differentiation from embryonic neural retina

ニワトリ胚神経性網膜から水晶体への分化遷移の機構

○Hideaki Iida[1], Yasuo Ishii[2], Hisato Kondoh[2] (DBGSE, Kyoto Sangyo Univ.[1], DMBFLS, Kyoto Sangyo Univ.[2])

P104 (OP21-FT1) Functional interaction between Latrophilin-2 and Teneurin-2/4 in the migration of neural crest cells

Latrophilin-2 と Teneurin-2/4 の神経堤細胞遊走における機能的相互作用

○Kousuke Tanegashima[1], Natsumi Yokote[1,2], Marianna Suzuki[1,2], Tatsuo Michiue[3], Takahiko Hara[1,2] (Stem Cell Project, Tokyo Metropol. Inst. Med. Sci.[1], Grad. Sch. of Tokyo Med. Dent Univ.[2], Dep. of Life Sci., Grad. Sch. of Arts and Sci., Univ. of Tokyo[3])

P105 Integrity of basement membrane is important for axogenesis of cerebellar granule cells

基底膜の安定性は小脳顆粒細胞の軸索形成に重要である

○Miki Takeuchi[1], Shingo Yamaguchi[2], Takuto Hayashi[2], Shigenobu Yonemura[3], Yuichiro Hara[3], Tetsutaro Hayashi[3], Shigehiro Kuraku[3], Takashi Shimizu[1,2], Masahiko Hibi[1,2] (BBC, Nagoya Univ.[1], Grad. Sch. Sci., Nagoya Univ.[2], RIKEN CLST[3])

P106 Identification and developmental fates of *Pax2/5/8*-expressing cells in *Ciona intestinalis*

カタユウレイボヤにおける *Pax2/5/8* 発現細胞の同定と発生運命

○Yuichi Hasegawa[1], Kotaro Shimai[1], Megumi Mukai[1], Yutaka Daido[1], Koki Nishitsuji[2], Takehiro Kusakabe[1] (Inst. Integr. Neurobiol., Grad. Sch. Nat. Sci., Konan Univ.[1], OIST[2])

P107 The role of FGFs and Shh signaling in the craniofacial development of Amur catfish, *Silurus asotus*
ナマズの頭部形態形成における FGFs 及び Shh シグナルの役割
○Tatsuya Itoyama, Yasuhiko Tosa, Torao Kawanaka, Yasunori Murakami (Ehime Univ)

P108 Intermingled migration of the CA3 pyramidal and dentate granule progenitors in the developing hippocampal formation
Taku Sugiyama[2], Noriko Osumi[1], ○Yu Katsuyama[1] (Tohoku Univ. Grad. Sch. Med.[1], RIKEN BSI[2])

P109 Analysis of Mab21 expression in the mouse fore- & midbrain and the Mab21l2 requirement during its development
○Yanjiang Guo, King Lau Chow (LIFS, HKUST)

P110 (OP09-FT2) *Mab21l2* is required for development of the preBötC neurons involved in respiratory rhythmogenesis
○Chung Man Chan, King Lau Chow (LIFS, HKUST)

P111 Expression patterns and functional characterization of zebrafish di-ras1a and di-ras1b
○Li-Sung Hsu, Chi-Wei Yeh (IBB, CSMU)

P112 (OP21-FT2) Hydra peduncle nervous system has primitive functions of the brain
ヒドラ柄部の神経系は原始的な脳機能をもっている
○Hiroshi Shimizu[1], Xiaoming Zhang[2], Takashi Gojobori[1] (KAUST[1], KUMC[2])

P113 (OP18-FT1) ゼブラフィッシュ小脳顆粒細胞の分化における Cfdp1 の役割
A nuclear protein Cfdp1 regulates differentiation of granule cells in zebrafish cerebellum
○Takashi Shimizu[1], Shuichi Kani[2], Young-Ki Bae[2,3], Xiaoding Sun[1], Hibi Masahiko[1] (BBC, Nagoya Univ.[1], CDB, RIKEN[2], NCC, Korea[3])

P114 Scarp and build of glial assemblies in the *Drosophila* brains
ショウジョウバエ脳におけるグリア組織網の再編成
○Kentaro Kato, Masami Tomura, Takeshi Awasaki (Sch. Med., Kyorin Univ.)

