



Research Organization of Information and Systems
National Institute of Genetics

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No.59
2008

ANNUAL REPORT

情報・システム研究機構
国立遺伝学研究所
年報

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Research Organization of Information and Systems
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 life science. 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. To this end NIG and three other national institutes, the National Institute of Informatics, The Institute of Statistical Mathematics and the National Institute of Polar Research have formed a new organization, the Research Organization of Information and Systems (ROIS) since April 2004, as a part of the reform of national universities and research institutes in Japan. Inter-institutional collaborations within the new organization are in progress.

We welcome your comments and suggestions on our research activities and endeavors.

Yuji Kohara, Director-General

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KOHARA, Yuji, D. Sc.

Vice-Director

KATSURA, Isao, D. Sc.

GOJOBORI, Takashi, D. Sc.

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Division of Mutagenesis

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TSUTSUI, Yasuhiro, D.Med., Assistant Professor

Molecular Mechanism Laboratory

SEINO, Hiroaki, D. Sc., Assistant Professor

Division of Nucleic Acid Chemistry

NATSUME, Tohru, D. Med., Adjunct Professor

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IIDA, Tetsushi, D. Sc., Assistant Professor

Division of Microbial Genetics

ARAKI, Hiroyuki, D. Sc., Professor

TANAKA, Seiji, D. Sc., Assistant Professor

Division of Cytoplasmic Genetics

BALLING, Rudi, Ph. D., Adjunct Professor

KURODA, Shinya, D. Med., Adjunct Professor

3. Department of Developmental Genetics

HIROMI, Yasushi, D. Sc., Head of the Department

Division of Developmental Genetics

HIROMI, Yasushi, D. Sc., Professor

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HIROSE, Susumu, D. Sc., Professor

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FUSE, Naoyuki, D. Sc., Assistant Professor
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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
Division of Theoretical Genetics
WU, Chung-I, Ph. D., Adjunct Professor
HASEGAWA, Masami, D. Sc., Adjunct Professor

5. Department of Integrated Genetics

SASAKI, Hiroyuki, D. Med., Head of the Department
Division of Human Genetics
SASAKI, Hiroyuki, D. Med., Professor
SADO, Takashi, D. Sc., Assistant Professor
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NISHIJIMA, Hitoshi, Ph. D., Assistant Professor
SAZE, Hidetoshi, Ph.D., Assistant Professor
Division of Brain Function
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KAWASAKI, Takahiko, D. Sc., Assistant Professor
Division of Applied Genetics
SHINKAI, Yoichi, D. Med., Adjunct Professor
KADOWAKI, Takashi, D. Med., Adjunct Professor

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
Mammalian Development Laboratory
SAGA, Yumiko, D. Sc., Professor
KOKUBO, Hiroki, D. Sc., Assistant Professor
Mouse Genomics Resource Laboratory
KOIDE, Tsuyoshi, D. Med., Associate 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

FURUYA, Kanji, D. Sc., Assistant Professor
Invertebrate Genetics Laboratory
UEDA, Ryu, D. Sc., Professor
TAKAHASHI, Kuniaki, 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
Genomu Biology Laboratory
KOHARA, Yuji, D. Sc., Professor
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Comparative Genomics
FUJIYAMA, Asao, D.Sc., Professor
TOYODA, Atsushi, D.Sc., Associate Professor

8. Structural Biology Center

SHIMAMOTO, Nobuo, D. Sc., Head of the Center
Biological Macromolecules Laboratory
SHIINA, Nobuyuki, D. Sc., Assistant Professor
Molecular Biomechanism Laboratory
SHIMAMOTO, Nobuo, D. Sc., Professor
NAKAYAMA, Hideki, D. Eng., Assistant Professor
Multicellular Organization Laboratory
KATSURA, Isao, D. Sc., Professor
KIMURA, Koutarou, D. Ag., 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

GOJOBORI, Takashi, D. Sc., Head of the Center
Laboratory for DNA Data Analysis
GOJOBORI, Takashi, D. Sc., Professor
IKEO, Kazuho, D. Sc., Associate Professor
SUZUKI, Yoshiyuki, M. D., Ph. D., Assistant Professor
Laboratory for Gene-Product Informatics
NAKAMURA, Yasukazu, D. Sc., Professor
FUKUCHI, Satoshi, D. Sc., Assistant Professor
Laboratory for Gene Function Research
TATENO, Yoshio, Ph. D., D. Sc., Professor
Laboratory for the Research and Development of Biological Databases
TAKAGI, Toshihisa, D. Eng., Professor
SUGAWARA, Hideaki, D. Eng., Professor
IWAYANAGI, Takao, D. Eng., Professor
Laboratory for Gene-Expression Analysis
OKUBO, Kousaku, M. D., Ph. D., Professor
OGASAWARA, Osamu, D. Sc., Assistant Professor

10. Center for Frontier Research

KATSURA, Isao, D. Sc., Head of the Center
Laboratory for Cell Lineage
ISSHIKI, Takako, D. Sc., Associate Professor
Neural Morphogenesis Laboratory

EMOTO, Kazuo, D. Pharm., Associate Professor
Cell Architecture Laboratory
KIMURA, Akatsuki, D. Sc., Associate Professor

11. Radioisotope Center

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

12. Experimental Farm

KURATA, Nori, D. Ag., Head of the Farm
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13. Intellectual Property Unit

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YATA, Katsunori, Assistant Chief of the Section

15. Department of Administration

MARUYAMA, Ken-ichi, Head of the Department
UCHIYAMA, Akira, Head of the Department
KOKUDAI, Masatoshi, Chief of the Research Promotion Section
HIROSE, Hisayuki, Chief of the Management Project Section

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Advisory committee

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KONDO, Shigeru; Professor, Graduate school of Medicine, Tohoku University

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KURATA, Nori; Professor, Genetic Strains Research Center

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

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Research Outline

Code	Division/Laboratory	Group name
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-b	Division of Gene Expression	Susumu Hirose
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D-a	Division of Population Genetics	Toshiyuki Takano
D-b	Evolutionary Genetics	Hiroshi Akashi
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E-b	Division of Agricultural Genetics	Tetsuji Kakutani
E-b	Division of Agricultural Genetics	Keiichi Shibahara
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-a	Biological Macromolecules Laboratory	Makio Tokunaga
H-b	Molecular Biomechanism Laboratory	Nobuo Shimamoto
H-c	Multicellular Organization Laboratory	Isao Katsura
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-c	Laboratory for Gene Function Research	Yoshio Tateno
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-a	Laboratory for Cell Lineage	Takako Isshiki
J-b	Neural Morphogenesis Laboratory	Emoto Kazuo
J-c	Cell Architecture Laboratory	Kimura Akatsuki
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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. Hori, T., Okada, M., Maenaka, K., and Fukagawa T. (2007) CENP-O-class proteins form a stable complex and are required for proper kinetochore function. , **Mol. Biol. Cell** , 19 , 843 - 854
2. Hori, T., Amano, M., Suzuki, A., Backer, C., Welburn, J.P., Dong, Y., McEwen, B.F., Shang, W.H., Suzuki, E., Okawa, K., Cheeseman, I.M., and Fukagawa, T. (2008) CCAN makes multiple contacts with centromeric DNA and provides distinct pathways to the outer kinetochore , **Cell** , 135 , 1039 - 1052
3. 鈴木應志、深川竜郎 (2008) キネトコアの分子構築を見る , 細胞工学別冊「電子顕微鏡で読み解く生命の謎」 , , 130 - 155
4. Fukagawa, T. (2007) The kinetochore and spindle checkpoint in vertebrate cells. , **Frontiers in Bioscience** , 13 , 2705 - 2713
5. Cheeseman, M. I. Hori, T., Fukagawa, T., and Desai, A. (2007) KNL1 and CENP-H/W/K complex coordinately direct kinetochore assembly in vertebrates. , **Molecular Biology of the Cell** , 19 , 587 - 594

ORAL PRESENTATION

1. 深川竜郎 キネトコア形成に必要なクロマチン構造 大阪大学蛋白質研究所セミナー:クロマチン-構造とダイナミクスー 大阪大学コンベンションセンター 10/30-31

POSTER PRESENTATIONS

1. Hori, T., and Fukagawa, T. 「 Functional analysis of CENP-O class kinetochore proteins 」, The 3rd International Symposium on Chromosome Dynamics , Mishima , 5/26
2. Fukagawa, T. 「 Molecular architecture of the vertebrate constitutive centromere associated network 」, International Symposium on chromosome dynamics in Ise , Ise , 5/28
3. 深川竜郎 「 インナーキネトコアの分子構築 」, 第60回日本細胞生物学会シンポジウム , 横浜 , 6/29
4. Fukagawa T. 「 Molecular architecture of the vertebrate constitutive centromere associated network 」, EMBO workshop on Chromosome Segregation: Centromeres and Kinetochores , Bordeaux , 9/27-10/2
5. 深川竜郎 「 セントロメア特異的クロマチン構造の構築 」, BMB2008 (第31回日本分子生物学会シンポジウム) , 神戸 , 12/10
6. 大山隆、木村元、景山大、古谷美香、 深川竜郎、浅野士郎 「 ゲノムの階層的折り畳みの

- 基盤となるDNA物性」, BMB2008 (第31会日本分子生物学会シンポジウム), 神戸, 12/10
7. 岡田聖裕、深川竜郎 「 CENP-Aのセントロメア局在化の関与する因子の機能解析 」, BMB2008 (第31会日本分子生物学会), 神戸, 12/11
8. 堀哲也、天野美保、鈴木應志、大川克也、Iain Cheeseman、深川竜郎 「 セントロメアDNAに結合するCENP-T複合体の機能解析 」, BMB2008 (第31会日本分子生物学会), 神戸, 12/11
9. 岡田聖裕、深川竜郎 「 CENP-Aのセントロメア局在化に関与する因子の機能解析 」, BMB2008 (第31会日本分子生物学会), 神戸, 12/11
10. 古谷美香、景山大、木村元、深川竜郎、荒川潤、大山隆 「 ヒトゲノムの物理的特性と染色体構造 」, BMB2008 (第31会日本分子生物学会), 神戸, 12/10
11. 宇田川紘司、山本拓哉、松村祐紀、深川竜郎、大山隆 「 人工イベントDNAにより活性化された外来遺伝子の核内局在 」, BMB2008 (第31会日本分子生物学会), 神戸, 12/10
12. 深川竜郎 「 CENP-H/I複合体のサブ複合体であるCENP-Oクラス複合体の性質 」, 染色体ワークショップ, 湯河原, 1/31

EDUCATION

1. 深川竜郎、大山隆 クロマチン研究会-細胞核・染色体・クロマチンの機能構造構築と動態- 遺伝研研究集会 三島 10/22-23
2. 深川竜郎、大山隆 クロマチンを基盤とした遺伝情報の収納と発現 BMB2008 (第31会日本分子生物学会シンポジウム) 神戸 12/9-12
3. Niki, H., Kobayashi, T., and Fukagawa, T. International Symposium on chromosome dynamics in Ise Ise 5/28-5/30
4. Niki, H., Kobayashi, T., and Fukagawa, T. The 3rd International Symposium on Chromosome Dynamics Mishima 5/26-27

BOOK

1. Fukagawa, T., and De wulf, P. (2008) Kinetochore composition, formation, and organization. **The Kinetochore** 133 - 191

PATENT

1. 特願2008-039526, セントロメア局在タンパク質, 天野美保、堀哲也、深川竜郎, 大学共同利用機関法人情報・システム研究機構
2. 特願2008-194497, 細胞輸送用担体及びそれを使用した細胞の輸送方法, 富川宗博、深川竜郎, 大学共同利用機関法人情報・システム研究機構/Bio-Rois

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A. DEPARTMENT OF MOLECULAR GENETICS

A-b. Division of Mutagenesis

A. DEPARTMENT OF MOLECULAR GENETICS

A-b. Division of Mutagenesis

Fumiaki Yamao

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Haruta, N., Akamatsu, Y., Tsutsui, Y., Kurokawa, Y., Murayama, Y., Arcangioli, B., Iwasaki, H. (2007) Fission yeast Swi5 protein, a novel DNA recombination mediator, **DNA Repair (Amst)**, 7, 1-9

POSTER PRESENTATIONS

1. 筒井康博, 夏目豊彰, 須谷尚史, 白髭克彦, 岩崎博史, 山尾文明 「セントロメアクロマチン構造の維持に關与する分裂酵母Mcl1の解析」, 第25回染色体ワークショップ, 静岡県熱海市, 1/30-2/1
2. 筒井康博, 黒川裕美子, 菱田卓, 森下卓, 品川日出夫, 山尾文明, 岩崎博史 「相同組換えの制御に關与する分裂酵母Fbh1の機能解析」, 2007年度組換え・染色体再編ワークショップ, 静岡県伊豆市, 3/4-3/7

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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. (2007) A new role of the rDNA and nucleolus in the nucleus -rDNA instability maintains genome integrity-, **BioEssays** , 30 , 267 - 272

POSTER PRESENTATIONS

1. オーステン ガンレイ、坂 季美子、井手 聖、小林 武彦 「 リボソームRNA遺伝子の安定性と細胞の老化機構 」, 組換え・染色体再編ワークショップ・第19回DNA複製・分配ワークショップ, 静岡, 3/5
2. 井手 聖, 真木寿治, 小林 武彦 「 なぜ出芽酵母がrDNAを150コピー持つのか? 」, 組換え・染色体再編ワークショップ・第19回DNA複製・分配ワークショップ, 静岡, 3/5
3. 小林 武彦 「 リボソームRNA遺伝子が過剰に存在する理由 」, 第31回分子生物学会, 神戸, 12
4. 小林 武彦 「 リボソームRNA遺伝子の安定性と細胞の老化機構 」, 酵母遺伝学フォーラム第41回研究報告会, 札幌市, 9
5. 小林 武彦 「 The effect of replication initiation on gene amplification in the rDNA and its relationship to aging. 」, International Symposium for 3R, 静岡県掛川市, 10
6. 小林 武彦 「 The effect of replication initiation on gene amplification in the rDNA and its relationship to aging. 」, International Symposium on Chromosome Dynamics, 三重県伊勢市, 5

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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. 田中誠司,荒木弘之 (2008) 真核細胞染色体DNA複製開始反応とCDKによる制御, 細胞工学, 27, 985 - 991

ORAL PRESENTATION

1. 荒木弘之 サイクリン依存性キナーゼによる真核生物染色体DNA複製の制御機構 染色体機能とその病態 蛋白質研究所 3/14

POSTER PRESENTATIONS

1. Araki,H.,Tanaka,T.,Hirai,K.,Tanaka,Y.,Umemori,T.,Yanagisawa,Y.,Sakamoto,S.,Tanaka,S. 「 Molecular Mechanism of the Initiation Step of Chromosomal DNA Replication in Budding Yeast 」, XX International Congress of Genetics 2008 , Belrin, Germany , 7/13
2. Araki, H., Hirai, K., Li, Y., Muramatsu, S.,Tanaka, T., Yanagisawa, Y., Endo,S.,Tanaka, Y.,Umemori, T., Tanaka, S. 「 How CDKs trigger initiation of chromosomal DNA replication in budding yeast. 」, 染色体サイクル「International Symposium on Chromosome Dynamics in Ise, 2008 」, 三重県志摩市 , 5/28
3. Araki, H., Tanaka, T., Hirai, K., Li, Y., Tanaka, Y.,Umemori, T., Yanagisawa, Y., Muramatsu, S., Tanaka, S. 「 CDK-dependent regulation of chromosomal DNA replication 」, FASEB「Yeast Chromosome Structure, Replication & Segregation」, AZ, USA , 6/25
4. Araki, H., Tanaka., Hirai, K., Tanaka, Y., Umemori, T., Yanagisawa, Y., Muramatsu, S., Tanaka, S. 「 Molecular mechanism of the initiation step of chromosomal DNA replication in budding yeast. 」, XX International Congress of Genetics 2008 , Berlin,Germany ,
5. Araki, H.,Tanaka,T.,Hirai,K.,Li,Y.,Umemori,T.,Yanagisawa,Y.,Muramatsu, S.,Tanaka,S. 「 CDK-dependent initiation of chromosomal DNA replication in budding yeast. 」, Cold Spring Harbor Laboratory「The Cell Cycle」, NY, USA , 5/15
6. 荒木弘之 「 真核生物染色体DNAの複製開始機構 」, 日本分子生物学会 第8回春季シンポジウム, 札幌 , 5/27
7. Tanaka,S.,Araki,H. 「 Periodic expression of Sld2 is important for DNA replication and genome integrity 」, FASEB「Yeast Chromosome Structure, Replication & Segregation」, AZ, USA , 6/25
8. Araki,H. 「 染色体DNAの複製機構を探る 」, 第11回真核微生物交流会, 東広島市 , 7/4
9. Araki,H.,Hirai,K.,Li,Y.,Tanaka,T.,Tanaka,Y.,Umemori,T.,Yanagisawa,Y.,Muramatsu,S.,Tanaka,S. 「 CDK-dependent Assembly of Replication Proteins to Initiate Chromosomal DNA Replication 」, DNA REPLICATION and GENOME INTEGRITY 2008 , CA, USA , 7/19
10. 平井和之,村松佐知子,荒木弘之 「 染色体DNAの複製開始期に形成されるタンパク質複合体

の解析」, 日本遺伝学会第80回大会, 名古屋, 9/4

11. Li,Y.,Araki,H. 「 In vitro reconstitution of pre-CMG complex in budding yeast」, 酵母遺伝学フォーラム第41回研究報告会, 札幌, 9/10

12. Tanaka,S.,Araki,H. 「 Regulation of the replication protein Sld2 and its role in stable genome maintenance」, 酵母遺伝学フォーラム第41回研究報告会, 札幌, 9/10

13. 荒木弘之 「 核酸合成に関わるたんぱく質複合体の構造と機能解析 --DNA複製開始を司るタンパク質複合体の形成機構--」, JST終了シンポジウム, 東京, 10/22

14. 田中誠司,荒木弘之 「 サイクリン依存性キナーゼによる染色体DNAの複製制御機構」, JST終了シンポジウム, 東京, 10/22

15. 平井和之,荒木弘之 「 DNA複製タンパク質複合体の解析」, JST終了シンポジウム, 東京, 10/22

16. 荒木弘之 「 核酸合成に関わるたんぱく質複合体の構造と機能解析」, 平成15年度採択研究課題事後評価会議, 東京, 10/23

17. Araki,H. 「 CDK-dependent ASSEMBLY of replication proteins to initiate chromosomal DNA replication」, 第一回GCOE国際シンポジウム, 東京, 10/25

18. Tanaka,S. 「 Periodic expression of replication protein Sld2 is important for DNA replication and genome integrity」, 3R Symposium 2008, 掛川, 10/27

19. Hirai,K. 「 Protein assembly at the initiation step of DNA replication in budding yeast」, 3R Symposium 2008, 掛川, 10/28

20. Li,Y. 「 Mechanism study of Saccharomyces cerevisiae CMG complex formation」, 3R Symposium 2008, 掛川, 10/28

21. Tanaka,T. 「 Proper initiation of chromosomal DNA replication requires the Sld3-Sld7 complex in budding yeast.」, 3R Symposium 2008, 掛川, 10/29

22. 平井和之,村松佐知子,荒木弘之 「 染色体DNAの複製開始期に形成されるタンパク質複合体の生化学的解析」, BMB2008, 神戸, 12/9

23. Li,Y.,Araki,H. 「 In vitro reconstitution of pre-CMG complex in budding yeast」, BMB2008, 神戸, 12/9

24. Tanaka,S.,Araki,H. 「 Regulation of the replication protein Sld2 and its role in stable genome maintenance.」, BMB2008, 神戸, 12/10

25. Araki,H.,Hirai,K.,Li,Y.,Muramatsu,S.,Tanaka,T.,Yanagisawa,Y.,Umemori,T.,Tanaka,S. 「 CDK-dependent assembly of replication protein to initiate chromosomal DNA replication」, BMB2008, 神戸, 12/12

26. Hirai,K.,Muramatsu,S.,Araki,H. 「 Protein assembly at the initiation step of DNA replication in budding yeast」, DNA Replication and Recombination, NM, USA, 2/10~2/15

27. 田中誠司 「 Cell cycle specific expression of Sld2 is important for the initiation of DNA replication」, 2007年度 DNA組換え・複製合同ワークショップ, 伊豆, 3/4~3/7

28. Li,Y. 「 In vitro formation of pre-CMG complex in Saccharomyces cerevisiae」, 2007年度 DNA組換え・複製合同ワークショップ, 伊豆, 3/4~3/7

29. 田中太門 「 出芽酵母における適切な染色体DNA複製の開始にはSld7-Sld3複合体が必要」, 2007年度 DNA組換え・複製合同ワークショップ, 伊豆, 3/4~3/7

EDUCATION

1. Araki, H. 3R Symposium 2008 静岡県掛川市 10/27~10/30

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C. DEPARTMENT OF DEVELOPMENTAL GENETICS

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Hiroshi Shimizu

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1 . Shimizu, H, Aufschnaiter, R., Li L., Sarras, M.P. Jr, Borza, D.B., Abrahamson, D.R., Sado, Y., Zhang (2008) The extracellular matrix of hydra is a porous sheet and contains type IV collagen. , **Zoolog** , 111 , 410 - 418

BOOK

1 . Shimizu, H. (2008) Overturning the prejudices about hydra and metazoan evolution
Evolutionary biology: from concepts to applications 117 - 134

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Yasushi Hiromi

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. 浅岡美穂 (2008) ショウジョウバエにおける生殖幹細胞ニッチとその形成機構, 細胞工学, 27, 653 - 658
2. 勝木健雄, 広海健. (2008) 神経回路形成における構造・機能相関 --- 軸索ガイダンス受容体はなぜ軸索内局在をするのか?, 蛋白質 核酸 酵素, 53, 537 - 543

ORAL PRESENTATION

1. Yasushi Hiromi Intra-axonal Patterning and its role in Neural Network Formation
EMBL, Germany 1/10

POSTER PRESENTATIONS

1. Asaoka, M. 「 Germline stem cell formation in Drosophila ovary 」, 41st annual meeting of JSDB (co-sponsored by ISDB), 徳島, 5/28-5/30
2. Katsuki, T., Hiramoto, M., Hiromi, Y. 「 Intra-axonal patterning: intrinsic compartmentalization of the axonal membrane in Drosophila neurons 」, Frontiers in Developmental Biology meeting, Presquile de Giens, Southern France, 9/13-17
3. Yasushi Hiromi 「 Intra-axonal patterning: pattern formation within a single neuronal process 」, NAIST-GCOE International Symposium "Developmental Biology", Nara, 1/15-16
4. Yasushi Hiromi 「 Intra-axonal patterning and its role in axon guidance 」, The third Swiss-Japanese Meeting "Progress in developmental biology: from", Arosa, Switzerland, 1/6-9
5. Hiromi, Y. 「 Neural network formation through intra-axonal patterning. 」, The 1st iCeMS Symposium/The 11th International Membrane Forum, Kyoto, 2/20-22
6. 湯浅喜博 広海健 「 Notch情報伝達系がグリア細胞の特異性を決めるための細胞内環境 」, 第2回神経発生討論会, 岡崎市, 3/13-14
7. 湯浅喜博 広海健 「 3つの異なるタイプの転写因子がNotch情報伝達経系が特異的に働く細胞内環境を提供する 」, 08' 遺伝情報DECODE・冬のワークショップ, 越後湯沢, 1/21-23

OTHERS

1. Y. Hiromi, 3, Dr. Hiromi served as an editor for Development, Growth and Differentiation.

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

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Urasaki, A., Asakawa, K., Kawakami, K. (2008) Efficient transposition of the Tol2 transposable element from a single-copy donor in zebrafish , **Proc. Natl. Acad. Sci. USA** , 105 , 19827 - 19832
- 2 . Harada, H., Takahashi, Y., Kawakami, K., Ogura, T., Nakamura, H. (2008) Tracing retinal fiber trajectory with a method of transposon-mediated genomic integration in chick embryo. , **Development, Growth & Differentiation** , 50 , 697 - 702
- 3 . Urasaki, A., Mito, T., Noji, S., Ueda, R., Kawakami, K. (2008) Transposition of the vertebrate Tol2 transposable element in *Drosophila melanogaster* , **Gene** , 425 , 64 - 68
- 4 . Yoshikawa, S., Kawakami, K., Zhao X.C. (2008) G2R Cre reporter transgenic zebrafish. , **Developmental Dynamics** , 237 , 2460 - 2465
- 5 . Aleström, P., Begemann, G., Carvan, M.J. 3rd, Cheng, K.C., Crosier, K., Crosier, P., Ekker, S., Huttenlocher, A., Kawakami, K., Kelly, G., Korzh, V., Lieschke, G., Mione, M., Neely, M.N., Neuhauss, S., and Trede, N.S. (2008) Views on four key questions about zebrafish research. , **Zebrafish** , 5 , 9 - 24
- 6 . Asakawa, K., and Kawakami, K. (2008) Targeted gene expression by the Gal4-UAS system in zebrafish , **Development, Growth & Differentiation** , 50 , 391 - 399
- 7 . Takahashi, Y., Watanabe, T., Nakagawa, S., Kawakami, K., Sato, Y. (2008) Transposon-mediated stable integration and tetracycline-inducible expression of electroporated transgenes in chicken embryos. , **Methods in Cell Biology** , 87 , 271 - 280
- 8 . Kotani, T., Kawakami, K. (2007) Misty somites, a maternal effect gene identified by transposon-mediated insertional mutagenesis in zebrafish that is essential for the somite boundary maintenance , **Developmental Biology** , 316 , 383 - 396
- 9 . Nagayoshi, S., Hayashi, E., Abe, G., Osato, N., Asakawa, K., Urasaki, A., Horikawa, K., Ikeo, K., Takeda, H., Kawakami, K. (2007) Insertional mutagenesis by the *Tol2* transposon-mediated enhancer trap approach generated mutations in two developmental genes: *tcf7* and *synembryon-like* , **Development** , 135 , 159 - 169
- 10 . Asakawa, K., Suster, M.L., Mizusawa, K., Nagayoshi, S., Kotani, T., Urasaki, A., Kishimoto, Y., Hibi, M., Kawakami, K. (2007) Genetic dissection of neural circuits by Tol2 transposon-mediated Gal4 gene and enhancer trapping in zebrafish , **Proc. Natl. Acad. Sci. USA** , 105 , 1255 - 1260

ORAL PRESENTATION

- 1 . Kawakami, K. Transposon-mediated gene and enhancer trapping in zebrafish The

2. 川上浩一 トランスポゾンを用いた遺伝子トラップ・エンハンサートラップ法によるゼブラフィッシュの機能ゲノム学 京都大学大学院理学研究科生物科学セミナー 京都大学大学院理学研究科生物科学専攻 9/18

3. Kawakami, K. Transposon-Mediated Gene Trapping and Enhancer Trapping in Zebrafish UCLA NEUROSCIENCE RESEARCH SEMINARS & LECTURES UCLA, USA 9/8

4. 川上浩一 ゼブラフィッシュにおけるトランスポゾンを用いた遺伝子トラップ・エンハンサートラップ法 東京工業大学大学院・生命理工学研究科 9/2

POSTER PRESENTATIONS

1. 稲葉真史, 渡邊正勝, 伊田健一郎, 川上浩一, 近藤 滋 「カリウムイオンはゼブラフィッシュの模様形成に寄与する」, 日本動物学会第79回大会, 福岡, 9/5-7

2. 平田晋三, 川上浩一 「しなやかに泳ぐゼブラフィッシュとうまく泳げないゼブラフィッシュ」, ゲノム研究勢ぞろい2008 in 名古屋, 名古屋, 10.25-26

3. 平田晋三, 東島真一, 川上浩一 「しなやかに泳ぐゼブラフィッシュとうまく泳げないゼブラフィッシュ」, ミニゲノムひろば2008 in 福岡, 福岡, 12/21

4. 川上浩一 「光る心臓、光る神経」, 国立遺伝学研究所一般公開講演会, 静岡県三島市, 4/5

5. Hu, S., Gong, H., Raz, E., Kawakami, K., Lin, G., Wu, J. 「Development of Platform Technology for Sterile Control of Genetically Modified Fish」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

6. Asakawa, K., Suster, M.L., Mizusawa, K., Nagayoshi, S., Kotani, T., Urasaki, A., Kishimoto, Y., Hibi, M., Kawakami, K. 「Targeted Gene Expression by Tol2 Transposon-mediated Gal4 Gene and Enhancer Trap Approaches in Zebrafish」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

7. Gong, H., Lin, M., Huang, H., Hu, S., Lin, G., Liu, W., Hu, M., Kawakami, K., Wu, J. 「Overexpression of Zebrafish IMP2 Induces Steatosis and ER Stress in the Liver of Transgenic Zebrafish as an Animal Model of Human Non-Alcoholic Fatty Liver Disease」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

8. Abe, G., Nagayoshi, S., Kawakami, K. 「Functional redundancy of Tcf7 and Lef1, transcription factors mediating the Wnt signaling pathway, during zebrafish fin development」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

9. Ikenaga, T., Gebhart, N., Urban, J., Kawakami, K., Ono, F. 「Pax8 regulates development of dopaminergic neurons in diencephalon」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

10. Yamamoto, M., Matsumoto, K., Yonemura, S., Kawakami, K., Itoh, M. 「Jagged-Notch Signaling is Involved in Zebrafish Notochord Development」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

11. Inaba, M., Watanabe, M., Ida, K., Kawakami, K., Kondo, S. 「Potassium ion contributes to pigment pattern formation」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

12. Santoriello, C., Deflorian, G., Pezzimenti, F., Kawakami, K., Lanfrancone, L., Fagagna, F., Mione, M. 「DNA Damage Response and Cellular Senescence in a Zebrafish Model of Costello Syndrome」, 8th International Conference on Zebrafish Development and Genetics, Madison, 6/25-29

13. Funahashi, J., 岡本仁, 川上浩一, 仲村春和 「内耳でGFPを発現するゼブラフィッシュ系統を用いた変異系統の形態形成異常の解析」, 第31回日本分子生物学会年会 第81回日本生化学会大会, 神戸, 12/9~12

14. 稲葉真史, 渡邊正勝, 伊田健一郎, 新屋みのり, 川上浩一, 近藤 滋 「黒色素細胞におけるKirチャンネルの発現はゼブラフィッシュのストライプ幅を制御する」, 第31回日本分子生物学会年会 第81回日本生化学会大会, 神戸, 12/9~12

15. Yoshida, A., Yamaguchi, Y., Nonomura, K., Kawakami, K., Takahashi, Y., Miura, M. 「Exploiting the Tol2 transposon system for investigation of glial development in mouse central nervous system」, 第31回日本分子生物学会年会 第81回日本生化学会大会, 神

