# 研究を魅せるプレスリリース文の作成法

~アンケートによる研究ストーリーの抽出と整理~

清水智樹り,井上寛美り,小川正り

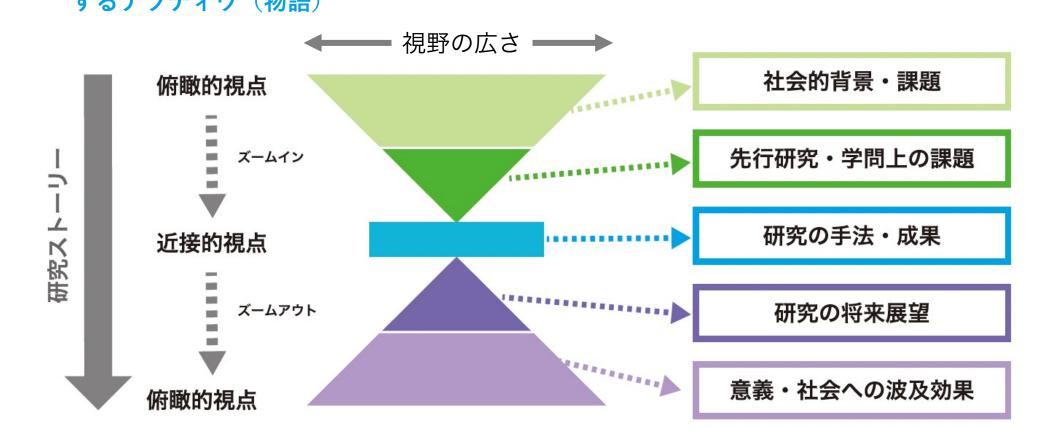
<sup>1</sup>京都大学高等研究院ヒト生物学高等研究拠点(WPI-ASHBi)リサーチアクセラレーションユニット Email: ashbi-acceleration@mail2.adm.kyoto-u.ac.jp

### 背景と課題:プレスリリースによる研究成果発信には「研究ストーリー」を伝える文章が必要

プレスリリースの目的:ASHBiの研究成果を一般社会(記者・市民等の非専門家)にアピールする

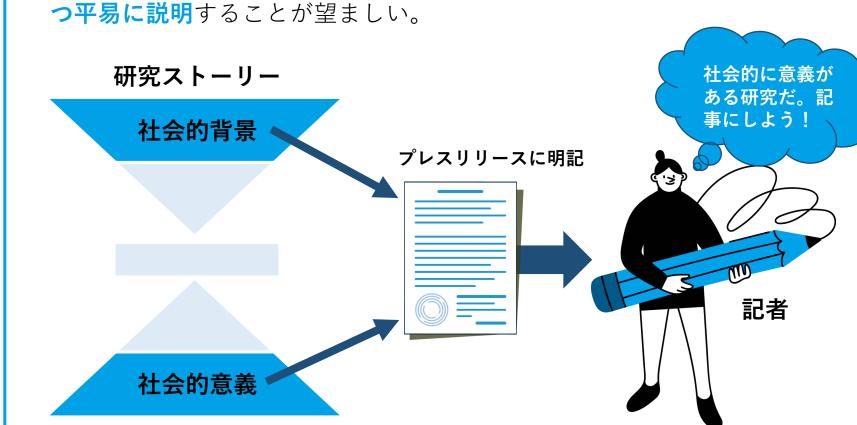
### 学術研究を非専門家に理解してもらうためには「研究ストーリー」の活用が有効1

「研究ストーリー」とは、研究結果のみならず、研究を行うに至った社会的背景や 学術的課題、研究の将来展望、期待される社会的意義を含めた研究活動全体を叙述 するナラティヴ(物語)



### 社会的背景・意義を十分に説明する必要

論文のプレスリリースの場合、記者や一般市民が研究内容に興味を持ち、 研究と社会の繋がりを理解できるように、社会的な背景や意義をも十分か



### 現状のプレスリリース文の課題

### 課題1:研究ストーリーの叙述が不十分

研究者がプレスリリースの原稿を作成する場合、内容が研究の課題・手法・成 果・展望に偏り、社会的な背景や意義が十分に記述されない傾向にあった。ま た、専門用語を多用し非専門家の読者には理解が困難だった。

### 課題2:効果的な原稿作成を支援する体制が不十分

プレスリリースの原稿を研究者が執筆していたため研究者の負担が大きかった。 研究者から研究ストーリーを十分に引き出し、効果的な原稿の作成を支援する 仕組みづくりが十分に出来ていなかった。

