



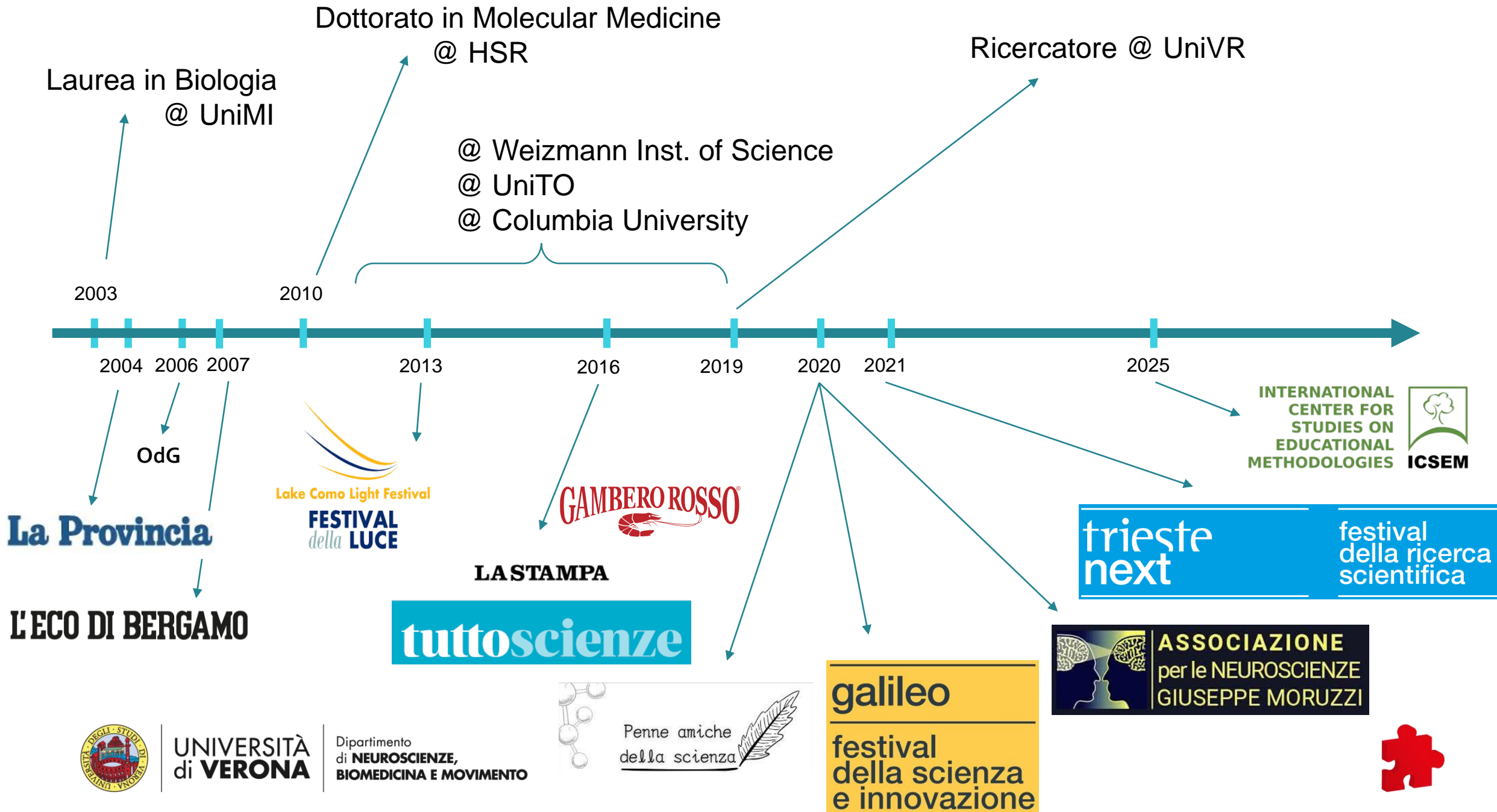
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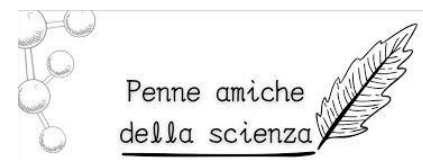
Ricercatore e Giornalista





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galileo festival della scienza e innovazione





Contents lists available at ScienceDirect

Brain Stimulation

journal homepage: <http://www.journals.elsevier.com/brain-stimulation>



Transcranial direct current stimulation of the mouse prefrontal cortex modulates serotonergic neural activity of the dorsal raphe nucleus



paraformaldehyde. Frozen brains were cut into 35-µm sections and incubated in blocking solution for 1h at RT, followed by over-

Systems/Circuits

Higher-Order Sensory Cortex Drives Basolateral Amygdala Activity during the Recall of Remote, but Not Recently Learned Fearful Memories

Marco Cambiaghi,¹ Anna Grosso,¹ Ekaterina Likhtik,² Raffaele Mazziotti,³ Giulia Concina,¹ Annamaria Renna,¹ Tiziana Sacco,¹ Joshua A. Gordon,¹ and Benedetto Sacchetti^{1,5}

