

# 研究成果を世界へ配信： なぜ、どうやって、そして誰が

RA協議会第1回年次大会・2015.9.2  
今羽右左 デイヴィッド 甫 (KURA)、  
小泉 周 (NINS)、倉田 智子 (NIBB)



KURA



# 今羽右左 デイヴィッド 甫

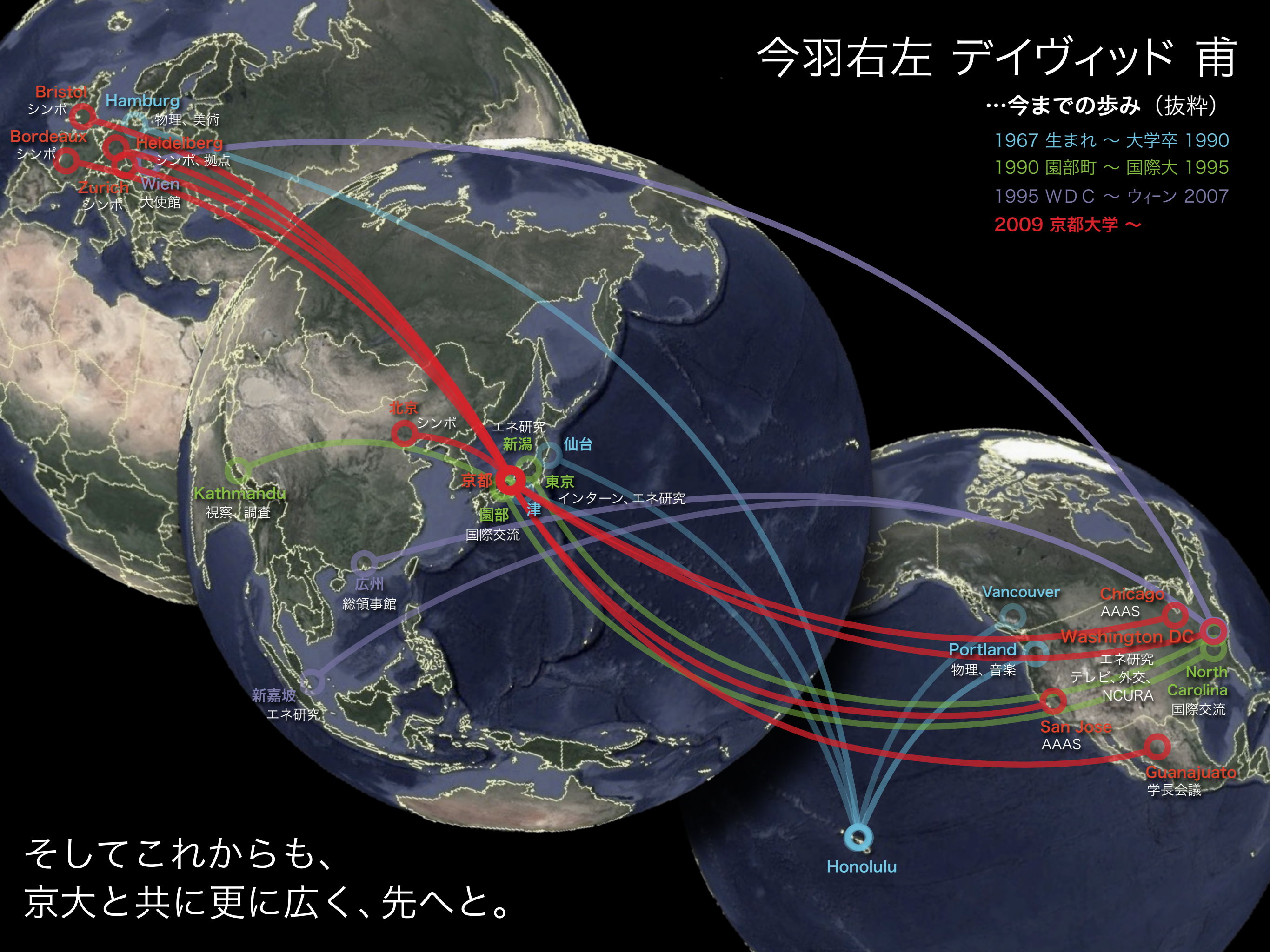
…今までの歩み（抜粋）

1967 生まれ ~ 大学卒 1990

1990 園部町 ~ 国際大 1995

1995 WDC ~ ウィーン 2007

2009 京都大学 ~



そしてこれからも、  
京大と共に更に広く、先へと。

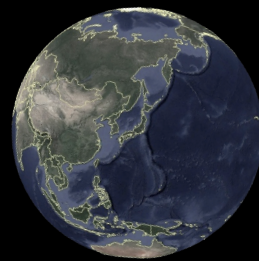


研究成果を世界へ配信

**point 1**

why

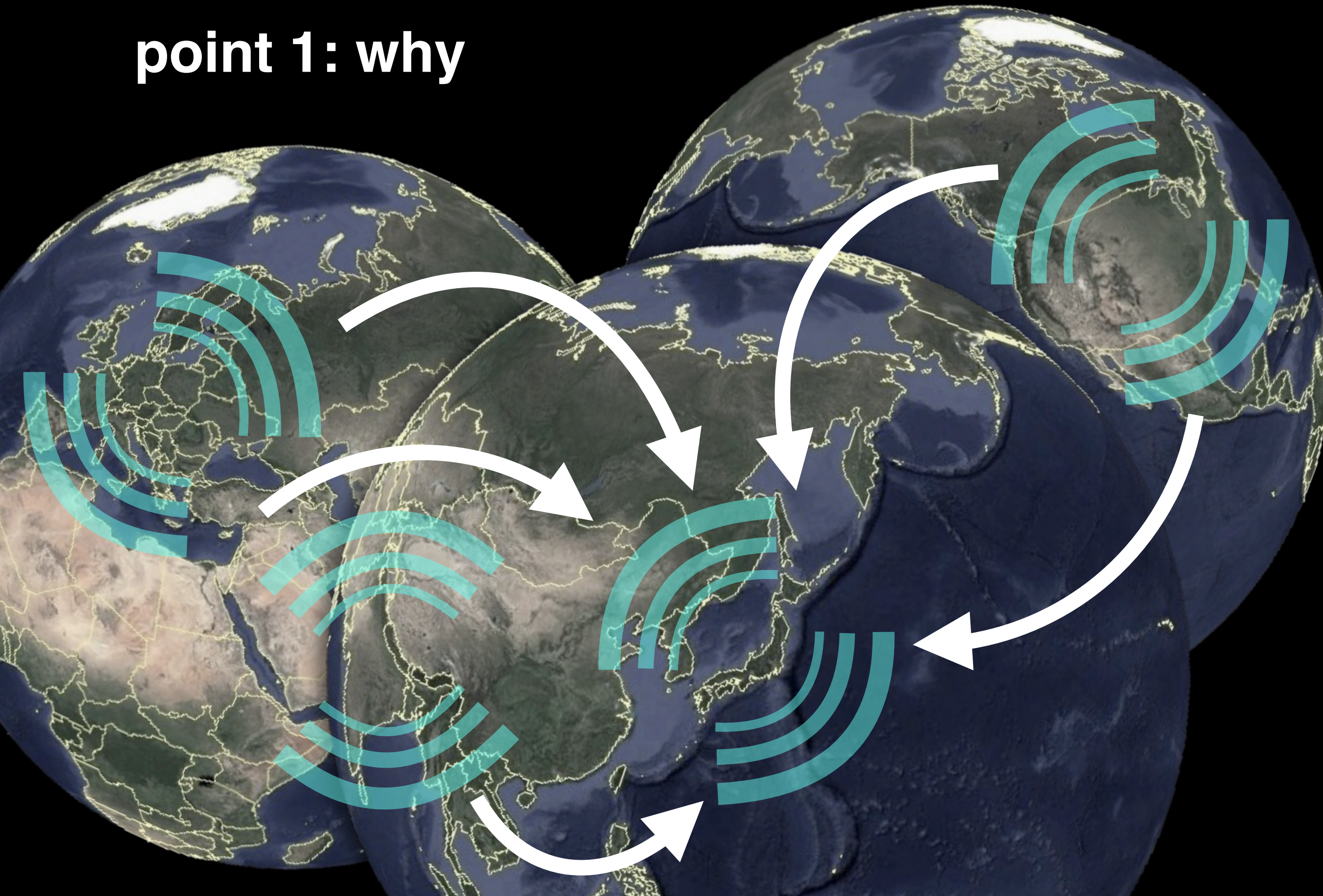
?





研究成果を世界へ配信

## point 1: why

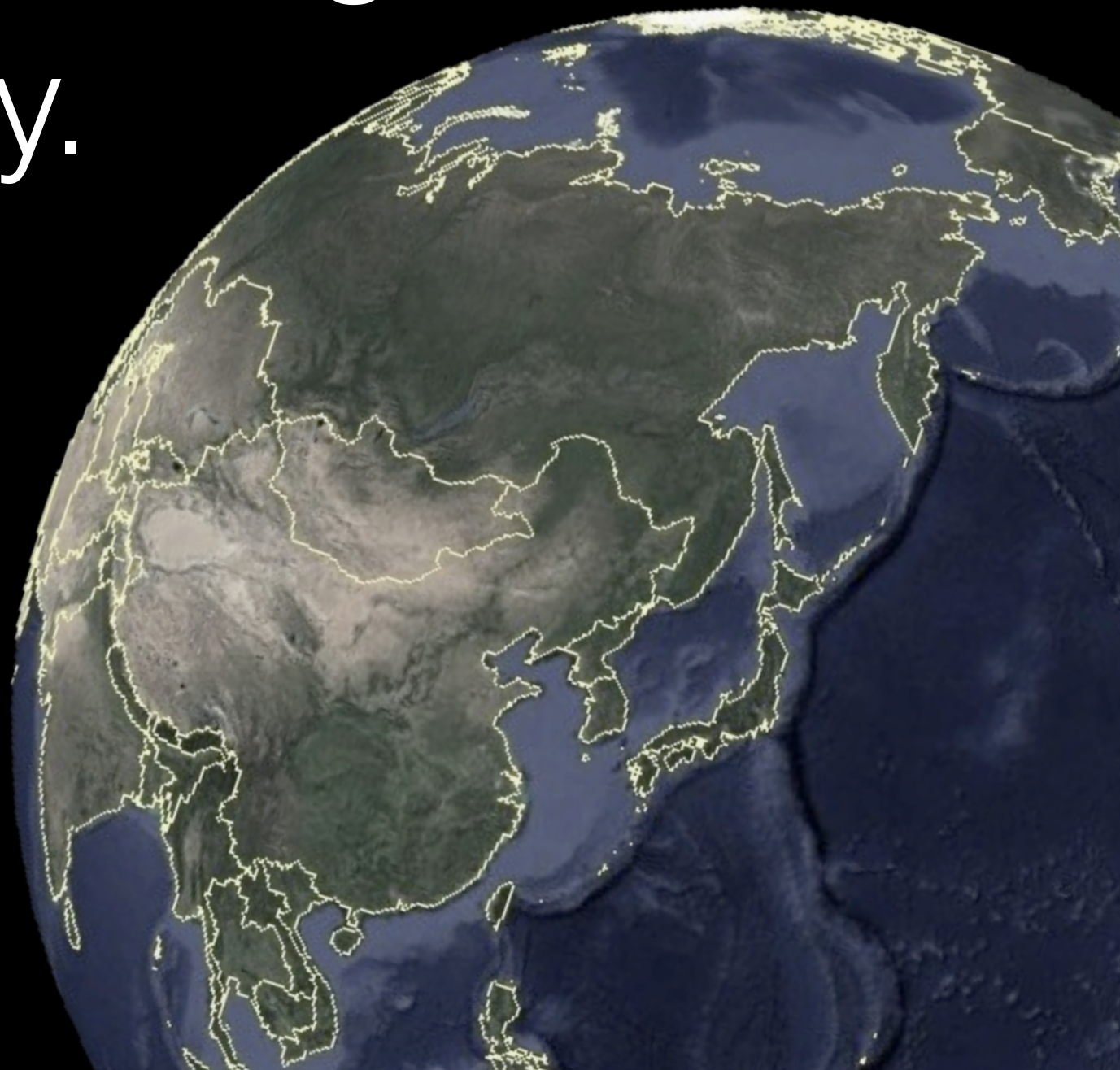




## point 1: why

There is no such thing  
as bad publicity.