戸, 12/9~12

16. Muto, A., Suster, M.L., Asakawa, K., Kawakami, K. 「 BEHAVIORAL SCREENING OF GAL4-ENHANCER TRAP LINES WITH UAS-TETANUS TOXIN IN ADULT ZEBRAFISH », The 2008 meeting on Axon Guidance, Synaptogenesis & Neural Plasticity, New York, 9/10-14

17. 小出哲也, 宮坂信彦, 森本耕造, 川上浩一, 吉原良浩 「 アミノ酸への誘引行動を介在するゼブラフィッシュ嗅覚神経回路の遺伝学的解析 », 日本味と匂学会第42回大会, 富山, 9/17-20

18. Abe, G., Suster, M.L., Kotani, T., Kishimoto, Y., Kawakami, K. 「 The zebrafish parafibromin gene is essential for embryogenesis and expression of *tbx5* target genes in pectoral fin development », 第14回小型魚類研究会, 岡崎, 9/20-21

19. Suster, M.L., Kania, A., Liao, M., Asakawa, K., Charron, F., Kawakami, K., Drapeau, P. 「 A Novel Conserved *evx1* Enhancer Links Spinal Interneuron Morphology and Cis-regulation from Fish to Mammals », The 16th CDB Meeting Cis-sequence Regulation and its Evolution, 神戸, 9/29-10/1

20. 小谷友也, 家村俊一郎, 夏目徹, 川上浩一, 山下正兼 「 脊椎動物発生過程においてプロテインキナーゼAの活性を制御する分子機構の解明 », 日本動物学会第79回大会, 福岡市, 9/5-7

21. Koide, T., Miyasaka, N., Morimoto, K., Kawakami, K., Yoshihara, Y. 「 Genetic Dissection of Zebrafish Olfactory Circuitry Mediating Attractive Response to Amino Acids », International Symposium on Olfaction and Taste Meeting, San Francisco, 7/21-26

22. Kawakami, K. 「 Genetic dissection of neural circuits by *Tol2* transposon-mediated Gal4 gene and enhancer trapping in zebrafish. », 6th FENS Forum of European Neuroscience, Geneva Switzerland, 7/12-16

23. Kawakami, K. 「 Transposon-mediated gene trapping and enhancer trapping in zebrafish », 6th Annual International Conference on Transposition and Animal Biotechnology, Berlin, Germany, 6/19-21

24. Kawakami, K. 「 Genetic dissection of neural circuits by *Tol2* Transposon-mediated Gal4 gene and enhancer trapping in zebrafish », Asia pacific zebrafish network meeting 2008, Auckland, New Zealand, 2/17-20

25. Abe, G., Nagayoshi, S., Kawakami, K. 「 Functional redundancy of *Tcf7* and *Lef1*, transcription factors mediating the Wnt signaling pathway, during zebrafish fin development », 第41回日本発生生物学会, 徳島, 5/28-30

26. Yamamoto, M., Matsumoto, K., Yonemura, S., Kawakami, K., Itoh, M. 「 Jagged-Notch signaling is involved in zebrafish notochord development », 第41回日本発生生物学会, 徳島, 5/28-30

27. 浅川和秀, Suster, M.L., 浦崎明宏, 小谷友也, 永吉さおり, 岸本康之, 日比正彦, 川上浩一 「ゼブラフィッシュGal4トラップ法を用いた神経回路の可視化と機能阻害 », 第41回日本発生生物学会, 徳島, 5/28-30

28. Asakawa, K., Suster, M.L., Mizusawa, K., Nagayoshi, S., Kotani, T., Urasaki, A., Kishimoto, Y., Hibi, M., Kawakami, K. 「 Genetic dissection of neural circuits by *Tol2* transposon-mediated Gal4 gene and enhancer trapping in zebrafish », The 2008 meeting on Neuronal Circuits: from Structure to Function, Cold Spring Harbor Laboratory, New York, 3/13~16

29. Asakawa, K., Suster, M.L., Mizusawa, K., Nagayoshi, S., Kotani, T., Urasaki, A., Kishimoto, Y., Hibi, M., Kawakami, K. 「 Genetic Dissection of Neural Circuits by *Tol2* Transposon-Mediated Gal4 and Enhancer Trapping in Zebrafish », The 6th annual CDB Symposium 2008, Turning Neurons into a Nervous System, Kobe, 3/24~26

EDUCATION

1. Kawakami, K. Technology Session Chair 8th International Conference on Zebrafish Development and Genetics Madison 6/25-29

2. Amacher, S., Bally-Cuif, L., Chien, C., Hammerschmidt, M., Kawakami, K., Weinstein, B. Organizers 8th International Conference on Zebrafish Development and Genetics Madison 6/25-29

3. Kawakami, K., Kawahara, A. Morphogenesis (axis formation, segmentation, etc) 第41

PATENT

1. US7468430B2, Transposase and method of gene modification, 川上浩一, 科学技術振興機構(JST)
2. 1239042, Transposase and method of gene modification, 川上浩一, 科学技術振興機構(JST)

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D. DEPARTMENT OF POPULATION GENETICS

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Toshiyuki Takano

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Inomata, N., Itoh, M., Kondo, R., Ohshima, M., Inoue, Y., and Takano-Shimizu T. (2008) A new test for detecting ongoing selection. , **Genetica** , 133 , 321 - 334
2. Liu Y.-H., Takahashi, A., Kitano, T., Koide, T., Shiroishi, T., Moriwaki, K. and Saitou, N. (2008) Mosaic genealogy of the *Mus musculus* genome revealed by 21 nuclear genes from its three subspecies. , **Genes Genet. Syst** , 83 , 77 - 88
3. Kawabe, A., Forrest, A., Wright, S.I., and Charlesworth, D. (2008) High DNA sequence diversity in pericentromeric genes of the plant *Arabidopsis lyrata*. , **Genetics** , 179 , 985 - 995
4. Ross-Ibarra, J., Wright, S.I., Foxe, J.P., Kawabe, A., DeRose-Wilson, L., Gos, G., Charlesworth, D., and Gaut, B.S. (2008) Patterns of polymorphism and demographic history in natural populations of *Arabidopsis lyrata*. , **PLoS One** , , 0 - 0
5. Fujimoto, R., Kinoshita, Y., Kawabe, A., Kinoshita, T., Takashima, K., Nordborg, M., Nasrallah, M.E., Shimizu, K.K., and Kakutani, T. (2008) Evolution and Control of Imprinted FWA Genes in the Genus *Arabidopsis*. , **PLoS Genet** , , 0 - 0
6. 河邊昭 (2008) short topics インプリント遺伝子MEDEAの進化パターン, 細胞工学別冊 植物細胞工学シリーズ24 植物のエピジェネティクス , , 152 - 155

ORAL PRESENTATION

1. 高橋亮 理論集団遺伝学特講 筑波大学生命環境学群生物学類 8/27-28
2. 河邊昭 シロイヌナズナ近縁種を用いたインプリンティング遺伝子の分子集団遺伝学的研究 奈良先端科学技術大学院大学 10/22

POSTER PRESENTATIONS

1. Takano-Shimizu, T., Watanabe, Y., Itoh, M., Takahashi, A. 「High occurrence of nonallelic homologous recombination leading to structural arrangements. 」, 49th Annual Drosophila Research Conference , San Diego , 4/2-6
2. 高橋一男, 高野敏行, Hoffmann, A. A. 「Effect of Hsp genes on fitness and developmental stability under thermal stresses. 」, 日本進化学会第10回大会, 東京, 8/22-24
3. 田中健太郎, 高野敏行 「Genetic screening for mutations affecting the repair system for bicoid copy-number alteration in *Drosophila* embryo. 」, 日本遺伝学会第80回大会, 名古屋 , 9/3-5
4. 高野敏行 「An evolutionary model of cis- and trans-regulatory changes revealed by allele-specific expression analysis in hybrids. 」, 日本遺伝学会第80回大会, 名古屋 , 9/3-

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5. 高橋文,高野敏行 「 Dscam遺伝子のalternatively spliced exonにおけるスプライシングの制御が同義コドン使用頻度に与える影響の解析 」, 日本遺伝学会第80回大会, 名古屋, 9/3-5
6. 藤川和世,高橋文,高野敏行,岡本はるか,伊藤雅信,西村梓,尾崎まみこ 「 絶食により甘味感受性の上昇するショウジョウバエ変異体の表現型解析 」, 日本遺伝学会第80回大会, 名古屋, 9/3-5
7. 高橋文 「 ショウジョウバエ種内・種間の比較ゲノム解析-機能分化及び自然選択について 」, 第2回昆虫ゲノム研究会, 東京, 3/6-7
8. Takahashi, A. 「 The role of a pigmentation gene and mating preference in Drosophila speciation 」, 第55回日本生態学会大会, 福岡, 3/14-17
9. 高橋文 「 ショウジョウバエ模様の種内多型について 」, 第10回日本進化学会大会, 東京, 8/22-24
10. 高橋亮 「 DNA 配列の多様性から探る種分化の機構:ヒト・チンパンジーの分岐を例に 」, 日本進化学会第10回東京大会, 東京, 8/23
11. 高橋亮, 田嶋文生 「 集団の縮小に伴う平均適応度の経時変化 」, 日本遺伝学会第80回大会, 名古屋, 9/4
12. Kawabe, A.,Forrest,A.,Charlesworth,D. 「 Arabidopsis のPheres 遺伝子の分子集団遺伝学的解析 」, 日本遺伝学会第80回大会, 名古屋, 9/3-5
13. Kawabe, A.,Charlesworth,D. 「 Patterns of DNA variation among three centromere satellite families in Arabidopsis halleri and lyrata 」, 第20回国際遺伝学会, ベルリン,

EDUCATION

1. 舘田英典, 高橋亮 ゲノムの多様性から探る生物集団の構造と歴史(2)系統 地理学と集団遺伝学の接点を探る 日本進化学会第10回東京大会 東京 8/23

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D. DEPARTMENT OF POPULATION GENETICS

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Naruya Saitou

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Yuasa, I., Nakagawa, M., Umetsu, K., Harihara, S., Matsusue, A., Nishimukai, H., Fukumori, Y., Saitou, N., Park, K. S., Jin, F., Lucotte, G., Chattopadhyay, P. K., Henke, L., and Henke, J. (2008) Molecular basis of complement factor I (CFI) polymorphism: one of two polymorphic suballeles responsible for CFI A is Japanese-specific , **Journal of Human Genetics** , 53 , 1016 - 1021
- 2 . Shimada, M. K., Hayakawa, S., Fujita, S., Saitou, N., and Sugiyama, Y. (2008) Skewed Matrilineal Genetic Composition in a Small Wild Chimpanzee Community , **Folia Primatologica** , 80 , 19 - 32
- 3 . Hattori, E., Nakajima, M., Yamada, K., Iwayama, Y., Toyota, T., Saitou, N., and Yoshikawa, T. (2008) Variable number of tandem repeat polymorphisms of DRD4: re-evaluation of selection hypothesis and analysis of association with schizophrenia , **European Journal of Human Genetics** , in press , 0 - 0
- 4 . Saitou, N. (2008) 遺伝子から見た人間進化. 特集『ダーウィンは「人間」をどう考えたか』 , 科学 , , 1338 - 1343
- 5 . Yamasaki, C., Murakami, K., Fujii, Y., Sato, Y., Harada, E., Takeda, J., Taniya, T., Sakate, R., Kikugawa, S., Shimada, M., Tanino, M., Koyanagi, K.O., Barrero, R.A., Gough, C., Chun, H.W., Habara, T., Hanaoka, H., Hayakawa, Y., Hilton, P.B., Kaneko, Y., Kanno, M., Kawahara, Y., Kawamura, T., Matsuya, A., Nagata, N., Nishikata, K., Noda, A.O., Nurimoto, S., Saichi, N., Sakai, H., Sanbonmatsu, R., Shiba, R., Suzuki, M., Takabayashi, K., Takahashi, A., Tamura, T., Tanaka, M., Tanaka, S., Todokoro, F., Yamaguchi, K., Yamamoto, N., Okido, T., Mashima, J., Hashizume, A., Jin, L., Lee, K.B., Lin, Y.C., Nozaki, A., Sakai, K., Tada, M., Miyazaki, S., Makino, T., Ohyanagi, H., Osato, N., Tanaka, N., Suzuki, Y., Ikeo, K., Saitou, N., Sugawara, H., O'Donovan, C., Kulikova, T., Whitfield, E., Halligan, B., Shimoyama, M., Twigger, S., Yura, K., Kimura, K., Yasuda, T., Nishikawa, T., Akiyama, Y., Motono, C., Mukai, Y., Nagasaki, H., Suwa, M., Horton, P., Kikuno, R., Ohara, O., Lancet, D., Eveno, E., Graudens, E., Imbeaud, S., Debily, M.A., Hayashizaki, Y., Amid, C., Han, M., Osanger, A., Endo, T., Thomas, M.A., Hirakawa, M., Makalowski, W., Nakao, M., Kim, N.S., Yoo, H.S., De Souza, S.J., Bonaldo, Mde F., Niimura, Y., Kuryshev, V., Schupp, I., Wiemann, S., Bellgard, M., Shionyu, M., Jia, L., Thierry-Mieg, D., Thierry-Mieg, J., Wagner, L., Zhang, Q., Go, M., Minoshima, S., Ohtsubo, M., Hanada, K., Tonellato, P., Isogai, T., Zhang, J., Lenhard, B., Kim, S., Chen, Z., Hinz, U., Estreicher, A., Nakai, K., Makalowska, I., Hide, W., Tiffin, N., Wilming, L., Chakraborty, R., Soares, M.B., Chiusano, M.L., Suzuki, Y., Auffray, C., Yamaguchi-Kabata, Y., Itoh, T., Hishiki, T., Fukuchi, S., Nishikawa, K., Sugano, S., Nomura, N., Tateno, Y., Imanishi, T., Gojobori, T. (2008) The H-Investigational Database (H-InvDB), a comprehensive annotation resource for human genes

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6 . Liu, Y.-H., Takahashi, A., Kitano, T., Koide, T., Shiroishi, T., Moriwaki, K., and Saitou, N. (2008) Mosaic genealogy of the *Mus musculus* genome revealed by 21 nuclear genes from its three subspecies , **Genes and Genetics Systems** , 83 , 77 - 88

7 . Blancher, A., Bonhomme, M., Crouau-Roy, B., Terao, K., Kitano, T., and Saitou, N. (2008) Mitochondrial DNA sequence phylogeny of four populations of the widely distributed cynomolgus macaque (*Macaca fascicularis fascicularis*) , **Journal of Heredity** , 99 , 254 - 264

8 . Calafell, F., Roubinet, F., Ramirez-Soriano, A., Saitou, N., Bertranpetit, J., and Blancher, A. (2008) Evolutionary dynamics of the human ABO gene , **Human Genetics** , 124 , 123 - 135

9 . Nemoto-Sasaki, Y., Hayama, K., Ohya, H., Arata, Y., Kato Kaneko, M., Saitou, N., Hirabayashi, J., and Kasai, K. (2008) Caenorhabditis elegans galectins LEC-1-LEC-11: Structural features and sugar-binding properties , **Biochimica et Biophysica Acta** , 1780 , 1131 - 1142

10 . 斎藤成也 (2008) 私のゲノム像 , 現代化学 , 5月号 , 66 - 67

11 . Sasaki, T., Nishihara, H., Hirakawa, M., Fujimura, K., Tanaka, M., Kokubo, N., Kimura-Yoshida, C., Matsuo, I., Sumiyama, K., Saitou, N., Shimogori, T., and Okada, N. (2007) Possible involvement of SINEs in mammalian-specific brain formation , **Proceedings of the National Academy of Sciences of the United States of America** , 105 , 4220 - 4225

ORAL PRESENTATION

1 . 斎藤成也 いつかは滅びゆくわれわれの未来 第1回総研大合同フォーラム『未来ある人類社会の構築』 総合研究大学院大学 12/2

2 . 隅山 健太 分子進化解析入門 (ClustalW) 第19回DDBJing講習会 国立遺伝学研究所・生命情報・DDBJ研究センター 6/19

3 . 隅山 健太 「生命・ゲノム・発生・進化」 進路啓発ガイダンス講義 静岡県立三島北高等学校 7/11

4 . 斎藤成也 データ検索から系統樹作成まで DDBJing & KEGGing & PDGJing講習会 京都大学化学研究所 11/27

5 . 斎藤成也 分子進化学 集中講義 山形大学・医学部 1/17

6 . 斎藤成也 比較ゲノム学 講義 東京大学大学院理学系研究科 4/19

7 . 斎藤成也 分子進化学 講義 東京大学・理学部 5/7,14,21,28

8 . 斎藤成也 細胞分子生物学 講義 熊本大学・理学部 6/25,26

9 . 斎藤成也 自然史科学演習 講義 東京大学大学院理学系研究科 7/10

10 . 斎藤成也 ゲノム進化学 講義 大阪市立大学大学院理学系研究科 7/24,25

11 . 斎藤成也 分子生物学特論2 講義 埼玉大学大学院理工学研究科 12/16,17,18

12 . 斎藤成也 DNALレベルにおける人類集団の遺伝的近縁性 新薬開発本部講演会 大塚製薬・大阪市 4/18

13 . 斎藤成也 ゲノム進化学とは 第48回生物物理「夏の学校」 八王子セミナーハウス 7/20

14 . 斎藤成也 ゲノム進化学が拓く道とは 第48回生命科学「夏の学校」2008 八王子セミナーハウス 8/1

15 . 斎藤成也 系統ネットワークの理論と応用 第131回農林交流センターワークショップ 農業環境技術研究所 10/7

16 . 斎藤成也 光と遺伝子～宇宙の歴史における生命の歴史～ 第25回浜松コンファレンス アクトシティ浜松 11/3

17 . 斎藤成也 自然科学の方向を展開させるゲノム進化学 生体ナノマシン・バイオナノ合同研究会 鳴子温泉 11/7

18 . 斎藤 成也 分子進化学 集中講義 山形大学 1/17

POSTER PRESENTATIONS

1 . Saitou, N. 「 MISHIMA: 新しいアルゴリズムに基づく大規模塩基配列を高速に多重整列するシステム 」, 日本遺伝学会第80回大会 , 名古屋市 , 9/4

2. Sumiyama, K., Amemiya, C.T., Ruddle, F.H. 「 Cis-regulatory Elements and Evolution Elucidated by Genomic Sequence Comparison of the Vertebrate Dlx3-7 Bigene Clusters. 」, The 16th CDB Meeting "Cis-sequence Regulation and its Evolution", Kobe, 9/29
3. 隅山 健太 「 遺伝子間領域におけるcis-elementの進化 」, 国立遺伝学研究所研究会<中立進化論の現在>, 三島, 7/28
4. 隅山 健太 「 系統フットプリント法を応用した遺伝子間領域cis-elementの進化速度解析の試み 」, 日本進化学会第10回大会, 東京, 8/22
5. Ishibashi, M., Saitou, N., Sumiyama, K. 「 Two Regulatory Elements in ParaHox Clusters Derived from Whole Genome Duplication 」, The 16th CDB Meeting "Cis-sequence Regulation and its Evolution", Kobe, 9/29
6. Ishibashi, M., Saitou, N., Sumiyama, K. 「 Highly conserved non-coding sequences in ParaHox clusters drive reporter gene expression similar to endogenous ParaHox Gsh genes. 」, Annual Meeting of the Society for Molecular Biology and Evolution, Barcelona, Spain, 6/5-8
7. 斎藤成也 「 霊長類の種内変異を解析するためのPCRプライマーデータベースPrim-Primの開発とその応用 」, 日本DNA多型学会第17回学術集会, 東京, 11/21
8. 斎藤成也 「 いつかは滅びゆくわれわれの未来 」, 第1回総研大合同フォーラム, 葉山, 12/2
9. 斎藤成也 「 哺乳類および霊長類に特有な高度に保存されている塩基配列の進化 」, 日本分子生物学会・日本生化学合同大会, 神戸市, 12/9
10. Saitou N. 「 Utility of phylogenetic network for deciphering nucleotide sequence history 」, Invitation to the NIG International Symposium, Tokyo, 3/28
11. Saitou N. 「 Some examples of evolutionary genomics study 」, 7th Japan-Korea-China Bioinformatics Training Course, Jeju Korea, 3/20
12. 斎藤成也 「 進化からみた人間の過去・現在・未来 」, 日本学術会議第二部主催シンポジウム, 東京, 2/5
13. 斎藤成也 「 霊長類でのみ進化的に高度に保存されているタンパク質非コード領域の性質 」, 国立遺伝学研究所研究会, 三島市, 3/12
14. 斎藤成也 「 Phylogenetic Networks for Evolutionary Studies 」, 第10回日本進化学会大会, 東京, 8/22
15. 斎藤成也 「 MISHIMA: 新しいアルゴリズムに基づく大規模塩基配列を高速に多重整列するシステム 」, 日本遺伝学会第80回大会, 名古屋市, 9/4
16. 斎藤成也 「 霊長類ゲノム多様性解析のためのPrim-Prim DBの開発とその応用 」, 日本人類学会第62回大会, 名古屋市, 11/1
17. Sumiyama, K. 「 Cis-element evolution elucidated by genomic sequence comparison of the vertebrate Dlx3-7 bigene clusters 」, Annual Meeting of the Society for Molecular Biology and Evolution, Barcelona, 6/5-6/8
18. 斎藤 成也 「 考古学と自然科学のクロスオーバー 」, 中世総合資料学の実践間宮海峡から琉球弧へ, 東京, 1/12
19. 斎藤成也 「 中立進化論その思想的展開の可能性 」, 分子進化の中立論40周年, 東京, 2/17

EDUCATION

1. 斎藤成也 中立進化論の現在 国立遺伝学研究所研究集会 三島市 7/28,29
2. 斎藤成也 戦争と人類学 日本学術会議自然人類学分科会 東京 9/28

BOOK

1. 斎藤成也 (2008) 言語能力獲得にいたる生命進化の諸相 こころと言葉 13 - 28
2. Saitou, N. (2008) Genetic Relationships of Human Populations in and around the Japanese Archipelago **Simulations, genetics and human prehistory** 89 - 92
3. 斎藤成也 (2008) 生物学的基盤から創発する人種差別のメカニズム 人種と人種主義を問う 23 - 38
4. 斎藤成也 (2008) 人間は何処から来て, どこに向かうのか 新しい人間観を探る 99 - 196

E. DEPARTMENT OF INTEGRATED GENETICS E-a. Division of Human Genetics

E. DEPARTMENT OF INTEGRATED GENETICS
E-a. Division of Human Genetics
Hiroyuki Sasaki

RESEARCH ACTIVITIES

PUBLICATIONS Papers

1. Hu,Y.-G.,Hirasawa,R.,Hu,J.-L.,Hata,K.,Jin,Y.,Chen,T.,Li,E.,Rigolet,M.,Viegas-Pequignot,E.,Sasaki,H., and Xu,G.-L. (2008) Regulation of DNA methylation activity through Dnmt3L promoter methylation by Dnmt3 enzymes in embryonic development, **Hum Mol Genet.**, 1, 2654 - 2664
2. Watanabe,T.,Totoki,Y.,Toyoda,A.,Kaneda,M.,Kuramochi-Miyagawa,S.,Obata,Y., Chiba,H.,Kohara,Y.,Kono,T.,Nakano,T.,Surani,M.A.,Sakaki,Y., and Sasaki,H. (2008) Endogenous siRNAs from naturally formed dsRNAs regulate transcripts in mouse oocytes., **Nature**, 453, 539 - 543
3. 平澤竜太郎, 佐々木裕之 (2008) ゲノムインプリンティング, 生体の科学, 59, 402 - 403
4. Nesterova,T.B.,Popova,B.C.,Cobb,B.S., Norton,S.,Senner,C.E.,Tang,Y.A.,Spruce, T.,Rodriguez,T.A.,Sado,T., Merckenschlager,M., and Brockdorff,N. (2008) Dicer regulates Xist promoter methylation in ES cells indirectly through transcriptional control of Dnmt3a., **Epigenetics and Chromatin**, 1, 0 - 0
5. Chiba,H.,Hirasawa,R.,Kaneda,M.,Amakawa,Y., Li,E.,Sado,T., and Sasaki,H. (2008) De novo DNA methylation independent establishment of maternal imprint on X chromosome in mouse oocytes., **Genesis**, 46, 768 - 774
6. 千葉初音, 佐々木裕之 (2008) バイサルファイトシークエンシング, 実験医学別冊 エピジェネティクス実験プロトコル, 38 - 47
7. Sasaki,H., and Matsui,Y. (2007) Epigenetic events in mammalian germ-cell development:reprogramming and beyond., **Nat. Rev. Genet.**, 9, 129 - 140
8. Saruhashi,S., Hamada,K., Miyata,D., Horiike,T., and Shinozawa,T. (2008) Comprehensive analysis of the origin of eukaryotic genomes, **Genes Genet. Syst.**, 83, 285 - 291
9. 渡部聡朗, 佐々木裕之 (2008) マウス卵における内在性siRNAの生合成と機能, 実験医学, 26, 2109 - 2111
10. 一柳健司 (2008) カモノハシ・ゲノムから見た哺乳類の進化, 科学, 78, 817 - 819
11. Kuramochi-Miyagawa,S.,Watanabe,T., Gotoh,K.,Totoki,Y.,Toyoda,A.,Ikawa,M.,Asada,N.,Kojima,K.,Yamaguchi,Y.,Ijiri,T.,Hata,K.,Li,E.,Matsuda,Y.,Kimura,T.,Okabe,M.,Sakaki,Y.,Sasaki,H., and Nakano,T. (2008) DNA methylation of retrotransposon genes is regulated by Piwi family members MIL1 and MIWI2 in murine fetal testes., **Genes Dev.**, 22, 908 - 917
12. 渡部聡朗 (2008) piRNAとPiwiの生殖系細胞における機能, 実験医学増刊, 26, 83 - 87
13. 尼川裕子, 佐渡敬 (2008) マウス胚発生におけるX染色体の不活性化と再活性化, 蛋白質核酸酵素, 53, 830 - 835
14. Hirasawa,R.,Chiba,H.,Kaneda,M.,Tajima, S.,Li,E.,Jaenisch,R., and Sasaki,H. (2008) Maternal and zygotic Dnmt1 are necessary and sufficient for the maintenance of DNA methylation imprints during preimplantation development, **Genes Dev.**, 22, 1607 - 1616
15. Ichianagi,K., and Okada,N. (2008) Mobility pathways for vertebrate L1, L2, CR1, and RTE clade retrotransposons., **Mol. Biol. Evol.**, 25, 1148 - 1157
16. Ohhata,T., Hoki,Y., Sasaki,H., and Sado,T. (2007) Crucial role of antisense transcription across the Xist promoter in Tsix-mediated Xist chromatin modification., **Development**, 135, 227 - 235
17. 古海弘康, 佐々木裕之 (2007) エピジェネティクス～疾患を見つめる新たな視点, **BIO Clinica**, 23, 65 - 69
18. 宮成悠介, 臼田伸晃, 下遠野邦忠 (2007) HCVの増殖戦略, 蛋白質核酸酵素, 53, 666 - 672
19. 富澤信一, 佐々木裕之 (2008) 細胞のエピジェネティクス, 遺伝子医学MOOK (別冊) 進みつつける細胞移植治療の実際 上巻, 145 - 148
20. 古海弘康, 佐々木裕之 (2008) 遺伝か環境か?—エピジェネティクスの視点から, 医学のあゆみ, 225, 949 - 953

ORAL PRESENTATION

1. 佐々木裕之 ゲノムの高度活用戦略～哺乳類のエピジェネティクスと非コードRNA～ 国立遺伝学研究所 公開講演会2008 秋葉原コンベンションホール 11/8
2. Sasaki,H. Epigenetics and small RNAs in mammalian development:Advanced strategies to regulate the genome Scientific Colloquium Department of Zoology University of Delhi 10/22
3. Sasaki,H. Epigenetics and small RNAs in mammalian germ cells Lecture Workshop on "Trends in Modern Biology" Indian Institute of Science Education and Research,Pune 10/25
4. 佐々木裕之 マウス卵子における内在性siRNAの発見 国立成育医療センター研究所特別セミナー 国立成育医療センター研究所 9/12
5. 佐々木裕之 内在性siRNAを介した偽遺伝子による遺伝子発現制御 第15回癌ゲノムサイエンス研究会 東京ガーデンパレス 7/24
6. 佐々木裕之 エピジェネティクスと小分子RNA 中外製薬御殿場研究所 6/18
7. 佐々木裕之 マウス卵細胞における内在性siRNAによるトランスポゾンと遺伝子の発現制御 東京大学先端科学技術研究センター 5/23
8. 佐々木裕之 障害児歯科学 九州大学歯学部講義 九州大学歯学部 5/27

POSTER PRESENTATIONS

1. 大西悠亮, 十時泰, 豊田敦, 渡部聡朗, 佐々木裕之, 徳永勝士, 榊佳之, 北條浩彦 「マウス初期胚に存在する機能性small RNAの解析」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
2. Watanabe,T.,Totoki,Y.,Toyoda,A.,Kaneda,M.,Miyagawa,S.,Obata,Y., Chiba,H.,Kono,T.,Kohara,Y.,Nakano,T.,Surani,A.,Sakaki,Y., and Sasaki,H. 「Endogenous siRNAs from naturally formed dsRNAs regulate transcripts in mouse oocytes」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
3. 保木裕子, 木村直美, 佐々木裕之, 佐渡敬 「Xist遺伝子5'領域の欠失が招くXistアンチセンス制御の異常」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
4. Miyazaki,Y.,Kato,Y.,Horiike,T.,Nozaki,M., and Sasaki,H. 「Profiling of DNA methylation in male germ cells.」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
5. 尼川裕子, 保木裕子, 佐々木裕之, 佐渡敬 「マウス始原生殖細胞におけるX染色体再活性化阻害の試み」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
6. Chiba,H.,Hirasawa,R.,Kaneda,M.,Sado,T.,Li, E., and Sasaki,H. 「De novo DNA methylation independent establishment of maternal imprint on

