



Research Organization of Information and Systems  
National Institute of Genetics

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国立遺伝学研究所

情報・システム研究機構

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No.62  
2011

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NATIONAL INSTITUTE OF GENETICS

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## Introduction

The National Institute of Genetics (NIG) was established in 1949 as the central institute to study various aspects of genetics. It was reorganized in 1984 as an inter-university research institute to promote collaborations with researchers at universities. Since 1988, NIG has been participating in graduate education as the Department of Genetics of the Graduate University for Advanced Studies (SOKENDAI). NIG also serves as a center for various genetic resources such as mutant strains, clones and vectors, and houses DDBJ, the DNA Data Bank of Japan, and a DNA sequencing center.

The history of NIG overlaps the period of a revolution in the field of Genetics. Genetics is no longer a discipline to study the rules and mechanisms of heredity, but has become the basis for all fields of life science. Molecular techniques now allow us not only to decipher the entire genome sequence of organisms including humans, but also to understand the details of higher biological phenomena: cell differentiation, morphogenesis, brain function, and evolution --- the history of life itself. Currently, 39 research groups are actively performing pioneering and cutting-edge researches in these fields at NIG.

Recent generation of massive information on biological systems and their environment calls for new directions in life sciences, such as bioinformatics, system-level analysis, and theoretical approaches to extract knowledge from databases. In particular, so-called the next generation DNA sequencing technology will revolutionize a wide range of life science. To this end NIG sets up the facilities for the high-throughput DNA sequencing and massive data analysis, which are used for collaborations in the research community. NIG has collected and developed various bioresources(mouse, rice etc.) from wild population for long time, which are now excellent targets in the new genome era to understand the mechanisms and its evolution and diversity of life.

We would appreciate your continuous support and encouragement to NIG, and welcome your comments and suggestions on our research activities and endeavors.

Yuji Kohara, Director-General

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## Staff

### Member

#### Director-General

KOHARA, Yuji, D. Sc., Professor

#### Vice-Director

GOJOBORI, Takashi, D. Sc., Professor

KURATA, Nori, D. Ag., Professor

### Member

#### 1. Department of Molecular Genetics

YAMAOKA, Fumiaki, D. Sc., Head of the Department

##### *Division of Molecular Genetics*

FUKAGAWA, Tatsuo, D. Sc., Professor

HORI, Tetsuya, D. Ag., Assistant Professor

NISHINO, Tatsuya, D. Med., Assistant Professor

##### *Division of Mutagenesis*

YAMAOKA, Fumiaki, D. Sc., Professor

##### *Molecular Mechanism Laboratory*

SEINO, Hiroaki, D. Sc., Assistant Professor

##### *Division of Nucleic Acid Chemistry*

EARNSHAW, William C. Visiting Professor (Principal Research Fellow of the Wellcome Trust, Professor of Chromosome Dynamics, The University of Edinburgh)

MARKO, John F. Visiting Professor, Departments of Molecular Biosciences and Physics & Astronomy, Northwestern University, Evanston IL)

#### 2. Department of Cell Genetics

ARAKI, Hiroyuki, D. Sc., Head of the Department

##### *Division of Cytogenetics*

KOBAYASHI, Takehiko, D. Sc., Professor

IIDA, Tetsushi, D. Sc., Assistant Professor

##### *Division of Microbial Genetics*

ARAKI, Hiroyuki, D. Sc., Professor

TANAKA, Seiji, D. Sc., Assistant Professor

HIZUME, Kohji, D. Sc., Assistant Professor

##### *Division of Cytoplasmic Genetics*

BOCCARD, Frederic, Visiting Professor (Directeur de recherche, Centre de Genetique Moleculaire du CNRS)

UEDA, Hiroki, Visiting Professor (Project Leader, RIKEN Center for Developmental Biology)

#### 3. Department of Developmental Genetics

KAWAKAMI, Koichi, D. Sc., Head of the Department

##### *Division of Developmental Genetics*

HIROMI, Yasushi, D. Sc., Professor

SHIMIZU, Hiroshi, D. Eng., Assistant Professor  
ASAOKA, Miho, D. Sc., Assistant Professor  
HAYASHI, Takashi, D. Sc., Assistant Professor  
*Division of Neurogenetics*  
IWASATO, Takuji, D. Sc., Professor  
MIZUNO, Hidenobu, D. Sc., Assistant Professor  
*Division of Molecular and Developmental Biology*  
KAWAKAMI, Koichi, D. Sc., Professor  
ASAKAWA, Kazuhide, D. Sc., Assistant Professor  
*Division of Physiological Genetics*  
STERN, David L, Visiting Professor (Professor, Princeton University)  
KIMBLE, Judith E, Visiting Professor (Professor, University of Wisconsin)

#### **4. Department of Population Genetics**

SAITOU, Naruya, Ph. D., Head of the Department  
*Division of Population Genetics*  
SAITOU, Naruya, Ph. D., Professor  
TAKANO, Toshiyuki, D. Sc., Associate Professor  
SUMIYAMA, Kenta, D. Sc., Assistant Professor  
TAKAHASHI, Aya, D. Ag., Assistant Professor  
*Division of Evolutionary Genetics*  
AKASHI, Hiroshi, D. Sc., Professor  
OSADA, Naoki, Ph. D., Assistant Professor  
*Division of Theoretical Genetics*  
HARTL, Daniel L, Visiting Professor (Professor, Harvard University)  
CLARK, Andrew G, Visiting Professor (Professor, Cornell University)

#### **5. Department of Integrated Genetics**

KAKUTANI, Tetsuji, D. Sc., Head of the Department  
*Division of Human Genetics*  
INOUE, Itsuro, M. D., Professor  
HOSOMICHI, Kazuyoshi, D. Ag., Assistant Professor  
*Division of Agricultural Genetics*  
KAKUTANI, Tetsuji, D. Sc., Professor  
SAZE, Hidetoshi, Ph.D., Assistant Professor  
TARUTANI, Yoshiaki, D. Agr., Assistant Professor  
*Division of Brain Function*  
HIRATA, Tatsumi, D. Med., Associate Professor  
KAWASAKI, Takahiko, D. Sc., Assistant Professor  
*Division of Applied Genetics*  
COLOT, Vincent, Visiting Professor (Professor, NRA/CNRS/UEVE)  
TSUJI, Shoji, Visiting Professor (Professor, The University of Tokyo Hospital)

#### **6. Genetics Strains Research Center**

SHIROISHI, Toshihiko, D. Sc., Head of the Center  
*Mammalian Genetics Laboratory*  
SHIROISHI, Toshihiko, D. Sc., Professor  
TAMURA, Masaru, D. Sc., Assistant Professor  
TAKADA, Toyoyuki, D. Ag., Assistant Professor  
*Mammalian Development Laboratory*  
SAGA, Yumiko, D. Sc., Professor  
KOKUBO, Hiroki, D. Sc., Assistant Professor  
MORIMOTO, Mitsuru, D. Sc., Assistant Professor  
*Mouse Genomics Resource Laboratory*  
KOIDE, Tsuyoshi, Ph.D., Associate Professor  
TAKAHASHI, Aki, D. Sc., Assistant Professor  
*Model Fish Genomics Resource Laboratory*

SAKAI, Noriyoshi, Ph. D., Associate Professor  
SHINYA, Minori, D. Sc., Assistant Professor  
*Plant Genetics Laboratory*

KURATA, Nori, D. Ag., Professor  
KUBO, Takahiko, D. Ag., Assistant Professor  
*Microbial Genetics Laboratory*

NIKI, Hironori, D. Med., Professor  
*Invertebrate Genetics Laboratory*

UEDA, Ryu, D. Sc., Professor  
KONDO, Shu, D. Sc., Assistant Professor

### **7. Center for Genetic Resource Information**

SHIROISHI, Toshihiko, D. Sc., Head of the Center  
*Genetic Informatics Laboratory*

YAMAZAKI, Yukiko, D. Sc., Associate Professor  
*Genome Biology Laboratory*

KOHARA, Yuji, D. Sc., Professor  
ANDACHI, Yoshiki, D. Sc., Assistant Professor

*Comparative Genomics*  
FUJIYAMA, Asao, D. Sc., Professor  
TOYODA, Atsushi, D. Sc., Project Associate Professor

### **8. Structural Biology Center**

ARAKI, Hiroyuki, D. Sc., Head of the Center  
*Biological Macromolecules Laboratory*

MAESHIMA, Kazuhiro, D. Med., Professor  
HIRATANI, Ichiro, D. Sci., Assistant Professor

*Multicellular Organization Laboratory*  
SAWA, Hitoshi, D. Sci., Professor

IHARA, Shinji, D. Sci., Assistant Professor  
*Biomolecular Structure Laboratory*

SHIRAKIHARA, Yasuo, D. Sc., Associate Professor  
ITO, Hiroshi, D. Sc., Assistant Professor

*Gene Network Laboratory*  
SUZUKI, Emiko, D. Med., Associate Professor  
KURUSU, Mitsuhiro, D. Sc., Assistant Professor

### **9. Center for Information Biology and DNA Data Bank of Japan**

OKUBO, Kousaku, M. D. Ph. D., Professor., Head of the Center  
*Laboratory for DNA Data Analysis*

GOJOBORI, Takashi, D. Sc., Professor  
IKEO, Kazuho, D. Sc., Associate Professor

*Genome Informatics Laboratory*  
NAKAMURA, Yasukazu, D. Sc., Professor  
KAMINUMA, Eli, D. Eng., Assistant Professor

*Laboratory for Research and Development of Biological Databases*  
TAKAGI, Toshihisa, D. Sc., Professor

*Laboratory for Gene-Expression Analysis*  
OKUBO, Kousaku, D. Med., Professor  
OGASAWARA, Osamu, D. Sc., Assistant Professor

### **10. Center for Frontier Research**

KURATA, Nori, D. Ag., Head of the Center  
*Cell Architecture Laboratory*

KIMURA, Akatsuki, D. Sc., Associate Professor  
*Motor Neural Circuit Laboratory*

HIRATA, Hiromi, D. Sc., Associate Professor

*Molecular Function Laboratory*

KANEMAKI, Masato, D. Sc., Associate Professor

*Multicellular Society Laboratory*

HORIKAWA, Kazuki, D. Sc., Associate Professor

*Symbiosis and Cell Evolution Laboratory*

MIYAGISHIMA, Shin-ya, D. Sc., Project Associate Professor

*Ecological Genetics Laboratory*

KITANO, Jun, D. Med., Project Associate Professor

*Centrosome Biology Laboratory*

KITAGAWA, Daiju, D. Pha., Project Associate Professor

**11. Radioisotope Center**

NIKI, Hironori, D. Med., Head of the Center

**12. Experimental Farm**

NONOMURA, Ken-ichi, D. Ag., Associate Professor / Head of the Farm

MIYAZAKI, Saori, D. Agr., Assistant Professor

**13. Intellectual Property Unit**

SUZUKI, Mutsuaki, D. Pharm., Director

**14. Technical Section**

KURATA, Nori, Deputy Chief of the Section

YATA, Katsunori, Assistant Chief of the Section

**15. Department of Administration**

NODA, Kiyoshi, General Manager of the Department

MATSUNAGA, Shigeru, Manager of the Research Promotion Section

KATO, Kazuhito, Manager of the Management Project Section

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## Advisory Committee

### Advisory committee

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KURATA, Nori; Vice-Director, National Institute of Genetics

#### **Vice-chairman**

SEKIGUCHI, Mutsuo; Adjunct Professor, Fukuoka Dental College

#### **Outside Members** (Alphabetical order)

KONDO, Shigeru; Professor, Graduate school of Frontier Biosciences, Osaka University

NAKAMURA, Haruki; Professor, Institute for Protein Research, Osaka University

NISHIDA, Eisuke; Professor, Graduate school of Biostudies, Kyoto University

OGAWA, Tomoko; Vice-Director, Iwate College of Nursing

OKADA, Norihiro; Professor, Tokyo Institute of Technology school and Graduate school of Bioscience and Biotechnology

OSUMI, Noriko; Professor, Graduate School of Medicine, Tohoku University

SHINOZAKI, Kazuo; Director, Plant Science Center, RIKEN

SUGANO, Sumio; Professor, Graduate School of Frontier Sciences, The University of Tokyo

TACHIDA, Hidenori; Professor, Faculty of Sciences, Kyusyu University

#### **Inside Members** (Alphabetical order)

ARAKI, Hiroyuki; Head, Department of Cell Genetics

GOJOBORI, Takashi; Vice-Director

HIROMI, Yasushi; Professor, Department of Developmental Genetics

NIKI, Hironori; Head, Radioisotope Center

KAKUTANI, Tetsuji; Head, Department of Integrated Genetics

KAWAKAMI, Koichi; Head, Department of Developmental Genetics

OKUBO, Kousaku; Head, Center for Information Biology and DNA Data Bank of Japan

SAITOU, Naruya; Head, Department of Population Genetics

SHIROISHI, Toshihiko; Head, Genetic Strains Research Center

YAMAOKA, Fumiaki; Head, Department of Molecular Genetics

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## Advisory Board

### ADVISORY BOARD

#### **Members** ( Alphabetical order)

GEHRING, Walter J.; Professor, Biozentrum, University of Basel

HUNT, Tim; Principal Scientist, Cancer Research UK London Research Institute

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SAKAKI, Yoshiyuki; President, Toyohashi University of Technology

SULSTON, John; Chair, Institute for Science, Ethics and Innovation, The University of Manchester

TAKEICHI, Masatoshi; Director, Center for Developmental Biology, RIKEN

WIESCHAUS, Eric; Professor, Princeton University

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## Research Outline

<b>Code</b>	<b>Division/Laboratory</b>	<b>Group name</b>
A-a	Division of Molecular Genetics	Tatsuo Fukagawa
A-b	Division of Mutagenesis	Fumiaki Yamao
A-c	Molecular Mechanism Laboratory	Hiroaki Seino
B-a	Division of Cytogenetics	Takehiko Kobayashi
B-b	Division of Microbial Genetics	Hiroyuki Araki
C-a	Division of Developmental Genetics	Yasushi Hiromi
C-a	Division of Developmental Genetics	Hiroshi Shimizu
C-b	Division of Neurogenetics	Takuji Iwasato
C-c	Division of Molecular and Developmental Biology	Koichi Kawakami
D-a	Division of Population Genetics	Naruya Saitou
D-a	Division of Population Genetics	Toshiyuki Takano
D-b	Evolutionary Genetics	Hiroshi Akashi
E-b	Division of Agricultural Genetics	Tetsuji Kakutani
E-c	Division of Brain Function	Tatsumi Hirata
E-e	Division of Human Genetics	Itsuro Inoue
F-a	Mammalian Genetics Laboratory	Toshihiko Shiroishi
F-b	Mammalian Development Laboratory	Yumiko Saga
F-c	Mouse Genomics Resource Laboratory	Tsuyoshi Koide
F-d	Model Fish Genomics Resource	Noriyoshi Sakai
F-e	Plant Genetics Laboratory	Nori Kurata
F-f	Microbial Genetics Laboratory	Hironori Niki
F-g	Invertebrate Genetics Laboratory	Ryu Ueda
G-a	Genetic Informatics Laboratory	Yukiko Yamazaki
G-b	Genome biology Laboratory	Yuji Kohara
G-c	Comparative Genomics Laboratory	Asao Fujiyama
H-a	Biological Macromolecules	Kazuhiro Maeshima
H-d	Biomolecular Structure Laboratory	Yasuo Shirakihara
H-e	Gene Network Laboratory	Emiko Suzuki
H-f	Multicellular Organization Laboratory	Hitoshi Sawa
I-a	Laboratory for DNA Data Analysis	Takashi Gojobori
I-b	Laboratory for Gene-Product Informatics	Yasukazu Nakamura
I-d	Laboratory for Research and Development of Biological Databases	Toshihisa Takagi
I-d	Laboratory for Research and Development of Biological Databases	Hideaki Sugawara
I-e	Laboratory for Gene-Expression Analysis	Kousaku Okubo

J-c	Cell Architecture Laboratory	Kimura Akatsuki
J-d	Motor Neural Circuit Laboratory	Hiroshi Hirata
J-e	Molecular Function Laboratory	Masato Kanemaki
J-f	Multicellular Society Laboratory	Kazuki Horikawa
J-g	Symbiosis and cell evolution laboratory	Shinya Miyagishima
J-h	Ecological Genetics Laboratory	Jun Kitano
J-i	Centrosome Biology Laboratory	Daiju Kitagawa
K	RADIOISOTOPE CENTER	RADIOISOTOPE CENTER
L	EXPERIMENTAL FARM	EXPERIMENTAL FARM
M	Intellectual Property Unit	Intellectual Property Unit
N	Technical Section	Technical Section

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## A. DEPARTMENT OF MOLECULAR GENETICS

### A-a. Division of Molecular Genetics

## A. DEPARTMENT OF MOLECULAR GENETICS

### A-a. Division of Molecular Genetics

Tatsuo Fukagawa

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Perpelescu, M., and Fukagawa, T. (2011) The ABCs of CENPs. , **Chromosoma** , 120 , 425 - 446
2. Gascoigne, K. E., Takeuchi, K., Suzuki, A., Hori, T., Fukagawa, T., and Cheeseman, I.M. (2011) Induced ectopic kinetochore assembly bypasses the requirement for CENP-A nucleosomes. , **Cell** , 145 , 410 - 422
3. Suzuki, A., Hori, T., Nishino, T., Usukura, J., Miyagi, A., Morikawa, K., and Fukagawa, T. (2011) Spindle microtubules generate tension-dependent changes in the distribution of inner kinetochore proteins. , **J. Cell Biol.** , 193 , 125 - 140
4. Suzuki, A., and Fukagawa, T. (2011) Cell Biological Analysis of DT40 Knockout Cell Lines for Cell-Cycle Genes. , **Curr. Proto. Cell Biol.** , 50 , 8.7.1 - 8.7.17
5. 深川竜郎 (2011) セントロメアの構造, 生体の科学, 62, 454 - 457
6. 深川竜郎 (2011) 新しく見出されたCENP-S/X複合体, 生体の科学, 62, 470 - 471

### ORAL PRESENTATION

1. Fukagawa, T. Molecular architecture of vertebrate kinetochores Whitehead Institute, MIT 11/7
2. Fukagawa, T. Genetic engineering of chicken centromeres Wellcome trust Centre for Cell Biology, The University of Edinburgh 9/20
3. Fukagawa, T. Genetic engineering of vertebrate centromeres University of Pennsylvania 11/19
4. 深川竜郎 染色体分配に必要なセントロメアの分子構造 京都大学大学院医学研究科 11/4
5. 深川竜郎 染色体分配に必要なセントロメア構造 新潟大学医学部 2/18

### POSTER PRESENTATIONS

1. Nishino, T., Takeuchi, K., Gascoigne, K. E., Suzuki, A., Hori, T., Oyama, T., Morikawa, K., Cheeseman, I. M., Fukagawa, T. 「 Structural cell biochemistry of a novel histone fold vertebrate kinetochore complex: CENP-TW and CENP-SX form a heterotetramer 」, 51th ASCB Annual Meeting , デンバー(米国) , 12/3~6
2. Nishino, T. 「 Structural cell biochemistry of a novel histone fold vertebrate kinetochore complex 」, Gordon Research Conferences : Chromosome Dynamics , ウェストドーバー(米国) , 7/11~15
3. Fukagawa, T. 「 Spindle microtubules generate tension-dependent structural

- deformation of inner kinetochore」, 第1回 ISDP 国際シンポジウム, 横浜, 1/27~28
4. Fukagawa, T. 「 A unique centromeric chromatin structure in vertebrate cells 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  5. Osakabe, A., Tachiwana, H., Takaku, M., Hori, T., Obuse, C., Kimura, H., Fukagawa, T., Kurumizaka, H. 「 Histone chaperone activity of a novel histone interacting factor SPT2 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  6. Hori, T., Shang, W.H., Takeuchi, T., Toyoda, A., Sakakibara, Y., Ikeo, K., Fujiyama, A., Fukagawa, T. 「 Ectopic localization of CCAN proteins induces centromere formation in vertebrate cells. 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  7. Nishimura, K., Ishiai, M., Fukagawa, T., Takata, M., Takisawa, H. 「 Mcm8 and Mcm9 form a novel complex involved in resistance to DNA crosslinking reagents 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  8. Kitamura, H., Ohfuchi, E., Obuse, C., Tanabe, T., Hori, T., Fukagawa, T., Harata, M. 「 Interaction between the actin-related protein Arp6 and nuclear myosin I and their contribution to the nuclear organization 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  9. 竹内 康造, 西野 達哉, 堀 哲也, Karen E. Gascoigne, 立和名博昭, 越阪部晃永, 胡桃坂仁志, Iain M. Cheeseman, 深川竜郎 「 CENP-T-W-S-X 複合体は, 動原体タンパク質群の集合機構に重要な役割を担う 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  10. 橋本瑞代, 西村浩平, 深川竜郎, 滝澤温彦, 鐘巻将人 「 ニワトリDT40 細胞を用いたMCM-BP(MCM-binding protein)の機能解析 」, 第34回日本分子生物学会年会, 横浜, 12/13~16
  11. 西淵いくの, 鈴木秀和, 木野村愛子, 孫継英, 原田昌彦, 深川竜郎, 井倉毅, 田代聡 「 DNA 損傷応答におけるヒストンバリエントH2A.Z isoform の関与 」, 第34回日本分子生物学会年会, 横浜, 12/6~16
  12. 深川竜郎 「 高等動物におけるキネトコア形成機構 」, 第84回日本生化学会大会, 京都, 9/21~24
  13. 深川竜郎 「 キネトコア構造を決定するエピジェネティックス機構 」, 構造エピゲノム研究会第3回ワークショップ, 横浜, 4/25
  14. Fukagawa, T. 「 Genetic engineering of chicken centromeres 」, 6th International Chick Meeting, エジンバラ(イギリス), 9/17~20
  15. Fukagawa, T. 「 Genetic engineering of vertebrate centromeres 」, The Boston Area Mitosis and Meiosis (BAMM) meeting, ボストン(米国), 11/16~17

## EDUCATION

1. 深川竜郎, 胡桃坂仁志 クロマチンダイナミクスの分子機構 平成23年度遺伝研研究集会 三島市 10/20~21

## OTHERS

1. 深川竜郎, 1, 日本細胞生物学会評議員
2. 深川竜郎, 1, Chromosome Research Associated Editor

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## B. DEPARTMENT OF CELL GENETICS

### B-a. Division of Cytogenetics

## B. DEPARTMENT OF CELL GENETICS

### B-a. Division of Cytogenetics

Takehiko Kobayashi

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Kobayashi, T. (2011) Regulation of ribosomal RNA gene copy number and its role in modulating genome integrity and evolutionary adaptability in yeast. , **Cellular and Molecular Life Sciences** , 68 , 1395 - 1403
2. Ganley A.R. and Kobayashi T. (2011) Monitoring the Rate and Dynamics of Concerted Evolution in the Ribosomal DNA Repeats of *Saccharomyces cerevisiae* Using Experimental Evolution. , **Molecular Biology and Evolution**. , 28 , 2883 - 2891
3. Kobayashi, T. (2011) How does genome instability affect lifespan? -The roles of rDNA and telomeres-, **Genes Cells** , 16 , 617 - 624
4. Miyazaki, T. and Kobayashi, T. (2011) Visualization of the dynamic behavior of ribosomal RNA gene repeats in living yeast cells. , **Genes Cells** , 16 , 491 - 502

### POSTER PRESENTATIONS

1. 飯田哲史, 中嶋映里香, 小林武彦 「出芽酵母*S. cerevisiae*における環状rDNA分子(ERC)の分配機構」, 第44回酵母遺伝学フォーラム研究報告会, 福岡市, 9/5-9/7
2. 小林 武彦 「Recovery of rDNA stability contributes to rejuvenation in yeast.」, 第34回分子生物学会シンポジウム, 横浜市, 12/15
3. Kobayashi, T. 「Regulation of ribosomal RNA gene copy number and its role in modulating genome integrity and evolutionary adaptability in yeast.」, Okinawa Institute of Science and Technology Workshop (QECG2011): Linkage and Recombination in Genome Sequences. , 沖縄 沖縄科学技術大学院大学, 05/25
4. 小林 武彦 「ヒストン修飾とリボソームRNA遺伝子のコピー数制御」, 酵母遺伝学フォーラム第44回研究報告会, 福岡市, 9/6
5. Kobayashi, T. 「Maintenance of the ribosomal RNA gene repeat and its role in cellular senescence.」, The 5th International Workshop on Cell Regulations in Division and Arrest , 沖縄, 10/24

### BOOK

1. 小林 武彦, 坂 季美子 (2011) II.核酸の分離の原理とプロトコール 4. パルスフィールド電気泳動法 実験医学別冊「核酸実験の原理とプロトコール」 85 - 91
2. 小林 武彦 (2011) 4.核小体 核小体の新機能 生体の科学 「細胞核」 **62巻5号** 412 - 415
3. 小林 武彦 (2011) 4. 核小体 リボソームRNA遺伝子の安定性と細胞老化 生体の科学 「細胞核」 **62巻5号** 416 - 417

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## B. DEPARTMENT OF CELL GENETICS B-b. Division of Microbial Genetics

## B. DEPARTMENT OF CELL GENETICS B-b. Division of Microbial Genetics Hiroyuki Araki

### RESEARCH ACTIVITIES

#### PUBLICATIONS

##### Papers

- 1 . Tanaka.S., Nakano.R., Katou.Y., Shirahige.S.,and Araki, H. ( 2011 ) Origin Association of Sld3,Sld7,and Cdc45 Proteins is a Key Step for Detemination of Origin-Firing Timing , **Current Biology** , 21 , 2055 - 2063
- 2 . Tanaka, S., Araki, H. ( 2011 ) Multiple regulatory mechanisms to inhibit untimely initiation of DNA replication are important for stable genome maintenance. , **PLoS Genet.** , 7 , e1002136 (1-16) -
- 3 . Araki, H. ( 2011 ) Initiation of chromosomal DNA replication in eukaryotic cells; contribution of yeast genetics to the elucidation. , **Genes Genet. Syst.** , 86 , 141 - 149
- 4 . Tanaka, T., Umemori, T., Endo, S., Muramatsu, S., Kanemaki, M., Kamimura, Y., Obuse C. and Araki, H. ( 2011 ) Sld7, an Sld3-associated protein required for efficient chromosomal DNA replication in budding yeast. , **EMBO J.** , 30 , 2019 - 2030

#### ORAL PRESENTATION

- 1 . Araki,H. Molecular mechanism of the initiation of chromosomal DNA replication in eukaryotic cells Peking University 5/13
- 2 . Tanaka,S. Regulation and co-ordination of the activation of replication origins in eukaryotes Helmholtz Zentrum München-German Research Center for Environmental Health (GmbH) (UK) 4/7
- 3 . Tanaka,S. Regulation and co-ordination of the activation of replication origins in eukaryotes Cancer Research UK, London Research Institute Clare Hall Laboratories (UK) 4/15
- 4 . Araki,H. Molecular mechanism of the initiation of chromosomal DNA replication in budding yeast University of Dundee (UK) 4/15
- 5 . Araki,H. CDK-dependent initiation step of chromosomal DNA replication in budding yeast – role of DNA polymerase epsilon - Cancer Research UK, London Research Institute Clare Hall Laboratories (UK) 4/18

#### POSTER PRESENTATIONS

- 1 . 牧野仁志穂、荒木弘之、遠藤静子 「真核生物の染色体DNA複製開始におけるSld3-Sld7複合体の役割」, 第12回 静岡ライフサイエンスシンポジウム, 静岡, 3/4
- 2 . Tanaka,S.,Araki,H. 「Origin Association of Sld3, Sld7, andCdc45 Proteins is a Key Step for Determination of Origin-Firing Timing. 」, 第34回日本分子生物学会年会, 横浜, 12/13~12/16

- 3 . Hizume,K.,Yagura,M.,Araki,H. 「 Analysis of the interaction between chromatin and the origin recognition complex using atomic force microscopy 」, 第34回日本分子生物学会年会, 横浜, 12/13~12/16
- 4 . Yagura,M.,Araki,H. 「 IN VITRO STUDY OF THE INITIATION OF DNA REPLICATION IN BUDDING YEAST 」, 第34回日本分子生物学会年会, 横浜, 12/13~12/16
- 5 . Makino,N.,Endo S.,Araki,H. 「 Characterization of the Sld3-Sld7 complex, an essential initiation factor for chromosome DNA replication in budding yeast 」, 第34回日本分子生物学会年会, 横浜, 12/13~12/16
- 6 . 田中誠司、荒木弘之 「 DDK-dependent recruitment of Sld3, Sld7 and Cdc45 specifies the timing of origin-firing in the budding yeast *Saccharomyces cerevisiae* 」, 第21回DNA複製・組換え・ゲノム安定性制御ワークショップ, 福岡県福津, 10/25~10/27
- 7 . 日詰光治、矢倉勝、荒木弘之 「 原子間力顕微鏡を用いたOrc/クロマチン相互作用の解析 」, 第21回DNA複製・組換え・ゲノム安定性制御ワークショップ, 福岡県福津, 10/25~10/27
- 8 . 荒木弘之、田中尚美、柳沢好美、遠藤静子 「 酵母染色体DNA複製開始におけるpre-LC複合体の役割 」, 日本遺伝学会第83回大会, 京都, 9/20~9/23
- 9 . Araki,H.Tanaka Y.,Yanagisawa Y.,Endo S. 「 Essential role of DNA polymerase epsilon at the initiation step of chromosomal DNA replication in budding yeast 」, 2011 Cold Spring Harbor Laboratory Meeting on EUKARYOTIC DNA REPLICATION & GENOME MAINTENANCE, Cold Spring Harbor, NY(USA), 9/6~9/10
- 10 . Tanaka,S.,Araki,H. 「 DDK-dependent recruitment of Sld3, Sld7 and Cdc45 specifies the timing of origin-firing in budding yeast 」, 2011 Cold Spring Harbor Laboratory Meeting on EUKARYOTIC DNA REPLICATION & GENOME MAINTENANCE, Cold Spring Harbor, NY(USA), 9/6~9/10
- 11 . Yagura,M.,Araki,H. 「 IN VITRO STUDY OF THE INITIATION OF DNA REPLICATION IN BUDDING YEAST 」, 2011 Cold Spring Harbor Laboratory Meeting on EUKARYOTIC DNA REPLICATION & GENOME MAINTENANCE, Cold Spring Harbor, NY(USA), 9/6~9/10
- 12 . Araki,H. 「 Molecular mechanism of initiation of chromosomal DNA replication in budding yeast 」, 25th International Conference on "Yeast Genetics and Molecular Biology", Kortowo-Olsztyn(Poland), 7/7~7/18
- 13 . 田中誠司、荒木弘之 「 DDK-dependent recruitment of Sld3, Sld7 and Cdc45 specifies the timing of origin-firing in the budding yeast *Saccharomyces cerevisiae* 」, 2011 関東東海DNA研究会, 長野県山形村, 7/19~7/21
- 14 . 日詰光治、荒木弘之 「 Analysis of the interaction between chromatin and the origin recognition complex using atomic force microscopy 」, 2011 関東東海DNA研究会, 長野県山形村, 7/19~7/21
- 15 . 矢倉勝、荒木弘之 「 In vitro study of the initiation of DNA replication in budding yeast 」, 2011 関東東海DNA研究会, 長野県山形村, 7/19~7/21
- 16 . 牧野仁志保、荒木弘之 「 Role of Sld3-Sld7 complex in eukaryotic DNA replication 」, 2011 関東東海DNA研究会, 長野県山形村, 7/19~7/21
- 17 . Araki, H.,Tanaka, Y.,Yanagisawa, Y., Endo,S.,Hirai,K.,Tanaka, S. 「 Essential Function of Pol Epsilon at the Initiation Step of Chromosomal DNA Replication in Budding Yeast 」, Keystone Symposia "DNA Replication and Recombination", Keystone, Colorado, USA, 2/26~3/5
- 18 . Araki,H.,Tanaka,T.,Tanaka,Y.,Yanagisawa, Y., Endo,S.,Hirai,K.,Tanaka, S. 「 How replication proteins associate with origins to initiate chromosomal DNA replication 」, 6th UK-Japan Cell Cycle Workshop, Windermere (UK), 4/10~4/14
- 19 . Tanaka,S.,Araki,H. 「 Yeast initiation proteins, Sld3, Sld7 and Cdc45, specifies the timing of origin-firing 」, 6th UK-Japan Cell Cycle Workshop, Windermere (UK), 4/10~4/14

