

# TELL THE WORLD

Global research outreach at the University of Tokyo



# Promoting your Research: Press releases, UTokyo Research and more

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Ayumi Koso, PhD

Project Researcher, Public Relations Office

# About myself and the PRO

- Background in Neurolinguistics
- Press officer after finishing grad school



# The “whys” of outreach

- To win public support
- Public outreach can contribute to a scholar’s scientific impact (Liang et al., 2014)
- Researchers who engage with society are those who have a good academic record (Jensen et al., 2008)

# The “whys” of outreach

## CASE 1 – skills development

“It (public engagement) developed my skills – I can now talk confidently to a wider range of people. ”

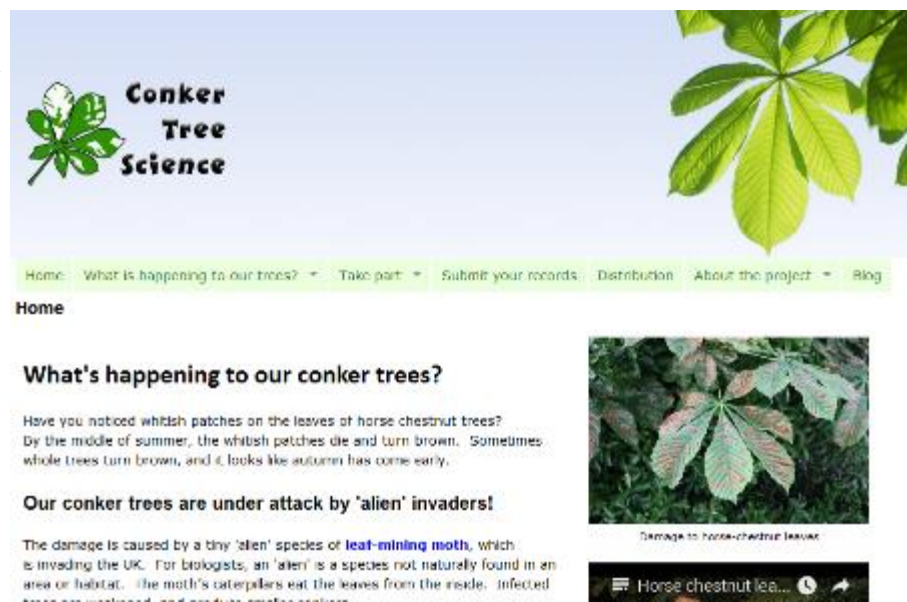
Dr Matthew Studley, University of West England



# “The whys” of outreach

## CASE 2 - additional funding, new ideas, boost in research

- Dr Darren Evans and Dr Michael Pocock were awarded new funding for a nation-wide research project to investigate the health of conker trees in the UK



# “The whys” of outreach

## CASE 3 – raising your research profile

“I won a number of national and international research accolades for which I would not have been recognised if I had not been engaging with the public on a regular basis”

Dr Kelly Bérubé, Cardiff University



# The “hows” of outreach

## 1) Live or face-to-face events





# "The hows" of public outreach

## 2) Traditional media



# "The hows" of public outreach

## 3) Online media



CC BY-ND © 2009 Spencer E Holtaway


# Activities at the University

## 1) Live or face-to-face events


TDP > Events

### Events


All Events Exhibitions




**HathiTrust**  
The Future of Digital Archive  
ハーティトラストと  
デジタルアーカイブの未来  
講演者  
J. Stephen Downie  
講演  
大森利雄 (Moderator) 日本時間  
1月25日 13:30-17:50  
講演会「HathiTrustとデジタル  
アーカイブの未来」(第 ...  
Events  
Open: 2016 / 01 / 25  
Sorry, this entry is only  
available in 日本語.  
2015 / 12 / 24 \* more



谷川俊太郎  
2015年12月20日  
文学インタビュー第4回 谷川俊太郎  
Events Finished  
Open: 2015 / 12 / 20  
Sorry, this entry is only  
available in 日本語.  
2015 / 12 / 01 \* more



【第15回受賞日】図書館総合展で  
ポスター展示をしました  
Exhibitions Finished  
Open: 2015 / 11 / 10  
Close: 2015 / 11 / 12  
Sorry, this entry is only  
available in 日本語.  
2015 / 12 / 08 \* more



**Green & Hybrid**  
Library  
21世紀の図書館の指針  
講演者  
Klaus Ulrich Werner  
Janin Präbber  
講演会「21世紀の図書館の指針-  
ドイツにおけるグリーン ...  
Events Finished  
Open: 2015 / 11 / 03  
Sorry, this entry is only  
available in 日本語.  
2015 / 10 / 09 \* more