...但し一般  
メディア  
に限る！

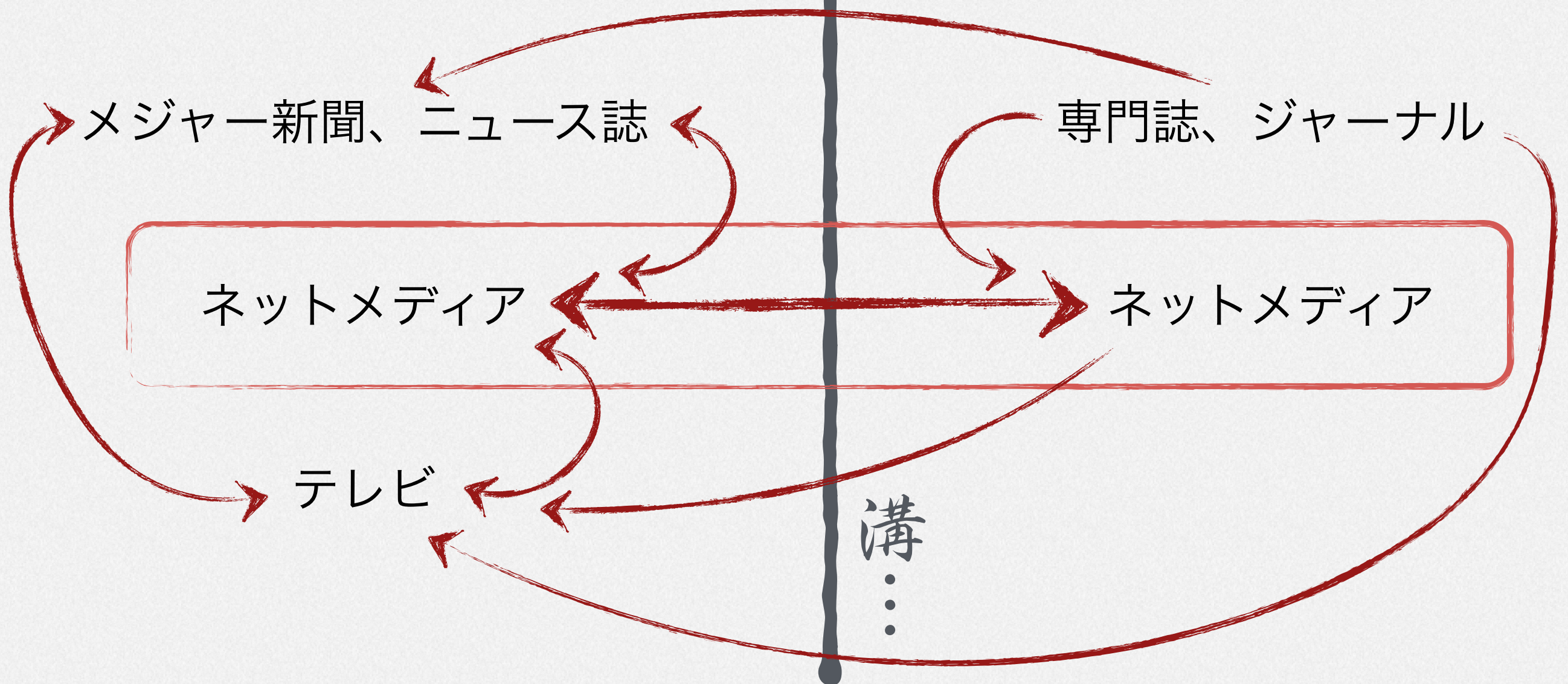




## 余談1: メディアの種類と特徴

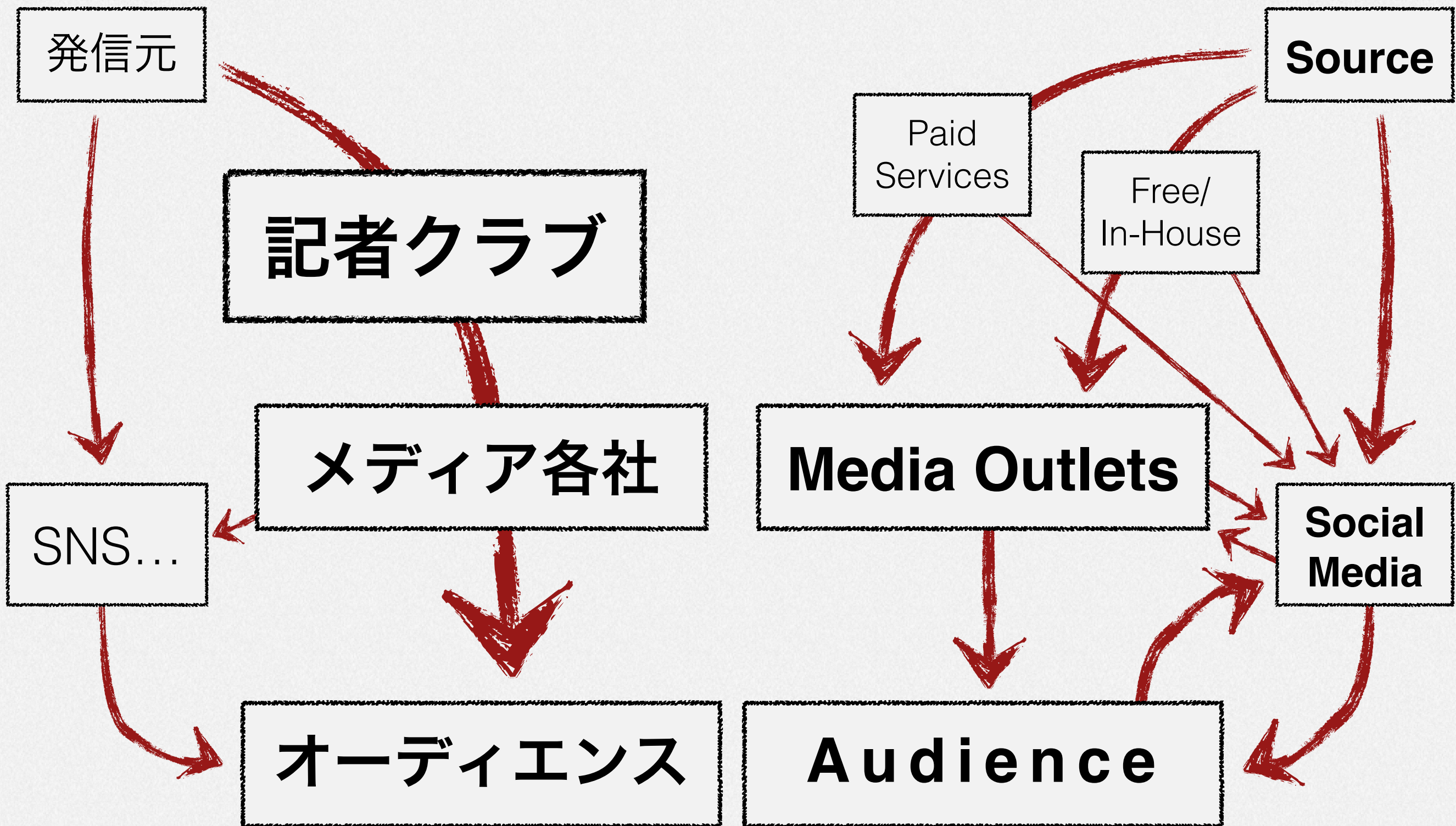
一般メディア

専門メディア





## 余談2: 情報の流れ ～日欧比較～





研究成果を世界へ配信

**point 2**

how

?