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C. DEPARTMENT OF DEVELOPMENTAL GENETICS  
C-a. Division of Developmental Genetics

C. DEPARTMENT OF DEVELOPMENTAL GENETICS  
C-a. Division of Developmental Genetics  
Hiroshi Shimizu

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Takaku Y, Shimizu H, Fujisawa T. ( 2011 ) Microtubules are involved in regulating body length in hydra. , **Developmental Biology** , 350 , 228 - 237
- 2 . Takaku Y, Shimizu H, Fujisawa T ( 2010 ) Microtubules are involved in regulating body length in hydra. , **Developmental Biology** , 350 , 228 - 237

### POSTER PRESENTATIONS

- 1 . Shimizu, H., Zhang, X. 「 Behavioral analysis of hydra 」, The Evolution of Multicellularity: Insights from Hydra and other Basal Metazoans , Tutzling, Germany , 9/12

### OTHERS

- 1 . 清水 裕 , 3 , Editorial board member of BMC EvoDevo

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## C. DEPARTMENT OF DEVELOPMENTAL GENETICS

### C-a. Division of Developmental Genetics

## C. DEPARTMENT OF DEVELOPMENTAL GENETICS

### C-a. Division of Developmental Genetics

Yasushi Hiromi

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1 . Katsuki T, Joshi R, Ailani D, Hiromi Y. ( 2011 ) Compartmentalization within neurites: its mechanisms and implications. , **Dev. Neurobiol** , 71 , 458 - 473

### POSTER PRESENTATIONS

1 . Joshi, R., Katsuki, T., DeFalco, T., Hiromi, Y 「 “Intra-axonal compartmentalization” of guidance receptors in drosophila neurons 」, Society for Neuroscience , Washington, DC , 11/11-16

2 . Joshi, R., Katsuki, T., DeFalco, T., Hiromi, Y. 「 “Intra-axonal compartmentalization” of guidance receptors in drosophila neurons 」, Assembly, Plasticity, Dysfunction and Repair of Neural Circuits , Suzhou , 10/17-21

3 . Matsuoka, S.,Hiromi, Y.,Asaoka, M. 「 Maintenance of undifferentiated state of stem cell precursors in the Drosophila ovary 」, 1st APDRC , Taipei , 5/22

4 . Hiromi, Y 「 Intra-axonal compartmentalization of axon guidance receptors: its mechanism and roles in axon guidance 」, 第34回日本神経科学大会 シンポジウム「軸索・樹状突起形成におけるガイダンス分子の勾配」, 横浜 , 9/14-17

5 . Matsuoka, S.,Asaoka, M.,Hiromi Y. 「 Maintenance of undifferentiated state of stem cell precursors in the Drosophila ovary 」, 52nd Annual Drosophila Conference , San Diego , 3

6 . Hiromi, Y. 「 Intra-axonal patterning 」, JSDB-GfE Joint Meeting , Dresden, Germany , 3/23-26

### BOOK

1 . 小林悟, 浅岡美穂 ( 2011 ) ショウジョウバエの卵子幹細胞 卵子学 13 - 24

2 . 勝木健夫/広海 健 ( 2011 ) ショウジョウバエの培養系を用いた細胞分化の解析技術 生物機能モデルと新しいリソース・リサーチツール 540 - 549

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## C. DEPARTMENT OF DEVELOPMENTAL GENETICS C-b. Division of Neurogenetics

## C. DEPARTMENT OF DEVELOPMENTAL GENETICS C-b. Division of Neurogenetics Takuji Iwasato

### RESEARCH ACTIVITIES

#### POSTER PRESENTATIONS

1. 岩田亮平, 後藤大道, 田中三佳, 糸原重美, 岩里琢治 「 Loss of Rac-GAP a-chimerin leads to alterations of emotional and cognitive behaviors in mice 」, Neuroscience 2011 , Washington,DC , 11/12-11/16
2. 岩田亮平, 後藤大道, 田中三佳, 糸原重美, 岩里琢治 「 Loss of Rac-GAP a-chimerin leads to alterations of emotional and cognitive behaviors in mice 」, Molecular and cellular cognition society , Washington,DC , 11/10-11/11
3. 岩田亮平, 後藤大道, 田中三佳, 糸原重美 「 Rac GAP a-キメリン欠損マウスの網羅的行動解析 Comprehensive behavioral analysis of Rac-GAP a-chimaerin deficient mice 」, 第34回 日本神経科学大会 , 横浜 , 9/14-9/17
4. 水野秀信, 齊藤芳和, 糸原重美, 岩里琢治 「 Single cell labeling method reveals the precise developmental process of barrel neuron dendrites in somatosensory cortex of neonatal mice 」, Neuroscience 2011, Society for Neuroscience 41st annual meeting , Washington D.C. アメリカ合衆国 , 11/12-11/16
5. 水野秀信, 齊藤芳和, 糸原重美, 岩里琢治 「 高輝度単一細胞標識法による幼仔期体性感覚野におけるバレル細胞 」, Neuroscience2011(第34回日本神経科学大会) , 横浜 , 9/14-9/17

#### BOOK

1. 岩里琢治 (2011) マウス逆遺伝学により明らかになる行動－神経回路－遺伝子 行動遺伝学入門 動物とヒトの“こころ”の科学 111 - 124
2. 岩里琢治 糸原重美 (2011) Miffy変異マウス:ウサギのように両足をそろえて歩く自然発生変異マウス <series モデル動物利用マニュアル> 疾患モデルの作製と利用－脳・神経疾患 99 - 110
3. 岩里琢治 (2011) 体性感覚系神経回路発達に異常のある変異マウス <series モデル動物利用マニュアル> 疾患モデルの作製と利用－脳・神経疾患 162 - 172

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## C. DEPARTMENT OF DEVELOPMENTAL GENETICS C-c. Division of Molecular and Developmental Biology

### C. DEPARTMENT OF DEVELOPMENTAL GENETICS C-c. Division of Molecular and Developmental Biology Koichi Kawakami

#### RESEARCH ACTIVITIES

#### PUBLICATIONS

##### Papers

- 1 . Kishimoto, N., Alfaro-Cervello, C., Shimizu, K., Asakawa, K., Urasaki, A., Nonaka, S., Kawakami, K., Garcia-Verdugo, J.M., and Sawamoto, K. ( 2011 ) Migration of neuronal precursors from the telencephalic ventricular zone into the olfactory bulb in adult zebrafish , **The Journal of Comparative Neurology** , 519 , 3549 - 3565
- 2 . Mizoguchi, T., Togawa, S., Kawakami, K., and Itoh, M. ( 2011 ) Neuron and sensory epithelial cell fate is sequentially determined by Notch signaling in zebrafish lateral line Development , **The Journal of Neuroscience** , 31 , 15522 - 15530
- 3 . Muto, A., and Kawakami, K ( 2011 ) Imaging functional neural circuits in zebrafish with a new GCaMP and the Gal4FF-UAS system , **Communicative & Integrative Biology** , 4 , 566 - 568
- 4 . Abe, G., Suster, M.L., and Kawakami, K. ( 2011 ) Tol2-mediated transgenesis, gene trapping, enhancer trapping, and the Gal4-UAS system , **Methods in Cell Biology** , 104 , 23 - 49
- 5 . Suster, M.L., Abe, G., Schouw, A., and Kawakami, K. ( 2011 ) Transposon-mediated BAC transgenesis in zebrafish , **Nature Protocols** , 6 , 1998 - 2021
- 6 . Wang, H., Bonnet, A., Delfini, M.C., Kawakami, K., Takahashi, Y., and Duprez, D. ( 2011 ) Stable, conditional, and muscle-fiber-specific expression of electroporated transgenes in chick limb muscle cells , **Developmental Dynamics** , 240 , 1223 - 1232
- 7 . Ikenaga, T., Urban, J.M., Gebhart, N., Hatta, K., Kawakami, K., and Ono, F. ( 2011 ) Formation of the spinal network in zebrafish determined by domain-specific Pax genes , **The Journal of Comparative Neurology** , 519 , 1562 - 1579
- 8 . Vogalis, F., Shiraki, T., Kojima, D., Wada, Y., Nishiwaki, Y., Jarvinen, J.L., Sugiyama, J., Kawakami, K., Masai, I., Kawamura, S., Fukada, Y., and Lamb, T.D. ( 2011 ) Ectopic expression of cone-specific G protein-coupled receptor kinase GRK7 in zebrafish rods leads to lower photosensitivity and altered responses , **The Journal of Physiology** , 589 , 2321 - 2348
- 9 . Shakes, L.A., Abe, G., Eltayeb, M.A., Wolf, H.M., Kawakami, K., Chatterjee, P.K. ( 2011 ) Generating libraries of iTol2-end insertions at BAC ends using loxP and lox511 Tn10 transposons , **BMC Genomics** , 12 , 351 -
- 10 . Muto, A., Ohkura, M., Kotani, T., Higashijima, S.-I., Nakai, J., and Kawakami, K. ( 2010 ) Genetic visualization with an improved GCaMP reveals spatiotemporal activation of the spinal motor neurons in zebrafish , **Proc. Natl. Acad. Sci. USA** , 108 , 5425 - 5430
- 11 . Tsujita, T., Li, L., Nakajima, H., Iwamoto, N., Nakajima-Takagi, Y., Ohashi, K., Kawakami, K., Kumagai, Y., Freeman, B.A., Yamamoto, M., and Kobayashi, M. ( 2010 )

Nitro-fatty acids and cyclopentenone prostaglandins share strategies to activate the Keap1-Nrf2 system: a study using green fluorescent protein transgenic zebrafish, **Genes to Cells**, 16, 46 - 57

12. Hu, S.Y., Liao, C.H., Lin, Y.P., Li, Y.H., Gong, H.Y., Lin, G.H., Kawakami, K., Yang, T.H., and Wu, J.L. (2010) Zebrafish eggs used as bioreactors for the production of bioactive tilapia insulin-like growth factors., **Transgenic research**, 20, 73 - 83

## ORAL PRESENTATION

1. 川上浩一 ゼブラフィッシュが解き明かす脳のはたらき 国立遺伝学研究所公開講演会 2011「知りたい！生命科学の最先端」秋葉原コンベンションセンター 11/5

2. Kawakami, K. The Tol2-mediated Gal4-UAS system and its application to the study of functional neural circuits in zebrafish Neuroscience Research Partnership, Singapore 6/23

3. 川上浩一 モデル脊椎動物ゼブラフィッシュを用いた神経回路機能研究 特別講義 国際基督教大学 5/11

## POSTER PRESENTATIONS

1. Okigawa, S., Isoda, M., Suster, M., Kikuta, H., Higashijima, S., Kawakami, K., Ito, M. 「 Different combinations of Notch ligands are involved in the V2 interneuron development 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

2. Kishimoto, N., Shimizu, K., Nagai, H., Asakawa, K., Urasaki, A., Nonaka, S., Kawakami, K., Sawamoto, K. 「 Zebrafish as a model for studying adult neurogenesis and neuronal regeneration 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

3. 黒木あづさ, 谷田部春香, 水野沙耶香, 川上浩一, 河村正二, 藤原晴彦 「 配列特異的遺伝子導入ツールとしてのLINE:28S rDNA標的的特異的LINE・R2OIによる外来遺伝子導入 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

4. Fukuda, R., Kotani, T., Kawahara, A., Kawakami, K. 「 G protein alpha 12/13 is involved in the heart tube formation via S1P signaling 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

5. Okigawa, S., Isoda, M., Suster, M., Kikuta, H., Higashijima, S., Kawakami, K., Ito, M. 「 Different combinations of Notch ligands are involved in the V2 interneuron development 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

6. Kishimoto, N., Shimizu, K., Nagai, H., Asakawa, K., Urasaki, A., Nonaka, S., Kawakami, K., Sawamoto, K. 「 Zebrafish as a model for studying adult neurogenesis and neuronal regeneration 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

7. 黒木あづさ, 谷田部春香, 水野沙耶香, 川上浩一, 河村正二, 藤原晴彦 「 配列特異的遺伝子導入ツールとしてのLINE:28S rDNA標的的特異的LINE・R2OIによる外来遺伝子導入 」, 第34回日本分子生物学会年会, 横浜, 12/13-16

8. Muto, A., Nakai, J., Kawakami, K. 「 Functional brain imaging with improved GCaMPs in zebrafish 」, SOCIETY FOR NEUROSCIENCE 2011, Washington DC, 11/12-16

9. Asakawa, K., Abe, G., Kawakami, K. 「 Genetic dissection of the hindbrain by the Gal4-UAS system in zebrafish. 」, SOCIETY FOR NEUROSCIENCE 2011, Washington DC, 11/12-16

10. Asakawa, K., Kawakami, K. 「 The Role of *Iman2la*, an L-type Lectin Gene, in the Escape Behavior in Zebrafish 」, 2011 Annual Conference of the Society for Glycobiology, Seattle, 11/9-12

11. 川上浩一, 阿部玄武, 浅川和秀, 福田隆一, Lal Pradeep, 武藤彩, 中井淳一 「 トランスポゾンを用いた遺伝子トラップ法による脳機能の遺伝学的解剖 」, 第34回日本神経科学大会, 横浜, 9/14-17

12. 武藤彩, 中井淳一, 川上浩一 「 ゼブラフィッシュ稚魚視覚系の脳機能カルシウムイメージング 」, 第34回日本神経科学大会, 横浜, 9/14-17

13. 岸本憲人, 清水耕平, 永井秀人, 浅川和秀, 浦崎明宏, Holger Knaut, 野中茂紀, 川上浩一, 澤本和延 「 ゼブラフィッシュ成魚の脳室壁付近における神経-血管ニッチ 」, 第34回日本神経科学大会, 横浜, 9/14-17

14. 浅川和秀, 阿部玄武, 川上浩一 「 ゼブラフィッシュを用いた後脳運動制御機能の遺伝学

的解剖」, 第34回日本神経科学大会, 横浜, 9/14-17

15. 天羽龍之介, 揚妻正和, 木下雅恵, 白木利幸, 東島眞一, 松田勝, Maximiliano L Suster, 川上浩一, 大島登志男, 相澤英紀, 岡本仁 「手綱核の機能解析に向けたゼブラフィッシュ内側及び外側手綱核相同領域の遺伝学的操作」, 第34回日本神経科学大会, 横浜, 9/14-17

16. Nagai, H., Kishimoto, N., Shimizu, K., Asakawa, K., Urasaki, A., Knaut, H., Nonaka, S., Kawakami, K., Sawamoto, K. 「The Role of Sdf1/Cxcr4 Chemokine Signaling in Neurovascular Niche within the Adult Zebrafish Telencephalic Ventricular Zone」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

17. Wada, H., Kawakami, K. 「Dickkopf controls neuromast size during lateral line development」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

18. Muto, A., Kawakami, K. 「Brain Imaging with New GCaMPs」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

19. Lal, P., Kawakami, K. 「Genetic dissection of the adult zebrafish brain by the GAL4-UAS system」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

20. Amo, R., Agetsuma, M., Kinoshita, M., Shiraki, T., Higashijima, S., Matsuda, M., Suster, M.L., Kawakami, K., Oshima, T., Aizawa, H., Okamoto, H. 「Functional analysis of the habenulo-raphé pathway using genetic manipulation」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

21. Abe, G., Asakawa, K., Ito, A., Fukuda, R., Muto, A., Lal, P., Wada, H., Kawakami, K. 「Development of Tol2 transposon mediated gene trap method in zebrafish using MAZ transcription termination site」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

22. Kawakami, K., Abe, G., Asakawa, K., Fukuda, R., Lal, P., Muto, A., Wada, H. 「zTrap and NIGKOF: the databases for gene trap/enhancer trap lines and gene-knockout fish lines」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

23. Mizoguchi, T., Togawa, S., Kawakami, K., Ito, M. 「Notch signaling regulates neuronal versus sensory epithelial fate choice in the zebrafish lateral line system」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

24. Okigawa, S., Isoda, M., Suster, M.L., Kikuta, H., Kawakami, K., Ito, M. 「V2 interneuron development is regulated by multiple Delta-Notch signaling」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

25. Takeuchi, M., Shimizu, T., Kani, S., Bae, Y., Tanabe, K., Kusuda, R., Asakawa, K., Kawakami, K., Hibi, M. 「Genetic control for development of cerebellar neurons and neural circuits in zebrafish」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

26. Fukuda, R., Kotani, T., Kawahara, A., Kawakami, K. 「G protein  $\alpha$  12/13 is involved in the heart tube formation via S1P signaling」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

27. Nakayama, S., Kamihagi, C., Ikenaga, T., Kawakami, K., Hatta, K. 「The Observation of Craniofacial Cartilages and a Single Floor Plate Cell using a Gal4-Enhancer Trap Line」, 17th Japanese Medaka and Zebrafish Meeting, 三島, 9/8-9

28. Mizoguchi, T., Togawa, S., Kawakami, K., and Itoh, M. 「Neuron and sensory epithelial cell fate is sequentially determined by Notch signaling in zebrafish lateral line development」, The 5th Asia-Oceania Zebrafish Meeting, Beijing, China, 8/26-29

29. Sato, F., Sato, T., Sakaguchi, K., Arai, H., Kurisaki, T., Kawakami, K., and Sehara-Fujisawa, A. 「Roles of Meltrin beta (ADAM19) in development of peripheral nervous system」, The 5th Asia-Oceania Zebrafish Meeting, Beijing, China, 8/26-29

30. Kawakami, K. 「The Tol2-mediated Gal4-UAS method in zebrafish and its application to studies of functional neural circuits」, The 5th Asia-Oceania Zebrafish Meeting, Beijing, China, 8/26-29

31. Asakawa, K., Abe, G., Kawakami, K. 「GENETIC DISSECTION OF THE HINDBRAIN BY THE Gal4-UAS SYSTEM」, 7th European Zebrafish Meeting, Edinburgh, Scotland, 7/5-9

32. Muto, A., Kawakami, K. 「CALCIUM IMAGING OF THE ZEBRAFISH BRAIN WITH IMPROVED GCAMPS」, 7th European Zebrafish Meeting, Edinburgh, Scotland, 7/5-9

33. Tsetskhladze, Z., Canfield, V., Johnson, S., Kawakami, K., Cheng, K. 「FUNCTIONAL ASSESSMENT OF HUMAN CODING POLYMORPHISMS IN SLC45A2 USING ORTHOLOGOUS RESCUE (OR) IN ZEBRAFISH」, 7th European Zebrafish Meeting,

Edinburgh, Scotland , 7/5-9

- 34 . Kawakami, K., Abe, G., Asakawa, K., Fukuda, R., Pradeep, L., Muto, A., Takakubo, H., Wada, H. 「 zTrap and NIGKOF: the databases for gene trap/enhancer trap lines and gene-knockout fish lines 」, 7th European Zebrafish Meeting , Edinburgh, Scotland , 7/5-9
- 35 . Kawakami, K. 「 The transposon-mediated Gal4-UAS method in zebrafish and calcium imaging with an improved GCaMP 」, Zebrafish Disease Models 4: Blood, Immunity, Cancer, and Endothelial workshop , Edinburgh, Scotland , 7/9-11
- 36 . 浅川和秀, 川上浩一 「ゼブラフィッシュL型レクチンIman2la は、体幹運動の発達に必要である」, 第30回日本糖質学会年会, 長岡(新潟), 7/11-13
- 37 . Asakawa, K., Abe, G., Kawakami, K. 「 Genetic dissection of the hindbrain by the Gal4-UAS system in zebrafish 」, 44th Annual Meeting of the Japanese Society of Developmental Biologists , Ginowan, Okinawa , 5/18-21
- 38 . Wada, H., Kawakami, K. 「 Postembryonic development of the lateral line neuromasts in zebrafish 」, 44th Annual Meeting of the Japanese Society of Developmental Biologists , Ginowan, Okinawa , 5/18-21
- 39 . Lal, P., Kawakami, K. 「 Genetic dissection of adult zebrafish brain by Tol2 transposon mediated Gal4-UAS system and gene trap and enhancer trap method 」, 44th Annual Meeting of the Japanese Society of Developmental Biologists , Ginowan, Okinawa , 5/18-21
- 40 . Tanino, S., Abe, G., Kawakami, K., Nakamura, H., Funahashi, J. 「 Essential roll of SOX5 in the semicircular canal development of zebrafish 」, 44th Annual Meeting of the Japanese Society of Developmental Biologists , Ginowan, Okinawa , 5/18-21
- 41 . Kawakami, K. 「 zTrap and NIGKOF: the databases for Tol2-mediated gene trap/enhancer trap lines and gene-knockout fish lines 」, Conference on genome engineering 2011 , Singapore , 6/20-22
- 42 . 川上浩一 「脊椎動物の骨格筋の形成・成熟・維持機構の研究」, 「再生医学・再生医療の先端融合的共同研究拠点」平成22年度共同研究会 , 京都大学大学院理学研究科生物科学専攻 , 6/9
- 43 . 川上浩一 「トランスポゾンを用いた遺伝学的アプローチによるゼブラフィッシュ機能的神経回路研究」, 脳の発達と機能:最近の研究進歩 , 東京大学医学部 , 1/22
- 44 . Kawakami, K. 「 The Tol2-mediated Gal4-UAS methods and their application to the study of neural circuits 」, The 4th strategic conference of zebrafish investigators , Asilomar, California , 1/29-2/2
- 45 . Postlethwait, J.H., Rodriguez-Mari, A., Wilson, C., Titus, T.A., Canestro, C., BreMiller, R.A., Yan, Y.-L., Nanda, I., Johnston, A., Asakawa, K., Kanki, J., Gray, E.A., He, X., Spitsbergen, J., Look, A.T., Kawakami, K., and Schind, D. 「 Fanconi Anemia: Insights into mechanisms of sex determination and cancer 」, The 4th strategic conference of zebrafish investigators , Asilomar, California , 1/29-2/2

## EDUCATION

- 1 . 川上浩一、日比正彦、小田洋一 ゼブラフィッシュ・メダカから見える脳機能 第34回日本神経科学大会 横浜 9/14-17
- 2 . Kawakami, K., Nakai, J. Neuronal ensemble revealed by calcium imaging 第34回日本分子生物学会年会ワークショップ 横浜 12/13-16
- 3 . 浅川和秀、新屋みのり、平田普三、酒井則良、川上浩一 17th Japanese Medaka and Zebrafish Meeting 三島 9/8-9
- 4 . Kawakami, K. Session V Genetic tools/chemicals biology (Chair) The 5th Asia-Oceania Zebrafish Meeting Beijing, China 8/26-29
- 5 . Kawakami, K. and Appel, B. Technology Blast II The 4th strategic conference of zebrafish investigators Asilomar, California 1/29-2/2

## OTHERS

- 1 . Koichi Kawakami , 3 , Editorial board of Zebrafish
- 2 . Koichi Kawakami , 3 , Editorial board of Mobile DNA



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## D. DEPARTMENT OF POPULATION GENETICS

### D-a. Division of Population Genetics

## D. DEPARTMENT OF POPULATION GENETICS

### D-a. Division of Population Genetics

Naruya Saitou

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Suzuki R. and Saitou N. ( 2011 ) Exploration for functional nucleotide sequence candidates within coding regions of mammalian genes , **DNA Research** , 18 , 177 - 183
- 2 . Ezawa, K., Ikeo, K., Gojobori, T., and Saitou N. ( 2011 ) Evolutionary patterns of recently emerged animal duplogs , **Genome Biology and Evolution** , 3 , 1119 - 1135
- 3 . Reich,D., Patterson,N., Kircher,M., Delfin,F., Nandineni,M.R., Pugach,I., Ko,MS.A., Ko,YC., Jinam,A.J., Phipps,E.M., Saitou N., Wollstein,A., Kayser,M., Paabo,S., and Stoneking M. ( 2011 ) Denisova Admixture and the First Modern Human Dispersals into Southeast Asia and Oceania , **American Journal of Human Genetics** , 89 , 516 - 528
- 4 . Prakash,T., Oshima,K., Morita,H., Fukuda,S., Imaoka,A., Kumar,N., Sharma,K.V., Takahashi,M., Saitou N., Taylor,D.T., Ohno,H., Umesaki,Y., and Hattori M. ( 2011 ) Complete genome sequences of rat and mouse segmented filamentous bacteria, a potent inducer of Th17 cell differentiation , **Cell Host & Microbe** , 10 , 273 - 284
- 5 . Saitou,N., Kimura,R., Fukase,H., Yogi,A., Murayama,S., and Ishida H. ( 2011 ) Advanced CT images reveal nonmetric cranial variations in living humans , **Anthropological Science** , 119 , 231 - 237
- 6 . Tashiro, K., Teissier, A., Kobayashi, N., Nakanishi, A., Sasaki, T., Yan, K., Tarabykin, V., Vigier, L., Sumiyama, K., Hirakawa, M., Nishihara, H., Pierani, A., and Okada, N. ( 2011 ) A Mammalian Conserved Element Derived from SINE Displays Enhancer Properties Recapitulating Satb2 Expression in Early-Born Callosal Projection Neurons , **PLoS ONE** , 6 , e28497 -
- 7 . Sumiyama, K., and Saitou, N. ( 2011 ) Loss-of-function mutation in a repressor module of human-specifically activated enhancer HACNS1. , **Molecular Biology and Evolution** , 28 , 3005 - 3007

### ORAL PRESENTATION

- 1 . 斎藤 成也 集中講義 分子進化学 東京大学・理学部 6/15,22,29,7/6
- 2 . 斎藤 成也 集中講義 知能工学最前線 広島市立大学・情報科学部 8/24
- 3 . 斎藤 成也 集中講義 分子進化学 関西学院大学 9/5,6
- 4 . 斎藤 成也 日本列島人の成立 東京大学理学部二号館談話会 東京大学・理学部 4/15
- 5 . 斎藤 成也 日本列島人の多様性, 生物多様性をめぐる科学と社会の対話 in 東北 日本学術会議公開シンポジウム 一関市 5/15
- 6 . 斎藤 成也 人類の起源 花園大学・東京禅センター共催「科学と仏教の接点VI」 東京禅センター 5/28

7. 齋藤 成也 人間と他の生物との連続と断絶 総合人間学会第6回シンポジウム 明治大学 6/11
8. 齋藤 成也 日本列島人の起源と成立 東京西北ロータリークラブ例会 京王プラザ 8/22
9. 齋藤 成也 分子系統学の理論と実習 第155回農林交流センターワークショップ 農林水産省農林水産技術会議事務局筑波事務所 10/28
10. 齋藤 成也 研究者によるオープンアクセス雑誌のたちあげを! SparcJapanセミナー 2011 ベルサール九段 10/28
11. Saitou N. Proposal of new gene duplication category called 'drift duplication' through analyses of recently emerged animal duplogs Barcelona Biomedical Research Park (Spain) 11/28
12. Saitou N. Anatomy of mammalian genomes: coding and noncoding sequence evolution Institute National de la Recherche Agronomique (France) 11/30
13. Saitou N. Evolution of the human genome University Paul Sabatier (France) 12/12
14. 齋藤 成也 集中講義 基礎遺伝学 山形大学・医学部 1/20
15. 齋藤 成也 集中講義 分子進化学 東京大学大学院・理学系研究科 2/14,15
16. 隅山 健太 Tol2トランスポゾンシステムと細胞質注入によるシンプルで高効率なトランスジェニックマウスの作製法 明治大学科学技術研究所 講師招聘講演会 明治大学農学部 1/17
17. 隅山 健太 トランスジェニックマウス解析による転写調節メカニズム進化が脊椎動物形態進化に果たす役割の解明 京都大学化学研究所 生体分子情報研究領域 セミナー 京都大学化学研究所 10/6
18. 隅山 健太 トランスジェニックマウス解析による転写調節メカニズム進化が脊椎動物形態進化に果たす役割の解明 システム自然科学研究科セミナー 名古屋市立大学システム自然科学研究科 10/11
19. 隅山 健太 発生調節因子Dlx3-4遺伝子群シス発現制御領域の機能解析およびTol2トランスポゾンを用いた新しいトランスジェニックマウス作製法の開発 解剖学(埴原単位)セミナー 特別講演 北里大学医学部 6/23

## POSTER PRESENTATIONS

1. 齋藤 成也 「哺乳類ゲノムにおいて系統特異的に高度に保存された非コード塩基配列の同定とそれらの特性」, 日本遺伝学会第83回大会, 京都, 9/22
2. Saitou N. 「No distinction of orthology/paralogy among human and chimpanzee Rh blood group genes」, SMBE 2011 Kyoto, 京都, 7/28
3. Saitou N. 「Evolutionary Patterns of Recently Emerged Animal Duplogs」, 日本進化学会第13回大会in京都, 京都, 7/31
4. Saitou N. 「Phylogenetic networks as default representation of nuclear DNA sequence phylogeny」, Molecular Phylogenetics and Evolution Morris Goomdman Memorial Symposium, Detroit (USA), 10/3
5. Saitou N. 「Final Proof of Ainu-Okinawa Shared Ancestry Theory」, 第65回日本人類学会大会, 那覇市, 11/5
6. Saitou N. 「Evolutionary history of continental South East Asians: Early Train" hypothesis based on complete mitochondrial DNA sequences」, International Symposium "Comparing Ancient and Modern DNA Variability", Porto (Portugal), 11/25
7. Sumiyama, K. 「Evolution of Cis-regulatory Elements in the Vertebrate Dlx Bigene Cluster System」, Symposium of Genomic Conservation and Diversity of Organisms ~Beyond the NGS time of Life Science~, Tainan, 12/10
8. Sumiyama, K. 「Cis-regulatory landscape and evolution of the mammalian Dlx genes.」, International Symposium Genetic Regulation of Development, Kyoto, 11/30-12/1
9. 隅山 健太 「Toolkit genes, cis-regulatory modules, turnover, and evolvability」, 第1回 Tokyo Vertebrate Morphology Meeting, 東京, 11/19
10. Sumiyama, K. 「Theria-specific evolution in both coding and noncoding region of the Dlx4 gene.」, SMBE 2011, Kyoto, 7/26-30
11. 隅山 健太 「胎盤形成に関与するDlx4 遺伝子の獣亜綱 (Theria)特異的なタンパク質コード領域および転写制御領域における分子進化と機能解析」, 日本進化学会第13回大会, 京都, 7/30
12. Kanzawa H., Suwa G. and Saitou N. 「Genetic Analysis of Ancient Mitochondrial DNA among Japanese Archipelago Population in Tohoku Jomon」, SMBE 2011 Kyoto, 京都,

7/26-30

13 . Kryukov K., Saitou N. 「 Alignment free phylogeny reconstruction using oligonucleotide frequencies 」, SMBE 2011 Kyoto , 京都 , 7/26-30

14 . Jinam T., Phipps E.M., Stoneking M., Saitou N. 「 Evolutionary history of continental South East Asians: "early train" hypothesis based on complete mitochondrial DNA sequences 」, SMBE 2011 Kyoto , 京都 , 7/26-30

15 . Saitou N. 「 Reconstruction of phylogenetic relationships 」, National Institute of Biomedical Genomics Seminar , Kalyani , 2/11

16 . Saitou N. 「 Application and examples of molecular phylogenetics 」, National Institute of Biomedical Genomics Seminar , Kalyani , 2/11

17 . Saitou N. 「 Evolution of animal duplogs 」, Korea-China-Japan Bioinformatics Symposium , Jeju Island , 5/13

## EDUCATION

1 . 斎藤成也 ヒト形質のゲノム発掘による新しい進化人類学の創成 国立遺伝学研究所研究会 三島市 7/1-2

2 . 斎藤 成也 SMBE 2011 Kyoto 京都 7/26-30

3 . 斎藤 成也 ヒトの社会と愛 ～ラミダス猿人化石からわかること～ 日本学術会議公開シンポジウム 東京 2/6

## BOOK

1 . 斎藤成也 (2011) ダーウィン入門 ダーウィン入門 0-0

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Toshiyuki Takano

RESEARCH ACTIVITIES

OTHERS

1. 高野敏行, 1, 日本遺伝学会評議員

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## E. DEPARTMENT OF INTEGRATED GENETICS