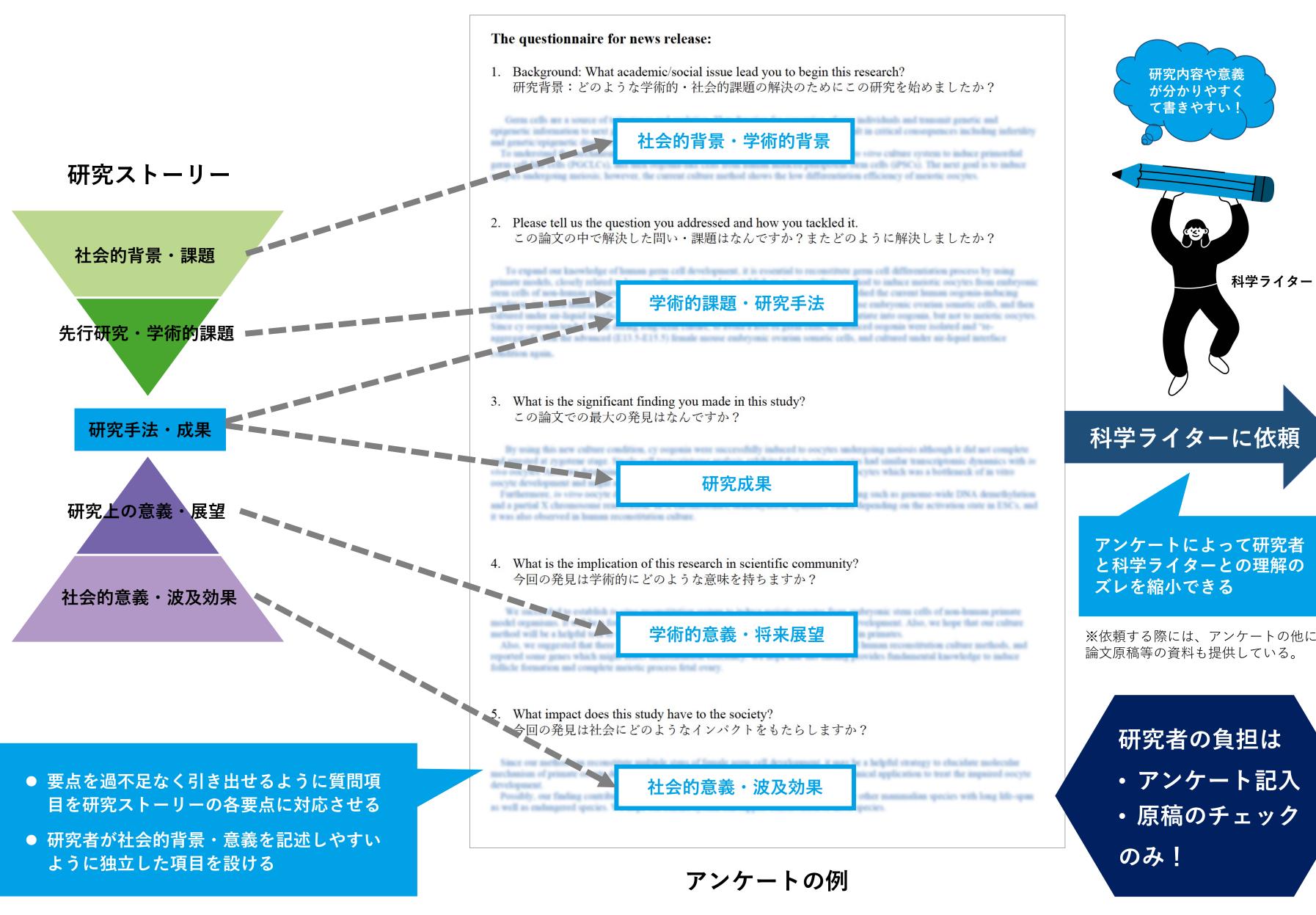


①研究者から研究ストーリーを十分に引き出し、②研究者 の負担を軽減するプレスリリース原稿の作成手法を開発・ 実践する!

# 課題解決の手法:研究ストーリーを抽出するアンケートを実施し、科学ライターに原稿作成を依頼する

■研究者から研究ストーリーの要点を引き出すアンケートを実施

■回答が不十分な場合には広報担当者(科学コミュニケーター)が補足インタビューを行う



# 科学ライターに依頼

科学ライター

アンケートによって研究者 と科学ライターとの理解の ズレを縮小できる

研究者の負担は

・アンケート記入 原稿のチェック

## 研究ストーリーの要点を含んだ効果的な文章が完成!

Japanese Researchers Successfully Induce Primate Oocytes In the Lab

リード文(LEAD) 研究の中心的なメッセージ(研究の 最重要部分)を短く魅力的に記述し、 読者の興味を引き付ける冒頭段落

The many types of cells in the human body are produced through the process of differentiation, in which ■ 前提知識・社会的背景 infertility treatment to conservation of endangered species. A new study by a Japanese team of researchers led by Dr. Mitinori Saitou has successfully induced meiotic (dividing) oocytes from the embryonic stem cells - 研究成果の核心部分 of cynomolgus monkeys, which share many physiological traits with humans. By establishing a culture method for inducing the differentiation of meiotic oocytes, the researchers aimed to shed light on germ cell development in both humans and other primates. The study's findings were published in the March 2023 issue of The EMBO Journal.