P115 A missing link in the evolution of sensory architecture in craniates
脊椎動物体幹部感覚神経進化を理解する鍵
○Hiroshi Yajima[1], Shigeru Sato[1], Toshinori Hayashi[2], Takashi Takeuchi[2], Kiyoshi Kawakami[1] (Div of Biol, CMM, Jichi Med Univ[1], School of Life Science, Tottori Univ[2])

P116 Live imaging of midline crossing and longitudinal tract formation of commissural axons in developing chick spinal cord
ニワトリ胚脊髄の交連神経軸索の正中横断と縦束神経路形成のライブイメージング
○Yuji Watanabe[1], Lingling Ding[2], Chie Sakuma[1], Hiroyuki Yaginuma[1] (Dept. Neuroanat. & Embryol., Sch. Med., Fukushima Medical Univ.[1], Dept. Anat., Sch. Basic Med. Sci., Wuhan Univ.[2])

P117 Nobel roles of Fgf8 which is expressed in ventral region of the developing chick hindbrain
発生期後脳において腹側に発現する Fgf8 は背腹軸パターン形成に作用する
○Jun Hatakeyama, Kenji Shimamura (IMEG, Kumamoto Univ.)

P118 Formation of neuronal circuits by interactions between neuronal populations derived from different origins in the Drosophila visual center
由来の異なる細胞同士の相互作用による神経回路の形成機構
○Takumi Suzuki[1], Masako Kaido[1], Rie Takayama[1], Makoto Sato[1,2] (FSO Kanazawa Univ[1], CREST, JST[2])

P119 Over expression of ER-localized Bcl2 suppresses BNip1-dependent apoptosis
小胞体局在型 Bcl2 の過剰発現は BNip1 が誘導する細胞死を抑制する
○Yuko Nishiwaki, Eri Oguri, Masato Araragi, Shohei Nakamura, Asuka Yoshizawa, Ichiro Masai (OIST)

P120 (OP18-FT2) GAD in the AER
外胚様性堤防のグルタミン酸脱炭酸酵素
Nozomi Onodera[2], Hiroshi Nakata[1], ○Satomi Sasaki[1], Isato Araki[2] (DCBFE, Iwate Univ.[1], UGAS, Iwate Univ.[2])

P121 (OP12-FT2) Species-specific repertories of promoter-associated non-coding RNAs may contribute to the diversification of gene expression profile
長鎖ノンコーディング RNA を介した遺伝子発現制御の生物種間多様性
○Masahiro Uesaka[1,2,3], Kinichi Nakashima[2], Kiyokazu Agata[1], Takuya Imamura[2] (Grad. Sch. of Sci., Kyoto Univ.[1], Grad. Sch. of Med. Sci., Kyushu Univ.[2], Grad. Sch. of Sci., Univ. of Tokyo[3])

P122 A role of the two protein tyrosine phosphatases, Lar and Ptp69D, in the photoreceptor axon targeting
2 種のチロシン脱リン酸化酵素 Lar と Ptp69D の視神経の軸索投射における役割
○Satoko Hakeda-Suzuki, Takashi Suzuki (Tokyo Inst. Tech., Grad. Sch. of Biosci. & Biotech.)

P123 (OP12-FT1) Synaptic specificity and loci determination in the Drosophila photoreceptor
ショウジョウバエの視神経を用いた中枢神経シナプスの分布・可塑性制御機構の解析
○Fumio Takahashi[1], Atsushi Sugie[2], Satoko Hakeda-Suzuki[1], Takashi Suzuki[1] (TITech[1], DZNE, Bonn, Germany[2])

P124 Search for the genes required for synaptic plasticity in the Drosophila visual system
ショウジョウバエの視神経系におけるシナプスの可塑性を制御する遺伝子の同定
○Tomohiro Araki[1], Mai Shimozono[1], Atsushi Sugie[2], Satoko Hakeda-Suzuki[1], Takashi Suzuki[1] (Graduate School of Bioscience and Biotechnology, Tokyo Tech, Yokohama, Japan[1], DZNE, Bonn, Germany[2])

