# Weekly Science Report July 8, 2016

"The time has come to take concrete steps to bring about a real transformation in the ways we educate our future generations. We need to combine both an education of the mind with an education of the heart so that our children grow up as responsible, caring citizens equipped to meet the challenges of today's increasingly globalized world."

Dalai Lama

## **Table of Contents**

Introduction	2
News Articles	
Paleontology, Evolution and Prehistoric Studies	
History	4
Archaeology	
Egyptology	
General Science	
Physics, Earth and Space Sciences	8
Environment, Climate Change and Alternative Energy Sources	
Biological, Genetics and Medical Sciences	
Other	
Additional Informational	12

## Introduction

Steve Detwiler created this publication with the support of Graham Hancock and John Anthony West to share news and information on various disciplines to include but not limited to paleontology, space sciences, genetics and archaeology. His goal behind sharing this publication has always been very simple, by sharing knowledge we can make our world a better place. This publication is Mr. Detwiler's contribution to bring people together and share ideas and discoveries with his fellow humans.

I hope you enjoy this publication and that the content challenges and inspires you!

Steve Detwiler

#### **News Articles**

#### Paleontology, Evolution and Prehistoric Studies

Evidence of Manmade Fires Well Before Clovis Culture

http://www.newhistorian.com/evidence-manmade-fires-well-clovis-

culture/6558/?utm content=bufferef52c&utm medium=social&utm source=linkedin.com&utm campaign=buffer

Beautifully preserved feathers belonged to tiny flying dinosaurs

https://www.newscientist.com/article/2095298-beautifully-preserved-feathers-belonged-to-tiny-flying-

dinosaurs/?utm\_source=NSNS&utm\_medium=SOC&utm\_campaign=hoot&cmpid=SOC%7CNSNS%7C2016-GLOBAL-hoot

Neanderthals Were Smarter Than We Thought!

http://www.seeker.com/neanderthals-were-smarter-than-we-thought-

1899471488.html?utm\_source=facebook&utm\_medium=dnewssocial&utm\_campaign=owned

Okinawa's trove of ancient bones may point to migration route <a href="http://www.asahi.com/ajw/articles/AJ201606300058.html">http://www.asahi.com/ajw/articles/AJ201606300058.html</a>

Archaeology suggests no direct link between climate change and early human innovation http://phys.org/news/2016-07-archaeology-link-climate-early-human.html

Stone age cities: what modern urbanites could learn from paleolithic humans <a href="https://www.theguardian.com/cities/2016/may/23/stone-age-cities-modern-urbanites-learn-paleolithic-">https://www.theguardian.com/cities/2016/may/23/stone-age-cities-modern-urbanites-learn-paleolithic-</a>

humans?utm\_content=bufferb6ce7&utm\_medium=social&utm\_source=linkedin.com&utm\_campa ign=buffer

#### **History**

Why July 2 is really America's independence day <a href="https://www.washingtonpost.com/news/answer-sheet/wp/2015/07/02/why-july-2-is-really-americas-independence-day/?tid=sm\_fb">https://www.washingtonpost.com/news/answer-sheet/wp/2015/07/02/why-july-2-is-really-americas-independence-day/?tid=sm\_fb</a>

Elie Wiesel, Nobel Laureate, Holocaust Survivor and 'Night' Author, Dies at 87 <a href="http://www.nbcnews.com/news/world/elie-wiesel-nobel-laureate-holocaust-survivor-night-author-dies-87-n603006?cid=sm">http://www.nbcnews.com/news/world/elie-wiesel-nobel-laureate-holocaust-survivor-night-author-dies-87-n603006?cid=sm</a> fb

A Century After The Battle Of The Somme, Europe Gathers To Honor The Fallen <a href="http://www.npr.org/sections/thetwo-way/2016/07/01/484344178/a-century-after-the-battle-of-the-somme-europe-gathers-to-honor-the-fallen?sc=tw">http://www.npr.org/sections/thetwo-way/2016/07/01/484344178/a-century-after-the-battle-of-the-somme-europe-gathers-to-honor-the-fallen?sc=tw</a>

Silent soldiers across the UK mark Battle of the Somme in poignant live art piece <a href="http://theartnewspaper.com/news/news/silent-soldiers-across-the-uk-mark-battle-of-the-somme-in-poignant-live-art-piece-/">http://theartnewspaper.com/news/news/silent-soldiers-across-the-uk-mark-battle-of-the-somme-in-poignant-live-art-piece-/</a>

Xoan singing to become intangible cultural heritage of humanity <a href="http://ht.ly/mOdJ301SFka">http://ht.ly/mOdJ301SFka</a>

#### Archaeology

German Tourist Plunges to Death While Posing for Photo at Machu Picchu <a href="http://www.nbcnews.com/news/world/german-tourist-plunges-death-while-posing-photo-machu-picchu-n602941?cid=sm">http://www.nbcnews.com/news/world/german-tourist-plunges-death-while-posing-photo-machu-picchu-n602941?cid=sm</a> fb