The team previously reported conditions for inducing oogonia, the precursors of oocytes, by aggregating 🗕 先行研究・学術的課題 induced to differentiate into oogonia but did not progress to meiotic oocytes. To overcome this hurdle, the —— 研究手法 nduced oogonia were isolated and re-aggregated with somatic cells from the ovaries of female mouse embryos and cultured again. Under these new culture conditions, the cynomolgus monkey oogonia were successfully induced to

transcriptome analysis showed that the transcriptomic dynamics of the oocytes *in vitro* (in the lab) were similar to those of oocytes in vivo (in our body). The researchers also identified differences in gene 🗕 研究成果 expression between the *in vitro* and *in vivo* oocytes, which suggested a bottleneck for *in vitro* oocyte development that might lead to the arrest of meiosis in vitro. Furthermore, by performing whole-genome methylome analysis, the authors found that the induced oocytes derived X chromosomes. These unique methylation dynamics were also found in human oogonia induced in vitro, suggesting that the mechanisms underlying female germ cell development may be the same across - 研究上の意義・展望 primate species. Thus, this culture system might be useful as a model of the primate germ cell

Asked about the potential impact of their study, the authors said that their method of reconstituting multiple steps in the development of female germ cells may help to clarify the molecular mechanisms of primate oocyte development and could one day contribute to the treatment of impaired oocyte development in reproductive medicine. First author Dr. <u>Sayuri Gyobu-Motani</u> says, "We hope that that our culture system can aid in the conservation of endangered species and the creation of in vitro oocyte induction systems for other mammalian species with long lifespans."

完成したプレスリリースの文章

differentiate into meiotic oocytes, but their development stopped at the second stage of meiosis. Single-cell

## 成果:プレスリリースを国際社会に発信して研究成果をアピール

## EurekAlert!に配信

国際的科学ニュース配信プラットフォーム **EurekAlert!** Maaas SEARCH ARCHIVE Japanese researchers successfully induce primate oocytes in the lab HOME NEWS RELEASES MULTIMEDIA MEETINGS y in Subscribe: ₽ ≥ → Japanese researchers successfully induce primate oocytes in the lab 海外ニュースサイト に転載・拡散 The many types of cells in the human body are produced through the process of differentiation, in which stem cells Temperatures Are Here To STAY For The Summer are converted to more specialized types. Currently, it is oing that that our culture system can aid in the conservation of endangered species and th Because Low Pressure challenging for researchers to control the differentiation of The many types of cells in the human body are produced through the process o Systems Are Currently 'In differentiation, in which stem cells are converted to more specialized types. Charge Of Britain's Weather', stem cells in the lab (*in vitro*). Of particular interest are Currently, it is challenging for researchers to control the differentiation of stem Experts Say Strange & Offbeat oocytes, which are female germ cells that develop into eggs. cells in the lab (in vitro). Of particular interest are oocytes, which are female germ cells that develop into eggs. Understanding their development could have far-Understanding their development could have far-ranging Angus Cloud, Best Known Fo ranging impacts, from infertility treatment to conservation of endangered 'Euphoria' Role As Fezco, Dies impacts, from infertility treatment to conservation of At 25: 'Angus Was Special To endangered species. A new study by a Japanese team of Easier to Craft Amino Acids That A new study by a Japanese team of researchers led by Dr. Mitinori Saitou has successfully researchers led by Dr. Mitinori Saitou has Man Utd Transfer News LIVE: induced meiotic (dividing) oocytes from the embryonic stem ccessfully induced meiotic (dividing) SELF SERVICE Virgin Birth, and Switch on the pocytes from the embryonic stem cells o Rasmus Hojlund Fee AGREED cells of cynomolgus monkeys, which share many **ANALYTICS** omolaus monkeys, which share many Amrabat 'Close', Takeover physiological traits with humans. By establishing a culture physiological traits with humans. By Researchers Tickle Rats to stablishing a culture method for inducing IMAGE: HOPING THAT THAT OUR CULTURE method for inducing the differentiation of meiotic oocytes, Identify Part of the Brain Critical he differentiation of meiotic oocytes, the SYSTEM CAN AID IN THE CONSERVATION OF for Laughter and Playfulness the researchers aimed to shed light on germ cell esearchers aimed to shed light on germ **ENDANGERED SPECIES AND THE CREATION OF IN** Developments In North Sea Oil cell development in both humans and ARTH & CLIMATE development in both humans and other primates. The VITRO OOCYTE INDUCTION SYSTEMS FOR OTHER other primates. The study's findings were MAMMALIAN SPECIES WITH LONG LIFESPANS study's findings were published in the March 2023 issue of Sun 'Umbrella' Tethered to published in The EMBO Journal. Drake, Co-Headliner 21 Asteroid Might Help Mitigate The EMBO Journal. ocytes in vitro (in the lab) were similar to those of oocytes in vivo (in our Climate Change CREDIT: ASHBI/KYOTO UNIVERSITY body). The researchers also identified differences in gene expression Concert: Logistically Bacteria as Blacksmiths The team previously reported conditions for inducing between the in vitro and in vivo oocytes, which suggested a bottleneck for in vitro oocyte development that might lead to the arrest of meiosis in Egg 'Signatures' Will Allow oogonia, the precursors of oocytes, by aggregating human Why You Shouldn't Declay rongos to Identify Cuckoo primordial germ cell-like cells (hPGCLCs) with cells from the ovaries of female mouse embryos and then culturing them under air-liquid interface conditions<sup>1</sup>. Similarly, PGCLCs from cynomolgus monkey were Furthermore, by performing whole-genome methylome analysis, the successfully induced to differentiate into meiotic oocytes, but their developinduced to differentiate into oogonia but did not progress to meiotic oocytes. To overcome this hurdle, the ment stopped at the second stage of meiosis. Single-cell transcriptome analysis showed that the transcrip nics of the oocytes in vitro (in induced oogonia were isolated and re-aggregated with somatic cells from the ovaries of female mouse the lab) were similar to those of o odv). The reembryos and cultured again. Microbes to Their Offspring searchers also identified differences and in vivo opeytes, which suggest

