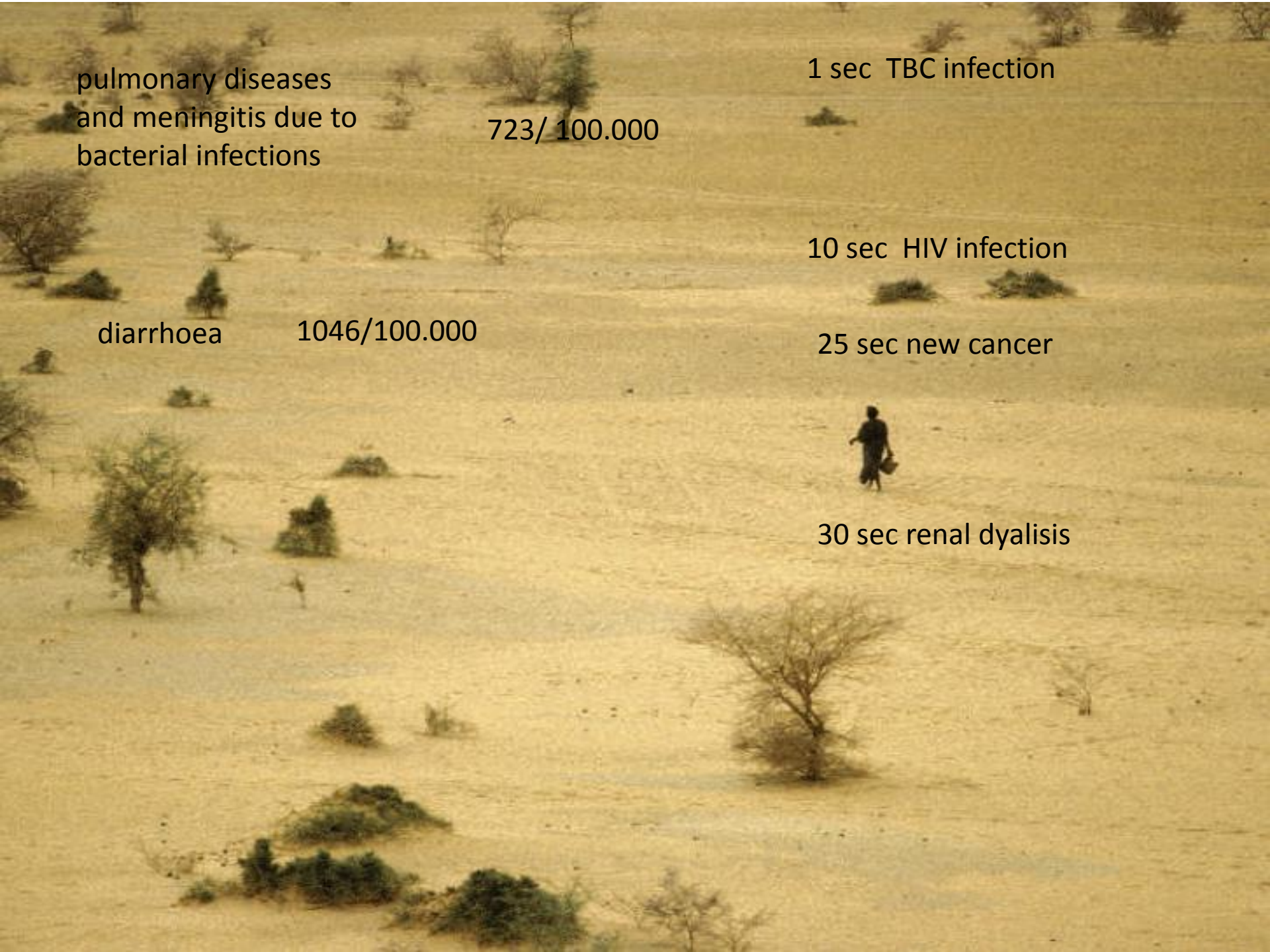
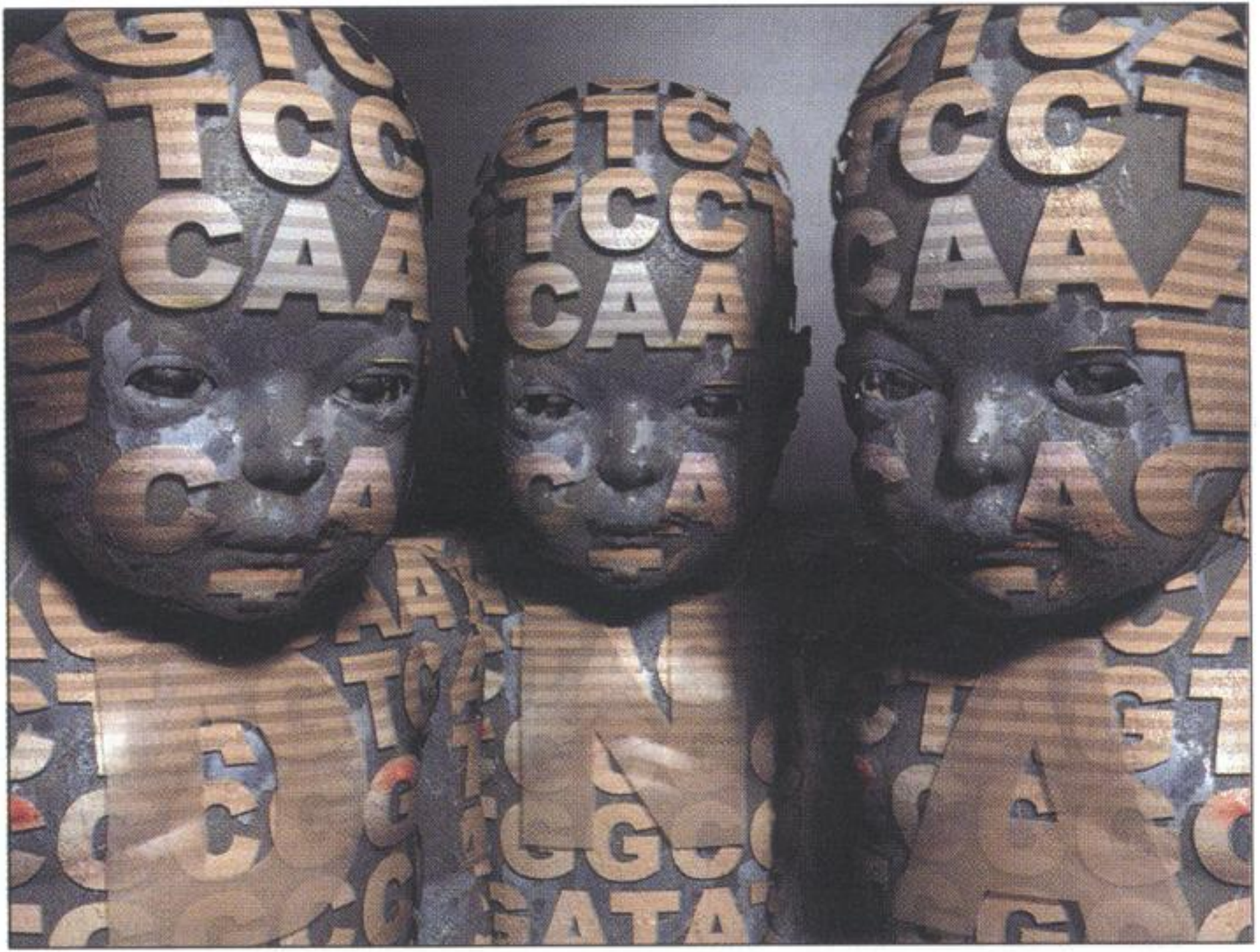

pulmonary diseases
and meningitis due to
bacterial infections
723/ 100.000
1 sec TBC infection
10 sec HIV infection
diarrhoea
1046/100.000
25 sec new cancer
30 sec renal dyalisis


USA
USA

DEFINE

NECESSITY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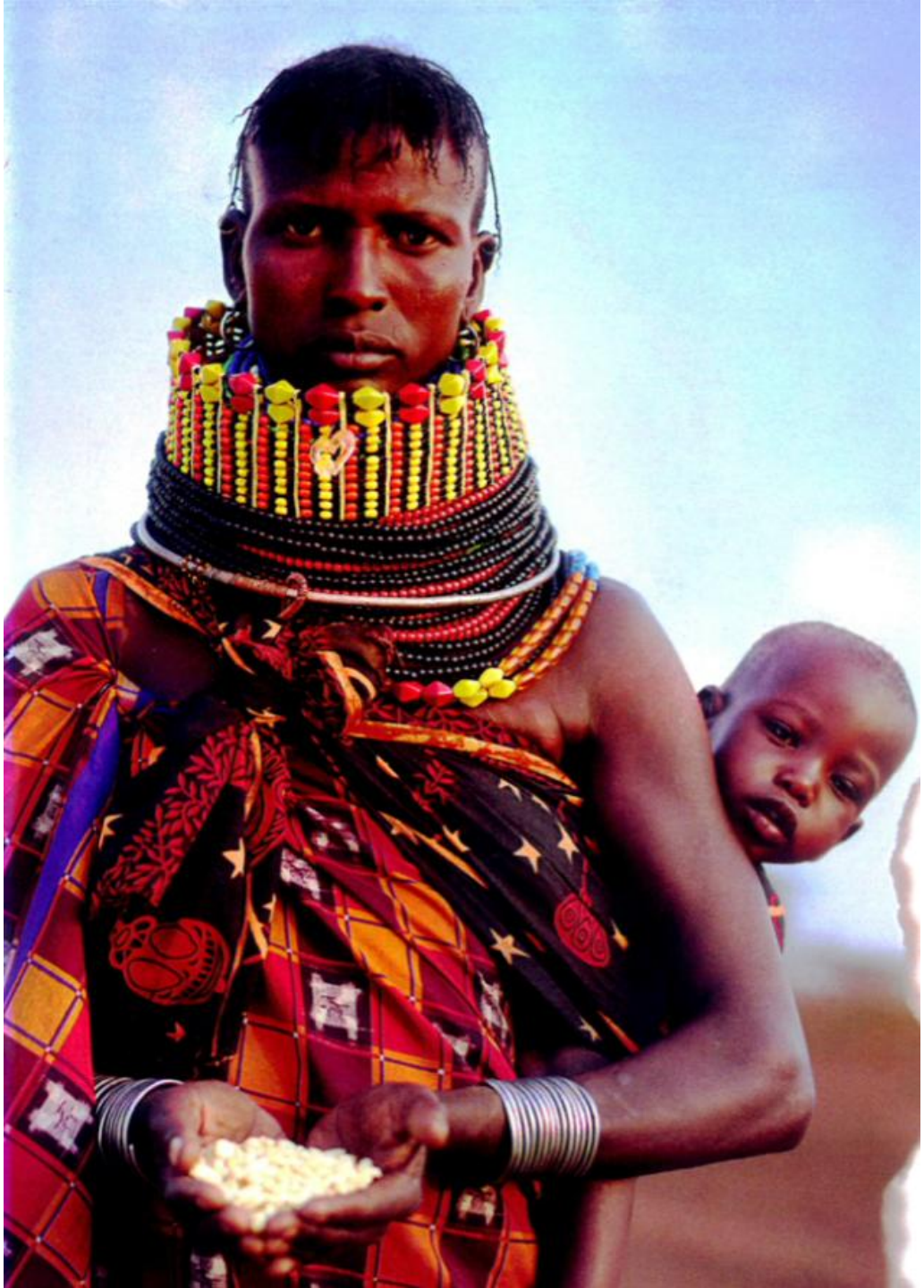
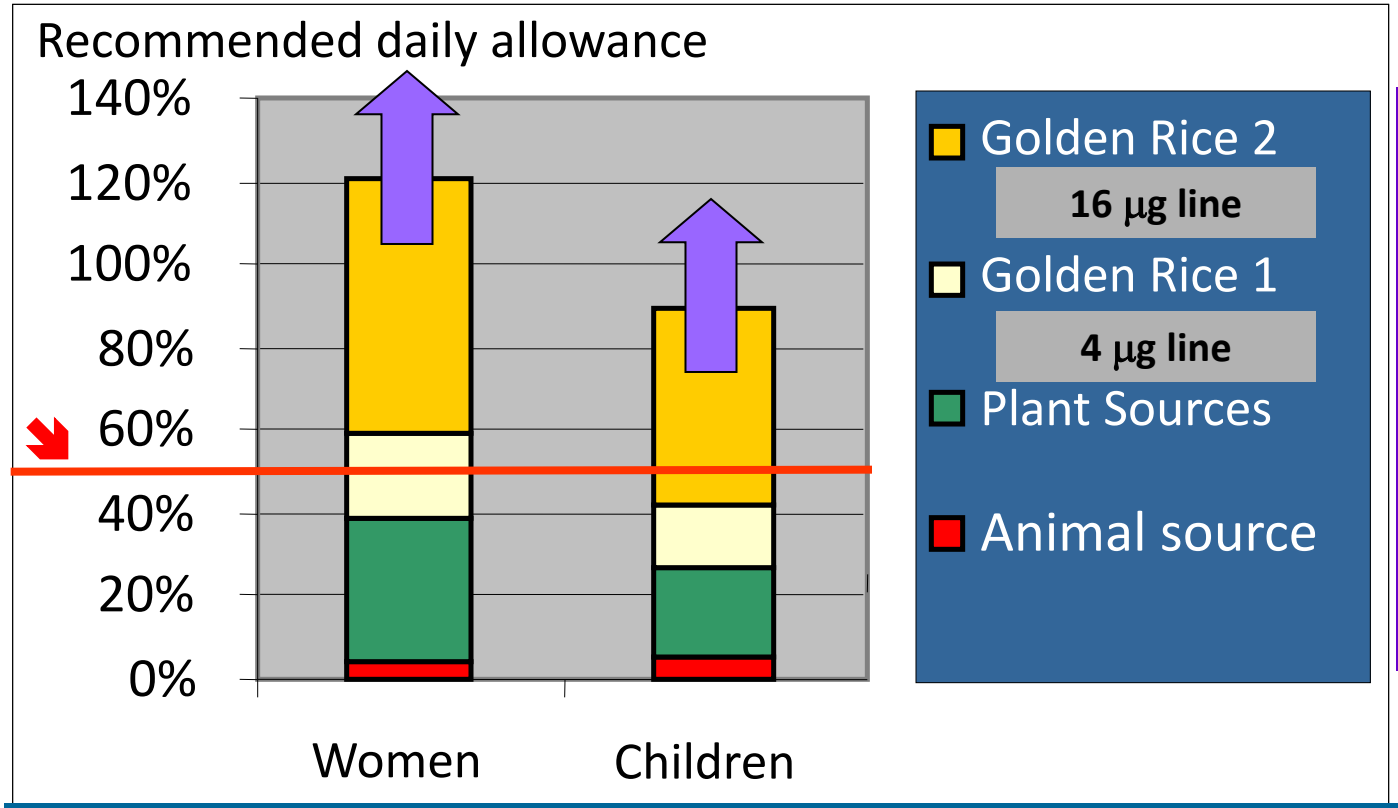
CAA