### E-b. Division of Agricultural Genetics

## E. DEPARTMENT OF INTEGRATED GENETICS

### E-b. Division of Agricultural Genetics

Tetsuji Kakutani

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Kawagoe T, Shimizu KK, Kakutani T, Kudoh H ( 2011 ) Coexistence of trichome variation in a natural plant population: a combined study using ecological and candidate gene approaches. , **PLoS One** , 6 , e22184 -
- 2 . To TK, Kim JM, Matsui A, Kurihara Y, Morosawa T, Ishida J, Tanaka M, Endo T, Kakutani T, Toyoda T, Kimura H, Yokoyama S, Shinozaki K, Seki M ( 2011 ) Arabidopsis HDA6 regulates locus-directed heterochromatin silencing in cooperation with MET1. , **PLoS Genetics** , 7 , e1002055 -
- 3 . Fujimoto, R., Sasaki, T., Kudoh, H., Taylor, JM., Kakutani, T., and Dennis ES. ( 2011 ) Epigenetic variation in the FWA gene within the genus Arabidopsis , **Plant J** , Epub , -
- 4 . Toyama, M., Matsuda, K., Kakutani, T., Terao-Morita, M., and Tasaka, M. ( 2011 ) Developmental changes in crossover frequency in Arabidopsis , **Plant J** , 14 , 81 - 87
- 5 . Saze, H., and Kakutani, T. ( 2011 ) Differentiation of epigenetic modifications between transposons and genes , **Current Opinion of Plant Biology** , 65 , 589 - 599
- 6 . Ingaki, S., and Kakutani T. ( 2011 ) Control of genic DNA methylation in Arabidopsis , **Journal of Plant Research** , 123 , 299 - 302

### ORAL PRESENTATION

- 1 . Kakutani, T. Genetics DNA methylation in genes and transposons Plant Biology Graduate Program テキサス大学 8/15
- 2 . To, T. Molecular mechanisms of gene silencing and environmental stress response mediated by Arabidopsis histone deacetylase HDA6 ロンドン大学 8/30
- 3 . Saze, H. Regulation of heterochromatic epigenetic modifications in genic regions in Arabidopsis ジュネーブ大学 5/30

### POSTER PRESENTATIONS

- 1 . To, T. 「 Arabidopsis HDA6 regulates locus-directed heterochromatin silencing cooperatively with MET1 」, GARNet 2011 Meeting, Dynamic biology - New Levels and New Dimensions of Regulation, ケンブリッジ, 9/6
- 2 . 角谷徹仁 「 シロイヌナズナにおける遺伝子とトランスポゾンのDNAメチル化の遺伝学 」, 第63回日本細胞学会大会, 北海道札幌市, 6/27
- 3 . 付焜、塚原小百合、角谷徹仁 「 シロイヌナズナのDNAメチル化制御因子DDM1とIBM1の遺伝的相互作用 」, 日本遺伝学会第83回大会, 京都市, 9/20
- 4 . 角谷徹仁 「 トランスポゾンとDNAメチル化のエピ遺伝学 」, 日本生化学会第84回大会,

京都市, 9/23

5. 角谷徹仁 「 DNA methylation and transposon dynamics in Arabidopsis 」, 第34回日本分子生物学会年会, 横浜市, 12/16

6. Kakutani, T. 「 Genetics of DNA methylation in genes and transposons in Arabidopsis 」, Gordon Research Conferences 2011-Epigenetics, ボストン, 8/8

7. Kakutani, T. 「 Genetics of DNA methylation in genes and transposons in Arabidopsis 」, Plant & Animal Genome XIX, EPIC: Plant Epigenome Project, San Diego, U.S.A., 1/15

8. Kakkutani, T. 「 Genetics of DNA methylation in genes and transposons in Arabidopsis 」, CDB Symposium 2011 Epigenetic Landscape in Development and Disease, 神戸, 3/14

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## E. DEPARTMENT OF INTEGRATED GENETICS E-c. Division of Brain Function

## E. DEPARTMENT OF INTEGRATED GENETICS E-c. Division of Brain Function Tatsumi Hirata

### RESEARCH ACTIVITIES

#### PUBLICATIONS

##### Papers

- 1 . Sato, Y., Mita, S., Fukushima, N., Fujisawa, H., Saga, Y., and Hirata, T. ( 2011 ) Induction of axon growth arrest without growth cone collapse through the N-terminal region of four-transmembrane glycoprotein M6a. , **Dev. Neurobiol.** , 71 , 733 - 746
- 2 . Sato, Y., Iketani, M., Kurihara, Y., Yamaguchi, M., Yamashita, N., Nakamura, F., Arie, Y., Kawasaki, T., Hirata, T., Abe, T., Kiyonari, H., Strittmatter, S.M., Goshima, Y. and Takei, K. ( 2011 ) Cartilage acidic protein-1B (LOTUS), an endogenous Nogo receptor antagonist for axon tract formation. , **Science** , 333 , 769 - 773
- 3 . Sato, Y., Watanabe, N., Fukushima, N., Mita, S. and Hirata, T. ( 2011 ) Actin-independent behavior and membrane deformation exhibited by the four-transmembrane protein M6a. , **PLoS One** , 6 e26702 , 1 - 13

#### POSTER PRESENTATIONS

- 1 . Suzuki, I.K., Gojobori, T., and Hirata, T. 「 Generation program of neocortical layer-specific neurons predates mammalian emergence 」, Society for Molecular Biology and Evolution (SMBE) Symposium , Kyoto , 7/28
- 2 . Mita, S., Saga, Y., Werner, H.B., Nave, K-A, and Hirata, T. 「 M6 proteins regulate axon outgrowth in mouse callosal neurons 」, 第34回日本分子生物学会年会 , 横浜 , 12/13
- 3 . Kawasaki, T., and Hirata, T. 「 Distinct functions of PInA family in the central olfactory projection 」, 第44回日本発生生物学会年会 , 沖縄 , 5/20

#### BOOK

- 1 . 平田たつみ ( 2011 ) 「竹市雅俊」(インタビュー聞き手・執筆) 分子生物学に魅せられた人々 143 - 158

#### OTHERS

- 1 . 平田たつみ , 1 , JST さきがけ領域アドバイザー
- 2 . 平田たつみ , 1 , 日本神経科学学会 男女共同参画推進委員
- 3 . 平田たつみ , 1 , 岡崎統合バイオサイエンスセンター運営委員

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## F. GENETIC STRAINS RESEARCH CENTER

### F-a. Mammalian Genetics Laboratory

## F. GENETIC STRAINS RESEARCH CENTER

### F-a. Mammalian Genetics Laboratory

Toshihiko Shiroishi

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Yokoyama, H., Maruoka, T., Aruga, A., Amano, T., Ohgo, S., Shiroishi, T., Tamura, K. ( 2011 ) Prx-1 expression in *Xenopus laevis* scarless skin-wound healing and its resemblance to epimorphic regeneration , **J Invest Dermatol** , 131 , 2477 - 2485
2. Koide, T., Ikeda, K., Ogasawara, M., Shiroishi, T., Moriwaki, K., Takahashi, A. ( 2011 ) A new twist on behavioral genetics by incorporating wild-derived mouse strains. , **Exp Anim** , 60 , 347 - 354
3. Sugimoto, H., Okabe, S., Kato, M., Koshida, N., Shiroishi, T., Mogi, K., Kikusui, T., Koide, T ( 2011 ) A role for strain differences in waveforms of ultrasonic vocalizations during male-female interaction , **PLoS One** , 6 , e22093 -
4. Kasai S, Kan F, Hata H, Takamatsu Y, Hagino Y, Shiroishi T, Koide T, Ikeda K ( 2011 ) Relationship between Oprm1 polymorphism and morphine sensitivity in inbred-strain mice derived from wild mice , **Nihon Shinkei Seishin Yakurigaku Zasshi** , 31 , 87 - 88
5. Shikata, Y., Okada, T., Hashimoto, M., Ellis, T., Matsumaru, D., Shiroishi, T., Ogawa, M., Wainwright, B., and Motoyama, J. ( 2010 ) Ptch1-mediated dosage-dependent action of Shh signaling regulates neural progenitor development at late gestational stages , **Dev Biol** , 349 , 147 - 159
6. Ishii, A., Koide, T., Takahashi, A., Shiroishi, T., Hettinger, TP., Frank, ME., Savoy, LD., Formaker, BK., Yertutanol, S., Lionikas, A., and Blizard, DA. ( 2011 ) B6-MSM Consomic Mouse Strains Reveal Multiple Loci for Genetic Variation in Sucrose Octaacetate Aversion , **Behav. Genet.** , , -
7. Kondrashov, N., Pusic, A., Stumpf, CR., Shimizu, K., Hsieh, AC., Xue S., Ishijima, J., Shiroishi, T., and Barna, M. ( 2011 ) Ribosome-mediated specificity in hox mRNA translation and vertebrate tissue patterning. , **Cell** , 145 , 383 - 397

### ORAL PRESENTATION

1. 天野孝紀, 城石俊彦 Long-rangeエンハンサーによるShh遺伝子の発現制御 みんなで建設的に考える会 名古屋大学 8/5
2. 天野孝紀 Shh遺伝子の発現を制御する染色体高次構造の動態 東北大学加齢医学研究所研究員会セミナー 東北大学加齢医学研究所 11/4

### POSTER PRESENTATIONS

1. 天野孝紀, 嵯峨井知子, 築地長治, 城石俊彦 「 A BAC-transgenic mouse model for the long-range enhancer-promoter interaction at the Shh locus 」, 第44回日本発生生物学会年

会，沖縄，5/18-5/21

2. 前野哲輝, 岩淵由希, 田村勝 「 X線CT装置を用いたマウス眼球毛細血管の3次元画像化」, 第22回生物学技術研究会，岡崎市，2/17-2/18

3. 岡彩子, 城石俊彦 「マウス亜種間の生殖隔離の遺伝的メカニズム」, 日本遺伝学会第83回大会，京都，9/20-9/22

4. Takada, T. 「 Functional genomics powered by mouse inter-subspecific genome diversity」, Mouse Genetics Symposium，Seoul, Korea，10/27

5. 高田豊行, 三田晃彦, 森脇和郎, 米川博通, 城石俊彦 「日本産野生由来マウス系統MSM/Msを用いた加齢性エネルギー代謝の機能ゲノム解析」, 日本遺伝学会第83回大会，京都，9/20-9/22

6. 高田豊行 「MSM/Ms系統を基盤にしたマウス機能ゲノム学データベースの構築」, 第58回日本実験動物学会総会・ワークショップ，東京，5/25-5/27

7. 田中成和, 高田豊行, 城石俊彦 「Hairless遺伝子変異体を用いた新規表現型の探索」, 日本遺伝学会第83回大会，京都，9/20-9/22

8. 田村勝, 加藤依子, 城石俊彦 「ヒト染色体異常疾患4番染色体長腕部分重複症原因遺伝子の同定」, 日本遺伝学会第83回大会，京都，9/20-9/22

9. 田村勝 「突然変異、及び遺伝子改変マウスを用いたヒト4番染色体長腕部分重複症の解析」, 第25回モロシヌス研究会，新潟，7/8-7/9

10. Kono, H., Tamura, M., Ohta, K., Shiroishi, T. 「 Polymorphism of wild-mouse Prdm9 that marks meiotic recombination hotspots」, 第34回日本分子生物学会年会，横浜，12/13-12/16

## BOOK

1. 高田豊行 (2011) マウス表現型関連データベースの紹介 疾患モデルマウス表現型解析指南 360 - 372

## OTHERS

1. Komiyama H., Aoki A., Tanaka S., Maekawa H., Kato Y., Wada R., Maekawa T., Tamura M., Shiroishi T., 2, Genes and Genetic Systems Prize 2011

2. 田村勝, 加藤依子, 城石俊彦，2，日本遺伝学会第83回大会・Best Paper賞 “Identification of responsible genes for human chromosomal disorder, Partial trisomy distal 4q”

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F. GENETIC STRAINS RESEARCH CENTER  
F-b. Mammalian Development Laboratory

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F-b. Mammalian Development Laboratory  
Yumiko Saga

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Hosoya M, Fujioka M, Matsuda S, Ohba H, Shibata S, Nakagawa F, Watabe T, Wakabayashi KI, Saga Y, Ogawa K, Okano HJ, Okano H. ( 2011 ) Expression and Function of Sox21 During Mouse Cochlea Development. , **Neurochem Res** , 36 , 1261 - 9
- 2 . Sato Y, Mita S, Fukushima N, Fujisawa H, Saga Y, Hirata T. ( 2011 ) Induction of axon growth arrest without growth cone collapse through the N-terminal region of four-transmembrane glycoprotein M6a. , **Dev Neurobiol.** , 71 , 733 - 746
- 3 . Feridooni T, Hotchkiss A, Remley-Carr S, Saga Y, Pasumarthi KB. ( 2011 ) Cardiomyocyte specific ablation of p53 is not sufficient to block doxorubicin induced cardiac fibrosis and associated cytoskeletal changes. , **PLoS One.** , 6 , -
- 4 . Fukada S, Yamaguchi M, Kokubo H, Ogawa R, Uezumi A, Yoneda T, Matev MM, Motohashi N, Ito T, Zolkiewska A, Johnson RL, Saga Y, Miyagoe-Suzuki Y, Tsujikawa K, Takeda S, Yamamoto H. ( 2011 ) Hesr1 and Hesr3 are essential to generate undifferentiated quiescent satellite cells and to maintain satellite cell numbers. , **Development.** , 138 , 4609 - 19
- 5 . Oyama T, Harigaya K, Sasaki N, Okamura Y, Kokubo H, Saga Y, Hozumi K, Suganami A, Tamura Y, Nagase T, Koga H, Nishimura M, Sakamoto R, Sato M, Yoshida N, Kitagawa M. ( 2011 ) Mastermind-like 1 (MamL1) and mastermind-like 3 (MamL3) are essential for Notch signaling in vivo. , **Development.** , 138 , 5235 - 46
- 6 . Geyer CB, Saba R, Kato Y, Anderson AJ, Chappell VK, Saga Y, Eddy EM. ( 2011 ) RhoX13 Is Translated in Premeiotic Germ Cells in Male and Female Mice and Is Regulated by NANOS2 in the Male. , **Biol Reprod.** , , -

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- 1 . 森本充 呼吸器の機能を支える上皮細胞パターンの決定機構 京都大学大学院医学研究科 生体構造医学講座セミナー 京都大学 8/30
- 2 . 森本充 Two types Notch signalings coordinate the three major epithelial cell types in the airways. Global COE Liaison Laboratory regular seminar 熊本大学 11/30
- 3 . 森本充 Two types of Notch signaling cooperate in epithelial patterning during lung organogenesis CDB seminar 理化学研究所CDB神戸 1/23

### POSTER PRESENTATIONS

- 1 . Quan Wu, Kohei Kanata, Rie Saba, Hiroshi Hamada and Yumiko Saga 「 TGFb

- signaling is essential for sex differentiation of male germ cells ], The Cold Spring Harbor Asia conference , Suzhou, China , 10/11-15
- 2 . 中島優紀,相賀裕美子,鈴木敦 「 マウス胎児期雄性生殖細胞のP-body形成における NANOS2 zinc finger motif の機能解析 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 3 . Yumiko Saga 「 Pofut1 regulates Notch activity via balancing clathrin- and caveolin-dependent endocytotic pathways 」, The Notch Meeting , Athens, Greece , 10/2-6
  - 4 . Rie,Saba, Yumiko Saga 「 NANOS2 suppresses premature meiosis in the CYP26B1-null male gonad 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 5 . Rie,Saba, Yumiko, Saga. 「 NANOS2 suppresses premature meiosis in the CYP26B1-null male gonad 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 6 . Kazuteru,Hasegawa, Yumiko, Saga. 「 Fgf signaling is required to maintain spermatogonial stem cells in mouse testes 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 7 . Rie,Saba, Masafumi, Muraoka, Yumiko, Saga. 「 Analyses of small amount RNAs via next generation sequencer 」, 第34回日本分子生物学会 , 横浜 , 12-13-16
  - 8 . Masafumi, Muraoka, Rie, Saba, Yuzuru, Kato, Katsuhiko, Shirahige, Yumiko, Saga. 「 Analyses of the regulation of transcriptome in embryonic male germ cells via next generation sequencer 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 9 . 森田宜典,相賀裕美子,鈴木敦 「 Functional differences between NANOS2 and NANOS3 in the interaction with CCR4-NOT deadenylation complex 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 10 . Sakura, Mita, Yumiko, Saga, Hauke B Werner, Klaus-Armin Nave, Tatsumi, Hirata. 「 M6 proteins regulate axon outgrowth in mouse callosal neurons 」, 第34回日本分子生物学会 , 横浜 , 12/13-16
  - 11 . 森本充 「 Two types of Notch receptor-ligand combination coordinate the number and distribution of the three major epithelial cell types in the conducting airways. 」, 第6回Notchシグナル研究会 , 野田 , 11/14
  - 12 . 森本充 「 異なる2種のNotchシグナルが3種の気道上皮細胞の数量的・空間的バランスを制御する 」, 第34回日本分子生物学会年会 , 横浜 , 12/13
  - 13 . 大久保佑亮,相賀裕美子 「 The coupling mechanism to generate synchronized oscillation of segmentation clock in mice 」, 第6回Notchシグナル研究会 , 野田 , 11/8-11/9
  - 14 . Mitsuru, Morimoto, Yumiko , Saga, Rahael Kopan. 「 Notch signaling regulates the spatial balance of lung epithelial cells 呼吸器上皮細胞の適切な空間配置はNotchシグナルによって決定する 」, 第44回日本発生生物学会 , 沖縄 , 5/18~5/21
  - 15 . 森本充 「 呼吸器上皮細胞の適切な空間配置はNotchシグナルによって決定する 」, 第44回 日本発生生物学会 , 沖縄 , 5/19
  - 16 . 森本充 「 呼吸器発生研究の最前線 ~幹細胞とガン~ 」, 第99回日本肺癌学会中部支部会 , 静岡 , 9/17
  - 17 . 森本充 「 Two types Notch signalings coordinate the three major epithelial cell types in the airways 」, Exciting Biology Series Cellular Development: Biology at the Interface , 神戸 , 9/29-10/1
  - 18 . Quan, Wu, Rie, Saba, Kohei, Kanata, Hiroshi, Hamada, Yumiko, Saga 「 TGF $\beta$  signaling is essential for sex differentiation of male germ cells 」, 第44回日本発生生物学会 , 沖縄 , 5/18~5/21
  - 19 . Yu, Takahashi, Yukuto, Yasuhiko, Yumiko, Saga, Shinji, Takada, Jun, Kanno. 「 Metameric pattern of vertebral body/intervertebral disc is correlated with Pax1 expression and is formed irrespectively of rostro-caudal patterning of somites 」, 第44回日本発生生物学会 , 沖縄 , 5/18~5/21
  - 20 . Yumiko , Saga. 「 Male germ cell development in mice 」, Gordon Research Conference (Developmental Biology) , Andover, NH , 6/19-24
  - 21 . Yumiko Saga. 「 The mechanism leading to sexual differentiation of male germ cells. 」, The Cold Spring Harbor Asia conference , Suzhou, China , 10/11-15
  - 22 . 森本充,相賀裕美子, Rahael Kopan. 「 Notch signaling regulates the spatial balance of lung epithelial cells. 」, Keystone symposia "Lung Development and Repair" , Santa Fe, New Mexico, USA , 2/6-11



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F. GENETIC STRAINS RESEARCH CENTER  
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Tsuyoshi Koide

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Sugimoto, H., Okabe, S., Kato M., Koshida N., Shiroishi T., Mogi K., Kikusui T., Koide T. (2011) A role for strain differences in waveforms of ultrasonic vocalizations during male–female interaction, **PLoS ONE**, 6, e22093 -
2. Ishii A., Koide T., Takahashi A., Shiroishi T., Hettinger T.P., Frank M.E., Savoy L.D., Formaker B.K., Yertutanol S., ALionikas A., Blizard D.A. (2011) B6-MSM consomic mouse strains reveal multiple loci for genetic variation in sucrose octaacetate aversion. , **Behavior Genetics**, In press, -
3. Koide T., Ikeda K., Ogasawara M., Shiroishi T., Moriwaki K., and Takahashi A. (2011) A new twist on behavioral genetics by incorporating wild-derived mouse strains. , **Experimental Animals**, In press, -
4. Miczek, K.A., Nikulina, E.M., Takahashi, A., Covington, H.E. 3rd, Yap, J.J., Boyson, C.O., Shimamoto, A., de Almeida, R.M. (2011) Gene Expression in Aminergic and Peptidergic Cells During Aggression and Defeat: Relevance to Violence, Depression and Drug Abuse. , **Behavior Genetics**, In press, -

### ORAL PRESENTATION

1. Takahashi, A. Neurobiological mechanisms of escalated aggression in mice: GABA receptor modulation of dorsal raphe nucleus 大阪大学神経回路機能学セミナー 大阪大学・理学部 3/2

### POSTER PRESENTATIONS

1. Sugimoto, H., Okabe, S., Kikusui T., Koide, T. 「 A role of strain difference in waveforms of male ultrasonic vocalization for social behavior 」, 13th Annual Meeting for International Behavioural and Neural Genetics Society, Rome, 5/10
2. Koide, T., Tanave, A., Sugimoto, H., Takahashi, A. 「 Wild-derived stock of mice, a useful resource for studying genetic basis of anxiety-like behavior 」, 13th Annual Meeting for International Behavioural and Neural Genetics Society, Rome, 5/10
3. 菊水健史, 小出剛 「 マウス求愛歌の行動学的解析 」, 第34回日本神経科学大会 シンポジウム, 横浜, 9/14

### BOOK

1. 高橋阿貴, Miczek, K.A. (2011) 過剰な攻撃行動を引き起こす神経メカニズム メディカ



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## F. GENETIC STRAINS RESEARCH CENTER F-d. Model Fish Genomics Resource

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F-d. Model Fish Genomics Resource  
Noriyoshi Sakai

### RESEARCH ACTIVITIES

#### PUBLICATIONS

##### Papers

- 1 . Ozaki, Y.,Saito, K.,Shinya, M.,Kawasaki, T.,Sakai, N. ( 2011 ) Evaluation of Sycp3, Plzf and Cyclin B3 expression and suitability as spermatogonia and spermatocyte markers in zebrafish. , **Gene Expression Patterns** , 11 , 309 - 315
- 2 . Shinya, M.,Sakai, N. ( 2011 ) Generation of highly homogeneous strains of zebrafish through full sib-pair mating. , **G3** , 1 , 377 - 386
- 3 . Saito, K.,Siegfried, K.R.,Nusslein-Volhard, C.,Sakai, N. ( 2011 ) Isolation and cytogenetic characterization of zebrafish meiotic prophase I mutants. , **Developmental Dynamics** , 240 , 1779 - 1792
- 4 . Torihara, H.,Uechi, T.,Chakraborty, A.,Shinya, M.,Sakai, N.,Kenmochi, N. ( 2011 ) Erythropoiesis failure due to RPS19 deficiency is independent of an activated p53 response in a zebrafish model of Diamond-Blackfan anaemia. , **Br. J. Haematol.** , 152 , 648 - 654

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- 1 . 酒井則良 魚類における配偶子形成と遺伝子改変技術 九州大学農学部海洋科学第二九州大学・農学部 12/14-16

#### POSTER PRESENTATIONS

- 1 . 新屋みのり,木村哲晃,成瀬清 「メダカを用いた量的形質遺伝子座解析～高速なコンジュニック系統作成系の構築～」, 第83回日本遺伝学会 , ,
- 2 . Shinya, M.,Kimura, T.,Naruse, K. 「 Quantitative trait analysis in the medaka – Establishment of a quick system to generate congenic strains – 」, The 1st Strategic Meeting for Medaka Research , Okazaki ,
- 3 . Kawasaki, T.,Sakai, C.,Sakai, N. 「 Cytogenetic characterization of zebrafish mutants with defect in spermatogonial development 」, 17th Japanese Medaka and Zebrafish Meeting , Mishima , 9/8-9
- 4 . Sakai, C.,Saito, K.,Sakai, N. 「 Characterization and linkage mapping of zebrafish meiotic prophase I mutants 」, 17th Japanese Medaka and Zebrafish Meeting , Mishima , 9/8-9
- 5 . 酒井則良,酒井千春,河崎敏広,齊藤憲二,Siegfried, K.R., Nusslein-Volhard, C. 「ゼブラフィッシュ精子形成異常突然変異体の解析」, 生殖系列の世代サイクルとエピゲノムネットワーク 第4回公開シンポジウム , 豊中 , 11/17-18
- 6 . 酒井千春,齊藤憲二,酒井則良 「減数分裂異常を示すゼブラフィッシュ突然変異体の解析

」, 日本動物学会 第82回大会, 旭川, 9/21-23

7. 河崎敏広, 酒井千春, 酒井則良 「 精原細胞の分化に異常を示すゼブラフィッシュ突然変異体の解析 」, 日本, 旭川, 9/21-23

## EDUCATION

1. 川上浩一、酒井則良、平田晋三、新屋みのり、浅川和秀 第17回小型魚類研究会 三島

## BOOK

1. Shinya, M. ( 2011 ) Craniofacial traits **Medaka -A model for organogenesis, human disease, and evolution** 185 - 199

## PATENT

1. 2011-129549, モロコ細胞株、その製造方法および用途, 高田達之、小山芳江、酒井則良, 立命館大学

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F. GENETIC STRAINS RESEARCH CENTER  
F-e. Plant Genetics Laboratory

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Nori Kurata

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Ito, Y., Thirumurugan, T., Serizawa, A., Hiratsu, K., Ohme-Takagi, M. and Kurata, N. ( 2011 ) Aberrant vegetative and reproductive development by overexpression and lethality by silencing of OsHAP3E in rice. , **Plant Science** , 181 , 105 - 110
- 2 . Tsuda, K., Ito, Y., Sato, Y., and Kurata, N. ( 2011 ) Positive autoregulation of a KNOX gene is essential for shoot apical meristem maintenance in rice , **Plant Cell** , 23 , 4368 - 4381
- 3 . Kubo, T., Yoshimura, A., Kurata, N. ( 2011 ) Hybrid Male Sterility in Rice Is Due to Epistatic Interactions with a Pollen Killer Locus , **Genetics** , 189 , 1083 - 1092
- 4 . Ito, Y., Kimura, F., Hirakata, K., Tsuda, K., Takasugi, T., Eiguchi, M., Nakagawa, K., and Kurata, N. ( 2011 ) Fatty acid elongase is required for shoot development in rice , **Plant J.** , 66 , 680 - 688
- 5 . Ohnishi, T., Takanashi, H., Mogi, M., Takahashi, H., Kikuchi, S., Yano, K., Okamoto, T., Fujita, M., Kurata, N., Tsutsumi, N. ( 2010 ) Distinct Gene Expression Profiles in Egg and Synergid Cells of Rice as Revealed by Cell Type-specific Microarrays , **Plant Physiol.** , 155 , 881 - 891
- 6 . Yamaki, S., Nagato, Y., Kurata, N., Nonomura, K.I. ( 2010 ) Ovule is a lateral organ finally differentiated from the terminating floral meristem in rice. , **Developmental Biology** , 351 , 208 - 216
- 7 . Nonomura, K-I, Eiguchi M., Nakano, M., Takashima, K., Komeda. N., Fukuchi, S., Miyazaki, S., Miyao, A., Hirochika, H., Kurata, N. ( 2010 ) A novel RNA-recognition-motif protein is required for premeiotic G1/S-phase transition in rice (*Oryza sativa* L.). , **PLoS Genetics** , 7 , e1001265 -
- 8 . Ishikawa, R., Ohnishi, T., Kinoshita, Y., Eiguchi, M., Kurata, N., Kinoshita, T. ( 2010 ) Rice interspecies hybrids show precocious or delayed developmental transitions in the endosperm without change to the rate of syncytial nuclear division , **Plant J.** , 65 , 798 - 806
- 9 . Hamada, K., Hongo, K., Suwabe, K., Shimizu, A., Nagayama, T., Abe, R., Kikuchi, S., Yamamoto, N., Fujii, T., Yokoyama, K., Tsuchida, H., Sano, K., Mochizuki, T., Oki, N., Horiuchi, Y., Fujita, M., Watanabe, M., Matsuoka, M., Kurata, N., Yano, K. ( 2010 ) OryzaExpress: An Integrated Database of Gene Expression Networks and Omics Annotations in Rice , **Plant Cell Physiol.** , 52 , 220 - 229

### POSTER PRESENTATIONS

- 1 . 水多陽子, 春島嘉章, 倉田のり 「 イネ亜種間交雑で生殖的隔離を引き起こす重複遺伝子

DPL1,DPL2の解析」, 第52回日本植物生理学会年会, , 3/20-22

2. 津田勝利, 伊藤幸博, 佐藤豊, 倉田のり 「イネにおけるKNOX遺伝子の自己制御」, 第52回日本植物生理学会年会, , 3/20-22

3. Kurata, N., Mizuta, Y., Kubo, T., Harushima Y. 「Reproductive barriers in rice diversification」, SMBE 2011 Kyoto (Symposium6: Molecular bases of speciation), 京都, 7/26-30

4. 小宮怜奈, 大柳一, 新濱充, 渡部聡朗, 筒井康博, 望月孝子, 神沼英里, 中村保一, 倉田のり, 野々村賢一 「イネ生殖細胞特異的Argonauteタンパク質MEL1と結合するsmall RNAsの同定」, 第34回日本分子生物学会年会, 横浜, 12/13-16

5. 小宮怜奈, 大柳一, 新濱充, 渡部聡朗, 筒井康博, 望月孝子, 神沼英里, 中村保一, 倉田のり, 野々村賢一 「イネ生殖細胞特異的Argonauteタンパク質MEL1と結合するsmall RNAsの同定」, 第34回日本分子生物学会年会, 横浜, 12/13-16

6. Takasugi, T., Fujita, M., Kurata, N., Ito, Y. 「Cytokinin-induced KNOX gene expression in rice -a search for a gene connecting cytokinin and KNOX gene」, 第34回日本分子生物学会年会, 横浜, 12/13-16

7. 望月孝子, 長崎英樹, 神沼英里, 大柳一, 倉田のり, 二河成男, 中村保一 「新型シーケンサ・アーカイブ配列からのDNA多型注釈データベース構築」, 第34回日本分子生物学会年会, 横浜, 12/13-16

8. Hamada, K., Fukazawa K., Nagayama, T., Yokoyama, K., Tsuchida, H., Igarashi, K., Kurata, N., Yano, K. 「OryzaExpress: An integrated Database for Gene Expression Networks in Rice」, 第34, 横浜, 12/13-16

9. Kurata, N. 「ASSEMBLING THE O. OFFICINALIS, CC GENOME, SHORT READS」, 9th ISRFG Workop1"International Oryza Map Alignment Project", Taiwan, 11/7-9

10. Ohyanagi, H., Kurata, N. 「DIVERSIFICATION AND EVOLUTION OF TWO SUBSPECIES OF ORYZA SATIVA AND THREE WILD ACCESSIONS OF ORYZA RUFIPOGON」, 9th ISRFG, Taiwan, 11/7-9

11. Takasugi, T., Fujita, M., Kurata, N., Ito, Y. 「A SEARCH FOR A GENE CONNECTING CYTOKININ AND A KNOX GENE」, 9th International Symposium of Rice Functional Genomics, Taiwan, 11/7-9

12. 大柳一, 長崎英樹, 永田俊文, 望月孝子, 神沼英里, 中村保一, 竹下紗由美, 会津智幸, 豊田敦, 藤山秋佐夫, Zhao Qisng, Han Bin, 倉田のり 「栽培イネOryza sativa 2 亜種と栽培種近縁野生イネOryza rufipogon 3 系統の多様性と進化」, 日本遺伝学会第83回大会 ワークショップ, 京都, 9/20-22

13. 濱田和輝, 深澤開, 長山大志, 横山幸治, 土田博子, 五十嵐香理, 倉田のり, 矢野健太郎 「イネの遺伝子発現ネットワーク解析とデータベース」, 日本育種学会第120回講演会, 福井, 9/22-24

14. 久保貴彦, 藤田雅丈, 高橋宏和, 中園幹生, 堤伸浩, 倉田のり 「イネ雌性配偶子形成過程のトランスクリプトーム解析」, 日本育種学会第120回講演会, 福井, 9/22-24