### 研究ストーリーを十分叙述した文章は報道に繋がる! 研究機関のブランディングにも貢献!

記者は、日々膨大な量のプレスリリースを受け取っている。例えば EurekAlert!だけでも1日約100件のプレスリリースを配信している。そ の中から選ばれ報道してもらうためには、**研究内容を一読して理解でき** る、研究ストーリーを十分かつ平易に魅力的に叙述した文章が必須

# 波及的取組:若手研究者向けの広報セミナーを開催

■研究ストーリーを組み立て、研究成果を効果的に発信する手法を学ぶセミナーを開催!

■京都大学内外の若手研究者・広報担当者・研究支援担当者に提供!



の支援を受けています。

differentiation process.





- 社会的意義・波及効果

EurekAlert!のディレクターBrian Lin氏を講師に迎えた国際広報セミナー

# **ASHBi Research Acceleration Program**

ASHBiリサーチアクセラレーションユニットでは、論文執筆・研究費獲得・広報/アウトリーチ各分 野のスペシャリストが、外国人研究者や若手研究者が研究活動を大きく推進するためのセミナーシ リーズ「ASHBi Research Acceleration Program」を随時実施しています。詳しくはユニットのウェブ ページをご覧ください!



参考文献 1 Dahlstrom, M. F.. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. Proceedings of the National Academy of Sciences, 111(supplement\_4),

13614–13620. https://doi.org/10.1073/pnas.1320645111 本発表を行うに当たり、WPI-ASHBiリサーチアクセラレーションユニットの構成員各氏(小川正教授、Spyros Goulas講師、信田誠氏、井上寛美氏、千綿千恵子氏)および澄 田裕美助教(京都大学医生物学研究所)のご助言を賜りましたことに深謝いたします。当ユニットの活動は文部科学省「世界トップレベル研究拠点プログラム(WPI)」

#### 魅力的な文章と科学イラスト(ポスターP52参照)で 研究成果を効果的にアピール!

Under these new culture conditions, the cynomolgus monkey oogonia were successfully induced to

to those of oocytes *in vivo* (in our body). The researchers also identified differences in gene expression

might lead to the arrest of meiosis in vitro.

differentiate into meiotic oocytes, but their development stopped at the second stage of meiosis. Single-cell transcriptome analysis showed that the transcriptomic dynamics of the oocytes in vitro (in the lab) were similar

between the in vitro and in vivo oocytes, which suggested a bottleneck for in vitro oocyte development that

Furthermore, by performing whole-genome methylome analysis, the authors found that the induced oocytes were involved in the genome-wide demethylation process in vitro, as seen in mouse and human female germ cell development. They also noticed that demethylation behaved differently in paternally and maternally-

derived X chromosomes. These unique methylation dynamics were also found in human oogonia induced in vitro, suggesting that the mechanisms underlying female germ cell development may be the same across

primate species. Thus, this culture system might be useful as a model of the primate germ cell differentiation