¹Rita Levi-Montalcini Department of Neuroscience, University of Turin, I-10125 Turin, Italy, ²Department of Biological Sciences, Hunter College, City University of New York, New York, New York 10065 and Biology Program, Neuroscience Collaborative, Graduate Center, City University of New York, New York, New York 10016, ³Institute of Neuroscience, Consiglio Nazionale delle Ricerche, Pisa 56124, Italy, ⁴Department of Psychiatry, College of Physicians and Surgeons, Columbia University, New York, New York 10032, and ⁵National Institute of Neuroscience-Corso Raffaello 30, I-10125 Turin, Italy

Negative experiences are quickly learned and long remembered. Key unresolved issues in the field of emotional memory include identifying the loci and dynamics of memory storage and retrieval. The present study examined neural activity in the higher-order auditory

EJN European Journal of Neuroscience | **FENS** Federation of European Neuroscience Societies

The official journal of



Brain transcranial direct current stimulation modulates motor excitability in mice

Marco Cambiaghi, Svetla Velikova, Javier J. Gonzalez-Rosa, Marco Cursi, Giancarlo Comi



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Linguaggio diverso

Finalità comuni

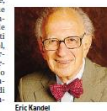
LA SCIENZA CIAIUTERÀ A CAPIRE QUESTI QUADRI

Intervista con il Premio Nobel Eric Kandel. Che cosa succede nel nostro cervello quando guardiamo un'opera d'arte? «Si attivano sia la parte emotiva sia quella della memoria»

MARCO CAMBIAGHI

La scena

Premiato per gli studi sui neuroni della lumaca



Eric Kandel

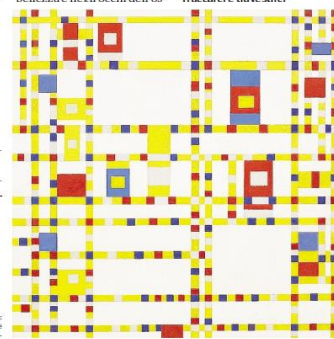
«magliamo di trovare al Museo di New York di fronte al quadro "Broadway Boogie Woogie" (1942-43) di Piet Mondrian, una tela dell'artista olandese che raffigura una serie di linee orizzontali e verticali colorate solo con rosso, giallo e blu. Il dinamismo che emerge da questo quadro è sconcertante, un vero ritmo musicale. Come è possibile? Per rispondere, immaginiamo poi di ascoltare le parole dei due neuroscienziati David Hubel e Torsten Wiesel, Premi Nobel per la loro scoperta sul funzionamento della corteccia visiva, che ci spiegano come i nostri neuroni rispondono a linee semplici e a bordi con un preciso orientamento. A rendere questi giochi di im-

viviamo, ci stupisce nuovo perché la scoperta dell'arte è un nuovo senso di ordine e bellezza. Ma hanno anche delle caratteristiche comuni? Qual è questo terreno comune? Una caratteristica fondamentale che li lega è la curiosità. Inoltre, molti artisti, come gli scienziati, amano sperimentare. Provano e riprovano finché non riescono a trovare quello che stanno cercando, alla ricerca della perfezione. Durante questo processo fanno molte scoperte straordinarie.

Nel libro si parla molto del legame tra neuroscienze e ritrattismo. Si, anche questo deriva dalla similitudine fra scienziati e artisti. Anche gli scienziati spesso adottano un metodo riduzionista, cercano di semplificare le

neuroscienze MARCO CAMBIAGHI COLUMBIA UNIVERSITY - NEW YORK

Il suo ultimo saggio, «A Taste for the Beautiful: the Evolution of Attraction» (Princeton Press) è sorprendente: «La bellezza è negli occhi dell'osservatore». Perché questa - direbbero i fisici - è una proprietà emergente della biologia. Truccarci e travestirci



Piet Mondrian, "Broadway Boogie Woogie" (1942-43)



Jackson Pollock, "Autumn Rhythm (Number 30)", 1950

Intervista TETSURO MATSUZAWA scienziato



SCIMPANZÉ E UOMINI CI DIVIDE LA FANTASIA

Da dove viene? Il chimpanzé è un animale molto curioso. A questo punto, il chimpanzé è un animale molto curioso. A questo punto, il chimpanzé è un animale molto curioso.



Donatella Zorretto



Anna Lembke

Gli studi di uno zoologo Usa sulle leggi delle esperienze estetiche "Un'unica storia, dalla coda del pavone al make-up degli umani"

Drogati di bellezza Vogliamo essere sexy come qualunque animale È una legge universale



"Seductive Girl" di Roy Lichtenstein (1998)

ARTIFICHE la Repubblica

Il sesso ci fa paura: preferiamo un like

Molte ricerche riferiscono una nuova passione per la castità. Tra i giovani e non solo. Colpa dell'insicurezza, degli stili di vita "sul divano", dei social che allontanano la corporeità. Uno studioso riflette sulla "notte di passione che lascia posto a un like"