15. 山木辰一郎, 長戸康郎, 野々村賢一, 倉田のり 「イネGYPSY EMBRYO遺伝子は穂の枝分かれと花分裂組織の有限性を制御する」, 日本育種学会第120回講演会, 福井, 9/22-24

16. 高梨秀樹, 平田悠人, 大柳一, 瓦間淳子, 永田俊文, 豊田敦, 藤山秋佐夫, 倉田のり, 堤伸浩 「次世代シーケンサーを用いたイネ雌性配偶体構成細胞のトランスクリプトーム解析」, 日本育種学会第120回講演会, 福井, 9/22-24

17. 大柳一, 長崎英樹, 永田俊文, 望月孝子, 神沼英里, 中村保一, 竹下紗由美, 会津智幸, 豊田敦, 藤山秋佐夫, Q. Zhao, B. Han, 倉田のり 「高速DNAシーケンサーで探る栽培種近縁野生イネ Oryza rufipogon 3系統の多様性と進化」, 日本育種学会第120回講演会, 福井, 9/22-24

18. 須崎大地, 永田俊文, 植田美那子, 倉田のり, 東山哲也 「顕微細胞操作と大規模発現解析を駆使して雌性配偶体が機能を獲得する仕組みに迫る」, 第52回日本植物生理学会年会, , 3/20-22

19. 木本剛彰, 柴博史, 岩野恵, 高橋宏和, 中園幹生, 藤田雅丈, 倉田のり, 磯貝彰 他 「レーザーマイクロダイセクションを利用したシロイヌナズナ葯タペート組織における遺伝子発現様態の網羅的解析」, 第52回日本植物生理学会年会, , 3/20-22

20. 永田俊文, 大柳一, 長崎英樹, 望月孝子, 神沼英里, 中村保一, 会津智幸, 豊田敦 他 「高速シーケンサーを用いたイネ近縁種の比較ゲノム解析」, 第52回日本植物生理学会年会, , 3/20-22

21. 濱田和輝, 本郷耕平, 諏訪部圭太, 清水顕史, 長山大志, 阿部侑奈, 菊地俊介, 山本直樹 他 「OryzaExpress:イネの機能アノテーションと遺伝子発現ネットワークの統合データベース」, 第52回日本植物生理学会年会, , 3/20-22
22. 久保貴彦, 倉田のり 「イネPollen killerを制御するエピスタシスの解析」, 日本育種学会第119回講演会, , 3/29-30
23. 永田俊文, 大柳一, 長崎英樹, 望月孝子, 神沼英里, 中村保一, 会津智幸, 豊田敦, 藤山秋佐夫, 倉田のり 「次世代高速シーケンサーを用いた近縁野生イネ *O. rufipogon*のゲノム比較解析」, 日本育種学会第119回講演会, , 3/29-30
24. 濱田和輝, 本郷耕平, 諏訪部圭太, 清水顕史, 長山大志, 阿部侑奈, 菊地俊介, 山本直樹, 藤井貴朗, 横山幸治, 土田博子, 佐野和美, 望月孝子, 大木信彦, 堀内陽子, 藤田雅丈, 渡辺正夫, 松岡信, 倉田のり, 矢野健太郎 「OryzaExpress:イネの遺伝子発現ネットワークとオミックス情報統合データベース」, 日本育種学会第119回講演会, , 3/29-30
25. 久保山勉, 一谷勝之, 沖山友哉, 濱田和輝, 本郷耕平, 矢野健太郎, 藤田雅丈, 倉田のり, 渡部信義 「HWC1とHWC2によって生じるイネ雑種弱勢のマイクロアレイとGOによる遺伝子発現解析」, 日本育種学会第119回講演会, , 3/29-30
26. 白木英介, 香山弘明, 山本静香, 守口和基, 倉田のり, 鈴木克周 「大腸菌によって引き起こされる植物細胞の生育抑制の解析及び原因遺伝子のゲノム網羅的スクリーニング」, 日本育種学会第119回講演会, , 3/29-30

## EDUCATION

1. 長戸康郎, 倉田のり 国立遺伝学研究所研究会 イネ分子遺伝学の飛躍 三島 11/18-19

## OTHERS

1. 倉田のり, 1, 日本育種学会会長

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F. GENETIC STRAINS RESEARCH CENTER  
F-f. Microbial Genetics Laboratory

F. GENETIC STRAINS RESEARCH CENTER  
F-f. Microbial Genetics Laboratory  
Hironori Niki

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Rhind, N., Chen, Z., Yassour, M., Thompson, D. A., Haas, B. J., Habib, N., Wapinski, I., Roy, S., Lin, M. F., Heiman, D. I., Young, S. K., Furuya, K., Guo, Y., Pidoux, A., Chen, H. M., Robbertse, B., Goldberg, J. M., Aoki, K., Bayne, E. H., Berlin, A. M., Desjardins, C. A., Dobbs, E., Dukaj, L., Fan, L., FitzGerald, M. G., French, C., Gujja, S., Hansen, K., Keifenheim, D., Levin, J. Z., Mosher, R. A., Muller, C. A., Pfiffner, J., Priest, M., Russ, C., Smialowska, A., Swoboda, P., Sykes, S. M., Vaughn, M., Vengrova, S., Yoder, R., Zeng, Q., Allshire, R., Baulcombe, D., Birren, B. W., Brown, W., Ekwall, K., Kellis, M., Leatherwood, J., Levin, H., Margalit, H., Martienssen, R., Nieduszynski, C. A., Spatafora, J. W., Friedman, N., Dalgaard, J. Z., Baumann, P., Niki, H., Regev, A., and Nusbaum, C. ( 2011 ) Comparative functional genomics of the fission yeasts. , **Science** , 332 , 930 - 936
- 2 . AOKI, K., Hayashi, H., Furuya, K., Sato, M., Takagi, T., Osumi, M., Kimura, A., and Niki, H. ( 2011 ) Breakage of the nuclear envelope by an extending mitotic nucleus occurs during anaphase in *Schizosaccharomyces japonicus*. , **Genes Cells** , 16 , 911 - 926
- 3 . Furuya, K., and Niki, H. ( 2011 ) Construction of diploid zygotes by interallelic complementation of *ade6* in *Schizosaccharomyces japonicus*. , **Yeast** , 28 , 747 - 754
- 4 . Yanagihara, K., Niki, H., and Baba, T. ( 2011 ) Direct PCR amplification of the 16S rRNA gene from single microbial cells isolated from an Antarctic iceberg using laser microdissection microscopy. , **Polar Science** , 5 , 375 - 382
- 5 . Hale, CA., Shiomi, D., Liu, B., Bernhardt, TG., Margolin, W., Niki, H., and de Boer, PA. ( 2011 ) Identification of *Escherichia coli* ZapC (YcbW) as a component of the division apparatus that binds and bundles FtsZ polymers. , **Journal of Bacteriology** , 193 , 1393 - 1404
- 6 . Liu, J., Chen, CY., Shiomi, D., Niki, H., and Margolin, W. ( 2011 ) Visualization of bacteriophage P1 infection by cryo-electron tomography of tiny *Escherichia coli*. , **Virology** , 417 , 304 - 11
- 7 . Shiomi, D., and Niki, H. ( 2011 ) A mutation of *ispA* that is involved in isoprenoid biogenesis can improve slow growth of *Escherichia coli* at low temperature. , **Microbiol Immunol** , 55 , 885 - 8

### POSTER PRESENTATIONS

- 1 . 青木敬太, 古谷寛治, 仁木宏典 「 ジャポニカス分裂酵母菌における核膜動態の遺伝学的解析 」, 第28回染色体ワークショップ, 石川, 1/11-1/13
- 2 . 青木敬太, 古谷寛治, 仁木宏典 「 APC/C is involved in nuclear envelope dynamics during mitosis in *Schizosaccharomyces japonicus* 」, 6th UK-Japan Cell Cycle Workshop , Low

Wood Hotel, Windermere, UK , 4/10-4/14

3. 青木敬太,古谷寛治,仁木宏典 「 APC/C is involved in nuclear envelope dynamics during mitosis in *Schizosaccharomyces japonicus* 」, The 6th International Fission Yeast Meeting , Harvard Medical School , 6/25-6/30
4. 青木敬太,古谷寛治,仁木宏典 「 ジャポニカス分裂酵母における核膜動態の遺伝学的解析 」, 第44回酵母遺伝学フォーラム研究報告会, 福岡, 9/5-9/7
5. 青木敬太,志波優,高田啓,古谷寛治,吉川博文,仁木宏典 「 ジャポニカス分裂酵母における核膜動態の遺伝学的解析 」, 第10回核ダイナミクス研究会, 北海道, 10/26-10/28
6. 青木敬太,志波優,高田啓,古谷寛治,吉川博文,仁木宏典 「 ジャポニカス分裂酵母菌を用いた核膜動態の遺伝学的解析 」, 第34回 日本分子生物学会年会, 横浜, 12/13-12/16
7. 塩見 大輔,仁木 宏典 「 細胞骨格タンパク質RodZの分裂面への局在とその生理的意義 」, 第8回21世紀大腸菌研究会, 長野県南木曾町, 5/18~19
8. 塩見 大輔,仁木宏典 「 Cytoskeletal protein RodZ regulates the cell length in collaboration with a cell division apparatus in *Escherichia coli*. 」, IUMS 2011 , 北海道、札幌市, 9/6-10
9. 塩見 大輔,仁木宏典 「 Toward a manipulation of bacterial cell shape 」, 「細胞を作る研究会」4.0, 大阪市, 10/26-28
10. 塩見 大輔,仁木 宏典 「 大腸菌の形態形成を司る細胞骨格タンパク質RodZと細胞分裂の関係 」, 第5回細菌学・若手コロッセウム, 高知県高知市, 8/8-10
11. 野崎晋五, 仁木宏典 「 新規因子PanZによるピルボイル酵素PanDの活性制御 」, 第8回21世紀大腸菌研究会, 南木曾, 5/18-19
12. AOKI, K., Furuya, K., and Niki,H. 「 ジャポニカス分裂酵母菌における核膜動態の遺伝学的解析 」, 第28回染色体ワークショップ, 日本, 1/11-1/13
13. Furuya, K.,Miyabe, I.,Tsutsui, Y.,Kakusho, N.,Masai, H.,Carr AM.,Niki, H. 「 DDK phosphorylates checkpoint clamp Rad9 and promotes its release from damaged Chromatin 」, 第28回染色体ワークショップ, 加賀, 1/11-13

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F. GENETIC STRAINS RESEARCH CENTER  
F-g. Invertebrate Genetics Laboratory

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F-g. Invertebrate Genetics Laboratory  
Ryu Ueda

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1 . Kondo, S., and Perrimon, N. ( 2010 ) A genome-wide RNAi screen identifies core components of the G2-M DNA damage checkpoint. , **Sci. Signal.** , 4 , rs1 -

### POSTER PRESENTATIONS

1 . Senthilkumar D, Hemant Verma, Girish Rathnaparkhi, Ryu Ueda, Anuradha Ratnaparkhi 「 RNAi based screen to identify genetic modifiers of amyotrophic lateral sclerosis 8 protein, VAPB. 」, 1st Asia-Pacific Drosophila Research Conference , Taipei, Taiwan , 5/22-25

2 . Masatoshi Yamamoto, Ryu Ueda, Masayoshi Watada, Muneo Matsuda 「 National BioResource Project-Drosophila 」, 1st Asia-Pacific Drosophila Research Conference , Taipei, Taiwan , 5/22-25

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## G. CENTER FOR GENETIC RESOURCE INFORMATION

### G-a. Genetic Informatics Laboratory

## G. CENTER FOR GENETIC RESOURCE INFORMATION

### G-a. Genetic Informatics Laboratory

Yukiko Yamazaki

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1 . Saito, T., Ariizumi, T., Okabe, Y., Asamizu, E., Tanase, K., Yamazaki, Y., Fukuda, N., Aoki, Ezura (2011) "TOMATOMA": A Novel Tomato Mutant Database Distributing Micro-Tom Mutant Collections , **Plant and Cell Physiology** , , 0 - 0

### POSTER PRESENTATIONS

1 . Watanabe, T.,Takahashi, Y.,Sakaniwa, S.,Tsuchiya, R.,Saito, M.,Yamakawa, T. 「 Improvement to Oryzabase: Integrated Rice Science Database 」, Plant & Animal Genomes XIX Conference , San Diego , 1/15-19

2 . Watanabe, T.,Kimura, G.,Sakaniwa, S.,Saito, M.,Yamakawa, T.,Yamazaki, Y. 「 Extension of Bioresource World Search - from Journals to Biological Resources - 」, Plant & Animal Genomes XIX Conference , San Diego , 1/15-19

3 . Takahashi, Y.,Tsuchiya, R.,Saito, M.,Yamakawa, T. 「 Improvement to Oryzabase: Integrated Rice Science Database 」, Plant & Animal Genomes XIX Conference , San Diego , 1/15-19

### BOOK

1 . 山崎由紀子 (2011) NBRPデータベースの現状と将来展望 実験医学:使えるデータベース・ウェブツール 2374 - 2382

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G. CENTER FOR GENETIC RESOURCE INFORMATION  
G-b. Genome biology Laboratory

G. CENTER FOR GENETIC RESOURCE INFORMATION  
G-b. Genome biology Laboratory  
Yuji Kohara

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Sumiyoshi,S., Takahashi, S., Obata, H., Sugimoto, A., and Kohara, Y. ( 2011 ) The beta-catenin HMP-2 functions downstream of Src in parallel with the Wnt pathway in early embryogenesis of *C. elegans*. , **Developmental Biology** , 355 , 302 - 312
- 2 . Sakudoh T, Nakashima T, Kuroki Y, Fujiyama A, Kohara Y, Honda N, Fujimoto H, Shimada T, Nakagaki M, Banno Y, Tsuchida K. ( 2010 ) Diversity in copy number and structure of a silkworm morphogenetic gene as a result of domestication. , **Genetics** , 187 , 965 - 976
- 3 . Sato S, Hirakawa H, Isobe S, Fukai E, Watanabe A, Kato M, Kawashima K, Minami C, Muraki A, Nakazaki N, Takahashi C, Nakayama S, Kishida Y, Kohara M, Yamada M, Tsuruoka H, Sasamoto S, Tabata S, Aizu T, Toyoda A, Shin-i T, Minakuchi Y, Kohara Y, Fujiyama A, Tsuchimoto S, Kajiyama S, Makigano E, Ohmido N, Shibagaki N, Cartagena JA, Wada N, Kohinata T, Atefeh A, Yuasa S, Matsunaga S, Fukui K ( 2010 ) Sequence analysis of the genome of an oil-bearing tree, *Jatropha curcas* L. , **DNA RESEARCH** , 18 , 65 - 76
- 4 . Katsuma S, Kang W, Shin-i T, Ohishi K, Kadota K, Kohara Y, Shimada T ( 2010 ) Mass identification of transcriptional units expressed from the *Bombyx mori* nucleopolyhedrovirus genome. , **J Gen Virol.** , 92 , 200 - 203

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## G. CENTER FOR GENETIC RESOURCE INFORMATION G-c. Comparative Genomics Laboratory

## G. CENTER FOR GENETIC RESOURCE INFORMATION G-c. Comparative Genomics Laboratory Asao Fujiyama

### RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Chisada, SI., Okamoto, H., Taniguchi, Y., Kimori, Y., Toyoda, A., Sakaki, Y., Takeda, S., and Yoshiura, Y. ( 2011 ) Myostatin-deficient medaka exhibit a double-muscling phenotype with hyperplasia and hypertrophy, which occur sequentially during post-hatch development. , **Dev Biol.** , 359 , 82 - 94
- 2 . Ono, R., Kuroki, Y., Naruse, M., Ishii, M., Iwasaki, S., Toyoda, A., Fujiyama, A., Shaw, G., Renfree, MB., Kaneko-Ishino, T., and Ishino, F. ( 2011 ) Identification of tammar wallaby SIRH12, derived from a marsupial-specific retrotransposition event. , **DNA Research** , 18 , 211 - 219
- 3 . Renfree, MB., Papenfuss, AT., Deakin, JE., Lindsay, J., Heider, T., Belov, K., Rens, W., Waters, PD., Pharo, EA., Shaw, G., Wong, ES., Lefevre, CM., Nicholas, KR., Kuroki, Y., Wakefield, MJ., Zenger, KR., Wang, C., Ferguson-Smith, M., Nicholas, FW., Hickford, D., Yu, H., Short, KR., Siddle, HV., Frankenberg, SR., Chew, KY., Menzies, BR., Stringer, JM., Suzuki, S., Hore, TA., Delbridge, ML., Mohammadi, A., Schneider, NY., Hu, Y., O'Hara, W., Al Nadaf, S., Wu, C., Feng, ZP., Cocks, BG., Wang, J., Flicek, P., Searle, SM., Fairley, S., Beal, K., Herrero, J., Carone, DM., Suzuki, Y., Sagano, S., Toyoda, A., Sakaki, Y., Kondo, S., Nishida, Y., Tatsumoto, S., Mandiou, I., Hsu, A., McColl, KA., Landsell, B., Weinstock, G., Kuczek, E., McGrath, A., Wilson, P., Men, A., Hazar-Rethinam, M., Hall, A., Davies, J., Wood, D., Williams, S., Sundaravadanam, Y., Muzny, DM., Jhangiani, SN., Lewis, LR., Morgan, MB., Okwuonu, GO., Ruiz, SJ., Santibanez, J., Nazareth, L., Cree, A., Fowler, G., Kovar, CL., Dinh, HH., Joshi, V., Jing, C., Lara, F., Thornton, R., Chen, L., Deng, J., Liu, Y., Shen, JY., Song, XZ., Edson, J., Troon, C., Thomas, D., Stephens, A., Yapa, L., Levchenko, T., Gibbs, RA., Cooper, DW., Speed, TP., Fujiyama, A., Graves, JA., O'Neill, RJ., Pask, AJ., Forrest, SM., and Worley, KC. ( 2011 ) Genome sequence of an Australian kangaroo, *Macropus eugenii*, provides insight into the evolution of mammalian reproduction and development. , **Genome Biology** , 12 , R81 -
- 4 . W, Liu., D, Morito., S, Takashima., Y, Mineharu., H, Kobayashi., T, Hitomi., H, Hashikata., N, Matsuura., S, Yamazaki., A, Toyoda., K, Kikuta., Y, Takagi., KH, Harada., A, Fujiyama., R, Herzig., B, Kirschek., L, Zou., JE, Kim., M, Kitakaze., S, Miyamoto., K, Nagata., N, Hashimoto., and A. Koizumi. ( 2011 ) Identification of RNF213 as a Susceptibility Gene for Moyamoya Disease and Its Possible Role in Vascular Development. , **PLoS One.** , 6 , e22542 -
- 5 . Takahashi, S., Toyoda, A., Sekiyama, Y., Takagi, H., Nogawa, T., Uramoto, M., Suzuki, R., Koshino, H., Kumano, T., Panthee, S., Dairi, T., Ishikawa, J., Ikeda, H., Sakaki, Y., and Osada, H. ( 2011 ) Reveromycin A biosynthesis uses RevG and RevJ for stereospecific spiroacetal formation. , **Nature Chemical Biology** , 7 , 461 - 468

- 6 . Watanabe, T., Tomizawa, S., Mitsuya, K., Totoki, Y., Yamamoto, Y., Kuramochi-Miyagawa, S., Iida, N., Hoki, Y., Murphy, P.J., Toyoda, A., Gotoh, K., Hiura, H., Arima, T., Fujiyama, A., Sado, T., Shibata, T., Nakano, T., Lin, H., Ichiyanagi, K., Soloway, P.D., and Sasaki, H. ( 2011 ) Role for piRNAs and noncoding RNA in de novo DNA methylation of the imprinted mouse Rasgrf1 locus. , **Science** , 332 , 848 - 852
- 7 . Watanabe, T., Chuma, S., Yamamoto, Y., Kuramochi-Miyagawa, S., Totoki, Y., Toyoda, A., Hoki, Y., Fujiyama, A., Shibata, T., Sado, T., Noce, T., Nakano, T., Nakatsuji, N., Lin, H., and Sasaki, H. ( 2010 ) MITOPLD Is a Mitochondrial Protein Essential for Nuage Formation and piRNA Biogenesis in the Mouse Germline. , **Dev Cell** , 20 , 364 - 375
- 8 . Hongoh, Y., and Toyoda, A. ( 2010 ) Whole-genome sequencing of unculturable bacterium using whole-genome amplification. , **Methods Mol Biol.** , 733 , 25 - 33
- 9 . Y., Kazuki, H., Hoshiya, M., Takiguchi, S., Abe, Y., Iida, M., Osaki, M., Katoh, M., Hiratsuka, Y., Shirayoshi, K., Hiramatsu, E., Ueno, N., Kajitani, T., Yoshino, K., Kazuki, C., Ishihara, S., Takehara, S., Tsuji, F., Ejima, A., Toyoda, Y., Sakaki, V., Larionov, N., Kouprina, and M., Oshimura ( 2010 ) Refined human artificial chromosome vectors for gene therapy and animal transgenesis. , **Gene Therapy** , 18 , 384 - 393
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## H. STRUCTURAL BIOLOGY CENTER

### H-a. Biological Macromolecules

## H. STRUCTURAL BIOLOGY CENTER

### H-a. Biological Macromolecules

Kazuhiro Maeshima

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Maeshima, K., Hihara, S., Takata H. (2011) New insight into the mitotic chromosome structure: irregular folding of nucleosome fibres? , **Cold Spring Harbor Symposia on Quantitative Biology** , Volume 75 , 439 - 444
2. Ikeda, T., Kanai, Y., Iwai, Y., Kojima, TM., Maeshima, K., Meissl, W., Kobayashi, T., Nebiki, T., Miyamoto, S., Pokhil, GP., Narusawa, T., Imamoto, N., Yamazaki Y., (2011) Glass capillary optics for producing nanometer sized beams and its applications , **Surface and Coatings Technology** , 206 , 859 - 863
3. Pope B.D., Tsumagari K., Battaglia D., Ryba T., Hiratani I., Ehrlich M., Gilbert D.M. (2011) DNA replication timing is maintained genome-wide in primary human myoblasts independent of D4Z4 contraction in FSH muscular dystrophy , **PLoS One** , 6 , e27413 -
4. Ryba T., Hiratani I., Sasaki T., Battaglia D., Kulik M., Zhang J., Dalton S., Gilbert D.M. (2011) Replication timing: a fingerprint for cell identity and pluripotency , **PLoS Computational Biology** , 7 , e1002225 -
5. Ryba T., Battaglia D., Pope B.D., Hiratani I., Gilbert D.M. (2011) Genome-scale analysis of replication timing: from bench to bioinformatics , **Nature Protocols** , 6 , 870 - 895
6. Maeshima, K., Iino, H., Hihara, S., Imamoto, N. (2011) Nuclear Size, Nuclear Pore Number, and Cell Cycle. , **Nucleus** , , in press -
7. Takata H., and Maeshima, K. (2011) Irregular folding of nucleosomes in the cell , **Physics Life of Reviews** , 8 , 51 - 52

### ORAL PRESENTATION

1. Kazuhiro Maeshima Nuclear pore formation, but not nuclear growth, is governed by cyclin-dependent Kinases (Cdks) during interphase in human cells Blue Seminar at EMBL Heidelberg 10/18
2. 前島一博 細胞周期における細胞核構造の制御 第56回医薬会セミナー 国立国際医療センター 2/18
3. 前島一博 一本の長いヒトゲノムDNAはどのように染色体内で折り畳まれているのか? 熊本大学プロジェクトゼミ 熊本 2/21
4. 前島一博 一本の長いヒトゲノムDNAは染色体や細胞核の中でどのように折り畳まれているのか? -遺伝情報の収納と読み出しについて ソニーオープンラボ講演会 御茶ノ水 3/4
5. Kazuhiro Maeshima Mitotic chromosome structure: irregular folding of nucleosome fibers without the 30-nm chromatin fiber Bauer Forum, FAS Center for Systems Biology, Harvard University Cambridge, MA, USA 6/8

6 . Kazuhiro Maeshima Mitotic chromosome structure: irregular folding of nucleosome fibers without the 30-nm chromatin fiber Seminar at The Rockefeller University NY, USA  
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## POSTER PRESENTATIONS

- 1 . Hideaki Takata, Tomo Hanafusa, Toshiaki Mori, Yuko Yoshikawa, Kenichi Yoshikawa, Kazuhiro Maeshima 「 How can we know the chromatin environment in living cells? - Structural analysis of mitotic chromosomes in living cells – 」, 第49回日本生物物理学会年会, 姫路, 9/16-9/18
- 2 . Saera Hihara, Changi Pack, Kazunari Kaizu, Yasushi Sako, Masataka Kinjo, Koichi Takahashi, Kazuhiro Maeshima 「 How can we know the chromatin environment in living cells? -Structural analysis of mitotic chromosomes in living cells – 」, 第49回日本生物物理学会年会, 姫路, 9/16-9/18
- 3 . 前島一博 「細胞核内と分裂期染色体内のglobalなクロマチン構造」, 特定領域研究遺伝情報デコード成果報告シンポジウム, 東京, 東京
- 4 . Kazuhiro Maeshima 「 How is a Long Strand of DNA Compacted into a Chromosome? 」, How is a Long Strand of DNA Compacted into a Chromosome?, Albany, SUNY, NY, USA, 6/14-6/19
- 5 . Kazuhiro Maeshima 「 Mitotic chromosome structure: irregular folding of nucleosome fibers without the 30-nm chromatin fiber 」, Gordon Research Conference: Chromosome Dynamics, Mount Snow Resort, VT, USA, 7/10-7/15
- 6 . Kazuhiro Maeshima, Yoshinori Nishino, Yasumasa Joti, Kazuki Ito, Mikhail Eltsov, Tetsuya Ishikawa 「 How is a long strand of genomic DNA organized into chromosome? 」, 第49回日本生物物理学会年会, 姫路, 9/16-9/18
- 7 . Hiratani I., Maeshima K. 「 Global genome reorganization revealed by genome-wide DNA replication timing analysis: exploring its significance during early stages of mouse development 」, 第34回日本分子生物学会年会, 横浜, 12/13-16
- 8 . Hiratani I., Ryba T., Itoh M., Rathjen J., Kulik M., Papp B., Fussner E., Bazett-Jones D.P., Plath K., Dalton S., Rathjen P.D., Gilbert D.M. 「 Genome-wide dynamics of DNA replication timing revealed by in vitro models of mouse embryogenesis - Implications for higher-order genome organization and its developmental regulation 」, CDB Symposium 2011 Epigenetic Landscape in Development and Disease, 神戸, 3/14

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H. STRUCTURAL BIOLOGY CENTER  
H-d. Biomolecular Structure Laboratory

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H-d. Biomolecular Structure Laboratory  
Yasuo Shirakihara

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1 . Aramaki, H., Kabata, H., Takeda, S., Itou, H., Nakayama, H., Shimamoto, N. ( 2011 )  
Formation of repressor-inducer-operator ternary complex: negative cooperatively of D-  
camphor binding to CamR , **Genes to Cells** , 16 , 1200 - 1207

### POSTER PRESENTATIONS

1 . Yoshimune,K&Shirakihara,Y 「 Structure of Salt-tolerant Glutaminase:Structural Basis  
for Salt Tolerance 」, 生物物理学会49回年会, 姫路, 9/18  
2 . 伊藤啓、矢倉勝、伊藤建夫、白木原康雄 「複製開始因子ColE2-Repによるori認識機構  
の構造生物学的研究」, 日本結晶学会2011年年会, 北海道札幌市, 11/24-25

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H. STRUCTURAL BIOLOGY CENTER  
H-e. Gene Network Laboratory

H. STRUCTURAL BIOLOGY CENTER  
H-e. Gene Network Laboratory  
Emiko Suzuki

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Kobayashi,Y.,Kimura,K.,and Katsura,I. ( 2011 ) Ultradian rhythm in the intestine of *Caenorhabditis elegans* is controlled by the C-terminal region of the FLR-1 ion channel and the hydrophobic domain of the FLR-4 protein kinase , **Genes Cells** , 16 , 565 - 575
- 2 . Mochizuki,H.,Toda,H.,Ando,M.,Kurusu,M.,Tomoda,T.,and Furukubo-Tokunaga,K. ( 2011 ) Unc-51/ATG1 Controls Axonal and Dendritic Development via Kinesin-Mediated Vesicle Transport in the *Drosophila* Brain. , **PLoS ONE** , 6 , e19632 -
- 3 . Nakayama,M.,Sato,H.,Okuda,T.,Fujisawa,N.,Kono,N.,Arai,H.,Suzuki,E.,Umeda,M.,Ishikawa,H.,and Matsuno,K. ( 2011 ) *Drosophila* carrying *pex3* or *pex16* mutations are models of Zellweger syndrome that reflect its symptoms associated with the absence of peroxisomes , **PLoS ONE** , 6 , e22984 -
- 4 . Sakaidani,Y.,Nomura,T.,Matsuura,A.,Ito,M.,Suzuki,E.,Murakami,K.,Nadano,D.,Matsuda,T.,Furukawa,K. and Okajima,T. ( 2011 ) O-linked-N-acetylglucosamine on extracellular protein domains mediates epithelial cell-matrix interactions , **Nature communications** , 2 , 583 - 592
- 5 . Yamakawa,T.,Yamada,K.,Sasamura,T.,Nakazawa,N.,Kanai,M.,Suzuki,E.,Fortini,Mark E.,and Matsuno,K. ( 2011 ) Deficient Notch signaling associated with neurogenic *pecanex* is compensated for by the unfolded protein response in *Drosophila* , **Development** , 139 , 558 - 567
- 6 . Nakayama,M.,Sato,H.,Okuda,T.,Fujisawa,N.,Kono,N.,Arai,H.,Suzuki,E.,Umeda,M.,Ishikawa,H.,and Matsuno,K. ( 2011 ) *Drosophila* carrying *Pex3* or *Pex16* mutations are models of Zellweger Syndrome that reflect its symptoms associated with the absence of peroxisomes. , **PLoS ONE** , 6 , 22984 -

### POSTER PRESENTATIONS

- 1 . Yuta Sakaidani,Tomoko Nomura,Aiko Matsuura,Makiko Ito,Emiko Suzuki,Kosuke Murakami,Daita Nadano,Tsukasa Matsuda,Koichi Furukawa,Tetsuya Okajima. 「 O-GlcNAc on extracellular protein domains mediates epithelial cell-matrix interaction 」, 第75回日本生化学会 中部支部例会・シンポジウム , 静岡 , 5/28
- 2 . Yuta Sakaidani,Tomoko Nomura,Aiko Matsuura,Makiko Ito,Emiko Suzuki,Kosuke Murakami,Daita Nadano,Tsukasa Matsuda,Koichi Furukawa,Tetsuya Okajima. 「 O-GlcNAc on extracellular domains mediates cell adhesion to the extracellular matrix 」, 第31回内藤コンファレンス , 札幌 , 9/13-16
- 3 . Mitsuhiro Kurusu,Takeo Katsuki,Kai Zinn, Emiko Suzuki. 「 Intrinsic control of spatiotemporal change in N-cadherin expression during neuronal maturation 」, 第34回日本神経科学大会 , 横浜 , 9/14-17
- 4 . Yuta Sakaodani,Tomoko Nomura,Aiko Matsuura,Makiko Ito,Emiko Suzuki,Kosuke Murakami,Daita Nadano,KoichiFurukawa,Tetsuya Okajima. 「 O-GlcNAc on extracellular protein domains mediates epithelial cell-matrix interaction 」, 第84回日本生化学会大会 , 京都 , 9/21-24
- 5 . 堺谷祐太,野村朋子,松浦愛子,伊藤麻紀子,鈴木えみ子,村上耕介,灘野大太,松田幹,古川鋼一,岡島徹也. 「 細胞外タンパク質ドメインにおけるO-GlcNAcは上皮と細胞外マトリックスの相互作用に関わる 」, 糖鎖科学名古屋拠点・第9回若手の力 フォーラム , 岐阜 , 10/22
- 6 . Tomoko Yamakawa, Kenta Yamada, Takeshi Sasamura, Naotaka Nakazawa, Maiko Kanai, Emiko Suzuki, Mark E. Fortini, and Kenji Matsuno. 「 Function of a neurogenic gene, *pecanex* in Notch