P125 An RNAi screen for the genes required for synaptic specificity in the *Drosophila* visual system
ショウジョウバエ視神経系を用いたシナプス形成を制御する遺伝子の探索
○Mai Shimozono[1], Tomohiro Araki[1], Atsushi Sugie[2], Satoko Hakeda-Suzuki[1], Takashi Suzuki[1] (Graduate school of Bioscience and Biotechnology, Tokyo Institute of Technology[1], DZNE, Bonn Germany[2])

P126 Dorso-Ventral Patterning of the Lamprey Telencephalon by *Foxg1*, Evolution of the Vertebrate Telencephalon
ヤツメウナギ終脳形成における *Foxg1* を介した DV パターニング機構と脊椎動物終脳の進化
○Fumiaki Sugahara[1,2], Shin-ichi Aota[2], Yasunori Murakami[3], Noboru Sato[4], Shigeru Kuratani[2] (Div. Biol., Hyogo Coll. Med.[1], Evol. Morph., RIKEN[2], Grad. Sch. Sci. Eng., Ehime Univ.[3], Grad. Sch. Med. Dent., Niigata Univ.[4])

P127 The Developmental Distribution of Neuronal Intermediate Filament inaa and inab in the Zebrafish Retina
○Meng-Lin Liao, Daphne Wei-Chun Kan, Chung-Liang Chien (DACB, NTU)

P128 (OP05-FT3) Gene expression analysis of apical epidermal cap during tail regeneration in xenopus tadpole

アフリカツメガエル幼生尾部再生時に形成される apical epidermal cap における遺伝子発現解析
○Akinori Okumura, Yoshihiko Umesono, Makoto Mochii (Grad Sch of Life Sci, Univ of Hyogo)

P129 Identification and characterization of regeneration signal response enhancers in Xenopus pronephros
Nanoka Suzuki[1], Koudai Hirano[1], Hajime Ogino[2], ○Haruki Ochi[1] (Yamagata Univ., Fac. of Med.[1], Department of Animal Bioscience, Nagahama Institute of Bio-Science and Technology[2])

P130 Fundamental mechanisms for multiple organ regeneration in urodele amphibians
有尾両生類における様々な器官再生を制御する基本的メカニズム
○Aki Makanae, Kazumasa Mitogawa, Akira Satoh (RCIS, Okayama Univ.)

P131 (OP02-FT2) Differential roles for the H3K27 methylase and demethylases in Xenopus tail regeneration
ツメガエルの尾部再生における H3K27 メチル化因子と脱メチル化因子の異なる役割
○Akane Kawaguchi, Hajime Ogino (n-bio)

P132 Comparative histological analysis of tectum regeneration in *Xenopus laevis* and Newts, *Pleurodeles waltl*
視蓋再生におけるカエルとイモリの再生様式の比較解析
○Yuko Urata[1], Wataru Yamashita[1,2], Takeshi Inoue[1], Kiyokazu Agata[1] (Dept. of Biophys., Grad. Sch. of Sci., Kyoto Univ.[1], Dept. of Biology, Kyoto Pref. Univ. Med.[2])

P133 Periportal hepatocytes may give rise to biliary epithelial cells during liver regeneration after partial hepatectomy of mouse
部分肝切除後の肝再生において門脈域肝細胞は胆管上皮細胞を生じるかもしれない
○Tatsuya Fukuda, Tomokazu Fukuchi, Nobuyoshi Shiojiri (DBS, Shizuoka Unv.)