- X chromosome in mouse oocytes」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
7. 富澤信一, 小林久人, 渡部聡朗, 堀池浩子, 佐々木裕之「マウス生殖細胞におけるインプリント領域のDNAメチル化解析」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
8. Sasaki,H.「The epigenome and small RNA repertoire in mammalian germ cells」, International Symposium Decoding Epigenetic Code, 東京, 12/15-16
9. 佐々木裕之「哺乳類の生殖細胞系列におけるゲノムインプリンティングのプログラム機構」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
10. 山口新平, 佐々木裕之, 中辻憲夫, 多田高「マウス生殖細胞におけるNanogの抑制は移動期でのアポトーシスを誘導する」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
11. 松井稔幸, 宮下広樹, 林(高中)陽子, 加藤由紀, 木村宏, 白髭克彦, 佐々木裕之, 立花誠, 眞貝洋一「ESET/SETDB1は片親性発現遺伝子の転写開始点に局在する」, 第31回日本分子生物学会年会 第81回日本生化学会大会 合同大会, 神戸, 12/9-12
12. 佐々木裕之「マウス卵子における内在性siRNAの発現とその機能」, 特定領域研究 第1回「生殖系列の世代サイクルとエピゲノムネットワーク」第5回「性分化機構の解明」合同領域会議, 熊本, 11/24-27
13. 佐々木裕之「エピジェネティクスと小分子RNA」, かわさきサイエンス&テクノロジーフォーラム2008, 川崎, 11/12-13
14. 佐渡敬「noncoding RNAによる染色体サイレンシング」, 第67回日本癌学会学術総会, 名古屋, 10/28-30
15. Shoji,M.,Tanaka,T.,Hosokawa,M.,Kitamura,K.,Kato,Y.,Kondoh,G.,Okawa,K.,Cyujyo,T.,Suzuki,T.,Hata,K.,Kuramochi-Miyagawa,S.,Nakano,T.,Sasaki,H.,Chuma,S.,and Nakatsuji,N.「Role of Tdr9 in male meiosis and regulatory pathway of transposon RNA and DNA methylation」, Cold Spring Harbor Laboratory on Germ Cell, New York, 10/1-5
16. Sasaki,H.「Endogenous siRNAs derived from naturally formed dsRNAs regulate coding-transcripts and retrotransposons in mouse oocytes」, International Conference on Epigenetics 2008, Berlin, 7/11-12
17. Sasaki,H.「Endogenous siRNAs derived from naturally formed dsRNAs regulate coding-transcripts and retrotransposons in mouse oocytes」, "The 2nd Shanghai Symposium on Epigenetics in Development and Diseases/the 3rd Annual Meeting of Asian Epigenome Alliance", Shanghai, 7/4-7
18. 佐渡敬, 保木裕子, 木村直美, 佐々木裕之「マウス胚におけるXist遺伝子発現制御」, 日本遺伝学会第80回大会, 名古屋, 9/3-5
19. Tomizawa,S.,Kobayashi,H.,Watanabe,T.,and Sasaki,H.「Methylation status and small RNA mapping of the 15 imprinted differentially methylated regions (DMRs) in the mouse germline」, EMBO Workshop on Genomic Imprinting, Singapore, 9/21-24
20. 尼川裕子, 保木裕子, 佐々木裕之, 佐渡敬「始原生殖細胞におけるX染色体再活性化阻害の試み」, 日本遺伝学会第80回大会, 名古屋, 9/3-5
21. 佐々木裕之「マウス卵子におけるガラクタ遺伝子の機能:siRNAを介した遺伝子制御」, 発生工学・疾患モデル研究会第70回定例会「ncRNA抜きには語れない生命機能の調節」, 東京, 9/10
22. 佐々木裕之「生殖細胞の発生・リプログラミングとエピジェネティクス」, 日本人類遺伝学会第53回大会, 横浜, 9/27-30
23. Sasaki,H.「Gametogenesis and imprinting in mice」, EMBO Workshop on Genomic Imprinting, Singapore, 9/21-24
24. 佐々木裕之, 渡部聡朗「内在性siRNAはマウスの卵子において自然に形成される二本鎖RNAから作られ、遺伝子やレトロトランスポゾンに制御する」, 日本遺伝学会第80回大会, 名古屋, 9/3-5
25. Chiba,H.,Hirasawa,R.,Kaneda,M.,Sado,T.,En Li,and Sasaki,H.「De novo DNA methyltransferases are dispensable for imprinting X chromosomes in oocytes」, EMBO Workshop on Genomic Imprinting, Singapore, 9/21-24
26. 堀池徳祐, 宮田大輔, 館野義男「大量遺伝子情報を用いた原核生物の系統解析」, 第10回日本進化学会, 東京, 8/22-24
27. 保木裕子, 木村直美, 佐々木裕之, 佐渡敬「Xist 遺伝子座アンチセンス制御におけるAリピート領域の重要性」, 第10回日本RNA学会年会, 札幌, 7/23-25
28. 尼川裕子, 保木裕子, 佐々木裕之, 佐渡敬「Xist RNAの恒常的発現によるX染色体再活性化阻害の試み」, 第10回日本RNA学会年会, 札幌, 7/23-25
29. 渡部聡朗, 十時泰, 豊田敦, 金田正弘, 宮川さとみ, 尾畑やよい, 千葉初音, 小原雄治, 河野友宏, 仲野徹, Azim Surani, 榎佳之, 佐々木裕之「マウス卵子において、内在性siRNAは自然に形成される二本鎖RNAから作られ、転写産物を制御している」, 第10回日本RNA学会年会, 札幌, 7/23-25
30. Sasaki,H.,Watanabe,T.,Totoki,Y., Toyoda,A.,Kaneda,M.,Kuramochi-Miyagawa,S.,Obata,Y.,Chiba,H., Kohara,Y.,Kono,T.,Nakano,T., Surani,M.A.,and Sakaki,Y.「Endogenous siRNAs derived from naturally formed dsRNAs regulate coding-transcripts and retrotransposons in mouse oocytes」, NIBB-EMBL Joint Meeting, "Evolution of epigenetic regulation", Heidelberg, 3/17-19
31. 佐渡敬「Xist遺伝子座アンチセンス制御機構の新たな展開」, 第2回日本エピジェネティクス研究会年会, 三島, 5/9-10
32. 佐渡敬「Proximal region of Xist harbors a genomic element critical for tsix-mediated Xist silencing」, The 21st Naito Conference, 山梨, 6/24-27
33. 佐々木裕之, 渡部聡朗「Endogenous siRNAs derived from naturally formed dsRNAs regulate transcripts in mouse oocytes」, 第60回日本細胞生物学会大会シンポジウム「分化とepigenetic制御」, 横浜, 6/29-7/1
34. Sado,T.,Hoki,Y.,Kimura,N.,and Sasaki,H.「Critical role of the 5' region of the Xist gene in Tsix-mediated Xist silencing」, The 3rd NIG International Symposium on 'Chromosome Dynamics', 三島, 5/26-27
35. 千葉初音, 平澤竜太郎, 金田正弘, 佐渡敬, 佐々木裕之「De novo DNA methyltransferases are dispensable for the initiation of imprinted X chromosome inactivation in the female germline」, 第2回日本エピジェネティクス研究会年会, 三島, 5/9-10
36. 渡部聡朗, 十時泰, 豊田敦, 宮川さとみ, 金田正弘, 榎佳之, 尾畑やよい, 河野友宏, 仲野徹, 佐々木裕之「マウス卵における内在性siRNA」, 第2回日本エピジェネティクス研究会年会, 三島, 5/9-10
37. 佐々木裕之, 熊木健治, 小林久人, 加藤謙, 平澤竜太郎, 堀池徳祐「哺乳類のCpNpGメチル化か、それともアーチファクトか?」, 第2回日本エピジェネティクス研究会年会, 三島, 5/9-10
38. 尼川裕子, 保木裕子, 佐々木裕之, 佐渡敬「マウス始原生殖細胞におけるX染色体再活性化の阻害」, 第2回日本エピジェネティクス研究会年会, 三島, 5/9-10
39. 佐々木裕之「エピジェネティクスとsmall RNA」, 九州大学理学部シンポジウム「今、最も話を聴きたい研究者」, 福岡, 3/22-23

EDUCATION

1. Sasaki,H. Cold Spring Harbor Laboratory Meeting"Mouse Genetics & Genomics:Development & Disease" New York 10/29-11/2
2. 佐々木裕之 特定領域研究 第1回「生殖系列の世代サイクルとエピゲノムネットワーク」第5回「性分化機構の解明」合同領域会議 熊本 11/24-27
3. 佐々木裕之 第2回日本エピジェネティクス研究会年会 三島 5/9-10
4. 佐々木裕之 特定領域研究 生殖系列の世代サイクルとエピゲノムネットワーク発足記念キックオフシンポジウム 東京 3/4-5

BOOK

1. 平澤竜太郎, 佐々木裕之 (2008) 生殖細胞分化とエピジェネティクス 転写制御の分子生物学ーゲノムでコードに向けて 63 - 72
2. 渡部聡朗, 十時泰 (2008) 第二章-6 小分子RNAのバイオインフォマティクス RNA実験ノート 下巻 66 - 70

OTHERS

1. 佐々木裕之, 3, Journal of Human Genetics Editorial Board (編集委員)
2. 佐々木裕之, 1, 日本生殖再生医学会理事
3. 佐々木裕之, 1, 日本人類遺伝学会評議員
4. 佐々木裕之, 1, (財)遺伝学普及会評議員
5. 佐々木裕之, 3, 三島社会保険病院倫理委員会委員
6. 佐々木裕之, 1, 日本エピジェネティクス研究会副代表幹事
7. 佐々木 裕之, 3, Human Molecular Genetics Editorial Board (編集委員)

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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. Fujimoto, R., Kinoshita, Y., Kawabe, A., Kinoshita, T., Takashima, K., Nordborg, M., Nasrallah, M., Shimizu, K., Kudoh, H., Kakutani, T. (2008) Evolution and control of imprinted FWA genes in the genus Arabidopsis, **PLoS Genetics**, 4, 1000048 - 0
2. Saze H, Shiraishi A, Miura A, Kakutani T (2008) Control of genic DNA methylation by a jmjC domain-containing protein in Arabidopsis thaliana, **Science**, 319, 462 - 465

ORAL PRESENTATION

1. 角谷徹仁 集中講義 東京大学農学部 10/31
2. 角谷徹仁 集中講義 名古屋大学農学部 5/14-5/15
3. 角谷徹仁 集中講義 京都大学ウイルス研究所 6/17

POSTER PRESENTATIONS

1. Kakutani T, Saze H, Shiraishi A, Miura A 「 Genetics of DNA methylation in the BONSAI locus 」, 第60回日本細胞生物学会大会シンポジウム, 横浜, 6/30
2. Kakutani, T. 「 Genetics of DNA methylation in the BONSAI locus. 」, The 55th NIBB Conference: Frontiers of Plant Science in the 21st Century, 岡崎, 9/13-15
3. 角谷徹仁 「 シロイヌナズナを用いたエピジェネティクスの遺伝学 」, 第31回日本分子生物学会年会・第81回日本生化学会大会 合同大会 シンポジウム「クロマチンを基盤とした遺伝情報の収納と発現」, 神戸, 12/10
4. Saze, H., Shiraishi, A., Miura, A., Kakutani, T. 「 Genetics of DNA methylation in Arabidopsis 」, Decoding Epigenetic Code, 東京, 12/15-16
5. Kakutani T 「 Genetics of DNA methylation in the BONSAI locus 」, 6th NIBB-EMBL meeting 'Evolution of Epigenetic Regulation', Heidelberg, 3/17-3/19
6. Fujimoto, R., Kinoshita, Y., Kawabe, A., Kinoshita, T., Takashima, K., Nordborg, M., Nasrallah, M. E. Shimizu, K. K., Kudoh, H., Kakutani, T. 「 Evolution and control of imprinted FWA genes in Arabidopsis 」, 6th NIBB-EMBL Joint Meeting: Evolution of epigenetic regulation, Heidelberg, 3/17-19
7. 佐瀬英俊, 白石明子, 三浦明日香, 角谷徹仁 「 シロイヌナズナにおける高メチル化変異体の解析 」, 日本遺伝学会第80回大会ワークショップ, 名古屋, 9/5
8. 三浦明日香, 角谷徹仁 「 トランスポゾンCACTAの転移を制御するクロマチン因子 」, 日本遺伝学会第80回大会, 名古屋, 9/5
9. 中村みゆき, 三浦明日香, 木下由紀, 木下哲, 加藤正臣, 角谷徹仁 「 シロイヌナズナにおけるCACTA トランスポゾンの自己活性制御機構 」, 第49回日本植物生理学会年会, 札幌,

OTHERS

1. 角谷徹仁, 3, Associate Editor of PLoS Genetics
2. 三浦明日香、角谷徹仁, 2, 第81回日本遺伝学会Best Paper賞
3. 角谷徹仁, 3, Editorial Board member, Epigenetics & Chromatin
4. 角谷徹仁, 1, 日本エピジェネティクス研究会幹事

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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 Keiichi Shibahara

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Adachi, N., Nishijima, H., and Shibahara, K-i. (2008) Gene Targeting Using the Human Nalm-6 Pre-B Cell Line. , **BioScience Trends** , 2 , 169 - 180
2. Barman, HK, Takami, Y., Nishijima, H., Shibahara, K-i., Sanematsu, F., Nakayama, T. (2008) Histone acetyltransferase-1 regulates integrity of cytosolic histone H3-H4 containing complex. , **Biochem. Biophys. Res. Commun.** , 373 , 624 - 630

ORAL PRESENTATION

1. 柴原慶一 細胞核高次構造の機能解析と分子進化論的考察 統計数理研究所 4/22
2. 柴原慶一 幹細胞とシグナル伝達/核機能における最先端技術と研究(座長) Millipore Bio Forum Asia 2008 京王プラザホテル 3/7

POSTER PRESENTATIONS

1. Takata,H.,Nishijima,H.,Ogura,S., Mochizuki,T.,Shibahara,K. 「 Proteome analysis of nuclear insoluble fraction. 」, Cold Spring Harbor Meeting , New York , 9/14-9/17
2. 西嶋仁,小野達也,高田英昭,飯泉晋,足立典隆,山下聡,木村宏,牛島俊和,小山秀機,柴原慶一 「 Development of inducible DDM1 gene knockout cell line derived from human Nalm-6 」, BMB2008 , 神戸 , 12/12
3. 西嶋仁,坂口武久,古関明彦,柴原慶一 「 精細胞形成過程の性染色体不活性化におけるヒストンバリエントmacroH2Aの役割 」, 特定領域(生殖系列)斑会議 , , 10/26
4. 柴原慶一 「 ヒト疾患原因遺伝子のジーンターゲティング細胞株の作製とその応用 」, 富士山麓エリア都市エリア成果発表会 , 静岡 , 3/4
5. 柴原慶一 「 ヒト疾患原因遺伝子のジーンターゲティング細胞株の作製とその応用 」, 都市エリア事業外部評価会議 , 静岡 , 2/26
6. 柴原慶一 「 ヒト疾患原因遺伝子のジーンターゲティング細胞株の作製とその応用 」, 都市エリア事業内部評価会議 , 静岡 , 12/26
7. 西嶋仁、高田英昭、小倉俊一郎、望月徹、柴原慶一 「 核マトリックスのプロテオーム解析 」, 第2回エピジェネティクス研究会年会 , 三島市 , 5/9-10
8. 西嶋仁、小野達也、高田英昭、足立典隆、小山秀機、柴原慶一 「 ヒトNalm-6細胞を用いた誘導型DDM1遺伝子発現ノックアウト細胞株樹立法の開発 」, 第2回エピジェネティクス研究会年会 , 三島市 , 5/9-10
9. Shibahara, K. 「 Generation and application of Tet-inducible gene knockout human Nalm-6 cells 」, 8th International Bio-Expo , Tokyo , 7/2-4
10. 西嶋仁, 高田英昭, 小倉俊一郎, 望月徹, 柴原慶一 「 核マトリックスのプロテオーム解

析(Proteome Analysis of Nuclear Matrix) 」, 第2回エピジェネティクス研究会年会, 三島市, 5/9-10

11. 西嶋仁, 小野達也, 高田英昭, 足立典隆, 小山秀機, 柴原慶一 「 ヒトNalm-6細胞を用いた誘導型DDM1遺伝子発現ノックアウト細胞株樹立法の開発(Development of inducible DDM1 gene knockout cell line derived from human Nalm-6 cell 」, 第2回エピジェネティクス研究会年会, 三島市, 5/9-10

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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 . Oginuma, M., Hirata, T., and Saga, Y. (2008) Identification of presomitic mesoderm (PSM)-specific Mesp1 enhancer and generation of a PSM-specific Mesp1/Mesp2-null mouse using . , **Mech. Dev.** , 125 , 432 - 440
- 2 . Takagi, K., Okuda-Ashitaka, E., Mabuchi, T., Katano, T., Ohnishi, T., Matsumura, S., Abe, T., Hirata, T., Minami, T., and Ito, S. (2008) Involvement of stem cell factor and its receptor tyrosine kinase c-kit in pain regulation , **Neuroscience** , 153 , 1278 - 1288
- 3 . Ito, K., Kawasaki, T., Takashima, S., Matsuda, I., Aiba, A., and Hirata, T. (2008) Semaphorin 3F confines ventral tangential migration of lateral olfactory tract neurons onto telencephalon surface , **J. Neurosci.** , 28 , 4414 - 4422

POSTER PRESENTATIONS

- 1 . Hirata, T. 「 Ventral tangential migration of guidepost neurons in the lateral olfactory tract 」, 31回日本神経科学学会 日豪共同シンポジウム, 東京, 7/9
- 2 . Kawasaki, T., Hirata, T. 「 The role of semaphorin signaling in the olfactory bulb projections 」, 第31回日本神経科学学会年会, 東京, 7/10
- 3 . Sato, Y., Yamaguchi, M., Iketani, M., Arie, Y., Nakamura, F., Kawasaki, T., Hirata, T., Goshima, Y., Takei, K. 「 嗅索神経束形成に関与する新規分子の同定と機能解析 」, 第60回日本細胞生物学会 ミニシンポジウム「細胞突起の形成と発達のメカニズム」, 横浜, 6/29
- 4 . Sato, Y., Yamaguchi, M., Iketani, M., Arie, Y., Nakamura, F., Kawasaki, T., Hirata, T., Goshima, Y., Takei, K. 「 神経回路網形成を司る新規分子LOTUSの同定 」, 第51回日本神経化学会, 富山, 9/11-13
- 5 . Hirata, T. 「 Axon outgrowth inhibition mediated by a growth cone membrane protein 」, Scientific Colloquium at Department of Zoology, University of Delhi , Delhi, India , 10/22
- 6 . Hirata, T. 「 Axon outgrowth inhibition mediated by a growth cone membrane protein 」, IISER - SOKENDAI Lecture Workshop on Trends in Modern Biology , Pune, India , 10/25
- 7 . Hirata, T. 「 Axon outgrowth inhibition mediated by four-transmembrane protein M6a 」, UTMD Anderson Cancer Center / RIKEN-CDB Joint Symposium: Vertebrate Development and Organogenesis , Houston , 11/21
- 8 . Hirata, T. 「 Axon outgrowth inhibition mediated by four-transmembrane protein M6a 」, San Fransisco – Japan Joint Meeting on Vertebrate Organogenesis , San Francisco , 11/24
- 9 . Kawasaki, T., Hirata, T. 「 The role of semaphorin signaling in the projections of olfactory bulb axons 」, 第41回日本発生生物学会, 徳島, 5/28
- 10 . Suzuki, I., Hirata, T., Gojobori, T. 「 The Evolutionary Origin of the Neocortical

Lamination」, The 12th Conference of Peace through Mind Brain, 浜松, 2/5

11. Suzuki, I., Hirata, T., Gojobori, T. 「 The Evolutionary Origin of the Laminar Structure in the Mammalian Neocortex 」, Annual Meeting of the Society of Molecular Biology and Evolution, Barcelona, 6/7

12. 鈴木郁夫, 平田たつみ, 五條堀孝 「 大脳皮質層構造の進化的起原 」, 第31回日本神経科学学会年会, 東京, 7/9

EDUCATION

1. 日本神経科学学会男女共同参画推進委員会 Roundtable Seminar with Prof. Nicole Le Douarin 第31回日本神経科学学会年会 東京 7/10

OTHERS

1. 平田たつみ, 1, 日本神経科学学会男女共同参画推進委員長

2. 平田たつみ, 1, 科学技術振興機構 男女共同参画アドバイザーコミッティー

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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 . Takada, T., Mita, A., Maeno, A., Sakai, T., Shitara, H., Kikkawa, Y., Moriwaki, K., Yonekawa, H., Shiroishi, T. (2008) Mouse inter-subspecific consomic strains for genetic dissection of quantitative complex traits. , **Genome Res.** , 18 , 500 - 508
- 2 . Amano, T., Sagai, T., Tanabe, H., Mizushina, Y., Nakazawa, H., and Shiroishi T. (2008) Chromosomal Dynamics at the Shh Locus: Limb Bud-specific Differential Regulation of Competence and Active Transcription. , **Developmental Cell** , in press , 0 - 0
- 3 . Araki, K., Takeda, N., Yoshiki, A., Obata, Y., Nakagata, N., Shiroishi, T., Moriwaki, K., and Yamamura KI. (2008) Establishment of germline-competent embryonic stem cell lines from the MSM/Ms strain. , **Mammalian Genome** , in press , 0 - 0
- 4 . Uehara, S., Izumi, Y., Kubo, Y., Wang, CC., Mineta, K., Ikeo, K., Gojobori, T., Tachibana, M., Kikuchi, T., Kobayashi, T., Shibahara, S., Taya, C., Yonekawa, H., Shiroishi, T., and Yamamoto, H. (2008) Specific expression of Gsta4 in mouse cochlear melanocytes: a novel role for hearing and melanocyte differentiation. , **Pigment Cell and Melanoma Research** , in press , 0 - 0
- 5 . Takahashi, A., Nishi, A., Ishii, A., Shiroishi, T., and Koide, T. (2008) Systematic analysis of emotionality in consomic mouse strains established from C57BL/6J and wild-derived MSM/Ms. , **Genes, Brain and Behavior** , 7 , 849 - 858
- 6 . Shigeta Y., Kasai S., Han W., Hata H., Nishi A., Takamatsu, Y., Hagino, Y., Yamamoto, H., Koide, T., Shiroishi, T., Kasai, K., Tsunashima, K., Kato, N., and Ikeda, K. (2008) Association of morphine-induced antinociception with variations in the 5' flanking and 3' untranslated regions of the mu opioid receptor gene in 10 inbred mouse strains. , **Pharmacogenetics and Genomics** , 18 , 927 - 936
- 7 . Fujii, T., Tamura, M., Tanaka, S., Kato, Y., Yamamoto, H., Mizushina, Y., and Shiroishi, T. (2008) Gasdermin D (Gsdmd) is dispensable for mouse intestinal epithelium development. , **Genesis** , 46 , 418 - 423
- 8 . Lin, YH., Takahashi, A., Kitano, T., Koide, T., Shiroishi, T., Moriwaki, K., and Saitou, N. (2008) Mosaic genealogy of the Mus musculus genome revealed by 21 nuclear genes from its three subspecies. , **Genes and Genetic Systems** , 83 , 77 - 88
- 9 . Takahashi, A., Shiroishi, T., and Koide, T. (2008) Multigenic factors associated with a hydrocephalus-like phenotype found in inter-subspecific consomic mouse strains. , **Mammalian Genome** , 19 , 333 - 338

ORAL PRESENTATION

- 1 . 田村勝 幹細胞の生物学 日本弁理士会セミナー(特許庁単位認定セミナー) 東京・弁理

士会館会議室 6/10

2. 田村勝 組織性幹細胞・ES細胞・iPS細胞 日本弁理士会セミナー(特許庁単位認定セミナー) 名古屋・弁理士会東海支部会議室 9/2

POSTER PRESENTATIONS

1. 城石俊彦 「ゲノム解読から見てきた汎用実験用マウス系統の起源」, 第11回遺伝談話会「日本の野生生物と遺伝学」, 札幌, 5/9
2. 城石俊彦 「Evolutionary conserved non-coding sequence 1Mb away from the shh coding region acts as bud-specific shh enhancer.」, 第10回日本進化学会, 東京, 8/24
3. 城石俊彦 「マウス亜種間コンソミック系統によるゲノム機能解析」, 第3回西郷シンポジウム, 白河, 10/9
4. 城石俊彦 「マウス亜種間コンソミック系統によるゲノム機能解析」, 静岡実験動物研究会平成20年度大会, 三島, 10/17
5. 城石俊彦 「マウス亜種間コンソミック系統によるゲノム機能解析」, 第44回高血圧関連疾患モデル学会学術総会, 出雲, 11/12
6. 城石俊彦 「糖尿病研究におけるforward geneticsアプローチ」, 第1回疾患モデルシンポジウム, 東京, 12/3
7. 城石俊彦 「化学変異原ENUによるマウス大規模ミュータジェネシス」, 日本環境変異原学会第37回大会, 宜野湾, 12/4
8. Amano, T., Sagai, T., Okagaki, A., and Shiroishi, T. 「Hemimelic extra-toes (Hx) mutation gains a new cis-regulatory motif in limb-specific Shh enhancer」, 日本発生生物学会41回大会, 徳島, 5/28-5/30
9. 天野孝紀、嵯峨井知子、田辺秀之、水品洋一、中澤博美、城石俊彦 「Long-rangeエンハンサーによるShh遺伝子の動的転写制御」, 第22回モロシヌス研究会, 東京, 9/12-9/13
10. Amano, T., Sagai, T., Tanabe, H., and Shiroishi, T. 「Gene kissing: A remote enhancer-promoter interaction regulates expression of Sonic hedgehog in mouse limb buds」, The 3rd Asian Chromosome Colloquium 2008, 大阪, 12/1-12/4
11. 水品 洋一、中澤 博美、岡垣 郁香、田村 勝、城石 俊彦 「野生由来マウス系統における生殖工学技術の適用:MSM/Ms系統の体外受精」, 日本実験動物科学技術, 仙台, 5/15
12. Takada, T., Mita, A., Maeno, A., Moriwaki, K., Yonekawa, H., and Shiroishi, T. 「Mouse inter-subspecific consomic strains uncovers additive and non-additive genetic effects on complex traits.」, 22th International Mammalian Genome Conference, Prague, 11/2-11/5
13. Takada, T., Mita, A., Moriwaki, K., Yonekawa, H., and Shiroishi, T. 「Mouse inter-subspecific consomic strains for the study of energy metabolism-related traits.」, CBI Annual Meeting 2008 International Symposium, 東京, 10/22-10/24
14. 高田豊行, 三田晃彦, 森脇和郎, 米川博通, 城石俊彦 「マウス亜種間コンソミック系統群を用いた肥満関連表現型の遺伝解析」, 日本遺伝学会第80回大会, 名古屋, 9/3-9/5
15. 高田豊行, 三田晃彦, 森脇和郎, 米川博通, 城石俊彦 「マウス亜種間コンソミック系統群を用いたエネルギー代謝関連形質の遺伝解析」, 第55回日本実験動物学会総会, 仙台, 5/15-5/17
16. 田村勝、田中成和、加藤依子、城石俊彦 「Gasdermin(Gsdm)family 遺伝子の機能とは?」, 日本遺伝学会第80回大会, 名古屋, 9/3-9/5
17. Sagai, T., Amano, T., Tamura, M., Mizushima, Y., Yamamoto, H., Okagaki, A., Sumiyama, K., and Shiroishi, T. 「Two adjacent long-range-enhancers regulate segmental Shh expression in epithelial linings of endoderm」, 日本発生生物学会41回大会, 徳島, 5/28-5/30
18. Oka, A., Takagi, N., Moriwaki, K., and Shiroishi, T. 「Genetic Study of the Reproductive Isolation between Two Mouse Subspecies, *Mus musculus domesticus* and *M. m. molossinus*」, XX International congress of Genetics, Berlin, 7/12-7/17
19. 岡彩子、高田幸、古関明彦、森脇和郎、城石俊彦 「マウス亜種間における生殖隔離と減数分裂期のチェックポイント機構との関連」, 日本遺伝学会第80回大会, 名古屋, 9/3-9/5
20. 田中成和、田村勝、加藤依子、城石俊彦 「マウスGasdermin A3変異による皮膚癌発症」, 日本遺伝学会第80回大会, 名古屋, 9/3-9/5
21. Tanaka, S., Tamura, M., and Shiroishi, T. 「Dominant mutation of Gsdma3 is involved

in skin multistep tumorigenesis J, 22th International Mammalian Genome Conference ,
Prague , 11/2-11/5

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

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

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Oginuma M, Niwa Y, Chapman DL, Saga Y. (2008) Mesp2 and Tbx6 cooperatively create periodic patterns coupled with the clock machinery during mouse somitogenesis. , **Development** , 135 , 2555 - 2562
2. Oginuma M, Hirata T, Saga Y (2008) Identification of presomitic mesoderm (PSM)-specific Mesp1 enhancer and generation of a PSM-specific Mesp1/Mesp2-null mouse using BAC-based rescue technology , **Mech Dev** , 125 , 432 - 440
3. Saga Y (2008) Sexual development of mouse germ cells: Nanos2 promotes the male germ cell fate by suppressing the female pathway. , **Dev Growth Differ** , 50 , 141 - 147
4. Suzuki H, Tsuda M, Kiso M, Saga Y (2008) Nanos3 maintains the germ cell lineage in the mouse by suppressing both Bax-dependent and -independent apoptotic pathways. , **Dev Biol** , 318 , 133 - 142
5. Macdonald ST, Bamforth SD, Chen CM, Farthing CR, Franklyn A, Broadbent C, Schneider JE, Saga Y, Lewandoski M, Bhattacharya S (2008) Epiblastic Cited2 deficiency results in cardiac phenotypic heterogeneity and provides a mechanism for haploinsufficiency. , **Cardiovasc Res** , 79 , 448 - 457
6. Cornier AS, Staehling-Hampton K, Delventhal KM, Saga Y, Caubet JF, Sasaki N, Ellard S, Young E, Ramirez N, Carlo SE, Torres J, Emans JB, Turnpenny PD, Pourquie O. (2008) Mutations in the MESP2 gene cause spondylothoracic dysostosis/Jarcho-Levin syndrome. , **Am J Hum Genet** , 82 , 1334 - 1341
7. Okamura Y, Saga Y. (2008) Pofut1 is required for the proper localization of the Notch receptor during mouse development. , **Mech Dev** , 125 , 663 - 675
8. Yoshida T, Vivatbutsi P, Morriss-Kay G, Saga Y, Iseki S (2008) Cell lineage in mammalian craniofacial mesenchyme. , **Mech Dev** , 125 , 797 - 808
9. Saga Y. (2008) Mouse germ cell development during embryogenesis , **Curr Opin Genet Dev** , 18 , 337 - 341
10. Okamura Y, Saga Y. (2008) Notch signaling is required for the maintenance of enteric neural crest progenitors. , **Development** , 135 , 3555 - 3565
11. Yasuhiko Y, Kitajima S, Takahashi Y, Oginuma M, Kagiwada H, Kanno J, Saga Y. (2008) Functional importance of evolutionally conserved Tbx6 binding sites in the presomitic mesoderm (PSM) specific enhancer of Mesp. , **Development** , 135 , 3511 - 3519
12. Shimazaki M, Nakamura K, Kii I, Kashima T, Amizuka N, Li M, Saito M, Fukuda K, Nishiyama T, Kitajima S, Saga Y, Fukayama M, Sata M, Kudo A. (2008) Periostin is essential for cardiac healing after acute myocardial infarction. , **J Exp Med** , , 0 - 0
13. Suzuki A, Saga Y (2008) Nanos2 suppresses meiosis and promotes male germ cell differentiation. , **Genes & Devel** , 22 , 430 - 435