- signaling. ], The 1st Asia-Pacific Drosophila Research Conference , Taipei Taiwan , 5/22-5/25
- 7 . Tomoko Yamakawa, Kenta Yamada, Takeshi Sasamura, Naotaka Nakazawa, Maiko Kanai, Emiko Suzuki, Mark E. Fortini, and Kenji Matsuno. 「 Function of a neurogenic gene, pecanex in Notch signaling. ], 第34回日本分子生物学会年会, , 神奈川 , 12/13-12/16
- 8 . Tomoko Yamakawa, Kenta Yamada, Takeshi Sasamura, Naotaka Nakazawa, Maiko Kanai, Emiko Suzuki, Mark E. Fortini, and Kenji Matsuno. 「 Function of a neurogenic gene, pecanex in Notch signaling. ], 第6回Notch研究会 , 千葉 , 11/14,11/15
- 9 . Kanae Iijima-Ando\*, Michiko Sekiya, Emiko Suzuki and Koichi Iijima 「 Disruption of mitochondrial transport promotes tau toxicity through Alzheimer's disease-related tau phosphorylation. ], Alzheimer's Association International Conference on Alzheimer's Disease 2011 , Paris , 7/20
- 10 . Kanae Iijima-Ando\*, Michiko Sekiya, Emiko Suzuki and Koichi Iijima 「 Loss of axonal mitochondria promotes Alzheimer's disease-related tau phosphorylation and toxicity. ], Society for Neuroscience annual meeting , Washington DC , 11/13

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H. STRUCTURAL BIOLOGY CENTER  
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H-f. Multicellular Organization Laboratory  
Hitoshi Sawa

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. 伊原伸治 (2011) 線虫の子宮・陰門形成における組織境界は基底膜の移動度接着分子により制御される, 実験医学, 29, 2143 - 2147
2. Ihara, S., Hagedorn E. J., Morrissey M. A., Chi Q., Motegi. F., Kramer J. M. and Sherwood D. R. (2011) Basement Membrane Sliding and Targeted Adhesion Remodels Tissue Boundaries During Uterine vulval Attachment in *C. elegans*. , **Nature Cell Biology** , , 641 - 651
3. Sugioka, K., Mizumoto, K. & Sawa, H. (2011) Wnt regulates spindle asymmetry to generate asymmetric nuclear  $\beta$ -catenin in *C. elegans*. , **Cell** , , 942 - 945
4. Sugioka, K. Sawa, H. (2011) Wntシグナルは非対称分裂時に非対称な微小管の制御を介して $\beta$ -cateninの非対称な核局在を形成する , 細胞工学 , , 1294 - 1295
5. Yamamoto, Y., Takeshita ,H. & Sawa ,H. (2011) Multiple Wnts redundantly control polarity orientation in *Caenorhabditis elegans* epithelial stem cells. , **PLoS Genetics** , , -

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## I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN

### I-a. Laboratory for DNA Data Analysis

## I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN

### I-a. Laboratory for DNA Data Analysis

Takashi Gojobori

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Ogura,A., Lin,M., Shigenobu,Y., Fujiwara,A., Ikeo,K., Nagai,S. ( 2011 ) Effective gene collection from the metatranscriptome of marine microorganisms , **BMC Genomics** , 12 , -
- 2 . Hatin, W., Nur-Shafawati, A., Zahri, M., Xu, S., Jin, L., Tan, S-G., Rizman-Idid, M., Zifalil, B., and Gojobori, T., The HUGO Pan-Asian SNP Consortium ( 2011 ) Population genetic structure of peninsular Malaysia Malay sub-ethnic groups , **PLoS One** , 6 , 1 - 5
- 3 . Yang,, X., Xu, S., Gojobori, T., The HUGO Pan-Asian SNP Consortium ( 2011 ) Identification of close relatives in the HUGO Pan-Asian SNP database , **PLoS One** , 6 , 1 - 7
- 4 . Ezawa, K.,Ikeo,K.,Gojobori,T.,Saitou,N. ( 2011 ) Evolutionary patterns of recently emerged animal duplogs , **Genome Biol Evol.** , 3 , 1119 - 1135
- 5 . Barrero, R., Keeble-Gagnère,G., Zhang.B., Moolhuijzen,P., Ikeo,K., Tateno, Y., Gojobori,T., Guerrero,FD., Lew-Tabor, A., Bellgard,M. ( 2011 ) Evolutionary conserved microRNAs are ubiquitously expressed compared to tick-specific miRNAs in the cattle tick *Rhipicephalus(Boophilus)microplus* , **BMC Genomics** , 12 , 1 - 17
- 6 . Wang,C., Kazuki,Y., Oshimura,M., Ikeo,K., Gojobori, T. ( 2011 ) Gene dosage imbalance of human chromosome 21 in mouse embryonic stem cells differentiating to neurons , **Gene** , 481 , 93 - 101
- 7 . Takayama, K., Tsutsumi, S., Katayama, S., Okayama, T., Horie-Inoue, K., Ikeda, K., Urano, T., Kawazu, C., Hasegawa, A., Ikeo, K., Gojobori, T., Ouchi, Y., Hayashizaki, Y., Aburatani, H., Inoue, S. ( 2011 ) Integration of cap analysis of gene expression and chromatin immunoprecipitation analysis on array reveals genome-wide androgen receptor signaling in prostate cancer cells , **Oncogene** , 30 , 619 - 630
- 8 . Kobayashi, Y., Suzuki, Y., Itou, T., Ito, F., Gojobori, T., Sakai, T. ( 2011 ) Evolutionary history of dog rabies in Brazil , **J of General Virology** , 92 , 85 - 90
- 9 . Kaminuma, E., Kosuge, T., Kodama, Y., Aono, H., Mashima, J., Gojobori, T., Sugawara, H., Ogasawara, O., Takagi, T., Okubo, K., Nakamura, Y. ( 2011 ) DDBJ Progress Report , **Nucleic Acids Res.** , 39 , 22 - 27
- 10 . Gaudet, P., Bairoch, A., Field, D., Sansone, SA., Taylor, C., Attwood, TK., Bateman, A., Blake, JA., Bult, CJ., Cherry, JM., Chisholm, RL., Cochrane, G., Cook, CE., Eppig, JT., Galperin, MY., Gentleman, R., Goble, CA., Gojobori, T., Hancock, JM., Howe, DG., Imanishi, T., Kelso, J., Landsman, D., Lewis, SE., Mizrachi, IK., Orchard, S., Ouellette, BF., Ranganathan, S., Richardson, L., Rocca-Serra, P., Schofield, PN., Smedley, D., Southan, C., Tan, TW., Tatusova, T., Whetzel, PL., White, O., Yamasaki, C., on behalf of the

- BioDBCore working group. ( 2011 ) Towards BioDBcore: a community-defined information specification for biological databases. , **Nucleic Acids Res.** , 39 , 7 - 10
- 11 . Gaudet, P., Bairoch, A., Field, D., Sansone, SA., Taylor, C., Attwood, TK., Bateman, A., Blake, JA., Bult, CJ., Cherry, JM., Chisholm, RL., Cochrane, G., Cook, CE., Eppig, JT., Galperin, MY., Gentleman, R., Goble, CA., Gojobori, T., Hancock, JM., Howe, DG., Imanishi, T., Kelso, J., Landsman, D., Lewis, SE., Mizrahi, IK., Orchard, S., Ouellette, BF., Ranganathan, S., Richardson, L., Rocca-Serra, P., Schofield, PN., Smedley, D., Southan, C., Tan, TW., Tatusova, T., Whetzel, PL., White, O., Yamasaki, C., on behalf of the BioDBCore working group. ( 2011 ) Towards BioDBcore: a community-defined information specification for biological databases. , **Database** , 2011 , 1 - 6
- 12 . Fukuchi, S., Hosoda, K., Homma, K., Gojobori, T. and Nishikawa, K. ( 2011 ) Binary classification of protein molecules into intrinsically disordered and ordered segments , **BMC Struct Biol.** , 11 , 1 - 29
- 13 . Bousquet, J., Anto, J., Sterk, P., Adcock, I., Brahmachari, S., Roca, J., Agusti, A., Gojobori, T., Auffray, C., + 55 other authors. ( 2011 ) Systems medicine and integrated care to combat chronic noncommunicable diseases , **Genome Medicine** , 3 , 1 - 12
- 14 . 五條堀 孝、山内一也 ( 2011 ) 生物とウイルスの奇妙な関係 , ニュートンムック , 別冊 , 118 - 119
- 15 . 岩田想、川上善之、五條堀孝、鈴木榮一郎、濡木理、山本雅之、若槻壮市 ( 2011 ) 見えてきたタンパク構造を知る本当の意義 (前編) , 実験医学 9月号 , 22 , 2282 - 2289
- 16 . 岩田想、川上善之、五條堀孝、鈴木榮一郎、濡木理、山本雅之、若槻壮市 ( 2011 ) 構造生物学は次のパラダイムを見出せるか (後編) , 実験医学 10月号 , 29 , 2678 - 2685
- 17 . 中山潤一、五條堀孝、杉本直己 ( 2011 ) 見て・読んで納得! DNAとは何か , ニュートン , 11月号 , 18 - 59

## ORAL PRESENTATION

- 1 . Takashi Gojobori "Introduction to Evolutionary and Comparative Genomics" China-Japan-Korea Bioinformatics Training Course The Ocean Suite Hotel, Jeju Island, Korea 5/12
- 2 . 五條堀 孝 「データ解析拠点の構築と情報研究開発」 セルイノベーション、バイオインダストリー協会との勉強会「セルイノベーションプログラムのデータ解析拠点における研究動向」バイオインダストリー協会 5/23
- 3 . 五條堀 孝 「ゲノム情報から見た進化」 東京大学「獣医学特論」「ゲノムから見た妊娠成立」 東京大学弥生講堂 7/15
- 4 . Takashi Gojobori Closing Remarks National Institute of Genetics Meeting, Young Researchers Conference on Evolutionary Genomics 学術総合センター 8/2
- 5 . Takashi Gojobori presentation HPC戦略プログラム1大規模生命データ解析ワークショップ 東京国際フォーラム 9/3
- 6 . 五條堀 孝 「ゲノム情報とバイオインフォマティクス」 北九州産業学術研究都市産学連携フェア、バイオ分野セミナー 北九州学術研究都市学術情報センター 10/19
- 7 . Takashi Gojobori "Theme 4: Large-scale analysis of life data, Sub Theme D: Meta-genomic analysis and comparative genomic analysis" HPC戦略プログラム分野1 全体ワークショップ 理化学研究所(埼玉県和光市) 12/4
- 8 . 五條堀 孝 "Progress of genome studies using a next generation sequencer"「次世代シーケンサーを用いたゲノム関連研究の展開」 放射線影響研究所における講演会 放射線影響研究所(広島県) 12/16
- 9 . 池尾 一穂 「バイオインフォマティクス」 上智大学大学院理工学研究科 集中講義 上智大学 6/4.11.25
- 10 . 池尾 一穂 大規模配列比較からどのように生命現象を理解するか 名古屋大学大学院 Global COE ベーシックサイエンスコース 名古屋大学 10/7
- 11 . Ikeo,K. Way of handling of large scale data by NGS Korea-China-Japan Bioinformatics Training Course Jeju island, Korea 5/12
- 12 . Ikeo,K. Genome Bioinformatics National Cheng Kung University Intensive Course National Cheng Kung University,Taiwan 11/7-9
- 13 . Takashi Gojobori "The impacts of the next generation sequencing techniques on the biological researches: chances and challenges" National Taiwan Ocean University

(NTOU), Taiwan, China 1/22

14. Takashi Gojobori "The impacts of the next generation sequencing techniques on the biological researches: chances and challenges" National Cheng Kung University(NCKU), Taiwan, China 1/23

15. 五條堀 孝 「ゲノムから探る脳の進化」 慶應大学特別講義 慶應大学医学部解剖学教室(東京) 1/27

16. 五條堀 孝 「DNA型鑑定～犯人と被告人との同一性を立証するための証拠として～」 刑事鑑定研究会 静岡地方裁判所(静岡) 2/7

17. 五條堀 孝 「ゲノム先端研究からみた社会ビジョン-ゲノム情報社会を目指して-」 日本学術振興会協力会理事会・評議員会終了後の講演会 グランドアーク半蔵門(東京) 2/24

## POSTER PRESENTATIONS

1. Takashi Gojobori 「 "Evolutionary Origin of Camera-type eye" 」, International Symposium of Biodiversity, Taiwan, 3/25

2. 五條堀 孝 「 「ライフサイエンス革命によるゲノム情報社会の将来形成」 」, 九州大学創立百周年記念講演会, 福岡県福岡市, 6/18

3. Takashi Gojobori 「 "Evolutionary Origin of Camera-type eye" 」, Meeting "Molecular Evolution in the Genome Era", Rome 3 University, Rome, Italy, 9/30

4. Takashi Gojobori 「 "Towards the Genome Information-oriented Society, and its Role of Database" 」, FAOBMB, Biopolis, Singapore, 10/7

5. 五條堀 孝 「 「眼の起源と進化-遺伝子からみた世界-」 」, 第65回日本臨床眼科学会, 東京, 10/9

6. Takashi Gojobori 「 "Vision from Data-intensive Life Science: Genome Information-oriented Society" 」, High Level Symposium to Commemorate CODATA's 45th Anniversary, Beijing, China, 10/30

7. Takashi Gojobori 「 "Revolutionary Developments of Genomic Research and its Application to a study of Marine Micro-Biodiversity" 」, Cross-strain diversity symposium" BSROC Annual Meeting in Plant Sciences 2011, Taiwan, 11/14

8. Takashi Gojobori 「 "Dynamic evolution of translation initiation mechanisms in prokaryotes" 」, Workshop III: Evolutionary Genomics, GENWS3, Los Angeles, USA, 11/16

9. Takashi Gojobori 「 Opening Remarks "Revolutionary Developments of Genome Research and its Application to a Study of Marine Micro-Biodiversity" 」, NCKU Symposium "Genomic Conversation and Diversity of Organisms-Beyond the NGS time of Life Science", Taiwan, 12/10

10. 五條堀 孝 「 「次世代シーケンサー時代のデータベースを考える」 "What is useful integration of biological information in genome science?" 」, 日本分子生物学会 ワークショップ「役に立つデータベース、役に立たないデータベース」"Useful and Useless data base", 神奈川県, 12/14

11. 池尾一穂 「 生物進化における遺伝子重複と多様性 」, 第6回地文台シンポジウム&東工大流動機構国際ワークショップ, 東京, 11/1

12. 池尾一穂 「 次世代シーケンサーがもたらす大量データの世界 」, 日本人類遺伝学会第56回大会 超高速シーケンサー情報算出とバイオインフォマティクス, 千葉, 11/10

13. Ikeo,K. 「 Transcriptome analysis by using large scale sequencing 」, Bioinformatics Symposium, Jeju island, Korea, 5/13

14. Ikeo,K. 「 Genome wide data analysis by using NGS 」, SMBE2011, Kyoto, Japan, 7/28

15. Ikeo,K. 「 Genome wide data analysis by using NGS 」, Next Generation Sequencing Asia Congress, Singapore, 10/4

16. Ikeo,K. 「 Comparative analysis of gene expression for convergent evolution of camera eye between octopus and human 」, Genomic Conversation and Diversity of Organisms, National Cheng Kung University, Taiwan, 12/10

17. 五條堀 孝 「 「ライフサイエンスにおける“多様性のなかの統一”(基調講演) 」, 日本・サウジアラビア青年交流フォーラム、プレフォーラム「日本・イスラム文明間対話シンポジウム-多様性の中の統一-」, 東京, 2/20

18. Takashi Gojobori 「 Opening Remarks 」, Japan-Singapore Joint Workshop for

## EDUCATION

1. 五條堀 孝 国立遺伝学研究所研究集会「次世代シーケンシング時代の分子進化研究」  
静岡県三島市 4/27
2. 五條堀 孝 日本組織適合性学会 静岡県静岡市 8/28-8/30
3. DNA鑑定学会 DNA鑑定学会第4回大会 東京都港区 11/24-11/25
4. 五條堀 孝 遺伝情報分析研究室Winter Seminar 静岡県熱海市 ホテルサンミ倶楽部  
1/16
5. 五條堀 孝 ヒトゲノム多様性研究集会 静岡県三島市 国立遺伝学研究所 3/4

## BOOK

1. Takashi Gojobori ( 2011 ) Genomic Exploration of the RNA Continent **The Proceedings of the Plenary Sesstion 28 October - 1 November 2010** 245 - 251

## OTHERS

1. 五條堀 孝 , 1 , 日本遺伝学会会長
2. 五條堀 孝 , 1 , DNA鑑定学会理事長
3. 五條堀 孝 , 1 , 日本組織適合性学会理事
4. 五條堀 孝 , 1 , 日本組織適合性第20回大会委員長
5. 五條堀 孝 , 1 , 日本分子生物学会理事
6. 五條堀 孝 , 3 , Section Editor for BMC Genomics
7. 五條堀 孝 , 3 , Editorial Board of Genome Research
8. 五條堀 孝 , 3 , Associate Editor of PLoS Genetics
9. 五條堀 孝 , 3 , Associate Editor of Molecular Biology and Evolution
10. 五條堀 孝 , 3 , Editor of GENE
11. 五條堀 孝 , 3 , Editor of FEBS Letters
12. 五條堀 孝 , 1 , 日本進化学会評議員

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## I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN I-b. Laboratory for Gene-Product Informatics

## I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN Ib. Laboratory for Gene-Product Informatics Yasukazu Nakamura

### RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Katayama T, Wilkinson MD, Vos R, Kawashima T, Kawashima S, Nakao M, Yamamoto Y, Chun HW, Yamaguchi A, Kawano S, Aerts J, Aoki-Kinoshita KF, Arakawa K, Aranda B, Bonnal RJ, Fernández JM, Fujisawa T, Gordon PM, Goto N, Haider S, Harris T, Hatakeyama T, Ho I, Itoh M, Kasprzyk A, Kido N, Kim YJ, Kinjo AR, Konishi F, Kovarskaya Y, von Kuster G, Labarga A, Limviphuvadh V, McCarthy L, Nakamura Y, Nam Y, Nishida K, Nishimura K, Nishizawa T, Ogishima S, Oinn T, Okamoto S, Okuda S, Ono K, Oshita K, Park KJ, Putnam N, Senger M, Severin J, Shigemoto Y, Sugawara H, Taylor J, Trelles O, Yamasaki C, Yamashita R, Satoh N, Takagi T. ( 2011 ) The 2nd DBCLS BioHackathon: interoperable bioinformatics Web services for integrated applications. , **J Biomed Semantics.** , , -
- 2 . Yilmaz, P., Gilbert, J.A., Knight, R., Amaral-Zettler, L., Karsch-Mizrachi, I., Cochrane, G., Nakamura, Y., Sansone, S.A., Glöckner, F.O., Field, D. ( 2011 ) The genomic standards consortium: bringing standards to life for microbial ecology. , **ISME J.** , 5 , 1565 - 1567
- 3 . Guberman JM, Ai J, Arnaiz O, Baran J, Blake A, Baldock R, Chelala C, Croft D, Cros A, Cutts RJ, Di Génova A, Forbes S, Fujisawa T, Gadaleta E, Goodstein DM, Gundem G, Haggarty B, Haider S, Hall M, Harris T, Haw R, Hu S, Hubbard S, Hsu J, Iyer V, Jones P, Katayama T, Kinsella R, Kong L, Lawson D, Liang Y, Lopez-Bigas N, Luo J, Lush M, Mason J, Moreews F, Ndegwa N, Oakley D, Perez-Llamas C, Primig M, Rivkin E, Rosanoff S, Shepherd R, Simon R, Skarnes B, Smedley D, Sperling L, Spooner W, Stevenson P, Stone K, Teague J, Wang J, Wang J, Whitty B, Wong DT, Wong-Erasmus M, Yao L, Youens-Clark K, Yung C, Zhang J, Kasprzyk A. ( 2011 ) BioMart Central Portal: an open database network for the biological community. , **Database : the journal of biological databases and curation** , 2011 , bar041 -
- 4 . Hamada K, Hongo K, Suwabe K, Shimizu A, Nagayama T, Abe R, Kikuchi S, Yamamoto N, Fujii T, Yokoyama K, Tsuchida H, Sano K, Mochizuki T, Oki N, Horiuchi Y, Fujita M, Watanabe M, Matsuoka M, Kurata N, Yano K. ( 2010 ) OryzaExpress: an integrated database of gene expression networks and omics annotations in rice. , **Plant Cell Physiol.** , 52 , 220 - 229
- 5 . Adachi S, Minamisawa K, Okushima Y, Inagaki S, Yoshiyama K, Kondou Y, Kaminuma E, Kawashima M, Toyoda T, Matsui M, Kurihara D, Matsunaga S, Umeda M. ( 2011 ) Programmed induction of endoreduplication by DNA double-strand breaks in Arabidopsis , **Proc. Natl. Acad. Sci. USA** , , -
- 6 . Cochrane, G., Karsch-Mizrachi, I., Nakamura Y., On behalf of the International Nucleotide Sequence Database Collaboration ( 2010 ) The International Nucleotide Sequence

Database Collaboration. , **Nucleic Acids Res.** , 39 , D15 - D18

7 . Kaminuma, E., Kosuge, T., Kodama, Y., Aono, H., Mashima, J., Gojobori, T., Sugawara, H., Ogasawara, O., Takagi, T., Okubo, K., and Nakamura, Y. ( 2010 ) DDBJ progress report. , **Nucleic Acids Res.** , 39 , D22 - D27

8 . Arai-Kichise, Y., Shiwa, Y., Nagasaki, H., Ebana, K., Yoshikawa, H., Yano, M., Wakasa, K. ( 2011 ) Discovery of Genome-Wide DNA Polymorphisms in a Landrace Cultivar of Japonica Rice by Whole-Genome Sequencing , **Plant Cell Physiol.** , 52 , 274 - 282

## ORAL PRESENTATION

- 1 . 中村保一 DDBJ の紹介と大量配列のためのクラウド型計算機資源利用法 DDBJing 講習会(23) & PDBj 講習会 in 長浜 長浜バイオ大学 1/18
- 2 . 神沼英里 次世代シーケンサ(NGS)概論とクラウド型解析ツール DDBJ Pipeline DDBJing 講習会(23) & PDBj 講習会 in 長浜 長浜バイオ大学 1/18
- 3 . 猿橋 智 NGS 登録データベース DDBJ Sequence Read Archive DDBJing 講習会(23) & PDBj 講習会 in 長浜 長浜バイオ大学 1/18
- 4 . 望月孝子 NGS クラウド型解析ツール DDBJ Pipeline 実習 DDBJing 講習会(23) & PDBj 講習会 in 長浜 長浜バイオ大学 1/18
- 5 . 真島 淳 SAKURA を用いた塩基配列登録の方法・実習 DDBJing 講習会(23) & PDBj 講習会 in 長浜 長浜バイオ大学 1/18
- 6 . 中村 保一 DDBJ の紹介・データ受付など 第24回 DDBJing 講習会 in 東京 ライフサイエンス統合データベースセンター 6/30
- 7 . 児玉 悠一 DDBJ Sequence Read Archive (DRA) へのデータ登録 第24回 DDBJing 講習会 in 東京 ライフサイエンス統合データベースセンター 6/30
- 8 . 長崎 英樹 Pipeline 高次(galaxyとゲノム・SNP 解析例) 第24回 DDBJing 講習会 in 東京 ライフサイエンス統合データベースセンター 6/30
- 9 . 大城戸 利久 NGS 由来アセンブル配列の登録～大量登録システム(MSS) 第24回 DDBJing 講習会 in 東京 ライフサイエンス統合データベースセンター 6/30
- 10 . Takako Mochizuki Pipeline基礎(アセンブリ、マッピング) 第24回 DDBJing 講習会 in 東京 DBCLS 6/30

## POSTER PRESENTATIONS

- 1 . 長崎英樹, 望月孝子, 神沼英里, 渡邊成樹, 児玉悠一, 猿橋智, 菅原秀明, 高木利久, 大久保公策, 中村保一 「 DDBJ Read Annotation Pipeline : 新型シーケンサ由来配列のクラウド型パイプライン 」, 日本植物生理学会年会 , , 3/20-22
- 2 . 猿橋智, 長崎英樹, 望月孝子, 神沼英里, 中村保一 「 新型シーケンサ・アーカイブ配列からのDNA多型注釈データベース構築系統識別ワークフローの開発 」, 第34回日本分子生物学会年会 , ,
- 3 . 長崎英樹, 望月孝子, 児玉悠一, 猿橋智, 高木利久, 大久保公策, 神沼英里, 中村保一 「 新型シーケンサ・アーカイブ配列のクラウド型解析パイプラインDDBJ Pipeline進捗: de novoアセンブル配列注釈ワークフロー 」, 第34回日本分子生物学会年会, 横浜, 12/14
- 4 . 神沼英里, 児玉悠一, 猿橋智, 望月孝子, 長崎英樹, 高木利久, 大久保公策, 中村保一 「 次世代シーケンサーのアーカイブDBとクラウド型データ解析システムの紹介 」, 第154回農林交流センターワークショップ, つくば, 8/19
- 5 . 神沼英里 「 新型DNAシーケンサ配列解析のためのクラウド型計算機資源利用法 」, 東北大学グローバルCOE 第7回Network Medicine特論, 仙台, 1/28
- 6 . 中村保一 「 日本DNAデータバンク(DDBJ)での新規電算機システムによる超並列型シーケンサ由来の大規模塩基配列情報解析支援の試み 」, 第12回IPABシンポジウム, 東京, 12/9
- 7 . 青木考, 長崎秀樹, 神沼英里, 須田邦裕, 川村慎吾, 矢野健太郎, 辰本将司, 水口洋平, 豊田敦 「 マイクロトムゲノム配列解読 」, 日本植物生理学会年会 , ,
- 8 . 永田俊文<sup>1</sup>, 大柳一<sup>1,2</sup>, 長崎英樹<sup>3</sup>, 望月孝子<sup>3</sup>, 神沼英里<sup>3</sup>, 中村保一<sup>3</sup>, 会津智幸<sup>4</sup>, 豊田敦, 藤山秋佐夫<sup>4</sup>, 倉田のり<sup>1</sup> 「 高速シーケンサーを用いたイネ近縁種の比較ゲノム解析 」, 日本植物生理学会 年会 , ,
- 9 . 猿橋智, 児玉 悠一, 李慶範, 大城戸利久, 横山会美, 長崎英樹, 望月孝子, 神沼英里, 菅原秀明, 高木利久, 大久保公策, 中村保一 「 DNA Data Bank of Japan ~新型シーケンサから

- のデータ登録・解析」, ゲノム微生物学会年会, ,
10. 青木考、長崎英樹、豊田敦、神沼英里、辰本将司、水口洋平、須田邦裕、川村慎吾、矢野健太郎「マイクロームゲノム配列の解析」, 日本植物細胞分子生物学会 年会, ,
11. 藤澤貴智、岡本忍、神沼英里、菅原秀明、中村保一「微生物ゲノムアノテーションリファレンスの整備と共用化」, NBDC トーゴの日シンポジウム2011, ,
12. 中村保一<sup>1</sup>, 小笠原理<sup>1</sup>, 神沼英里<sup>1</sup>, 高木利久<sup>1,3</sup>, 大久保公策<sup>1,2</sup>, 「DNA Data Bank of Japan」, NBDC トーゴの日シンポジウム2011, ,
13. Kosuge T, Mashima J, Tsutui H, Ejima M, Kaminuma E, Takagi T, Okubo K., Nakamura Y「DDBJ created a new Web-based nucleotide sequence data submission tool, code name: D-easy」, 第34回日本分子生物学会年会, ,
14. Kodama Y, Nozaki A, Lee K-B, Mashima J, Kaminuma E, Takagi T, Okubo K, Nakamura Y「New resources of DNA Data Bank of Japan: DDBJ Omics Archive and BioProject」, 第34回日本分子生物学会年会, ,
15. 神沼英里, 望月孝子, 長崎英樹, 猿橋智, 中村保一「新型シーケンサーアーカイブ配列からのゲノムワイドIBD推定と系統系譜データベース構築」, 第34回日本分子生物学会年会, ,
16. 藤澤貴智「CyanoBaseおよびKazusa Annotation Suiteの今後の展開」, ラン藻ゲノム研究交流会2011, 東京, 7/2
17. 藤澤貴智, 中尾光輝, 岡本忍, 山本泰智, 中村保一「大規模なゲノムアノテーション情報の手動による精度と再利用性の向上」, 日本ゲノム微生物学会ワークショップ, 仙台, 8/20
18. 藤澤貴智, 岡本忍, 神沼英里, 菅原秀明, 内山郁夫, 黒川顕, 中村保一「微生物エンサイクロペディア」とCyanoBaseにおける微生物ゲノムアノテーションリファレンス整備にむけた取り組み」, ラン藻の分子生物学2011, 東京,
19. 藤澤貴智, 岡本忍, 神沼英里, 菅原秀明, 内山郁夫, 黒川顕, 中村保一「統合微生物ゲノムアノテーションリファレンスの整備と共用化に向けた取り組み」, 第34回日本分子生物学会年会, 横浜, 12/14
20. 望月孝子, 長崎英樹, 神沼英里, 大柳一, 倉田のり, 二河成男, 中村保一「新型シーケンサーアーカイブ配列からのDNA多型注釈データベース構築」, 第34回日本分子生物学会年会, 横浜, 12/14
21. 猿橋智, 児玉悠一, 李慶範, 大城戸利久, 横山会美, 長崎英樹, 望月孝子, 神沼英里, 菅原秀明, 高木利久, 大久保公策, 中村保一「DDBJ Read Annotation Pipeline: 新型シーケンサー由来配列のクラウド型解析パイプライン」, NGS現場の会 第1回研究会, 熱海, 5/28
22. Satoshi Saruhashi, Takako Mochizuki, Hideki Nagasaki, Yuichi Kodama, Asami Nozaki, Kyung-Bum Lee, Toshihisa Okido, Emi Yokoyama, Eli Kaminuma, Hideaki Sugawara, Kousaku Okubo, Toshihisa Takagi, Yasukazu Nakamura「DDBJ Sequence Read Archive and a cloud-computing based analytical pipeline for next-generation sequencing reads」, SOL & ICuGI 2011, 8th Solanaceae and 2nd Cucurbitaceae Joint Conference, 神戸, 11/28
23. Nagasaki, H., Mochizuki, T., Kodama Y, Saruhashi, S., Takagi, T., Okubo, K., Kaminuma, E., Nakamura, Y.「DDBJ Sequence Read Archive and a cloud-computing based annotation tool for next-generation sequencing data」, The 2nd International Conference on the Progress of “1000 Plant & Animal Reference Genomes Project”, Shenzhen, China., 7/10-12
24. 望月孝子, 児玉悠一, 猿橋智, 長崎英樹, 神沼英里, 菅原秀明, 大久保公策, 高木利久, 中村保一「DDBJ Read Annotation Pipeline 次世代シーケンサー由来配列データ解析パイプライン 解析目的別ワークフローの構築」, 「生命情報科学若手の会」第2回研究会, 三島, 10/9
25. Nagasaki, H., Mochizuki, T., Watanabe S., Morizaki, S., Kodama Y., Saruhashi, S., Takagi T., Okubo K., Kaminuma E., Nakamura, Y.「DDBJ Read Annotation Pipeline: A cloud based pipeline for high-throughput analysis of next generation sequencing data」, Plant and Animal Genome XIX Conference, サンディエゴ 米国, 1/15-19
26. Nagasaki, H., Mochizuki, T., Watanabe S., Morizaki, S., Kodama Y., Saruhashi, S., Takagi T., Sugawara, H., Okubo K., Kaminuma E., Nakamura, Y.「DDBJ Read Annotation Pipeline: 新型DNAシーケンサー由来配列のクラウド型パイプライン」, 第52回日本植物生理学会年会, 仙台, 3/20-22