What is the contribution of Golden Rice to vitamin A intake?

Estimation from International Food Policy Institute:



Calculation based on assumption of a 12:1 conversion rate from provitamin A to vitamin A. Conversion 3:1 instead of 12:1!

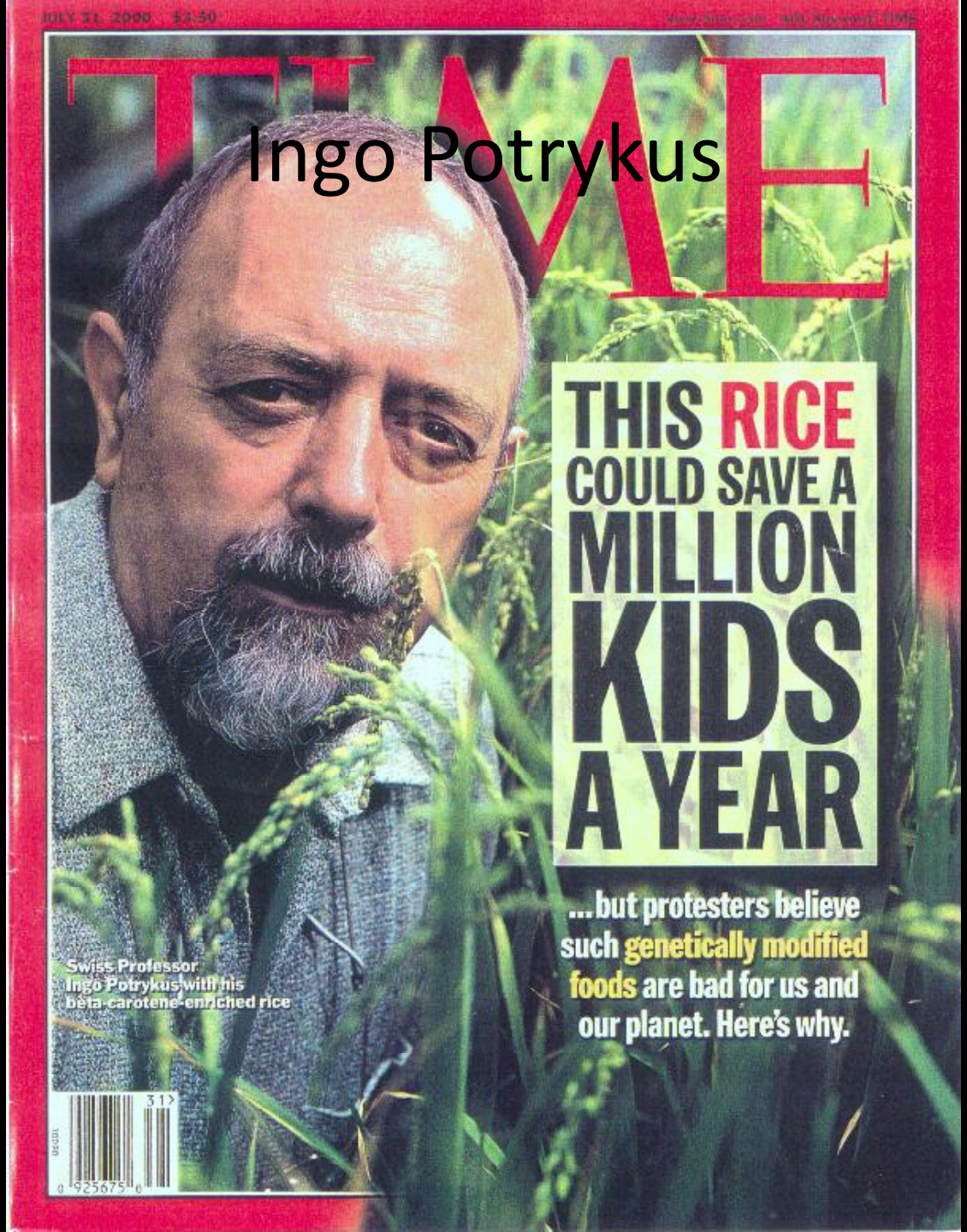
50% RDA suffient to prevent malnutrition

(H Bouis, 2005, unpublished.)

Golden Rice could minimize vitamin A-malnutrition sustained and at no costs, as soon as it would replace ordinary rice.

Golden Rice could save between 5‘500-39‘700 lives or 204‘000-1,382’000 DALYs per year in India alone, but GMO-regulation delays use for at least six years, thus being responsible for the loss of minimum 33‘ 000 lives.

Greenpeace invests ca. 12 million per annum into anti GMO-campaigns, trying every trick to prevent, that Golden Rice can save these lives - and Greenpeace is considered a „altruistic“ organization!


JULY 31, 2000 $2.50
TIME
Ingo Potrykus
THIS RICE COULD SAVE A MILLION KIDS A YEAR
...but protesters believe such genetically modified foods are bad for us and our planet. Here's why.
Swiss Professor Ingo Potrykus with his beta-carotene-enriched rice

Pubblicità

l'OGM-che-non-e-mai-esistito

Falsi d’autore

- “60 persone sono morte mangiando il pomodoro antigelo, perchè erano allergiche al pesce“

Unomattina: Mario Capanna, presidente della “Fondazione per i Diritti Genetici”

- “Un caso classico è la fragola in cui viene immesso un gene di un pesce artico per permettere alla pianta di poter produrre in condizioni climatiche di maggior freddo. Naturalmente viene fuori una fragola che ha poco a che spartire con il sapore di quella naturale”

Report, RAI3

- *Si è prodotta, per esempio, una fragola che è stata resa resistente al gelo inserendo dei geni di pesci che vivevano in zone fredde. Questa fragola ha cominciato a produrre un prodotto secondario che era il glicoletilenico, il comune liquido antigelo dei radiatori. Quindi sono diventate immangiabili.*

Repubblica, supplemento D, Maggio 1999

- *la fragola con il gene di una sogliola del mar Baltico che doveva renderla resistente al freddo, è stata un disastro: il risultato è una fragola che sa di antigelo. Gli esperimenti sono stati subito interrotti, e la fragogliola è finita sullo scaffale dei "cibi Frankenstein"*

La Rivista dei Parchi, Regione Piemonte, Ottobre 2004

- *In campo agricolo, lo scopo degli ogm è modificare una pianta inserendo nel suo DNA uno o più geni che le conferiscano le caratteristiche desiderate. Il caso dell'**introduzione di geni di passera di mare** nelle fragole per aumentarne la conservabilità è un tipico esempio.*

COOP, dossier sulle biotecnologie, 2007

- *Un gene prelevato dal pesce artico inserito in fragole e patate conferisce la resistenza al freddo e permette la coltivazione di questi prodotti in zone caratterizzate da bassissime temperature. E' il caso della Finlandia, che ormai* ***ha interrotto quasi del tutto le importazioni di fragole,*** *consumando quelle coltivate sul proprio territorio, per lunghi periodi dell'anno costantemente coperto da spessi strati di ghiaccio*

Cfp: Carbon foot print

Dall'autunno 2012 su ogni prodotto

già oggi progetti pilota:

Tesco (UK): succo d'arancia, lampadine ed altri 98 prodotti tra cui PATATE: far bollire o in microonde rispetto al forno (3.5 emissione del forno !) e detersivo liquido concentrato rispetto a sapone in polvere

Leclerc (F): scontrino fiscale con Cfp

Water Footprint

Water Footprint NETWORK

Your Water Footprint » Extended Calculator

Your individual water footprint is equal to the water required to produce the goods and services consumed by you. Please take your time and feel free to use the extended water footprint calculator to assess your own unique water footprint. The calculations are based on the water requirements per unit of product as in your country of residence.

Note: put decimals behind a point, not a comma (e.g. write 1.5 and not 1,5).

Select a Country

Food consumption

Cereal products (wheat, rice, maize, etc.)	kg per week
Meat products	kg per week
Dairy products	kg per week
Eggs	number per week
How do you prefer to take your food?	High fat
How is your sugar and sweets consumption?	High
Vegetables	kg per week
Fruits	kg per week
Starchy roots (potatoes, cassava)	kg per week
How many cups of coffee do you take per day?	cup per day
How many cups of tea do you take per day?	cup per day

Domestic water use

Indoors

How many showers do you take each day?	number per day

What It Takes To Make A Quarter-Pound Hamburger

feed **6.7**	Pounds of grains and forage	
water **52.8**	Gallons for drinking water and irrigating feed crops	
land **74.5**	Square feet for grazing and growing feed crops	
fossil fuel energy **1,036**	BTUs for feed production and transport. That's enough to power a typical microwave for 18 minutes.	