International Council of Museums conference: institutions asked to think beyond collections <a href="http://theartnewspaper.com/news/conservation/museums-asked-to-think-beyond-collections/">http://theartnewspaper.com/news/conservation/museums-asked-to-think-beyond-collections/</a>

Eight gold coins discovered in Germany mark the site of an ancient Roman massacre, archaeologists say

http://www.dailymail.co.uk/sciencetech/article-3670663/Eight-gold-coins-discovered-Germany-mark-site-ancient-Roman-massacre-archaeologists-say.html

Ancient Shrine That May Hold Buddha's Skull Bone Found in Crypt <a href="http://www.livescience.com/55243-buddha-skull-bone-found-in-crypt.html">http://www.livescience.com/55243-buddha-skull-bone-found-in-crypt.html</a>

Prized Lion of Babylon joins list of crumbling Iraqi antiquities <a href="http://www.al-monitor.com/pulse/originals/2016/06/iraq-babylon-culture-heritage.html#ixzz4DM3AmzPF">http://www.al-monitor.com/pulse/originals/2016/06/iraq-babylon-culture-heritage.html#ixzz4DM3AmzPF</a>

Lindisfarne monastery evidence found by amateur archaeologist <a href="http://www.bbc.com/news/uk-england-tyne-36712209">http://www.bbc.com/news/uk-england-tyne-36712209</a>

The Future of Archaeology Is 'Spacejunk' <a href="http://www.theatlantic.com/technology/archive/2016/06/grand-tour-of-the-future/488909/">http://www.theatlantic.com/technology/archive/2016/06/grand-tour-of-the-future/488909/</a>

Akrotiri excavations on Santorini start up again with funding injection from Eugene Kaspersky <a href="http://www.ekathimerini.com/210027/article/ekathimerini/life/akrotiri-excavations-on-santorini-start-up-again-with-funding-injection-from-eugene-kaspersky">http://www.ekathimerini.com/210027/article/ekathimerini/life/akrotiri-excavations-on-santorini-start-up-again-with-funding-injection-from-eugene-kaspersky</a>

Work to conserve U'mista masks and regalia almost complete http://www.cbc.ca/news/canada/british-columbia/umista-masks-regalia-conservation-1.3661136

Is This the Legendary Throne of Agamemnon? <a href="http://www.seeker.com/is-this-the-legendary-throne-of-agamemnon-1904059121.html">http://www.seeker.com/is-this-the-legendary-throne-of-agamemnon-1904059121.html</a>

USS Monitor gun turret undergoes 3-D scanning <a href="http://www.dailypress.com/news/newport-news/dp-nws-uss-monitor-3d-scan-20160707-story.html">http://www.dailypress.com/news/newport-news/dp-nws-uss-monitor-3d-scan-20160707-story.html</a>

<u>Egyptology</u>
Nothing to report

Scientists investigating nanoparticles conduct experiment while free falling <a href="http://phys.org/news/2016-07-scientists-nanoparticles-free-falling.html">http://phys.org/news/2016-07-scientists-nanoparticles-free-falling.html</a>							
http://phys.org/nev	<u>vs/2016-07-scientists</u>	<u>-nanoparticles-fre</u>	<u>e-falling.html</u>				

#### Physics, Earth and Space Sciences

Curiosity rover discovers a new type of sand dune on Mars

http://www.aol.com/article/2016/07/01/curiosity-rover-discovers-a-new-type-of-sand-dune-on-mars/21422680/?ncid=txtlnkusaolp00001357

Entangled universe: Could wormholes hold the cosmos together?

https://www.newscientist.com/article/mg22830460-400-entangled-universe-could-wormholes-hold-the-cosmos-

together/?utm\_source=NSNS&utm\_medium=SOC&utm\_campaign=hoot&cmpid=SOC%7CNSNS %7C2016-GLOBAL-hoot

Face to face in the Arctic with a terrifying new sublime

https://www.newscientist.com/article/mg23130803-400-face-to-face-in-the-arctic-with-a-terrifying-new-

<u>sublime/?utm\_source=NSNS&utm\_medium=SOC&utm\_campaign=hoot&cmpid=SOC%7CNSNS</u> %7C2016-GLOBAL-hoot

NASA approves new far-flung destination for Pluto space probe

https://www.newscientist.com/article/2095997-nasa-approves-new-far-flung-destination-for-pluto-space-

probe/?utm\_source=NSNS&utm\_medium=SOC&utm\_campaign=hoot&cmpid=SOC%7CNSNS%7C2016-GLOBAL-hoot

A Space Pioneer, 79, Is Ready to Track Juno for NASA http://www.nytimes.com/2016/07/04/science/space/nasa-juno-susan-finley.html? r=1

Lush Venus? Searing Earth? It could have happened <a href="http://phys.org/news/2016-07-lush-venus-searing-earth.html">http://phys.org/news/2016-07-lush-venus-searing-earth.html</a>

RemoveDebris to launch space cleanup demonstrator <a href="http://www.gizmag.com/removedebris-space-harpoon/44191/">http://www.gizmag.com/removedebris-space-harpoon/44191/</a>