P134 Attempt to obtain new insight into PIWI function in planarians
PIWI タンパク質のリボソーマル RNA 合成への関与の検討
Miyako Hikichi[1], Makoto Kashima[1], Kuniaki Saito[2], Haruhiko Siomi[2], Mikiko Siomi[3], Kiyokazu Agata[1], ○Norito Shibata[1] (Dept. of Biophys, Kyoto Univ.[1], Dept. of Mol. Biol, Keio Univ.[2], Grad. Sch. of Sci., Univ. of Tokyo[3])

P135 Dedifferentiation of HBx- and HCP-expressed hepatocytes are essential for intrahepatic cholangiocarcinoma formation in zebrafish
Sung-Yu Wu, Wangta Liu, ○Jen-Leih Wu (ICOB, Academia Sinica, Taiwan)

P136 (OP02-FT3) Gene expression profile of pluripotent stem cells activated for differentiation during regeneration in planarian
○Hayoung Lee[1], Kiyokazu Agata[1], Norito Shibata[2] (Dept. of Biophysics, Grad. School of Science, Kyoto Univ.[1], Regenerative Biology, Grad. School of Science, Kyoto Univ.[2])

P137 Progranulin is Required for Liver Regeneration in the Partial Hepatectomized Zebrafish
○Keng-Yu Chiang[1,2], Ya-Wen Li[1], Yen-Hsing Li[1], Jen-Leih Wu[1] (ICOB, Academia Sinica[1], Department of Life Science, National Taiwan University, Taiwan[2])

P138 Chronic inflammation induces the blastema apoptosis during zebrafish fin fold regeneration
ゼブラフィッシュの膜ヒレ再生において、過剰な炎症反応が再生芽のアポトーシスを誘導する
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○Chih-Lun Cheng[1] (ICOB, Academia Sinica[1], Chih-Lun, Cheng[2])

日本発生生物学会第 48 回大会
第 9 回男女共同参画ランチョンワークショップ
48th Annual meeting for the JSDB with the APDBN, 9th Gender equality workshop

日　時：6月5日（金）12:30 - 13:15
会　場：つくば国際会議場2階 Room B
テーマ：

誰のための「男女共同参画活動」？

男女雇用機会均等法が制定されてから今年で 30 年目です。

まだ、30 年といった方が良いでしょうか？この短い歴史の中で男女共に「働く」ことが大きく変化し、その時代を乗り越えて働いてきた方々がまだまだ現役であると同時に、産まれたときから男女差無く教育を受けてきた世代がキャリア選択に悩む年代となって来ました。当然、それぞれの世代の思い描く「男女共同参画活動」は異なるはずですが、このような「世代間ギャップ」を認識できているでしょうか？もちろん、同世代の中でも「どんな人生を望むのか」は千差万別です。多様性を理解した上で、お互いの持つ”経験”という財産を共有する場を提供し、現在の私たちのための「男女共同参画活動」を考えたいと思います。

ワークショップの進行にあたっては、昨年に引き続き、2012 年 11 月に実施された「第3回大規模アンケート：科学技術系専門職の男女共同参画実態調査」の回答分析データの一部を例に挙げながら、パネルディスカッション形式で進めて行く予定です。

後半は女性研究者の生の声として3人の女性研究者の方にお話しをしていただきます。参加者の皆さんも、積極的なご討論をお願い致します。

ランチ付き、日本語ですので、多くの方々のご参加をお待ちしております。

講演者
- 吉田 薫　（桐蔭横浜大学）
- 白江 麻貴（名古屋大学）
- 山川 智子（大阪大学）
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主催：日本発生生物学会男女共同参画 WG
後援：男女共同参画学協会連絡会

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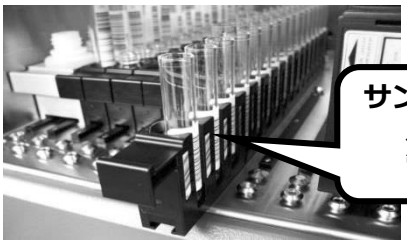