Source: J.L. Capper, Journal of Animal Science, July, 2011.

Credit: Producers: Eliza Barclay, Jessica Stoller-Conrad; Designer: Kevin Uhrmacher/NPR

FOOD & AGRICULTURE ORGANIZATION OF THE UN

5.000 l di acqua (giornaliero) per sfamare un essere umano

Litri / Kg per la produzione di : latte 1.020

zucchero 1.782

pasta 1.849

riso 2.497

carne di pollo 4.325

carne di manzo 15.415

SOIA 1.053

Savage River Inc.

Thanks for your interest in meat substitute products!

We value the trust you've put in our hands by giving us your email address. You'll only be contacted with important information—no frivolous "news" about changing the color of our logo…that is if we had a logo.

As you read in the *New York Times* article, we don't yet have a name for our brand. That's where you come in.

We need you to break the tie and move the needle on one of our name finalists.

Give us your top choice for a brand name as soon as you can so that we can get back to making products for you to enjoy!

Thanks again for your support. We'll be back to you soon with more information on our products and where and when you'll be able to buy them.

EMBO *reports*

scien

The future of life

Creating natural, artificial, synthetic and virtual organisms

Ian Pearson

the interglacial age is over

HOLOCENE --------- ANTHROPOCENE

Timeline: The Three Revolutions

1953: Discovery of DNA

1976: Biotech sector emerges with founding of Genentech

mid-2000s: Academic sectors start exploring convergence

2009: NAS releases *A New Biology* report

Molecular Biology Revolution

Genomics Revolution

Convergence Revolution

1950 1960 1970 1980 1990 2000 2010

1969: Salvador Luria, theorist of molecular biology, awarded Nobel Prize

2001: Human Genome Project, Celera publish working draft of human genome

Image and info credits (clockwise from top-left): DNAmazing.com, Gene.com, BioX.stanford.edu, qb3.org, mit.edu/ki, nap.edu, sciencemag.org, nature.com, nlm.nih.gov

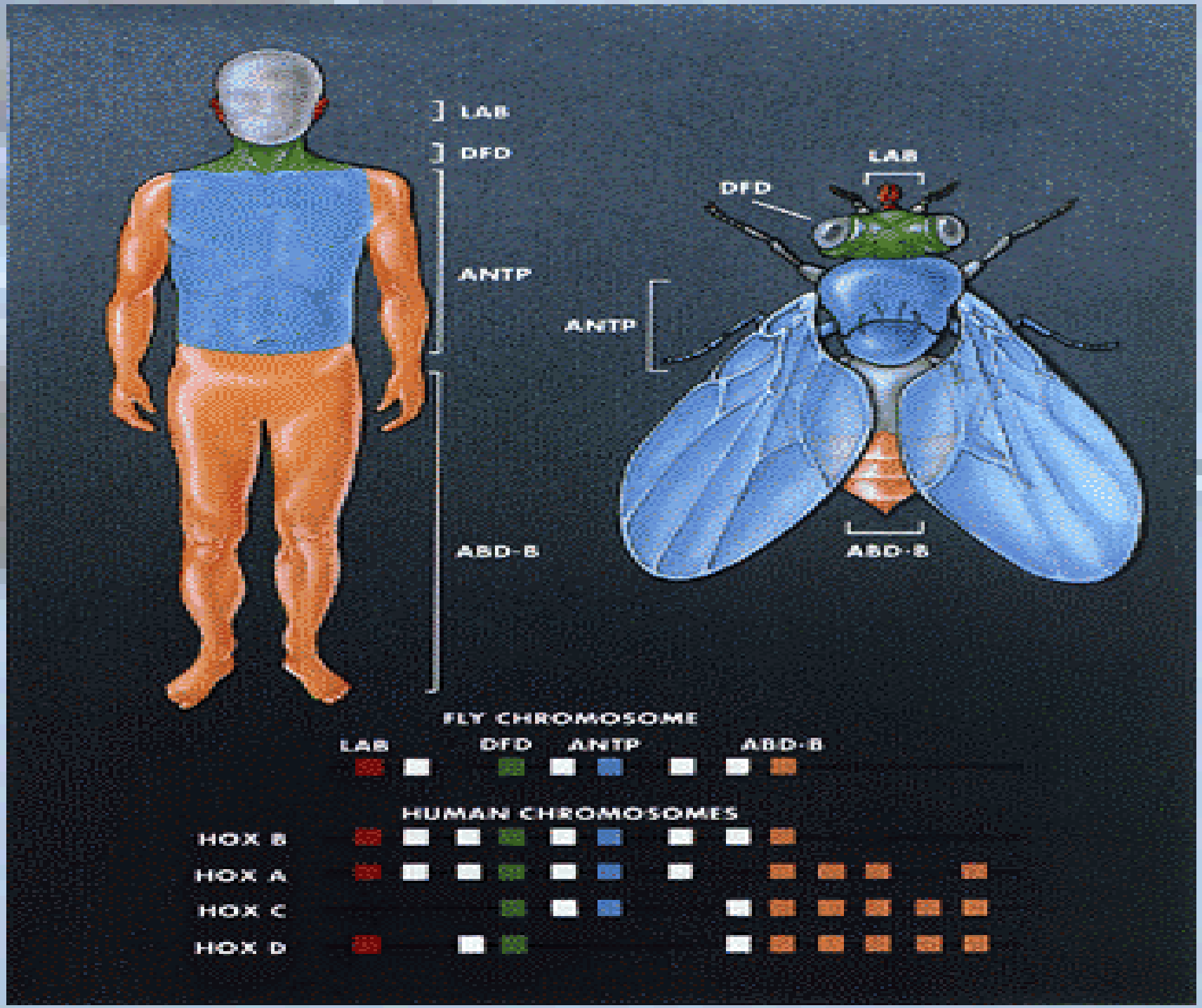
EMBO
reports

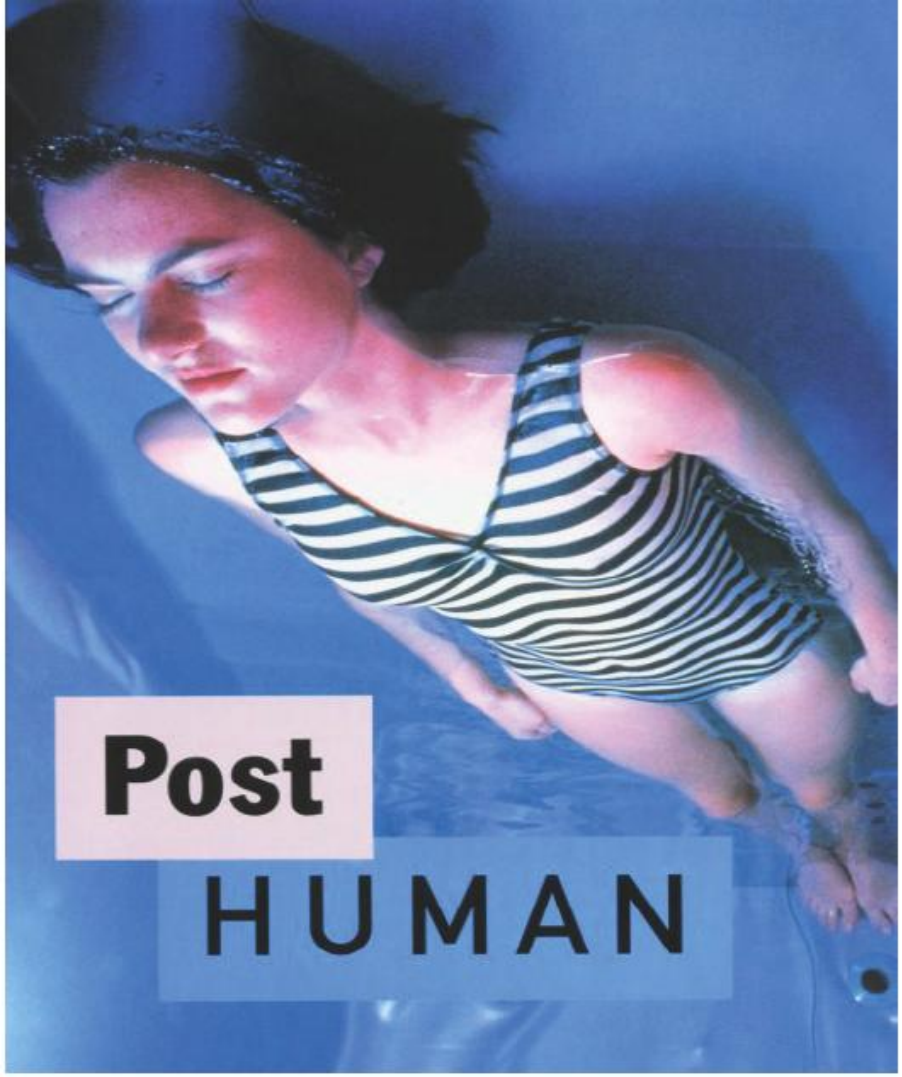
SC

Humanity 2.0?

Enhancement, evolution and the possible futures o

Sarah Chan


LAB
DFD
ANTP
ABD-B
LAB
DFD
ANTP
ABD-B
FLY CHROMOSOME
LAB
DFD
ANTP
ABD-B
HUMAN CHROMOSOMES
HOX B
HOX A
HOX C
HOX D



This book explores the implications of genetic engineering, plastic surgery, mind expansion, and other forms of body alteration, to ask whether our society is developing a new model of the human being. It poses the question of whether our society is creating a new kind of post-human person that replaces previous constructions of the self. Images from the new technological and consumer culture and the new, conceptually oriented figurative art of thirty-six young artists will endeavor to give us a glimpse of the coming post-human world.

Why Choose Cryonics?

The Cryonics Institute is an ambulance ride to the high-tech hospital that we're confident will exist in the future. When the time comes and present medical science has given up on you or your loved ones, we ask for a second opinion from the future.
The choice is yours - Do you take the chance at life or accept mortal fate?

Envision a Brighter Future

Another Chance at Life

Cryonics offers the chance to live a renewed life in the future.

Reunite with Loved Ones

Start anew with your loved ones, children and grandchildren.

Future Cures for Today's Diseases

Future medicine will eliminate debilitating and fatal diseases to significantly improve quality of life.

Organ Preservation

The cryonic technique of vitrification will allow preservation and transplant of vital organs.

Renewed Youth and Health

The potential to stop or even reverse the aging process.

Witness the Future

Don't just imagine the world of the future - personally experience space travel, virtual reality and the other incredible things to come.

Live Longer

The possibility of an unlimited lifespan to live all your dreams.

