

# Call for Applications

京都大学高等研究院ヒト生物学高等研究拠点 (ASHBi) 募集要項

9 November 2018

平成 30 年 11 月 9 日

The following points were revised on February 6, 2019:

- Revise the job title of the Ogawa Group from Postdoctoral Fellow to Assistant Professor
- Close application for job opening of the Saitou Group and

平成 31 年 2 月 6 日：以下の点を変更しました。

- ・小川グループの募集職種を変更（特定研究員⇒特定助教）。
- ・斎藤グループの募集を終了。

The following points were revised on December 21, 2018:

- Revise the job title of the Eiraku Group from Postdoctoral Fellow to Assistant Professor

平成 30 年 12 月 21 日：以下の点を変更しました。

- ・永楽グループの募集職種を変更（特定研究員⇒特定助教）。

The following points were revised/added on December 6, 2018:

- Revise the job title of the Saitou Group from Postdoctoral Fellow to Assistant Professor
- Close application for job opening of the Isa Group and Yamamoto Group
- Add job opening of the Ogawa Group
- Add the article 10th to the "ASHBi Research Position Application Guidelines"

平成 30 年 12 月 6 日：以下の点を追加・変更しました。

- ・斎藤グループの募集職種を変更（特定研究員⇒特定助教）。
- ・伊佐グループ、山本グループの募集を終了。
- ・小川グループの募集を追加。
- ・記入要項（"ASHBi Research Position Application Guidelines"）で記載事項(10)を追加。

**Institute for the Advanced Study of Human Biology (ASHBi)**

ヒト生物学高等研究拠点

**KUIAS, Kyoto University**

京都大学高等研究院

Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) recently selected the Institute for the Advanced Study of Human Biology (ASHBi) for participation in the World Premier International Research Center (WPI) Program, establishing it within KUIAS Kyoto University on 30 October

2018 with Mitinori Saitou, a world-leading cell biologist, at its head.

京都大学から申請していたヒト生物学高等研究拠点（ASHBi）の設立構想が文部科学省 WPI 拠点として採択されたことを受けて、平成 30 年 10 月 30 日付で京都大学高等研究院にヒト生物学高等研究拠点が設置されました。

ASHBi is now calling for applications, as described below.

ヒト生物学高等研究拠点では、研究者採用のための以下のような公募を行います。

## 1. Recruiting 職種・募集人数

The following research groups are seeking qualified candidates.

次の研究グループが以下の職名及び人数の候補者を募集しています。

	Principle Investigator 主任研究者	Research Group Name 研究グループ名	Position 職種	No. of Positions 募集人数
1 *(closed)	Mitinori Saitou 斎藤 通紀	Human Germ Cell Biology	Assistant Prof 特定助教	1
2 *(closed)	Tadashi Isa 伊佐 正	Evolutionary Systems Neuroscience	Assistant Prof 特定助教	1
3	Yasuaki Hiraoka 平岡 裕章	Mathematical Science	Assistant Prof 特定助教	2
4 *(closed)	Takuya Yamamoto 山本 拓也	Genetic Information Biology	Postdoc 特定研究員	1
5	Takashi Hiiragi 柘 卓志	Developmental Biology	Associate Prof 特定准教授	1
5	Takashi Hiiragi 柘 卓志	Developmental Biology	Postdoc 特定研究員	1
6	Mototsugu Eiraku 永樂 元次	Comparative Developmental Neurobiology	Assistant Prof 特定助教	1
7	Misao Fujita 藤田 みさお	Bioethics and Philosophy	Postdoc 特定研究員	1
8	Motoko Yanagita 柳田 素子	Primate Nephrology	Assistant Prof 特定助教	1
9	Seishi Ogawa 小川 誠司	Single-Cell Cancer Biology	Assistant Prof 特定助教	1

\*1, 2, 4 については募集を終了しました。

## 2. Affiliation 所属・勤務場所

Institute for the Advanced Study of Human Biology (ASHBi), KUIAS Kyoto University

Yoshida Ushinomiya, Sakyo, Kyoto 606-8501 Japan

京都大学高等研究院ヒト生物学高等研究拠点(ASHBi)