di Marco Cambiaghi
06 Marzo 2023

Sesso? No grazie, preferisco Internet

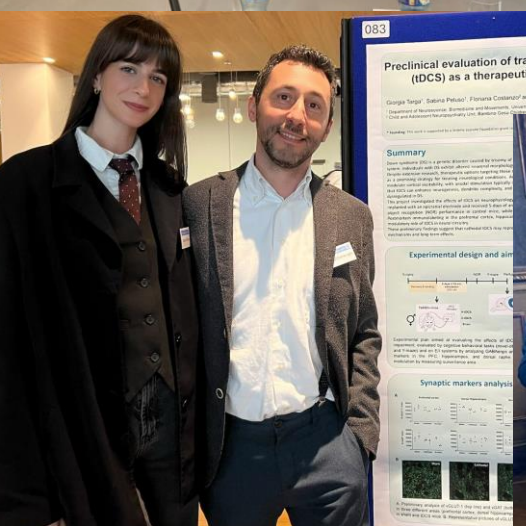
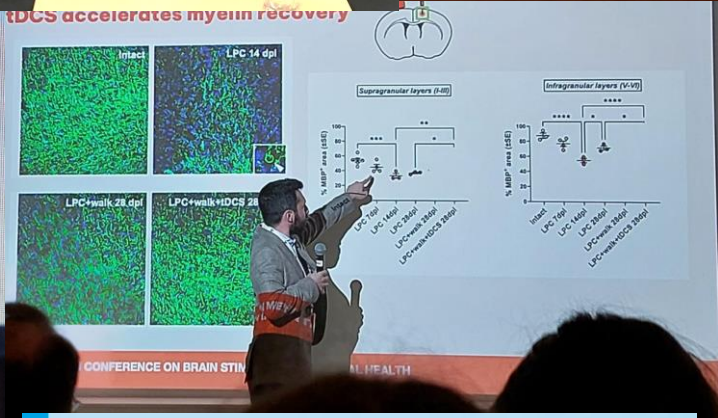
Il nuovo trend, anche tra i giovani, è il calo dell'eros. Perché accade e cosa comporta? Le risposte nel numero di Salute in edicola giovedì 23 febbraio con La Repubblica, La Stampa e i quotidiani del Gruppo Gedi

di Donatella Zorretto
22 Febbraio 2023

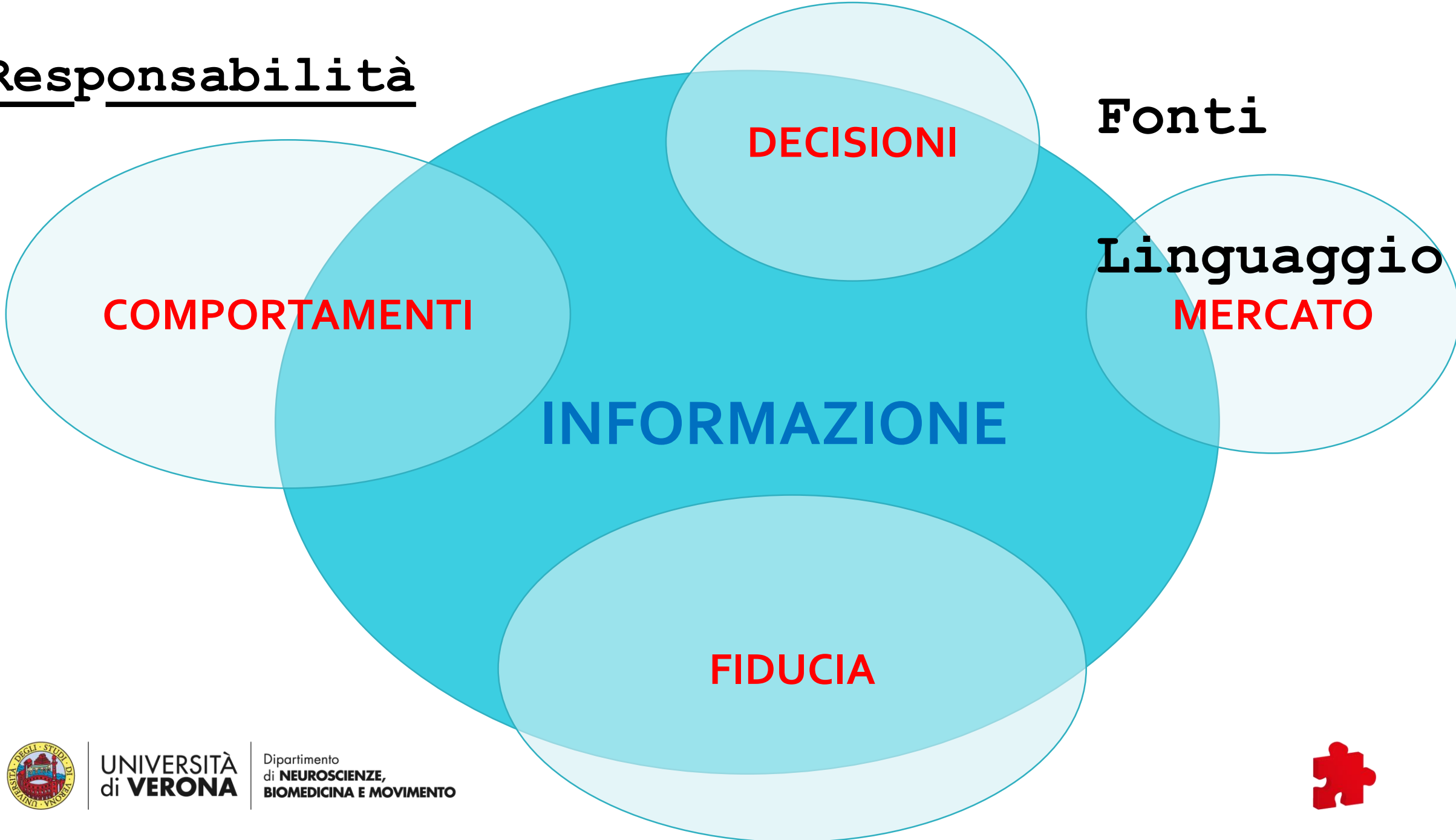
Sicuri che tra piacere e dolore sia sempre meglio il primo? Sì, ma con moderazione