1. 中村保一 第24回 DDBJing 講習会 in 東京 東京
2. 中村保一 DDBJing 講習会 & PDBj 講習会 in 長浜 長浜

## BOOK

1. 中村保一・小笠原理・神沼英里・菅原秀明・高木利久・大久保公策 (2011) DDBJの現在:継承と変革 実験医学増刊 **Vol.29 No.15** 使えるデータベース・ウェブツール -
2. 神沼英里、中村保一 (2011) DDBJ Cloud:次世代シーケンサーの配列アーカイブとクラウド型解析ツール 細胞工学**2011年8月号** 次世代シーケンサーを使いこなす -
3. 神沼英里、中村保一 (2011) クラウド型計算機資源利用に基づいた新型DNAシーケンサ大量配列解析 化学と生物**vol.49, No.3** セミナー室 -
4. Nakao, M.,Fujisawa, T. (2011) 1.解析プラットフォーム紹介 実験医学増刊 **Vol.29 No.15** 使えるデータベース・ウェブツール 2516 - 1521
5. Nagasaki, H.,Kaminuma, E. (2011) DDBJの塩基配列解析ツールと登録システム 実験医学増刊 **Vol.29 No.15** 使えるデータベース・ウェブツール 2537 - 2543

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J. CENTER FOR FRONTIER RESEARCH  
J-c. Cell Architecture Laboratory

J. CENTER FOR FRONTIER RESEARCH  
J-c. Cell Architecture Laboratory  
Kimura Akatsuki

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Kimura, K., and Kimura, A. ( 2011 ) A novel mechanism of microtubule length-dependent force to pull centrosomes toward the cell center. , **BioArchitecture** , 1 , 74 - 79
- 2 . Kimura, K., and Kimura, A. ( 2010 ) Intracellular organelles mediate cytoplasmic pulling force for centrosome centration in the *Caenorhabditis elegans* early embryo. , **Proc. Natl. Acad. Sci. USA** , 108 , 137 - 142
- 3 . Aoki, K., Hayashi, H., Furuya, K., Sato, M., Takagi, T., Osumi, M. , Kimura, A., and Niki, H. ( 2011 ) Breakage of the nuclear envelope by an extending mitotic nucleus occurs during anaphase in *Schizosaccharomyces japonicus*. , **Genes to Cells** , 16 , 911 - 926
- 4 . Niwayama, R., Shinohara, K., and Kimura, A. ( 2011 ) The hydrodynamic property of the cytoplasm is sufficient to mediate cytoplasmic streaming in the *Caenorhabditis elegans* embryo. , **Proc. Natl. Acad. Sci. USA** , 108 , 11900 - 11905
- 5 . Kosodo, Y., Suetsugu, T., Suda, M., Mimori-Kiyosue, Y., Toida, K., Baba, S.A., Kimura, A., and Matsuzaki, F.. ( 2011 ) Regulation of interkinetic nuclear migration by cell cycle-coupled active and passive mechanisms in the developing brain. , **EMBO J** , , -

### ORAL PRESENTATION

- 1 . Kimura, A. Cellular Allometry: 細胞内構造物のサイズ制御における秩序 文部科学省科学研究費補助金新学術領域研究(研究領域提案型)「ミクロからマクロへ階層を超える秩序形成のロジック」(領域代表: 武田洋幸)2011年度班会議 ラフォーレ修善寺 6/21
- 2 . Kimura, A. Cellular Allometry: 線虫 *C. elegans* を用いた紡錘体のサイズ制御機構の研究 名古屋大学 7/20
- 3 . Kimura, A. Cell architecture: Centrosome centration and chromosome structure in *Caenorhabditis elegans* embryo. 大阪大学 11/1
- 4 . Kimura, A. Cell architecture: Centrosome centration and chromosome structure in *Caenorhabditis elegans* embryo The 1544th Biological Symposium 国立遺伝学研究所 11/9

### POSTER PRESENTATIONS

- 1 . Kimura, K., Kimura, A. 「 Centrosome centration is driven by dynein-dependent movement of intracellular organelles along astral microtubules in *C. elegans* early embryos 」, 18th International *C. elegans* Meeting , Los Angeles , 6/24
- 2 . Kimura, K., Kimura, A. 「 線虫 *C. elegans* における中心体中央化のための中心体-オルガネラ間の相互引きモデル 」, 第63回日本細胞生物学会大会ワークショップ2「細胞内輸送とオ

ルガネラ」, 札幌, 6/27

3 . Hara, Y., Kimura, A. 「 An equation to calculate mitotic spindle width as a function of spindle length: a study in *Caenorhabditis elegans* embryos. 」, RIKEN CDB-QBiC Joint Symposium "Towards Innovation on Developmental Cell Biology: The Impact of Emerging Technologies.", 神戸, 7/1

4 . Kimura, A. 「 細胞建築学:細胞内空間の隠れた秩序の理解をめざして 」, 第51回生物物理若手の会夏の学校, 京都, 8/26

5 . Kimura, A. 「 Constructing Cell Model, to Study the Spatial Organization of the Cell. 」, The 49th Annual Meeting of the Biophysical Society of Japan, 姫路, 9/16

6 . Hara, Y., Kimura, A. 「 An equation to relate mitotic spindle width with spindle length in *Caenorhabditis elegans* embryos. 」, Centrosomes & Spindle Pole bodies, Barcelona, 10/3

7 . Kimura, A. 「 細胞内部の空間構成を探る細胞建築学と、情報科学への期待 」, 生命情報科学若手の会第3回研究会, 岡崎, 10/15

8 . Kimura, A. 「 Cell Architectonics - toward understanding the design principles underlying the construction of the cell - 」, Kick-off Symposium on "Young Researcher Development Program for Frontier Research in Life Science", Mishima, 4/21

9 . Kimura, A. 「 Size-dependency/independency in the spatial organization of the cell: nuclear positioning and chromosome dynamics in *C. elegans* embryos 」, International Symposium Physicochemical Field for Genetic Activities, Awaji, Japan, 1/24

10 . Hara, Y. 「 Control of the condensed chromosome size in the *C. elegans* early embryo. 」, International Symposium Physicochemical Field for Genetic Activities, Awaji, Japan, 1/24

## EDUCATION

1 . Hiraoka, Y., Kurumizaka, H., Kimura, A. International Symposium on Physicochemical Field for Genetic Activities Awaji, Japan 1/24-26

## BOOK

1 . Hara, Y., Kimura, A. ( 2011 ) Cell-size-dependent control of organelle sizes during development. **Cell Cycle in Development** -

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J. CENTER FOR FRONTIER RESEARCH  
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J-d. Motor Neural Circuit Laboratory  
Hiromi Hirata

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

- 1 . Ogino, K., Ramsden, S. L., Keib, N., Schwarz, G., Harvey, R. J. and Hirata, H. ( 2011 ) Duplicated gephyrin genes showing distinct tissue distribution and alternative splicing patterns mediate Moco biosynthesis, glycine receptor clustering and escape behavior in zebrafish. , **J. Biol. Chem.** , 286 , 806 - 817
- 2 . Low, S. E., Amburgey, K., Horstick, E., Linsley, J., Sprague, S. M., Cui, W. W., Zhou, W., Hirata, H., Saint-Amant, L. and Kuwada, J. Y. ( 2011 ) TRPM7 is required within zebrafish sensory neurons for the activation of touch-evoked escape behaviors. , **J. Neurosci.** , 31 , 11633 - 11644
- 3 . Naganawa, Y. and Hirata, H. ( 2011 ) Developmental transition of touch response from slow muscle-mediated coilings to fast muscle-mediated burst swimming in zebrafish. , **Dev. Biol.** , 355 , 194 - 204
- 4 . Hirata, H., Takahashi, M., Yamada, K. and Ogino, K. ( 2011 ) The biological role of the glycinergic synapse in early zebrafish motility. , **Neurosci. Res.** , 71 , 1 - 11

### ORAL PRESENTATION

- 1 . Hirata, H. Genetic analysis of glycinergic synapse formation in zebrafish. ZMNH Seminar Zentrum für Molekulare Neurobiologie Hamburg, Hamburg, Germany 7/11
- 2 . Hirata, H. Genetic analysis of activity-dependent glycinergic synapse formation in zebrafish. Pharmacology Seminar University of London, London, UK 7/4
- 3 . Hirata, H. Functional development of muscle in zebrafish early motility. Vollume Institute Seminar Oregon Health and Science University, Portland, USA 11/11
- 4 . 平田普三 Development of motor system in zebrafish. The 1037th NIG Colloquium 国立遺伝学研究所(三島) 11/4

### POSTER PRESENTATIONS

- 1 . Horstick, E., Linsley, J., Dowling, J., Hirata, H. and Kuwada, J. Y. 「 The zebrafish mutant mi34 is necessary for normal excitation contraction coupling in skeletal muscle. 」, The 7th European Zebrafish Meeting , Edinburgh, UK , 7/6
- 2 . 長縄由里子、荻野一豊、平田普三 「 Developmental transition of touch response from slow muscle-mediated coilings to fast muscle-mediated burst swimming in zebrafish. 」, 第17回小型魚類研究会 , 三島 , 9/9
- 3 . 平田普三 「 Formation of glycinergic synapse in Zebrafish. 」, 遺伝研シンポジウム "Kick Off Symposium" , 三島 , 4/21

4. 平田普三 「ゼブラフィッシュにおけるグリシン作動性シナプスの活動依存的形成」, 第34回日本神経科学大会, 横浜, 9/15
5. Hirata, H. 「Developmental transition of motor behavior from slow muscle-mediated coiling to fast muscle-mediated burst swimming in zebrafish.」, The 7th European Zebrafish Meeting, Edinburgh, UK, 7/6
6. 平田普三 「運動・行動の分子遺伝学」, 三重大学COE-Aシンポジウム「魚類をモデルとした生物多様性と次世代型ポストゲノム教育研究拠点」, 津, 12/6
7. 平田普三 「運動システムの発達における神経系と筋の分化・形成」, 第84回日本生化学学会大会 奨励賞受賞講演, 京都, 9/21
8. 荻野一豊、平田普三 「逃避行動とグリシン作動性シナプスの形成」, 第82回日本動物学会大会, 旭川, 9/21
9. 平田普三 「ゼブラフィッシュの運動発達とグリシン作動性シナプスの形成」, 第571回北里医学会招待学術講演会, 相模原, 10/3
10. 長縄由里子、平田普三 「ゼブラフィッシュの運動発達における運動能獲得過程の解析」, 第84回日本生化学学会大会, 京都, 9/22
11. 長縄由里子、荻野一豊、平田普三 「ゼブラフィッシュの運動発達過程における筋の使い分け」, 平成23年度日本動物学会中部支部大会, 福井, 7/31

## EDUCATION

1. 浅川和秀、新屋みのり、平田普三、酒井則良、川上浩一 世話人 第17回小型魚類研究会 三島 9/8-9

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1. 平田普三, 2, 平成23年度日本生化学会奨励賞

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J-e. Molecular Function Laboratory  
Masato Kanemaki

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

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- 2 . Watase G., Takisawa H. and Kanemaki M. 「 MCM10 IS REQUIRED FOR ORIGIN UNWINDING IN *S.CEREVISIAE* 」, Cold Spring Harbor Meeting on Eukaryotic DNA Replication and Genome Maintenance , CSH, New York , 9/8
- 3 . Nishimura K., Ishiai M., Fukagawa T., Takata M., Takisawa H. and Kanemaki M. 「 MCM8 AND MCM9 FORM A NOVEL COMPLEX INVOLVED IN RESISTANCE TO DNA CROSSLINKING REAGENTS 」, 第34回 日本分子生物学会年会 , 横浜 , 12/15
- 4 . Watase G., Takisawa H., and Kanemaki M. 「 MCM10 IS REQUIRED FOR ORIGIN UNWINDING IN *S.CEREVISIAE* 」, 第34回 日本分子生物学会年会 , 横浜 , 12/15

### PATENT

- 1 . 特願2011-252147 , 改良型オーキシン分解誘導法を用いたタンパク質発現制御法 , 鐘巻将人(代表)、西村浩平、小畑以有、三村覚、滝澤温彦 , 大学共同利用機関法人情報・システム研究機構、大阪大学

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Shinya Miyagishima

## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Miyagishima, S., Nakanishi, H., and Kabeya, Y. (2011) Structure, regulation, and evolution of the plastid division machinery. , **Int. Rev. Cell. Mol. Biol.** , , 115 - 153
2. 宮城島 進也, 壁谷 如洋 (2011) 「葉緑体の分裂機構」, 細胞工学 , 30 , 1177 - 1184
3. Miyagishima, S. (2011) Mechanism of plastid division: from a bacterium to an organelle , **Plant Physiol.** , , -

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2. 宮城島 進也 「細胞内共生:ミトコンドリアと葉緑体」, 第6回地文台シンポジウム & 東工大流動機構国際ワークショップ , ,
3. Miyagishima, S. 「Evolution and Regulation of the Chloroplast Division Machinery: Permanent Inheritance of Endosymbiotic Organelles」, 第84回日本生化学会大会 , ,
4. 宮城島 進也 「藻類細胞周期による葉緑体分裂制御機構」, 日本植物学会第75回大会 , ,

### OTHERS

1. 宮城島 進也 , 1 , 日本植物学会 評議員
2. 宮城島 進也 , 1 , 日本植物形態学会 評議員
3. 宮城島 進也 , 1 , 日本植物学会 会計幹事

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## RESEARCH ACTIVITIES

### PUBLICATIONS

#### Papers

1. Kitano J., Kawagishi, Y., Mori, S., C, L, Peichel., Makino, T., Kawata, M., and Kusakabe, M. (2011) Divergence in sex steroid hormone signaling between sympatric species of Japanese threespine stickleback. , **PloS One** , 6 , e29253 -
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2. Kitano J 「 Genomic and Functional Characterization of a Neo-Sex Chromosome Important for Stickleback Speciation」, SMBE, 京都, 7/27
3. 北野 潤 「 Integrating Genomics into physiology」, 日本動物学会シンポジウム, 旭川, 9/23

### BOOK

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#### Papers

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3. Daiju Kitagawa Structural basis of 9-fold symmetry of centrioles Sinergia grant meeting EPFL Lausanne 2/3
4. Kitagawa, D. The mechanisms of centriole formation 学友会セミナー 東京大学医科学研究所 3/25

### POSTER PRESENTATIONS

1. Daiju Kitagawa 「Cracking the mystery of nine-ness」, 日本分子生物学会, 神奈川県横浜市, 12/16

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2. 山本辰一郎、長戸康郎、野々村賢一、倉田のり 「 イネGYPSY EMBRYO 遺伝子は穂の枝分かれと花分裂組織の有限性を制御する 」, 日本育種学会平成23年度秋季講演会 , 福井 , 9/22-24
3. 野々村賢一、小宮怜奈、宮崎さおり 「 減数分裂前のイネ生殖細胞発生を制御する新規のRNA経路 」, 日本遺伝学会第83回大会 , 京都 , 9/20-23
4. 小宮怜奈、大柳一、新濱充、渡部聡明、筒井康博、望月孝子、神沼英里、中村保一、倉田のり、野々村賢一 「 イネ生殖細胞特異的Argonauteタンパク質MEL1と結合するsmall RNAsの同定 」, 第34回日本分子生物学会年会 , 横浜 , 12/13-16
5. 野々村賢一、小宮怜奈、宮崎さおり 「 減数分裂前のイネ生殖細胞発生を制御する新規のRNA経路 」, 日本遺伝学会 第83回大会 , 京都 , 9-20-23
6. 小宮怜奈、大柳一、新濱充、渡部聡朗、筒井康博、望月孝子、神沼英里、中村保一、倉田のり、野々村賢一 「 イネ生殖細胞特異的Argonauteタンパク質MEL1と結合するsmall RNAsの同定 」, 第5回日本エピジェネティクス研究会年会 , 熊本 , 5/19-20
7. Reina Komiya, Hajime Ohyanagi Mitsuru Niihama, Toshiaki Watanabe, Shigeki Watanabe, Yasuhiro Tsutsui, Takako Mochizuki, Eli Kaminuma, Yasukazu Nakamura, Nori Kurata, Ken-Ichi Nonomura 「 Identification of small RNAs associating with rice MEL1, a germ-cell-specific Argonaute protein 」, 第52回日本植物生理学会年会 , 仙台 , 3/20-22

### OTHERS

1. 野々村賢一, 1, 日本育種学会、常任幹事会庶務幹事

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1. 小林 武彦, 坂 季美子 (2011) パルスフィールド電気泳動法 目的別で選べる 核酸実験の原理とプロトコール 85 - 90

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Friedman, N.	F-f Microbial Genetics Laboratory
Fujii T	Ib Laboratory for Gene-Product Informatics
Fujii, T.	F-e Plant Genetics Laboratory
Fujimoto H	G-b Genome biology Laboratory
Fujimoto, R.	E-b Division of Agricultural Genetics
Fujioka M	F-b Mammalian Development Laboratory
Fujisawa H	F-b Mammalian Development Laboratory
Fujisawa T	C-a Division of Developmental Genetics
Fujisawa T.	C-a Division of Developmental Genetics
Fujisawa, H.	E-c Division of Brain Function
Fujisawa, N.	H-e Gene Network Laboratory
Fujisawa, T.	Ib Laboratory for Gene-Product Informatics
Fujisawa,N.	H-e Gene Network Laboratory
Fujita M	Ib Laboratory for Gene-Product Informatics
Fujita, M.	F-e Plant Genetics Laboratory
Fujiwara,A.	Ia Laboratory for DNA Data Analysis
Fujiyama A	G-b Genome biology Laboratory
Fujiyama, A.	G-c Comparative Genomics Laboratory
Fukada S	F-b Mammalian Development Laboratory
Fukada, Y.	C-c Division of Molecular and Developmental Biology
Fukagawa T.	J-e Molecular Function Laboratory
Fukagawa, T.	A-a Division of Molecular Genetics
Fukai E	G-b Genome biology Laboratory
Fukase,H.	D-a Division of Population Genetics
Fukazawa K.	F-e Plant Genetics Laboratory
Fukuchi, S.	F-e Plant Genetics Laboratory Ia Laboratory for DNA Data Analysis
Fukuda, N.	G-a Genetic Informatics Laboratory
Fukuda, R.	C-c Division of Molecular and Developmental Biology
Fukuda,S.	D-a Division of Population Genetics
Fukui K	G-b Genome biology Laboratory
Fukushima N	F-b Mammalian Development Laboratory
Fukushima, N.	E-c Division of Brain Function
Funahashi, J.	C-c Division of Molecular and Developmental Biology
Furukawa,K.	H-e Gene Network Laboratory
Furuya, K.	J-c Cell Architecture Laboratory F-f Microbial Genetics Laboratory
Fussner E.	H-a Biological Macromolecules
Galperin, MY.	Ia Laboratory for DNA Data Analysis
Ganley A.R.	B-a Division of Cytogenetics
Gascoigne, K. E.	A-a Division of Molecular Genetics
Gaudet, P.	Ia Laboratory for DNA Data Analysis
Gebhart, N.	C-c Division of Molecular and Developmental Biology

Gentleman, R.	I-a Laboratory for DNA Data Analysis
Geyer CB	F-b Mammalian Development Laboratory
Gibbs, RA.	G-c Comparative Genomics Laboratory
Gilbert D.M.	H-a Biological Macromolecules
Girish Rathnaparkhi	F-g Invertebrate Genetics Laboratory
Goble, CA.	I-a Laboratory for DNA Data Analysis
Gojobori, T.	Ib Laboratory for Gene-Product Informatics D-a Division of Population Genetics E-c Division of Brain Function I-a Laboratory for DNA Data Analysis
Gojobori,T.	I-a Laboratory for DNA Data Analysis
Gojyobori, T.	I-a Laboratory for DNA Data Analysis
Goldberg, J. M.	F-f Microbial Genetics Laboratory
Gong, H.Y.	C-c Division of Molecular and Developmental Biology
Goshima, Y.	E-c Division of Brain Function
Gotoh, K.	G-c Comparative Genomics Laboratory
Graves, JA.	G-c Comparative Genomics Laboratory
Gray, E.A.	C-c Division of Molecular and Developmental Biology
Gribskov M	L EXPERIMENTAL FARM
Gujja, S.	F-f Microbial Genetics Laboratory
Guo, Y.	F-f Microbial Genetics Laboratory
H, Hashikata.	G-c Comparative Genomics Laboratory
H, Kobayashi.	G-c Comparative Genomics Laboratory
Haas, B. J.	F-f Microbial Genetics Laboratory
Habib, N.	F-f Microbial Genetics Laboratory
Hachinohe M.	J-e Molecular Function Laboratory
Hagedorn E. J.	H-f Multicellular Organization Laboratory
Hagino Y	F-a Mammalian Genetics Laboratory
Hale,CA.	F-f Microbial Genetics Laboratory
Hall, A.	G-c Comparative Genomics Laboratory
Hamada K	Ib Laboratory for Gene-Product Informatics
Hamada, K.	F-e Plant Genetics Laboratory
Hancock, JM.	I-a Laboratory for DNA Data Analysis
Hansen, K.	F-f Microbial Genetics Laboratory
Hara, Y.	J-c Cell Architecture Laboratory
Harigaya K	F-b Mammalian Development Laboratory
Harushima Y.	F-e Plant Genetics Laboratory
Harvey, R. J.	J-d Motor Neural Circuit Laboratory
Hasebe M	L EXPERIMENTAL FARM
Hasegawa, A.	I-a Laboratory for DNA Data Analysis
Hashimoto, M.	F-a Mammalian Genetics Laboratory
Hata H	F-a Mammalian Genetics Laboratory
Hatin, W.	I-a Laboratory for DNA Data Analysis
Hatta, K.	C-c Division of Molecular and Developmental Biology
Hayashi, H.	F-f Microbial Genetics Laboratory
Hayashi,H.	J-c Cell Architecture Laboratory
Hayashizaki, Y.	I-a Laboratory for DNA Data Analysis

Hazar-Rethinam, M.	G-c Comparative Genomics Laboratory
He, X.	C-c Division of Molecular and Developmental Biology
Heider, T.	G-c Comparative Genomics Laboratory
Heiman, D. I.	F-f Microbial Genetics Laboratory
Hemant Verma	F-g Invertebrate Genetics Laboratory
Herrero, J.	G-c Comparative Genomics Laboratory
Hettinger T.P.	F-c Mouse Genomics Resource Laboratory
Hettinger, TP.	F-a Mammalian Genetics Laboratory
Hibi, M.	C-c Division of Molecular and Developmental Biology
Hickford, D.	G-c Comparative Genomics Laboratory
Hideaki Sugawara	Ib Laboratory for Gene-Product Informatics
Hideaki Takata	H-a Biological Macromolecules
Hideki Nagasaki	Ib Laboratory for Gene-Product Informatics
Higashijima, S.	C-c Division of Molecular and Developmental Biology
Higashijima, S.-I.	C-c Division of Molecular and Developmental Biology
Hihara, S.	H-a Biological Macromolecules
Hirai,K.	B-b Division of Microbial Genetics
Hirakata, K.	F-e Plant Genetics Laboratory
Hirakawa H	G-b Genome biology Laboratory
Hirakawa, H.	G-c Comparative Genomics Laboratory
Hirakawa, M.	D-a Division of Population Genetics
Hiramatsu, E.	G-c Comparative Genomics Laboratory
Hirata T.	F-b Mammalian Development Laboratory
Hirata, H.	J-d Motor Neural Circuit Laboratory
Hirata, T.	E-c Division of Brain Function
Hirata.	F-b Mammalian Development Laboratory
Hiratani I.	H-a Biological Macromolecules
Hiratsu, K.	F-e Plant Genetics Laboratory
Hiratsuka, Y.	G-c Comparative Genomics Laboratory
Hirochika, H.	F-e Plant Genetics Laboratory
Hirohiko Hirochika	L EXPERIMENTAL FARM
Hiromi Y.	C-a Division of Developmental Genetics
Hiromi, Y	C-a Division of Developmental Genetics
Hiromi, Y.	C-a Division of Developmental Genetics
Hiroshi Hamada	F-b Mammalian Development Laboratory
Hiura, H.	G-c Comparative Genomics Laboratory
Hizume,K.	B-b Division of Microbial Genetics
Hoki, Y.	G-c Comparative Genomics Laboratory
Homma, K.	Ia Laboratory for DNA Data Analysis
Honda N	G-b Genome biology Laboratory
Hongo K	Ib Laboratory for Gene-Product Informatics
Hongo, K.	F-e Plant Genetics Laboratory
Hongoh, Y.	G-c Comparative Genomics Laboratory
Hore, TA.	G-c Comparative Genomics Laboratory
Hori, T.	A-a Division of Molecular Genetics
Horie-Inoue, K.	Ia Laboratory for DNA Data Analysis

Horiuchi Y	I-b Laboratory for Gene-Product Informatics
Horiuchi, Y.	F-e Plant Genetics Laboratory
Horstick, E.	J-d Motor Neural Circuit Laboratory
Hoshiya, M.	G-c Comparative Genomics Laboratory
Hosoda, K.	I-a Laboratory for DNA Data Analysis
Hosoya M	F-b Mammalian Development Laboratory
Hotchkiss A	F-b Mammalian Development Laboratory
Howe, DG.	I-a Laboratory for DNA Data Analysis
Hozumi K	F-b Mammalian Development Laboratory
Hsieh, AC.	F-a Mammalian Genetics Laboratory
Hsu, A.	G-c Comparative Genomics Laboratory
Hu, S.Y.	C-c Division of Molecular and Developmental Biology
Hu, Y.	G-c Comparative Genomics Laboratory
I M.	A-a Division of Molecular Genetics
Ichianagi, K.	G-c Comparative Genomics Laboratory
Igarashi, K.	F-e Plant Genetics Laboratory
Ihara, S.	H-f Multicellular Organization Laboratory
Iida, M.	G-c Comparative Genomics Laboratory
Iida, N.	G-c Comparative Genomics Laboratory
Iino, H.	H-a Biological Macromolecules
Ikeda K	F-a Mammalian Genetics Laboratory
Ikeda K.	F-c Mouse Genomics Resource Laboratory
Ikeda, H.	G-c Comparative Genomics Laboratory
Ikeda, K.	F-a Mammalian Genetics Laboratory I-a Laboratory for DNA Data Analysis
Ikeda, T.	H-a Biological Macromolecules
Ikenaga, T.	C-c Division of Molecular and Developmental Biology
Ikeo, K.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Ikeo, K.	I-a Laboratory for DNA Data Analysis
Iketani, M.	E-c Division of Brain Function
Imamoto, N.	H-a Biological Macromolecules
Imanishi, T.	I-a Laboratory for DNA Data Analysis
Imaoka, A.	D-a Division of Population Genetics
Inagaki S	I-b Laboratory for Gene-Product Informatics
Inagaki, S.	E-b Division of Agricultural Genetics
Inoue, S.	I-a Laboratory for DNA Data Analysis
Ishiai M.	J-e Molecular Function Laboratory
Ishida J	E-b Division of Agricultural Genetics
Ishihara, S.	G-c Comparative Genomics Laboratory
Ishii A.	F-c Mouse Genomics Resource Laboratory
Ishii, A.	F-a Mammalian Genetics Laboratory
Ishii, M.	G-c Comparative Genomics Laboratory
Ishijima, J.	F-a Mammalian Genetics Laboratory
Ishikawa, J.	G-c Comparative Genomics Laboratory
Ishikawa, R.	F-e Plant Genetics Laboratory

Ishikawa,H.	H-e Gene Network Laboratory
Isobe S	G-b Genome biology Laboratory
Isobe, S. Fukai	G-c Comparative Genomics Laboratory
Isoda, M.	C-c Division of Molecular and Developmental Biology
Ito T	F-b Mammalian Development Laboratory
Ito, A.	C-c Division of Molecular and Developmental Biology
Ito, F.	Ia Laboratory for DNA Data Analysis
Ito, M.	C-c Division of Molecular and Developmental Biology
Ito, Y.	F-e Plant Genetics Laboratory
Ito,M.	H-e Gene Network Laboratory
Itoh M.	H-a Biological Macromolecules
Itou, H.	H-d Biomolecular Structure Laboratory
Itou, T.	Ia Laboratory for DNA Data Analysis
Iwai, Y.	H-a Biological Macromolecules
Iwamoto, N.	C-c Division of Molecular and Developmental Biology
Iwasaki, S.	G-c Comparative Genomics Laboratory
J.L.	C-c Division of Molecular and Developmental Biology
JE, Kim.	G-c Comparative Genomics Laboratory
Jarvinen, J.L.	C-c Division of Molecular and Developmental Biology
Jhangiani, SN.	G-c Comparative Genomics Laboratory
Jin, L.	Ia Laboratory for DNA Data Analysis
Jinam T.	D-a Division of Population Genetics
Jinam,A.J.	D-a Division of Population Genetics
Jing, C.	G-c Comparative Genomics Laboratory
Johnson RL	F-b Mammalian Development Laboratory
Johnson, S.	C-c Division of Molecular and Developmental Biology
Johnston, A.	C-c Division of Molecular and Developmental Biology
Joshi R	C-a Division of Developmental Genetics
Joshi, R.	C-a Division of Developmental Genetics
Joshi, V.	G-c Comparative Genomics Laboratory
K, Kikuta.	G-c Comparative Genomics Laboratory
K, Nagata.	G-c Comparative Genomics Laboratory
KH, Harada.	G-c Comparative Genomics Laboratory
Kabata, H.	H-d Biomolecular Structure Laboratory
Kadota K	G-b Genome biology Laboratory
Kai Zinn	H-e Gene Network Laboratory
Kajitani, T.	G-c Comparative Genomics Laboratory
Kajiyama S	G-b Genome biology Laboratory
Kajiyama, S.	G-c Comparative Genomics Laboratory
Kakimoto T	J-e Molecular Function Laboratory
Kakkutani, T.	E-b Division of Agricultural Genetics
Kakusho, N.	F-f Microbial Genetics Laboratory
Kakutani T	E-b Division of Agricultural Genetics
Kakutani, T.	E-b Division of Agricultural Genetics
Kamihagi, C.	C-c Division of Molecular and Developmental Biology
Kamimura Y	J-e Molecular Function Laboratory
Kamimura, Y.	B-b Division of Microbial Genetics

Kaminuma E	I-b Laboratory for Gene-Product Informatics
Kaminuma E.	I-b Laboratory for Gene-Product Informatics
Kaminuma, E.	I-b Laboratory for Gene-Product Informatics I-a Laboratory for DNA Data Analysis
Kan F	F-a Mammalian Genetics Laboratory
Kanae Iijima-Ando*	H-e Gene Network Laboratory
Kanai, Y.	H-a Biological Macromolecules
Kanai, M.	H-e Gene Network Laboratory
Kaneko-Ishino, T.	G-c Comparative Genomics Laboratory
Kanemaki M	J-e Molecular Function Laboratory
Kanemaki M.	J-e Molecular Function Laboratory
Kanemaki, M.	B-b Division of Microbial Genetics
Kang W	G-b Genome biology Laboratory
Kani, S.	C-c Division of Molecular and Developmental Biology
Kanke M	J-e Molecular Function Laboratory
Kanki, J.	C-c Division of Molecular and Developmental Biology
Kanno.	F-b Mammalian Development Laboratory
Kanzawa H.	D-a Division of Population Genetics
Karsch-Mizrachi, I.	I-b Laboratory for Gene-Product Informatics
Kasai S	F-a Mammalian Genetics Laboratory
Katayama, S.	I-a Laboratory for DNA Data Analysis
Kato M	G-b Genome biology Laboratory
Kato M.	F-c Mouse Genomics Resource Laboratory
Kato Y	F-b Mammalian Development Laboratory
Kato, M.	G-c Comparative Genomics Laboratory F-a Mammalian Genetics Laboratory
Kato, Katsuhiko	F-b Mammalian Development Laboratory
Katoh, M.	G-c Comparative Genomics Laboratory
Katou, Y.	B-b Division of Microbial Genetics
Katsuki T	C-a Division of Developmental Genetics
Katsuki, T.	C-a Division of Developmental Genetics
Katsuma S	G-b Genome biology Laboratory
Kawagishi, Y.	J-h Ecological Genetics Laboratory
Kawagoe T	E-b Division of Agricultural Genetics
Kawahara, A.	C-c Division of Molecular and Developmental Biology
Kawakami, K.	C-c Division of Molecular and Developmental Biology
Kawamura, S.	C-c Division of Molecular and Developmental Biology
Kawasaki, T.	E-c Division of Brain Function F-d Model Fish Genomics Resource
Kawashima K	G-b Genome biology Laboratory
Kawashima M	I-b Laboratory for Gene-Product Informatics
Kawashima, K.	G-c Comparative Genomics Laboratory
Kawata, M.	J-h Ecological Genetics Laboratory
Kawazu, C.	I-a Laboratory for DNA Data Analysis
Kayser, M.	D-a Division of Population Genetics
Kazuhiro Maeshima	H-a Biological Macromolecules