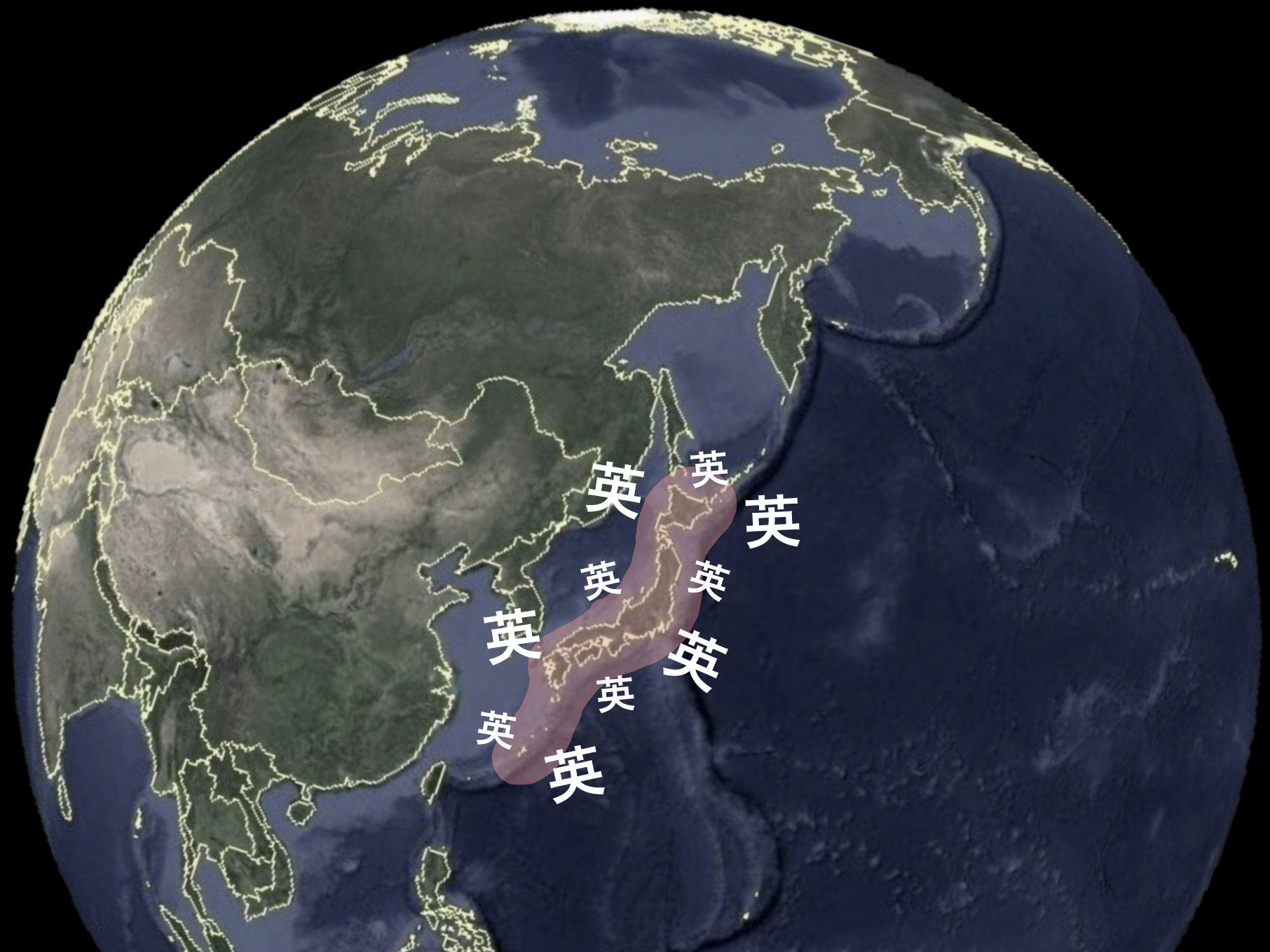




研究成果を世界へ配信

**point 2: how**

...但し、単純に日→英ではない！



## 余談3: 日英プレス向け研究成果発表文の違い

日

英

論文ベース

記事ベース

長い

短い

細かい

(やや) 一般向け

図が多い

図が少ない

専門用語だらけ

専門用語控えめ

「研究者の声」



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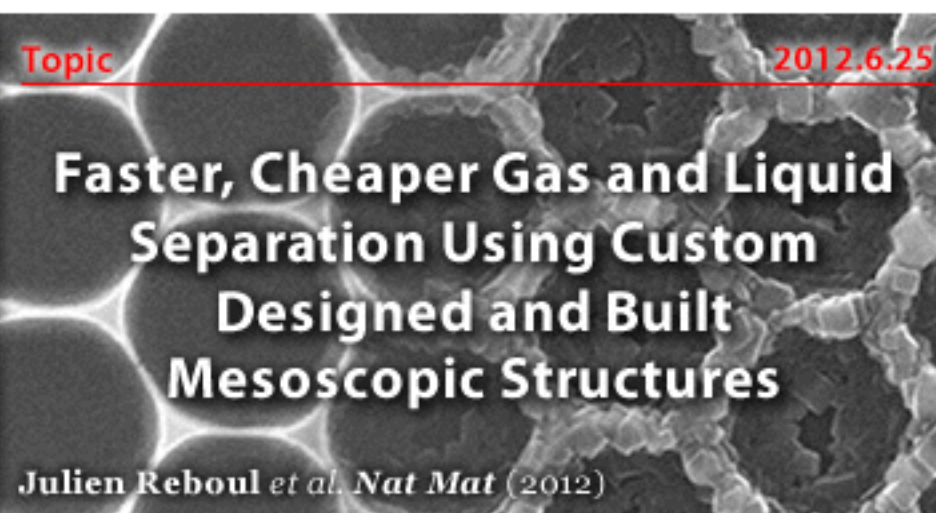
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Report images





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↓ [文献情報](#)   ↓ [関連リンク](#)   ↓ [関連記事・報道](#)

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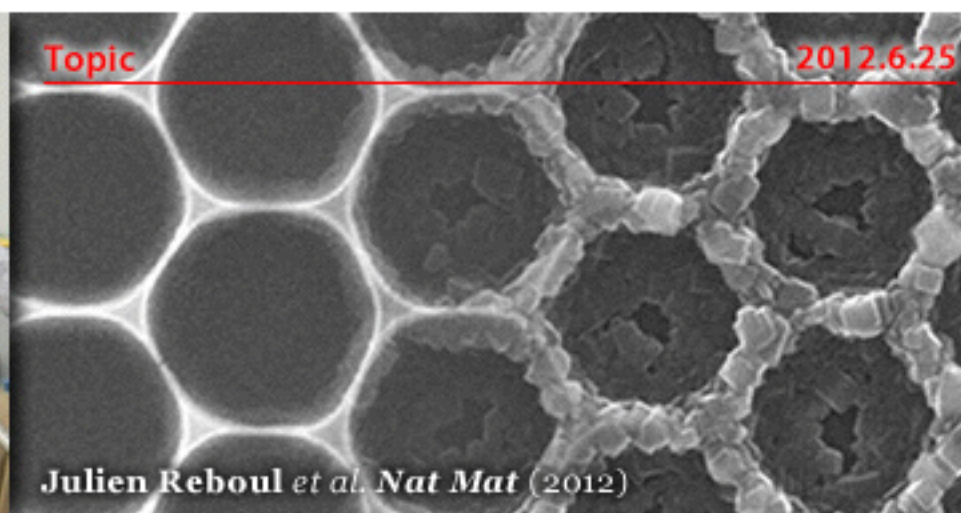
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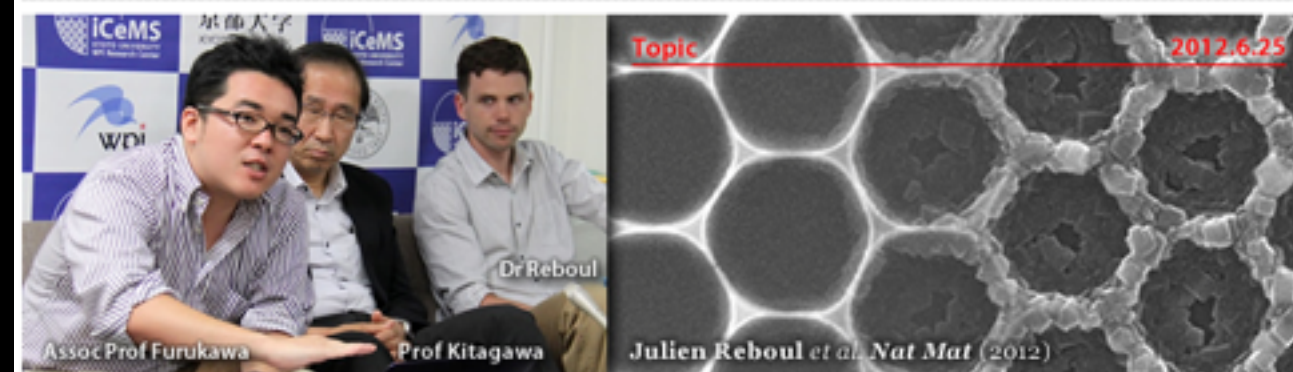
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# ①組織、関係者紹介



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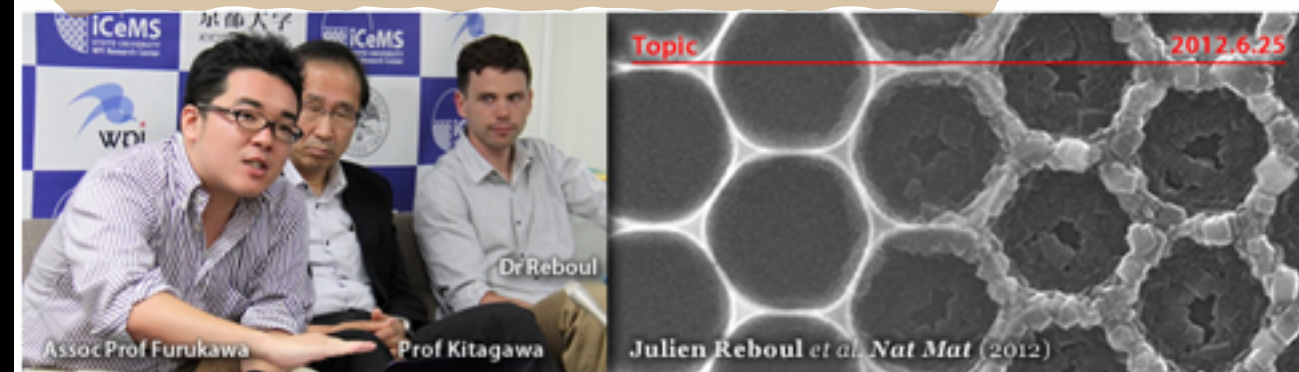
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## ②成果・背景、応用



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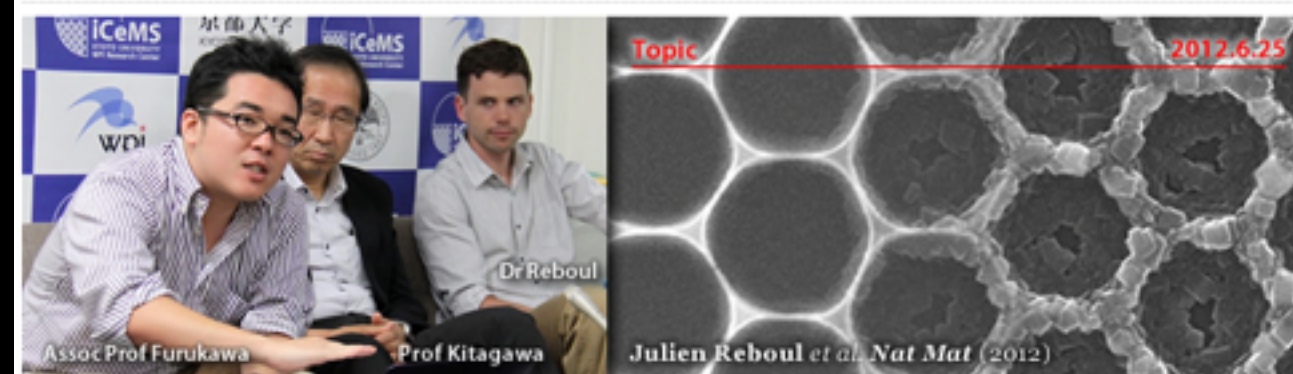
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## ③英文のみコンテンツ

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日

英

論文ベース

記事ベース

長い

短い

細かい

(やや) 一般向け

図が多い

図が少ない

専門用語だらけ

専門用語控えめ

「研究者の声」

ダイレクト  
図  
キャンペーン

Contact: David Kornhauser  
[pr@icems.kyoto-u.ac.jp](mailto:pr@icems.kyoto-u.ac.jp)  
81-757-539-755  
Institute for Integrated Cell-Material Sciences, Kyoto University

## Faster, cheaper gas and liquid separation using custom designed and built mesoscopic structures

### *Building larger porous coordination polymer architectures*

Kyoto, Japan -- In what may prove to be a significant boon for industry, separating mixtures of liquids or gasses has just become considerably easier.

Using a new process they describe as "reverse fossilization," scientists at Kyoto University's WPI Institute for Integrated Cell-Material Sciences (iCeMS) have succeeded in creating custom designed porous substances capable of low cost, high efficiency separation.