Il livello della dopamina determina lo stato di benessere. Esperimenti sui ratti hanno dimostrato che sostanze o attività come cioccolato, sesso e nicotina hanno una influenza determinante. Anna Lembke, professoressa di psichiatria e scienze comportamentali: "Attenti agli eccessi"

di Marco Cambiaghi



Responsabilità



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Come scegliere, interpretare e non farsi ingannare dalle fonti scientifiche

non tutte le fonti "scientifiche" sono uguali

L'esperto "sbagliato"

- Iper-esposizione di alcuni nomi
- Fuori dal proprio campo
- Conflitti di interesse nascosti

La selva delle riviste

- Non tutte godono della stessa credibilità
- Sono:
 - ✓ filtro di qualità
 - ✓ base del consenso scientifico
- Ma:
 - ✓ non garantiscono verità (errori/ritrattazioni)
 - ✓ bias/conflitti di interesse
 - ✓ linguaggio tecnico

Il problema dei preprint

- Velocità altissima (es. Covid)
- Ma:
 - ✓ non revisionati
 - ✓ facilmente fraintendibili

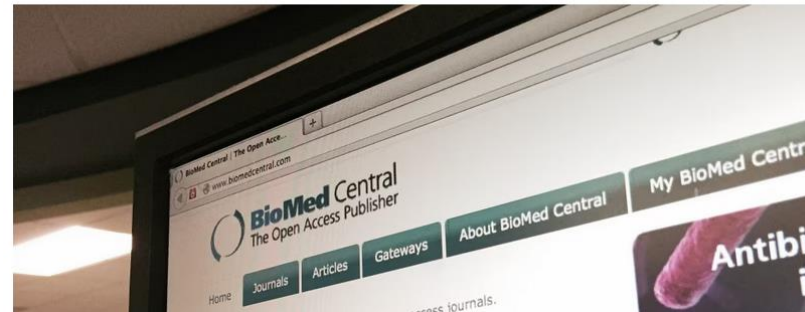
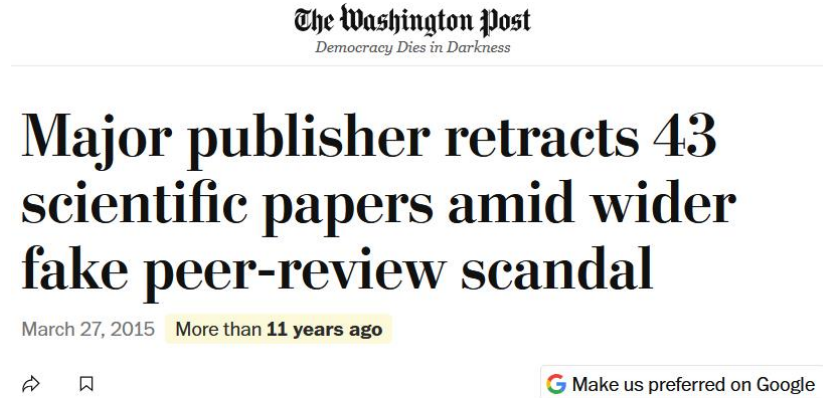




5 cose che un giornalista dovrebbe controllare in un articolo peer reviewed

1. Tipo di studio (clinico? osservazionale?)
2. Dimensione del campione
3. Limiti dichiarati dagli autori
4. Funding e conflitti di interesse
5. È un risultato isolato o confermato?

Attenzione ai "false peer reviewed" papers



Stamp out fake peer review

In the wake of large-scale retraction scandals, we urge scientific publishers to be more proactive in stamping out fake peer-reviewing practices. They should work with editors, authors and research institutes to implement an effective system of precautions and penalties.

Fraudulent peer review can arise when editors rely on authors' recommended reviewers. These names are often genuine but have a false e-mail address that enables the authors to write a favourable review of their own paper.

Springer Nature, also the publisher of *Nature*, this year retracted 107 papers from one of its journals on the basis of fake peer review (see T. Stigbrand *Tumor Biol.* <http://doi.org/b7gg>; 2017). Two years ago, it retracted 64 articles in 10 of its journals



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1 JUNE 2017 | VOL 546 | NATURE | 33





- riviste predatorie
- peer review superficiale
- pubblicano a pagamento

Non basta che una rivista sia “peer reviewed”: conta quale rivista

Peer reviewed non significa vero: significa che qualcuno competente ha già fatto delle domande

Il problema oggi non è accedere alle fonti scientifiche, ma capire quanto fidarsi di ciascuna



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LETTER

RETI

doi:10.1038/nature12969

Bidirectional developmental potential in reprogrammed cells with acquired pluripotency

Haruko Obokata^{1,2,3}, Yoshiki Sasaki⁴, Hitoshi Niwa⁵, Mitsutaka Kadota⁶, Munazah Andrabi⁶, Nozomu Takata⁴, Mikiko Tokoro², Yukari Terashita^{1,2}, Shigenobu Yonemura⁷, Charles A. Vacanti⁸ & Teruhiko Wakayama^{2,8}