Kazuki Ito	H-a Biological Macromolecules
Kazuki, C.	G-c Comparative Genomics Laboratory
Kazuki, H.	G-c Comparative Genomics Laboratory
Kazuki, Y.	Ia Laboratory for DNA Data Analysis
Kazunari Kaizu	H-a Biological Macromolecules
Kazuteru, Hasegawa	F-b Mammalian Development Laboratory
Kazuya Takashima	L EXPERIMENTAL FARM
Keib, N.	J-d Motor Neural Circuit Laboratory
Keifenheim, D.	F-f Microbial Genetics Laboratory
Kellis, M.	F-f Microbial Genetics Laboratory
Kelso, J.	Ia Laboratory for DNA Data Analysis
Ken-Ichi Nonomura	L EXPERIMENTAL FARM
Kenichi Yoshikawa	H-a Biological Macromolecules
Kenmochi, N.	F-d Model Fish Genomics Resource
Kenta Yamada	H-e Gene Network Laboratory
Kikuchi, S.	F-e Plant Genetics Laboratory
Kikuchi S	Ib Laboratory for Gene-Product Informatics
Kikuchi, S.	F-e Plant Genetics Laboratory
Kikusui T.	F-c Mouse Genomics Resource Laboratory
Kikusui, T.	F-a Mammalian Genetics Laboratory
Kikuta, H.	C-c Division of Molecular and Developmental Biology
Kim JM	E-b Division of Agricultural Genetics
Kimori, Y.	G-c Comparative Genomics Laboratory
Kimura H	E-b Division of Agricultural Genetics
Kimura, A.	J-c Cell Architecture Laboratory F-f Microbial Genetics Laboratory
Kimura, F.	F-e Plant Genetics Laboratory
Kimura, G.	G-a Genetic Informatics Laboratory
Kimura, K.	J-c Cell Architecture Laboratory
Kimura, T.	F-d Model Fish Genomics Resource
Kimura, K.	H-e Gene Network Laboratory
Kimura, R.	D-a Division of Population Genetics
Kinoshita, M.	C-c Division of Molecular and Developmental Biology
Kinoshita, T.	F-e Plant Genetics Laboratory
Kinoshita, Y.	F-e Plant Genetics Laboratory
Kircher, M.	D-a Division of Population Genetics
Kishida Y	G-b Genome biology Laboratory
Kishida, Y.	G-c Comparative Genomics Laboratory
Kishimoto, N.	C-c Division of Molecular and Developmental Biology
Kitagawa M.	F-b Mammalian Development Laboratory
Kitagawa, D.	J-i Centrosome Biology Laboratory
Kitano J	J-h Ecological Genetics Laboratory
Kitano J.	J-h Ecological Genetics Laboratory
Kiyonari, H.	E-c Division of Brain Function
Knaut, H.	C-c Division of Molecular and Developmental Biology
Ko, M.S.A.	D-a Division of Population Genetics

Ko, YC.	D-a Division of Population Genetics
Kobayashi T.	B-a Division of Cytogenetics
Kobayashi, N.	D-a Division of Population Genetics
Kobayashi, T.	B-a Division of Cytogenetics H-a Biological Macromolecules
Kobayashi, Y.	Ia Laboratory for DNA Data Analysis
Kobayashi, Y.	H-e Gene Network Laboratory
Kodama Y	Ib Laboratory for Gene-Product Informatics
Kodama Y.	Ib Laboratory for Gene-Product Informatics
Kodama, Y.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Koga H	F-b Mammalian Development Laboratory
Kohara M	G-b Genome biology Laboratory
Kohara Y	G-b Genome biology Laboratory
Kohara, M.	G-c Comparative Genomics Laboratory
Kohara, Y.	G-c Comparative Genomics Laboratory
Kohei Kanata	F-b Mammalian Development Laboratory
Kohinata T	G-b Genome biology Laboratory
Kohinata, T.	G-c Comparative Genomics Laboratory
Koichi Furukawa	H-e Gene Network Laboratory
Koichi Iijima	H-e Gene Network Laboratory
Koichi Takahashi	H-a Biological Macromolecules
Koide T	F-a Mammalian Genetics Laboratory
Koide T.	F-c Mouse Genomics Resource Laboratory
Koide, T	F-a Mammalian Genetics Laboratory
Koide, T.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Kojima, D.	C-c Division of Molecular and Developmental Biology
Kojima, TM.	H-a Biological Macromolecules
Kokubo H	F-b Mammalian Development Laboratory
Komeda, N.	F-e Plant Genetics Laboratory
Kondo, S.	G-c Comparative Genomics Laboratory F-g Invertebrate Genetics Laboratory
Kondou Y	Ib Laboratory for Gene-Product Informatics
Kondrashov, N.	F-a Mammalian Genetics Laboratory
Kono, H.	F-a Mammalian Genetics Laboratory
Kono, N.	H-e Gene Network Laboratory
Koshida N.	F-c Mouse Genomics Resource Laboratory
Koshida, N.	F-a Mammalian Genetics Laboratory
Koshino, H.	G-c Comparative Genomics Laboratory
Kosodo, Y.	J-c Cell Architecture Laboratory
Kosuge T	Ib Laboratory for Gene-Product Informatics
Kosuge, T.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Kosuke Murakami	H-e Gene Network Laboratory
Kotani, T.	C-c Division of Molecular and Developmental Biology
Kouprina,	G-c Comparative Genomics Laboratory

Kousaku Okubo	Ib Laboratory for Gene-Product Informatics
Kovar, CL.	G-c Comparative Genomics Laboratory
Kramer J. M.	H-f Multicellular Organization Laboratory
Kryukov K.	D-a Division of Population Genetics
Kubo, T.	F-e Plant Genetics Laboratory
Kuczek, E.	G-c Comparative Genomics Laboratory
Kudoh H	E-b Division of Agricultural Genetics
Kudoh, H.	E-b Division of Agricultural Genetics
Kulik M.	H-a Biological Macromolecules
Kumagai, Y.	C-c Division of Molecular and Developmental Biology
Kumano, T.	G-c Comparative Genomics Laboratory
Kumar,N.	D-a Division of Population Genetics
Kurata N	Ib Laboratory for Gene-Product Informatics
Kurata, N.	F-e Plant Genetics Laboratory
Kurihara D	Ib Laboratory for Gene-Product Informatics
Kurihara Y	E-b Division of Agricultural Genetics
Kurihara, Y.	E-c Division of Brain Function
Kurisaki, T.	C-c Division of Molecular and Developmental Biology
Kuroki Y	G-b Genome biology Laboratory
Kuroki, Y.	G-c Comparative Genomics Laboratory
Kurusu,M.	H-e Gene Network Laboratory
Kusuda, R.	C-c Division of Molecular and Developmental Biology
Kuwada, J. Y.	J-d Motor Neural Circuit Laboratory
Kyung-Bum Lee	Ib Laboratory for Gene-Product Informatics
L, Zou.	G-c Comparative Genomics Laboratory
L,sell	G-c Comparative Genomics Laboratory
L,sman	Ia Laboratory for DNA Data Analysis
Lal, P.	C-c Division of Molecular and Developmental Biology
Lara, F.	G-c Comparative Genomics Laboratory
Larionov, N.	G-c Comparative Genomics Laboratory
Leatherwood, J.	F-f Microbial Genetics Laboratory
Lee K-B	Ib Laboratory for Gene-Product Informatics
Lefevre, CM.	G-c Comparative Genomics Laboratory
Levchenko, T.	G-c Comparative Genomics Laboratory
Levin, H.	F-f Microbial Genetics Laboratory
Levin, J. Z.	F-f Microbial Genetics Laboratory
Lewis, LR.	G-c Comparative Genomics Laboratory
Lewis, SE.	Ia Laboratory for DNA Data Analysis
Li, L.	C-c Division of Molecular and Developmental Biology
Li, Y.H.	C-c Division of Molecular and Developmental Biology
Liao, C.H.	C-c Division of Molecular and Developmental Biology
Lin, G.H.	C-c Division of Molecular and Developmental Biology
Lin, H.	G-c Comparative Genomics Laboratory
Lin, M. F.	F-f Microbial Genetics Laboratory
Lin, Y.P.	C-c Division of Molecular and Developmental Biology
Lin,M.	Ia Laboratory for DNA Data Analysis

Lindsay, J.	G-c Comparative Genomics Laboratory
Linsley, J.	J-d Motor Neural Circuit Laboratory
Lionikas, A.	F-a Mammalian Genetics Laboratory
Liu, Y.	G-c Comparative Genomics Laboratory
Liu,B.	F-f Microbial Genetics Laboratory
Liu,J.	F-f Microbial Genetics Laboratory
Look, A.T.	C-c Division of Molecular and Developmental Biology
Low, S. E.	J-d Motor Neural Circuit Laboratory
M, Kitakaze.	G-c Comparative Genomics Laboratory
M,iou	G-c Comparative Genomics Laboratory
M.R.	D-a Division of Population Genetics
Maeshima K.	H-a Biological Macromolecules
Maeshima, K.	H-a Biological Macromolecules
Maiko Kanai	H-e Gene Network Laboratory
Makigano E	G-b Genome biology Laboratory
Makigano, E.	G-c Comparative Genomics Laboratory
Makiko Ito	H-e Gene Network Laboratory
Makino, T.	J-h Ecological Genetics Laboratory
Makino,N.	B-b Division of Microbial Genetics
Margalit, H.	F-f Microbial Genetics Laboratory
Margolin,W.	F-f Microbial Genetics Laboratory
Mark E. Fortini	H-e Gene Network Laboratory
Martienssen, R.	F-f Microbial Genetics Laboratory
Maruoka, T.	F-a Mammalian Genetics Laboratory
Masafumi,Muraoka	F-b Mammalian Development Laboratory
Masai, H.	F-f Microbial Genetics Laboratory
Masai, I.	C-c Division of Molecular and Developmental Biology
Masataka Kinjo	H-a Biological Macromolecules
Masatoshi Yamamoto	F-g Invertebrate Genetics Laboratory
Masayoshi Watada	F-g Invertebrate Genetics Laboratory
Mashima J	Ib Laboratory for Gene-Product Informatics
Mashima, J.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Masukata H.	J-e Molecular Function Laboratory
Masumoto H.	J-e Molecular Function Laboratory
Matev MM	F-b Mammalian Development Laboratory
Matsuda S	F-b Mammalian Development Laboratory
Matsuda, K.	E-b Division of Agricultural Genetics
Matsuda, M.	C-c Division of Molecular and Developmental Biology
Matsuda,T.	H-e Gene Network Laboratory
Matsui A	E-b Division of Agricultural Genetics
Matsui M	Ib Laboratory for Gene-Product Informatics
Matsumaru, D.	F-a Mammalian Genetics Laboratory
Matsunaga S	G-b Genome biology Laboratory Ib Laboratory for Gene-Product Informatics
Matsunaga, S.	G-c Comparative Genomics Laboratory

Matsuoka M	Ib Laboratory for Gene-Product Informatics
Matsuoka, M.	F-e Plant Genetics Laboratory
Matsuoka, S.	C-a Division of Developmental Genetics
Matsuura, A.	H-e Gene Network Laboratory
McColl, KA.	G-c Comparative Genomics Laboratory
McGrath, A.	G-c Comparative Genomics Laboratory
Meissl, W.	H-a Biological Macromolecules
Men, A.	G-c Comparative Genomics Laboratory
Menzies, BR.	G-c Comparative Genomics Laboratory
Michiko Sekiya	H-e Gene Network Laboratory
Miczek, K.A.	F-c Mouse Genomics Resource Laboratory
Mikhail Eltsov	H-a Biological Macromolecules
Mimori-Kiyosue, Y.	J-c Cell Architecture Laboratory
Minakuchi Y	G-b Genome biology Laboratory
Minakuchi, Y.	G-c Comparative Genomics Laboratory
Minami C	G-b Genome biology Laboratory
Minami.C.	G-c Comparative Genomics Laboratory
Minamisawa K	Ib Laboratory for Gene-Product Informatics
Mita S	F-b Mammalian Development Laboratory
Mita, S.	E-c Division of Brain Function
Mitsugu Eiguchi	L EXPERIMENTAL FARM
Mitsuhiko Kurusu	H-e Gene Network Laboratory
Mitsuru, Morimoto.	F-b Mammalian Development Laboratory
Mitsuya, K.	G-c Comparative Genomics Laboratory
Miyabe, I.	F-f Microbial Genetics Laboratory
Miyagi, A.	A-a Division of Molecular Genetics
Miyagishima, S.	J-g Symbiosis and cell evolution laboratory
Miyagoe-Suzuki Y	F-b Mammalian Development Laboratory
Miyamoto, S.	H-a Biological Macromolecules
Miyao, A.	F-e Plant Genetics Laboratory
Miyazaki, S.	F-e Plant Genetics Laboratory
Miyazaki, T.	B-a Division of Cytogenetics
Mizoguchi, T.	C-c Division of Molecular and Developmental Biology
Mizoguchi, T.	C-c Division of Molecular and Developmental Biology
Mizrachi, IK.	Ia Laboratory for DNA Data Analysis
Mizumoto, K. & Sawa	H-f Multicellular Organization Laboratory
Mizuta, Y.	F-e Plant Genetics Laboratory
Mochizuki T	Ib Laboratory for Gene-Product Informatics
Mochizuki, T.	Ib Laboratory for Gene-Product Informatics F-e Plant Genetics Laboratory
Mochizuki, H.	H-e Gene Network Laboratory
Mogi K.	F-c Mouse Genomics Resource Laboratory
Mogi, K.	F-a Mammalian Genetics Laboratory
Mogi, M.	F-e Plant Genetics Laboratory
Mohammadi, A.	G-c Comparative Genomics Laboratory
Morgan, MB.	G-c Comparative Genomics Laboratory

Mori,S.	J-h Ecological Genetics Laboratory
Morikawa, K.	A-a Division of Molecular Genetics
Morita,H.	D-a Division of Population Genetics
Moriwaki K.	F-c Mouse Genomics Resource Laboratory
Moriwaki, K.	F-a Mammalian Genetics Laboratory
Morizaki, S.	Ib Laboratory for Gene-Product Informatics
Morosawa T	E-b Division of Agricultural Genetics
Morrissey M. A.	H-f Multicellular Organization Laboratory
Mosher, R. A.	F-f Microbial Genetics Laboratory
Motegi. F.	H-f Multicellular Organization Laboratory
Motohashi N	F-b Mammalian Development Laboratory
Muller, C. A.	F-f Microbial Genetics Laboratory
Muneo Matsuda	F-g Invertebrate Genetics Laboratory
Murakami,K.	H-e Gene Network Laboratory
Muraki A	G-b Genome biology Laboratory
Muraki, A.	G-c Comparative Genomics Laboratory
Muramatsu S	J-e Molecular Function Laboratory
Muramatsu, S.	B-b Division of Microbial Genetics
Muraoka,.Yumiko	F-b Mammalian Development Laboratory
Murayama,S.	D-a Division of Population Genetics
Murphy, P.J.	G-c Comparative Genomics Laboratory
Muto, A.	C-c Division of Molecular and Developmental Biology
Mutsuko Nakano	L EXPERIMENTAL FARM
Muzny, DM.	G-c Comparative Genomics Laboratory
N, Hashimoto.	G-c Comparative Genomics Laboratory
N, Matsuura.	G-c Comparative Genomics Laboratory
N,ineni	D-a Division of Population Genetics
Nadano,D.	H-e Gene Network Laboratory
Nagai, H.	C-c Division of Molecular and Developmental Biology
Nagai,S.	Ia Laboratory for DNA Data Analysis
Naganawa, Y.	J-d Motor Neural Circuit Laboratory
Nagasaki, H.	Ib Laboratory for Gene-Product Informatics
Nagase T	F-b Mammalian Development Laboratory
Nagato, Y.	F-e Plant Genetics Laboratory
Nagayama T	Ib Laboratory for Gene-Product Informatics
Nagayama, T.	F-e Plant Genetics Laboratory
Nakagaki M	G-b Genome biology Laboratory
Nakagawa F	F-b Mammalian Development Laboratory
Nakagawa T	J-e Molecular Function Laboratory
Nakagawa, K.	F-e Plant Genetics Laboratory
Nakai, J.	C-c Division of Molecular and Developmental Biology
Nakajima, H.	C-c Division of Molecular and Developmental Biology
Nakajima-Takagi, Y.	C-c Division of Molecular and Developmental Biology
Nakamura Y	Ib Laboratory for Gene-Product Informatics
Nakamura Y.	Ib Laboratory for Gene-Product Informatics
Nakamura, F.	E-c Division of Brain Function

Nakamura, H.	C-c Division of Molecular and Developmental Biology
Nakamura, Y.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Nakanishi, A.	D-a Division of Population Genetics
Nakanishi, H.	J-g Symbiosis and cell evolution laboratory
Nakano, M.	F-e Plant Genetics Laboratory
Nakano, T.	G-c Comparative Genomics Laboratory
Nakano.R.	B-b Division of Microbial Genetics
Nakao, M.	Ib Laboratory for Gene-Product Informatics
Nakashima T	G-b Genome biology Laboratory
Nakato R.	J-e Molecular Function Laboratory
Nakatsuji, N.	G-c Comparative Genomics Laboratory
Nakayama S	G-b Genome biology Laboratory
Nakayama, H.	H-d Biomolecular Structure Laboratory
Nakayama, S.	G-c Comparative Genomics Laboratory C-c Division of Molecular and Developmental Biology
Nakayama,M.	H-e Gene Network Laboratory
Nakazaki N	G-b Genome biology Laboratory
Nakazaki, N.	G-c Comparative Genomics Laboratory
Nakazawa,N.	H-e Gene Network Laboratory
Naotaka Nakazawa	H-e Gene Network Laboratory
Narusawa, T.	H-a Biological Macromolecules
Naruse, K.	F-d Model Fish Genomics Resource
Naruse, M.	G-c Comparative Genomics Laboratory
Nave, K-A	E-c Division of Brain Function
Nazareth, L.	G-c Comparative Genomics Laboratory
Nebiki, T.	H-a Biological Macromolecules
Nicholas, FW.	G-c Comparative Genomics Laboratory
Nicholas, KR.	G-c Comparative Genomics Laboratory
Nieduszynski, C. A.	F-f Microbial Genetics Laboratory
Niki, H.	F-f Microbial Genetics Laboratory
Niki,H.	F-f Microbial Genetics Laboratory
Nikulina, E.M.	F-c Mouse Genomics Resource Laboratory
Nishida, Y.	G-c Comparative Genomics Laboratory
Nishihara, H.	D-a Division of Population Genetics
Nishikawa, K.	Ia Laboratory for DNA Data Analysis
Nishimura K	J-e Molecular Function Laboratory
Nishimura K.	J-e Molecular Function Laboratory
Nishimura M	F-b Mammalian Development Laboratory
Nishino, T.	A-a Division of Molecular Genetics
Nishino,T.	A-a Division of Molecular Genetics
Nishiwaki, Y.	C-c Division of Molecular and Developmental Biology
Nishiyama T	L EXPERIMENTAL FARM
Niwayama, R.	J-c Cell Architecture Laboratory
Noce, T.	G-c Comparative Genomics Laboratory
Nogawa, T.	G-c Comparative Genomics Laboratory

Nomura, T.	H-e Gene Network Laboratory
Nonaka, S.	C-c Division of Molecular and Developmental Biology
Nonomura, K-I	F-e Plant Genetics Laboratory
Nonomura, K.I.	F-e Plant Genetics Laboratory L EXPERIMENTAL FARM
Nori Kurata	L EXPERIMENTAL FARM
Norio Komeda	L EXPERIMENTAL FARM
Nozaki A	Ib Laboratory for Gene-Product Informatics
Nur-Shafawati, A.	Ia Laboratory for DNA Data Analysis
O'Hara, W.	G-c Comparative Genomics Laboratory
O'Neill, R.J.	G-c Comparative Genomics Laboratory
Obata, H.	G-b Genome biology Laboratory
Obuse C	J-e Molecular Function Laboratory
Obuse C.	B-b Division of Microbial Genetics
Ogasawara M.	F-c Mouse Genomics Resource Laboratory
Ogasawara, M.	F-a Mammalian Genetics Laboratory
Ogasawara, O.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Ogawa K	F-b Mammalian Development Laboratory
Ogawa R	F-b Mammalian Development Laboratory
Ogawa, M.	F-a Mammalian Genetics Laboratory
Ogino, K.	J-d Motor Neural Circuit Laboratory
Ogura, A.	Ia Laboratory for DNA Data Analysis
Ohashi, K.	C-c Division of Molecular and Developmental Biology
Ohba H	F-b Mammalian Development Laboratory
Ohgo, S.	F-a Mammalian Genetics Laboratory
Ohishi K	G-b Genome biology Laboratory
Ohkura, M.	C-c Division of Molecular and Developmental Biology
Ohme-Takagi, M.	F-e Plant Genetics Laboratory
Ohmido N	G-b Genome biology Laboratory
Ohmido, N.	G-c Comparative Genomics Laboratory
Ohnishi, T.	F-e Plant Genetics Laboratory
Ohno, H.	D-a Division of Population Genetics
Ohta, K.	F-a Mammalian Genetics Laboratory
Ohyanagi, H.	F-e Plant Genetics Laboratory
Okabe, S.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Okabe, Y.	G-a Genetic Informatics Laboratory
Okada, T.	F-a Mammalian Genetics Laboratory
Okajima, T.	H-e Gene Network Laboratory
Okamoto, H.	G-c Comparative Genomics Laboratory C-c Division of Molecular and Developmental Biology
Okamoto, T.	F-e Plant Genetics Laboratory
Okamura Y	F-b Mammalian Development Laboratory
Okano HJ	F-b Mammalian Development Laboratory
Okayama, T.	Ia Laboratory for DNA Data Analysis
Oki N	Ib Laboratory for Gene-Product Informatics

Okii, N.	F-e Plant Genetics Laboratory
Okigawa, S.	C-c Division of Molecular and Developmental Biology
Okubo K	Ib Laboratory for Gene-Product Informatics
Okubo K.	Ib Laboratory for Gene-Product Informatics
Okubo, K.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Okuda,T.	H-e Gene Network Laboratory
Okushima Y	Ib Laboratory for Gene-Product Informatics
Okwuonu, GO.	G-c Comparative Genomics Laboratory
Ono, R.	G-c Comparative Genomics Laboratory
Orchard, S.	Ia Laboratory for DNA Data Analysis
Osaki, M.	G-c Comparative Genomics Laboratory
Oshima, T.	C-c Division of Molecular and Developmental Biology
Oshima,K.	D-a Division of Population Genetics
Oshimura	G-c Comparative Genomics Laboratory
Oshimura,M.	Ia Laboratory for DNA Data Analysis
Osumi, M.	J-c Cell Architecture Laboratory F-f Microbial Genetics Laboratory
Ouchi, Y.	Ia Laboratory for DNA Data Analysis
Ouellette, BF.	Ia Laboratory for DNA Data Analysis
Oyama T	F-b Mammalian Development Laboratory
Oyama, T.	A-a Division of Molecular Genetics
Ozaki, Y.	F-d Model Fish Genomics Resource
Paabo,S.	D-a Division of Population Genetics
Panthee, S.	G-c Comparative Genomics Laboratory
Papenfuss, AT.	G-c Comparative Genomics Laboratory
Papp B.	H-a Biological Macromolecules
Pask, AJ.	G-c Comparative Genomics Laboratory
Pasumarthi KB.	F-b Mammalian Development Laboratory
Patterson,N.	D-a Division of Population Genetics
Peichel CL	J-h Ecological Genetics Laboratory
Peichel.	J-h Ecological Genetics Laboratory
Perpelescu, M.	A-a Division of Molecular Genetics
Pfiffner, J.	F-f Microbial Genetics Laboratory
Pharo, EA.	G-c Comparative Genomics Laboratory
Phipps E.M.	D-a Division of Population Genetics
Phipps,E.M.	D-a Division of Population Genetics
Pidoux, A.	F-f Microbial Genetics Laboratory
Pierani, A.	D-a Division of Population Genetics
Plath K.	H-a Biological Macromolecules
Pokhil, GP.	H-a Biological Macromolecules
Pope B.D.	H-a Biological Macromolecules
Postlethwait, J.H.	C-c Division of Molecular and Developmental Biology
Pradeep, L.	C-c Division of Molecular and Developmental Biology
Prakash,T.	D-a Division of Population Genetics
Priest, M.	F-f Microbial Genetics Laboratory
Pugach,I.	D-a Division of Population Genetics

Pusic, A.	F-a Mammalian Genetics Laboratory
Quan Wu	F-b Mammalian Development Laboratory
R,Herzig.	G-c Comparative Genomics Laboratory
R.M.	F-c Mouse Genomics Resource Laboratory
Ramsden, S. L.	J-d Motor Neural Circuit Laboratory
Ranganathan, S.	Ia Laboratory for DNA Data Analysis
Rathjen J.	H-a Biological Macromolecules
Rathjen P.D.	H-a Biological Macromolecules
Regev, A.	F-f Microbial Genetics Laboratory
Reich,D.	D-a Division of Population Genetics
Reina Komiya	L EXPERIMENTAL FARM
Remley-Carr S	F-b Mammalian Development Laboratory
Renfree, MB.	G-c Comparative Genomics Laboratory
Rens, W.	G-c Comparative Genomics Laboratory
Rhind, N.	F-f Microbial Genetics Laboratory
Richardson, L.	Ia Laboratory for DNA Data Analysis
Rie Saba	F-b Mammalian Development Laboratory
Rie,Saba	F-b Mammalian Development Laboratory
Rizman-Idid, M.	Ia Laboratory for DNA Data Analysis
Robbertse, B.	F-f Microbial Genetics Laboratory
Roca, J.	Ia Laboratory for DNA Data Analysis
Rocca-Serra, P.	Ia Laboratory for DNA Data Analysis
Rodriguez-Mari, A.	C-c Division of Molecular and Developmental Biology
Roy, S.	F-f Microbial Genetics Laboratory
Ruiz, SJ.	G-c Comparative Genomics Laboratory
Russ, C.	F-f Microbial Genetics Laboratory
Ryba T.	H-a Biological Macromolecules
Ryu Ueda	F-g Invertebrate Genetics Laboratory
S, Miyamoto.	G-c Comparative Genomics Laboratory
S, Takashima.	G-c Comparative Genomics Laboratory
S, Yamazaki.	G-c Comparative Genomics Laboratory
Saba R	F-b Mammalian Development Laboratory
Saba,.Yuzuru	F-b Mammalian Development Laboratory
Sado, T.	G-c Comparative Genomics Laboratory
Saera Hihara	H-a Biological Macromolecules
Saga Y	F-b Mammalian Development Laboratory
Saga, Y.	E-c Division of Brain Function
Saga,.Shinji	F-b Mammalian Development Laboratory
Saga.	F-b Mammalian Development Laboratory
Sagano, S.	G-c Comparative Genomics Laboratory
Saint-Amant, L.	J-d Motor Neural Circuit Laboratory
Saito, K.	F-d Model Fish Genomics Resource
Saito, M.	G-a Genetic Informatics Laboratory
Saito, T.	G-a Genetic Informatics Laboratory
Saitou N.	D-a Division of Population Genetics

Saitou,N.	D-a Division of Population Genetics Ia Laboratory for DNA Data Analysis
Sakaguchi, K.	C-c Division of Molecular and Developmental Biology
Sakai, C.	F-d Model Fish Genomics Resource
Sakai, N.	F-d Model Fish Genomics Resource
Sakai, T.	Ia Laboratory for DNA Data Analysis
Sakaidani,Y.	H-e Gene Network Laboratory
Sakaki, V.	G-c Comparative Genomics Laboratory
Sakaki, Y.	G-c Comparative Genomics Laboratory
Sakamoto R	F-b Mammalian Development Laboratory
Sakaniwa, S.	G-a Genetic Informatics Laboratory
Sakudoh T	G-b Genome biology Laboratory
Sakura,Mita	F-b Mammalian Development Laboratory
Sano K	Ib Laboratory for Gene-Product Informatics
Sano, K.	F-e Plant Genetics Laboratory
Sansone, SA.	Ia Laboratory for DNA Data Analysis
Santibanez, J.	G-c Comparative Genomics Laboratory
Saori Miyazaki	L EXPERIMENTAL FARM
Saruhashi, S.	Ib Laboratory for Gene-Product Informatics
Sasaki N	F-b Mammalian Development Laboratory
Sasaki T.	H-a Biological Macromolecules
Sasaki, T.	D-a Division of Population Genetics E-b Division of Agricultural Genetics
Sasamoto S	G-b Genome biology Laboratory
Sasamoto, S.	G-c Comparative Genomics Laboratory
Sasamura,T.	H-e Gene Network Laboratory
Sato ,S.	G-c Comparative Genomics Laboratory
Sato M	F-b Mammalian Development Laboratory
Sato S	G-b Genome biology Laboratory
Sato Y	F-b Mammalian Development Laboratory
Sato, F.	C-c Division of Molecular and Developmental Biology
Sato, M.	J-c Cell Architecture Laboratory F-f Microbial Genetics Laboratory
Sato, T.	C-c Division of Molecular and Developmental Biology
Sato, Y.	E-c Division of Brain Function F-e Plant Genetics Laboratory
Sato,H.	H-e Gene Network Laboratory
Satoshi Fukuchi	L EXPERIMENTAL FARM
Satoshi Saruhashi	Ib Laboratory for Gene-Product Informatics
Savoy L.D.	F-c Mouse Genomics Resource Laboratory
Savoy, LD.	F-a Mammalian Genetics Laboratory
Sawamoto, K.	C-c Division of Molecular and Developmental Biology
Saze, H.	E-b Division of Agricultural Genetics
Schneider, NY.	G-c Comparative Genomics Laboratory
Schofield, PN.	Ia Laboratory for DNA Data Analysis
Schouw, A.	C-c Division of Molecular and Developmental Biology
Schwarz, G.	J-d Motor Neural Circuit Laboratory

Searle, SM.	G-c Comparative Genomics Laboratory
Seki M	E-b Division of Agricultural Genetics
Sekiyama, Y.	G-c Comparative Genomics Laboratory
Senthilkumar D	F-g Invertebrate Genetics Laboratory
Serizawa, A.	F-e Plant Genetics Laboratory
Shakes, L.A.	C-c Division of Molecular and Developmental Biology
Sharma,K.V.	D-a Division of Population Genetics
Shaw, G.	G-c Comparative Genomics Laboratory
Shen, JY.	G-c Comparative Genomics Laboratory
Sherwood D. R.	H-f Multicellular Organization Laboratory
Shibagaki N	G-b Genome biology Laboratory
Shibagaki, N.	G-c Comparative Genomics Laboratory
Shibata S	F-b Mammalian Development Laboratory
Shibata, T.	G-c Comparative Genomics Laboratory
Shigeki Watanabe	L EXPERIMENTAL FARM
Shigenobu,Y.	Ia Laboratory for DNA Data Analysis
Shikata, Y.	F-a Mammalian Genetics Laboratory
Shimada T	G-b Genome biology Laboratory
Shimamoto, A.	F-c Mouse Genomics Resource Laboratory
Shimamoto, N.	H-d Biomolecular Structure Laboratory
Shimizu A	Ib Laboratory for Gene-Product Informatics
Shimizu H	C-a Division of Developmental Genetics
Shimizu KK	E-b Division of Agricultural Genetics
Shimizu, A.	F-e Plant Genetics Laboratory
Shimizu, H.	C-a Division of Developmental Genetics
Shimizu, K.	C-c Division of Molecular and Developmental Biology F-a Mammalian Genetics Laboratory
Shimizu, T.	C-c Division of Molecular and Developmental Biology
Shin-I, T.	G-c Comparative Genomics Laboratory
Shin-i T	G-b Genome biology Laboratory
Shinichiro Yamaki	L EXPERIMENTAL FARM
Shinohara, K.	J-c Cell Architecture Laboratory
Shinozaki K	E-b Division of Agricultural Genetics
Shinya, M.	F-d Model Fish Genomics Resource
Shiomi,D.	F-f Microbial Genetics Laboratory
Shirahige K.	J-e Molecular Function Laboratory
Shirahige,.Yumiko	F-b Mammalian Development Laboratory
Shirahige.S.	B-b Division of Microbial Genetics
Shiraki, T.	C-c Division of Molecular and Developmental Biology
Shirayoshi, K.	G-c Comparative Genomics Laboratory
Shiroishi T	F-a Mammalian Genetics Laboratory
Shiroishi T.	F-c Mouse Genomics Resource Laboratory
Shiroishi, T.	F-a Mammalian Genetics Laboratory
Shiwa, Y.	Ib Laboratory for Gene-Product Informatics
Short, KR.	G-c Comparative Genomics Laboratory
Siddle, HV.	G-c Comparative Genomics Laboratory