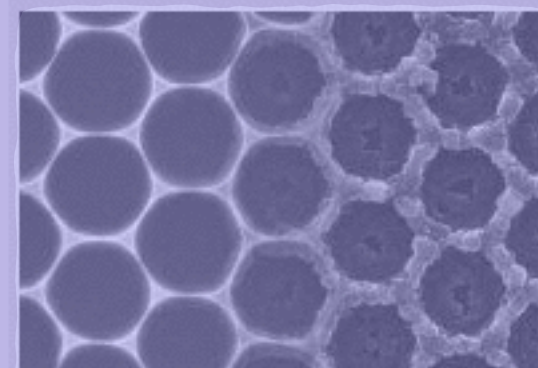
The process takes place in the mesoscopic realm, between the nano- and the macroscopic, beginning with the creation of a shaped mineral template, in this case using alumina, or aluminum oxide. This is then transformed into an equivalently shaped lattice consisting entirely of porous coordination polymer (PCP) crystals, which are themselves hybrid assemblies of organic and mineral elements.


"After creating the alumina lattice," explains team leader Assoc. Prof. Shuhei Furukawa, "we transformed it, molecule for molecule, from a metal structure into a largely non-metallic one. Hence the term 'reverse fossilization,' taking something inorganic and making it organic, all while preserving its shape and form."

After succeeding in creating both 2-dimensional and 3-dimensional test architectures using this technique, the researchers proceeded to replicate an alumina aerogel with a highly open, sponge-like macro-structure, in order to test its utility in separating water and ethanol.

"Water/ethanol separation has not been commonly possible using existing porous materials," elaborates Dr. Julien Reboul. "The PCP-based structures we created, however, combine the intrinsic nano-level adsorptive properties of the PCPs themselves with the meso- and macroscopic properties of the template aerogels, greatly increasing separation efficiency and capacity."

Lab head and iCeMS Deputy Director Prof. Susumu Kitagawa sees the team's achievement as a significant advance. "To date, PCPs have been shown on their own to possess highly useful properties including storage, catalysis, and sensing, but the very utility of the size of their nanoscale pores has limited their applicability to high throughput industrial processes. Using reverse fossilization to create architectures including larger, mesoscale pores now allows us to begin considering the design of such applications."



 **IMAGE:** A composite image showing (left) an alumina-based honeycomb lattice with approximately one micron diameter cells, from which (right) an equivalent porous coordination polymer (PCP) architecture is derived using "reverse fossilization." ...

[Click here for more information.](#)



## 余談4: インパクトのあるタイトルを書こう！

- **“ASAP”**                      できる限り短く
- **applications**                応用
- **results**                        結果
- **jargon-free!**                ~~専門用語~~

## 余談5: 中身の話し ～英文発表文のミソ～

- **Lead** (applications & results)
- **Background**
- (more background)
- **Quotation 1**
- **Still more background**
- **Quotation 2**
- (more applications)
- (Quotation 3)

応用と結果

背景

専門用語  
はここ！

「若手研究者の声」

「偉い先生の声」



研究成果を世界へ配信

## 余談6: リリース解剖劇場

## 古川修平准教授・北川進教授ら、化石化を逆転させて多孔性メソ構造体の形をデザイン：高速分離でバイオエタノール精製などの効率化へ [Nature Materials]



↑ 文献情報    ↑ 関連リンク    ↑ 関連記事・報道

2012年6月25日

京都大学物質-細胞統合システム拠点 (iCeMS=アイセムス) の北川進副拠点長・教授、古川修平iCeMS准教授、ジュリアン・ルブールiCeMS研究員らの研究グループは、ナノとマクロの間のメソスコピック領域において、様々な多孔性構造体をデザインする全く新しい手法の開発に世界で初めて成功しました。こうして作った物質は、気体や液体の高速分離材料としての応用が期待されます。

「化石化」は有機物でできた生き物・細胞などがその「形」を保ったまま無機物である石などに置き換わることで起こります。今回の研究では、その逆変換となる「逆化石化（無機物への有機物の導入）」を起こすことで、新しい材料を作る手法を開発しました。無機物であるアルミナを様々な構造体にあらかじめ成形しておき、その構造体の「形」を保ったまま、有機物と無機物からなる「多孔性金属錯体（PCPもしくはMOF、以下「PCP」という）」を合成するという手法です。これにより、様々なサイズの構造体を作ることが可能になりました。今回の研究では特に、メソスコピック領域やマクロスコピック領域（1マイクロメートル以上）で孔の空いた構造体を作ることになり成功し、PCPの持つ「ナノサイズ」の細孔と合わせて、ナノ-メゾ-マクロ領域の広範囲に及ぶ階層的な細孔を持つ材料の合成が可能になりました。さらに、この新しい多孔性構造体がバイオエタノール精製において重要な、水とエタノールの高速分離に非常に効果的であることを明らかにしました。PCPは人間の生活に欠かせない分離技術への応用が期待されている材料であり、今後この手法により様々な気体や液体の高速分離への応用が加速するものと期待されます。

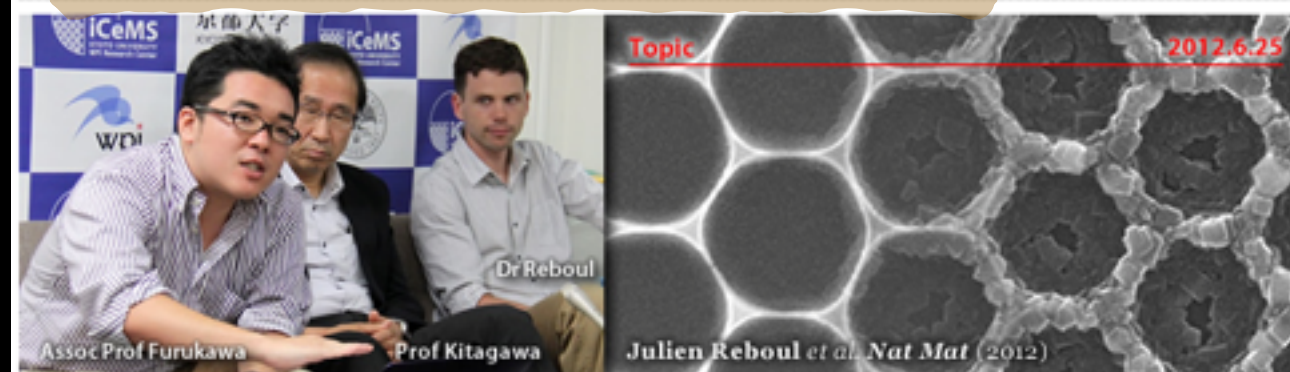
今回の研究は、JST戦略的創造研究推進事業 ERATO型研究「北川統合細孔プロジェクト」（研究総括：北川進）の一環として行われました。本成果はロンドン時間2012年6月24日（日本時間25日）に英科学誌「Nature Materials（ネイチャー・マテリアルズ）」オンライン速報版で公開されました。



PDF: 1.5MB

① & ②

## [Nat Mater] Faster, Cheaper Gas and Liquid Separation Using Custom Designed and Built Mesoscopic Structures



↑ Publication information    ↑ Related link    ↑ Media coverage

June 25, 2012

Kyoto, Japan -- In what may prove to be a significant boon for industry, separating mixtures of liquids or gasses has just become considerably easier.

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# Magnetic brain stimulation

New technique could lead to long-lasting localized stimulation of brain tissue without external connections.

Watch Video

David L. Chandler | MIT News Office  
March 12, 2015

▼ Press Inquiries

Researchers at MIT have developed a method to stimulate brain tissue using external magnetic fields and injected magnetic nanoparticles — a technique allowing direct stimulation of neurons, which could be an effective treatment for a variety of neurological diseases, without the need for implants or external connections.

The research, conducted by Polina Anikeeva, an assistant professor of materials science and engineering, graduate student Ritchie Chen, and three others, has been published in the journal *Science*.

Previous efforts to stimulate the brain using pulses of electricity have proven effective in reducing or eliminating tremors associated with Parkinson's disease, but the treatment has remained a last resort because it requires highly invasive implanted wires that connect to a power source outside the brain.

"In the future, our technique may provide an implant-free means to provide brain stimulation and mapping," Anikeeva says.

In their study, the team injected magnetic iron oxide particles just 22 nanometers in diameter into the brain. When exposed to an external alternating magnetic field — which can penetrate deep inside biological tissues — these particles rapidly heat up.

## RELATED

Paper: "Wireless Magnetothermal Deep Brain Stimulation"

Polina Anikeeva

Department of Materials Science and Engineering

Research Laboratory of Electronics

School of Engineering

## ARCHIVES



New fibers can deliver many simultaneous stimuli



Home > News and events > 1950s drug is future heart treatment

## 1950s drug is future heart treatment

HEALTH

PUBLISHED  
21 MAY 2015

SHARE THIS



Oxford University researchers have found a promising future treatment for heart disease, going back to a drug first developed in 1950.

Hydroxychloroquine (HCQ) was created to combat malaria, and was later found to be useful in the treatment of Lupus and rheumatoid arthritis. Now, a team at Oxford University's Departments of Pharmacology and of Physiology, Anatomy and Genetics has found that the drug can also reduce heart rate. Their report, to be published in journal *Heart Rhythm*, says that the treatment could benefit people with heart failure.

Dr Rebecca Burton, who led the research, said: "The starting point was a chance observation. A patient being treated for Lupus also had a high heart rate. When the patient started Hydroxychloroquine for the Lupus, their heart rate reduced. We started to think about how the drug might be acting in the heart and began extensive pre-clinical studies in collaboration with [Oxford University heart specialists] Professor Derek Terrar and Professor David Paterson."

Researchers found that the drug acts on an area of the heart called the sino-atrial node. This group of cells keeps the heart beating by producing a rhythmic electrical signal that is transmitted to the rest of the heart muscle. Within the node HCQ targets a particular protein to restrict an electrical signal known as the 'funny current' that is especially important in setting the heart rate.

The effects of HCQ on the heart were studied in the late 1950s but initial findings were not followed up. There were also reports of lowered heart rate as a side-effect in patients treated for other conditions. But the potential of HCQ as a heart treatment had not been pursued fully until the Oxford team began their research.



研究成果を世界へ配信

**point 3**

who

?



## **point 3: who**

Zurich Universityの場合...

- 大学広報にサイエンスライター 6 名
- 科学に興味のある文系出身の人
- 出来ればメディアの経験も...



## point 3: who

京都大学の場合...

- 大学広報にサイエンスライター 0 名
- ....

## point 3: who

え!!!

日本の場合... (案)

- サイエンスライター採用
- 科学に興味のある文系出身の人
- 出来ればメディアの経験も
- 英語苦手でもOK!



## point 3: who

日本の場合... (案)

- サイエンスライター採用
- 科学に興味のある文系出身の人
- 出来ればメディアの経験も
- 英語苦手でもOK!

いいいの。

読みやすい  
日本語を後で  
(外注でも)

英語に  
すれば  
良い!

そして読みやすい  
日本語も使える!

