# WHAT WILL WE KNOW NEXT YEAR THAT WE DON'T KNOW NOW?

This diary highlights some of the amazing breakthroughs made by researchers at The University of Manchester in 2018. Nobody knows what 2019 holds, but we can be certain that the University will continue to break new ground and make new discoveries that make the world work better



#### **PERSONAL INFORMATION**

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TELEPHONE

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NAME

EMAIL

NAME

**ADDRESS** 

ADDRESS

POSTCODE

TELEPHONE

**EMAIL** 

#### **PUBLIC HOLIDAYS 2019**

1 JANUARY New Year's Day

2 JANUARY Public Holiday (Scotland only)

17 MARCH St Patrick's Day (N.I. Only)

18 MARCH St Patrick's Day Public Holiday (N.I) only

19 APRIL Good Friday

22 APRIL Easter Monday

6 MAY Early May Bank Holiday

27 MAY Spring Bank Holiday

12 JULY Public Holiday (N.I. only)

6 AUGUST Public Holiday (Scotland only)

August Bank Holiday

25 DECEMBER Christmas Day

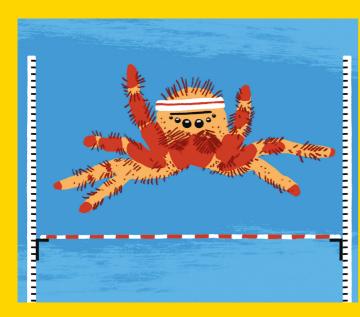
26 DECEMBER Boxing Day

26 AUGUST



JANUARY					APRIL						JULY						OCTOBER				
MONDAY		7	14	21 28	MONDAY	1	8	15	22	29	MONDAY	1	8	15	22	29	MONDAY		7 1	4	21 28
TUESDAY	1	8	15	22 29	TUESDAY	2	9	16	23	30	TUESDAY	2	9	16	23	30	TUESDAY	1	8 1	5	22 29
WEDNESDAY	2	9	16	23 30	WEDNESDAY	3	10	17	24		WEDNESDAY	3	10	17	24	31	WEDNESDAY	2	9 1	6	23 30
THURSDAY	3	10	17	24 31	THURSDAY	4	11	18	25		THURSDAY	4	11	18	25		THURSDAY	3	10 1	7	24 31
FRIDAY	4	11	18	25	FRIDAY	5	12	19	26		FRIDAY	5	12	19	26		FRIDAY	4	11 1	8	25
SATURDAY	5	12	19	26	SATURDAY	6	13	20	27		SATURDAY	6	13	20	27		SATURDAY	5	12 1	9	26
SUNDAY	6	13	20	27	SUNDAY	7	14	21	28		SUNDAY	7	14	21	28		SUNDAY	6	13 2	0	27
FEBRUARY					MAY						AUGUST						NOVEMBER				
MONDAY		4	11	18 25	MONDAY		6	13	20	27	MONDAY		5	12	19	26	MONDAY		4 1	1	18 25
TUESDAY		5	12	19 26	TUESDAY		7	14	21	28	TUESDAY		6	13	20	27	TUESDAY		5 1	2	19 26
WEDNESDAY		6	13	20 27	WEDNESDAY	1	8	15	22	29	WEDNESDAY		7	14	21	28	WEDNESDAY		6 1	3	20 27
THURSDAY		7	14	21 28	THURSDAY	2	9	16	23	30	THURSDAY	1	8	15	22	29	THURSDAY		7 1	4	21 28
FRIDAY	1	8	15	22	FRIDAY	3	10	17	24	31	FRIDAY	2	9	16	23	30	FRIDAY	1	8 1	5	22 29
SATURDAY	2	9	16	23	SATURDAY	4	11	18	25		SATURDAY	3	10	17	24	31	SATURDAY	2	9 1	6	23 30
SUNDAY	3	10	17	24	SUNDAY	5	12	19	26		SUNDAY	4	11	18	25		SUNDAY	3	10 1	7	24
MARCH					JUNE						SEPTEMBER						DECEMBER				
MONDAY		4	11	18 25	MONDAY		3	10	17	24	MONDAY	2	9	16	23	30	MONDAY	2	9 1	6	23 30
TUESDAY		5	12	19 26	TUESDAY		4	11	18	25	TUESDAY	3	10	17	24		TUESDAY	3	10 1	7	24 31
WEDNESDAY		6	13	20 27	WEDNESDAY		5	12	19	26	WEDNESDAY	4	11	18	25		WEDNESDAY	4	11 1	8	25
THURSDAY		7	14	21 28	THURSDAY		6	13	20	27	THURSDAY	5	12	19	26		THURSDAY	5	12 1	9	26
FRIDAY	1	8	15	22 29	FRIDAY		7	14	21	28	FRIDAY	6	13	20	27		FRIDAY	6	13 2	0	27
SATURDAY	2	9	16	23 30	SATURDAY	1	8	15	22	29	SATURDAY	7	14	21	28		SATURDAY	7	14 2	1	28
SUNDAY	3	10	17	24 31	SUNDAY	2	9	16	23	30	SUNDAY 1	8	15	22	29		SUNDAY 1	8	15 2	2	29





#### Spiders jump two ways

Researchers at Manchester used CT scanners and ultra-high-speed high-resolution cameras to study the different ways that spiders jump. Their results show spiders adopt different strategies depending on whether they need to conserve energy during longer jumps or minimise flight time when attempting to capture prey.