POSTER PRESENTATIONS

1. Atsushi, Suzuki, Rie, Saba, Yumiko, Saga 「Nanos2 promotes male germ cell development by preventing female genetic program」, CSH-meeting , Cold spring harbor , 10/1
2. Yumiko Saga 「Mesp2 and Tbx6 cooperatively create periodic patterns during mouse somitogenesis」, Joint meeting of French and Japan Societies for Developmental Biology , France , 9/13-17
3. Oginuma, M., Saga Y 「The stable and cyclic expression of L-fng, which is required for somitogenesis」, Joint meeting of French and Japan Societies , , 9/13-17
4. Aiko, Sada, Atsushi, Suzuki, Yumiko, Saga. 「Nanos2 plays an essential role in the maintenance of spermatogonial stem cells」, Germ cells , Cold Spring Harbor , 10/1-5
5. 相賀裕美子 「生殖細胞の性分化におけるNanos2の機能」, BMB2008 , 神戸 , 12/9-12
6. 佐々木伸雄, 木曾誠, 相賀 裕美子 「マウス体節形成にはMesp2によるNotch情報伝達系の抑制が必要である」, BMB2008 , 神戸 , 12/9-12
7. 高橋潤, 与那嶺享子, 相賀裕美子, 高田慎治 「マウスRipply1は体節の前後極性の確立に重要である」, BMB2008 , 神戸 , 12/9-12
8. Hiroki, Kokubo, Sachi, Miyagawa-Tomita, Yasumi, Nakashima, Toshio, Nakanishi, Yumiko, Saga. 「Hesr2 disrupted mice develop stenosis and regurgitation as a result of sclerotic degeneration of the aortic valve with advancing age」, BMB2008 , 神戸 , 12/9-12
9. Rie, Saba, Atsushi, Suzuki, Hitomi, Suzuki, Aiko, Sada, Yumiko, Saga. 「Nanos2 regulates the transcriptome in embryonic male germ cells」, BMB2008 , 神戸 , 12/9-12
10. Yu, Takahashi, Yukuto, Yasuhiko, Satoshi, Kitajima, Jun, Kanno, Yumiko, Saga. 「Novel mouse Delta-like 1(Dll1) alleles yield insights into involvement of Notch signal in segmentation of vertebrae」, BMB2008 , 神戸 , 12/9-12
11. Atsushi, Suzuki, Rie, Saba, Yumiko, Saga. 「RNA-binding protein Nanos2 promotes male germ cell development by preventing female genetic program」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30
12. Yukuto, Yasuhiko, Satoshi, Kitajima, Yu, Takahashi, Masayuki, Oginuma, Harumi, Kagiwada, Jun, Kanno, Yumiko, Saga 「Functional importance and evolutionary conservation of Tbx6 binding sites in presomitic mesoderm(PSM) specific enhancer of Mesp2」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30
13. Tomoko F. Shibata, Yumiko, Saga, Koji, Akasaka 「Molecular analysis of morphogenesis of segmented structure in feather stars(echioderm)」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30
14. Moe, Matsuo, Akira, Sumeragi, Tatsuya, Tsukahara, Daisuke, Kobayashi, Toshiki, Yagi, Yumiko, Saga, Ritsu, Kamiya, Hiroyuki, Takeda, Sumiko, Koshida 「Functional analysis of Kimtoun, a novel cytoplasmic protein required for the motility of cilia/flagella」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30
15. Masayuki, Oginuma, Yasutaka, Niwa, Deborah L Chapman, Yumiko, Saga 「Mesp2 and Tbx6 cooperatively create periodic patterns, coupled with the clock machinery during mouse somitogenesis」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30
16. Nobuo, Sasaki, Makoto, Kiso, Yumiko, Saga 「Genetic evidence for the Mesp2 function as the suppressor of Notch signaling」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30
17. Yu, Takahashi, Satoshi, Kitajima, Yukuto, Yasuhiko, Jun, Kanno, Yumiko, Saga 「Delta-like3(Dll3) does not substitute for Delta-like1(Dll1) in somitogenesis in vivo but modulates Dll1/Notch signaling in the posterior PSM」, 41st Annual Meeting for the Japanese Society of Developmental

Biologists , Tokushima , 5/28-30

18 . Aiko,Sada.,Atsushi,Suzuki.,Yumiko,Saga 「 Nanos2 plays an essential role in the maintenance of spermatogonial stem cells 」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30

19 . Hitomi,Suzuki.,Yumiko,Saga 「 Nanos3-3'UTR is required for translational suppression of Nanos3 in mouse embryonic somatic cells 」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30

20 . Rie,Saba.,Atsushi,Suzuki.,Hitomi,Suzuki.,Aiko,Sada.,Yumiko,SAGA 「 Gene expression profiling and function of Nanos2 in mouse germ cells 」, 41st Annual Meeting for the Japanese Society of Developmental Biologists , Tokushima , 5/28-30

21 . Kazuteru,Hasegawa.,Yoshiaki,Okamura.,Yumiko,Saga. 「 Analysis of notch signaling in mouse testis 」, Germ Cells , Cold Spring Harbor , 10/1-5

22 . Rie,Saba.,Atsushi,Suzuki.,Aiko,Sada.,Ymiko,Saga 「 Nanos2 regulates the transcriptome in embryonic male germ cells 」, Germ Cells , Cold Spring Harbor , 10/1-5

23 . Atsushi,Suzuki.,Yumiko,Saga. 「 Nanos2 binds to deadenylation complex and mayplay a role in degradation of specific RNAs 」, GERM CELLS , Cold Spring Harbor , 10/1-5

24 . Satoru,Kobayakawa.,Yumiko,Saga.,Kuniya,Abe. 「 Nanos3 is essential for acquisition of germ cell identity in mice 」, Germ Cells , Cold Spring Harbor , 10/1-5

EDUCATION

1 . Matuno K, Saga Y Notch シグナル研究会 遺伝研研究会 三島 7/17-18

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F. GENETIC STRAINS RESEARCH CENTER
F-c. Mouse Genomics Resource Laboratory

F. GENETIC STRAINS RESEARCH CENTER
F-c. Mouse Genomics Resource Laboratory
Tsuyoshi Koide

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Takahashi, A., Nishi, A., Ishii, A., Shiroishi, T., Koide, T. (2008) Systematic analysis of emotionality in consomic mouse strains established from C57BL/6J and wild-derived MSM/Ms. , **Genes, Brain and Behavior** , 7 , 849 - 858
- 2 . Liu, Y.-H., Takahashi, A., Kitano, T., Koide, T., Shiroishi, T., Moriwaki, K., Saitou, N. (2008) Mosaic genealogy of the Mus musculus genome revealed by 21 nuclear genes from its three subspecies. , **Genes and Genetic Systems** , 83 , 77 - 88
- 3 . Shigeta Y., Kasai S., Han W., Hata H., Nishi A., Takamatsu Y., Hagino Y., Yamamoto, H., Koide, T., Shiroishi, T., Kasai, K., Tsunashima, K., Kato, N., Ikeda, K (2008) Association of morphine-induced antinociception with variations in the 5' flanking and 3' untranslated regions of the μ opioid receptor gene in 10 inbred mouse strains. , **Pharmacogenet. Genomics** , 18 , 927 - 936

POSTER PRESENTATIONS

- 1 . Takahashi, A., Shiroishi, T., Koide, T. 「 Fine genetic mapping of emotionality-related traits on distal end of mouse chromosome 17 」, 10th Annual Meeting of the International Behavioural and Neural Genetics Society , Portland , 5/5-9
- 2 . Takahashi, A., Tomihara, K., Shiroishi, T., Koide, T. 「 Genetic analysis of inter-male aggression using consomic mouse strains established from C57BL/6J and MSM 」, 10th Annual Meeting of the International Behavioural and Neural Genetics Society , Portland , 5/5-9
- 3 . Takahashi, A., Sugimoto, H., Kimura, S., Tomihara, K., Tsuchiya, T., Kakiyama, S., Tanemura, M., Shiroishi, T., Koide, T. 「 Complex genetic architecture of social interaction and aggressive behavior clarified using consomic strains derived from MSM and C57BL/6 」, 22nd International Mammalian Genome Conference , Prague , 11/2-5
- 4 . 梅森十三, 近藤亮太, 宇野毅明, 湯浅茂樹, 小出剛 「 遺伝的不適合による神経発達異常 」, 第31回日本神経科学大会 , 東京 , 7/9-11
- 5 . 小出剛, 石井亜矢子, 西明紀, 城石俊彦, 高橋阿貴 「 マウスを用いた不安様行動の多様性に関わる遺伝的基盤の解析 」, 第31回日本神経科学大会 , 東京 , 7/9-11
- 6 . 石井亜矢子, 高橋阿貴, 西明紀, 城石俊彦, 小出剛 「 B6-MSMコンソミックマウス系統を用いた跳躍行動の遺伝学的行動学的解析 」, 第31回日本神経科学大会 , 東京 , 7/9-11
- 7 . 石井亜矢子, 高橋阿貴, 西明紀, 城石俊彦, 小出剛 「 B6-MSMコンソミックマウス系統を用いた跳躍行動に関わる遺伝的メカニズムの解析 」, 第68回日本動物心理学会大会 , 水戸 , 9/13-14

EDUCATION

1. 小出剛 日本行動神経内分泌研究会 第7回行動神経内分泌研究会 御殿場 7/26-27

OTHERS

1. 小出剛, 1, 日本実験動物学会評議員

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

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

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1 . Hashiguchi, M.,Shinya, M.,Tokumoto, M.,Sakai, N. (2008) Nodal/Bozozok-independent induction of the dorsal organizer by zebrafish cell lines , **Development Biology** , 321 , 387 - 396

POSTER PRESENTATIONS

- 1 . Sakai, N. 「 Characterization of type A spermatogonia in zebrafish 」, International Symposium on Sex Determination and Gametogenesis in Fish , Hawaii , 5/28-5/30
- 2 . Saito, K.,Sakai, N. 「 Characterization of type A spermatogonia in zebrafish 」, 8th International Conference on Zebrafish Development and Genetics , Madison, USA , 6/25-6/29
- 3 . 齊藤憲二,酒井則良 「 ゼブラフィッシュにおける休止期精原幹細胞の同定 」, 第31会日本分子生物学会 , 神戸 , 12/9-12/12
- 4 . Shinya, M. 「 メダカを用いた頭蓋顔面形質の遺伝学的解析 」, 若いちからシンポジウム , 名古屋 , 3/5
- 5 . Shinya, M.,Kimura, T.,Shimada, A.,Sakai, N.,Mitani, H.,Naruse, K.,Takeda, H.,Inoko, H.,Tamiya, G. 「 Genetic analysis of craniofacial traits in the medaka 」, 8th International conference on zebrafish development and genetics , Madison , 6/25-29
- 6 . Shinya, M. 「 メダカの量的形質とその遺伝学的解析 」, 進化学夏の学校 , 東京 , 8/23
- 7 . Shinya, M.,Kimura, T.,Shimada, A.,Sakai, N.,Mitani, H.,Takeda, H.,Inoko, H.,Tamiya, G.,Naruse, K. 「 メダカを用いた頭蓋顔面の量的形質遺伝子座解析 」, 日本遺伝学会第80回大会 , 名古屋 , 9/3-5
- 8 . Shinya, M.,Kobayashi, K.,Masuda, A.,Tokumoto, M.,Ozaki, Y.,Kawasaki, T.,Saka, K.,Sado, Y.,Saito, K.,Sakai, N. 「 The development of gene-knockdown system using RNA interference in zebrafish 」, 第31回日本分子生物学会年会 , 神戸 , 12/9-12

BOOK

- 1 . 村井耕二, 酒井則良, 山田雅保, 宅見薫雄, 安達卓 (2008) 基礎生物学テキストシリーズ 5 発生生物学 0 - 0

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

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

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Suzuki, T., Eiguchi, M., Kumamaru, T., Satoh, H., Matsusaka, H., Moriguchi, K. and Kurata, N. (2007) MNU-induced mutant pools and high performance TILLING enable finding of any gene mutation in rice. , **Mol. Genet. Genomics** , 279 , 213 - 223
2. Thirumurugan, T., Ito, Y., Kubo, T., Serizawa, A. and Kurata, N. (2007) Identification, characterization and interaction of HAP family genes in rice. , **Mol. Genet. Genomics** , 279 , 279 - 289
3. Suwabe K, Suzuki G, Takahashi H, Shiono K, Endo M, Yano K, Fujita M, Masuko H, Saito H, Fujioka T, Kaneko F, Kazama T, Mizuta Y, Kawagishi-Kobayashi M, Tsutsumi N, Kurata N, Nakazono M, Watanabe M. (2008) Separated transcriptomes of male gametophyte and tapetum in rice: validity of a laser microdissection (LM) microarray. , **Plant Cell Physiol.** , 49 , 1407 - 1416
4. Hobo T, Suwabe K, Aya K, Suzuki G, Yano K, Ishimizu T, Fujita M, Kikuchi S, Hamada K, Miyano M, Fujioka T, Kaneko F, Kazama T, Mizuta Y, Takahashi H, Shiono K, Nakazono M, Tsutsumi N, Nagamura Y, Kurata N, Watanabe M, Matsuoka M. (2008) Various spatiotemporal expression profiles of anther-expressed genes in rice. , **Plant Cell Physiol.** , 49 , 1417 - 1428
5. Ito, Y. and Kurata, N. (2008) Disruption of KNOX gene suppression in leaf by introducing its cDNA in rice. , **Plant Science** , 174 , 357 - 365

ORAL PRESENTATION

1. 野々村賢一 「イネの生殖関連遺伝子の機能解析と多様性研究への取り組み」 第7回 インターゲノミクスセミナー 神戸大学大学院 農学部 1/17

POSTER PRESENTATIONS

1. Ishikawa, R., Eiguchi, M., Kurata, N., Kinoshita, T. 「 Genomic Imprinting and reproductive barrier observed in the hybrid endosperm of rice 」, EMBO ワークショップ「インプリンティング」, シンガポール , 9/21-24
2. 久保貴彦、水多陽子、新濱充、春島嘉章、倉田のり 「 イネ生殖隔離機構の解析から見えるもの 」, 遺伝研研究集会「高等植物の生殖過程を制御する因子の多様性と生殖隔離」, 三島市 , 11/5-6
3. 藤田雅文 「 イネ全生殖過程における遺伝子発現解析を用いた多様な因子の捕捉 」, 遺伝研研究集会「高等植物の生殖過程を制御する因子の多様性と生殖隔離」, 三島市 , 11/5-6
4. 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障壁となる重複遺伝子の

解析」, 日本育種学会(第114回講演会), 彦根市, 10/11-12

5. 津田勝利、伊藤幸博、宮尾安藝雄、廣近洋彦、倉田のり「イネのシュート形成における極長鎖脂肪酸(VLCFA)の機能解析」, 日本育種学会(第114回講演会), 彦根市, 10/11-12

6. 望月孝子、菊地俊介、濱田和輝、加藤大貴、大木伸彦、藤田雅丈、堀内陽子、倉田のり、矢野健太郎「OryzaExpress:イネのゲノム・アノテーションとオミックス統合データベース」, 第31回日本分子生物学会年会、第81回日本生化学会大会 合同大会, 神戸市, 12/9-12

7. 津田勝利、伊藤幸博、倉田のり「イネにおけるKNOX遺伝子を介したSAMの維持および葉の分化の研究」, 遺伝研研究集会「イネ分子遺伝学の新展開」, 三島市, 12/19-20

8. 山木辰一郎「野生イネの穂にみる分枝パターンの多様性」, 遺伝研研究集会「イネ分子遺伝学の新展開」, 三島市, 12/19-20

9. 米田典央、倉田のり、野々村賢一「減数第一分裂前期に特異的な染色体挙動の観察」, イネ遺伝学・分子生物学ワークショップ2008, 福岡市, 7/4-5

10. Horiuchi, Y., Harushima, Y., Mochizuki, T., Fujisawa, H., Eguchi, S., Kawakita, M., Kurata, N.「Detection of Nucleotide and Expression Polymorphisms between Rice Strains Using Affymetrix Rice Genome Array」, XX International Congress of Genetics, Berlin, Germany, 7/12-17

11. Tsuda, K., Ito, Y., Miyao, A., Hirochika, H., Kurata, N.「Identification and Analysis of Rice Mutants Misexpressing KNOX Genes in Leaves」, XX International Congress of Genetics, Berlin, Germany, 7/12-17

12. Harushima, Y., Kuriki, S., Mizuta, Y., Kurata, N.「Detection of Pairs of Interactive Reproductive Barriers in Rice Genome」, XX International Congress of Genetics, Berlin, Germany, 7/12-17

13. Mizuta, Y., Harushima, Y., Kurata, N.「Positional Cloning of a Pair of Interactive Genes Causing Reproductive Barrier in the Hybrid Pollen of Rice」, XX International Congress of Genetics, Berlin, Germany, 7/12-17

14. Harushima, Y., Yano, M., Kurata, N.「Identification of a Reproductive Barrier Working in the Process of Pollen Competition in Rice」, XX International Congress of Genetics, Berlin, Germany, 7/12-17

15. 津田勝利、伊藤幸博、宮尾安藝雄、廣近洋彦、倉田のり「KNOX遺伝子を葉で異所的に発現するイネ突然変異体の解析1」, 第49回 日本植物生理学会年会, 札幌市, 3/20-22

16. 伊藤幸博、津田勝利、倉田のり「KNOX遺伝子を葉で異所的に発現するイネ突然変異体の解析(2)」, 第49回 日本植物生理学会年会, 札幌市, 3/20-22

17. 石川亮、永口貢、池田陽子、倉田のり、木下哲「イネの胚乳における生殖隔離機構とゲノムインプリンティング」, 第49回 日本植物生理学会年会, 札幌市, 3/20-22

18. 望月孝子、倉田のり、矢野健太郎「OryzaExpress:イネのゲノム・アノテーションと遺伝子発現の統合データベース」, 第49回 日本植物生理学会年会, 札幌市, 3/20-22

19. 藤田雅丈、望月孝子、堀内陽子、水多陽子、上田弥生、春島嘉章、倉田のり「Affymetrixマイクロアレイプローブ再定義とイネ生殖過程の遺伝子発現解析」, 日本育種学会第113回講演会, 川崎市, 3/27-29

20. 矢野健太郎、大木信彦、望月孝子、藤田雅丈、堀内陽子、谷坂隆俊、倉田のり「OryzaExpress:イネのゲノム・アノテーションとオミックス統合データベース」, 日本育種学会第113回講演会, 川崎市, 3/27-29

21. 上田弥生、野々村賢一、藤田雅丈、堀内陽子、倉田のり「生殖細胞の初期発生が異常になるイネmel1突然変異体を用いたマイクロアレイ解析」, 日本育種学会第113回講演会, 川崎市, 3/27-29

22. 石川亮、永口貢、池田陽子、倉田のり、木下哲「イネの胚乳における生殖隔離機構とゲノムインプリンティング」, 日本育種学会第113回講演会, 川崎市, 3/27-29

23. 野々村賢一「イネの生殖細胞の初期発生を制御するARGONAUTE遺伝子 MEL1の解析」, 国立遺伝学研究所研究会, 三島, 1/11

EDUCATION

1. 倉田のり「植物ゲノム障壁」第2回若手ワークショップ 札幌 10/27-29

2. 倉田のり イネ発生研究の新展開 国立遺伝学研究所研究会 三島 1/11-12

3. 渡辺正夫、倉田のり 高等植物の生殖過程を制御する因子の多様性と生殖隔離 国立遺伝学研究所研究会 三島 11/5-6

4. 長戸康郎、倉田のり イネ分子遺伝学の新展開 国立遺伝学研究所研究会 三島

12/19-20

OTHERS

1. 倉田のり, 1, 日本育種学会副会長

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

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Hironori Niki

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Shiomi, D, Sakai, M., Niki, H. (2008) Determination of bacterial rod shape by a novel cytoskeletal membrane protein , **EMBO J.** , 27 , 3081 - 3091

POSTER PRESENTATIONS

1. 古谷寛治,仁木宏典 「 DNAチェックポイントによるゲノム安定維持機構 」, タンパク研セミナー, 大阪, 3/14
2. 古谷寛治,仁木宏典 「 Multistep activation of genomic stability pathway 」, 遺伝研国際シンポジウム, 三島, 5/26
3. 古谷寛治,仁木宏典 「 Multistep activation of genomic stability pathway 」, International Chromosome Dynamics Symposium in Ise, 志摩, 5/28
4. 古谷寛治,仁木宏典,Carr AM. 「 Multistep Activation of Genomic stability Pathway 」, Asian-Pacific regional Fission Yeast Meeting, Singapore, 6/25
5. 古谷寛治,仁木宏典,Carr AM. 「 Multistep Activation of Genomic stability pathway 」, 複製組み換えワークショップ, 修繕寺, 3/5
6. 古谷寛治,仁木宏典,Carr AM. 「 Multistep activation of Genomic Stability pathway 」, 3R Meeting, 孺恋, 10/27
7. 古谷寛治,仁木宏典,Carr AM. 「 Multistep Activation of Genomic Stability Pathway 」, 染色体ワークショップ, 熱海, 1/30
8. 古谷寛治,仁木宏典,Carr AM. 「 Multistep Activation of Genomic stability Pathway 」, 分子生物学会, 神戸, 12/12
9. 塩見大輔,境雅子,仁木宏典 「 大腸菌の形態形成を司る新規因子の解析 」, 21世紀大腸菌研究会, 静岡県藤枝市, 7/28-29
10. AOKI, Keita., FURUYA, Kanji., NAKAJIMA, Reiko., and NIKI, Hironori. 「 Construction and Observation of S.japonicus mutants 」, Asia-Pacific Regional S.pombe Meeting 2008, Singapore., シンガポール, 7/25,26,27
11. AOKI, Keita., FURUYA, Kanji., NAKAJIMA, Reiko., and NIKI, Hironori. 「 Screening new mitotic mutants in S.japonicus 」, 3R Symposium 2008, 孺恋, 10/27-30
12. 塩見大輔 「 Novel cell shape determinant in Escherichia coli 」, Gordon research Conference "Bacterial Cell Surface", New England, NH, USA, 6/22-27
13. 塩見大輔 「 アクチンホモログFtsAの大腸菌細胞分裂における役割 」, 2007 年度組換え・染色体再編ワークショップ 第19回 DNA 複製・分配ワークショップ, , 3/5-3/7

EDUCATION

- 1 . Niki, H. International Symposium on Chromosome Dynamics in Ise, 2008 Shima, Mie 28/5
- 2 . NIKI, H. Chromosome Dynamics 第3回遺伝研国際シンポジウム Mishima 26/5

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

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Ryu Ueda

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Ueyama, M., Takemae, H., Ohmae, Y., Yoshida, H., Toyoda, H., Ueda, R., and Nishihara, S. (2007) Functional Analysis of Proteoglycan Galactosyltransferase II RNA Interference Mutant Flies. , **J. Biol. Chem.** , 283 , 6076 - 6084
2. Yano, T., Mita, S., Ohmori, H., Oshima, Y., Fujimoto, Y., Ueda, R., Takada, H., Goldman, WE., Fukase, K., Silverman, N., Yoshimori, T., and Kurata, S. (2008) Autophagic control of listeria through intracellular innate immune recognition in drosophila. , **Nat Immunol** , 9 , 908 - 916
3. Urasaki, A., Mito, T., Noji, S., Ueda, R., and Kawakami, K. (2008) Transposition of the vertebrate Tol2 transposable element in Drosophila melanogaster. , **Gene** , 425 , 64 - 68
4. Yoshida, H., Fuwa, T., Arima, M., Hamamoto, H., Sasaki, N., Ichimiya, T., Osawa, K-I., Ueda, R. and Nishihara, S. (2008) Identification of the Drosophila core 1 β 1,3-galactosyltransferase gene that synthesizes T antigen in the embryonic central nervous system and hemocytes. , **Glycobiology** , 18 , 1094 - 1104

POSTER PRESENTATIONS

1. 矢野環 三田静香 大森弘子 大島吉輝 上田龍 吉森保 倉田祥一郎 「ショウジョウバエPGRP-LEの細胞内寄生細菌の認識によるオートファジー誘導」, 第31回日本分子生物学会年会, 神戸, 12/9-12
2. 矢野環 三田静香 大森弘子 大島吉輝 上田龍 吉森保 倉田祥一郎 「ショウジョウバエPGRP-LEの細胞内寄生細菌の認識によるオートファジー誘導」, 第31回日本分子生物学会年会, 神戸, 12/9-12
3. 吉田秀樹 不破尚志 有馬三紀子 河野掌 佐々木紀彦 一宮智美 上田龍 西原祥子 「ショウジョウバエコア1 β 1,3-ガラクトース転移酵素は、胚の中樞神経系における T 抗原を合成する」, 第31回日本分子生物学会年会, 神戸, 12/9-12
4. 宇野貴明 上山盛夫 合田絵美 上田龍 西原祥子 「ショウジョウバエ新規糖ヌクレオチド輸送体候補遺伝子の機能解析」, 第31回日本分子生物学会年会, 神戸, 12/9-12
5. 青山尚規 大久保洋之 大堀真希 田村郁雄 飯田恵理子 上田龍 山口(武井)ゆき 渡辺晃 北田祐介 多羽田哲也 松野 健治 「RNA干渉法を用いたショウジョウバエNotchの細胞内小胞輸送に関連する遺伝子の網羅的探索」, 第31回日本分子生物学会年会, 神戸, 12/9-12
6. 伊藤 太一 高橋邦明 鵜飼-蓼沼磨貴 上田泰己 上田龍 谷村禎一 松本顕 「bHLH-ORANGEファミリー遺伝子による時計遺伝子の発現調節」, 第31回日本分子生物学会年会, 神戸, 12/9-12
7. 上田龍 「NBRPショウジョウバエ」, 第79回日本動物学会大会, 福岡, 9/5

8. 上田龍「ショウジョウバエRNAi変異体ライブラリについて」, 特定ゲノム4領域・第二回昆虫ゲノム研究会, 東京, 3/6-7

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G. CENTER FOR GENETIC RESOURCE INFORMATION

G-a. Genetic Informatics Laboratory

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G-a. Genetic Informatics Laboratory

Yukiko Yamazaki

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1 . Tsunewaki, K.,Matsuoka, Y.,Yamazaki, Y.,Ogihara, Y. (2008) Evolutionary dynamics of wheat mitochondrial gene structure with special remarks on the origin and effects of RNA editing in cereals. , **Genes & Genetic Systems** , 83 , 301 - 320

POSTER PRESENTATIONS

- 1 . 山崎由紀子 「 持続可能なバイオリソース情報発信体制の構築を目指して 」, NBRPキックオフシンポジウム , 東京 , 3/10
- 2 . 山崎由紀子,倉島治,落合知美,吉川泰弘,伊藤元巳,松浦啓一,松沢哲郎,菅原秀明 「 バイオリソースの情報発信体制の整備 」, NBRPキックオフシンポジウム , 東京 , 3/10
- 3 . Yamazaki, Y. 「 National BioResource Project in Japan 」, The 54th NIBB Conference - New Frontiers for the Medaka Model , Okazaki , 2/27-28
- 4 . Kimura, G.,Tsuchiya, R.,Sakaniwa, S.,Yamakawa, T.,Yamazaki, Y. 「 New Approaches in Oryzabase: Gene Merge and Text Mining 」, Plant and Animal Genome XVI , San Diego , 1/12-16
- 5 . Takahashi Y., ,Watanabe, T.,Sakaniwa, S.,Yamakawa, T.,Yamazaki, Y. 「 Shared Information of Biological Resources 」, Plant and Animal Genome XVI , San Diego , 1/12-16

BOOK

- 1 . Yamazaki, Y.,Niki, H.,Kato, J. (2008) Profiling of Escherichia coli Chromosome Database **Methods in Molecular Biology** 385 - 389

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G. CENTER FOR GENETIC RESOURCE INFORMATION

G-b. Genome biology Laboratory

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G-b. Genome biology Laboratory

Yuji Kohara

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . International Silkworm Genome Consortium. (2008) The genome of a lepidopteran model insect, the silkworm *Bombyx mori*. , **Insect Biochem Mol Biol.** , 38 , 1036 - 1045
- 2 . Kawaoka S, Hayashi N, Katsuma S, Kishino H, Kohara Y, Mita K, Shimada T. (2008) *Bombyx* small RNAs: genomic defense system against transposons in the silkworm, *Bombyx mori*. , **Insect Biochem Mol Biol.** , 38 , 1058 - 1065
- 3 . Yu JK, Wang MC, Shin-I T, Kohara Y, Holland LZ, Satoh N, Satou Y. (2008) A cDNA resource for the cephalochordate amphioxus *Branchiostoma floridae*. , **Dev Genes Evol.** , 218 , 723 - 727
- 4 . Putnam NH, Butts T, Ferrier DE, Furlong RF, Hellsten U, Kawashima T, Robinson-Rechavi M, Shoguchi E, Terry A, Yu JK, Benito-Gutierrez EL, Dubchak I, Garcia-Fernandez J, Gibson-Brown JJ, Grigoriev IV, Horton AC, de Jong PJ, Jurka J, Kapitonov VV, Kohara Y, Kuroki Y, Lindquist E, Lucas S, Osoegawa K, Pennacchio LA, Salamov AA, Satou Y, Sauka-Spengler T, Schmutz J, Shin-I T, Toyoda A, Bronner-Fraser M, Fujiyama A, Holland LZ, Holland PW, Satoh N, Rokhsar DS. (2007) The amphioxus genome and the evolution of the chordate karyotype. , **Nature** , 453 , 1064 - 1071
- 5 . Watanabe T, Totoki Y, Toyoda A, Kaneda M, Kuramochi-Miyagawa S, Obata Y, Chiba H, Kohara Y, Kono T, Nakano T, Surani MA, Sakaki Y, Sasaki H. (2008) Endogenous siRNAs from naturally formed dsRNAs regulate transcripts in mouse oocytes. , **Nature** , 453 , 539 - 541
- 6 . Rensing, S.A., Lang, D., Zimmer, A.D., Terry, A., Salamov, A., Shapiro, H., Nishiyama, T., Perroud, P-F., Lindquist, E.A., Kamisugi, Y., Tanahashi, T., Sakakibara, K., Fujita, T., Oishi, K., Shin-I, T., Kuroki, Y., Toyoda, A., Suzuki, Y., Hashimoto, S-I., Yamaguchi, K., Sugano, S., Kohara, Y., Fujiyama, A., Anterola, A., Aoki, S., Ashton, N., Barbazuk, W.B., Barker, E., Bennetzen, J.L., Blankenship, R., Cho, S-H., Dutcher, S.K., Estelle, M., Fawcett, J.A., Gundlach, H., Hanada, K., Heyl, A., Hicks, K.A., Hughes, J., Lohr, M., Mayer, K., Melkozernov, A., Murata, T., Nelson, D.R., Pils, B., Prigge, M., Reiss, B., Renner, T., Rombauts, S., Rushton, P.J., Sanderfoot, A., Schween, G., Shiu, S-H., Stueber, K., Theodoulou, F.L., Tu, H., de Peer, Y.V., Verrier, P.J., Waters, E., Wood, A., Yang, L., Cove, D., Cuming, A.C., Hasebe, M., Lucas, S., Mishler, B.D., Reski, R., Grigoriev, I.V., Quatrano, R.S., Boore, J.L. (2008) The *Physcomitrella* Genome Reveals Evolutionary Insights into the Conquest of Land by Plants , **Science** , 319 , 64 - 69