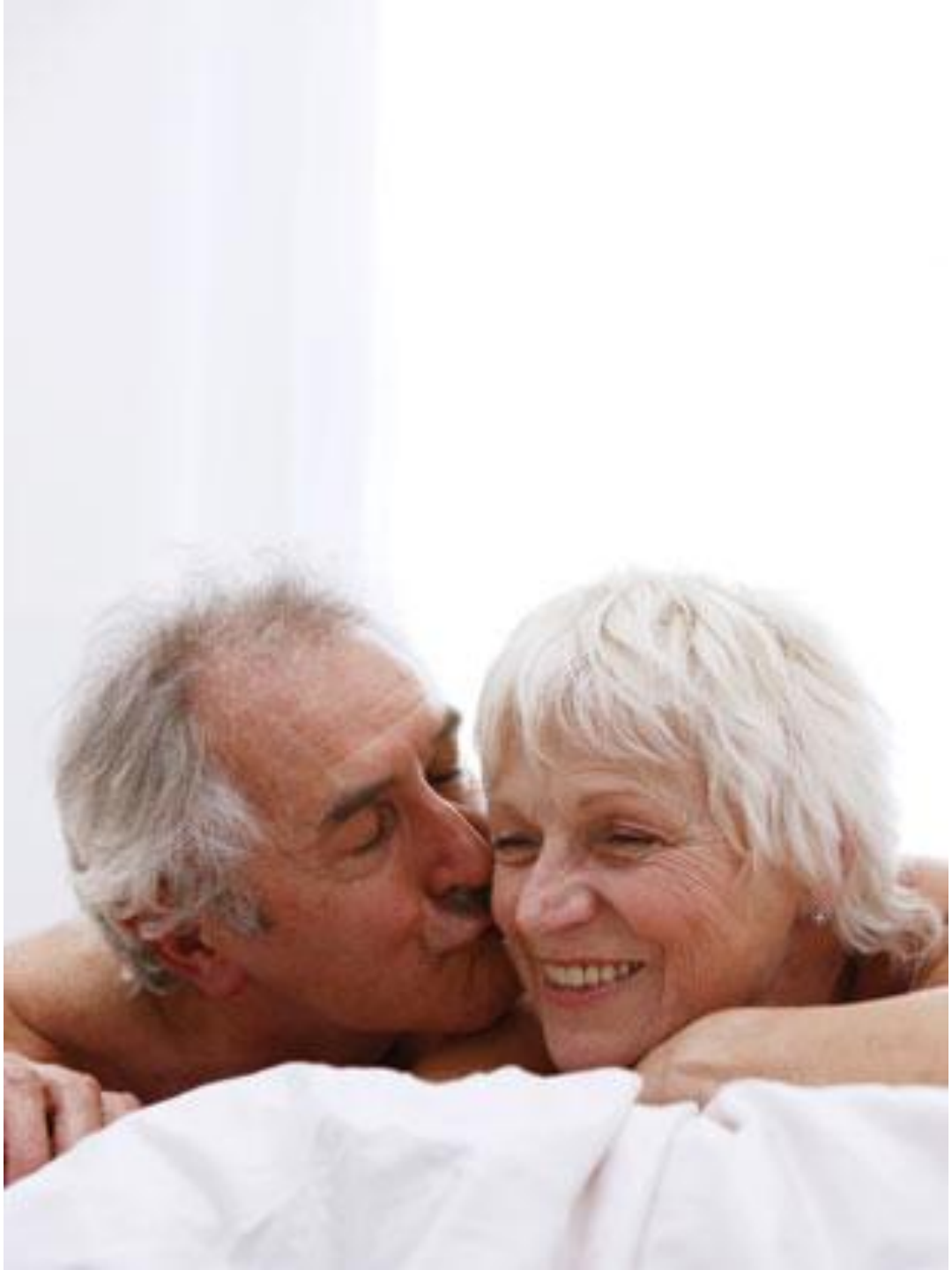
Preserve Endangered Species

Cryonic science has the potential to preserve or revive endangered or extinct species.

EXPLORE THE FUTURE

GET INVOLVED


HUMAN IN SUSPENSION
HUMAN IN SUSPENSION



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Sciencexpress

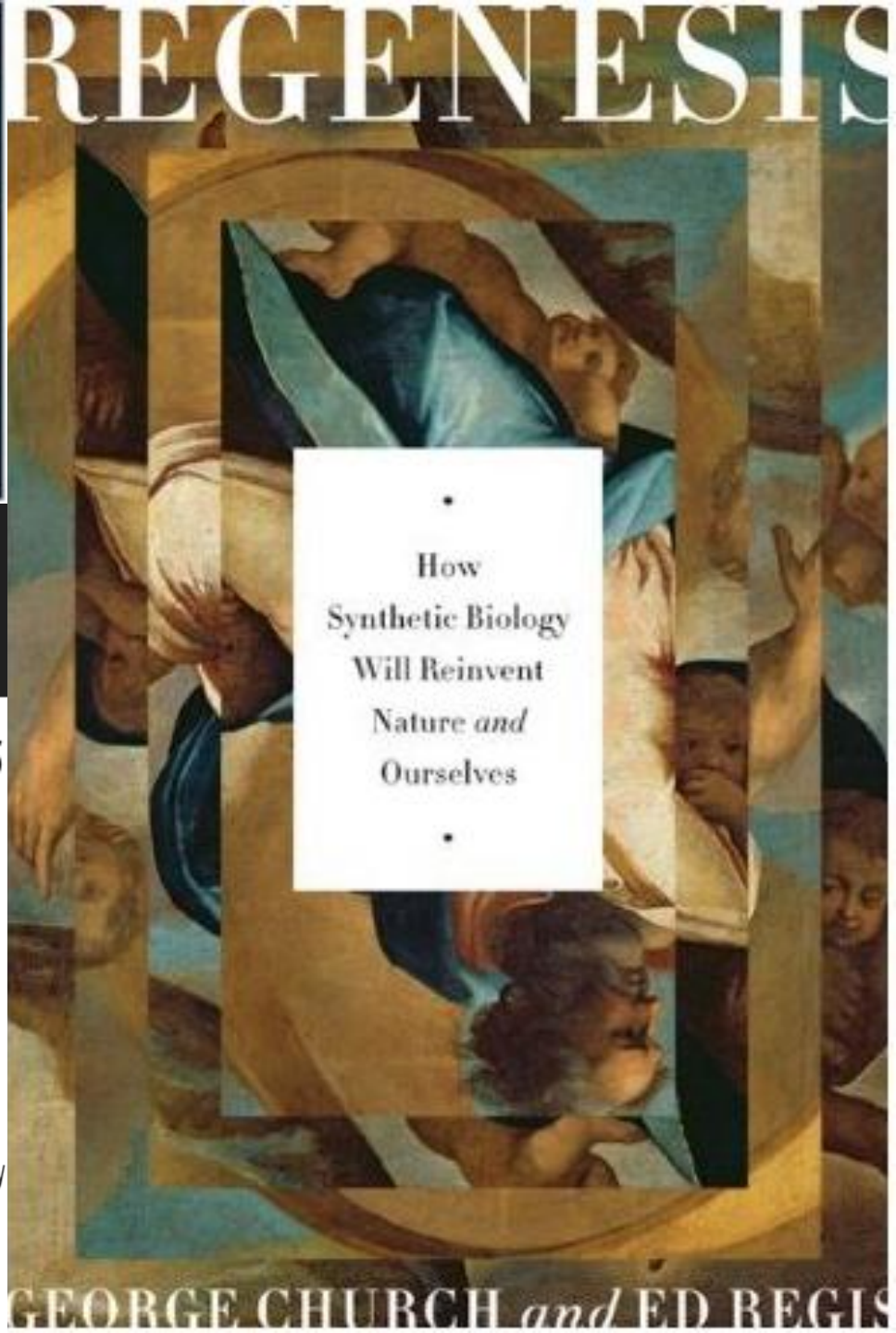
16 August 2012 / Page 1/ 10.1126/science.1226355

Next-Generation Digital Information Storage in DNA

George M. Church,[1,2] Yuan Gao,[3] Sriram Kosuri[1,2]*

[1]Department of Genetics, Harvard Medical School, Boston, MA 02115, USA. [2]Wyss Institute for Biologically Inspired Engineering, Boston, MA 02115, USA. [3]Department of Biomedical Engineering, Johns Hopkins University, Baltimore, MD 21205, USA.

*To whom correspondence should be addressed. E-mail: sri.kosuri@wyss.harvard.edu



Markus Schmidt · Alexander Kelle
Agomoni Ganguli-Mitra · Huib de Vriend
Editors

Synthetic Biology

The technoscience and its societal consequences

Springer

Napoli
18 maggio 1787, Johann Wolfgang von Goethe scriveva a Johann Gottfried Herder :

"Inoltre ho da confidarti che sono prossimo a scoprire il segreto della genesi e dell'organizzazione delle piante e si tratta della cosa più semplice che si possa immaginare. Sotto questo cielo sono possibili osservazioni bellissime. Il punto fondamentale in cui si cela il germe, l'ho scoperto nel più chiaro indubitabile dei modi; tutto il rimanente lo vedo nel suo insieme e soltanto pochi punti sono da definire meglio. La pianta originaria sarà la più straordinaria creazione del mondo, e la natura stessa me la invidierà. Con questo modello e con la relativa chiave si potranno poi inventare piante all'infinito, che debbono essere coerenti tra loro: vale a dire che, anche se non esistono, potrebbero esistere, e non sono ombre o parvenze pittoriche o poetiche, ma hanno un'intima verità e necessità. E la medesima legge potrà applicarsi ad ogni essere vivente."

BIOLOGIA SINTETICA

"ogni sistema biologico può essere considerato come una combinazione di elementi funzionali individuali che possono essere ricombinati in nuove configurazioni capaci di modificarne le precedenti proprietà funzionali o di crearne di nuove"

INOLOGY Lessons for future
he Internet in history of
ımunications **p.892**

DRUGS Opium dominates
show on legal and
illegal highs **p.896**

ECONOMICS Beware,
politicians will exploit
any indicator **p.897**

OBITUARY Allan Sandage,
measured the Universe'
expansion, remembere

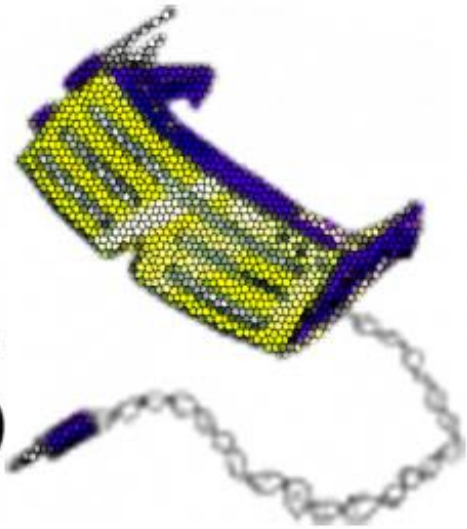
Build life to understand it

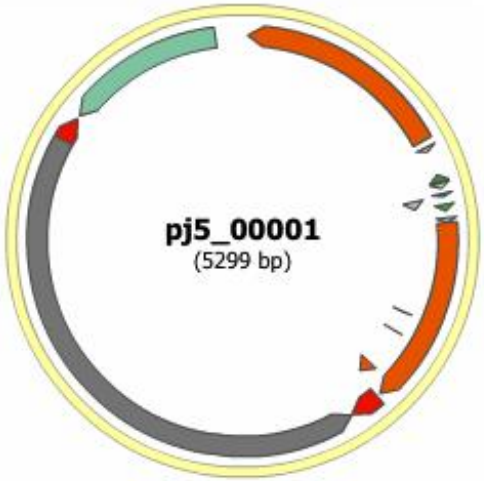
Clotho: It's What You Make of It

www.clothocad.org

CHANNELING STEVE JOBS: Like an iPhone for your DNA constructs, Clotho offers individual apps to manipulate sequences at the touch of a button.CIDAR Lab at Boston University

Main Page





navigation

- Main Page

- j5, DeviceEditor and VectorEditor demo
- j5 manual, paper, and user map
- DeviceEditor manual and paper
- VectorEditor project and paper
- SBOL XML <-> GenBank conversion utility
- Copyright Notice
- License

INSIDE THIS WEEK: A 16-PAGE SPECIAL REPORT ON WATER

The Economist

The battle of Bangkok

America's surprising primaries

Does Facebook know too much?