We recently discovered an unexpected phenomenon of somatic cell reprogramming into pluripotent cells by exposure to sublethal stimuli, which we call stimulus-triggered acquisition of pluripotency (STAP). This reprogramming does not require nuclear transfer^{1,2} or genetic manipulation¹. Here we report that reprogrammed STAP cells, unlike embryonic stem (ES) cells, can contribute to both embryonic and placental tissues, as seen in a blastocyst injection assay. Mouse STAP cells lose the ability to contribute to the placenta as well as trophoblast marker expression on converting into ES-like stem cells by treatment with adrenocorticotropic hormone (ACTH) and leukaemia inhibitory factor (LIF). In contrast, when cultured with Fgf4, STAP cells give rise to proliferative stem cells with enhanced trophoblastic characteristics. Notably, unlike conventional trophoblast stem cells, the Fgf4-induced stem cells from STAP cells contribute to both embryonic and placental tissues *in vivo* and transform into ES-like cells when cultured with LIF-containing medium. Taken

together, the developmental potential of STAP cells, shown by chimaera formation and *in vitro* cell conversion, indicates that they represent a unique state of pluripotency. We recently discovered an intriguing phenomenon of cellular fate conversion: somatic cells regain pluripotency after experiencing sublethal stimuli such as a low-pH exposure¹. When splenic CD45⁺ lymphocytes are exposed to pH 5.7 for 30 min and subsequently cultured in the presence of LIF, a substantial portion of surviving cells start to express the pluripotent cell marker Oct4 (also called Pou5f1) at day 2. By day 7, pluripotent cell clusters form with a bona fide pluripotency marker profile and acquire the competence for three-germ-layer differentiation as shown by teratoma formation. These STAP cells can also efficiently contribute to chimaeric mice and undergo germline transmission using a blastocyst injection assay¹. Although these characteristics resemble those of ES cells, STAP cells seem to differ from ES cells in their limited capacity for self-renewal (typically, for only a few

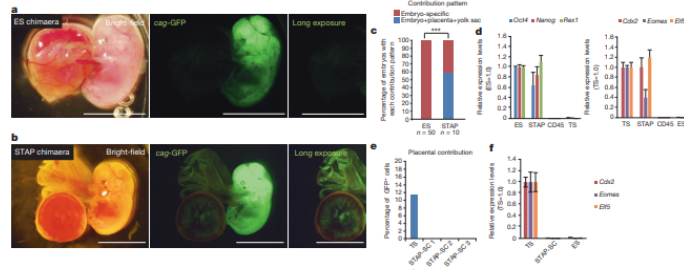


Figure 1 | STAP cells contribute to both embryonic and placental tissues *in vivo*. a, b, E12.5 embryos from blastocysts injected with ES cells (a) and STAP cells (b). Both cells are genetically labelled with GFP driven by a constitutive promoter. Progeny of STAP cells also contributed to placental tissues and fetal membranes (b), whereas ES-cell-derived cells were not found in these tissues (a). Scale bar, 5.0 mm. c, Percentages of fetuses in which injected cells contributed only to the embryonic portions (red) or also to placental and yolk sac tissues (blue). ***P < 0.001 with Fisher's exact test. d, qPCR analysis of FACS-sorted Oct4-GFP-strong STAP cells for pluripotent marker genes (left) and trophoblast marker genes (right). Values are shown as ratio to the expression level in ES cells. Error bars represent s.d. e, Contribution to placental tissues. Unlike parental STAP cells and trophoblast stem (TS) cells, STAP stem cells (STAP-SCA) did not retain the ability for placental contributions. Three independent lines were tested and all showed substantial contributions to the embryonic portions. f, qPCR analysis of trophoblast marker gene expression in STAP stem cells. Error bars represent s.d.

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ARTICLE

REVIEW

doi:10.1038/nature12968

Stimulus-triggered fate conversion of somatic cells into pluripotency

Haruko Obokata^{1,2,3}, Teruhiko Wakayama⁴, Yoshiki Sasaki⁴, Koji Kojima¹, Martin P. Vacanti^{1,5}, Hitoshi Niwa⁶, Masayuki Yamato⁷ & Charles A. Vacanti¹

Here we report a unique cellular reprogramming phenomenon, called stimulus-triggered acquisition of pluripotency (STAP), which requires neither nuclear transfer nor the introduction of transcription factors. In STAP, strong external stimuli such as a transient low-pH stressor reprogrammed mammalian somatic cells, resulting in the generation of pluripotent cells. Through real-time imaging of STAP cells derived from purified lymphocytes, as well as gene rearrangement analysis, we found that committed somatic cells give rise to STAP cells by reprogramming rather than selection. STAP cells showed a substantial decrease in DNA methylation in the regulatory regions of pluripotency marker genes. Blastocyst injection showed that STAP cells efficiently contribute to chimaeric embryos and to offspring via germline transmission. We also demonstrate the derivation of robustly expandable pluripotent cell lines from STAP cells. Thus, our findings indicate that epigenetic fate determination of mammalian cells can be markedly converted in a context-dependent manner by strong environmental cues.