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G. CENTER FOR GENETIC RESOURCE INFORMATION

G-c. Comparative Genomics Laboratory

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G-c. Comparative Genomics Laboratory

Asao Fujiyama

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Watanabe, T., Totoki, Y., Toyoda, A., Kaneda, M., Kuramochi-Miyagawa, S., Obata, Y., Chiba, H., Kohara, Y., Kono, T., Nakano, T., Surani, MA., Sakaki, Y., and Sasaki, H. (2008) Endogenous siRNAs from naturally formed dsRNAs regulate transcripts in mouse oocytes. , **Nature** , 453 , 539 - 543
- 2 . Sakuraba Y, Kimura T, Masuya H, Noguchi H, Sezutsu H, Takahashi KR, Toyoda A, Fukumura, R., Murata,T., Sakaki, Y., Yamamura, M., Wakana, S., Noda, T., Shiroishi,T. and Gondo, Y. (2008) Identification and characterization of new long conserved noncoding sequences in vertebrates. , **Mamm Genome** , 19 , 703 - 712
- 3 . Umezawa, T., Sakurai, T., Totoki, Y., Toyoda, A., Seki, M., Ishiwata, A., Akiyama, K., Kurotani, A., Yoshida, T., Mochida, K., Kasuga, M., Todaka, D., Maruyama, K., Nakashima, K., Enju, A., Mizukado, S., Ahmed, S., Yoshiwara, K., Harada K, Tsubokura Y, Hayashi M, Sato, S., Anai, T., Ishimoto, M., Funatsuki, H., Teraishi, M., Osaki, M., Shinano, T., Akashi, R., Sakaki, Y., Yamaguchi-Shinozaki, K. and Shinozaki, K. (2008) Sequencing and Analysis of Approximately 40 000 Soybean cDNA Clones from a Full-Length-Enriched cDNA Library. , **DNA Res.** , 15 , 333 - 346
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POSTER PRESENTATIONS

- 1 . Takami, H., Toyoda, A., Itoh, T., Tubouchi, T., Nishi, S., Matsui, S., Hori, S., Arai, W., Morono, Y., Inagaki, F. & Takai, K. 「 Metagenomic analysis of deep subsurface core samples collected in an offing of the Shimokita Peninsula on the northwest Honshu, Japan 」, 7th International Symposium for Subsurface Microbiology (ISSM 2008) , sizuoka , 11/16-21
- 2 . Takada, T., Ebata, T., Shin-I, T., Narita, T., Abe, K., Sakaki, Y., Toyoda, A., Obata, Y., Moriwaki, K., Kohara, Y. and Shiroishi, T 「 TWO WAVES INTROGRESSION OF SUBSPECIFIC GENOMES IN CLASSICAL LABORATORY MOUSE STRAINS 」, 22nd International Mammalian Genome Conference , Prague , 11/2-5
- 3 . 西 真郎、豊田 敦、松井 里美、坪内 泰志、堀 沙耶香、荒井 渉、諸野 祐樹、稲垣 史生、高井 研、高見 英人 「 bacterial 16S rRNA配列に基づく、下北半島掘削コアの深度別多様性解析 」, 第24回日本微生物生態学会 , 札幌 , 11/25-28
- 4 . 高見 英人、豊田 敦、伊藤 武彦、坪内 泰志、松井 里美、堀 沙耶香、西 真郎、荒井 渉、諸野、稲垣 史生、高井 研 「 下北半島東方沖掘削コアのメタゲノミクス 」, 第24回日本微生物生態学会 , 札幌 , 11/25-28
- 5 . Watanabe, T., Totoki, Y., Toyoda, A., Kaneda, M., Miyagawa, S., Obata, Y, Chiba, H., T. Kono, H., Kohara, Y., Nakano, T., Surani, A., Sakaki, Y., Sasaki, H. 「 Endogenous siRNAs from naturally formed dsRNAs regulate transcripts in mouse oocytes 」, 第31回日本分子生

物学会、第81回日本生化学会合同大会，神戸，12/9-12

6. Fujiyama, A., Toyoda, A., Kuroki, Y., Shin-I, T., Kohara, Y. 「Effect of Hyper-parallel sequencers on comparative genomics」, 第31回日本分子生物学会、第81回日本生化学会大会合同大会，神戸，12/9-12

7. 大西悠亮, 十時泰, 豊田敦, 渡部聡朗, 佐々木裕之, 徳永勝士, 榊佳之, 北條浩彦 「マウス初期胚に存在する機能性small RNA の解析」, 第31回日本分子生物学会、第81回日本生化学会大会合同大会，神戸，12/9-12

8. 隈啓一, 岩部直之, 加藤和貴, 藤博幸, 廣瀬希, 菅裕, 宮田隆, 鈴木穰, 笠原雅弘, 新井理, 大石加寿子, 鹿兒島浩, 豊田敦, 黒木陽子, 菅野純夫, 森下真一, 小原雄治, 藤山秋佐夫 「立襟鞭毛虫*Monosiga ovata* ゲノムプロジェクト: I. ゲノムの概観」, 第31回日本分子生物学会、第81回日本生化学会大会合同大会，神戸，12/9-12

9. 岩部直之, 隈啓一, 加藤和貴, 藤博幸, 廣瀬希, 佐々木剛, 菅裕, 宮田隆, 鈴木穰, 笠原雅弘, 新井理, 大石加寿子, 鹿兒島浩, 豊田敦, 黒木陽子, 菅野純夫, 森下真一, 小原雄治, 藤山秋佐夫 「立襟鞭毛虫*Monosiga ovata* ゲノムプロジェクト: II. 動物の初期進化における遺伝子多様化」, 第31回日本分子生物学会、第81回日本生化学会大会合同大会，神戸，12/9-12

10. 渡辺舞, 細道一善, 野口英樹, 黒木陽子, 豊田敦, 田中彰, 猪子英俊, 藤山秋佐夫, 椎名隆 「オキゴンドウMHC 領域のゲノム配列決定と比較ゲノム解析」, 第31回日本分子生物学会、第81回日本生化学会大会合同大会，神戸，12/9-12

11. Shibata, H., Goto, H., Watanabe, K., Kuroki, Y., Toyoda, A., Hattori, M., Sakaki Y., Fujiyama, A., Fukumaki, Y., 「Comparative analysis of glutamate receptor gene family between human and chimpanzee」, 第31回日本分子生物学会、第81回日本生化学会大会合同大会，神戸，12/9-12

12. Noda, S., Kurokawa, K., Tatsumoto, S., Sakaki, Y., Toyoda, A., Ohkuma, M. 「Meta-EST analysis of a symbiotic protistan community in the termite gut」, The 12th International Symposium on Microbial Ecology (ISME12), Cairns, 8/17-22

13. Hongoh, Y., Sharma, V.K., Prakash, T., Toyoda, A., Hattori, M., Ohkuma, M. 「Complete genome of the uncultured "Termite Group 1" bacteria in a single host protist cell」, The 12th International Symposium on Microbial Ecology (ISME12), Cairns, 8/17-22

14. 高木海, 高橋俊二, 浦本昌和, 橋爪大輔, 豊田敦, 石川 淳, 榊佳之, 長田 裕之 「放線菌 *Streptomyces reveromyceticus* 代謝物の系統的解析」, 2008年度日本放線菌学会大会，山梨，7/10-11

15. 高橋俊二, 荒蒔加奈子, 高木海, 浦本昌和, 豊田敦, 野川俊彦, 植木雅志, 榊佳之, 長田裕之 「*Streptomyces reveromyceticus* 由来インドールプレニルトランスフェラーゼの機能解析」, 2008年度日本放線菌学会大会，山梨，7/10-11

16. 河田章寛, 高橋俊二, 高木海, 浦本昌和, 豊田敦, 榊佳之, 長田裕之 「リベロマイシン多様化に関わるCoA ligase機能の解析」, 2008年度日本放線菌学会大会，山梨，7/10-11

17. Iwabe, N., Kuma, K., Katoh, K., Suga, H., Hirose, N., Toh, H., Miyata, T., Suzuki, Y., Kasahara, M., Narita, t., Shin-i, T., Kuroki, Y., Toyoda, A., Sugano, S., Morishita, S., Kohara, Y. and Fujiyama, A. 「Genome Sequencing Project of a Unicellular Choanoflagellate, *Monosiga ovata*: Extensive Molecular Phylogenetic Analysis with Choanoflagellate Genes Reveals Divergence Patterns of Gene Family Members in the Early Evolution of Metazoans.」, XX International Congress of Genetics, Berlin, 7/12-17

18. Kuroki, Y., Toyoda, A., Tatsumoto, S., Sakaki, Y. and Fujiyama, A. 「Comparative Analysis of Chromosome 21 Subtelomeric Regions between Human and Chimpanzee.」, XX International Congress of Genetics, Berlin, 7/12-17

19. 藤山 秋佐夫 「ゲノムが教えてくれる生物の姿」, 日本分子生物学会 第8回春季シンポジウム 市民公開講座，札幌，5/25

20. Choi, D.-W., Choi, S.-H., Fujiyama, A., Hwang, M.S., Kuroki, Y., Mikami, K., Park, H.-J., Saga, N., Tabata, S., and Toyoda, A. 「Joint porphyra genome project to reveal early development of plantsystems」, The Biology of Genomes, CSHL, New York, 5/6-10

21. Kurokawa, K., Ito, T., Kuwahara, T., Oshima, K., Toh, H., Toyoda, A., Taylor, T.D., Nogucji, H., Mori, H., Kim, S.-W., Itoh, K., Morita, H., Takami, H., Sakaki, T., Hayashi, T. and Hattori, M. 「Comparative metagenomics revealed commonly enriched gene sets in human intestine.」, The Biology of Genomes. CSHL, New York, 5/6-10

22. Kuroki, Y., Toyoda, A., Tatsumoto, S., Sakaki, Y. and Fujiyama, A. 「Comprehensive analysis of Y chromosomes toward understanding of the male-specific genome functions.」, The Biology of Genomes. CSHL, New York, 5/6-10

23 . Shin-i, T., Andachi, Y., Kagoshima, H., Suzuki, Y., Sugano, S., Fujiyama, A. and Kohara, Y. 「 Whole transcriptome anaysis of the nematode C. Elegance. 」, The Biology of Genomes. CSHL , New York , 5/6-10

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H. STRUCTURAL BIOLOGY CENTER
H-a. Biological Macromolecules Laboratory

H. STRUCTURAL BIOLOGY CENTER
H-a. Biological Macromolecules Laboratory
Makio Tokunaga

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1 . Tokunaga, M.,Imamoto, N.,Sakata-Sogawa K (2008) Highly inclined thin illumination enables clear single-molecule imaging in cells. , **Nature Methods** , 5 , 159 - 161

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H. STRUCTURAL BIOLOGY CENTER
H-b. Molecular Biomechanism Laboratory

H. STRUCTURAL BIOLOGY CENTER
H-b. Molecular Biomechanism Laboratory
Nobuo Shimamoto

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1 . Roy,S., Vedala,H., Roy,AD., Kim,D., Doud, M., Mathee, K., Shin, H., Shimamoto, N., Prasad,V., and Choi,W. (2007) Direct Electrical Measurements on Single-Molecule Genomic DNA Using Single-Walled Carbon Nanotubes , **Nano Lett.** , 8 , 26 - 30

POSTER PRESENTATIONS

- 1 . 中山秀喜、嶋本伸雄、伊藤耕一 「 リボソーム再生の一分子ダイナミクス 」, 第31回日本分子生物学会年会, 神戸市, 12/9~12
- 2 . 今清水正彦、嶋本伸雄 「 転写伸長反応の逆転スイッチ機構 」, 第31回日本分子生物学会年会, 神戸市, 12/9~12
- 3 . Shimamoto,N. 「 Single-molecule determination of the mechanism of translation termination and its physiological significance 」, 48th The American Society for Cell Biology , San Francisco, U.S.A. , 12/13~17
- 4 . Shimamoto,N. 「 Single-molecule determination of the mechanism of translation termination and its physiological significance 」, Asian Academic Seminar 2008 , Bangalore, India , 12/26~30
- 5 . Amemiya,Y., Shimamoto,N., Hatakeyama,A. 「 Controlling nanoscopic hardness of silane layer on diamond surface with bioactivity 」, Asian Academic Seminar 2008 , Bangalore, India , 12/26~30
- 6 . 今清水正彦、嶋本伸雄 「 逆反応による転写fidelity維持機構 」, ゲノム微生物学会若手会 , 八王子市, 11/6~7
- 7 . 嶋本伸雄 「 大腸菌プロモーター内のUVセンサー 」, 第5回大腸菌研究会, 藤枝市, 7/28~29
- 8 . 中山秀喜、嶋本伸雄、伊藤耕一 「 リボソーム再生の一分子ダイナミクス 」, 第5回大腸菌研究会, 藤枝市, 7/28~29
- 9 . 中山秀喜、嶋本伸雄、伊藤耕一 「 リボソーム再生の一分子ダイナミクス 」, 第10回RNAミーティング, 札幌市, 7/23~25
- 10 . Shimamoto,N.and Miyamoto,T. 「 UV-Sensor Motif in a Promoter of E.coli 」, Tenth Asian Conference on Transcription(ACT-X) , Bangalore,India , 1/13~16
- 11 . Nakayama,H.and Shimamoto,N. 「 Discovery of the Branched Pathway in Translation Termination 」, Tenth Asian Conference on Transcription(ACT-X) , Bangalore,India , 1/13~16
- 12 . Imashimizu,M.and Shimamoto,N. 「 Metal Ion-induced Changes in Abortive Synthesis and Misincorporation by Bacterial RNA polymerases 」, Tenth Asian Conference on Transcription(ACT-X) , Bangalore,India , 1/13~16

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H. STRUCTURAL BIOLOGY CENTER
H-c. Multicellular Organization Laboratory

H. STRUCTURAL BIOLOGY CENTER
H-c. Multicellular Organization Laboratory
Isao Katsura

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Kuhara, A., Okumura, M., Kimata, T., Tanizawa, Y., Takano, R., Kimura, K. D., Inada, H., Matsumoto, K., Mori, I. (2008) Temperature sensing by an olfactory neuron in a circuit controlling behavior of *C. elegans*. , **Science** , 320 , 803 - 807

ORAL PRESENTATION

1. 木村幸太郎 ドーパミンによって制御される線虫 *C. elegans* の匂い忌避行動 ～ 神経系が「系(システム)」として働くための動作原理解明に向けて～ セミナー 大阪大学・理学部 10/15

POSTER PRESENTATIONS

1. 木村幸太郎 「線虫 *C. elegans* の匂い忌避行動の統合的解析～神経系が「系」として働くための原理解明を目指して」, 生理学研究所研究会, 岡崎, 6/5

2. Kimura, K., Katsura, I. 「Enhancement of Odor Avoidance by Preexposure is Regulated by Dopamine in the Nematode *C. elegans*. 」, 総合研究大学院大学・国際セミナー: 行動神経科学における進化研究, 葉山, 6/26

3. Kimura, K., Katsura, I. 「Tracking analysis of the enhancement of 2-nonanone avoidance. 」, *C. elegans* topic meeting #2; Neuronal development, synaptic function & behavior, Madison, 6/30

4. Kimura, K., Katsura, I. 「Enhancement of Odor Avoidance by Preexposure is Regulated by Dopamine in *C. elegans*. 」, 第31回日本神経科学大会, 東京, 7/9

5. 木村幸太郎, 桂 勲 「線虫 *C. elegans* の事前刺激による匂い忌避行動の増強はドーパミンによって制御される」, 日本味と匂学会第42回大会, 富山, 9/18

6. 毛利・塩見亮子, 大石あかね, 桂 勲 「糖ペプチドホルモン線虫ホモログFLR-5は線虫の成長速度を制御する」, BMB2008: 第31回日本分子生物学会年会・第81回日本生化学会大会 合同大会, 神戸, 12/12

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

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

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Murakami,K.,Stewart M., Nozawa K., Tomii K.,Kudou N.,Igarashi N., Shirakihara Y., Wakatsuki S., Yasunaga T., and Wakabayashi T. (2009) Structural basis for tropomyosin overlap in thin (actin) filaments and the generation of a molecular swivel by troponin-T , **Proc. Natl. Acad. Sci.** , 105 , 7200 - 7205
- 2 . Gao, YG.,Suzuki, H.,Itou, H., Zhou, Y., Tanaka, Y., Wachi, M., Watanabe, N., Tanaka, I., Yao, M. (2008) Structural and functional characterization of the LidR from *Corynebacterium glutamicum*: a transcriptional repressor involved in L-lactate and sugar utilization , **Nucleic Acid Res.** , 36 , 7110 - 7123
- 3 . Itou, H., Yao, M.,Watanabe, N.,and Tanaka, I. (2008) Crystal structure of the PH1932 protein, a unique archaeal ArsR type winged-HTH transcription factor from *Pyrococcus horikoshii* OT3 , **Proteins** , 70 , 1631 - 1634

POSTER PRESENTATIONS

- 1 . Shirakihara, Y.,Shiratori A., Murakami S., Suzuki T., Yoshida M. 「 Crystallization and crystal analysis of ATPsynthase 」, IUCr2008 , Osaka , 8/23-8/31
- 2 . Itou, H.,Watanabe, N.,Yao, M.,Shirakihara, Y.,Tanaka, I. 「 Structural studies of the multidrug-responsive transcriptional repressor protein CgmR 」, 21st congress and general assembly of the international union of crystallography , Osaka, Japan , 8/23-8/30

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

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H-e. Gene Network Laboratory
Emiko Suzuki

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Kurusu, M.,Cording,A.,Taniguchi,M., Menon,K.,Suzuki, E.,and Zinn, K. (2008) A screen of cell-surface molecules identifies leucine-rich repeat proteins as key mediators of synaptic target selection , **Neuron** , 59 , 972 - 985
- 2 . Nishiwaki,Y.,Komori,A.,Sagara,H., Suzuki,E.,Manabe,T.,Hosoya,T., Nojima,Y.,H.,Wada,Tanaka,H., Okamoto,H.,and Masai,I. (2008) Mutation of cGMP phosphodiesterase 6a'-subunit gene causes progressive degeneration of cone photoreceptor in zebrafish. , **Mechanisms of Development** , 125 , 932 - 946
- 3 . Hori,T.,Amano,M.,Suzuki,A.,Backer,C.B., Welburn,J.P.,Dong,Y.,McEwen,B.F.,Suzuki,E.,Yates III,Okawa,K.,Cheeseman,I.M., and T.Fukagawa. (2008) The CCAN makes multiple contacts with centromeric DNA and provides distinct pathways to the outer kinetochore. , **Cell** , 135 , 1039 - 1052
- 4 . Toda,H.,Mochizuki,H.,Flores III,R., Zhan,C.,Josowitz,R.,Krasieva, T.B.,LaMorte,V.J.,Suzuki,E.,Gindhart,J.G., K.Furukubo-Tokunaga, and Tomoda,T. (2008) UNC-51/ATG1 kinase regulates axonal transport by mediating motor-cargo assembly. , **Genes. Dev** , 22 , 3292 - 3307
- 5 . Kurusu,M.,and Zinn,K. (2008) Receptor tyrosine phosphatases regulate birth order-dependent axonal fasciculation and midline repulsion during development of the *Drosophila* mushroom body , **Mol.Cell.Neurosci.** , 38 , 53 - 65

POSTER PRESENTATIONS

- 1 . 榎本和生、安永桂一郎、鈴木えみ子 「 ショウジョウバエ変態期における感覚ニューロンの樹状突起構造の再構築 Dendrite remodeling in adult *Drosophila* sensory neurons 」, 31st Annual Meeting of the Japan Neuroscience society , 東京 , 7/9-7/11
- 2 . 来栖光彦、Amy Cording,谷口美佐子、Kai Zinn,鈴木えみ子 「 ショウジョウバエ神経-筋結合部位を利用した軸索の標的認識、シナプス形成を制御する細胞表面タンパク質の探索と機能解析 」, 第31回日本分子生物学会年会 , 神戸 , 12/9-12/12
- 3 . 中山実、奥田貴之、藤澤奈穂、河野望、荒井洋由、鈴木えみ子、石川裕之、松野健治 「 ショウジョウバエをモデル系としたペルオキシソーム病の病態研究 」, 第31回日本分子生物学会年会 , 神戸 , 12/9-12/12
- 4 . 安永桂一郎、金森崇浩、鈴木えみ子、榎本和生 「 ショウジョウバエ変態期における感覚ニューロン樹状突起構造のリモデリング 」, 第31回日本分子生物学会年会 , 神戸 , 12/9-12/12
- 5 . 奥田貴之、中山実、藤澤奈穂、河野望、荒井洋由、鈴木えみ子、石川裕之、松野健治 「 ショウジョウバエ精子形成過程におけるペルオキシソーム機能 」, 第31回日本分子生物学会年会 , 神戸 , 12/9-12/12

OTHERS

1. 鈴木えみ子, 1, 日本顕微鏡学会第64回学術講演会 プログラム委員

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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 . Hwang, JS, Takaku, Y., Chapman, J., Ikeo, K., David, CN., Gojobori, T. (2008) Cilium evolution: identification of a novel protein, nematocilin, in the mechanosensory cilium of Hydra nematocytes. , **Mol Biol Evol.** , 25 , 2009 - 2017
- 2 . Meier, S., Gehring, C., MacPherson, C., Kaur, M., Maqungo, M., Reuben, S., Muyanga, S., Shih, M., Wei, F., Wanchana, S., Mauleon, R., Radovanovic, A., Bruskiewich, R., Tanaka, T., Mohanty, B., Itoh, T., Wing, R., Gojobori, T., Sasaki, T., Swarup, S., Hsing, Y. and Bajic V. (2008) The Promoter Signatures in Rice LEA Genes Can Be Used to Build a Co-expressing LEA Gene Network.. , **Rice** , 1 , 177 - 187
- 3 . Jin, L., Kryukov, K., Clemente, J., Komiyama, T., Suzuki, Y., Imanishi, T., Ikeo, K. and Gojobori, T. (2008) The evolutionary relationship between gene duplication and alternative splicing.. , **GENE** , 427 , 19 - 31
- 4 . Nagayoshi, S., Hayashi, E., Abe, G., Osato, N., Asakawa, K., Urasaki, A., Horikawa, K., Ikeo, K., Takeda, H., Kawakami, K. (2008) Insertional mutagenesis by the Tol2 transposon-mediated enhancer trap approach generated mutations in two developmental genes: tcf7 and synembryon-like. , **Development** , 135 , 159 - 169
- 5 . Suzuki, Y. (2008) False-positive results obtained from the branch-test of positive selection. , **Genes & Genetic Systems** , 88 , 331 - 338
- 6 . Suzuki, Y. (2008) Positive selection operates continuously on hemagglutinin during evolution of H3N2 human influenza A virus. , **GENE** , 427 , 111 - 116
- 7 . Suzuki, Y. (2008) Phylogenetic window analysis for detecting chronological changes in natural selection. , **Open Evolution Journal** , 2 , 13 - 30
- 8 . Akihito, Fumihito, A., Ikeda, Y., Aizawa, M., Makino, T., Umehara, Y., Kai, Y., Nishimoto, Y., Hasegawa, M., Nakabo, T. and Gojobori, T. (2008) Evolution of Pacific Ocean and the Sea of Japan populations of the gobiid species, Pterogobius elapoides and Pterogobius zonoleucus, based on molecular and morphological analyses. , **GENE** , 427 , 7 - 18
- 9 . Yamaguchi-Kabata, Y., Shimada, MK., Hayakawa, Y., Minoshima, S., Chakraborty, R., Gojobori, T. and Imanishi, T. (2008) Distribution and effects of nonsense polymorphisms in human genes. , **PLoS One** , 3 , 3393 - 0
- 10 . Takeda, J., Suzuki, Y., Sakate, R., Sato, Y., Seki, M., Irie, T., Takeuchi, N., Ueda, T., Nakao, M., Sugano, S., Gojobori, T. and Imanishi, T. (2008) Low conservation and species-specific evolution of alternative splicing in humans and mice analysed with comparative genomics using well-annotated full-length cDNAs. , **Nucl. Acids. Res.** , 36 , 6386 - 6395
- 11 . Howe, D., Costanzo, M., Fey, P., Gojobori, T., Hannick, L., Hide, W., Hill, DP., Kania,

- R., Schaeffer, M., St Pierre, S., Twigger, S., White, O. and Yon Rhee, S. (2008) Big data: The future of biocuration. , **Nature** , 455 , 47 - 50
- 12 . David, CN., Ozbek, S., Adamczyk, P., Meier, S., Pauly, B., Chapman, J., Hwang, JS., Gojobori, T. and Holstein TW. (2008) Evolution of complex structures: minicollagens shape the cnidarian nematocyst. , **Trends in Genet.** , 24 , 431 - 438
- 13 . Ohyanagi, H., Ikeo, K. and Gojobori, T. (2008) The origin of nucleus: Rebuild from the prokaryotic ancestors of ribosome export factors. , **GENE** , 423 , 149 - 152
- 14 . Ohyanagi, H., Ikeo, K. and Gojobori, T. (2008) Eukaryotic nuclear structure explains the evolutionary rate difference of ribosome export factors. , **GENE** , 421 , 7 - 13
- 15 . Nakagawa, S., Niimura, Y., Gojobori, T., Tanaka, H. and Miura, K. (2008) Diversity of preferred nucleotide sequences around the translation initiation codon in eukaryote genomes. , **Nucl. Acids. Res.** , 36 , 861 - 871
- 16 . Genome Information Integration Project and H-Invitational 2 Consortium: Yamasaki, C., Imanishi, T., Gojobori, T. et al. (2008) The H-Invitational Database (H-InvDB), a comprehensive annotation resource for human genes and transcripts. , **Nucl. Acids. Res.** , 36 , 793 - 799
- 17 . Tanaka, T., Itoh, T., Sasaki, T., Gojobori, T., Hsing, Y., Han, B., McCombie, W., Apweiler, R., Tyagi, A., Haberer, G., Bruskiwich, R., Bureau, T., Tatusova, T., An, G., Messing, J., Christie, K., Lieberherr, D., Wing, R., Meyers, B. and Echeverria, M. (2008) The Rice Annotation Project Database (RAP-DB): 2008 update. , **Nucl. Acids. Res.** , 36 , 1028 - 1033
- 18 . Matsuya, A., Sakate, R., Kawahara, Y., Koyanagi, KO., Sato, Y., Fujii, Y., Yamasaki, C., Habara, T., Nakaoka, H., Todokoro, F., Yamaguchi, K., Endo, T., Oota, S., Makalowski, W., Ikeo, K., Suzuki, Y., Hanada, K., Hashimoto, K., Hirai, M., Iwama, H., Saitou, N., Hiraki, AT., Jin, H., Kaneko, Y., Kanno, M., Murakami, K., Noda, AO., Saichi, N., Sanbonmatsu, R., Suzuki, M., Takeda, J., Tanaka, M., Gojobori, T., Imanishi, T. and Itoh, T. (2008) Evola: Ortholog database of all human genes in H-InvDB with manual curation of phylogenetic trees. , **Nucl. Acids. Res.** , 36 , 787 - 792
- 19 . Tateno, Y., Sugawara, H., Ogasawara, O., Okubo, K. and Gojobori, T. (2008) DDBJ with New System and Face. , **Nucl. Acids. Res.** , 36 , 22 - 24
- 20 . Murakami, K., Imanishi, T., Gojobori, T. and Nakai, K. (2008) Two different classes of co-occurring motif-pairs found by a novel visualization method in human promoter regions , **BMC Genomics** , 9 , 112 - 0
- 21 . Hotta, K., Takahashi, H., Satoh, N. and Gojobori, T. (2008) Brachyury-downstream gene sets in a chordate, *Ciona intestinalis*: Integrating notochord specification, morphogenesis and chordate evolution , **Evo. & Dev.** , 10 , 37 - 51

ORAL PRESENTATION

- 1 . Gojobori, T. 遺伝子転写制御ネットワークの全容理解に向けての情報基盤の構築-ゲノムネットワークから見えてきたもの- 内部交流セミナー 国立遺伝学研究所 1/25
- 2 . 五條堀 孝 ゲノムと遺伝子発現からみた脳・神経系の進化 九州大学生物科学部門の教育/研究等に関する外部評価委員会 九州大学附属中央図書館 2/29
- 3 . 五條堀 孝 病態発現機構の解明に役立つバイオインフォマティクスの研究開発 東京医科歯科大学難治疾患研究所、病態発現機構客員研究部門、客員部門研究報告セミナー 東京医科歯科大学難治疾患研究所 3/14
- 4 . 五條堀 孝 健康予防・医療創薬のためのゲノム戦略-パーソナルゲノム時代を迎えて- バイオベンチャー・研究開発支援事業人材育成講座 沖縄産業支援センター 7/31
- 5 . 五條堀 孝 次世代シーケンサーと情報戦略 BTJプロフェッショナルセミナー「次世代シーケンサーが変えるバイオ研究の未来」コクヨホール(東京) 9/18
- 6 . 五條堀 孝 DNAが語る病気と健康の未来 蔵deサイエンス「生命を考える」おにぎりカフェ丸平商店(静岡県三島市) 10/25
- 7 . Gojobori, T. The evolutionary origin of neural genes: Comparative Genomics and Gene Expression Academia Sinica (Taiwan, China) 11/24
- 8 . Gojobori, T. Evolution of the Central Nervous System: Comparative Genomics Approach Peking University 11/28
- 9 . 五條堀 孝 生命と知能の進化-集団遺伝学、バイオインフォマティクス 慶應大学セミナー