Labour after Gordon Brown

How to plug an oil well

MAY 22ND–28TH 2010 Economist.com

And man made life

The first artificial organism and its consequences

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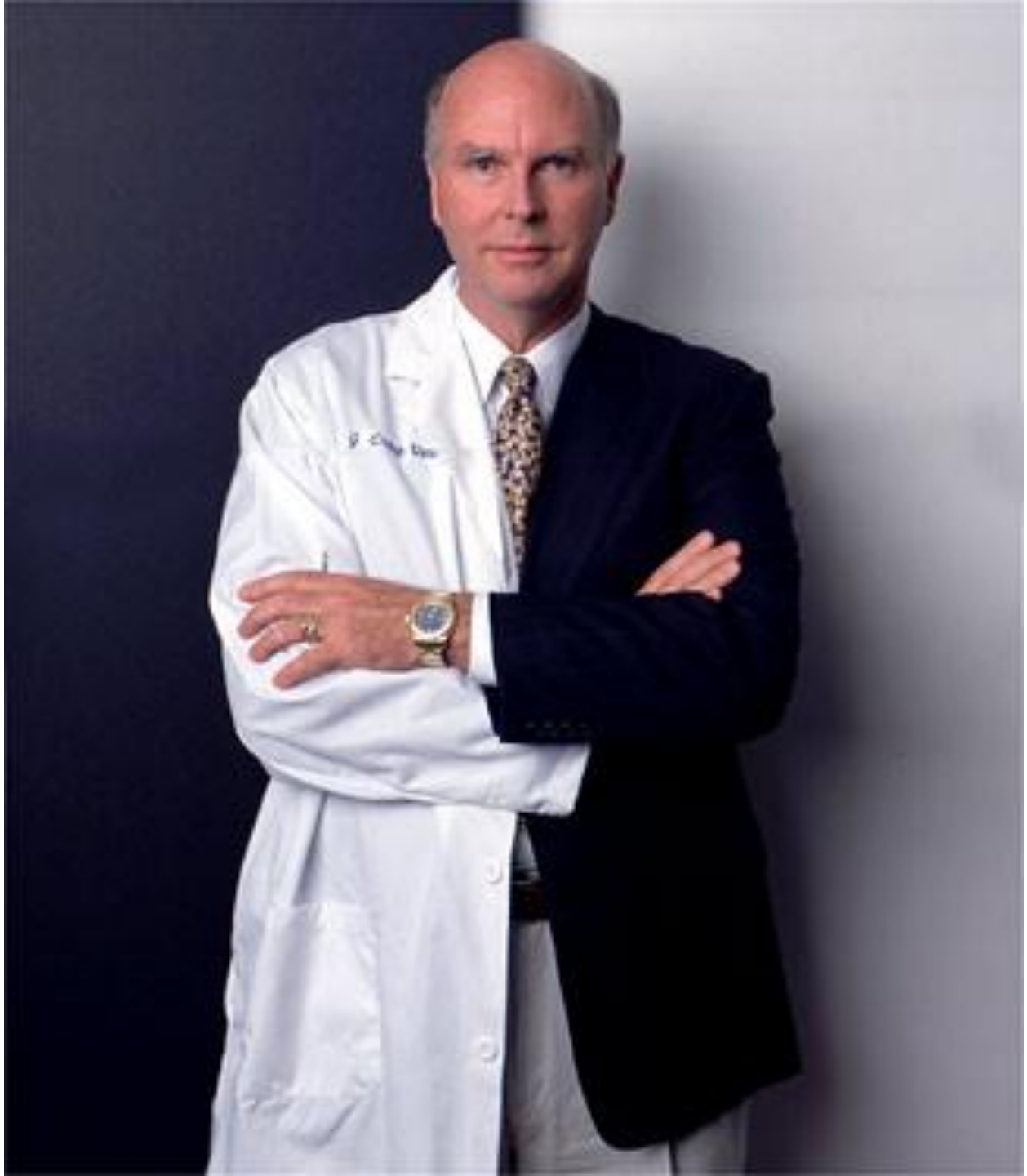
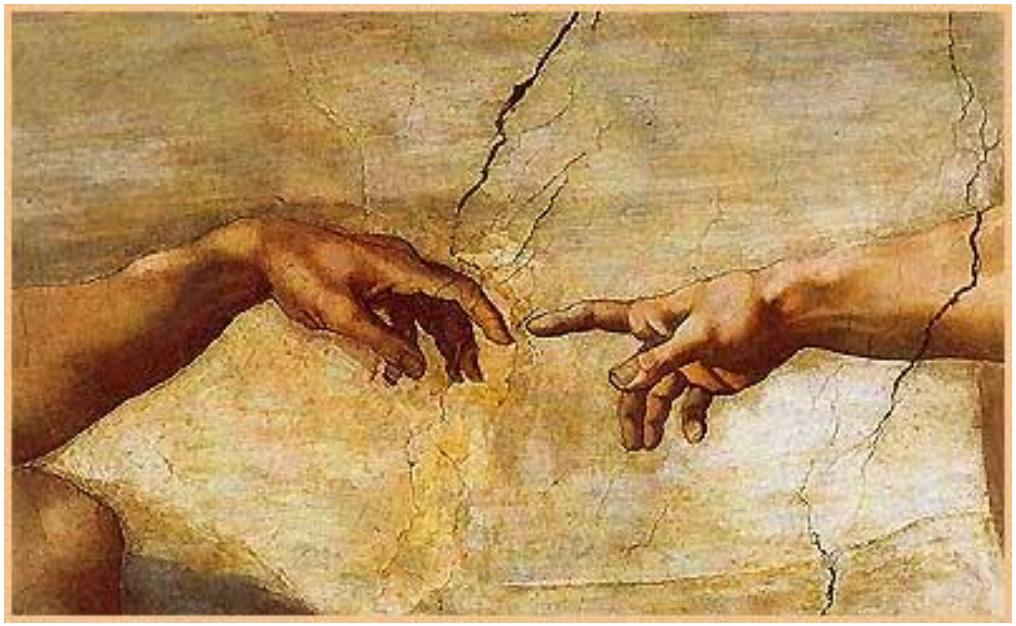
Bahrain Dinar4.00 Czech Rep CZK150 Greece €5.50 Italy €5.50 Lithuania LTL20 Poland PLN24 Serbia RSD660 Switzerland Sfr10
Belgium €5.50 Denmark DKr43 Hungary HUF1,590 Kenya KShs540 Luxembourg €5.50 Portugal cont. €5.50 Slovakia €5.50 Turkey TRY12
Bulgaria BGN13 Estonia EEK89 Iceland ISKr700 Kuwait Dinar 3.20 Malta €5.50 Qatar Rials40 Slovenia €5.50 UAE Dirhams 40