# Activities at the University

## 2) Traditional media

- Press releases
- Press conferences
- UTokyo Research, on site events

# Activities at the University

## 3) Online media

- University of Tokyo repository
- Spacewarps
- Essays by junior scientists
- UTokyo Research



# How the PRO can help: UTR

UTokyo Research

東京大学  
The University of Tokyo

Japanese | English

research at, keywords... search


Feature Stories

Research News

Editor's Choice

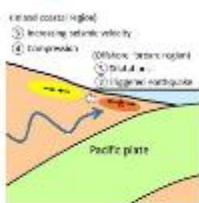
Discover Newsletter

Feature Stories 2016/01/14




Basic research and fieldwork go hand-in-hand at the wo...  
**Elucidating the mystery of phyt...**  
A way to avoid being trapped by conventional wisdom, Professor Shigetaka Namba smiles as he says, "Methods that everyone once thought heretical..."

Research News 2016/01/22




Sumatra earthquake caused changes in Earth's crust in Japan  
Cascading changes in induced seismicity and seismic wa...

Research News 2016/01/20



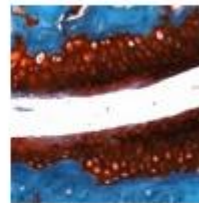
Good solar cells from bad effects  
Guideline for exploring new high-efficiency photovolta...

Research News 2016/01/19




Reconfigurable micro spirals control light  
Device switches Terahertz light circular polarization ...

Research News 2016/01/13



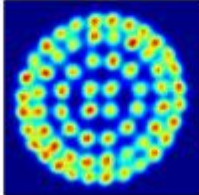
Effective osteoarthritis therapy with nucleic acid medicine  
In-joint therapy with mRNA of a transcription factor f...

Research News 2016/01/07




Muography  
Perspective Drawing in the 21st Century

Research News 2016/01/06



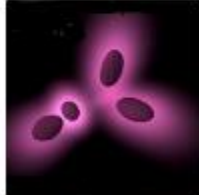
Highly efficient, high speed technology for satellite communication...  
Nano satellite achieves the highest communication speed...

Research News 2016/01/05



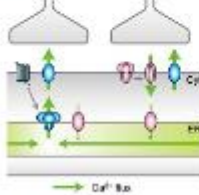
the world's smallest hard ferrite magnet  
A novel nanomaterial for magnet recording

Research News 2016/01/04




Tetranucleon nucleus found  
Avenue to neutron matter

Research News 2015/12/24




Visualization of the movement of calcium ions in neurons  
The endoplasmic reticulum as pipeline and store for Ca...

Research News 2015/12/24



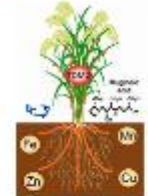
Discovery of nanoscale dynamics in supersaturation ion netwo...  
High speed DXT catches new motion in ion networks

Research News 2015/12/22




Flexible sheet-type sensor for measuring cellular oxygen met...  
A new tool useful for regenerative medicine and drug s...

Research News 2015/12/22



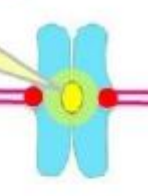
Plant diagram showing roots and leaves with chemical symbols (Fe, Ni, Zn, Cu).

Research News 2015/12/21




Psychiatric intervention group  
patients who did not receive psychiatric intervention...

Research News 2015/12/17




Chromosome MAJIN

Research News 2015/12/15



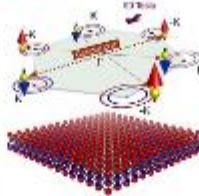
Rat diagram showing internal organs and a brain scan.

Research News 2015/12/14



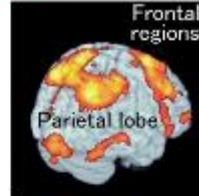
Molecular structure diagram showing a network of atoms.

Research News 2015/12/10



Brain scan diagram showing activity in the frontal and parietal regions.

Research News 2015/12/04



Frontal regions  
Parietal lobe



## Effective osteoarthritis therapy with nucleic acid medicine

In joint therapy with mRNA of a transcription factor for cartilage formation

**1601** [osteoarthritis](#) [messenger RNA](#) [transcription factor](#) [nucleic acid therapeutics](#) [disease-modifying therapy](#)

Graduate School of Engineering / Faculty of Engineering

2016/01/13

Researchers at the University of Tokyo have demonstrated that in-joint delivery of a transcription factor messenger RNA (mRNA) required for cartilage formation suppresses the progression of osteoarthritis in an animal model. This result suggests that transcription factor mRNAs can function as a novel nucleic acid therapy that specifically regulates transcription of therapeutic genes, supporting its use as an efficient treatment of musculoskeletal degenerative diseases and will advance the development of curative treatments or tissue regenerative therapies for such diseases.