## point 3: who

待望のデビュー  
9月上旬予定

### 京都大学の場合... (続編)

- 広報・KURAで成果選出
- サイエンスライティング外注
- サイエンスイラストレーション外注
- KURAで編集
- EurekAlert!で世界へ！



## point 4

# when



研究成果を世界へ配信

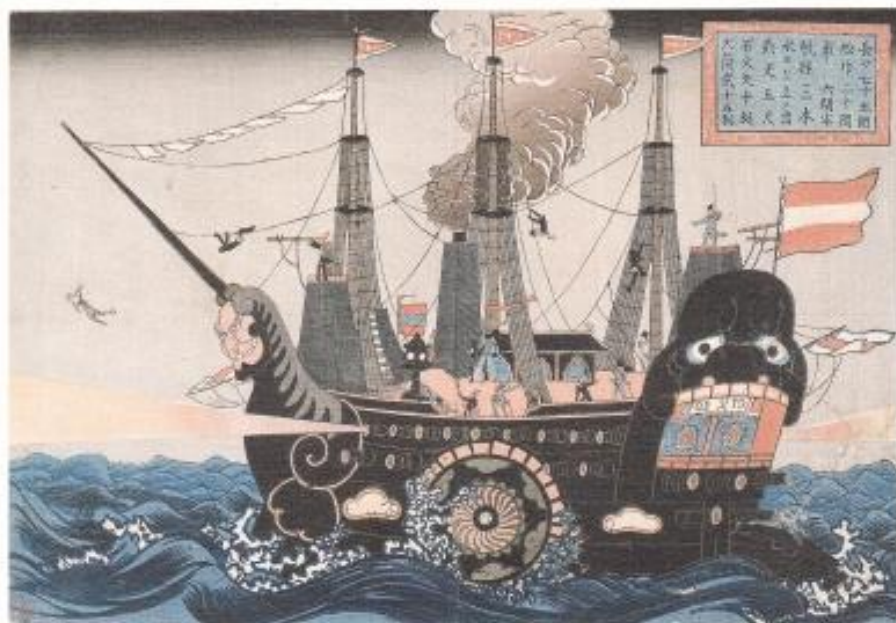
**point 4: when**

now of  
course!



# 英文プレスリリース配信プラットフォーム の検討と活用について

大学研究力強化ネットワーク  
国際情報発信に関するタスクフォース  
平成26年度  
より抜粋



150 years ago...

## AAAS NEWS & NOTES

EDITED BY KATHY WREN



## Japan's universities open up to the world

A quest to globalize and engage with a wary public has sparked enthusiasm for science communication at Japanese universities

By Brian Lin, in Tokyo

**A** devastating natural disaster, a dire need to internationalize its universities, and lucrative funding programs have ushered in a renaissance of science communication in a country better known for its corporate R&D.

Leading the pack is a small, young university on a secret island 400 miles south of Japan's mainland, the Okinawa Institute of Science and Technology (OIST) Graduate University.

Capitalizing on its strengths—English is OIST's official language, and half of its 400 researchers are overseas recruits—OIST has set out to communicate its achievements globally. An international internship program brings science and communications grads on campus to interview researchers and write about their work. And the use of its fully bilingual website, social media, and news distribution service like the AAAS-operated EurekaAlert! has helped OIST

punch above its weight in garnering foreign media attention.

That's good news for OIST, as the Japanese government is increasingly telling universities to step up internationalization and science communication—and rewarding them handsomely for doing so.

Compared to other world-class universities, Japanese institutions can be choosier places, where Japanese is the dominant language, even in funding applications and conference proceedings. This isolation has taken its toll: Only two of Japan's 781 universities made it within the top 100 in the 2015 *Times Higher Education* World University Rankings.

Japan's Top Global University Project, launched last year by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), aims to boost the global standing of 37 institutions by offering a total of 77 billion yen over 10 years to increase international exchange and the number of foreign faculty and students. A

year earlier, MEXT committed up to 400 million yen per year over 10 years to 22 institutions. The funds are earmarked for the hiring of University Research Administrators (URAs), who perform myriad roles within the research enterprise, from strategic planning, to partnership development, to communications.

For the sizable number of URAs newly assigned to improve communication, on-the-job training has become a top priority. Through the Research University Network of Japan, URAs and press officers from 25 universities have banded together to share expertise and find solutions. More than 30 communicators involved in the 2015 AAAS Annual Meeting in San Jose, CA, and more than 60 attended a 29 May workshop in Tokyo, which included case studies of how universities have used EurekaAlert!'s redesigned Japanese news portal to disseminate their bilingual press releases to the site's global audience that includes some 11,000 science journalists.

"There is some anxiety but even greater enthusiasm to learn," said Akihiro Kikuchi, a professor at the National Institute of Natural Sciences, who organized both gatherings. "But we're taking our first baby steps towards greater internationalization."

The push for more and better science communication had been iterated in the government-endorsed 4th Science and Technology

485 21 JULY 2015 • VOL 360 | SCIENCE

Published by AAAS

sciencemag.org | SCIENCE

Now...  
(Science, July 30, 2015号掲載)



# 英文プレスリリース配信プラットフォームの検討取り組み

**2014年3月** Nature本部広報部長 Alice Henschly氏 来日  
国際科学広報に関するワークショップ開催  
日本発の国際科学広報に関する問題意識の共有

**2014年8月** AlphaGalileo代表の来日 意見交換会開催  
プラットフォームのひとつとしてAlphaGalileoについて検討

**2014年9月** URAシンポジウム(北海道大学)にて、セッション開催  
EurekAlert!, AlphaGalileo, ResearchSEA等の比較紹介

**2015年3月** 国際科学広報ワークショップ  
国際科学広報の目的の整理

**2015年5月** AAAS EurekAlert! について勉強会 Brian Lin氏 来日  
プラットフォームのひとつとしてのAAAS EurekAlert!について検討

# 国際科学広報における課題

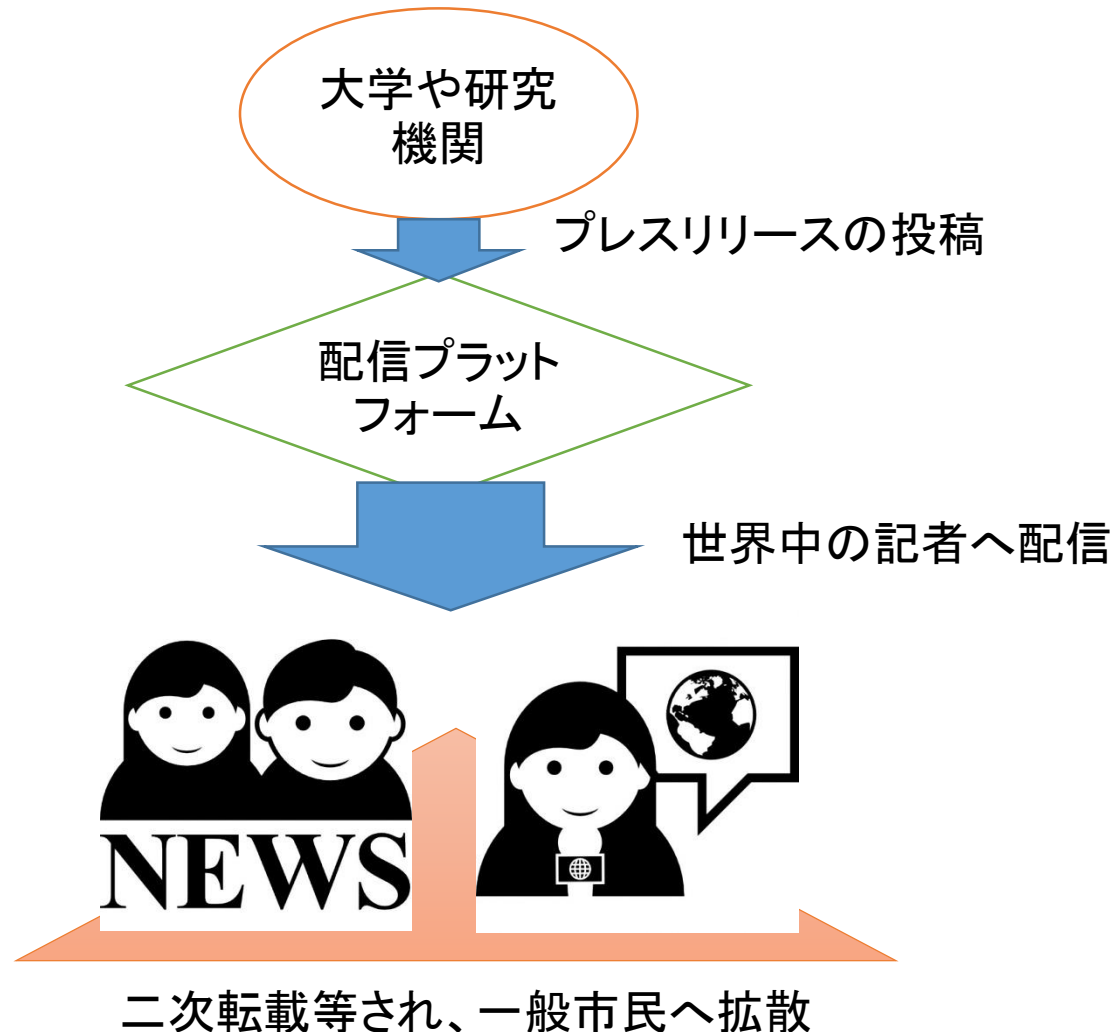
- (1) コンテンツ内容づくり？
- (2) 英語翻訳？ 英語スタイル化？ 人材の確保？
- (3-1) 海外への配信？リーチ？どのように？
- (3-2) Webの活用？マルチメディアの活用？
- (4-1) 問い合わせ対応？（英語対応？）
- (4-2) メディア対応トレーニング？？
- (5) 国際広報の効果評価？

2014年3月 Nature本部広報部長 Alice Henchsly氏 来日  
国際科学広報に関するワークショップ開催



# 英文プレスリリース配信プラットフォームの比較について(1)

英語プレスリリース 配信プラットフォームの仕組み



# 英文プレスリリース配信プラットフォームの比較について(2)

国際的プレスリリースプラットフォーム	実施主体	英語プレスリリース配信	日本語プレスリリース配信機能	登録記者数(概数)	その他
EurekAlert!	AAAS 米国	解禁前情報配信可能・解禁後公開	あり	11,000人	EurekAlert! Japan ポータルの設立月ごとに簡易レポートあり。
AlphaGalileo	AlphaGalileo Ltd 欧州	解禁前情報配信可能・解禁後公開	なし	6,000人	ウェブ上で簡易レポート閲覧可。
ResearchSea	ResearchSEA アジア	解禁後配信	なし	*****	英文論文から英語のプレスリリースを作成するサービスあり。配信したリリースのカバレッジをweb monitoringし、レポート。

抜粋

2014年9月 URAシンポジウム(北海道大学)にて、セッション開催  
EurekAlert!, AlphaGalileo, ResearchSEA等の比較紹介