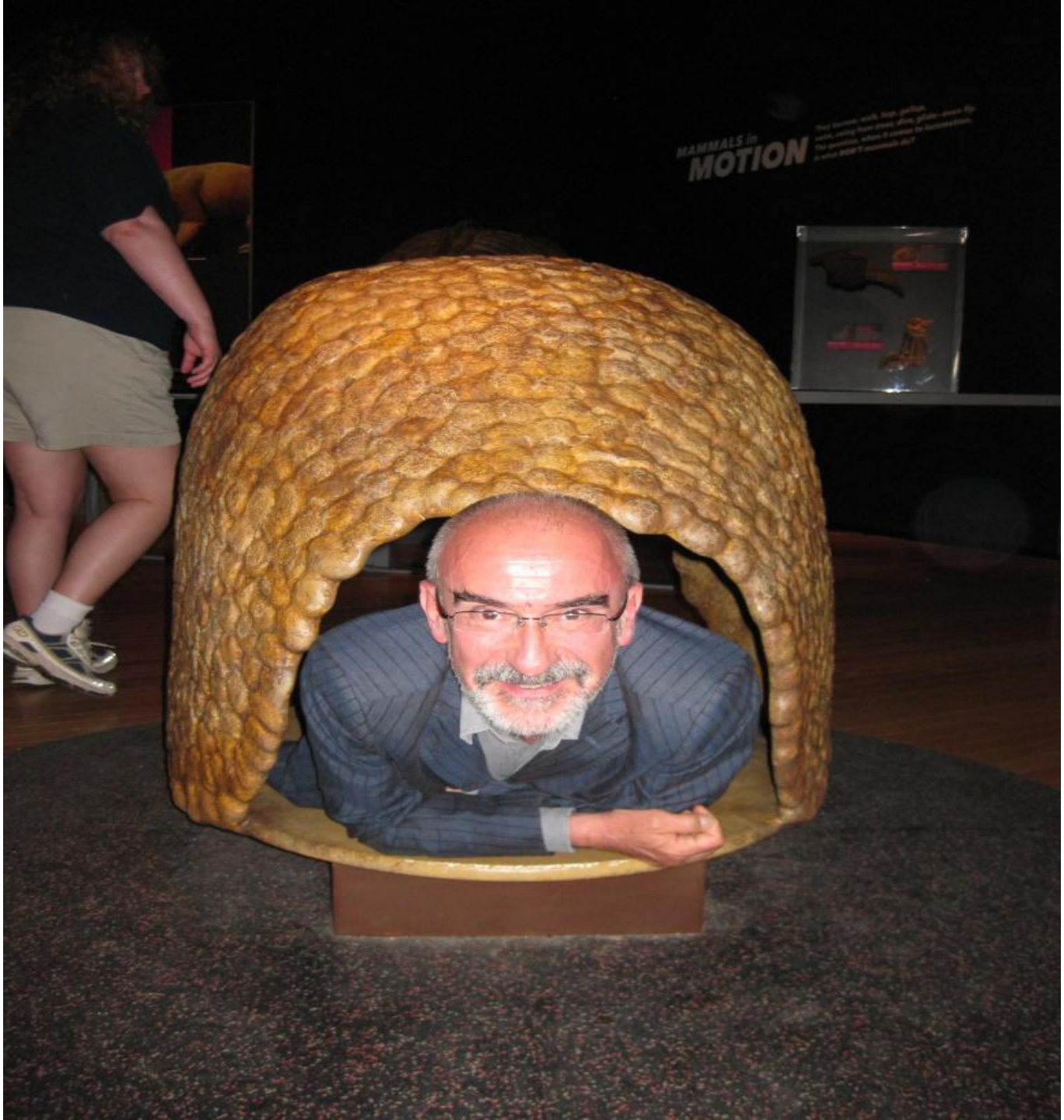
Craig Venter

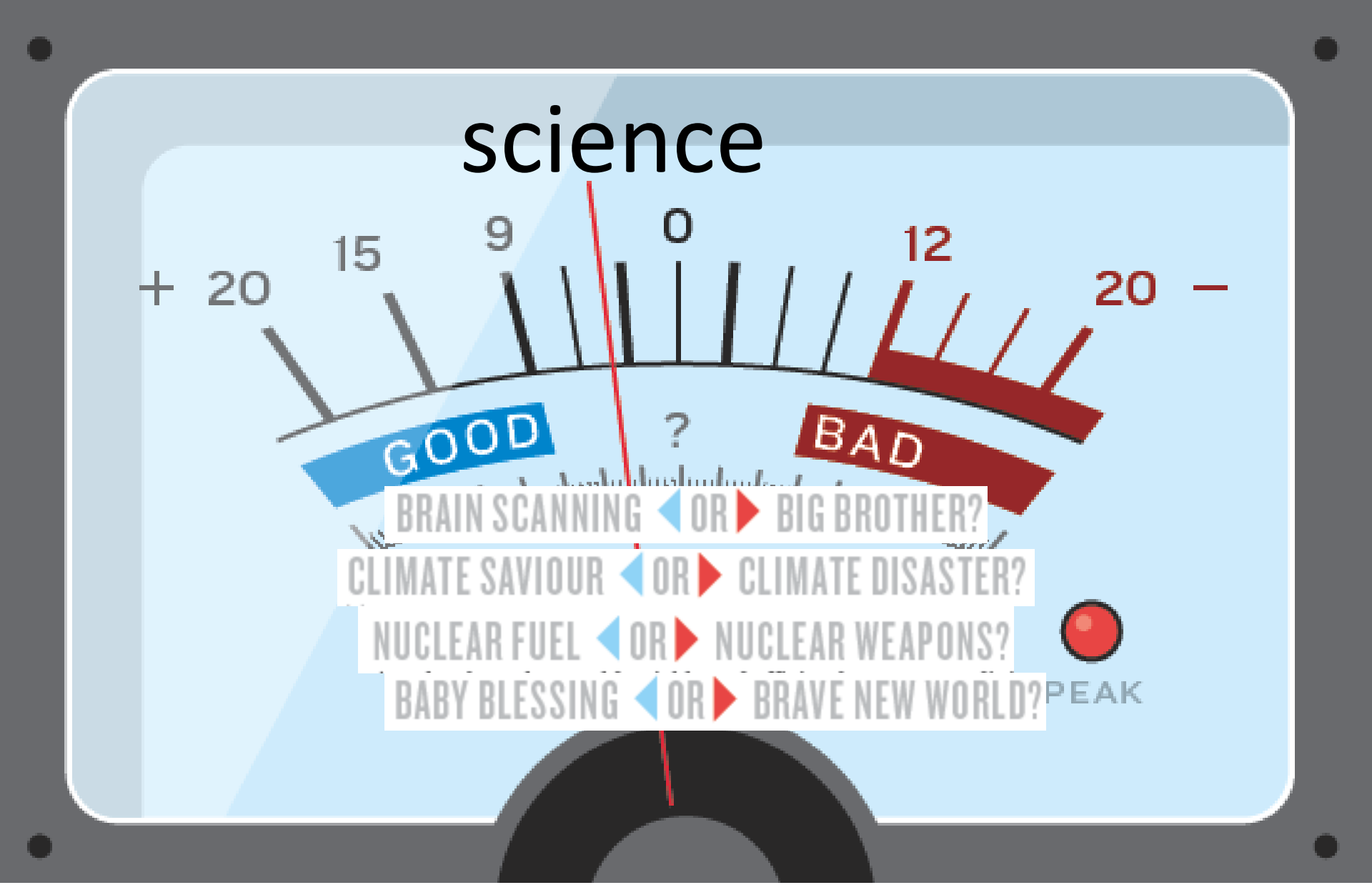


Synthia

objections to synthetic Biology




MAMMALS in
MOTION


science
+ 20
15
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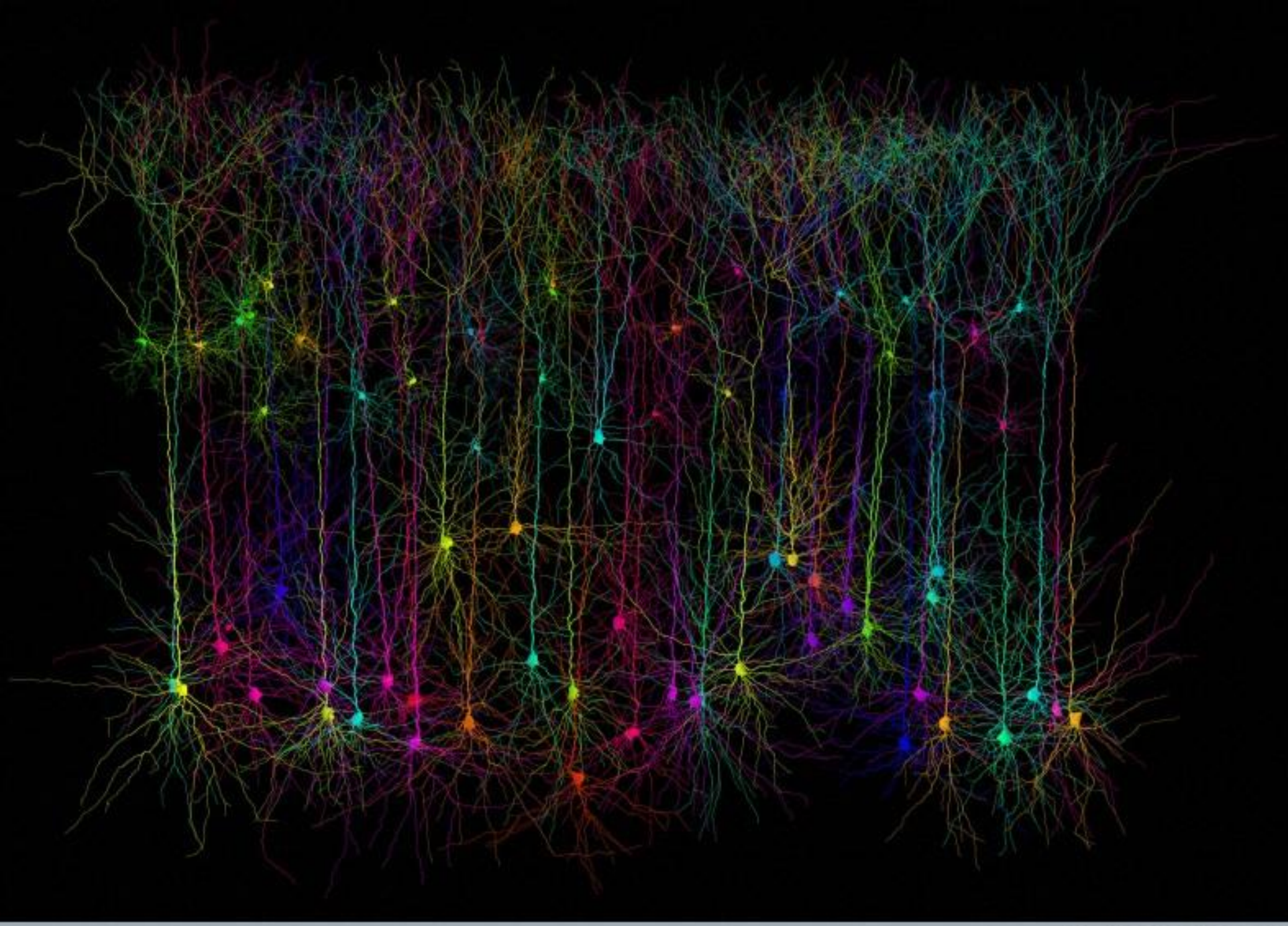
GOOD
?
BAD
BRAIN SCANNING OR BIG BROTHER?
CLIMATE SAVIOUR OR CLIMATE DISASTER?
NUCLEAR FUEL OR NUCLEAR WEAPONS?
BABY BLESSING OR BRAVE NEW WORLD?
PEAK

sinestesia

grafeme ---------- sapore

musica ---------- odore



Some illegal drugs such as heroin have been demonized only since the mid-nineteenth century.

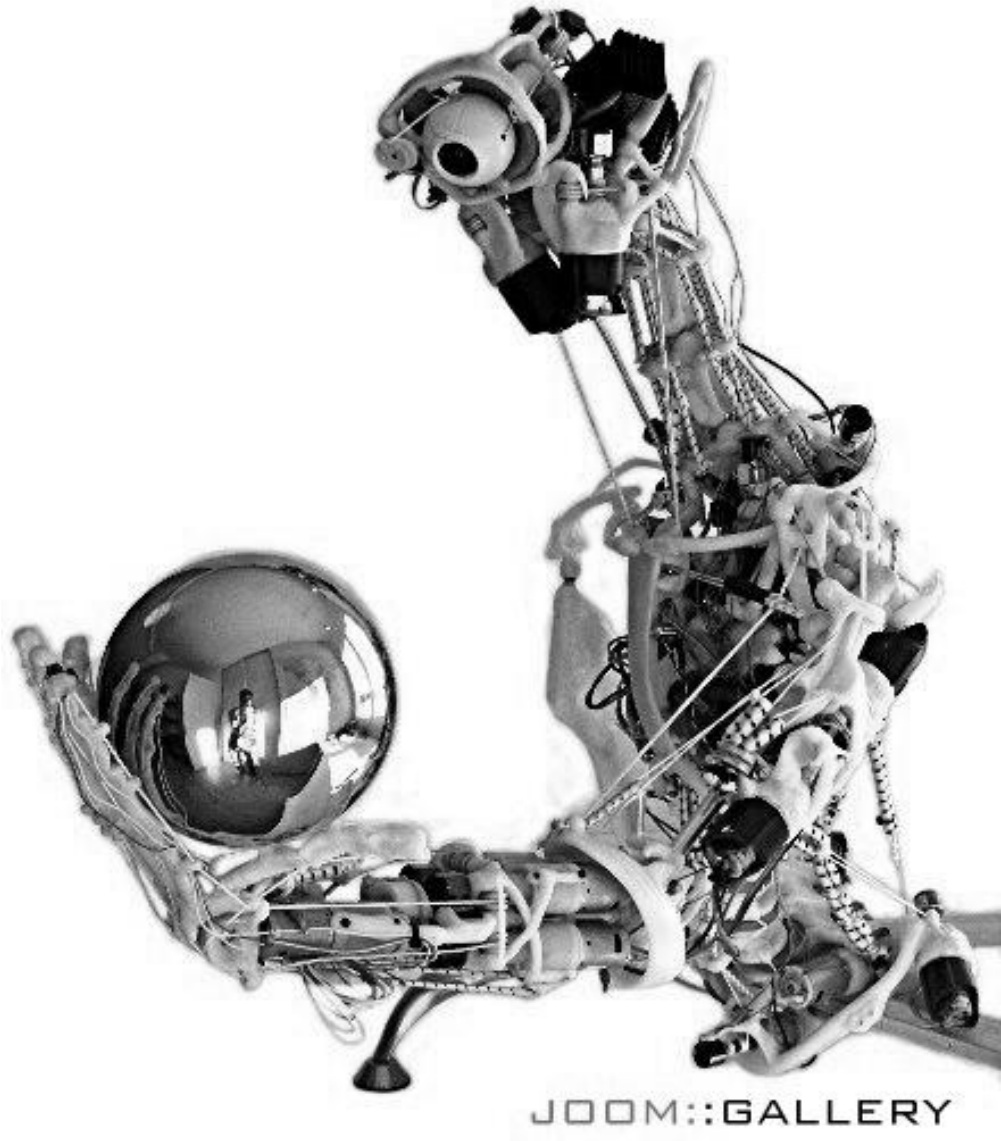
Alain Resnais – l’anno scorso a Marienbad (1961)

solo una possibilità tra le tante

Ciborg

Robot

?