WEEK 1 JANUARY

**31** MONDAY

1 TUESDAY

2 WEDNESDAY

**3** THURSDAY

4 FRIDAY

**5** SATURDAY

**6** SUNDAY

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More at your.manchester.ac.uk/week1



#### Believe it ou non?

You might believe a fact is always a fact, no matter which language you say it in. But new research by Manchester scientists demonstrated that people who are bilingual are more likely to accept a fact in their first language, and more likely to deny it in the other – even though they knew it was true. C'est incroyable, nicht wahr?

More at your.manchester.ac.uk/week2

WEEK 2 JANUARY

7 MONDAY Epiphany

8 TUESDAY

9 WEDNESDAY

**10** THURSDAY

**11** FRIDAY

**12** SATURDAY

**13** SUNDAY Christmas break ends



### Manchester welcomes refugees

Dr Alison Newby has shown that students and staff at The University of Manchester in the 1940s and 1950s debated passionately about the admission of stateless and displaced students to the University. They also raised funds to help students who were effectively refugees to pay for their education and hosted one of them in Manchester. We're very keen on maintaining this tradition of openness.

More at your.manchester.ac.uk/week3

WEEK 3

**JANUARY** 

- 14 MONDAY Semester 1 exams
- **15** TUESDAY Semester 1 exams
- **16** WEDNESDAY Semester 1 exams
- 17 THURSDAY Semester 1 exams
- **18** FRIDAY Semester 1 exams
- **19** SATURDAY
- **20** SUNDAY



#### Martian technology can monitor cancer treatments

Because every person's cancer is unique, The University of Manchester is always working to find ways to treat them individually. That's being made easier by measuring tumours more precisely than ever before using the machine learning algorithm developed to assess images of the craters and dunes of Mars.

More at your.manchester.ac.uk/week4

WEEK 4 JANUARY

**21** MONDAY Semester 1 exams

**22** TUESDAY Semester 1 exams

23 WEDNESDAY Semester 1 exams

24 THURSDAY Semester 1 exams

25 FRIDAY Semester 1 exams • Burn's Night

**26** SATURDAY

27 SUNDAY Semester 1 ends



#### The same mummy. (But different daddies)

The 'Two Brothers' are Manchester Museum's most famous mummies, but only now has their real relationship been revealed. Following painstaking analysis of 'ancient DNA', scientists have proved that they are not brothers at all, but half brothers. They share a mother but had different fathers. More at your.manchester.ac.uk/week5

WEEK 5 JANUARY

**28** MONDAY

**29** TUESDAY

**30** WEDNESDAY

**31** THURSDAY

1 FRIDAY

2 SATURDAY

**3** SUNDAY



### Beetroot may help with blood pressure in pregnancy

A recent study by researchers at The University of Manchester has shown that pregnant women with high blood pressure may benefit from drinking beetroot juice, which contains inorganic nitrate. Women who were able to convert this dietary nitrate into nitrite, a process which relies on bacteria in the mouth, responded to the dose of beetroot juice with a decrease in blood pressure.

More at your.manchester.ac.uk/week6

WEEK 6 FEBRUARY

4 MONDAY

**5** TUESDAY Chinese New Year (Pig)

**6** WEDNESDAY

7 THURSDAY

8 FRIDAY

9 SATURDAY

**10** SUNDAY



#### More droughts mean fewer bees

A team from Manchester have been investigating what the increase in droughts means for ecosystems. They found that flowers respond to drought in different ways: some by producing half as many flowers as usual, others by producing flowers with no nectar. But ultimately, drought means less food for bees, and that means fewer of them.