# 英文プレスリリース配信プラットフォーム：国際科学広報の目的の整理 (国際科学広報ワークショップ2015にて)

## 「日本の大学や研究機関における国際科学広報の目的とは？」

日本の大学や研究機関にとって、国際化は喫緊の課題となっているが、日本の大学や研究機関の国際的な知名度は、実際の研究力等に比して、決して高くない。

正当な評価を受けるためにも、まず、大学や研究機関の国際的なブランドイメージの確立、それに伴う知名度および評判(Reputation)の向上は重要である。それによって、国際的な研究者や大学生・大学院生などの人材確保、国際共同研究の推進などさまざまな面での進展が期待できる。また、海外の現地での認知度の向上は、フィールド調査などを伴う国際共同研究や大型プロジェクト推進にとって、大きな後押しとなる。

さらに、研究者の研究活動の評価にとっても、いまや既存のメディアをしのぐ視聴者数のあるソーシャルメディア等を用いた国際的な情報発信は、Altmetricsを用いた研究評価などに寄与する可能性も無視できない。

このように、大学や研究機関における国際科学広報は、組織にとっても研究者個人にとっても、その活動を国際的に広め、研究力を高め、正当な評価を受ける重要な手段であるといえる。

そのためにも、大学や研究機関においては、それぞれの経営指針に照らした広報目標、対象、手法の設定について、今後のさらなる検討が必要である。

# 英文プレスリリース配信プラットフォーム: AAAS EurekaAlert! Japan Portal

AAASが提供する英日でのプレスリリース配信ポータル(2014年11月始動)  
記者登録数 1万1千人超  
日本の科学記者 250名超

Chiba University  
High Energy Accelerator Research Organization (KEK)  
Hiroshima University  
Kanazawa University  
Kobe University  
Kumamoto University  
Nara Institute of Science and Technology (NAIST)  
National Institutes of Natural Sciences (NINS)  
Okinawa Institute of Science and Technology (OIST)  
Research Organization of Information and Systems (ROIS)  
Tokyo Metropolitan University  
Toyohashi University of Technology  
The University of Tokyo

Kyoto University  
Osaka University  
Tsukuba University  
join (2015 August)

**EurekaAlert!**  
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AAAS

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## EurekaAlert! 日本語

2015

Public Release: 25-May-2015  
生理学研究所、7テスラ超高磁場MRIシステムを導入  
NATIONAL INSTITUTES OF NATURAL SCIENCES

自然科学研究機構・生理学研究所は、7テスラ超高磁場MRIシステムを導入しました(2015年5月25日に開所式)。この新しいMRIは、ヒト脳高次機能の解明に必要な脳の微細構造や高度な認知活動、神経代謝物質の動態など、脳の形態から機能にいたる種々の情報を非侵襲かつ高精度に画像化します。7テスラ超高磁場MRIは、国内で3台、世界で50台程度が稼働し、ヒト生体研究への応用が期待される最新鋭の装置です。この装置を使用することで、生体現象、生体構造を包括的に観測する超高解像度脳情報画像化システムを構築し、高次脳機能研究のさらなる飛躍を目指します。

リソース

- Science ワークリー・ハイライト
- Science Translational Medicine ワークリー・ハイライト

EurekaAlert! 日本語ポータルの上は、次の方々にご支援いただいております:

- Chiba University
- High Energy Accelerator Research Organization (KEK)
- Hiroshima University
- Kanazawa University
- Kobe University
- Kumamoto University
- Nara Institute of Science and Technology (NAIST)
- National Institutes of Natural Sciences (NINS)
- Okinawa Institute of Science and Technology (OIST)
- Research Organization of Information and Systems (ROIS)
- Tokyo Metropolitan University
- Toyohashi University of Technology
- The University of Tokyo

Multi-Language News



AAAS 2015 年会にて、AAAS担当者との  
ミーティングより有効な活用について議論

## EurekaAlert! 日本語

### Japanese News Releases

Public Release: 12-Mar-2015

理化学研究所 環境資源科学研究センターと名古屋大学トランスフォーマティブ生命分子研究所の協定締結のお知らせ

INSTITUTE OF TRANSFORMATIVE BIO-MOLECULES (ITBM), NAGOYA UNIVERSITY



英日プレスリリース  
Webベース(即時性)  
記者クラブはなく、科学記者個人個人で加入している  
マルチメディア対応

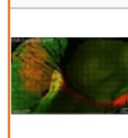
#### リソース

» Science ウィークリー ハイライト

» Science Translational Medicine ウィークリー ハイライト

EurekaAlert! 日本語ポータル向上は、次の方々にご支援いただいております:

- [Hiroshima University](#)
- [Kanazawa University](#)
- [Kumamoto University](#)
- [Nara Institute of Science and Technology \(NAIST\)](#)
- [National Institutes of Natural Sciences \(NINS\)](#)
- [High Energy Accelerator Research Organization \(KEK\)](#)
- [Okinawa Institute of Science and Technology \(OIST\)](#)
- [Research Organization of Information and Systems \(ROIS\)](#)
- [The University of Tokyo](#)
- [Tokyo Metropolitan University](#)
- [Toyohashi University of Technology](#)





# 英文プレスリリース配信プラットフォーム: AAAS EurekaAlert! Japan Portal

## 自然科学研究機構使用実績

EurekaAlert!の一次視聴数(PV)  
→ここから二次転載、三次転載される


THE HANS INDIA

HOME AP TELANGANA INDIA WORLD NRI BUSINESS SPORTS CRIME LIFESTYLE HANS VIDEOS

Japanese kids better at face perception

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MIL-TECH



Tokyo: Face perception plays an important role in social communication and Japanese kids have scored better in this.

According to researchers, the face perception in Japanese children almost matured by the age of 13, earlier than in western children.

"This was the first study to investigate the development of face perception in a large number of Japanese children. We are expecting that this result can be applied for understanding of the face perception of the children with the autism spectrum disorder," explained Miki Kensuke from the National Institute for Physiological Sciences in Okazaki, Japan.

Previous studies in adults using electroencephalogram (EEG) demonstrated a special component

6月の変動金利は0.65%

団信・8疾病保障がついてこのす 住信S B 1のネット専用付

Development of face perception earlier in Japanese children than Western children

Face perception plays an important role in social communication. There have been many studies of face perception in human using non-invasive neuroimaging and electrophysiological methods, but studies of face perception in children were quite limited. Scientists have now investigated the development of face perception in Japanese children, by using an electroencephalogram (EEG). The team also compared their

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EurekaAlert! 担当マネージャーBrian Lin氏来日 第三回  
大学研究力強化ネットワーク・カンファレンスを開催

# 広 国 報 際

日本の  
研究成果を  
世界に伝える

基礎生物学研究所  
研究力強化戦略室 広報グループ URA  
倉田智子



大学共同利用機関法人  
自然科学研究機構

# 基礎生物学 研究所

国立大学法人  
総合研究大学院大学  
生命科学研究科

# 基礎生物学 専攻





広報室は所長室の隣

# 広報は組織の イメージを 左右してしまう 重大な仕事

広報は経営の一部

組織幹部との意思疎通・  
連携が不可欠

# 経歴

1997年

筑波大学生物学類卒業

↓

1999年

筑波大学にて修士修了

↓

2003年

基礎生物学研究所

(総合研究大学院大学)にて博士取得

↓

基礎生物学研究所にてポスドク

↓

2006年より同研究所の広報に転身

↓

2013年より身分がURAになる

↓

現在に至る

(広報歴9年)

# 広報担当としての心がけ

## ■研究者と協働する広報

（研究者の時間を奪わず、かつ効果的な広報を目指す）

## ■自分の手を動かす広報

（技術力があれば、研究者との信頼関係が築きやすい）



# 研究を伝えるビジュアル資料の撮影



研究者撮影の  
研究者向け写真



広報撮影の  
広報用写真

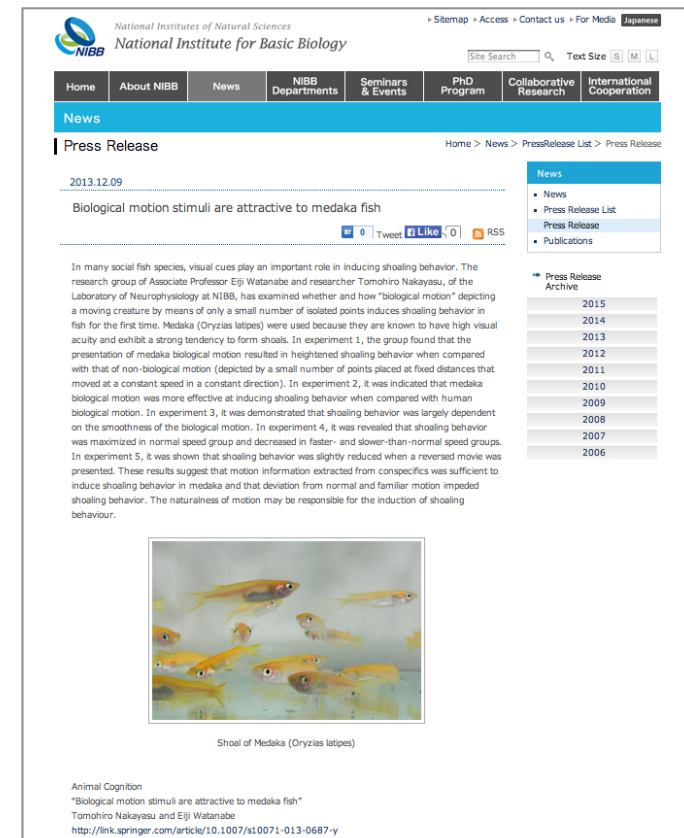
# 国際広報として何からはじめるか

- 研究所の最大のコンテンツは「研究成果」
- プレスリリースは最も重要！

# ホームページで発信のみの時代

2012-2013年頃

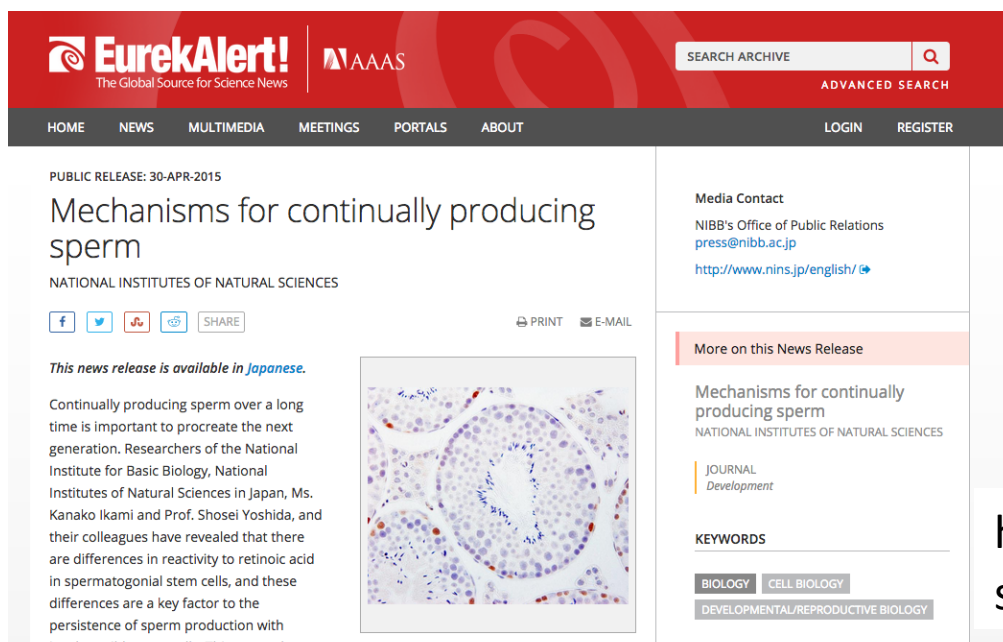
- プレスリリースの要旨を英語で研究所ホームページに掲載
- 何も反響が無い・・・
- 辛い・・・