iCub for the lonely

NewScientist

WEEKLY 16 April 2011

Free will

The illusion we can't live without

MIGHTY MORPHING MATERIALS

They shape-shift into anything you want

Special report

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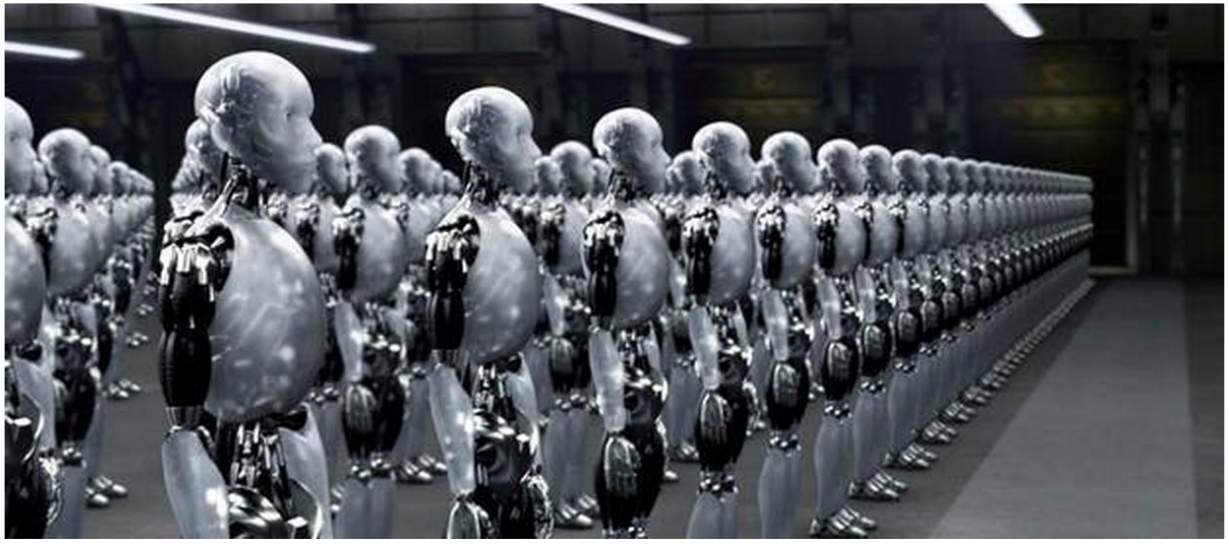
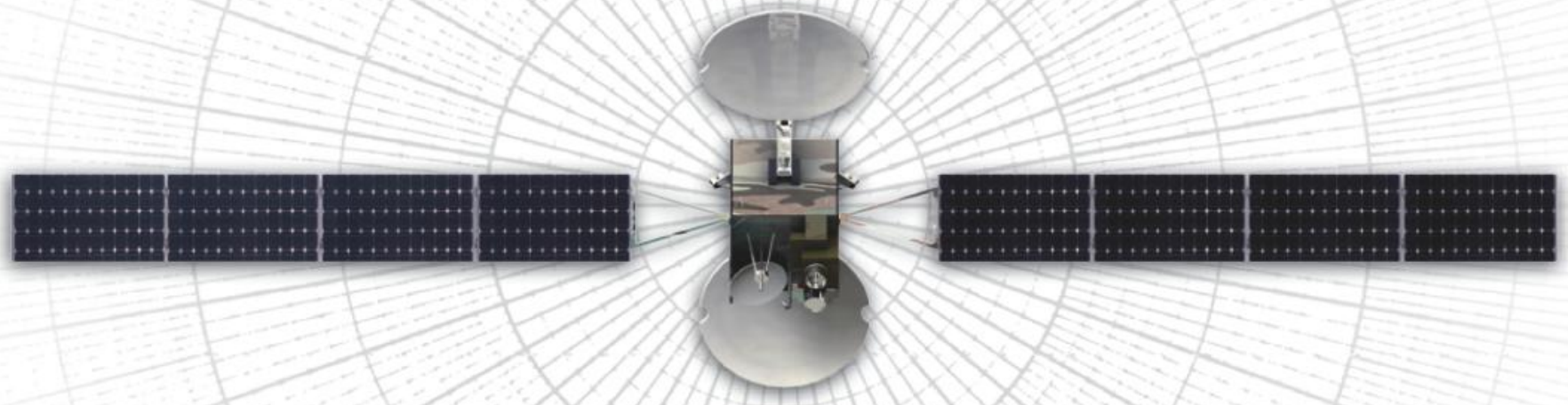
Rise of the machines? Robots will be smarter than us all by 2029, warns Google futurologist



Ray Kurzweil predicts computers will be able to flirt, learn from experience and even make jokes


12:34 PM
3
NTWK
BlackBerry
Wi Fi



SHARED INTELLIGENCE

The military has a vast array of scientifically valuable data — some more accessible than you think.

"WITH THE PROPER JUSTIFICATION, I COULD ASK FOR ALMOST ANYTHING."

THE NEW BIG DOG

backpack

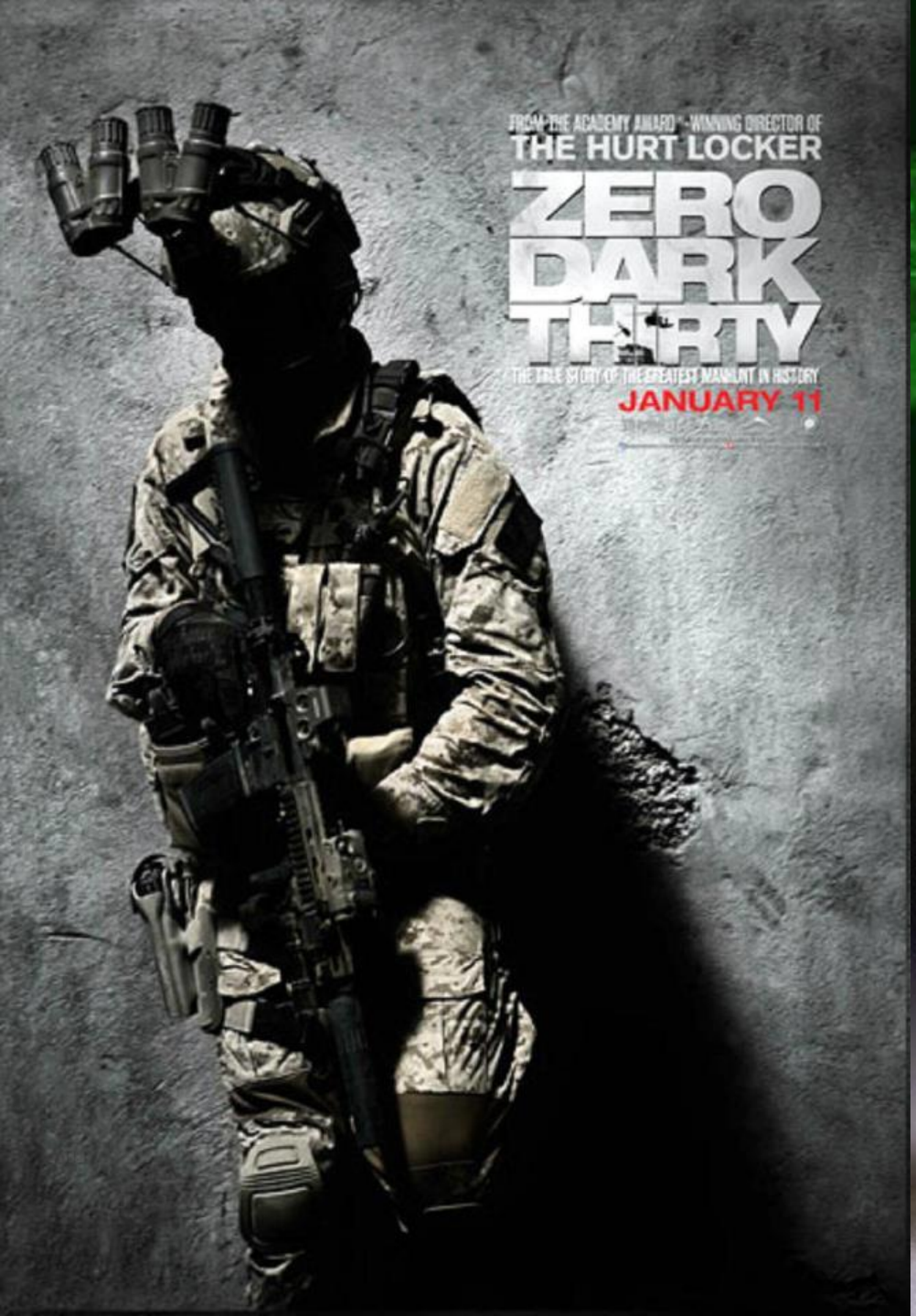
IGR information gathering robot

TALON

MQ-1 predator

An RQ-4 Global Hawk unmanned aerial vehicle before a mission in southwest Asia in November 2010.

A world of killer apps


FROM THE ACADEMY AWARD®-WINNING DIRECTOR OF
THE HURT LOCKER
ZERO DARK THIRTY
THE TRUE STORY OF THE GREATEST MANHUNT IN HISTORY
JANUARY 11


mibEC
COMMUNICATING
WITH
THE FUTURE

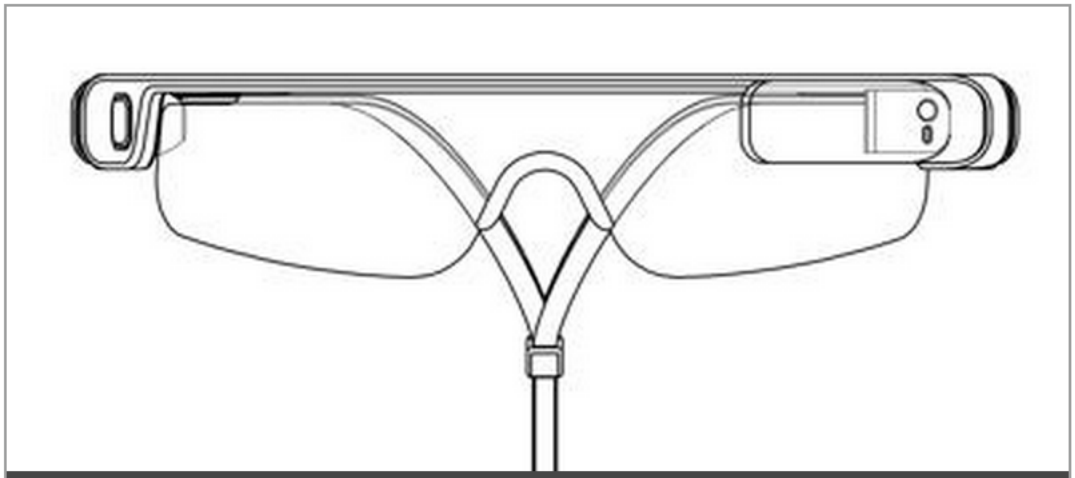
Corriere Sera 28 gennaio 2014

«Glass», a settembre arrivano quelli Galaxy

Samsung si lancia nella mischia delle tecnologie indossabili: «Design accattivante, ma non puntiamo a guadagni immediati»

Samsung ★ 6

UN ALTRO ARGOMENTO



La versione dei GalaxyGlass tratta dalla richiesta di brevetto depositato lo scorso ottobre