「生命と知能の進化」 慶應大学湘南藤沢キャンパス(神奈川) 12/9

10. 五條堀 孝 DNAシーケンス革命と情報戦略-超大量ゲノム情報時代を迎えて- 東京医科歯科大学第2回生命情報科学教育部同窓会セミナー 東京医科歯科大学 12/22

POSTER PRESENTATIONS

1. Takashi Gojobori 「 Evolutionary Genomics 」, 7th CJK Bioinformatics Training Course 2008, Jeju, Korea, 3/18-21

2. 五條堀 孝 「 ヒトゲノムからみた脳・神経系の進化 」, 第301回医学研究の基礎を語り合う会, 東京, 1/23

3. Gojobori,T. 「 Genomic evolution of neural genes in light of Ohno's view of biological order and disorder 」, The 2008 Memorial Symposium in honor of Dr. Susumu Ohno , California, U.S.A. , 2/1

4. Gojobori,T. 「 Genomic Evolution of the Neural System 」, 第12回マインドブレイン国際会議, 静岡県浜松市, 2/5-7

5. 五條堀 孝 「 肝炎ウイルス統合DBの構築に向けて 」, 「テーラーメイド治療を目指した肝炎ウイルスデータベース構築に関する研究」, H19年度第2回4班合同研究班会議, 東京, 2/15

6. 五條堀 孝 「 ゲノム生物学における中立進化論の役割と課題 」, 学術講演会「分子進化の中立論40周年」, 東京, 2/17

7. 五條堀 孝 「 DNAから見たシャモとナガナキドリ の起源 」, 日本生態学会第55回大会, 福岡, 3/14-18

8. Gojobori,T. 「 Evolution of nervous system 」, Bioinformatics Conference, 7th CJK Bioinformatics Training Course 2008, Jeju, Korea, 3/18-21

9. Gojobori,T. 「 Evolutionary Process of Human Neural Genes 」, 遺伝研国際シンポジウム「ゲノム進化の新視点から基礎生命活動を探る」, 東京, 3/26-28

10. Gojobori,T. 「 DDBJ, GenBank, and EMBL, and Sequencing Revolution 」, Symposium on 25th anniversary of GenBank , Maryland, U.S.A. , 4/7-8

11. Gojobori,T. 「 Information Platform of the Human Genome Network Project: Toward Elucidation of Transcriptional Regulation System 」, Systems Genomics 2008 , Heidelberg, Germany , 5/2-3

12. Gojobori,T. 「 An Evolutionary Study of Nervous System by Comparative Gene Expressomics 」, SMBE 2008 , Barcelona, Spain , 6/5-8

13. 五條堀 孝 「 オミックス医療のためのデータベース戦略-パーソナルゲノム時代を迎えて」, 第1回オミックス医療研究会シンポジウム・定期講演会, 東京, 7/3

14. 五條堀 孝 「 ゲノム科学の最前線ー肝炎ウイルスと肝臓病のゲノム的研究アプローチ- 」, 第6回肝臓病研究会シンポジウム, 東京, 7/5

15. Gojobori,T. 「 Evolution of Nervous System from the Viewpoint of Comparative Genomics and Gene Expressionics 」, XX International Congress of Genetics , Berlin, Germany , 7/12-17

16. Gojobori,T. 「 The Genome Evolution of the Central Nervous System 」, 第10回日本進化学会大会, 東京, 8/22-24

17. 五條堀 孝 「 大進化を論じるためのオミックス的基盤を考える 」, 第10回日本進化学会大会, 東京, 8/22-24

18. Gojobori,T. 「 Genome and Database 」, The 18th CODATA-DSAO Task Group Conference , 静岡県三島市, 8/30-31

19. 五條堀 孝 「 ダーウィンを超えて-新化学革命の最前線(中立説からゲノムまで)- 」, ダーウィン生誕200周年記念プレ・シンポジウム, 東京, 9/20

20. Gojobori,T. 「 Personal Genome Sequencing and its Strategic Construction of Database 」, The Human Variome Project "Collection of Human GENE VARIATION", HGM 2008 , Hyderabad, India , 9/27-30

21. Gojobori,T. 「 Sequencing Revolution and Human Genome Network 」, HGM 2008 , Hyderabad, India , 9/27-30

22. Gojobori,T. 「 The Evolutionary Origin and Process of the Central Nervous System: Comparative Genomics Approach 」, A meeting on "Scientific Insights into the Evolution of the Universe and Life , Vatican City , 10/31-11/4

23. 五條堀 孝 「 次世代シーケンサーによる生命情報革命とデータベース戦略 」, 第5回コンビナトリアル・バイオエンジニアリング会議「ポストゲノムデータベース時代の幕開け-バイオテク

ノロジー新時代をゆく」, 大阪, 11/7

24. 五條堀 孝 「病態のシステムの理解と疾患情報モデルの構築」, 応用ゲノム医学系 (CO1・CO2) 班会議, 東京, 12/3-4

25. 五條堀 孝 「DNAシーケンス革命とスーパーコンピューティング」, 生命体統合シミュレーション研究開発プロジェクトシンポジウム, 東京, 12/25-26

EDUCATION

1. JST, CIB-DDBJ, NIG, KOBIC, KRIBB, SCBIT 7th CJK Bioinformatics Training Course 2008 & Bioinformatics Conference Jeju, Korea 3/18-21

2. 遺伝学普及会 蔵deサイエンス「生命を考える」 静岡県三島市 10/25

3. 五條堀 孝 国立遺伝学研究所研究集会「ゲノム非タンパク質コード領域の進化」 静岡県三島市 3/12

4. 岡田典弘、舘野義男、五條堀 孝、斎藤成也 遺伝研国際シンポジウム「ゲノム進化の新視点から基礎生命活動を探る」 東京 3/26-28

5. Gojobori, T. The 18th CODATA Task Group Conference 静岡県 8/30-31

6. DNA鑑定学会(五條堀 孝) DNA鑑定学会講演会 東京 10/17

BOOK

1. Mineta, K., Ikeo, K. and Gojobori, T. (2008) Gene Expression in the brain and central nervous system in planarians. **Planaria: A Model for Drug Action and Abuse** 13 - 19

2. Koyanagi, KO., Imanishi, T. and Gojobori, T. (2008) Bidirectional Gene Pairs in the Human Genome. **Encyclopedia of Life Science** 1 - 6

3. Sakai, H., Itoh, T. and Gojobori, T. (2008) Processed Pseudogenes and Their Functional Resurrection in the Human and Mouse Genomes. **Encyclopedia of Life Science** 1 - 6

4. Hwang, JS., Nagai, S., Hayakawa, S., Takaku, Y. and Gojobori, T. (2008) The Search for the Origin of Cnidarian Nematocysts in Dinoflagellates. **Evolutionary Biology from Concept to Application** 135 - 152

PATENT

1. 2009-502560, 相同性検索システム, 五條堀 孝 池尾一穂 岡山利次, 大学共同利用機関法人情報・システム研究機構

OTHERS

1. 五條堀 孝, 1, Editor of FEBS Letters

2. 五條堀 孝, 1, Editor of GENE

3. 五條堀 孝, 1, Associate Editor of Molecular Biology and Evolution

4. 五條堀 孝, 1, Associate Editor of PLoS Genetics

5. 五條堀 孝, 1, Editorial Board of Genome Medicine

6. 五條堀 孝, 1, Editorial Board of OMICS A Journal of Integrative Biology

7. 五條堀 孝, 1, Editorial Board of Gene Therapy and Molecular Biology

8. 五條堀 孝, 1, Editorial Board of BMC Genomics

9. 五條堀 孝, 1, DNA鑑定学理事長

10. 五條堀 孝, 1, 日本遺伝学会評議員

11. 五條堀 孝, 1, 日本組織適合性学会理事

12. 五條堀 孝, 1, 遺伝学普及会常務理事

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I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN I-c. Laboratory for Gene Function Research

I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN I-c. Laboratory for Gene Function Research Yoshio Tateno

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

- 1 . Shin-I, T., Tanaka, Y., Tateno, Y. and Mizokami, M (2007) Development and public release of comprehensive Hepatitis virus database , **Hepatol Res** , 38 , 234 - 243
- 2 . Collier, N., Doan, S., Kawazow, A., Matsuda-Goodwin , R., Tateno, Y., Ngo, Q. – H., Dein, D., Kawtrakul, A., Takeuchi, K., Shigematsu, M., Taniguchi, K. (2008) BioCaster: Mining the Web for global health surveillance , **Bioinformatics** , 24 , 2940 - 2941
- 3 . Komiyama, T., Kobayashi, H., Tateno, Y., Inoko, H., Gojobori, T., Ikeo, K. (2008) An evolutionary origin and selection process of goldfish. , **Gene** , , 0 - 0
- 4 . Nagaoka, S., Ohshima, S., Honda, H., Kawai, Y., Kitazawa, H., Tateno, Y., Yamazaki, Y. and Saito T. (2008) Identification of five phospho-beta-glycosidases from *Lactobacillus gasser* ATCC33323T cultured in lactose medium , **Biosci Biotech Biochem** , 72 , 1954 - 1957
- 5 . Field, D., Garrity, G., Gray, T., Morrison, N., Selengut, J., Sterk, P., Tatusova, T., Thomson, N., Allen, M., Ashburner, M., Baldauf, S., Ballard, S., Boore, J., Cochrane, G., Cole, J., dePamphilis, C., Edwards, R., Faruque, N., Feldman, R., Glöckner, F. O., Haft, D., Hancock, D., Hermjakob, H., Hertz-Fowler, C., Hugenholtz, P., Joint, I., Kane, M., Kennedy, J., Kowalchuk, G., Kottmann, R., Kolker, E., Kyripides, N., Leebens-Mack, J., Lewis, S. E., Liste, A., Lord, P., Maltsev, N., Markowitz, V., Martiny, J., Methe, B., Moxon, R., Nelson, K., Parkhill, J., Sansone, S.-A. Spiers, A., Stevens, R., Swift, P., Taylor, C., Tateno, Y., Tett, A., Turner, S., Ussery, D., Vaughan, B., Ward, N., Whetzel, T., Wilson, G., and Wipat, A. (2008) Minimum Information about a Genome Sequence (MIGS) specification , **Nature Biotechnology** , 26 , 541 - 547
- 6 . Tateno, Y. (2008) International collaboration among DDBJ, EMBL Bank and GenBank , 蛋白質核酸酵素 , 53 , 182 - 189
- 7 . Genome Information Integration Project And H-Invitational 2 (2008) The H-Invitational Database (H-InvDB), a comprehensive annotation resource for human genes and transcripts , **Nucleic Acids Res** , 36 , 793 - 799
- 8 . Rice Annotation Project (2008) Rice annotation project database (RAP-DB) , **Nucleic Acids Res** , 36 , 1028 - 1033

POSTER PRESENTATIONS

- 1 . Imanishi, T., Gojobori, T. 「 Development of a Complex disease database and analysis of some diseases by using it 」, HUGO2008 Satellite Symposium , Kolkata , 9/25
- 2 . Fukami, K., Minesaki, Y., Nishikawa, K. 「 Construction of a tree of life by genome-wide information 」, HUGO2008 , Hyderabad , 9/27

3 . Fukami, K., Minesaki, Y., Nihsikawa, K. 「 Construction of tree of life using protein domain organizations 」, 20th International Congress of Genetics , Berlin , 7/12-7/18

BOOK

- 1 . 舘野義男 (2008) バイオインフォマティクス バイオインフォマティクス 1 - 140
- 2 . Tateno, Y., Fukami-Kobayashi, K., Inoko, H. (2008) Evolution of MHC class I complex region with special reference to fragmentary LINE sequences **Quantum Bio-Informatics** 412 - 426

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I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN
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I. CENTER FOR INFORMATION BIOLOGY AND DNA DATA BANK OF JAPAN
I-e. Laboratory for Gene-Expression Analysis
Kousaku Okubo

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Sugawara H, Ogasawara O, Okubo K, Gojobori T, Tateno Y. (2008) DDBJ with new system and face. , **Nucleic Acids Res.** , , 22 - 24

ORAL PRESENTATION

1. Kousaku Okubo Digital revolution and Life Sciences The 939th NIG colloquium 国立遺伝学研究所 10/31
2. 大久保公策 「科学データは誰のものか」 統合データベース講習会 AJACS 博多 九州大学 10/18
3. 大久保公策 「科学を社会に役立てるには？」 (独)日本学術振興会 ゲノムテクノロジー第164委員会 第27回研究会 東京大学 7/22
4. 大久保公策 「科学データは誰のものか？」 統合データベース講習会 AJACS 本郷1 東京大学 7/3

POSTER PRESENTATIONS

1. 大久保公策 「「科学データは誰のものか？」」, 第31回日本分子生物学会 , 神戸市 , 12/10
2. Kousaku Okubo, Shoko Kawamoto,Hidemasa Bono,Toshihisa Takagi. 「 Japan's Data Sharing Center For Publicly-Funded Biomedical Science 」, 2008 CSHL/WT Meeting on Genome Informatics , Hinxton,UK , 9/10~14

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J. CENTER FOR FRONTIER RESEARCH
J-b. Neural Morphogenesis Laboratory

J. CENTER FOR FRONTIER RESEARCH
J-b. Neural Morphogenesis Laboratory
Emoto Kazuo

RESEARCH ACTIVITIES

POSTER PRESENTATIONS

1 . Emoto, K. 「 The molecular mechanisms that regulate establishment, maintenance and remodeling of dendritic fields. 」, The 11th International Membrane Forum , Kyoto , 2/21

BOOK

1 . Emoto, K. (2008) 樹状突起構造の形成と維持を制御する分子基盤 **Brain and Nerve**
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J. CENTER FOR FRONTIER RESEARCH
J-c. Cell Architecture Laboratory

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Kimura Akatsuki

RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. 木村暁 (2008) Book Review: 生命の数理(巖佐庸著), 蛋白質核酸酵素, 53, 1307 - 0

ORAL PRESENTATION

1. Kimura, A. Mathematical modeling of intracellular architectures in animal cells SOKENDAI Lecture 2008 Delhi University, India 10/22
2. Kimura, A. Mathematical modeling of intracellular architectures in animal cells SOKENDAI Lecture 2008 Indian Institute of Science Education and Research (IISER) Pune, India 10/24

POSTER PRESENTATIONS

1. Kimura, K. 「 A tug-of-war model for the centrosomal centration in C.elegans early embryo 」, The 3rd East Asia C.elegans Meeting , Shanghai, China , 4/18
2. Kimura, A. 「 Quantitative measurements and computer simulation studies of spindle elongation in Caenorhabditis elegans embryo 」, International Symposium on Chromosome Dynamics in Ise , Ise, Japan , 5/29
3. Hara, Y. 「 Cell size-dependent spindle elongation in Caenorhabditis elegans early embryo 」, C. elegans Development & Evolution Meeting , Madison, U.S.A. , 6/13
4. Kimura, A. 「 Synthesizing 4-dimensional cell model, to study the spatial organization of the cell 」, The 1st annual meeting of the Japanese Society for Cell Synthesis Research , 大阪 , 10/16
5. Kimura, K. 「 線虫 C. elegans の初期胚における微小管とモータータンパク質に依存した中心体の中央配置機構の解析 」, 第31回日本分子生物学会年会・第81回日本生化学会大会 合同大会 (BMB2008), 神戸 , 12/9
6. Niwayama, R. 「 Construction of mechanical models for actomyosin dependent cytoplasmic streaming in C. elegans one-cell stage embryo 」, 第31回日本分子生物学会年会・第81回日本生化学会大会 合同大会 (BMB2008), 神戸 , 12/10
7. Hara, Y. 「 線虫 C. elegans の初期胚を用いた細胞の大きさ依存的な紡錘体伸長機構の解析 」, 第31回日本分子生物学会年会・第81回日本生化学会大会 合同大会 (BMB2008), 神戸 , 12/11
8. Koyama, H. 「 線虫の初期胚を用いた細胞質分裂における細胞の形状の実験的・理論的解析 」, 第31回日本分子生物学会年会・第81回日本生化学会大会 合同大会 (BMB2008), 神戸 , 12/11

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L. EXPERIMENTAL FARM
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RESEARCH ACTIVITIES

PUBLICATIONS

Papers

1. Thirumurugan, T., Ito, Y., Kubo, T., Serizawa, A. and Kurata, N. (0) Identification, characterization and interaction of HAP family genes in rice. , **Mol. Genet. Genomics** , 279 , 279 - 289
2. Ito, N. and Kurata, N. (2008) Disruption of KNOX gene suppression in leaf by introducing its c DNA in rice. , **Plant Science** , in press , 0 - 0

ORAL PRESENTATION

1. 野々村賢一 植物生殖細胞発生の分子生物学 集中講義 東京大学大学院 農学生命科学研究科 11/21
2. 野々村賢一 イネのゲノム障壁打破 基礎研究紹介セミナー 九州大学大学院農学研究科 12/16-17
3. 野々村賢一 植物の初期生殖細胞発生におけるRNAを介した遺伝子発現制御 GCOEセミナー 奈良先端科学技術大学院大学 12/12
4. 野々村賢一 「イネの生殖関連遺伝子の機能解析と多様性研究への取り組み」 第7回 インターゲノミクスセミナー 神戸大学大学院 農学部 1/17

POSTER PRESENTATIONS

1. 野々村賢一 「 RNAを介した転写後遺伝子発現制御は植物の減数分裂進行に必須である 」, 第31回分子生物学会, 神戸市, 12/9-12
2. Norio KOMEDA, Nori KURATA, Ken-ichi NONOMURA 「 Centromere and telomere dynamics during meiotic prophase I in rice 」, The 3rd Asian Chromosome Colloquium 2008, 大阪, 12/1-4
3. 野々村賢一 「 イネ生殖細胞分化関連遺伝子の単離と機能解析 」, 平成20年度新規採択課題ポスターセッション, 京都市, 10/30
4. 米田典央、倉田のり、野々村賢一 「 減数第一分裂前期に特異的な染色体挙動の観察 」, イネ遺伝学・分子生物学ワークショップ2008, 福岡市, 7/4-5
5. Ken-ichi Nonomura, Mutsuko Nakano, Mitsugu Eiguchi, Akio Miyao, Hirohiko Hirochika, Nori Kurata 「 A plant germline-specific Argonaute is required for maintenance of germline cell identity and meiosis progression 」, 41st Annual Meeting for the Japanese Society of Developmental Biologists, 徳島, 5/28-30
6. 石川亮、永口貢、池田陽子、倉田のり、木下哲 「 イネの胚乳における生殖隔離機構とゲノムインプリンティング 」, 第49回 日本植物生理学会年会, 札幌市, 3/20-22
7. 上田弥生、野々村賢一、藤田雅文、堀内陽子、倉田のり 「 生殖細胞の初期発生が異常に

なるイネmel1突然変異体を用いたマイクロアレイ解析」, 日本育種学会第113回講演会, 川崎市, 3/27-29

8. 石川亮、永口貢、池田陽子、倉田のり、木下哲 「イネの胚乳における生殖隔離機構とゲノムインプリンティング」, 日本育種学会第113回講演会, 川崎市, 3/27-29

9. 野々村賢一 「イネの生殖細胞の初期発生を制御するARGONAUTE遺伝子MEL1の解析」, 国立遺伝学研究所研究会, 三島, 1/11

EDUCATION

1. 倉田のり イネ発生研究の新展開 国立遺伝学研究所研究会 三島 1/11

BOOK

1. Nonomura, K.I. and Yamaki, S. (2008) Genetic dissection of sexual reproduction in rice(*Oryza sativa* L.) **Rice biology in the genomics era** 191 - 204

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Hwang, JS.	I-a Laboratory for DNA Data Analysis
Hwang, M.S	G-c Comparative Genomics Laboratory
Ichimiya, T.	F-g Invertebrate Genetics Laboratory
Ichianagi, K.	E-a Division of Human Genetics
Ida, K.	C-c Division of Molecular and Developmental Biology
Igarashi N.	H-d Biomolecular Structure Laboratory
Igasakai, T.	G-c Comparative Genomics Laboratory
Ijiri, T.W.	G-c Comparative Genomics Laboratory
Ijiri, T.	E-a Division of Human Genetics
Ikawa, M.	G-c Comparative Genomics Laboratory
Ikawa, M.	E-a Division of Human Genetics
Ikeda, K	F-c Mouse Genomics Resource Laboratory
Ikeda, Y.	I-a Laboratory for DNA Data Analysis
Ikegami T	G-c Comparative Genomics Laboratory
Ikenaga, T.	C-c Division of Molecular and Developmental Biology

Ikeo, K.	C-c Division of Molecular and Developmental Biology D-a Division of Population Genetics F-a Mammalian Genetics Laboratory I-a Laboratory for DNA Data Analysis I-c Laboratory for Gene Function Research
Ikeo, K.	I-a Laboratory for DNA Data Analysis
Iketani, M.	E-c Division of Brain Function
Imamoto, N.	H-a Biological Macromolecules Laboratory
Imanishi, T.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis I-c Laboratory for Gene Function Research
Imashimizu, M.	H-b Molecular Biomechanism Laboratory
Imbeaud, S.	D-a Division of Population Genetics
Inaba, M.	C-c Division of Molecular and Developmental Biology
Inada, H.	H-c Multicellular Organization Laboratory
Inami A	G-c Comparative Genomics Laboratory
Inoko, H.	F-d Model Fish Genomics Resource I-c Laboratory for Gene Function Research
Inomata, N.	D-a Division of Population Genetics
Inoue, Y.	D-a Division of Population Genetics
Irie, T.	I-a Laboratory for DNA Data Analysis
Iseki S	F-b Mammalian Development Laboratory
Ishibashi, M.	D-a Division of Population Genetics
Ishii, A.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Ishikawa, R.	F-e Plant Genetics Laboratory
Ishimizu T	F-e Plant Genetics Laboratory
Ishimoto, M.	G-c Comparative Genomics Laboratory
Ishiwata A	G-c Comparative Genomics Laboratory
Ishiwata, A.	G-c Comparative Genomics Laboratory
Isogai, T.	D-a Division of Population Genetics
Ito, K.	E-c Division of Brain Function
Ito, N.	L EXPERIMENTAL FARM
Ito, T.	G-c Comparative Genomics Laboratory
Ito, Y.	F-e Plant Genetics Laboratory L EXPERIMENTAL FARM
Ito, Y.	F-e Plant Genetics Laboratory
Itoh, K.	G-c Comparative Genomics Laboratory
Itoh, M.	C-c Division of Molecular and Developmental Biology D-a Division of Population Genetics
Itoh, T.	G-c Comparative Genomics Laboratory D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Itou, H.	H-d Biomolecular Structure Laboratory
Iwabe, N.	G-c Comparative Genomics Laboratory
Iwama, H.	I-a Laboratory for DNA Data Analysis
Iwasaki, H.	A-b Division of Mutagenesis
Iwayama, Y.	D-a Division of Population Genetics
Izumi, Y.	F-a Mammalian Genetics Laboratory

Jaenisch,R.	E-a Division of Human Genetics
Jahn, N.	G-c Comparative Genomics Laboratory
Jia, L.	D-a Division of Population Genetics
Jin, F.	D-a Division of Population Genetics
Jin, H.	I-a Laboratory for DNA Data Analysis
Jin, L.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Jin,Y.	E-a Division of Human Genetics
Josowitz,R.	H-e Gene Network Laboratory
Jun,Kanno.	F-b Mammalian Development Laboratory
Jurka J	G-b Genome biology Laboratory
K-i.	E-b Division of Agricultural Genetics
K. K.	E-b Division of Agricultural Genetics
K.Furukubo-Tokunaga	H-e Gene Network Laboratory
Kagiwada H	F-b Mammalian Development Laboratory
Kagoshima, H.	G-c Comparative Genomics Laboratory
Kai, Y.	I-a Laboratory for DNA Data Analysis
Kaji T	G-c Comparative Genomics Laboratory
Kakihara, S.	F-c Mouse Genomics Resource Laboratory
Kakutani T	E-b Division of Agricultural Genetics
Kakutani, T.	E-b Division of Agricultural Genetics
Kametani, Y.	G-c Comparative Genomics Laboratory
Kamisugi, Y.	G-b Genome biology Laboratory
Kaneda M	G-b Genome biology Laboratory
Kaneda, M.	G-c Comparative Genomics Laboratory
Kaneda,M.	E-a Division of Human Genetics
Kaneko F	F-e Plant Genetics Laboratory
Kaneko, Y.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Kania, A.	C-c Division of Molecular and Developmental Biology
Kania, R.	I-a Laboratory for DNA Data Analysis
Kanno J	F-b Mammalian Development Laboratory
Kanno, M.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Kapitonov VV	G-b Genome biology Laboratory
Kasahara, M.	G-c Comparative Genomics Laboratory
Kasai S.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Kasai, K.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Kashima T	F-b Mammalian Development Laboratory
Kasuga, M.	G-c Comparative Genomics Laboratory
Katano, T.	E-c Division of Brain Function
Kato Kaneko	D-a Division of Population Genetics
Kato, J.	G-a Genetic Informatics Laboratory
Kato, N.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory

Kato, Y.	F-a Mammalian Genetics Laboratory
Kato,Y.	E-a Division of Human Genetics
Katoh, K.	G-c Comparative Genomics Laboratory
Katsuki, T.	C-a Division of Developmental Genetics
Katsuma S	G-b Genome biology Laboratory
Katsura, I.	H-c Multicellular Organization Laboratory
Kaur, M.	I-a Laboratory for DNA Data Analysis
Kawabe, A.	D-a Division of Population Genetics E-b Division of Agricultural Genetics
Kawabe, A.Kinoshita	D-a Division of Population Genetics
Kawabe,A.	D-a Division of Population Genetics
Kawahara, Y.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Kawai, Y.	I-c Laboratory for Gene Function Research
Kawakami, K.	C-c Division of Molecular and Developmental Biology I-a Laboratory for DNA Data Analysis
Kawakita, M.	F-e Plant Genetics Laboratory
Kawamura, T.	D-a Division of Population Genetics
Kawaoka S	G-b Genome biology Laboratory
Kawasaki, T.	E-c Division of Brain Function F-d Model Fish Genomics Resource
Kawashima T	G-b Genome biology Laboratory
Kazama T	F-e Plant Genetics Laboratory
Kazuteru,Hasegawa.	F-b Mammalian Development Laboratory
Ken-Ichi NONOMURA	L EXPERIMENTAL FARM
Ken-Ichi Nonomura	L EXPERIMENTAL FARM
Kii I	F-b Mammalian Development Laboratory
Kikkawa, Y.	F-a Mammalian Genetics Laboratory
Kikuchi S	F-e Plant Genetics Laboratory
Kikuchi, T.	F-a Mammalian Genetics Laboratory
Kikugawa, S.	D-a Division of Population Genetics
Kikuno, R.	D-a Division of Population Genetics
Kim, N.S.	D-a Division of Population Genetics
Kim, S.	D-a Division of Population Genetics
Kim, S.-W.	G-c Comparative Genomics Laboratory
Kim,D.	H-b Molecular Biomechanism Laboratory
Kimata, T.	H-c Multicellular Organization Laboratory
Kimura T	G-c Comparative Genomics Laboratory
Kimura, A.	J-c Cell Architecture Laboratory
Kimura, G.	G-a Genetic Informatics Laboratory
Kimura, K.	J-c Cell Architecture Laboratory D-a Division of Population Genetics H-c Multicellular Organization Laboratory
Kimura, K. D.	H-c Multicellular Organization Laboratory
Kimura, S.	F-c Mouse Genomics Resource Laboratory
Kimura, T.	G-c Comparative Genomics Laboratory F-d Model Fish Genomics Resource

Kimura,N.	E-a Division of Human Genetics
Kimura,T.	E-a Division of Human Genetics
Kimura-Yoshida, C.	D-a Division of Population Genetics
Kinoshita, T.	E-b Division of Agricultural Genetics F-e Plant Genetics Laboratory
Kinoshita, Y.	D-a Division of Population Genetics E-b Division of Agricultural Genetics
Kishimoto, Y.	C-c Division of Molecular and Developmental Biology
Kishino H	G-b Genome biology Laboratory
Kiso M	F-b Mammalian Development Laboratory
Kitajima S	F-b Mammalian Development Laboratory
Kitamura,K.	E-a Division of Human Genetics
Kitano, T.	D-a Division of Population Genetics F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Kitano,T.	D-a Division of Population Genetics
Kitazawa, H.	I-c Laboratory for Gene Function Research
Klages, S.	G-c Comparative Genomics Laboratory
Kobayashi, H.	I-c Laboratory for Gene Function Research
Kobayashi, K.	F-d Model Fish Genomics Resource
Kobayashi, T.	B-a Division of Cytogenetics F-a Mammalian Genetics Laboratory
Kobayashi,H.	E-a Division of Human Genetics
Kohara Y	G-b Genome biology Laboratory
Kohara, Y.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory
Kohara,Y.	E-a Division of Human Genetics
Kohu, K.	G-c Comparative Genomics Laboratory
Koide, T.	C-c Division of Molecular and Developmental Biology D-a Division of Population Genetics D-a Division of Population Genetics F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Koji,Akasaka	F-b Mammalian Development Laboratory
Kojima, K.	G-c Comparative Genomics Laboratory
Kojima, T.	G-c Comparative Genomics Laboratory
Kojima,K.	E-a Division of Human Genetics
Kokubo, N.	D-a Division of Population Genetics
Komiyama, T.	I-a Laboratory for DNA Data Analysis I-c Laboratory for Gene Function Research
Komori,A.	H-e Gene Network Laboratory
Kondo, R.	D-a Division of Population Genetics
Kondo, S.	C-c Division of Molecular and Developmental Biology
Kondoh,G.	E-a Division of Human Genetics
Kono T	G-b Genome biology Laboratory
Kono, T.	G-c Comparative Genomics Laboratory
Kono,T.	E-a Division of Human Genetics
Kotani, T.	C-c Division of Molecular and Developmental Biology