# EurekAlert!を使い始めて

## ■プレスリリースがそのままニュースサイトに転載される(一字一句そのまま)



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PUBLIC RELEASE: 30-APR-2015

### Mechanisms for continually producing sperm

NATIONAL INSTITUTES OF NATURAL SCIENCES

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#### Mechanisms for continually producing sperm

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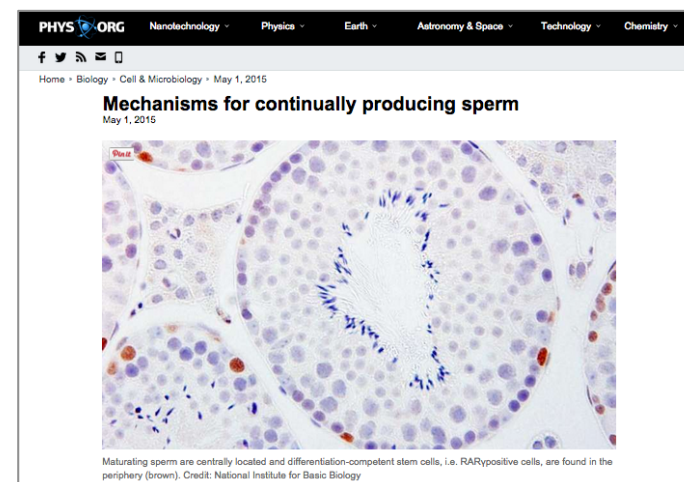
JOURNAL  
Development

KEYWORDS

BIOLOGY CELL BIOLOGY  
DEVELOPMENTAL/REPRODUCTIVE BIOLOGY

[http://www.eurekalert.org/pub\\_releases/2015-04/nion-mfc043015.php](http://www.eurekalert.org/pub_releases/2015-04/nion-mfc043015.php)

differentiate into mature sperm. In order to persistently produce sperm, the balance between maintaining stem cell numbers and inducing differentiation to sperm is important. If too many stem cells differentiate, spermatogenesis will be eventually exhausted, if too many stem cells self-renew, the testis will be full of undifferentiated cells. In the testis of the fruit-fly

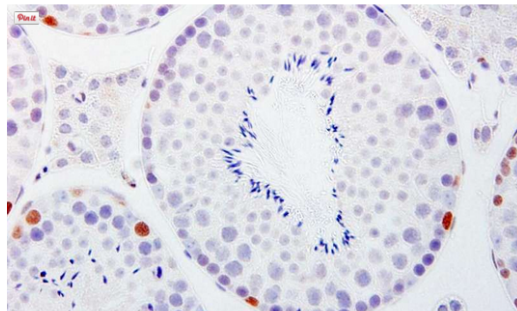


PHYS.ORG Nanotechnology Physics Earth Astronomy & Space Technology Chemistry

Home Biology Cell & Microbiology May 1, 2015

### Mechanisms for continually producing sperm

May 1, 2015



Maturing sperm are centrally located and differentiation-competent stem cells, i.e. RAR $\alpha$ positive cells, are found in the periphery (brown). Credit: National Institute for Basic Biology

<http://phys.org/news/2015-05-mechanisms-sperm.html>

- Irrelevant
- Repetitive
- Inappropriate

sperm, the balance between maintaining stem cell numbers and inducing differentiation to sperm is important. If too many stem cells differentiate, spermatogenesis will be eventually exhausted, if too many stem cells self-renew, the testis will be full of undifferentiated cells. In the testis of the fruit-fly *Drosophila*, the model organism in which spermatogenesis research has progressed the furthest, it is known that spermatogonial stem cells reside in a special microenvironment within the testis, called the "stem cell niche". Stem cells are maintained by the function of the niche, and once the stem cells leave the niche they differentiate into sperm. However, in mammalian testis an area has not yet been found that matches such a specialized stem cell niche.

Moreover, stem cells are found actively migrating over their tissue. Therefore it has remained unknown how mammalian testis keep the delicate balance between maintaining stem cell numbers and inducing differentiation of stem cells into sperm.

The research team has found that there are differences in reactivity (or "competence") to retinoic acid in spermatogonial stem cells depending on different sub-types of these cells. Consequently, although all the spermatogonial stem cells are equally bathed with retinoic acid, it induces differentiation in some stem cells, but not in others. The group has further revealed that differences in reactivity to retinoic acid are controlled solely by

#### MULTIMEDIA



Cross-Section of Mouse Seminiferous Tubules (IMAGE)

# EurekAlert!を使い始めて

## ■論文のAltmetricsに貢献できる



### STEM CELLS AND REGENERATION

#### Hierarchical differentiation competence in response to retinoic acid ensures stem cell maintenance during mouse spermatogenesis

Kanako Ikami<sup>1,2,†</sup>, Moe Tokue<sup>1,2,†</sup>, Ryo Sugimoto<sup>1,\*†</sup>, Chiyo Noda<sup>3</sup>, Satoru Kobayashi<sup>2,3</sup>, Kenshiro Hara<sup>1,2</sup> and Shoshei Yoshida<sup>1,2,§</sup>

† Author Affiliations

§ Author Notes

§ Author for correspondence (shoshei@nibb.ac.jp)

#### ABSTRACT

Stem cells ensure tissue homeostasis through the production of differentiating and self-renewing progeny. In some tissues, this is achieved by the function of a definitive stem cell niche. However, the mechanisms that operate in mouse spermatogenesis are unknown because undifferentiated spermatogonia ( $A_{undiff}$ ) are motile and intermingle with differentiating cells in an 'open' niche environment of seminiferous tubules.  $A_{undiff}$  include glial cell line-derived neurotrophic factor receptor  $\alpha 1$  (GFR $\alpha 1$ )<sup>+</sup> and neurogenin 3 (NGN3)<sup>+</sup> subpopulations, both of which retain the ability to self-renew. However, whereas GFR $\alpha 1$ <sup>+</sup> cells comprise the homeostatic stem cell pool, NGN3<sup>+</sup> cells show a higher probability to differentiate into KIT<sup>+</sup> spermatogonia by as yet unknown mechanisms. In the present study, by combining fate analysis of pulse-labeled cells and a model of vitamin A deficiency, we demonstrate that retinoic acid (RA), which may periodically increase in concentration in the tubules during the seminiferous epithelial cycle, induced only NGN3<sup>+</sup> cells to differentiate. Comparison of gene expression revealed that retinoic acid receptor  $\gamma$  (Rarg) was predominantly expressed in NGN3<sup>+</sup> cells, but not in GFR $\alpha 1$ <sup>+</sup> cells, whereas the expression levels of many other RA response-related genes were similar in the two

<http://dev.biologists.org/content/142/9/1582>

heterogeneous competence to differentiate in response to ubiquitously distributed differentiation-inducing signals.

Retinoic acid receptor gamma Spermatogenesis Spermatogonia Stem cell niche

#### FOOTNOTES

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10.1242/dev.118695  
May 1, 2015  
Development  
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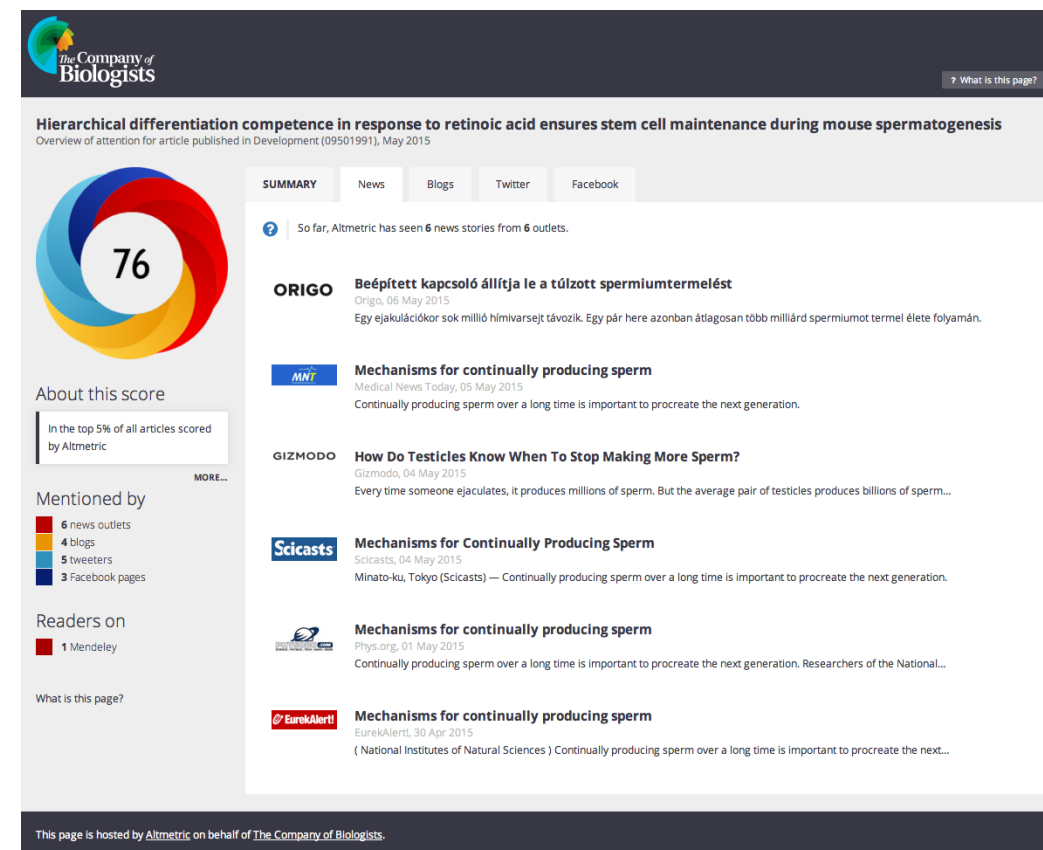
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- 記事を書いてもらう元ネタとして情報を提供するのではなく、自分が記事を書く
- 転載メディアによって記事が拡散される
- 記事をきっかけとして、新たなニュースが編集される