Non solo Galaxy S5 e Galaxy Gear 2: nel cantiere di Samsung si

NOTIZIE CORRELATE

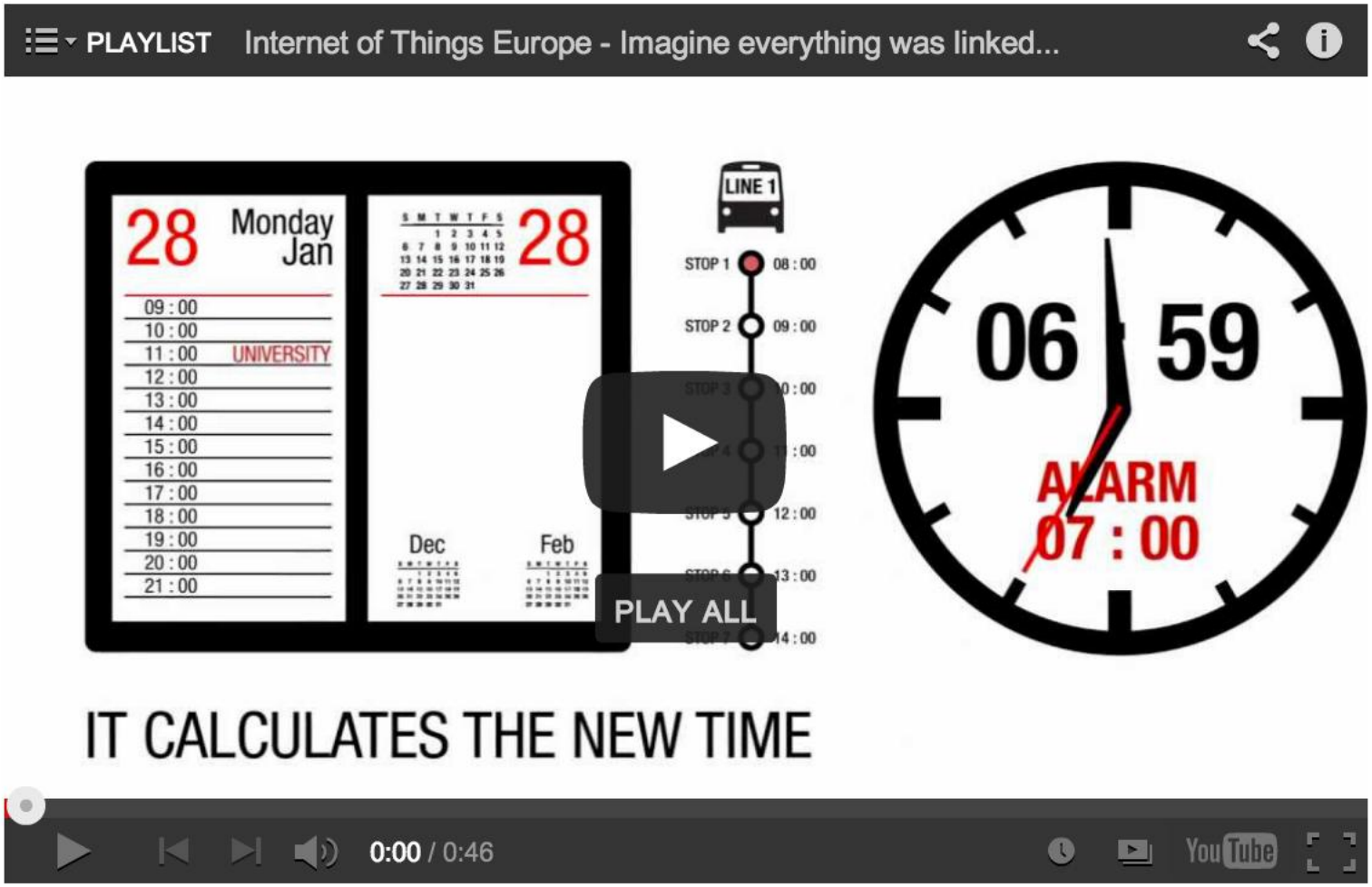
- GalaxyS5 in primavera e iPhone6 in estate (09/01/2014)

DIGITAL AGENDA FOR EUROPE

A Europe 2020 Initiative

The Internet of Things

Internet of Things (IoT) is a technology and a market development based on the inter-connection of everyday objects among themselves and applications. IoT will enable an ecosystem of smart applications and services, which will improve and simplify EU citizens' lives.



http://ec.europa.eu/digital-agenda/en/internet-things

FOREIGN AFFAIRS
Published by the Council on Foreign Relations

March/April 2014
ESSAY

As Objects Go Online

The Promise (and Pitfalls) of the Internet of Things

Neil Gershenfeld and JP Vasseur
NEIL GERSHENFELD is a Professor at the Massachusetts Institute of Technology and directs MIT's Center for Bits and Atoms. JP VASSEUR is a Cisco Fellow and Chief Architect of the Internet of Things at Cisco Systems.

Since 1969, when the first bit of data was transmitted over what would come to be known as the Internet, that global network has evolved from linking mainframe computers to connecting personal computers and now mobile devices. By 2010, the number of computers on the Internet had surpassed the number of people on earth.

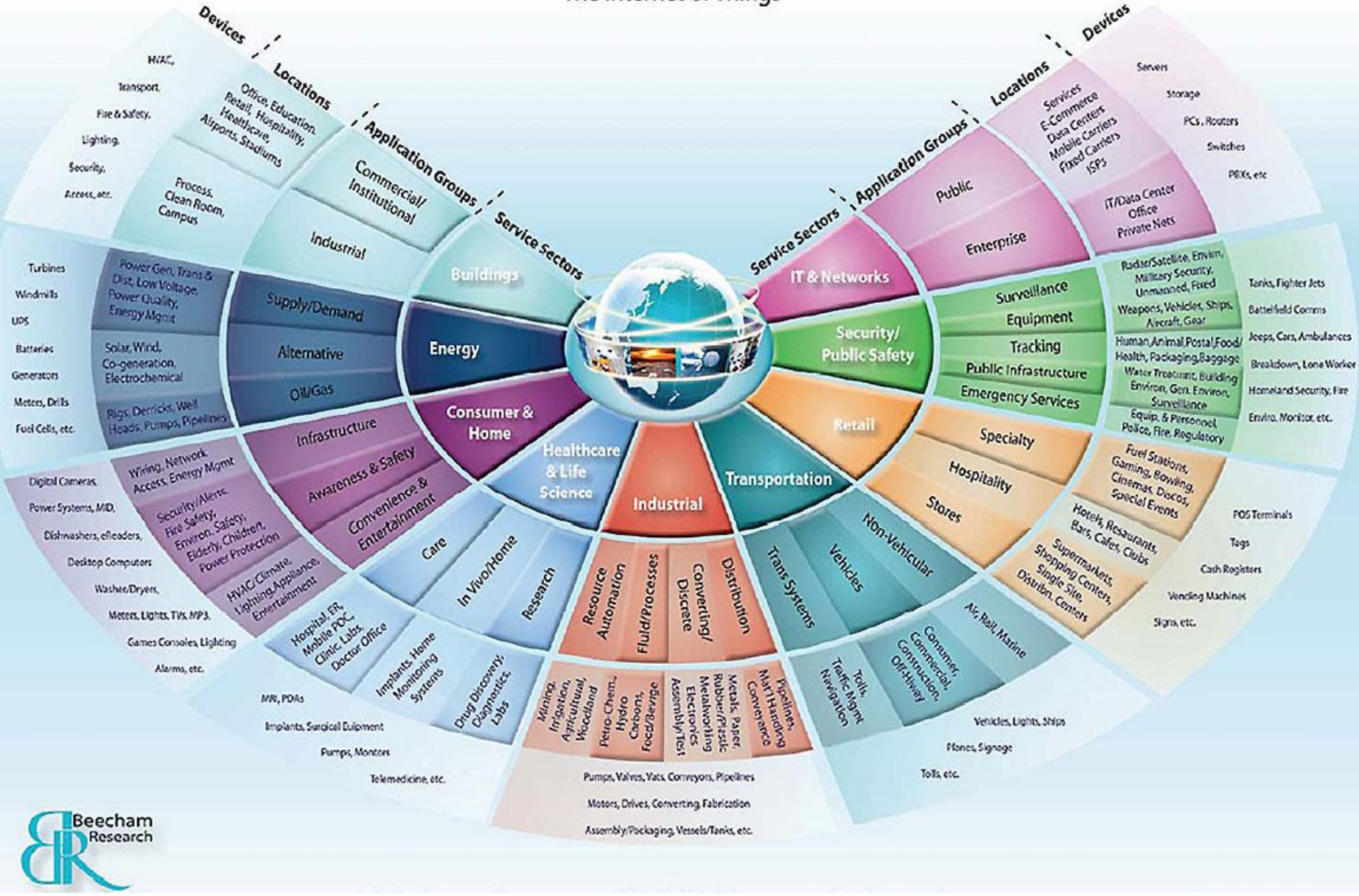
Yet that impressive growth is about to be overshadowed as the things around us start going online as well, part of what is called "the Internet of Things." Thanks to advances in circuits and software, it is now possible to make a Web server that fits on (or in) a fingertip for $1. When embedded in everyday objects, these small computers can send and

THE CONNECTED LIFE

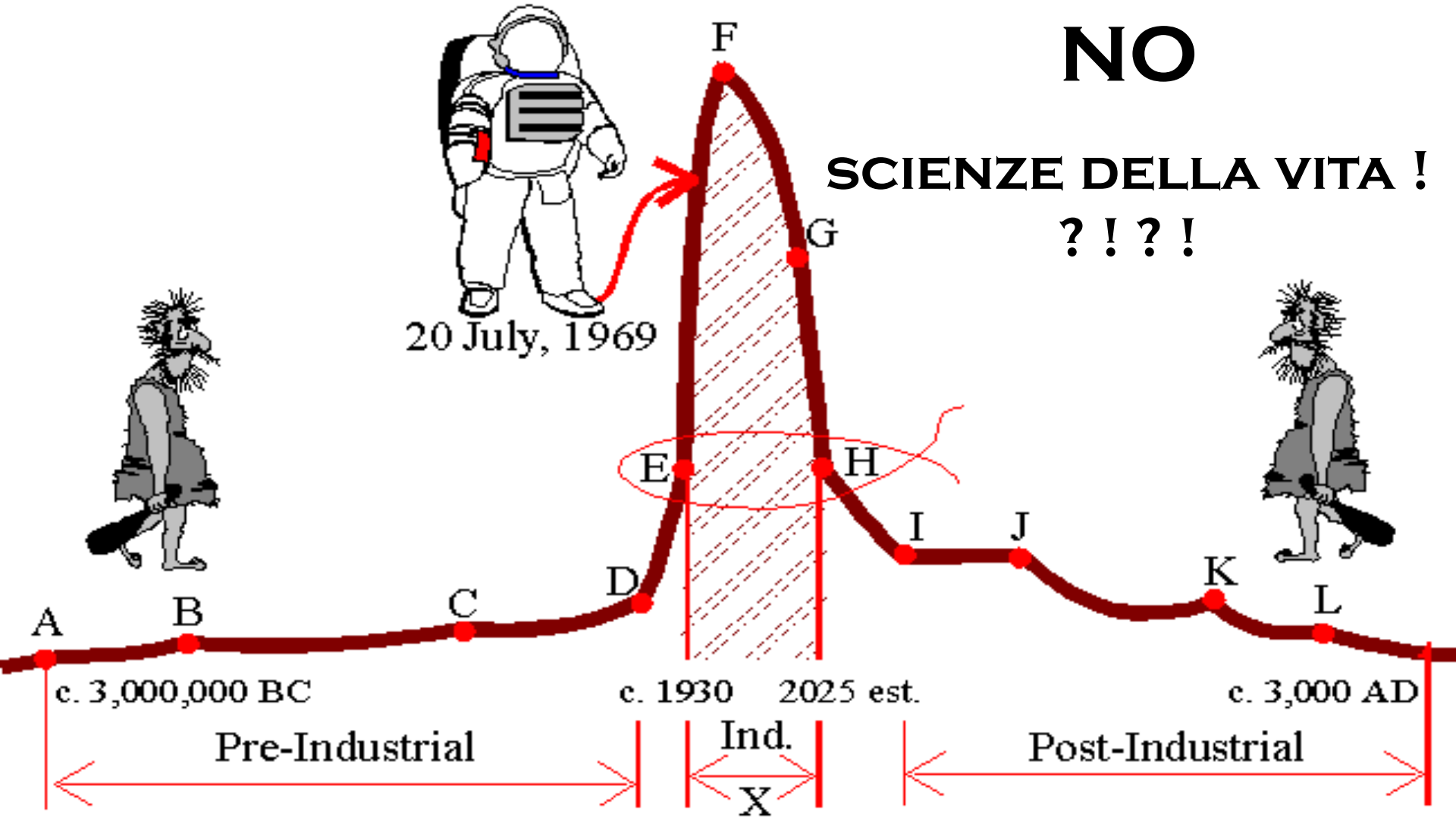
The Internet of Things is not just science fiction; it has already arrived. Some of the things currently networked together send data over the public Internet, and some communicate over secure private networks, but all share common protocols that allow them to interoperate to help solve profound problems.

Take energy inefficiency. Buildings account for three-quarters of all electricity use in the United States, and of that, about one-third is wasted. Lights stay on when there is

The Internet of Things



Beecham Research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Carlo Alberto Redi

Il biologo furioso

Provocazioni d'autore tra scienza e politica

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Pavia a spasso nella città della scienza

Guida scientifica di Pavia
di Carlo Alberto Redi
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per l’attenzione !