Kousaku Okubo	I-e Laboratory for Gene-Expression Analysis
Koyama, H.	J-c Cell Architecture Laboratory
Koyanagi, K.O.	D-a Division of Population Genetics
Koyanagi, KO.	I-a Laboratory for DNA Data Analysis
Krasieva, T.B.	H-e Gene Network Laboratory
Kren, V.	G-c Comparative Genomics Laboratory
Kryukov, K.	I-a Laboratory for DNA Data Analysis
Kube, M.	G-c Comparative Genomics Laboratory
Kubo, T.	F-e Plant Genetics Laboratory L EXPERIMENTAL FARM
Kubo, Y.	F-a Mammalian Genetics Laboratory
Kudo A.	F-b Mammalian Development Laboratory
Kudo T	G-c Comparative Genomics Laboratory
Kudo, T.	G-c Comparative Genomics Laboratory
Kudoh, H.	E-b Division of Agricultural Genetics
Kudou N.	H-d Biomolecular Structure Laboratory
Kuhara, A.	H-c Multicellular Organization Laboratory
Kuhl, H.	G-c Comparative Genomics Laboratory
Kulikova, T.	D-a Division of Population Genetics
Kuma, K.	G-c Comparative Genomics Laboratory
Kumagai H	G-c Comparative Genomics Laboratory
Kumamaru, T.	F-e Plant Genetics Laboratory
Kuniya,Abe.	F-b Mammalian Development Laboratory
Kuramoto, T.	G-c Comparative Genomics Laboratory
Kurata N	F-e Plant Genetics Laboratory
Kurata N	F-e Plant Genetics Laboratory
Kurata, N	F-e Plant Genetics Laboratory
Kurata, N.	F-e Plant Genetics Laboratory L EXPERIMENTAL FARM
Kuriki, S.	F-e Plant Genetics Laboratory
Kurokawa, K.	G-c Comparative Genomics Laboratory
Kurokawa, Y.	A-b Division of Mutagenesis
Kuroki Y	G-b Genome biology Laboratory
Kuroki, Y.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory
Kurotani A	G-c Comparative Genomics Laboratory
Kurotani, A.	G-c Comparative Genomics Laboratory
Kurusu,M.	H-e Gene Network Laboratory
Kuryshhev, V.	D-a Division of Population Genetics
Kuwahara, T.	G-c Comparative Genomics Laboratory
LaMorte,V.J.	H-e Gene Network Laboratory
Lancet, D.	D-a Division of Population Genetics
Lanfranccone, L.	C-c Division of Molecular and Developmental Biology
Lang, D.	G-b Genome biology Laboratory
Lathrop, G.M.	G-c Comparative Genomics Laboratory
Lechner, D.	G-c Comparative Genomics Laboratory
Lee, Y.A.	G-c Comparative Genomics Laboratory

Lee, K.B.	D-a Division of Population Genetics
Lenhard, B.	D-a Division of Population Genetics
Li L.	C-a Division of Developmental Genetics
Li M	F-b Mammalian Development Laboratory
Li, E.	G-c Comparative Genomics Laboratory E-a Division of Human Genetics
Li, Y.	B-b Division of Microbial Genetics
Li,E.	E-a Division of Human Genetics
Li,Y.	B-b Division of Microbial Genetics
Liao, M.	C-c Division of Molecular and Developmental Biology
Lieberherr, D.	I-a Laboratory for DNA Data Analysis
Lin, G.	C-c Division of Molecular and Developmental Biology
Lin, M.	C-c Division of Molecular and Developmental Biology
Lin, Y.C.	D-a Division of Population Genetics
Lin, YH.	F-a Mammalian Genetics Laboratory
Lindquist E	G-b Genome biology Laboratory
Lindquist, E.A.	G-b Genome biology Laboratory
Liu Y.-H.	D-a Division of Population Genetics
Liu, W.	C-c Division of Molecular and Developmental Biology
Liu, Y.-H.	D-a Division of Population Genetics F-c Mouse Genomics Resource Laboratory
Lohr, M.	G-b Genome biology Laboratory
Lopez-Bigas, N.	G-c Comparative Genomics Laboratory
Lucas S	G-b Genome biology Laboratory
Lucas, S.	G-b Genome biology Laboratory
Lucotte, G.	D-a Division of Population Genetics
M. Aksoy S.	G-c Comparative Genomics Laboratory
Mabuchi, T.	E-c Division of Brain Function
MacPherson, C.	I-a Laboratory for DNA Data Analysis
Macdonald ST	F-b Mammalian Development Laboratory
Maenaka, K.	A-a Division of Molecular Genetics
Maeno, A.	F-a Mammalian Genetics Laboratory
Maho, N.	G-c Comparative Genomics Laboratory
Makalowska, I.	D-a Division of Population Genetics
Makalowski, W.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Makino, T.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Makoto,Kiso.	F-b Mammalian Development Laboratory
Manabe,T.	H-e Gene Network Laboratory
Maqungo, M.	I-a Laboratory for DNA Data Analysis
Mari, A.	G-c Comparative Genomics Laboratory
Maruyama, K.	G-c Comparative Genomics Laboratory
Masayuki,Oginuma.	F-b Mammalian Development Laboratory
Mashima, J.	D-a Division of Population Genetics
Mashimo, T.	G-c Comparative Genomics Laboratory

Masuda, A.	F-d Model Fish Genomics Resource
Masuko H	F-e Plant Genetics Laboratory
Masuya H	G-c Comparative Genomics Laboratory
Mathee, K.	H-b Molecular Biomechanism Laboratory
Matsuda, I.	E-c Division of Brain Function
Matsuda, M.	G-c Comparative Genomics Laboratory
Matsuda, Y.	G-c Comparative Genomics Laboratory
Matsuda, Y.	E-a Division of Human Genetics
Matsui, S.	G-c Comparative Genomics Laboratory
Matsumoto, K.	C-c Division of Molecular and Developmental Biology H-c Multicellular Organization Laboratory
Matsumura, S.	E-c Division of Brain Function
Matsuo, I.	D-a Division of Population Genetics
Matsuoka M.	F-e Plant Genetics Laboratory
Matsuoka, Y.	G-a Genetic Informatics Laboratory
Matsusaka, H.	F-e Plant Genetics Laboratory
Matsusue, A.	D-a Division of Population Genetics
Matsuya, A.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Matsuzawa, A.	G-c Comparative Genomics Laboratory
Mauleon, R.	I-a Laboratory for DNA Data Analysis
Mayer, K.	G-b Genome biology Laboratory
McCombie, W.	I-a Laboratory for DNA Data Analysis
McEwen, B.F.	A-a Division of Molecular Genetics
McEwen, B.F.	H-e Gene Network Laboratory
McQueen, C.A.	G-c Comparative Genomics Laboratory
Meier, S.	I-a Laboratory for DNA Data Analysis
Melkozernov, A.	G-b Genome biology Laboratory
Merkenschlager, M.	E-a Division of Human Genetics
Messing, J.	I-a Laboratory for DNA Data Analysis
Meyers, B.	I-a Laboratory for DNA Data Analysis
Mikami, K.	G-c Comparative Genomics Laboratory
Minami, T.	E-c Division of Brain Function
Minesaki, Y.	I-c Laboratory for Gene Function Research
Mineta, K.	F-a Mammalian Genetics Laboratory I-a Laboratory for DNA Data Analysis
Minoshima, S.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Mione, M.	C-c Division of Molecular and Developmental Biology
Mishler, B.D.	G-b Genome biology Laboratory
Mita K	G-b Genome biology Laboratory
Mita, A.	F-a Mammalian Genetics Laboratory
Mita, S.	F-g Invertebrate Genetics Laboratory
Mitani, H.	F-d Model Fish Genomics Resource
Mito, T.	C-c Division of Molecular and Developmental Biology F-g Invertebrate Genetics Laboratory
Mitsugu Eiguchi	L EXPERIMENTAL FARM

Miura A	E-b Division of Agricultural Genetics
Miura, A.	E-b Division of Agricultural Genetics
Miura, K.	I-a Laboratory for DNA Data Analysis
Miura, M.	C-c Division of Molecular and Developmental Biology
Miyagawa, S.	G-c Comparative Genomics Laboratory
Miyagawa, S.	E-a Division of Human Genetics
Miyamoto K	G-c Comparative Genomics Laboratory
Miyamoto, T.	H-b Molecular Biomechanism Laboratory
Miyanari, Y.	E-a Division of Human Genetics
Miyano M	F-e Plant Genetics Laboratory
Miyao, A.	F-e Plant Genetics Laboratory
Miyasaka, N.	C-c Division of Molecular and Developmental Biology
Miyata, T.	G-c Comparative Genomics Laboratory
Miyata, D.	E-a Division of Human Genetics
Miyazaki, S.	D-a Division of Population Genetics
Mizokami, M	I-c Laboratory for Gene Function Research
Mizukado, S.	G-c Comparative Genomics Laboratory
Mizusawa, K.	C-c Division of Molecular and Developmental Biology
Mizushina, Y.	F-a Mammalian Genetics Laboratory
Mizuta Y	F-e Plant Genetics Laboratory
Mizuta Y	F-e Plant Genetics Laboratory
Mizuta, Y.	F-e Plant Genetics Laboratory
Mochida K	G-c Comparative Genomics Laboratory
Mochida, K.	G-c Comparative Genomics Laboratory
Mochizuki, T.	F-e Plant Genetics Laboratory
Mochizuki, H.	H-e Gene Network Laboratory
Mochizuki, T.	E-b Division of Agricultural Genetics
Moe, Matsuo.	F-b Mammalian Development Laboratory
Mohanty, B.	I-a Laboratory for DNA Data Analysis
Mori, H.	G-c Comparative Genomics Laboratory
Mori, I.	H-c Multicellular Organization Laboratory
Moriguchi, K.	F-e Plant Genetics Laboratory
Morimoto, K.	C-c Division of Molecular and Developmental Biology
Morishita, S.	G-c Comparative Genomics Laboratory
Morita, H.	G-c Comparative Genomics Laboratory
Moriwaki, K.	G-c Comparative Genomics Laboratory D-a Division of Population Genetics D-a Division of Population Genetics F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Morono, Y.	G-c Comparative Genomics Laboratory
Morriss-Kay G	F-b Mammalian Development Laboratory
Motono, C.	D-a Division of Population Genetics
Mott, R.	G-c Comparative Genomics Laboratory
Mukai, Y.	D-a Division of Population Genetics
Murakami S.	H-d Biomolecular Structure Laboratory
Murakami, K.	G-c Comparative Genomics Laboratory

	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Murakami, K.	H-d Biomolecular Structure Laboratory
Muramatsu, S.	B-b Division of Microbial Genetics
Muramatsu, S.	B-b Division of Microbial Genetics
Murata, T.	G-b Genome biology Laboratory
Murata, T.	G-c Comparative Genomics Laboratory
Murayama, Y.	A-b Division of Mutagenesis
Muto, A.	C-c Division of Molecular and Developmental Biology
Mutsuko Nakano	L EXPERIMENTAL FARM
Muyanga, S.	I-a Laboratory for DNA Data Analysis
NAKAJIMA, Reiko.	F-f Microbial Genetics Laboratory
Nagai, S.	I-a Laboratory for DNA Data Analysis
Nagamura Y	F-e Plant Genetics Laboratory
Nagaoka, S.	I-c Laboratory for Gene Function Research
Nagasaki, H.	D-a Division of Population Genetics
Nagata, N.	D-a Division of Population Genetics
Nagayoshi, S.	C-c Division of Molecular and Developmental Biology I-a Laboratory for DNA Data Analysis
Nakabo, T.	I-a Laboratory for DNA Data Analysis
Nakagata, N.	F-a Mammalian Genetics Laboratory
Nakagawa, M.	D-a Division of Population Genetics
Nakagawa, S.	C-c Division of Molecular and Developmental Biology I-a Laboratory for DNA Data Analysis
Nakai, K.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Nakajima, M.	D-a Division of Population Genetics
Nakamura K	F-b Mammalian Development Laboratory
Nakamura S	G-c Comparative Genomics Laboratory
Nakamura, F.	E-c Division of Brain Function
Nakamura, H.	C-c Division of Molecular and Developmental Biology
Nakano T	G-b Genome biology Laboratory
Nakano T.	G-c Comparative Genomics Laboratory
Nakano, T.	G-c Comparative Genomics Laboratory
Nakano, T.	E-a Division of Human Genetics
Nakao, M.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Nakaoka, H.	I-a Laboratory for DNA Data Analysis
Nakashima, K.	G-c Comparative Genomics Laboratory
Nakayama, T.	E-b Division of Agricultural Genetics
Nakayama, H.	H-b Molecular Biomechanism Laboratory
Nakazawa, H.	F-a Mammalian Genetics Laboratory
Nakazono M	F-e Plant Genetics Laboratory
Nanjo, T.	G-c Comparative Genomics Laboratory
Narita, T.	G-c Comparative Genomics Laboratory
Narita, t.	G-c Comparative Genomics Laboratory

Naruse, K.	F-d Model Fish Genomics Resource
Nasrallah, M.	E-b Division of Agricultural Genetics
Nasrallah, ME.	D-a Division of Population Genetics
Nelson, D.R.	G-b Genome biology Laboratory
Nemoto-Sasaki, Y.	D-a Division of Population Genetics
Nesterova, T.B.	E-a Division of Human Genetics
Nihsikawa, K.	Ic Laboratory for Gene Function Research
Niimura, Y.	D-a Division of Population Genetics Ia Laboratory for DNA Data Analysis
Niki, H.	F-f Microbial Genetics Laboratory G-a Genetic Informatics Laboratory
Nishi A.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Nishi, A.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Nishi, S.	G-c Comparative Genomics Laboratory
Nishihara, H.	D-a Division of Population Genetics
Nishihara, S.	F-g Invertebrate Genetics Laboratory
Nishijima, H.	E-b Division of Agricultural Genetics
Nishijima, H.	E-b Division of Agricultural Genetics
Nishikata, K.	D-a Division of Population Genetics
Nishikawa, K.	D-a Division of Population Genetics Ic Laboratory for Gene Function Research
Nishikawa, T.	D-a Division of Population Genetics
Nishimoto, Y.	Ia Laboratory for DNA Data Analysis
Nishimukai, H.	D-a Division of Population Genetics
Nishiwaki, Y.	H-e Gene Network Laboratory
Nishiyama T	F-b Mammalian Development Laboratory
Nishiyama, T.	G-b Genome biology Laboratory
Niwa Y	F-b Mammalian Development Laboratory
Niwayama, R.	J-c Cell Architecture Laboratory
Nobuo, Sasaki.	F-b Mammalian Development Laboratory
Noda S	G-c Comparative Genomics Laboratory
Noda, A.O.	D-a Division of Population Genetics
Noda, AO.	Ia Laboratory for DNA Data Analysis
Noda, S.	G-c Comparative Genomics Laboratory
Noda, T.	G-c Comparative Genomics Laboratory
Noguchi H	G-c Comparative Genomics Laboratory
Nogucji, H.	G-c Comparative Genomics Laboratory
Noji, S.	C-c Division of Molecular and Developmental Biology F-g Invertebrate Genetics Laboratory
Nojima, Y.	H-e Gene Network Laboratory
Nomura, N.	D-a Division of Population Genetics
Nonomura, K.	C-c Division of Molecular and Developmental Biology
Nonomura, K.I.	L EXPERIMENTAL FARM
Nordborg, M.	D-a Division of Population Genetics E-b Division of Agricultural Genetics

Nori KURATA	L EXPERIMENTAL FARM
Nori Kurata	L EXPERIMENTAL FARM
Norio KOMEDA	L EXPERIMENTAL FARM
Norton,S.	E-a Division of Human Genetics
Nozaki, A.	D-a Division of Population Genetics
Nozaki,M.	E-a Division of Human Genetics
Nozawa K.	H-d Biomolecular Structure Laboratory
Nurimoto, S.	D-a Division of Population Genetics
O'Donovan, C.	D-a Division of Population Genetics
OOta, S.	I-a Laboratory for DNA Data Analysis
Obata Y	G-b Genome biology Laboratory
Obata, Y	G-c Comparative Genomics Laboratory
Obata, Y.	G-c Comparative Genomics Laboratory F-a Mammalian Genetics Laboratory
Obata,Y.	E-a Division of Human Genetics
Ogasawara O	I-e Laboratory for Gene-Expression Analysis
Ogasawara, O.	I-a Laboratory for DNA Data Analysis
Ogihara, Y.	G-a Genetic Informatics Laboratory
Oginuma M	F-b Mammalian Development Laboratory
Oginuma, M.	E-c Division of Brain Function F-b Mammalian Development Laboratory
Ogura, T.	C-c Division of Molecular and Developmental Biology
Ogura,S.	E-b Division of Agricultural Genetics
Ohara, O.	D-a Division of Population Genetics
Ohashi T	G-c Comparative Genomics Laboratory
Ohhata,T.	E-a Division of Human Genetics
Ohkuma M.	G-c Comparative Genomics Laboratory
Ohkuma, M.	G-c Comparative Genomics Laboratory
Ohmae, Y.	F-g Invertebrate Genetics Laboratory
Ohmori, H.	F-g Invertebrate Genetics Laboratory
Ohnishi, T.	E-c Division of Brain Function
Ohshima, M.	D-a Division of Population Genetics
Ohshima, S.	I-c Laboratory for Gene Function Research
Ohtsubo, M.	D-a Division of Population Genetics
Ohya, H.	D-a Division of Population Genetics
Ohyanagi, H.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Oishi, K.	G-b Genome biology Laboratory
Oka, A.	F-a Mammalian Genetics Laboratory
Okabe, M.	G-c Comparative Genomics Laboratory
Okabe,M.	E-a Division of Human Genetics
Okada, M.	A-a Division of Molecular Genetics
Okagaki, A.	F-a Mammalian Genetics Laboratory
Okamoto,H.	H-e Gene Network Laboratory
Okamura Y	F-b Mammalian Development Laboratory
Okawa, K.	A-a Division of Molecular Genetics
Okawa,K.	E-a Division of Human Genetics

	H-e Gene Network Laboratory
Okido, T.	D-a Division of Population Genetics
Okubo K	I-e Laboratory for Gene-Expression Analysis
Okubo, K.	I-a Laboratory for DNA Data Analysis
Okuda-Ashitaka, E.	E-c Division of Brain Function
Okumura, M.	H-c Multicellular Organization Laboratory
Onda, D.	G-c Comparative Genomics Laboratory
Ono H	G-c Comparative Genomics Laboratory
Ono, F.	C-c Division of Molecular and Developmental Biology
Osaki, M.	G-c Comparative Genomics Laboratory
Osanger, A.	D-a Division of Population Genetics
Osato, N.	C-c Division of Molecular and Developmental Biology D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Osawa, K-I.	F-g Invertebrate Genetics Laboratory
Oshima, K.	G-c Comparative Genomics Laboratory
Oshima, Y.	F-g Invertebrate Genetics Laboratory
oski M	F-b Mammalian Development Laboratory
Osoegawa K	G-b Genome biology Laboratory
Ozaki, Y.	F-d Model Fish Genomics Resource
Ozbek, S.	I-a Laboratory for DNA Data Analysis
Park, H.-J.	G-c Comparative Genomics Laboratory
Park, K. S.	D-a Division of Population Genetics
Patone, G.	G-c Comparative Genomics Laboratory
Pauly, B.	I-a Laboratory for DNA Data Analysis
Pennacchio LA	G-b Genome biology Laboratory
Perroud, P-F.	G-b Genome biology Laboratory
Pezzimenti, F.	C-c Division of Molecular and Developmental Biology
Pils, B.	G-b Genome biology Laboratory
Platzer, M.	G-c Comparative Genomics Laboratory
Popova,B.C.	E-a Division of Human Genetics
Prakash T	G-c Comparative Genomics Laboratory
Prakash, T.	G-c Comparative Genomics Laboratory
Prasad,V.	H-b Molecular Biomechanism Laboratory
Pravenec, M.	G-c Comparative Genomics Laboratory
Prigge, M.	G-b Genome biology Laboratory
Putnam NH	G-b Genome biology Laboratory
Quatrano, R.S.	G-b Genome biology Laboratory
Radovanovic, A.	I-a Laboratory for DNA Data Analysis
Ramirez-Soriano, A.	D-a Division of Population Genetics
Raz, E.	C-c Division of Molecular and Developmental Biology
Reinhardt,R.	G-c Comparative Genomics Laboratory
Reiss, B.	G-b Genome biology Laboratory
Renner, T.	G-b Genome biology Laboratory
Rensing, S.A.	G-b Genome biology Laboratory
Reski, R.	G-b Genome biology Laboratory

Reuben, S.	I-a Laboratory for DNA Data Analysis
Rie ,Saba.	F-b Mammalian Development Laboratory
Rie,Saba.	F-b Mammalian Development Laboratory
Rigolet,M.	E-a Division of Human Genetics
Ritsu,Kamiya.	F-b Mammalian Development Laboratory
Robinson-Rechavi M	G-b Genome biology Laboratory
Rodriguez,T.A.	E-a Division of Human Genetics
Rokhsar DS.	G-b Genome biology Laboratory
Rombauts, S.	G-b Genome biology Laboratory
Ross-Ibarra,J.	D-a Division of Population Genetics
Roubinet, F.	D-a Division of Population Genetics
Roy,AD.	H-b Molecular Biomechanism Laboratory
Roy,S.	H-b Molecular Biomechanism Laboratory
Ruddle, FH.	D-a Division of Population Genetics
Rushton, P.J.	G-b Genome biology Laboratory
S,erfoot	G-b Genome biology Laboratory
S.J.	D-a Division of Population Genetics
Saar, K.	G-c Comparative Genomics Laboratory
Sado, Y.	C-a Division of Developmental Genetics F-d Model Fish Genomics Resource
Sado,T.	E-a Division of Human Genetics
Saga Y	F-b Mammalian Development Laboratory
Saga Y.	F-b Mammalian Development Laboratory
Saga, N.	G-c Comparative Genomics Laboratory
Sagai, T.	F-a Mammalian Genetics Laboratory
Sagara,H.	H-e Gene Network Laboratory
Saichi, N.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Saito H	F-e Plant Genetics Laboratory
Saito M	F-b Mammalian Development Laboratory
Saito T.	I-c Laboratory for Gene Function Research
Saito, K.	F-d Model Fish Genomics Resource
Saitou N.	D-a Division of Population Genetics
Saitou, N.	D-a Division of Population Genetics D-a Division of Population Genetics F-c Mouse Genomics Resource Laboratory I-a Laboratory for DNA Data Analysis
Saka, K.	F-d Model Fish Genomics Resource
Sakai, H.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Sakai, K.	D-a Division of Population Genetics
Sakai, M.	F-f Microbial Genetics Laboratory
Sakai, N.	F-d Model Fish Genomics Resource
Sakai, T.	F-a Mammalian Genetics Laboratory
Sakaki Y	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory
Sakaki Y.	G-c Comparative Genomics Laboratory

Sakaki, T.	G-c Comparative Genomics Laboratory
Sakaki, Y.	G-c Comparative Genomics Laboratory
Sakaki,Y.	E-a Division of Human Genetics
Sakakibara, K.	G-b Genome biology Laboratory
Sakamoto,S.	B-b Division of Microbial Genetics
Sakaniwa, S.	G-a Genetic Informatics Laboratory
Sakata Y	G-c Comparative Genomics Laboratory
Sakata-Sogawa K	H-a Biological Macromolecules Laboratory
Sakate, R.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Sakuraba Y	G-c Comparative Genomics Laboratory
Sakurai T	G-c Comparative Genomics Laboratory
Sakurai, T.	G-c Comparative Genomics Laboratory
Salamov AA	G-b Genome biology Laboratory
Salamov, A.	G-b Genome biology Laboratory
Sanbonmatsu, R.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Sanematsu, F.	E-b Division of Agricultural Genetics
Santoriello, C.	C-c Division of Molecular and Developmental Biology
Sarras, M.P. Jr	C-a Division of Developmental Genetics
Saruhashi,S.	E-a Division of Human Genetics
Sasaki H.	G-b Genome biology Laboratory
Sasaki, E.	G-c Comparative Genomics Laboratory
Sasaki, H.	G-c Comparative Genomics Laboratory
Sasaki, N.	F-g Invertebrate Genetics Laboratory
Sasaki, T.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Sasaki,H.	E-a Division of Human Genetics
Sata M	F-b Mammalian Development Laboratory
Satake, M.	G-c Comparative Genomics Laboratory
Sato, S.	G-c Comparative Genomics Laboratory
Sato, Y.	C-c Division of Molecular and Developmental Biology D-a Division of Population Genetics E-c Division of Brain Function I-a Laboratory for DNA Data Analysis
Satoh N	G-b Genome biology Laboratory
Satoh, H.	F-e Plant Genetics Laboratory
Satoh, N.	I-a Laboratory for DNA Data Analysis
Satoru,Kobayakawa.	F-b Mammalian Development Laboratory
Satoshi,Kitajima.	F-b Mammalian Development Laboratory
Satou Y	G-b Genome biology Laboratory
Satou Y.	G-b Genome biology Laboratory
Sauka-Spengler T	G-b Genome biology Laboratory
Saze H	E-b Division of Agricultural Genetics
Saze, H.	E-b Division of Agricultural Genetics
Schaeffer, M.	I-a Laboratory for DNA Data Analysis
Schilhabel,M.	G-c Comparative Genomics Laboratory

Schmutz J	G-b Genome biology Laboratory
Schneider JE	F-b Mammalian Development Laboratory
Schulz, H.	G-c Comparative Genomics Laboratory
Schupp, I.	D-a Division of Population Genetics
Schween, G.	G-b Genome biology Laboratory
Seki M	G-c Comparative Genomics Laboratory
Seki, M.	G-c Comparative Genomics Laboratory I-a Laboratory for DNA Data Analysis
Senner,C.E.	E-a Division of Human Genetics
Serikawa, T.	G-c Comparative Genomics Laboratory
Serizawa, A.	F-e Plant Genetics Laboratory L EXPERIMENTAL FARM
Sezutsu H	G-c Comparative Genomics Laboratory
Shang, W.H.	A-a Division of Molecular Genetics
Shapiro, H.	G-b Genome biology Laboratory
Sharma VK	G-c Comparative Genomics Laboratory
Sharma, V.K.	G-c Comparative Genomics Laboratory
Shiba, R.	D-a Division of Population Genetics
Shibahara, K-i.	E-b Division of Agricultural Genetics
Shibahara, K.	E-b Division of Agricultural Genetics
Shibahara, S.	F-a Mammalian Genetics Laboratory
Shibahara,K.	E-b Division of Agricultural Genetics
Shibata, H.	G-c Comparative Genomics Laboratory
Shigeta Y.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Shih, M.	I-a Laboratory for DNA Data Analysis
Shikhagaie, M.	G-c Comparative Genomics Laboratory
Shimada T.	G-b Genome biology Laboratory
Shimada, A.	F-d Model Fish Genomics Resource
Shimada, M.	D-a Division of Population Genetics
Shimada, M. K.	D-a Division of Population Genetics
Shimada, MK.	I-a Laboratory for DNA Data Analysis
Shimamoto, N.	H-b Molecular Biomechanism Laboratory
Shimamoto,N.	H-b Molecular Biomechanism Laboratory
Shimazaki M	F-b Mammalian Development Laboratory
Shimizu, H	C-a Division of Developmental Genetics
Shimizu, H.	C-a Division of Developmental Genetics
Shimizu, K.	E-b Division of Agricultural Genetics
Shimizu, KK.	D-a Division of Population Genetics
Shimogori, T.	D-a Division of Population Genetics
Shimoyama, M.	D-a Division of Population Genetics
Shin, H.	H-b Molecular Biomechanism Laboratory
Shin-I T	G-b Genome biology Laboratory
Shin-I, T.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory I-c Laboratory for Gene Function Research
Shin-i, T.	G-c Comparative Genomics Laboratory

Shinano, T.	G-c Comparative Genomics Laboratory
Shinohara, K.	G-c Comparative Genomics Laboratory
Shinozaki K.	G-c Comparative Genomics Laboratory
Shinozaki, K.	G-c Comparative Genomics Laboratory
Shinya, M.	F-d Model Fish Genomics Resource
Shiomi, D	F-f Microbial Genetics Laboratory
Shiono K	F-e Plant Genetics Laboratory
Shionyu, M.	D-a Division of Population Genetics
Shiraishi A	E-b Division of Agricultural Genetics
Shiraishi, A.	E-b Division of Agricultural Genetics
Shirakihara Y.	H-d Biomolecular Structure Laboratory
Shirakihara, Y.	H-d Biomolecular Structure Laboratory
Shiratori A.	H-d Biomolecular Structure Laboratory
Shiroishi, T	G-c Comparative Genomics Laboratory
Shiroishi, T.	D-a Division of Population Genetics D-a Division of Population Genetics F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Shiroishi, T.	G-c Comparative Genomics Laboratory
Shitara, H.	F-a Mammalian Genetics Laboratory
Shiu, S-H.	G-b Genome biology Laboratory
Shoguchi E	G-b Genome biology Laboratory
Shoji, M.	E-a Division of Human Genetics
Shoko Kawamoto	I-e Laboratory for Gene-Expression Analysis
Silverman, N.	F-g Invertebrate Genetics Laboratory
Soares, M.B.	D-a Division of Population Genetics
Spruce, T.	E-a Division of Human Genetics
St Pierre	I-a Laboratory for DNA Data Analysis
Stewart M.	H-d Biomolecular Structure Laboratory
Stuart, A.	G-c Comparative Genomics Laboratory
Stueber, K.	G-b Genome biology Laboratory
Suemizu, H.	G-c Comparative Genomics Laboratory
Suga, H.	G-c Comparative Genomics Laboratory
Sugano, S.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Sugawara H	I-e Laboratory for Gene-Expression Analysis
Sugawara, H.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Sugimoto, H.	F-c Mouse Genomics Resource Laboratory
Sumiko, Koshida	F-b Mammalian Development Laboratory
Sumiyama, K.	D-a Division of Population Genetics F-a Mammalian Genetics Laboratory
Surani MA	G-b Genome biology Laboratory
Surani, A.	G-c Comparative Genomics Laboratory
Surani, MA.	G-c Comparative Genomics Laboratory

Surani,A.	E-a Division of Human Genetics
Surani,M.A.	E-a Division of Human Genetics
Suster, M.L.	C-c Division of Molecular and Developmental Biology
Suwa, M.	D-a Division of Population Genetics
Suwabe K	F-e Plant Genetics Laboratory
Suzuki A	F-b Mammalian Development Laboratory
Suzuki G	F-e Plant Genetics Laboratory
Suzuki H	F-b Mammalian Development Laboratory
Suzuki T.	H-d Biomolecular Structure Laboratory
Suzuki, A.	A-a Division of Molecular Genetics
Suzuki, D.	G-c Comparative Genomics Laboratory
Suzuki, E.	A-a Division of Molecular Genetics
Suzuki, H.	H-d Biomolecular Structure Laboratory
Suzuki, I.	E-c Division of Brain Function
Suzuki, M.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Suzuki, T.	F-e Plant Genetics Laboratory
Suzuki, Y.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Suzuki,A.	H-e Gene Network Laboratory
Suzuki,E.	H-e Gene Network Laboratory
Suzuki,T.	E-a Division of Human Genetics
Swarup, S.	I-a Laboratory for DNA Data Analysis
T. Kono	G-c Comparative Genomics Laboratory
Tabata, S.	G-c Comparative Genomics Laboratory
Tachibana, M.	F-a Mammalian Genetics Laboratory
Tada, M.	D-a Division of Population Genetics
Taji T	G-c Comparative Genomics Laboratory
Tajima, S.	E-a Division of Human Genetics
Takabayashi, K.	D-a Division of Population Genetics
Takada, H.	F-g Invertebrate Genetics Laboratory
Takada, T.	G-c Comparative Genomics Laboratory F-a Mammalian Genetics Laboratory
Takagi, K.	E-c Division of Brain Function
Takagi, N.	F-a Mammalian Genetics Laboratory
Takahashi H	F-e Plant Genetics Laboratory
Takahashi Y	F-b Mammalian Development Laboratory
Takahashi Y.	G-a Genetic Informatics Laboratory
Takahashi, A.	D-a Division of Population Genetics D-a Division of Population Genetics F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Takahashi, H.	I-a Laboratory for DNA Data Analysis
Takahashi, Y.	C-c Division of Molecular and Developmental Biology
Takahasi KR	G-c Comparative Genomics Laboratory