# 国際プレスリリースをはじめる前の不安

- 英語で記者対応って私も、研究者も、はたして出来るだろうか？
- 労力を使って国際リリースしても何も反応が無いのではないか？

# 国際プレスリリースをやってみて

- 転載してくれるメディアは一定数ある
- 転載メディアからは、取材・問い合わせは全く無し
- 取材をきちんと行うメディアも、ほとんどメールのみで取材完了

# 国際プレスリリース作成の流れ

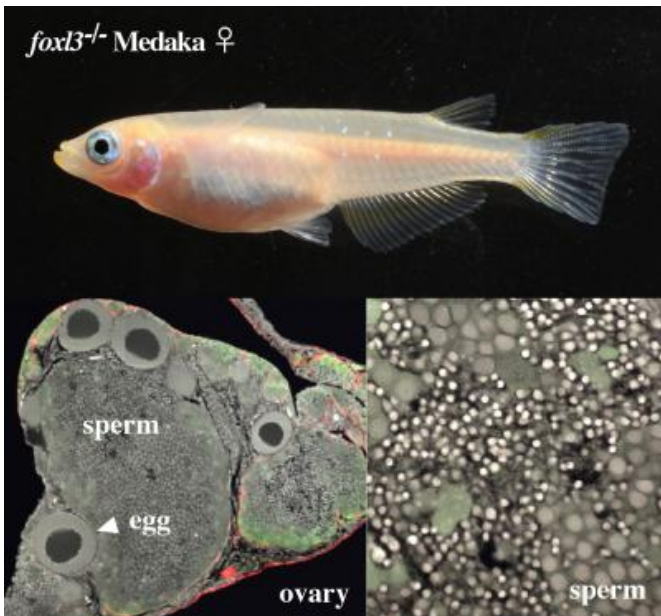
- 日本語のプレスリリースを完成させる  
(A4で3枚-4枚程度・データ多め)
- 日本語リリースの要約を元に英語リリースの内容を日本語で文章化  
(A4で1枚程度・研究者コメント入り・アイキャッチ的な画像を1～2枚・研究者写真を1枚) 広報室で作成し、研究者にチェックしてもらう



# 国際プレスリリース作成の流れ

- 日本語を英語に1行ずつ翻訳（英語ネイティブの翻訳者担当）
- 日本語を排除して英文リリース全体を調整
- 英文リリース原案を研究者にチェックしてもらう
- 別の英語ネイティブが英語校閲（本部）
- 英文プレスリリース完成

# ビジュアルは念入りに準備



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# Toshiya Nishimura, National Institute for Basic Biology (IMAGE)

NATIONAL INSTITUTES OF NATURAL SCIENCES

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**CAPTION**

Dr. Toshiya Nishimura is shown in an aquarium room at the National Institute for Basic Biology.

**CREDIT**

National Institute for Basic Biology

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Media Contact

NIBB's Office of Public Relations  
[press@nibb.ac.jp](mailto:press@nibb.ac.jp)  
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To be sperm, or not to be sperm?  
 NATIONAL INSTITUTES OF NATURAL SCIENCES

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*Science*

**KEYWORDS**

BIOLOGY CELL BIOLOGY

DEVELOPMENTAL/REPRODUCTIVE BIOLOGY

**TRANSLATIONS**

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**MULTIMEDIA**

Young Medaka Born Using Normal Eggs and Sperm (IMAGE)

Toshiya Nishimura, National Institute for Basic Biology (IMAGE)

# Science誌掲載論文が世界中で話題に

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PUBLIC RELEASE: 11-JUN-2015

Genetic switch determines egg or sperm

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

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*This news release is available in [Japanese](#).*

New experiments in the Japanese rice fish show that the foxl3 gene appears to be the switch that determines whether a germ cell becomes an egg or sperm cell. The finding could help researchers learn more about how the sexual fate of germ cells is determined during vertebrate development. Toshiya Nishimura and colleagues demonstrated that foxl3, which is expressed in germ cells but not in the surrounding cells of the fish's reproductive organs, provides a molecular cue that prevents the start of sperm formation. When the researchers disrupted foxl3 in adult fish with two X chromosomes (the female state), sperm formed in the female ovary. These sperm were functional and could fertilize eggs normally. The results indicate that germ cells in these fish -- and potentially other vertebrates -- do not need to be in the environment of the male reproductive organ to begin their switch into sperm.

###

Article #28: "foxl3 is a germ cell-intrinsic factor involved in sperm-egg fate decision in medaka," by T. Nishimura; Y. Yamamoto; I. Watakabe; S. Kobayashi; M. Tanaka at National Institute for Basic Biology in Okazaki, Japan; T. Nishimura; S. Kobayashi; M. Tanaka at The Graduate University for Advanced Studies (SOKENDAI) in Okazaki, Japan; T. Sato; Y. Ohkawa; M. Suyama at Kyushu University in Fukuoka, Japan; T. Sato; Y. Ohkawa; M. Suyama at Japan Science and Technology Agency in Fukuoka, Japan.

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Genetic switch determines egg or sperm  
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KEYWORDS

BIOLOGY CELL BIOLOGY  
ECOLOGICAL/ENVIRONMENT GENES  
SEX/RELATED CONDITIONS

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PUBLIC RELEASE: 11-JUN-2015

To be sperm, or not to be sperm?

Discovery of the genetic switch that determines germ cell fate

NATIONAL INSTITUTES OF NATURAL SCIENCES

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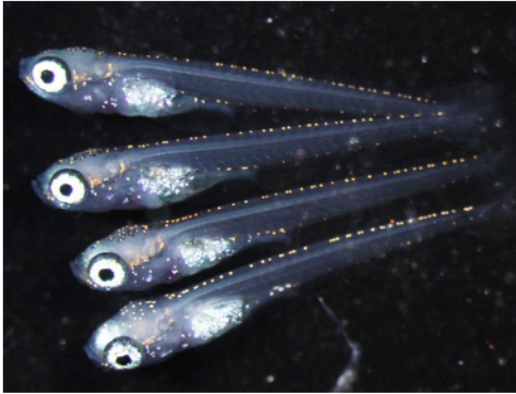


IMAGE: THIS IMAGE SHOWS YOUNG MEDAKA BORN USING NORMAL EGGS AND SPERM FROM FEMALE FISH LACKING FUNCTIONAL FOXL3 GENES. [view more >](#)

CREDIT: NATIONAL INSTITUTE FOR BASIC BIOLOGY

*This news release is available in [Japanese](#).*

Researchers in Japan have found, for the first time in vertebrates, a genetic switch that determines whether germ cells become sperm or eggs. The gene is named foxl3, and has been identified using a small fish called medaka (*Oryzias latipes*). In medaka without this gene's functionality, surprisingly, sperm are produced in the ovaries of females. The sperm that are produced function normally, and have been confirmed to produce normal offspring. These results will be announced in the journal *Science* through *Science Express* the online pre-print version on June 11th.

Dr. Toshiya Nishimura, Associate Professor Minoru Tanaka and their colleagues of the National Institute for Basic Biology, National Institutes of Natural Sciences, in collaboration with Dr. Satoru Kobayashi of the Okazaki Institute for Integrative Bioscience, and through joint research with Kyushu University's Dr. Mikita Suyama and Dr. Yasuyuki Ohkawa, revealed that the foxl3 gene works in the germ cells of females "to suppress differentiation into sperm".

In females lacking functional foxl3 genes, the small fish's body appearance is still totally female, however a large number of sperm are formed in the ovaries, and a small number of eggs are formed at the same time.

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To be sperm, or not to be sperm?  
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KEYWORDS

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Young Medaka Born Using Normal Eggs and Sperm (IMAGE)



Toshiya Nishimura, National Institute for Basic Biology (IMAGE)



Female Medaka Lacking foxl3 Genes Showing Standard Female Body Shape (IMAGE)

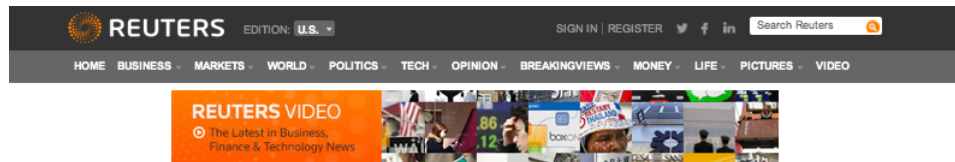
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↓  
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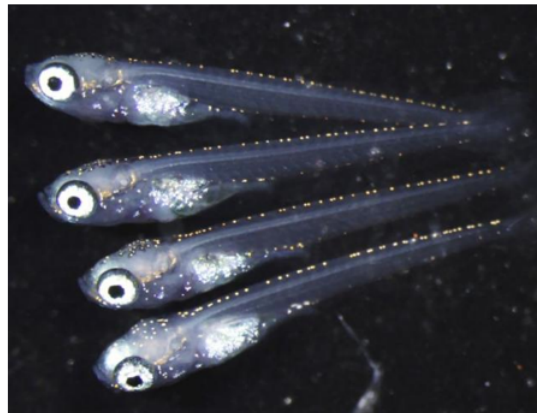


Science | Fri Jun 12, 2015 10:37am EDT

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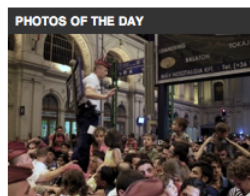
## Egg or sperm? Scientists identify a gene that makes the call

WASHINGTON | BY WILL DUNHAM



An undated handout image shows young medaka born using normal eggs and sperm from female fish lacking functional foxl3 genes.  
REUTERS/NATIONAL INSTITUTE FOR BASIC BIOLOGY/HANDOUT

Providing insight into the sometimes mysterious biology of reproduction, researchers in Japan have identified a gene that controls whether the reproductive precursor cells known as germ cells eventually become sperm or eggs.



Our top photos from the last 24 hours.  
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<http://www.reuters.com/article/2015/06/12/us-science-reproduction-idUSKBN0OR2IS20150612>

them from becoming sperm cells instead of egg cells in the ovaries.

The gene is not active in the surrounding cells of the fish's reproductive organs.

When the scientists inactivated the gene in female fish, the germ cells turned into sperm in

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PLANTS AND ANIMALS

## Scientists Make Female Fish That Produce Working Sperm

June 14, 2015 | by Josh L Davis

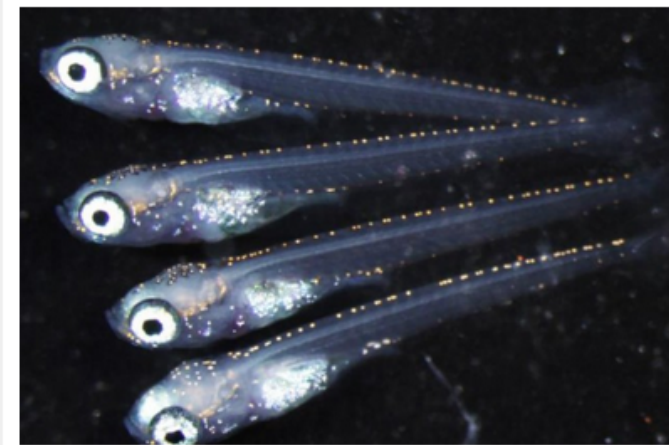


photo credit: Young medaka born using normal eggs, and sperm from female fish lacking functional foxl3 genes. Credit: National Institute for Basic Biology

<http://www.iflscience.com/plants-and-animals/scientists-make-female-fish-produce-working-sperm>

specific gene foxl3 in the fish, which are locally known as 'medaka'. They discovered that this gene works as a genetic switch, and determines if germ cells, the early cells that have the potential to become either eggs or sperm, develop into one or the other.

"While germ cells can become either sperm or eggs, nobody knew that in vertebrates

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