606-8501 京都市左京区吉田牛ノ宮町

### 3. Eligibility 資格等

Researchers with a doctoral degree (or equivalent research experience)

博士の学位を有すること（又は相当する研究経験を有すること）

### 4. Starting Date 着任時期

January 1, 2019 or the earliest possible date thereafter (adjustable according to individual requirements)

### 5. Term 任期・試用期間

Five (5) years in principle (with annual renewal, the first from 31 March 2020)

Initial probationary employment period: six (6) months

原則 5 年間（年度更新、最初の雇用期間は平成 32 年 3 月 31 日まで）

試用期間 6 か月

### 6. Job Descriptions 勤務内容

We are seeking talented postdoctoral fellows and assistant / associate professors to work in ASHBi under the supervision of the principle investigators described below (see **Research groups seeking candidates**).

下記「募集研究グループ一覧」に記載された研究内容について、主任研究者の下、職名に応じて実施する。

### 7. Working Conditions 勤務形態

Five (5) working days per week (days off: Saturdays, Sundays, public holidays, year-end and New Year holidays, Foundation Day, and summer vacation, as per University guidelines)

Working hours: 38 hours 45 minutes per week under a discretionary labor system.

専門業務型裁量労働制（週 38 時間 45 分相当、1 日 7 時間 45 分相当）

休日：土・日曜日、祝日、年末年始、創立記念日および夏季一斉休業日

### 8. Salary 給与

Paid annually in compliance with the rules of Kyoto University.

本学支給基準に基づき支給（年俸制）。

### 9. Allowance 手当

No allowance (such as for commuting, housing, bonuses, etc.) will be provided.

諸手当は支給なし。

### 10. Social Insurance 社会保険

National Public Service Mutual Aid Association health policy

Employee's pension insurance

Employment insurance

Worker's accident insurance

文部科学省共済組合，厚生年金，雇用保険および労災保険に加入。

#### 11. Deadline 応募締切

Open until the positions are filled.  
適任者を決定するまで募集します。

#### 12. Evaluation Procedure 選考方法

Submitted applications will be reviewed, followed by interviews for short-listed candidates.  
書類選考及び必要に応じて面接選考を行います。

#### 13. Application Method 応募方法および必要書類

Application documents must be prepared in English according to the "**ASHBi Research Position Application Guidelines**", and submitted as email attachments.

応募書類は、記入要領（“ASHBi Research Position Application Guidelines”）に従い英語で作成し、電子メールに添付して提出してください。

Submit via email to: [ASHBi-recruit@mail2.adm.kyoto-u.ac.jp](mailto:ASHBi-recruit@mail2.adm.kyoto-u.ac.jp)

#### 14. Additional Information その他

Kyoto University is committed to enhancing the diversity of its labor force in order to promote globalization and gender equality. 京都大学は国際化と男女共同参画を推進しています。

## Research groups seeking candidates

### 1. Saitou Group (Human Germ Cell Biology)

Saitou's group will develop in vitro systems to generate oocytes from primordial germ cell-like cells (PGCLCs) derived from human (h) and cynomolgus monkey (cy) induced pluripotent stem cells (iPSCs)/embryonic stem cells (ESCs), realizing in vitro analyses of the mechanism for h/cy germ-cell development. Saitou's group will focus on the mechanism for the generation of genetic and epigenetic diversities through meiotic recombination and epigenetic reprogramming, respectively, and uncover species differences of such key processes among mice, monkeys and humans.

### 2. Isa Group (Evolutionary Systems Neuroscience)

Isa's group will study the genetic and neural mechanisms underlying the neural systems which have specifically developed in higher primates, or exhibit marked species differences between rodents and primates. These systems include (1) frontal lobe functions such as working memory and self-monitoring, (2) those underlying the basal ganglia disorders, and (3) motor systems controlling dexterous hand functions. For this purpose, we analyze the gene expression of single homologous neuronal cells in rodents and higher primates in collaboration with the Single-Cell Genome Information Analysis Core (headed by T. Yamamoto), and Mathematics group (headed by Y. Hiraoka), and make the genome-edited macaque monkeys of the key genes in collaboration with Primate Genome Engineering Core (headed by M. Ema). Then, we will analyze the neural functions of these animals by applying large-scaled neural recording and analyzing techniques, and circuit manipulation (optogenetical and chemogenetical) techniques in our group.