In the canalization view of Waddington's epigenetic landscape, fates of somatic cells are progressively determined as cellular differentiation proceeds, like going downhill. It is generally believed that reversal of differentiated status requires artificial physical or genetic manipulation of nuclear function such as nuclear transfer^{1,2} or the introduction of multiple transcription factors³. Here we investigated the question of whether somatic cells can undergo nuclear reprogramming simply in response to external triggers without direct nuclear manipulation. This type of situation is known to occur in plants—drastic environmental changes can convert mature somatic cells (for example, dissociated carrot cells) into immature blastema cells, from which a whole plant structure, including stalks and roots, develops in the presence of auxins⁴. A challenging question is whether animal somatic cells have a similar potential that emerges under special conditions. Over the past decade, the presence of pluripotent cells (or closely relevant cell types) in adult tissues has been a matter of debate, for which conflicting conclusions have been reported by various groups^{5–14}. However, no study so far has proven that such pluripotent cells can arise from differentiated somatic cells. Haematopoietic cells positive for CD45 (leukocyte common antigen) are typical lineage-committed somatic cells that never express pluripotency-related markers such as Oct4 unless they are reprogrammed^{15,16}. We therefore addressed the question of whether splenic CD45⁺ cells could acquire pluripotency by drastic changes in their external environment such as those caused by simple chemical perturbations.

Low pH triggers fate conversion in somatic cells
CD45⁺ cells were sorted by fluorescence-activated cell sorting (FACS) from the lymphocyte fraction of postnatal spleens (1-week old) of C57BL/6 mice carrying an *Oct4-gfp* transgene¹⁷, and were exposed to various types of strong, transient, physical and chemical stimuli (described below). We examined these cells for activation of the Oct4

(hereafter called LIF+B27 medium). Among the various perturbations, we were particularly interested in low-pH perturbations for two reasons. First, as shown below, low-pH treatment turned out to be most effective for the induction of Oct4. Second, classical experimental embryology has shown that a transient low-pH treatment under 'sublethal' conditions can alter the differentiation status of tissues. Spontaneous neural conversion from salamander animal caps by soaking the tissues in citrate-based acidic medium below pH 6.0 has been demonstrated previously^{18–21}. Without exposure to the stimuli, none of the cells sorted with CD45 expressed Oct4-GFP regardless of the culture period in LIF+B27 medium. In contrast, a 30-min treatment with low-pH medium (25-min incubation followed by 5-min centrifugation; Fig. 1a; the most effective range was pH 5.4–5.8; Extended Data Fig. 1a) caused the emergence of substantial numbers of spherical clusters that expressed Oct4-GFP in day-7 culture (Fig. 1b). Substantial numbers of GFP⁺ cells appeared in all cases performed with neonatal splenic cells (n = 30 experiments). The emergence of Oct4-GFP⁺ cells at the expense of CD45⁺ cells was also observed by flow cytometry (Fig. 1c, top, and Extended Data Fig. 1b, c). We next fractionated CD45⁺ cells into populations positive and negative for CD90 (T cells), CD19 (B cells) and CD34 (haematopoietic progenitors²²), and subjected them to low-pH treatment. Cells of these fractions, including T and B cells, generated Oct4-GFP⁺ cells at an efficacy comparable to unfractionated CD45⁺ cells (25–50% of surviving cells on day 7), except for CD34⁺ haematopoietic progenitors²³, which rarely produced Oct4-GFP⁺ cells (<2%; Extended Data Fig. 1d). Among maintenance media for pluripotent cells²⁴, the appearance of Oct4-GFP⁺ cells was most efficient in LIF+B27 medium, and did not occur in mouse epiblast-derived stem-cell (EpiSC) medium^{25,26} (Extended Data Fig. 1e). The presence or absence of LIF during days 0–2 did not substantially affect the frequency of Oct4-GFP⁺ cell generation on day 7 (Extended Data Fig. 1f), whereas the addition of LIF

The two Nature papers described a method for converting mature mouse cells to an embryonic-like state by subjecting them to stress — e.g., by immersing them in acid — a method known as stimulus-triggered acquisition of pluripotency



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Duplicated and manipulated images were soon found in the papers



NATURE | NEWS

عربي

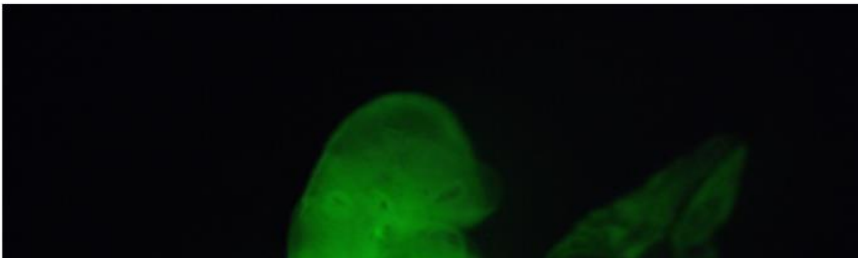
Acid bath offers easy path to stem cells

Just squeezing or bathing cells in acidic conditions can readily reprogram them into an embryonic state.

David Cyranoski

29 January 2014 | Updated: 17 September 2014

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SCIENCE/TECH

Cheap, Affordable Stem Cells Can Be Created By Dipping Blood Cells In Acid; Japanese Scientists Claim The Technique Is A Gamechanger

Jan 29, 2014, 11:26 AM By Susan Scutti



Enter a search term

Breakthrough in stem cell creation using acid bath

Thursday January 30 2014

france 5 Allodocteurs.fr

Page contents

À la une J'ai mal... Maladies Se soigner Sexe Alimentation Bien-être Psycho Grossesse - Enfant

Une méthode révolutionnaire pour produire des cellules souches

Une jeune biologiste japonaise a présenté une méthode inédite, d'une déconcertante simplicité, pour produire des cellules souches à partir de cellules adultes. Le processus, plus rapide et plus efficace que celui découvert en 2006 (et récompensé en 2012 par un prix Nobel) consiste à plonger la cellule adulte... dans un bain d'acide dilué. Si elle était confirmée, cette découverte – décrite ce 30 janvier dans la prestigieuse revue Nature – pourrait révolutionner la biologie et la médecine.