Doomed Spacecraft Shows Tantalizing Hints of Surprising Black Hole Behavior <a href="http://www.scientificamerican.com/article/doomed-spacecraft-shows-tantalizing-hints-of-surprising-black-hole-behavior/?WT.mc\_id=SA\_FB\_SPC\_NEWS">http://www.scientificamerican.com/article/doomed-spacecraft-shows-tantalizing-hints-of-surprising-black-hole-behavior/?WT.mc\_id=SA\_FB\_SPC\_NEWS</a>

Accelerating research into dark energy <a href="http://phys.org/news/2016-07-dark-energy.html">http://phys.org/news/2016-07-dark-energy.html</a>

Why should physicists study history?

http://scitation.aip.org/content/aip/magazine/physicstoday/article/69/7/10.1063/PT.3.3235

### Environment, Climate Change and Alternative Energy Sources

North America Will Draw Half Its Electricity from Carbon-Free Sources by 2025 <a href="http://www.scientificamerican.com/article/north-america-will-draw-half-its-electricity-from-carbon-free-sources-by-2025/?WT.mc\_id=SA\_FB\_ENGYSUS\_NEWS">http://www.scientificamerican.com/article/north-america-will-draw-half-its-electricity-from-carbon-free-sources-by-2025/?WT.mc\_id=SA\_FB\_ENGYSUS\_NEWS</a>

Uranium Extraction from Seawater Takes a Major Step Forward <a href="http://www.scientificamerican.com/article/uranium-extraction-from-seawater-takes-a-major-step-forward/?WT.mc">http://www.scientificamerican.com/article/uranium-extraction-from-seawater-takes-a-major-step-forward/?WT.mc</a> id=SA FB ENGYSUS FEAT

This Farm of the Future Uses No Soil and 95% Less Water <a href="http://www.seeker.com/this-farm-of-the-future-uses-no-soil-and-95-less-water-1904168802.html">http://www.seeker.com/this-farm-of-the-future-uses-no-soil-and-95-less-water-1904168802.html</a>?utm source=facebook&utm medium=dnewssocial&utm campaign=owned

This guy will clean Beijing's air while making jewelry <a href="https://www.globalcitizen.org/en/content/air-purifier-beijing-smog-free-tower-roosegaarde/?utm-source=facebook&utm-medium=social&utm-content=global&utm-campaign=general-content&linkId=26247779</a>

### Biological, Genetics and Medical Sciences

"Human-on-a-Chip" Technology Could Replace Animal Testing <a href="http://energy.gov/articles/human-chip-technology-could-replace-animal-testing">http://energy.gov/articles/human-chip-technology-could-replace-animal-testing</a>

Engineers design programmable RNA vaccines: Tests in mice show they work against Ebola, influenza, and common parasite <a href="http://phys.org/news/2016-07-programmable-rna-vaccines-mice-ebola.html">http://phys.org/news/2016-07-programmable-rna-vaccines-mice-ebola.html</a>

No one is an island: The history of human genetic ancestry in Madagascar <a href="http://phys.org/news/2016-07-island-history-human-genetic-ancestry.html">http://phys.org/news/2016-07-island-history-human-genetic-ancestry.html</a>

Caught on camera: Humpback whales play with dolphins off Hawaii <a href="http://khon2.com/2016/07/05/caught-on-camera-humpback-whales-play-with-dolphins-off-hawaii/">http://khon2.com/2016/07/05/caught-on-camera-humpback-whales-play-with-dolphins-off-hawaii/</a>

### **Other**

Art that makes us uncomfortable can make us smarter, more empathetic citizens <a href="http://qz.com/716873/art-that-makes-us-uncomfortable-can-make-us-better-social-justice-activists/">http://qz.com/716873/art-that-makes-us-uncomfortable-can-make-us-better-social-justice-activists/</a>

A rational nation ruled by science would be a terrible idea

https://www.newscientist.com/article/2096315-a-rational-nation-ruled-by-science-would-be-aterrible-

idea/?utm\_source=NSNS&utm\_medium=SOC&utm\_campaign=hoot&cmpid=SOC%7CNSNS%7 C2016-GLOBAL-hoot

Longest maths proof would take 10 billion years to read <a href="http://phys.org/news/2016-07-longest-maths-proof-billion-years.html">http://phys.org/news/2016-07-longest-maths-proof-billion-years.html</a>

# **Additional Informational**

100th Anniversary of the Battle of Somme <a href="https://www.yahoo.com/news/100th-anniversary-battle-somme-000000240.html">https://www.yahoo.com/news/100th-anniversary-battle-somme-000000240.html</a>

The Legend of Hercules Mulligan

https://www.cia.gov/news-information/featured-story-archive/2016-featured-story-archive/the-legend-of-hercules-mulligan.html

Autism Glass Takes Top Student Health Tech Prize [Slide Show] <a href="http://www.scientificamerican.com/article/autism-glass-takes-top-student-health-tech-prize-slide-show1/">http://www.scientificamerican.com/article/autism-glass-takes-top-student-health-tech-prize-slide-show1/</a>