### 3. Hiraoka Group (Mathematical Science)

Hiraoka's group will develop novel methodologies for analyzing multi-hierarchical, large-scale omics data based on mathematics such as topological data analysis, dynamical system and machine learning to clarify the principles for the emergence of species differences of "homologous" cell types or on the scales of time and physical dimensions in development among humans, non-human primates and rodents, allowing appropriate extrapolation of the knowledge from model organisms to humans.

### 4. Yamamoto Group (Genetic Information Biology)

Yamamoto's group aims to develop an advanced system that incorporates front-line genome-wide analysis techniques and information processing technologies. Ultimately, this system will be used to understand how different phenotypes emerge among different species despite similarities in DNA, RNA, proteins and other cellular infrastructure.

### 5. Hiiragi Group (Developmental Biology)

Hiiragi's Group aims to understand developmental mechanisms shared or distinct among mammalian species. The Group will establish the early primate developmental atlas at single-cell resolution by integrating single-cell omics data into 4D morphogenetic and lineage map derived from advanced microscopy.

**6. Eiraku Group (Comparative Developmental Neurobiology)**

Using versatile models (in vitro, in vivo and also in silico), Eiraku's group aims to understand the molecular mechanisms that control species-specific developmental scales in the spatiotemporal axes and clarify the mechanisms that generate biodiversity.

**7. Fujita Group (Bioethics and Philosophy)**

Fujita's group will formalize an ethics for the appropriate use of human and non-human primate materials and create a philosophy to direct the values of the Institute's research outcomes (e.g., artificial gametes, artificial cerebral cortexes, genome-edited monkeys).

**8. Motoko Yanagita Group (Primate Nephrology)**

Yanagita's group will perform three lines of research using cynomolgus monkeys: 1) verification of kidney disease models (an ischemia reperfusion model as an acute kidney injury model); 2) generation of gene-knockout monkeys [NPHS1(congenital nephrosis),NPHP1(nephronophthisis type 1)]; and 3) verification of "fetal programming" in the kidney.

**9. Ogawa Group (Single-Cell Cancer Biology)**

Ogawa's group is developing a new single cell sequencing platform that allows for simultaneous detection of genotype and gene-expression. With this platform and other technologies, Ogawa's group will perform comprehensive studies on the clonal expansion in normal tissues and the intra-tumor heterogeneity.

# ASHBi Research Position Application Guidelines

Follow the instructions below to prepare and submit your application. Write in English and use a 10.5 point font or larger. You may include photographs or charts in color or black and white. Please submit your application via email.

**Deadline:** Open until the position is filled  
**Submit by email to:** [ASHBi-recruit@mail2.adm.kyoto-u.ac.jp](mailto:ASHBi-recruit@mail2.adm.kyoto-u.ac.jp)  
(Related documents should be sent as email attachments)

Applications with serious deficiencies and/or false information will not be evaluated.

## 1. Basic Information

- (1) Name
- (2) Home Address and Contact Information (phone, email, etc.)
- (3) Recent Photograph
- (4) Date of Birth, Age, and Gender
- (5) Academic Degree (including date of acquisition)
- (6) Nationality
- (7) Current Appointment (your current affiliation, department, and position)
- (8) Position Sought (including host research group)
- (9) Education and Employment History (begin with high school and list education and achievements in chronological order)
- (10) Contact details of two (2) references (name, affiliation, position, address, e-mail address)

## 2. Research Plan (within 2 pages)

Concisely describe the research objectives to be achieved during your time at ASHBi, focusing on the unique ideas and methods you will use to reach them.

## 3. List of Publications

Enter your main research achievements in reverse chronological order, including published papers, books, invited lectures, awards, patents, etc.

## Contact

email: [ASHBi-recruit-info@mail2.adm.kyoto-u.ac.jp](mailto:ASHBi-recruit-info@mail2.adm.kyoto-u.ac.jp)

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Yoshida Ushinomiya, Sakyo, Kyoto 606-8501 Japan