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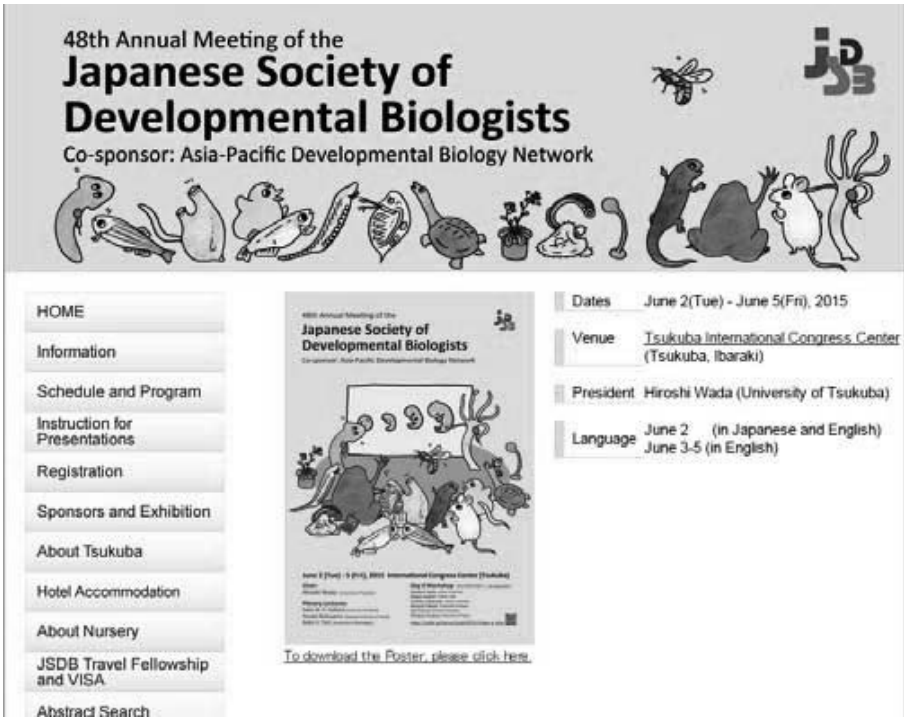

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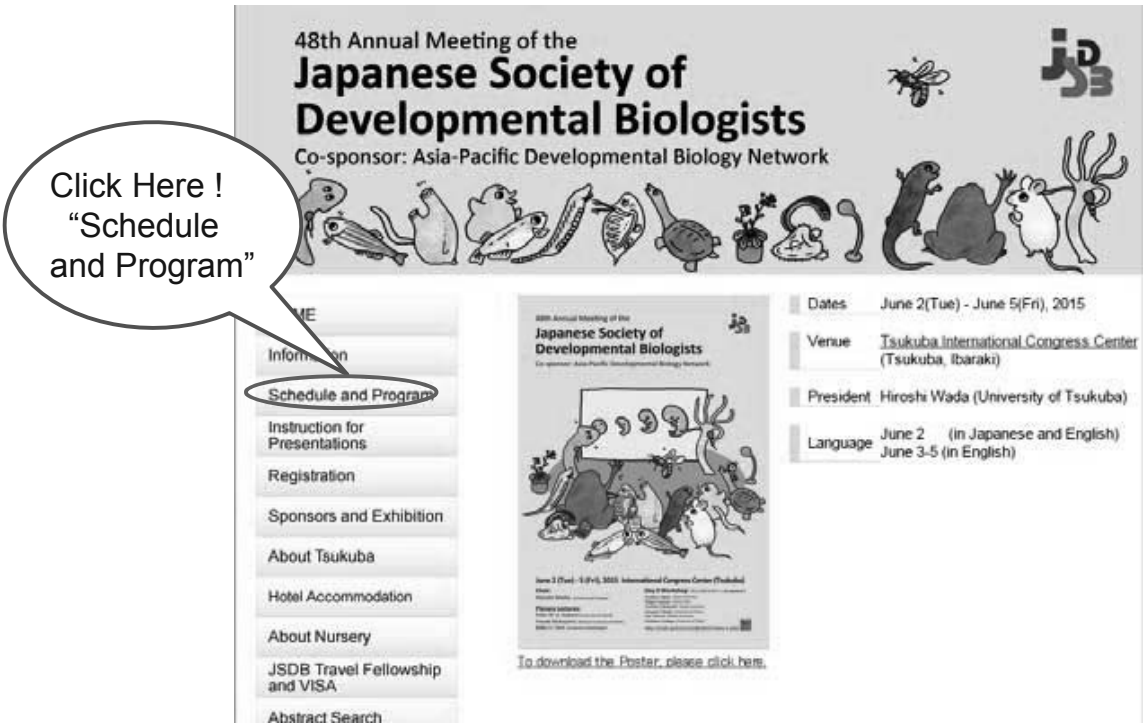