Siegfried, K.R.	F-d Model Fish Genomics Resource
Smedley, D.	Ia Laboratory for DNA Data Analysis
Smialowska, A.	F-f Microbial Genetics Laboratory
Soloway, PD.	G-c Comparative Genomics Laboratory
Song, XZ.	G-c Comparative Genomics Laboratory
Southan, C.	Ia Laboratory for DNA Data Analysis
Spatafora, J. W.	F-f Microbial Genetics Laboratory
Speed, TP.	G-c Comparative Genomics Laboratory
Spitsbergen, J.	C-c Division of Molecular and Developmental Biology
Sprague, S. M.	J-d Motor Neural Circuit Laboratory
Stephens, A.	G-c Comparative Genomics Laboratory
Sterk, P.	Ia Laboratory for DNA Data Analysis
Stoneking M.	D-a Division of Population Genetics
Stringer, JM.	G-c Comparative Genomics Laboratory
Strittmatter, S.M.	E-c Division of Brain Function
Stumpf, CR.	F-a Mammalian Genetics Laboratory
Suda, M.	J-c Cell Architecture Laboratory
Suetsugu, T.	J-c Cell Architecture Laboratory
Suganami A	F-b Mammalian Development Laboratory
Sugawara, H.	Ib Laboratory for Gene-Product Informatics Ia Laboratory for DNA Data Analysis
Sugimoto, A.	G-b Genome biology Laboratory
Sugimoto, H.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Sugioka, K.	H-f Multicellular Organization Laboratory
Sugioka, K. Sawa	H-f Multicellular Organization Laboratory
Sugiyama, J.	C-c Division of Molecular and Developmental Biology
Sumiyama, K.	D-a Division of Population Genetics
Sumiyoshi, S.	G-b Genome biology Laboratory
Sundaravadanam, Y.	G-c Comparative Genomics Laboratory
Suster, M.	C-c Division of Molecular and Developmental Biology
Suster, M.L.	C-c Division of Molecular and Developmental Biology
Suwa G.	D-a Division of Population Genetics
Suwabe K	Ib Laboratory for Gene-Product Informatics
Suwabe, K.	F-e Plant Genetics Laboratory
Suzuki R.	D-a Division of Population Genetics
Suzuki, A.	A-a Division of Molecular Genetics
Suzuki, I.K.	E-c Division of Brain Function
Suzuki, R.	G-c Comparative Genomics Laboratory
Suzuki, S.	G-c Comparative Genomics Laboratory
Suzuki, Y.	G-c Comparative Genomics Laboratory Ia Laboratory for DNA Data Analysis
Suzuki, E.	H-e Gene Network Laboratory
Swoboda, P.	F-f Microbial Genetics Laboratory
Sykes, S. M.	F-f Microbial Genetics Laboratory
T, Hitomi.	G-c Comparative Genomics Laboratory
T.D.	C-c Division of Molecular and Developmental Biology

Tabata S	G-b Genome biology Laboratory
Tabata, S.	G-c Comparative Genomics Laboratory
Takada, T.	F-a Mammalian Genetics Laboratory
Takada, Jun	F-b Mammalian Development Laboratory
Takagi T	Ib Laboratory for Gene-Product Informatics
Takagi T.	Ib Laboratory for Gene-Product Informatics
Takagi, H.	G-c Comparative Genomics Laboratory
Takagi, T.	J-c Cell Architecture Laboratory Ib Laboratory for Gene-Product Informatics F-f Microbial Genetics Laboratory Ia Laboratory for DNA Data Analysis
Takahashi A.	F-c Mouse Genomics Resource Laboratory
Takahashi C	G-b Genome biology Laboratory
Takahashi TS	J-e Molecular Function Laboratory
Takahashi, A.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Takahashi, C.	G-c Comparative Genomics Laboratory
Takahashi, H.	F-e Plant Genetics Laboratory
Takahashi, M.	J-d Motor Neural Circuit Laboratory
Takahashi, S.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory
Takahashi, Y.	C-c Division of Molecular and Developmental Biology G-a Genetic Informatics Laboratory
Takahashi, M.	D-a Division of Population Genetics
Takako Mochizuki	Ib Laboratory for Gene-Product Informatics L EXPERIMENTAL FARM
Takaku Y	C-a Division of Developmental Genetics
Takakubo, H.	C-c Division of Molecular and Developmental Biology
Takamatsu Y	F-a Mammalian Genetics Laboratory
Takanashi, H.	F-e Plant Genetics Laboratory
Takashi Gojobori	Ia Laboratory for DNA Data Analysis
Takashima, K.	F-e Plant Genetics Laboratory
Takasugi, T.	F-e Plant Genetics Laboratory
Takata H.	H-a Biological Macromolecules
Takata M.	J-e Molecular Function Laboratory
Takayama, K.	Ia Laboratory for DNA Data Analysis
Takeda S	F-b Mammalian Development Laboratory
Takeda, S.	G-c Comparative Genomics Laboratory H-d Biomolecular Structure Laboratory
Takehara, S.	G-c Comparative Genomics Laboratory
Takei, K.	E-c Division of Brain Function
Takeo Katsuki	H-e Gene Network Laboratory
Takeshi Sasamura	H-e Gene Network Laboratory
Takeuchi, K.	A-a Division of Molecular Genetics
Takeuchi, M.	C-c Division of Molecular and Developmental Biology
Takiguchi, S.	G-c Comparative Genomics Laboratory
Takisawa H.	J-e Molecular Function Laboratory

Tamura Y	F-b Mammalian Development Laboratory
Tamura, K.	F-a Mammalian Genetics Laboratory
Tamura, M.	F-a Mammalian Genetics Laboratory
Tan, S-G.	Ia Laboratory for DNA Data Analysis
Tan, TW.	Ia Laboratory for DNA Data Analysis
Tanabe, K.	C-c Division of Molecular and Developmental Biology
Tanaka M	E-b Division of Agricultural Genetics
Tanaka T	J-e Molecular Function Laboratory
Tanaka, S.	B-b Division of Microbial Genetics
Tanaka, T.	B-b Division of Microbial Genetics
Tanaka, Y.	B-b Division of Microbial Genetics
Tanaka,S.	B-b Division of Microbial Genetics
Tanaka,T.	B-b Division of Microbial Genetics
Tanaka,Y.	B-b Division of Microbial Genetics
Tanaka.S.	B-b Division of Microbial Genetics
Tanase, K.	G-a Genetic Informatics Laboratory
Tanave, A.	F-c Mouse Genomics Resource Laboratory
Taniguchi, Y.	G-c Comparative Genomics Laboratory
Tanino, S.	C-c Division of Molecular and Developmental Biology
Tarabykin, V.	D-a Division of Population Genetics
Tashiro, K.	D-a Division of Population Genetics
Tatsumoto, S.	G-c Comparative Genomics Laboratory
Tatusova, T.	Ia Laboratory for DNA Data Analysis
Taylor, C.	Ia Laboratory for DNA Data Analysis
Taylor, JM.	E-b Division of Agricultural Genetics
Taylor,D.T.	D-a Division of Population Genetics
Teissier, A.	D-a Division of Population Genetics
Terao-Morita, M.	E-b Division of Agricultural Genetics
Tetsuya Ishikawa	H-a Biological Macromolecules
Tetsuya Okajima.	H-e Gene Network Laboratory
Thirumurugan, T.	F-e Plant Genetics Laboratory
Thomas, D.	G-c Comparative Genomics Laboratory
Thompson, D. A.	F-f Microbial Genetics Laboratory
Thornton, R.	G-c Comparative Genomics Laboratory
Titus, T.A.	C-c Division of Molecular and Developmental Biology
To TK	E-b Division of Agricultural Genetics
To, T.	E-b Division of Agricultural Genetics
Toda,H.	H-e Gene Network Laboratory
Togawa, S.	C-c Division of Molecular and Developmental Biology
Togawa,S.	C-c Division of Molecular and Developmental Biology
Toida, K.	J-c Cell Architecture Laboratory
Tomizawa, S.	G-c Comparative Genomics Laboratory
Tomo Hanafusa	H-a Biological Macromolecules
Tomoda,T.	H-e Gene Network Laboratory
Tomoko Nomura	H-e Gene Network Laboratory
Tomoko Yamakawa	H-e Gene Network Laboratory

Torihara, H.	F-d Model Fish Genomics Resource
Toshiaki Mori	H-a Biological Macromolecules
Toshiaki Watanabe	L EXPERIMENTAL FARM
Toshihisa Okido	Ib Laboratory for Gene-Product Informatics
Toshihisa Takagi	Ib Laboratory for Gene-Product Informatics
Totoki, Y.	G-c Comparative Genomics Laboratory
Toyama, M.	E-b Division of Agricultural Genetics
Toyoda A	G-b Genome biology Laboratory
Toyoda T	Ib Laboratory for Gene-Product Informatics E-b Division of Agricultural Genetics
Toyoda, A.	G-c Comparative Genomics Laboratory
Toyoda, Y.	G-c Comparative Genomics Laboratory
Troon, C.	G-c Comparative Genomics Laboratory
Tsetskhladze, Z.	C-c Division of Molecular and Developmental Biology
Tsuchida H	Ib Laboratory for Gene-Product Informatics
Tsuchida K.	G-b Genome biology Laboratory
Tsuchida, H.	F-e Plant Genetics Laboratory
Tsuchimoto S	G-b Genome biology Laboratory
Tsuchimoto, S.	G-c Comparative Genomics Laboratory
Tsuchiya, R.	G-a Genetic Informatics Laboratory
Tsuda, K.	F-e Plant Genetics Laboratory
Tsuji, F.	G-c Comparative Genomics Laboratory
Tsujikawa K	F-b Mammalian Development Laboratory
Tsujita, T.	C-c Division of Molecular and Developmental Biology
Tsukasa Matsuda	H-e Gene Network Laboratory
Tsumagari K.	H-a Biological Macromolecules
Tsuruoka H	G-b Genome biology Laboratory
Tsuruoka, H.	G-c Comparative Genomics Laboratory
Tsutsui, Y.	F-f Microbial Genetics Laboratory
Tsutsumi, N.	F-e Plant Genetics Laboratory
Tsutsumi, S.	Ia Laboratory for DNA Data Analysis
Tsutui H	Ib Laboratory for Gene-Product Informatics
Uechi, T.	F-d Model Fish Genomics Resource
Ueno, N.	G-c Comparative Genomics Laboratory
Uezumi A	F-b Mammalian Development Laboratory
Umeda M.	Ib Laboratory for Gene-Product Informatics
Umeda,M.	H-e Gene Network Laboratory
Umemori T	J-e Molecular Function Laboratory
Umemori, T.	B-b Division of Microbial Genetics
Umesaki,Y.	D-a Division of Population Genetics
Uramoto, M.	G-c Comparative Genomics Laboratory
Urano, T.	Ia Laboratory for DNA Data Analysis
Urasaki, A.	C-c Division of Molecular and Developmental Biology
Urban, J.M.	C-c Division of Molecular and Developmental Biology
Usukura, J.	A-a Division of Molecular Genetics
Vaughn, M.	F-f Microbial Genetics Laboratory

Vengrova, S.	F-f Microbial Genetics Laboratory
Vigier, L.	D-a Division of Population Genetics
Vogalis, F.	C-c Division of Molecular and Developmental Biology
W, Liu.	G-c Comparative Genomics Laboratory
Wada N	G-b Genome biology Laboratory
Wada, H.	C-c Division of Molecular and Developmental Biology
Wada, N.	G-c Comparative Genomics Laboratory
Wada, Y.	C-c Division of Molecular and Developmental Biology
Wainwright, B.	F-a Mammalian Genetics Laboratory
Wakabayashi KI	F-b Mammalian Development Laboratory
Wakasa, K.	I-b Laboratory for Gene-Product Informatics
Wakefield, MJ.	G-c Comparative Genomics Laboratory
Wang, C.	G-c Comparative Genomics Laboratory
Wang, H.	C-c Division of Molecular and Developmental Biology
Wang, J.	G-c Comparative Genomics Laboratory
Wang,C.	I-a Laboratory for DNA Data Analysis
Wapinski, I.	F-f Microbial Genetics Laboratory
Watabe T	F-b Mammalian Development Laboratory
Watanabe A	G-b Genome biology Laboratory
Watanabe M	I-b Laboratory for Gene-Product Informatics
Watanabe S.	I-b Laboratory for Gene-Product Informatics
Watanabe, A.	G-c Comparative Genomics Laboratory
Watanabe, M.	F-e Plant Genetics Laboratory
Watanabe, N.	E-c Division of Brain Function
Watanabe, T.	G-c Comparative Genomics Laboratory G-a Genetic Informatics Laboratory
Watase G.	J-e Molecular Function Laboratory
Waters, PD.	G-c Comparative Genomics Laboratory
Weinstock, G.	G-c Comparative Genomics Laboratory
Werner, H.B.	E-c Division of Brain Function
Whetzel, PL.	I-a Laboratory for DNA Data Analysis
White, O.	I-a Laboratory for DNA Data Analysis
Williams, S.	G-c Comparative Genomics Laboratory
Wilson, C.	C-c Division of Molecular and Developmental Biology
Wilson, P.	G-c Comparative Genomics Laboratory
Wolf, H.M.	C-c Division of Molecular and Developmental Biology
Wollstein,A.	D-a Division of Population Genetics
Wong, ES.	G-c Comparative Genomics Laboratory
Wood, D.	G-c Comparative Genomics Laboratory
Wu, C.	G-c Comparative Genomics Laboratory
Xu, S.	I-a Laboratory for DNA Data Analysis
Xue S.	F-a Mammalian Genetics Laboratory
Y, Mineharu.	G-c Comparative Genomics Laboratory
Y, Takagi.	G-c Comparative Genomics Laboratory
Yagura,M.	B-b Division of Microbial Genetics
Yamada M	G-b Genome biology Laboratory

Yamada, K.	J-d Motor Neural Circuit Laboratory
Yamada, M.	G-c Comparative Genomics Laboratory
Yamada, K.	H-e Gene Network Laboratory
Yamaguchi M	F-b Mammalian Development Laboratory
Yamaguchi, M.	E-c Division of Brain Function
Yamakawa, T.	G-a Genetic Informatics Laboratory
Yamakawa, T.	H-e Gene Network Laboratory
Yamaki, S.	F-e Plant Genetics Laboratory
Yamamoto H.	F-b Mammalian Development Laboratory
Yamamoto N	Ib Laboratory for Gene-Product Informatics
Yamamoto, M.	C-c Division of Molecular and Developmental Biology
Yamamoto, N.	F-e Plant Genetics Laboratory
Yamamoto, Y.	G-c Comparative Genomics Laboratory H-f Multicellular Organization Laboratory
Yamasaki, C.	Ia Laboratory for DNA Data Analysis
Yamashita, N.	E-c Division of Brain Function
Yamazaki Y.	H-a Biological Macromolecules
Yamazaki, Y.	G-a Genetic Informatics Laboratory
Yan, K.	D-a Division of Population Genetics
Yan, Y.-L.	C-c Division of Molecular and Developmental Biology
Yanagihara, K.	F-f Microbial Genetics Laboratory
Yanagisawa Y.	B-b Division of Microbial Genetics
Yanagisawa, Y.	B-b Division of Microbial Genetics
Yang,	Ia Laboratory for DNA Data Analysis
Yang, T.H.	C-c Division of Molecular and Developmental Biology
Yano K.	Ib Laboratory for Gene-Product Informatics
Yano, K.	F-e Plant Genetics Laboratory
Yano, M.	Ib Laboratory for Gene-Product Informatics
Yap, J.J.	F-c Mouse Genomics Resource Laboratory
Yapa, L.	G-c Comparative Genomics Laboratory
Yassour, M.	F-f Microbial Genetics Laboratory
Yasuhiko, Yumiko	F-b Mammalian Development Laboratory
Yasuhiro Tsutsui	L EXPERIMENTAL FARM
Yasukazu Nakamura	Ib Laboratory for Gene-Product Informatics L EXPERIMENTAL FARM
Yasumasa Joti	H-a Biological Macromolecules
Yasuo Nagato	L EXPERIMENTAL FARM
Yasushi Sako	H-a Biological Macromolecules
Yertutanol S.	F-c Mouse Genomics Resource Laboratory
Yertutanol, S.	F-a Mammalian Genetics Laboratory
Yoder, R.	F-f Microbial Genetics Laboratory
Yogi, A.	D-a Division of Population Genetics
Yokoyama K	Ib Laboratory for Gene-Product Informatics
Yokoyama S	E-b Division of Agricultural Genetics
Yokoyama, H.	F-a Mammalian Genetics Laboratory
Yokoyama, K.	F-e Plant Genetics Laboratory

Yoneda T	F-b Mammalian Development Laboratory
Yoshida N	F-b Mammalian Development Laboratory
Yoshikawa, H.	Ib Laboratory for Gene-Product Informatics
Yoshimura, A.	F-e Plant Genetics Laboratory
Yoshino, K.	G-c Comparative Genomics Laboratory
Yoshinori Nishino	H-a Biological Macromolecules
Yoshiyama K	Ib Laboratory for Gene-Product Informatics
Young, S. K.	F-f Microbial Genetics Laboratory
Yu, H.	G-c Comparative Genomics Laboratory
Yu, Takahashi	F-b Mammalian Development Laboratory
Yuasa S	G-b Genome biology Laboratory
Yuasa, S.	G-c Comparative Genomics Laboratory
Yuichi Kodama	Ib Laboratory for Gene-Product Informatics
Yuko Yoshikawa	H-a Biological Macromolecules
Yumiko ,Saga.	F-b Mammalian Development Laboratory
Yumiko Saga	F-b Mammalian Development Laboratory
Yumiko Saga.	F-b Mammalian Development Laboratory
Yuta Sakaidani	H-e Gene Network Laboratory
Yuta Sakaodani	H-e Gene Network Laboratory
Zahri, M.	Ia Laboratory for DNA Data Analysis
Zeng, Q.	F-f Microbial Genetics Laboratory
Zenger, KR.	G-c Comparative Genomics Laboratory
Zhang J.	H-a Biological Macromolecules
Zhang, X.	C-a Division of Developmental Genetics
Zhou, W.	J-d Motor Neural Circuit Laboratory
Zifalil, B.	Ia Laboratory for DNA Data Analysis
Zolkiewska A	F-b Mammalian Development Laboratory

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## Biological Symposium

- Apr,  
13  
2011 Endogenous dsRNA replicons and dsRNA-binding proteins in plants. (Toshiyuki Fukuhara)
- Apr,  
13  
2011 The Genome of an Extremophile, *Thellungiella parvula* (Brassicaceae) (Hans J Bohnert)
- Apr,  
25  
2011 Dynamics of pattern formation and emergence of biological functions in *Physarum plasmodium* (Seiji Takagi)
- Apr,  
25  
2011 Q: What can we learn from sponges? A: The origin of stem cells and pattern formation (Noriko Funayama)
- Apr,  
28  
2011 Diversity of Plant Life Cycles Is Generated by Dynamic Epigenetic Regulation in Response to Vernalization (Akiko Satake)
- May,  
9  
2011 ヒストンのメチル化修飾とクロマチン動態制御 (中山潤一)
- May,  
12  
2011 Molecular mechanisms of gene silencing and environmental stress response mediated by *Arabidopsis* histone deacetylase HDA6 (Taiko To)
- Jun,  
1  
2011 New bioresource creates new scientific fields: the forgotten fission yeast *Schizosaccharomyces japonicus* exhibits novel nuclear envelope dynamics during mitosis (Keita Aoki)
- Jun,  
2  
2011 Cortical representations of olfactory input by transsynaptic tracing (Kazunari Miyamichi)
- Jun,  
14  
2011 Control of licensing of centriole duplication : Role of APC/C Cdh1 and Plk1 (Toshiyuki Hatano)
- Jun,  
16  
2011 Periostin regulates Notch1 protein expression and cell survival under a stress condition in mouse cells (Hideyuki Tanabe)
- Jun,  
27  
2011 Working with Genome-scale data (Ewan Birney)
- Jun,  
28  
2011 A reciprocal inhibition model between CDK and PP2A in the cell cycle control (Satoru Mochida)

- Jul, 4 2011 Turing's dream comes true: bacterial F plasmid segregation system as a model case study for reaction-diffusion system (Shun Adachi)
- Jul, 7 2011 Roles for the Swi5-Sfr1 complex in DNA strand break repair through homologous recombination (Yufuko Akamatsu)
- Jul, 20 2011 Scaffolding function of the Chlamydomonas procentreole protein CRC70, a member of the conserved Cep70 family (Gen Shiratsuchi)
- Jul, 25 2011 B chromosomes have a functional effect on sex determination in Lake Victoria cichlids (Kohta Yoshida)
- Jul, 25 2011 The molecular evolution of DDT resistance among Drosophila species (Charles Robin)
- Jul, 26 2011 代謝経路改変大腸菌を用いた有用セスキテルペン合成に関する研究 (岡本 尚)
- Jul, 26 2011 Simultaneous observation of structure and dynamics of functioning proteins by high-speed atomic force microscopy (Noriyuki Kodera)
- Jul, 29 2011 Non-cell-autonomous Control of the Orientation of Stem Cell Polarity and Divisions (Shigeki Yoshiura)
- Aug, 2 2011 Probing rare polymorphism in humans with exceptionally large samples (Andrew G. Clark)
- Aug, 8 2011 Genetic and cellular bases of visual processing in zebrafish (Akira Muto)
- Aug, 8 2011 The role and molecular mechanism of circadian clock in Drosophila. (Tadahiro Goda)
- Aug, 11 2011 Quantifying E. coli Proteome and Transcriptome with Single-Molecule Sensitivity in Single Cells (Yuichi Taniguchi)
- Aug, 12 2011 The protocadherin-alpha C2 is required for normal serotonergic projections (Shota Katori)
- Sep, 8 2011 High throughput spatio-temporal studies of the microbiome (Jose C. Clemente)
- Sep, 14 2011 Neurite development and regeneration in C. elegans neurons (Massimo Hilliard)
- Sep, 15 2011 Control of non-coding RNA processing in Arabidopsis thaliana.(Yukio Kurihara)
- Sep, 20 DNA Ligase III supports all essential DNA ligation functions in vertebrates (Hiroshi

- 2011 Arakawa)
- Sep,  
22  
2011 A single-cell RNAi screen for regulators of mitotic cell mechanics identifies diseases-associated genes. (Yusuke Toyoda)
- Sep,  
26  
2011 Principles of neuronal network architecture: Insights from locomotor circuits in larval zebrafish (Minoru Koyama)
- Sep,  
27  
2011 Symmetry breaking in mouse development (Takashi Hiiragi)
- Oct,  
6  
2011 Inter-axonal communication defines presynaptic tiling in *C. elegans* (Kota Mizumoto)
- Oct,  
7  
2011 Regulation and evolution of *Drosophila* wing pigmentation pattern (Shigeyuki Koshikawa)
- Oct,  
12  
2011 How cell recognizes genes and transposons? — Toward elucidation of epigenetic network regulating genome structure and function (Soichi Inagaki)
- Oct,  
13  
2011 Copy number evolution of gene families (Masafumi Nozawa)
- Oct,  
13  
2011 Resolving the Patterns and Timing of the Evolution of Basal Ray-Finned Fishes: A Phylogenomic Approach (Jun Inoue)
- Oct,  
25  
2011 Evolvability in Sequence Space (Daniel L. Hartl)
- Oct,  
31  
2011 Getting Published in Western Journals (Gary Schoenwolf & Kurt Albertine)
- Nov,  
9  
2011 Cell architecture: centrosome centration and chromosome structure in the *Caenorhabditis elegans* embryo (Akatsuki Kimura)
- Nov,  
17  
2011 Measurements using fluctuations based on non-equilibrium statistical mechanics: applications to motor protein F1-ATPase (Kumiko Hayashi)
- Nov,  
21  
2011 Analysis of a novel family of Ca<sup>2+</sup> channel regulators in skeletal muscles and neurons (John Y. Kuwada)
- Nov,  
21  
2011 Haeckel's recapitulation theory? or The developmental hourglass? (Naoki Irie)
- Nov,  
22  
2011 Hunting for GABAergic Neuron Subtypes in the Cortical Jungle with Genetic Tools: Chandelier Cells as an Entry Point into Subtype-Specific Dissection of GABAergic Circuits (Hiroki Takuguchi)
- Nov,

- 29  
2011 Genomic Control Logic for Development (Eric Harris Davidson)
- Nov,  
30  
2011 Multigenerational epigenetic variation:an epigenomics and quantitative genetics perspective (Vincent Colot)
- Dec,  
7  
2011 Single molecule study of ion-channel proteins (Toru Ide)
- Dec,  
13  
2011 Drosophila immune responses against endogenous ligands (Hidehiro Fukuyama)
- Dec,  
19  
2011 Chromosome and spindle pole-derived signals generate an intrinsic code for spindle position and orientation (Tomomi Kiyomitsu)
- Dec,  
21  
2011 Cell biology of the cholera pathogen:from chromosome biology to cell pole development (Yoshiharu Yamaichi)
- Dec,  
22  
2011 Live Cell Imaging Reveals Temporal and Spatial Organization of DNA Replication in Budding Yeast (Toyoaki Natsume)
- Jan,  
16  
2012 Adaptations to polar environments at different levels of organisation (Peter Convey)
- Jan,  
16  
2012 Development of the posterior lateral line in zebrafish and in blue-fin tuna. (Alain Ghysen)
- Jan,  
24  
2012 Structuring the Ter Macrodomain of the E. coli chromosome:mechanisms and consequences (Frédéric Boccard)
- Jan,  
30  
2012 A statistical approach for discovering differentially expressed genes (Kentaro Fukuta)
- Feb,  
6  
2012 Masculinization and defeminization of the silkworm Z Chromosome (J. Nagaraju)
- Feb,  
7  
2012 Gene finding and species classification on the short genomic sequences (Hideki NOGUCHI)
- Feb,  
7  
2012 Tracing the migration histories and genetic affiliations of human populations in Asia using genome-wide SNP and mitochondrial DNA markers (Timothy A Jinam)
- Feb,  
9  
2012 Exploring the genetic mechanisms for the latitudinal variation in the sexual dimorphism of medaka (Maiko Kawajiri)
- Feb,  
14  
2012 『クマムシの多様性』(鈴木 忠)"Tardigrade diversity"(Atsushi Suzuki)

- Feb,  
15  
2012 The proprotein convertase furin is required for trophoblast syncytialization (Zhi Zhou)
- Feb,  
20  
2012 Spatially Restricting Gene Expression in Neurons during Long-term Plasticity (DAN OHTAN WANG)
- Feb,  
24  
2012 Behavior of Notch receptors regulated by Deltex in Drosophila (Kenta Yamada)
- Feb,  
28  
2012 The visualization of craniofacial skeletal structure in teleosts using high-resolution X-ray CT and transgenic fish (Sohei Nakayama)
- Mar,  
1  
2012 Single-cell analysis of topographic neural organization development using the zebrafish lateral line system (Akira Sato)
- Mar,  
14  
2012 PPAR $\gamma$ の構造生物学的研究から示唆される核内受容体についての私的見解 Personal view of nuclear receptors as suggested by structural biology of PPAR $\gamma$  (森川耿右) (Kosuke Morikawa)
- Mar,  
15  
2012 Centriolar kinesin Kif24 interacts with CP110 to remodel microtubules and regulate ciliogenesis (Tetsuo Kobayashi)
- Mar,  
15  
2012 Gene finding and species classification on the short genomic sequences (Herbert E Covington, III)
- Mar,  
15  
2012 Rapid synthesis of the X-linked mental retardation protein Oligophrenin-1 (OPHN-1) mediates mGluR-dependent LTD (Akiko Kobayashi)
- Mar,  
23  
2012 Creation of form by cell focussing in the *C. elegans* embryo (Ralf Schnabel)

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## Foreign Visitors

Apr, 13 2011	Hans J Bohnert	Crop Sciences Department, University of Illinois
Jun, 2 2011	Kazunari Miyamichi	HHMI/Department of Biology, Stanford University
Jun, 14 2011	Toshiyuki Hatano	Cell Biology, University of Massachusetts Medical School
Jun, 27 2011	Ewan Birney	European Molecular Biology Laboratory - European Bioinformatics Institute
Jul, 25 2011	Charles Robin	Department of Genetics, The University of Melbourne
Aug, 2 2011	Andrew G. Clark	Department of Molecular Biology, Cornell University
Aug, 8 2011	Tadahiro Goda	Department of Biology, University of Virginia
Sep, 8 2011	Jose Clemente	University of Colorado Boulder
Sep, 14 2011	Massimo Hillard	Queensland Brain Institute - The University OF Queensland
Sep, 15 2011	Yukio Kurihara	The Salk Institute for Biological Studies
Sep, 20 2011	Hiroshi Arakawa	Helmholz Center Munich, German Research Center for Environmental Health, Germany
Sep, 22 2011	Yusuke Toyoda	Max Plank Institute of Molecular Cell Biology and Genetics, Dresden Germany
Sep, 26 2011	Minoru Koyama	Department of Neurobiology and Behavior, Cornell University
Sep, 27 2011	Takashi Hiiragi	European Molecular Biology Laboratory - Heidelberg
Oct, 6 2011	Kota Mizumoto	Department of Biology, Stanford University

Oct, 7 2011	Shigeyuki Koshikawa	University of Wisconsin, Laboratory of Molecular Biology/Howard Hughes Medical Institute
Oct, 25 2011	Daniel L. Hartl	Department of Organismic and Evolutionary Biology Harvard University. Cambridge MA USA
Oct, 31 2011	Gary Schoenwolf & Kurt Albertine	University of Utah, School of Medicine
Nov, 21 2011	John Kuwada	Department of Molecular, Cellular and Developmental Biology at the University of Michigan
Nov, 22 2011	Hiroki Taniguchi	Cold Spring Harbor Laboratory, USA
Nov, 29 2011	Eric Harris Davidson	Norman Candler Professor of Cell Biology, Division of Biology, California Institute of Technology
Nov, 30 2011	Vincent Colot	Institute de Biologie de l'Ecole Normale Superieure Paris, France
Dec, 12 2011	Hidehiro Fukuyama	Institut de Biologie Moleculaire et Cellulaire, Strasbourg France
Dec, 19 2011	Tomomi Kiyomitsu	Whitehead Institute for Biomedical Research MA USA
Dec, 21 2011	Yoshiharu Yamaichi	Brigham&Women's Hospital, Harvard Medical School, Howard Hughes Medical Institute
Dec, 22 2011	Toyoaki Natsume	College of Life Science, University of Dundee, UK
Jan, 16 2012	Alain Ghysen	INSERM, Universite Montpellier, France
Jan, 16 2012	Peter Convey	British Antarctic Survey
Jan, 24 2012	Frederic Boccard	Centre de Genetique Moleculaire du CNRS, France
Feb, 6 2012	Javaregowda Nagaraju	Laboratory of Molecular Genetics, Centre for DNA Fingerprinting and Diagnostics, Nampally, Hyderabad, India
Mar, 15 2012	Akiko Kobayashi	Cold Spring Harbor Laboratory
Mar, 15 2012	Herbert Convington	E. Department of Psychology and Neuroscience, Duke University

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2012

Tetsuo Kobayashi New York University School of Medicine

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23  
2012

Ralf Schnabel Technische Universität Braunschweig Developmental Genetics

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