Cartilage in our joints (articular cartilage) plays a key role in our locomotion throughout our lives. Degeneration or damage of the articular cartilage arises from a variety of causes, resulting in osteoarthritis (OA). In the current aging societies, OA is one of the major diseases threatening the quality of life of the elderly and shortening their healthy life expectancies. However, no curative treatment has been developed yet for OA.

In the current study, Project Researcher Hajet Aini, Project Associate Professor Shinsuke Ohba and Professor Ung-il Chung at the University of Tokyo Graduate School of Engineering, together with Project Associate Professor Keiji Itaka and Professor Kazunori Katsuda at the University of Tokyo Graduate School of Medicine, used a polyplex nanomicelle-based mRNA delivery system, developed in previous studies by the research group, to inject mRNA of the transcription factor RUNX1, which supports cartilage formation, into knee joints of OA model mice (mice that are surgically engineered to develop OA) once every three days for a month. OA was significantly suppressed in the RUNX1 mRNA-injected group compared with the control group. In addition, augmented expression of type II collagen (a major cartilage matrix protein), SOX9 (a transcription factor necessary for cartilage formation) and a protein that increases when cells are proliferating (PCNA, proliferating cell nuclear antigen) were observed in the articular cartilage of the RUNX1 mRNA-injected group.

"These results suggest that the mRNA delivered to the joint is translated to produce the RUNX1 protein, which acts as a therapeutic transcription factor, regulates the expression of a set of genes involved in the maintenance and proliferation of cartilage cells," says Project Associate Professor Ohba. He continues, "This result should find applications in curative treatments or tissue regenerative therapies for a variety of musculoskeletal degenerative diseases."

This work was published in the online version of the British journal *Scientific Reports* on January 25th, 2016.

### Press release

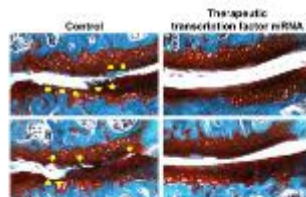
### Paper

Hajet Aini, Keiji Itaka, Ayano Fujisawa, Hirokuni Uchida, Satoshi Uchida, Shigeto Fukushima, Kazunori Katsuda, Taku Saito, Ung-il Chung, Shinsuke Ohba, "Messenger RNA delivery of a cartilage-anabolic transcription factor as a disease-modifying strategy for osteoarthritis treatment", *Scientific Reports* Online Edition: 2016/01/05 (login time), doi: 10.1038/srep18741.  
Article Link ([Publication](#))

### Links

[Graduate School of Engineering](#)

[Department of Bioengineering, Graduate School of Engineering](#)



Suppression of osteoarthritis progression by in-joint delivery of transcription factor mRNA that promotes cartilage formation

Articular cartilage is stained in red. During degeneration and abrasion of the articular cartilage surface (yellow arrows) are suppressed in the therapeutic transcription factor RUNX1 mRNA-injected group compared with the control group.

© 2016 Hajet Aini



## Why UTokyo?



Explore Our Campuses



Learn



Discover Our People



Why Tokyo?

## News and Events

News January 23, 2016

Call for Volunteers (JWIKIMEDIA/REQUE)



Event January 20, 2016

Commemorative Lecture Event Held for Nobel Prize Recipient Professor Kajita



Event January 20, 2016

February 19, 2016 [Design Innovation Open Seminar]



Event January 14, 2016

The 2nd GLEEM International Symposium



Event January 12, 2016

Public Symposium "Structural Shift of Publicness and Social Capital in Risk Society" January 27, 2016



## UTokyo Research

Research News January 22, 2016

Sanitary earthquake caused changes in earth's crust in Japan



Research News January 20, 2016

Good solar cells from bad effects



Research News January 15, 2016

Responsible nano speak (and not light)



Research News January 14, 2016

Elucidating the mystery of phytoplasmids, the ultimate killer bacteria



Research News January 13, 2016

Effective neurodegenerative therapy with nucleic acid medicine



ツイート  
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1,623UTokyo | 東京大学  
@UTokyo\_News\_en

Founded in 1877, the University of Tokyo is the most prestigious university in Japan, and one of the world's leading research universities. 日本大学  
UTokyo\_News

Tokyo

u-tokyo.ac.jp

2011年5月に登録

写真動画



ツイート ツイートと返信 画像 / 動画

UTokyo | 東京大学 @UTokyo\_News\_en · 1月22日  
#UTokyoResearch Sumatra earthquake caused changes in Earth's crust in Japan [bit.ly/1PIVWXXa](http://bit.ly/1PIVWXXa)