Par Florian Gouthière Rédigé le 29/01/2014, mis à jour le 30/01/2014

amazon.it

BUSINESS DAY

Study Says New Method Could Be a Quicker Source of Stem Cells

By ANDREW POLLACK JAN 29, 2014

A surprising study has found that a simple acid bath might turn cells in the body into stem cells that could one day be used for tissue repair and other medical treatments.

The technique, performed only with cells from mice, might turn out to be a quicker and easier source of multipurpose stem cells than methods now in use.

"If reproducible in humans, this could be a paradigm changer," said Dr. Robert Lanza, chief scientific officer of the biotechnology company

STAP cell pioneer nearly gave up on her research

© January 30, 2014

Tweet Recommend 8+1

By RYOSUKE NONAKA/ Staff Writer

Her colleagues describe her as a tenacious researcher with a never-give-up attitude, but Haruko Obokata, a new star in the science world, says she was not always that way.

"There were many days when I wanted to give up on my research and cried all night long," Obokata, 30, said at a Jan. 28 news conference at the Riken Center for Developmental Biology in Kobe. "But I encouraged myself to hold on just for one more day, and then I realized that five years had passed."

Obokata led a research unit that discovered a new method—called "stimulus-triggered acquisition of pluripotency" (STAP)—to create pluripotent stem cells in mice.

The discovery is being hailed as a major breakthrough in regenerative medicine because STAP cell creation is simpler than the process for induced pluripotent stem (iPS) cells, and gene damage in STAP cells is minimal compared with embryonic stem cells.

The feat came just three years after Obokata earned her Ph.D.

Born in Matsudo, Chiba Prefecture, Obokata was accepted by the Faculty of Science and Engineering at Waseda University in Tokyo in 2002. The selection process placed emphasis on the personality and aspirations of the applicant.

In her interview with university officials, Obokata said she wanted to



Haruko Obokata, a unit leader of the Riken Center for Developmental Biology in Kobe's Chuo Ward, wears a 'kappogi' garment during experiments. (Takuya Isayama)



Dr Haruko Obokata explains how she nearly gave up on the project when fellow researchers didn't believe what she had found



Stem-cell met **SCIENCE** 08/13/2014 12:55 pm ET

Papers describing acid-l finds errors in methodol

David Cyranoski

18 March 2014

PDF Rights & P

In Suicide Note, Stem Cell Scientist Yoshiaki Sasai Blames Media 'Bashing'

...earcher, an Author of a Stem Cell Study, Is Dead

David Cyranoski

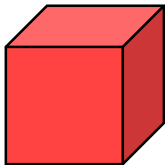


TORU YAMANAKA VIA GETTY IMAGES



Yoshiaki Sasai, right, was a co-author of a highly publicized paper on stem cells. A protégée and lead author, Haruko Obokata, left, came under intense criticism after the paper's errors came to light. Kyodo/Reuters





Strumenti utili e affidabili per il giornalista scientifico

Siti delle riviste (Nature, Science, Lancet...)

Accesso diretto ai paper

➤ Sezioni news e commenti utili

“Fonte primaria + interpretazione”

PubMed

Specializzato in medicina e scienze della vita

➤ Fonti affidabili e organizzate

“Standard per il giornalismo medico-scientifico”

Scopus / Web of Science

Database di letteratura scientifica

➤ Per trovare studi e valutarne il peso (citazioni, riviste)

“Ti dice cosa conta nella ricerca”

Google Scholar

Motore di ricerca rapido e ampio (gratuito)

➤ Utile per una prima esplorazione

“Ti fa trovare tutto (filtri!!!)”

Gli strumenti non sostituiscono il giornalista: amplificano la sua capacità di scegliere e interpretare le fonti



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Attenzioni particolari al linguaggio della divulgazione scientifica

SCIENCE IMMUNOLOGY | RESEARCH ARTICLE

CANCER IMMUNOLOGY

Intratumoral T_{reg} cell ablation elicits NK cell-mediated control of CD8 T cell-resistant tumors

Chenyu Zhang¹, Charles Chien^{2,3}, Eglė Jurgaitytė¹, Koharu Sakiyama¹, Alissa Bockman¹, Yeara Jo¹, Seungwon Lee¹, Stephanie Silveria¹, Elizabeth Andrews¹, Abigail Mende¹, Lily Zhang¹, K. Christopher Garcia⁴, Allon Wagner^{1,2,3}, Michel DuPage^{1*}, David Raulet^{1*}

Cancer cells frequently lose major histocompatibility complex class I (MHC I) to evade CD8 T cell recognition. Natural killer (NK) cells are poised to target MHC I-deficient cancer cells, but MHC I loss alone is often insufficient to unleash fully effective NK cell responses. Here, we show that selective intratumoral (IT) ablation of regulatory T cells (T_{reg} cells) elicited potent antitumor NK cell responses that controlled MHC I-deficient and even MHC I⁺ cancers that expressed NKG2D ligands. T_{reg} cells controlled the activation, maturation, and antitumor cytotoxic activity of NK cells within the tumor microenvironment. Mechanistically, depletion of IT-T_{reg} cells relieved the inhibition of cDC2-dependent induction of IL-2 production by conventional CD4 T cells that was necessary for NK cell activation. Systemically administered antibodies that selectively depleted IT-T_{reg} cells similarly empowered NK cell-dependent tumor control. These findings expand the breadth of T_{reg} cell-mediated cancer immunosuppression to encompass antitumor NK cells and suggest that therapeutic targeting of T_{reg} cells in tumors can control CD8 T cell-resistant cancers.