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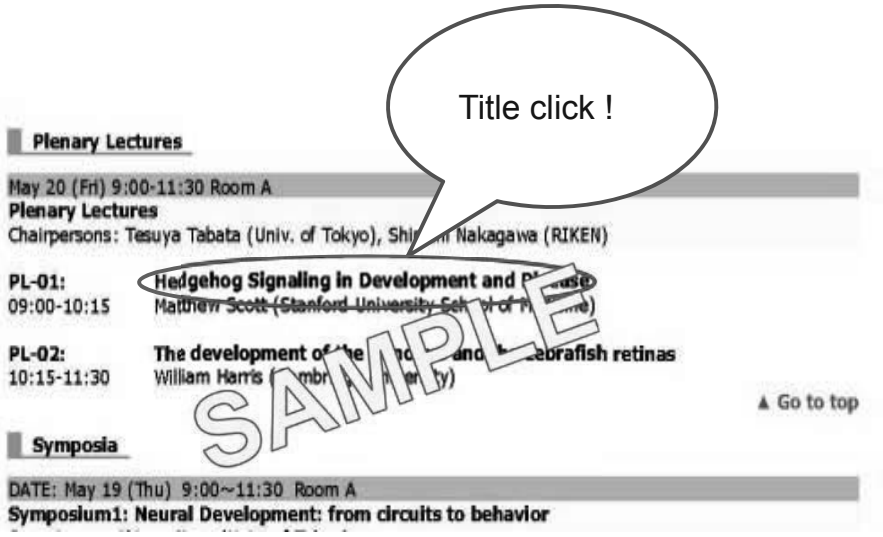

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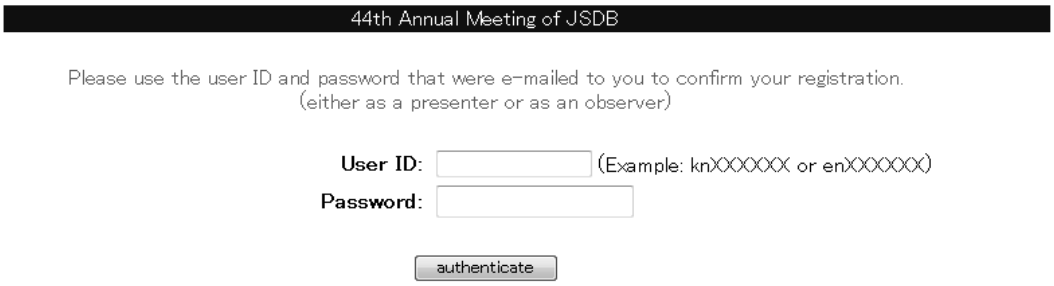

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[PL-01]

Hedgehog Signaling in Development and Disease

*Matthew Scott

(Stanford University School of Medicine)

The development of numerous tissues and organs depends on Hedgehog (Hh) protein signals that influence gene expression in target cells. Defective Hh signaling leads to birth defects and cancer. We are investigating Hh signal transduction and gene regulation mechanisms in the context of cultured fibroblasts and cerebellum development. Reception of the Hh protein signal has many unique features. Primary cilia as a Hh signal transduction organelle. Primary cilia, microtubule organelles found on most cells, have been implicated in several signaling pathways. We have observed direct binding of Hh protein to them. We find that the receptor Patched localizes to cilia, where it prevents accumulation of the transmembrane protein Smo. Binding of Hh to Ptc causes departure of both from the cilium, allowing Smo to accumulate there. Smo in the cilium is able to activate Gli transcription factors that control target gene expression. Using tagged proteins, and mutants that affect primary cilia, we are exploring the mechanisms of protein trafficking and target gene activation. We are characterizing direct Hh target genes in responsive cerebellum granule neuron precursors and in the medulloblastoma tumors that arise from the precursors when Ptc function is reduced.

Signaling in development

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