Takai, T.	G-c Comparative Genomics Laboratory
Takaku, Y.	I-a Laboratory for DNA Data Analysis
Takamatsu Y.	F-c Mouse Genomics Resource Laboratory
Takamatsu, Y.	F-a Mammalian Genetics Laboratory
Takami, H.	G-c Comparative Genomics Laboratory
Takami, Y.	E-b Division of Agricultural Genetics
Takano, R.	H-c Multicellular Organization Laboratory
Takashi Gojobori	I-a Laboratory for DNA Data Analysis
Takashima, K.	D-a Division of Population Genetics E-b Division of Agricultural Genetics
Takashima, S.	E-c Division of Brain Function
Takata,H.	E-b Division of Agricultural Genetics
Takeda, H.	C-c Division of Molecular and Developmental Biology F-d Model Fish Genomics Resource I-a Laboratory for DNA Data Analysis
Takeda, J.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Takeda, N.	F-a Mammalian Genetics Laboratory
Takei, K.	E-c Division of Brain Function
Takemae, H.	F-g Invertebrate Genetics Laboratory
Takeuchi, N.	I-a Laboratory for DNA Data Analysis
Tamiya, G.	F-d Model Fish Genomics Resource
Tamura, M.	F-a Mammalian Genetics Laboratory
Tamura, T.	D-a Division of Population Genetics
Tanabe, H.	F-a Mammalian Genetics Laboratory
Tanahashi, T.	G-b Genome biology Laboratory
Tanaka S	G-c Comparative Genomics Laboratory
Tanaka, H.	I-a Laboratory for DNA Data Analysis
Tanaka, I.	H-d Biomolecular Structure Laboratory
Tanaka, M.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Tanaka, N.	D-a Division of Population Genetics
Tanaka, S.	D-a Division of Population Genetics F-a Mammalian Genetics Laboratory B-b Division of Microbial Genetics
Tanaka, T.	I-a Laboratory for DNA Data Analysis B-b Division of Microbial Genetics
Tanaka, Y.	H-d Biomolecular Structure Laboratory I-c Laboratory for Gene Function Research B-b Division of Microbial Genetics
Tanaka,S.	B-b Division of Microbial Genetics
Tanaka,T.	E-a Division of Human Genetics B-b Division of Microbial Genetics
Tanaka,Y.	B-b Division of Microbial Genetics
Tanaka.	B-b Division of Microbial Genetics
Tanemura, M.	F-c Mouse Genomics Resource Laboratory
Tang,Y.A.	E-a Division of Human Genetics
Tanino, M.	D-a Division of Population Genetics

Tanioka, Y.	G-c Comparative Genomics Laboratory
Taniya, T.	D-a Division of Population Genetics
Tanizawa, Y.	H-c Multicellular Organization Laboratory
Tateno Y.	I-e Laboratory for Gene-Expression Analysis
Tateno, Y.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis I-c Laboratory for Gene Function Research
Tatsumoto, S.	G-c Comparative Genomics Laboratory
Tatsuya,Tsukahara.	F-b Mammalian Development Laboratory
Tatusova, T.	I-a Laboratory for DNA Data Analysis
Taudien, S.	G-c Comparative Genomics Laboratory
Taya, C.	F-a Mammalian Genetics Laboratory
Taylor TD	G-c Comparative Genomics Laboratory
Taylor, T.D.	G-c Comparative Genomics Laboratory
Teraishi, M.	G-c Comparative Genomics Laboratory
Terao, K.	D-a Division of Population Genetics
Terry A	G-b Genome biology Laboratory
Terry, A.	G-b Genome biology Laboratory
Theodoulou, F.L.	G-b Genome biology Laboratory
Thierry-Mieg, D.	D-a Division of Population Genetics
Thierry-Mieg, J.	D-a Division of Population Genetics
Thirumurugan, T.	F-e Plant Genetics Laboratory L EXPERIMENTAL FARM
Thomas, M.A.	D-a Division of Population Genetics
Tiffin, N.	D-a Division of Population Genetics
Toda,H.	H-e Gene Network Laboratory
Todaka, D.	G-c Comparative Genomics Laboratory
Todokoro, F.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Toh H	G-c Comparative Genomics Laboratory
Toh, H.	G-c Comparative Genomics Laboratory
Tokumoto, M.	F-d Model Fish Genomics Resource
Tokunaga, M.	H-a Biological Macromolecules Laboratory
Tomihara, K.	F-c Mouse Genomics Resource Laboratory
Tomii K.	H-d Biomolecular Structure Laboratory
Tomizawa,S.	E-a Division of Human Genetics
Tomoko F.Shibata.	F-b Mammalian Development Laboratory
Tonellato, P.	D-a Division of Population Genetics
Toshihisa Takagi.	I-e Laboratory for Gene-Expression Analysis
Toshiki,Yagi.	F-b Mammalian Development Laboratory
Toshio,Nakanishi.	F-b Mammalian Development Laboratory
Totoki Y	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory
Totoki, Y.	G-c Comparative Genomics Laboratory
Totoki,Y.	E-a Division of Human Genetics
Toyoda A	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory

Toyoda, A.	G-b Genome biology Laboratory G-c Comparative Genomics Laboratory
Toyoda, H.	F-g Invertebrate Genetics Laboratory
Toyoda, A.	G-c Comparative Genomics Laboratory E-a Division of Human Genetics
Toyota, T.	D-a Division of Population Genetics
Tsubokura Y	G-c Comparative Genomics Laboratory
Tsuchiya, R.	G-a Genetic Informatics Laboratory
Tsuchiya, T.	F-c Mouse Genomics Resource Laboratory
Tsuda M	F-b Mammalian Development Laboratory
Tsuda, K.	F-e Plant Genetics Laboratory
Tsunashima, K.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Tsunewaki, K.	G-a Genetic Informatics Laboratory
Tsutsumi N	F-e Plant Genetics Laboratory
Tu, H.	G-b Genome biology Laboratory
Tubouchi, T.	G-c Comparative Genomics Laboratory
Twigger, S.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Tyagi, A.	I-a Laboratory for DNA Data Analysis
Uchiyama, M.	G-c Comparative Genomics Laboratory
Ueda, R.	C-c Division of Molecular and Developmental Biology F-g Invertebrate Genetics Laboratory
Ueda, T.	I-a Laboratory for DNA Data Analysis
Uehara, S.	F-a Mammalian Genetics Laboratory
Ueyama, M.	F-g Invertebrate Genetics Laboratory
Umehara, Y.	I-a Laboratory for DNA Data Analysis
Umemori, T.	B-b Division of Microbial Genetics
Umemori, T.	B-b Division of Microbial Genetics
Umetsu, K.	D-a Division of Population Genetics
Umezawa, T.	G-c Comparative Genomics Laboratory
Urasaki, A.	C-c Division of Molecular and Developmental Biology F-g Invertebrate Genetics Laboratory I-a Laboratory for DNA Data Analysis
Urban, J.	C-c Division of Molecular and Developmental Biology
Utsunomiya S	G-c Comparative Genomics Laboratory
Vedala, H.	H-b Molecular Biomechanism Laboratory
Verrier, P.J.	G-b Genome biology Laboratory
Viegas-Pequignot, E.	E-a Division of Human Genetics
Vivatbutsiri P	F-b Mammalian Development Laboratory
Voigt, B.	G-c Comparative Genomics Laboratory
Wachi, M.	H-d Biomolecular Structure Laboratory
Wada, Tanaka	H-e Gene Network Laboratory
Wagner, L.	D-a Division of Population Genetics
Wakana, S.	G-c Comparative Genomics Laboratory
Wakatsuki S.	H-d Biomolecular Structure Laboratory
Wan, J.	G-c Comparative Genomics Laboratory

Wanchana, S.	I-a Laboratory for DNA Data Analysis
Wang MC	G-b Genome biology Laboratory
Wang, CC.	F-a Mammalian Genetics Laboratory
Watanabe M	F-e Plant Genetics Laboratory
Watanabe M.	F-e Plant Genetics Laboratory
Watanabe T	G-b Genome biology Laboratory
Watanabe, K.	G-c Comparative Genomics Laboratory
Watanabe, M.	C-c Division of Molecular and Developmental Biology
Watanabe, N.	H-d Biomolecular Structure Laboratory
Watanabe, T.	G-c Comparative Genomics Laboratory C-c Division of Molecular and Developmental Biology
Watanabe,T.	E-a Division of Human Genetics
Waters, E.	G-b Genome biology Laboratory
Wei, F.	I-a Laboratory for DNA Data Analysis
Welburn, J.P.	A-a Division of Molecular Genetics
Welburn,J.P.	H-e Gene Network Laboratory
White, O.	I-a Laboratory for DNA Data Analysis
Whitfield, E.	D-a Division of Population Genetics
Wiemann, S.	D-a Division of Population Genetics
Wilming, L.	D-a Division of Population Genetics
Wing, R.	I-a Laboratory for DNA Data Analysis
Wood, A.	G-b Genome biology Laboratory
Wright,S.I.	D-a Division of Population Genetics
Wu, J.	C-c Division of Molecular and Developmental Biology
Wu, Y.	G-c Comparative Genomics Laboratory
Y.V.	G-b Genome biology Laboratory
Yagita, H.	G-c Comparative Genomics Laboratory
Yamabe, E.	G-c Comparative Genomics Laboratory
Yamada, K.	D-a Division of Population Genetics
Yamaguchi, K.	G-b Genome biology Laboratory D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis
Yamaguchi, M.	E-c Division of Brain Function
Yamaguchi, Y.	G-c Comparative Genomics Laboratory C-c Division of Molecular and Developmental Biology
Yamaguchi,Y.	E-a Division of Human Genetics
Yamakawa, T.	G-a Genetic Informatics Laboratory
Yamaki, S.	L EXPERIMENTAL FARM
Yamamoto R	G-c Comparative Genomics Laboratory
Yamamoto, H.	F-a Mammalian Genetics Laboratory F-c Mouse Genomics Resource Laboratory
Yamamoto, M.	C-c Division of Molecular and Developmental Biology
Yamamoto, MT.	G-c Comparative Genomics Laboratory
Yamamoto, N.	D-a Division of Population Genetics
Yamamura, M.	G-c Comparative Genomics Laboratory
Yamasaki, C.	D-a Division of Population Genetics I-a Laboratory for DNA Data Analysis

Yamazaki, Y.	G-a Genetic Informatics Laboratory I-c Laboratory for Gene Function Research
Yanagisawa, Y.	B-b Division of Microbial Genetics
Yanagisawa, Y.	B-b Division of Microbial Genetics
Yang, L.	G-b Genome biology Laboratory
Yano K	F-e Plant Genetics Laboratory
Yano, M.	F-e Plant Genetics Laboratory
Yano, T.	F-g Invertebrate Genetics Laboratory
Yao, M.	H-d Biomolecular Structure Laboratory
Yasuda, T.	D-a Division of Population Genetics
Yasuhiko Y	F-b Mammalian Development Laboratory
Yasumi, Nakashima.	F-b Mammalian Development Laboratory
Yasunaga T.	H-d Biomolecular Structure Laboratory
Yasushi Hiromi	C-a Division of Developmental Genetics
Yasutaka, Niwa.	F-b Mammalian Development Laboratory
Yates III	H-e Gene Network Laboratory
Ymiko, Saga	F-b Mammalian Development Laboratory
Yon Rhee	I-a Laboratory for DNA Data Analysis
Yonekawa, H.	F-a Mammalian Genetics Laboratory
Yonemura, S.	C-c Division of Molecular and Developmental Biology
Yoo, H.S.	D-a Division of Population Genetics
Yoshiaki, Okamura.	F-b Mammalian Development Laboratory
Yoshida M.	H-d Biomolecular Structure Laboratory
Yoshida T	F-b Mammalian Development Laboratory
Yoshida, A.	C-c Division of Molecular and Developmental Biology
Yoshida, H.	F-g Invertebrate Genetics Laboratory
Yoshida, T.	G-c Comparative Genomics Laboratory
Yoshihara, Y.	C-c Division of Molecular and Developmental Biology
Yoshikawa, S.	C-c Division of Molecular and Developmental Biology
Yoshiki, A.	F-a Mammalian Genetics Laboratory
Yoshimi K	G-c Comparative Genomics Laboratory
Yoshimori, T.	F-g Invertebrate Genetics Laboratory
Yoshiwara, K.	G-c Comparative Genomics Laboratory
Yu JK	G-b Genome biology Laboratory
Yu, Takahashi.	F-b Mammalian Development Laboratory
Yu, Takahashi.	F-b Mammalian Development Laboratory
Yuasa, I.	D-a Division of Population Genetics
Yukuto, Yasuhiko	F-b Mammalian Development Laboratory
Yukuto, Yasuhiko.	F-b Mammalian Development Laboratory
Yumiko Saga	F-b Mammalian Development Laboratory
Yumiko, SAgA	F-b Mammalian Development Laboratory
Yumiko, Sag	F-b Mammalian Development Laboratory
Yumiko, Saga	F-b Mammalian Development Laboratory
Yumiko, Saga.	F-b Mammalian Development Laboratory
Yura, K.	D-a Division of Population Genetics
Zelenika, D.	G-c Comparative Genomics Laboratory

Zhan,C.	H-e Gene Network Laboratory
Zhang	C-a Division of Developmental Genetics
Zhang, J.	D-a Division of Population Genetics
Zhang, Q.	D-a Division of Population Genetics
Zhao XC.	C-c Division of Molecular and Developmental Biology
Zhou, Y.	H-d Biomolecular Structure Laboratory
Zimdahl, H.	G-c Comparative Genomics Laboratory
Zimmer, A.D.	G-b Genome biology Laboratory

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Biological Symposium

- Jan,
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2008 Physiological function of membrane protein M6a, a putative regulator of axon outgrowth in the developing brain(Sakura Mita)
- Apr,
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2008 From genome to function: a quest with transposon(Koichi Kawakami)
- Apr,
15
2008 「顕微鏡解析からイメージ解析へ ～細胞イメージ解析装置でどのような事が出来るか～」(天川玄太)
- Apr,
17
2008 メチル化DNAを検出するための新規化学反応(岡本 晃充)
- Apr,
24
2008 Phenotypic diversity of reproductive traits in a cichlid fish of Lake Tanganyika(Sato, Tetsu)
- Apr,
24
2008 Vernalisation and the Epigenetic Control of Flowering(Liz Dennis)
- Apr,
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2008 糖鎖修飾・極性輸送を制御する遺伝子のゲノムワイドスクリーニング(後藤 聡)
- Apr,
25
2008 GENETIC DISSECTION OF A COMPLEX DISEASE: HIRSCHSPRUNG AGANGLIONOSIS(Aravinda Chakravarti)
- May,
2
2008 電子顕微鏡法の現状と展望(藤吉 好則)
- May,
8
2008 Nanobiology of Cell Nucleus(Shige H. Yoshimura)
- May,
12
2008 小脳皮質形成を担うニューロン移動と樹状突起伸展のダイナミクス(見学美根子)
- May,
14
2008 Budding yeast Pol I transcription termination in vivo(Junya Kawauchi)
- May,
15
2008 Understanding neural circuits through integration of genetic, synaptic and systems approaches(Hokto Kazama)

- May, 20 2008 Sensory-neural system development, assembly and regeneration in the zebrafish(Hernan Lopez-Schier)
- May, 20 2008 Translation factor control of signal transduction pathways(翻訳開始因子による情報伝達経路の制御)(Katsura Asano)
- May, 22 2008 Systems Biology — Properties and logics behind molecular networks —(Sinya Kuroda)
- May, 22 2008 Temporal coding of ERK signaling networks(Sinya Kuroda)
- Jun, 3 2008 RNA-directed DNA elimination in Tetrahymena(Kazufumi Mochizuki)
- Jun, 5 2008 Chromatin-dependent gene silencing mediated by ectopically-produced siRNAs in fission yeast(Tetsushi Iida)
- Jun, 12 2008 DNA脱メチル化機構に必須な新規因子ROS3の機能解析(三木大介)
- Jun, 17 2008 Neuroscience of Human Language(Kuniyoshi L. Sakai)
- Jun, 24 2008 Phenotypic diversity of reproductive traits in a cichlid fish of Lake Tanganyika (Sato, Tetsu)
- Jun, 26 2008 Mechanisms underlying biological robustness(TANAKA, Kentaro)
- Jul, 9 2008 Modeling Reticulate Evolution: Metrics on Phylogenetic Networks(Gabriel Valiente)
- Jul, 16 2008 Defining the complete protein composition of mitotic chromosomes with a new concept proteomic screen(Shinya Ohta)
- Jul, 17 2008 NIGINTERN 2008 Reports(Nimesh Jain, Parshuram Hotkar, Abhinav Dubey, Meenal Mishra, Benjamin Strauber)
- Jul, 17 2008 Ultradian oscillations in somite segmentation and other events(Ryuichiro Kageyama)
- Jul, 22 2008 Chromosomal mapping of the difference of activity-related behaviors in subconsomic strains derived from B6-Chr3MSM consomic strain(ISHII, Ayako)
- Jul, 23 2008 Burst of a Rice Transposon mPing in a cultivar Gimbozu: the Cause and the Impact(Ken Naito)

- Jul,
25
2008 狙った細胞に高効率に遺伝子、タンパク質導入可能な新技術:スタンポレーション法
(佐々木靖夫)
- Jul,
28
2008 A molecular analysis of genetic incompatibility caused by intercrosses of wild-
derived mouse strains, KJR and BLG2(KONDOU, Ryouta)
- Jul,
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2008 新技術紹介セミナー「Single Cell 解析を現実にする IFC Microfluidics 技術」
(organized by Yumiko Saga)
- Jul,
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2008 A new approach to knockout an essential gene in vertebrate cells - What the cells
can tell us?(Kumiko Samejima)
- Aug,
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2008 4D解析の新機軸 ～ゼブラフィッシュの眼球形態形成過程にて～(大綱英生)
- Sep,
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2008 Integrating genetic data to define functional and transcriptional networks(Paul
Sternberg)
- Sep,
22
2008 PIP3-independent activation of TorC2 and PKB at the cell's leading edge mediates
chemotaxis.(Yoichiro Kamimura)
- Sep,
24
2008 脊椎動物付属運動器官の発生位置の多様性を支える基本メカニズム(田村 宏治)
- Oct,
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2008 Interneuron specification in the vertebrate spinal cord(Katharine Lewis)
- Oct,
7
2008 Kinetochore specification, assembly, and function(Tatsuo Fukagawa)
- Oct,
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2008 Integrated Database Project for Life Science and information technologies for
utilizing biological knowledge towards database integration(Toshihisa Takagi)
- Oct,
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2008 Past, present and future of genome annotation(Yasukazu Nakamura)
- Oct,
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2008 Endogenous siRNAs in Drosophila(Katsutomo Okamura)
- Oct,
24
2008 Transgenerational inheritance of epigenetic defects: lessons from
Arabidopsis(Vincent Colot)
- Oct,
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2008 DNA Replication Mechanism and Control in Budding Yeast(John F.X. Diffley)
- Oct,
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2008 Micromechanical study of chromosome organization(John F. Marko)

Nov, 4 2008	Reconstitution of bacterial cell division machinery “Z-ring” in liposomes(Masaki Osawa)
Nov, 4 2008	The Neutralist/Selectionist Controversy and Its Legacy(Michael R. Dietrich)
Nov, 6 2008	Segregated neural pathways for Drosophila gravity sensing and hearing(Azusa Kamikouchi)
Nov, 10 2008	DNA damage checkpoint proteins at telomeric DNA ends(Katsunori Sugimoto)
Nov, 21 2008	Neural circuit underlying odor-evoked neural oscillations in Drosophila:Results from genetic, electrophysiological,and electron microscopic studies(Nobuaki Tanaka)
Nov, 25 2008	Courtship memory and pheromone coding in Drosophila melanogaster(Aki Ejima)
Nov, 25 2008	Role of MicroRNAs in Acute Lung Injury(Shahid S. Siddiqui)
Nov, 25 2008	The role of gene regulatory architecture in vertebrate development and evolution(Francois Spitz)
Dec, 4 2008	Competitive interactions during growth in Drosophila(Laura A. Johnston)
Dec, 4 2008	Response of Drosophila imaginal discs to massive apoptosis(Gines Morata)
Dec, 17 2008	Multiple roles for histone chaperone-dependent acetyltransferase complexes in DNA repair/genome integrity and chromatin regulation(Toshiaki Tsubota)
Dec, 18 2008	New thoughts on the requirement of Notch for mouse segmentation(Miguel Maroto.)
Dec, 22 2008	The evolutionary analysis of conserved non-coding elements of vertebrate HOX clusters and ALX subfamily genes(Masatoshi Matsunami)
Dec, 24 2008	How is genome DNA compacted into a mitotic chromosome?(Kazuhiro Maeshima,)
Dec, 24 2008	Structural Analysis of Membrane Proteins by Electron Crystallography(Kaoru Mitsuoka)
Dec, 24 2008	Two-photon microscopy for in-vivo molecular cell biology of neural and secretory function(Tomomi Nemoto, Ph. D.)

- Dec, 26 2008 Characterization of the physical property of the cytoplasm through comparison between in vivo quantification and numerical modeling of cytoplasmic streaming in the *Caenorhabditis elegans* embryo(Ritsuya Niwayama)
- Jan, 5 2009 Study on localization mechanisms of the maternal mex-3 mRNA in *C. elegans*(Hiroyuki Konno)
- Jan, 14 2009 Evolution of Highly Conserved Non-coding Sequences in ParaHox Clusters and Their Function(Minaka Ishibashi)
- Jan, 16 2009 DNA methylation analysis of gametic imprints in the mouse and search for factors involved in imprint establishment.(Shinichi Tomizawa)
- Jan, 19 2009 Accurate Classification of Amino Acid Sequences by Physical Parameters Reveals the Conservation of Gene Groups in Evolution(Shigeki Mitaku)
- Jan, 20 2009 Genomic basis of the dual origin of the Japanese population(Shuhei Mano)
- Jan, 21 2009 Mammals meet the plant; a synthetic biological approach to construct a universal degron system in eukaryotes(Masato Kanemaki)
- Jan, 22 2009 Biological Interpretation of high-throughput expression data using ExPlainTM(Edgar Wingender)
- Jan, 22 2009 Studies of acceleration mechanism of CACTA transposon activity. (Miyuki Nakamura)
- Jan, 26 2009 Evolution of Robustness: Proposal of a General Relationship between Phenotypic Fluctuations due to Genetic Variance and Epigenetic Noise(Kunihiko Kaneko)
- Jan, 28 2009 Molecular characterization of genes essential for early development of germ cells in rice(Yayoi Ueda)
- Jan, 29 2009 G protein alpha subunit gene odr-3 mediates olfactory learning in *C. elegans*.(Hiroshi Ichijo)
- Jan, 29 2009 Roles and biogenesis pathways of endogenous siRNAs and piRNAs in mouse germline cells(Toshiaki Watanabe)
- Jan, 30 2009 The early evolution of eukaryotes with special reference to ribosome export factors(Hajime Ohyanagi)
- Jan, 30 2009 The early evolution of eukaryotes with special reference to ribosome export factors(Hajime Ohyanagi)
- Jan, 30 哺乳類におけるタンパク質ドメインの進化的解析(Waka Masuyama)

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Feb,
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2009 Evaluating the performance of Affymetrix SNP Array 6.0 platform with 200 Japanese individuals(Nao Nishida)

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2009 Molecular genetic analyses of the membrane trafficin the post-Golgi network of higher plant(Mitsuru Niihama)

Feb,
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2009 Linear Polyubiquitination : A newly identified regulator of NF-kB signaling(Dr. Kazuhiro IWA)

Feb,
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2009 Receptor-like kinases related in fertilization and reproduction(Saori Miyazaki)

Feb,
18
2009 Temporal and spatial activity of LTR retrotransposon in plants(Eigo Fukai)

Feb,
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2009 Studies on neural circuits by the Gal4 gene and enhancer trapping in zebrafish.(Dr. Kazuhide Asakawa)

Feb,
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2009 The 1st EfS Biological Symposium (students of “English for Scientists course” (EfS))

Feb,
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2009 Starvation Induced Protein Dps from Mycobacteria and its bimodal function(Dipankar Chatterji)

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2009 The 2nd EfS Biological Symposium (students of “English for Scientists course” (EfS))

Mar,
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2009 Evolution of multiple phosphodiesterase isoforms in stickleback involved in olfactory signal transduction pathway(Yukuto Sato)

Mar,
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2009 Reprogramming cardiac cell fate by the Chromatin Remodeling factors.(Jun K. Takeuchi)

Mar,
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2009 Feedback Control of Spindle Assembly(Hironori Funabiki)

Mar,
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2009 In silico phenotypic analysis of Arabidopsis mutants based on reconstructed 3D shape modelsand integrated plant omics databases for automatic annotation(Eri Kaminuma)

Mar,
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2009 The evolution of dorsoventral axis formation in insects(Siegfried Roth)

Mar,
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2009 Global changes in DNA replication timing and genome organization in the nucleus during ES cell differentiation: a whole-genome microarray study(Ichiro Hiratani)

Mar,
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Development and evolution of pigmentation in Drosophila(Patricia J. Wittkopp)

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Mar,
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2009 Genomics and genetics of the medaka fish, with a special focus on left-right specification(Hiroyuki Takeda)

Mar,
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2009 Protein interactions with and within the stress MAPK cascade in fission yeast.(Kaz Shiozaki)

Mar,
25
2009 Ablation of Chibby Impairs Motile Cilia Biogenesis and Function in the Respiratory Epithelium of Mice(Ken-Ichi Takemaru)

Mar,
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2009 A new multi-dimensional index for gene coexpression and application to the large-scale data of Arabidopsis(Kengo Kinoshita)

Mar,
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2009 Genome scale analysis of gene function: deciphering signaling network controlling metabolic pathways(Hidemasa Bono)

Mar,
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2009 Polymorphism, divergence, and speciation: genomic perspective(Naoki Osada)

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Foreign Visitors

Apr, 24 2008	Liz Dennis	CSIRO Plant Industry. Canberra Australia
Apr, 25 2008	Aravinda Chakrabarti	Mckusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine, Baltimore, MD.
May, 14 2008	Junya Kawauchi	Sir William Dunn School of Pathology, University of Oxford, UK
May, 15 2008	Hokto Kazama	Harvard Medical School, Department of Neurobiology
May, 20 2008	Hernan Lopez- Schier	Laboratory of Sensory Cell Biology & Organogenesis, Centre de Regulaci? Gen?mica, Spain
May, 20 2008	Katsura Asano	Division of Biology, Kansas State University
Jun, 5 2008	Tetsushi Iida	Department of Cell Biology, Harvard Medical School
Jun, 12 2008	三木大介	University of California, Riverside
Jul, 9 2008	Gabriel Valiente	Algorithms, Bioinformatics, Complexity and Formal Methods Research Group, Technical University of Catalonia
Jul, 16 2008	Shinya Ohta	University of Edinburgh, SCOTLAND, UK
Jul, 23 2008	Ken Naito	Sue Wessler Lab, Plant Biology Department, University of Georgia
Jul, 30 2008	umiko Samejima	KUniversity of Edinburgh, SCOTLAND, UK
Aug, 21 2008	大綱英生	University of Utah, Neurobiology & Anatomy
Sep, 2 2008	Paul Sternberg	Caltech, Division of Biology
Sep, 22 2008	Yoichiro Kamimura	Department of Cell Biology, Johns Hopkins University, School of Medicine

Sep, 26 2008	Daniel Martinez	Department of Biology, Pomona College, Pomona CA, USA
Oct, 7 2008	Katharine Lewis	Department of Physiology, Development and Neuroscience, Cambridge University, UK
Oct, 16 2008	Katsutomo Okamura	Memorial Sloan-Kettering Cancer Center
Oct, 24 2008	Vincent Colot	Departement de Biologie, Ecole Normale Superieure, Paris
Oct, 31 2008	John F.X. Diffley	Cancer Research UK London Research Institute, Clare Hall Laboratories
Nov, 4 2008	Michael R. Dietrich	Department of Biology Dartmouth College
Nov, 10 2008	Katsunori Sugimoto	Dept. Cell Biology & Molecular Medicine, UMDNJ-NJMS
Nov, 21 2008	Nobuaki Tanaka	National Institute of Child Health and Human Development,NIH,US
Nov, 25 2008	Aki Ejima	Brandeis University
Nov, 25 2008	Francois Spitz	Developmental Biology Unit, EMBL Heidelberg
Nov, 25 2008	Shahid S. Siddiqui	Department of Medicine, Pritzker School of Medicine, University of Chicago
Dec, 4 2008	Gines Morata	Centro de Biologia Molecular, CSIC-UAM
Dec, 4 2008	Laura A. Johnston	Columbia University Medical Center
Dec, 17 2008	Toshiaki Tsubota	University of Massachusetts Medical School
Dec, 18 2008	Miguel Maroto.	Division of Cell and Developmental Biology, College of Life Sciences, University of Dundee. Scotland, UK
Feb, 24 2009	Dipankar Chatterji	Molecular Biophysics Unit, Indian Institute of Science, Bangalore, INDIA
Mar, 4 2009	Hironori Funabiki	The Rockefeller University
Mar, 9 2009	Siegfried Roth	University of Cologne
Mar, 12 2009	Ichiro Hiratani	Department of Biological Science, Florida State University
Mar, 16 2009	Patricia J. Wittkopp	Ecology and Evolutionary Biology, Molecular, Cellular and Developmental Biology, University of Michigan
Mar, 19 2009	Kaz Shiozaki	Dept. of Microbiology, University of California, Davis

Mar, 25 Ken-Ichi
2009 Takemaru

Department of Pharmacological Sciences, SUNY at Stony Brook

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