Il linguaggio accademico è:

- Denso
- Ricco di cautela (potrebbe, suggerisce)
- Spesso poco leggibile

Il rischio per il giornalista:

- Lo copia (...e non si capisce)
- Lo semplifica troppo (...e diventa falso)



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➤ Semplificazione vs distorsione

✓ semplificare = togliere complessità inutile

✗ banalizzare = togliere significato

➤ Scelte linguistiche

“può aumentare il rischio” ≠ “provoca”

“in questo studio” ≠ “è stato dimostrato”

“un campione limitato” ≠ “funziona per tutti”

Studio: “associazione tra X e Y”

Titolo: “X causa Y”

Così nasce disinformazione



Piccoli cambiamenti → grande impatto

Il linguaggio costruisce la percezione della certezza



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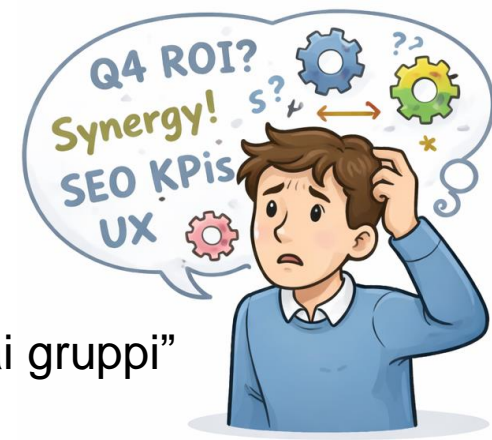
➤ Evitare il gergo (ma senza perdere precisione)

È importante:

- tradurre i termini tecnici
- mantenere il concetto chiave

"randomized controlled trial"
→ "studio in cui i partecipanti sono assegnati casualmente ai gruppi"

Più lungo, ma più chiaro



➤ Usare i termini in modo appropriato

Al fine di:

- non confondere
- evitare interpretazioni errate



→ acido

→ catalizzare

→ denso

→ duro



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Aveva chiesto un passaggio a un conoscente e stava prendendo una pillola per il mal di testa: ha usato una bottiglia che era nel retro dell'auto



Nocera Inferiore, beve soda caustica (pensando fosse acqua) per ingerire una pillola: avvocato grave in Rianimazione

I sanitari, nonostante il tempestivo intervento, sono preoccupati perché la soda caustica è un acido potente: ingerire anche poche gocce può **provocare ustioni agli organi interni**. Nel frattempo, nonostante appaia chiara la dinamica dell'incidente, i carabinieri hanno avviato le indagini per ricostruire la vicenda.

20 NOV 2024

Go Electric, così Ford spinge sull'elettrificazione

a cura della redazione Automotori



ROMA - Catalizzare l'attenzione del grande pubblico sulla transizione elettrica della mobilità. Con questo obiettivo Ford Italia ha lanciato "Go Electric", un'iniziativa che da una parte sottolinea l'impegno del brand verso la mobilità 100% elettrica in





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 [frantoio_la_molazza](#) • Segui

 [frantoio_la_molazza](#) 34 sett
💧 "Questo olio è denso, sarà buono!"
Attenzione: la densità non dice tutto.
Ma dice molto.

La densità dell'olio extravergine dipende da tanti fattori:
👉 temperatura, varietà delle olive, contenuto in acidi grassi, grado di maturazione, lavorazione.

📖 Non è un parametro di qualità assoluta, ma:

- ✔ Un olio troppo fluido può indicare lavorazioni industriali o varietà povere
- ✔ Un olio troppo pastoso può essere ossidato o fuori equilibrio
- ✔ Un olio equilibrato, vellutato e avvolgente... è segno di armonia

🌿 L'olio va anche "sentito" tra le dita. Perché la sensazione tattile completa quella gustativa.

Densità: rapporto fra massa e volume
H₂O → 1 Kg/l
Olio oliva → 0,92 Kg/l

densità vs viscosità



rarefazione



fluidità



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Fontana di Trevi vandalizzata: dopo i bagni dei turisti le incisioni sul marmo

Un ragazzo di 21 anni è stato fermato condotto presso gli uffici della Polizia Locale



Dopo [le risse](#) e i [bagni dei turisti](#), un altro atto vandalico sulla Fontana di Trevi. Il giorno della vigilia di Ferragosto un 21enne romeno ha inciso "Cla", le iniziali del suo nome sul marmo.

La scala di Mohs (1812, Friedrich Mohs) misura la durezza dei minerali basandosi sulla loro capacità di scalfirne altri



fragilità vs durezza

Durezza:

- vetro, 5-6,5
- marmo di Carrara, 3-4
- moneta, 2,5-4
- Unghie, 2-2,5



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