UTokyo | 東京大学 @UTokyo\_News\_en · 1月21日  
[Discover Our People]  
Saipe Chandra opens up about her new life in Japan and studying at UTokyo's ISSC [bit.ly/1Ks5uR9](http://bit.ly/1Ks5uR9)

UTokyo | 東京大学 @UTokyo\_News\_en · 1月20日  
[Topic] Commemorative Lecture Event Held for Nobel Prize Recipient Professor Kajita - A com... [bit.ly/1P41sUf](http://bit.ly/1P41sUf)

UTokyo | 東京大学 @UTokyo\_News\_en · 1月20日  
#UTokyoResearch Good solar cells from bad effects [bit.ly/1nKHnXM](http://bit.ly/1nKHnXM)

UTokyo | 東京大学 @UTokyo\_News\_en · 1月20日  
#UTokyoResearch Newsletter #149

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さんはFacebookを利用しています。

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アカウント登録 ログイン



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技術研究機関

タイムライン 基本データ 写真 レビュー もっと見る

このページの情報を検索

ユーザー

★★★★★

いいね! 42,920件

チェックイン 13,822件

場所



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7-3-1

03-3812-7111

<http://www.u-tokyo.ac.jp/en/>

アプリ



Research Newsletter

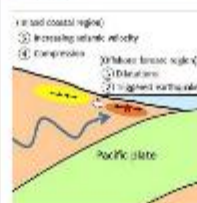
写真



The University of Tokyo / UTokyo

1月21日 18:11 · 公開

#UTokyoResearch Sumatra earthquake caused changes in Earth's crust in Japan - A research group at the University of Tokyo and others found that the Sumatra earthquake induced increased seismic activity in northeastern Japan, revealing that elastic disturbances in the Earth's crust spread over a broad area. This discovery improves our understanding of the Earth's elastic system and of the physics of earthquake occurrence. <http://bit.ly/1PIVWXXa>



シェアする

300名がいいね、10人がコメント、Chamith Pusudtha Kumarasingheさん、佐藤 健太郎さんがいいねしています。

シェア12件

1件のコメントを表示

Fawad Hajam Izzad Custoni Saied Zaman

👍 1 · 1月21日 20:44

U Rite d point -8 WHEN was daumstra quake n how it affcted jap tectonic plate  
1月21日 トピック



The University of Tokyo / UTokyo


1月20日 18:54 · 公開

最近


2016年  
2015年  
2014年  
2013年  
2012年  
2011年  
1943年  
1938年  
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1928年  
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1980年  
1978年  
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# How the PRO can help: press releases



The Global Source for Science News




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### TRENDING SCIENCE NEWS



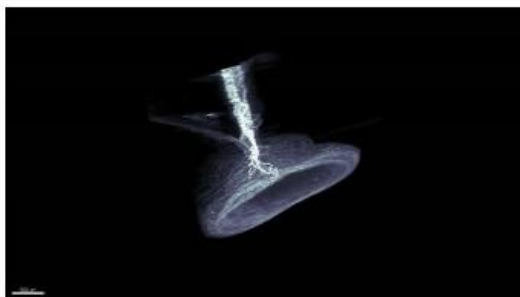
The way to learn  
NETHERLANDS INSTITUTE OF ECOLOGY  
(NIOO-KNAW)

NYU study explains why mistakes slow us down, but not necessarily for the better  
NEW YORK UNIVERSITY




Will blocking IL-17A help treat kidney disease?  
BENTHAM SCIENCE PUBLISHERS

Many colorectal cancer patients are younger than the recommended screening age  
WILEY

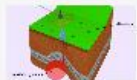


The neurons in our gut help the immune system keep inflammation in check  
ROCKEFELLER UNIVERSITY

Tumor-suppressing gene restrains mobile elements that can lead to genomic instability  
UT SOUTHWESTERN MEDICAL CENTER



Environmental toxin may increase risk of Alzheimer's disease and other neurodegenerative illnesses  
EDELMAN PUBLIC RELATIONS



Breakthrough in continuous monitoring of CO2 leaks from storage sites could assist CCS  
KYUSHU UNIVERSITY, I2CNER

Self-stacking nanogrids  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

### BREAKING NEWS

Teens who use e-cigarettes more likely to try the real thing a year later  
BMJ 12m

Recovery position may curb hospital admission rate of unconscious kids  
BMJ 12m

Epilepsy drug could protect nerves from damage in MS  
UNIVERSITY COLLEGE LONDON 12m

Targeted axillary dissection of lymph nodes after chemotherapy improves staging accuracy of node-positive breast cancer  
UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER 51m

[View all breaking news >](#)

### Multi-Language News

En Français > Auf Deutsch >

En Español > Em Português >

# Organization

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