More at your.manchester.ac.uk/week7

WEEK 7 FEBRUARY

**11** MONDAY

**12** TUESDAY

**13** WEDNESDAY

14 THURSDAY Valentine's day

**15** FRIDAY

**16** SATURDAY

17 SUNDAY



### Fake news at least 3,000 years old (really)

Hold the front papyrus. Fake news actually started in ancient Egypt. A dig has uncovered information that shows the idea that Pharaoh Ramses II was a great warlord may have been based on false stories about great victories over Libya and Nubia constructed to reinforce his own internal propaganda. More at your.manchester.ac.uk/week8

**FEBRUARY** WEEK 8 **18** MONDAY **19** TUESDAY **20** WEDNESDAY **21** THURSDAY 22 FRIDAY 23 SATURDAY

**24** SUNDAY





### Speed of lava flow may be predicted using 4D scans

The latest 4D scanning technology is helping Manchester volcanologists predict the behaviour of lava flows. It enables scientists to watch crystals grow in real time and simulate the behaviour of lava once a volcano has erupted. Understanding the behaviour of lava flows could help safety agencies develop new strategies to save lives and infrastructures during eruptions. More at your.manchester.ac.uk/week9

**FEBRUARY** WEEK 9 **25** MONDAY **26** TUESDAY **27** WEDNESDAY **28** THURSDAY 1 FRIDAY St David's Day 2 SATURDAY **3** SUNDAY



### Pets can help people with mental health problems

Keeping a pet – even something as small as a hamster – can reduce feelings of loneliness and help people manage long-term issues with their mental health. That's the conclusion of a systematic review of research carried out by academics at The Universities of Manchester, Liverpool and Southampton.

More at your.manchester.ac.uk/week10

WEEK 10 MARCH

4 MONDAY

5 TUESDAY Pancake day

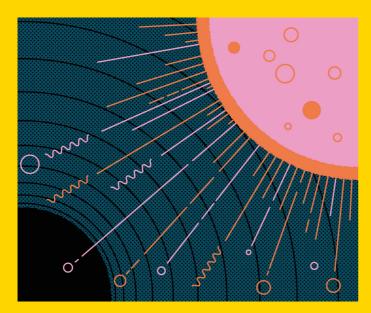
**6** WEDNESDAY

7 THURSDAY

8 FRIDAY

9 SATURDAY

10 SUNDAY



#### What happens when a star meets a black hole

Jodrell Bank astronomers have seen what happens when a star comes too close to the gravitational pull of a supermassive black hole. Watching a pair of colliding galaxies called Arp 299, they observed a star with twice the mass of the sun burst apart, squirting out a jet of matter and energy at enormous speed. More at your.manchester.ac.uk/week11

WEEK 11 MARCH

**11** MONDAY

**12** TUESDAY

**13** WEDNESDAY

**14** THURSDAY

**15** FRIDAY

**16** SATURDAY

17 SUNDAY St Patrick's Day



### Getting the bus keeps older people fit

A new study shows that older people who use public transport regularly walk faster and are more physically active than those who do not. Despite the benefits, two thirds of people over 60 rarely or never use public transport, even though it costs them nothing. So pick up your bus pass and walk.

More at your.manchester.ac.uk/week12

**MARCH** WEEK 12 **18** MONDAY **19** TUESDAY **20** WEDNESDAY **21** THURSDAY 22 FRIDAY 23 SATURDAY

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**24** SUNDAY



#### How to kill whipworms

New research by Professors Richard Grencis and Ian Roberts has discovered that parasitic whipworms – which bury into the large intestine – have their own gut flora. This could lead to more effective treatments for these parasites, which are estimated to affect one in every four children in the developing world.

More at your.manchester.ac.uk/week13

WEEK 13 MARCH

**25** MONDAY

**26** TUESDAY

**27** WEDNESDAY

**28** THURSDAY

29 FRIDAY Brexit Day (?)

**30** SATURDAY

**31** SUNDAY Mother's Day • BST commences



### Who wrote Jack the Ripper's' postcards?

Dr Andrea Nini, a forensic linguist at the University has studied the two letters responsible, when published, for the popularisation of the nickname 'Jack the Ripper'. He concluded that the messages – known as 'Dear Boss' and 'Saucy Jack' – show such linguistic similarity that they are from the same person.

More at your.manchester.ac.uk/week14

WEEK 14 APRIL

1 MONDAY

2 TUESDAY

**3** WEDNESDAY

**4** THURSDAY

**5** FRIDAY Easter break starts

**6** SATURDAY

7 SUNDAY



#### Light can heal

A new lamp can treat chronic ulcers with a combination of infrared, red and ultraviolet light, offering dramatic results for patients with slow healing. It's seen as a potential treatment for tens of thousands of patients with ulcers in the UK alone. More at your.manchester.ac.uk/week15

WEEK 15 APRIL

8 MONDAY

9 TUESDAY

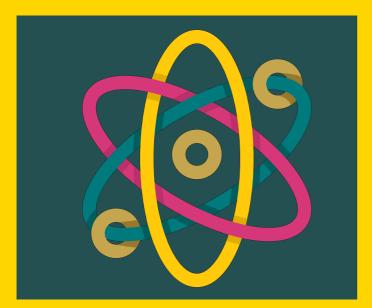
**10** WEDNESDAY

**11** THURSDAY

**12** FRIDAY

**13** SATURDAY

14 SUNDAY



#### How to tilt a proton

Scientists working on the Large Hadron Collider (LHC) have discovered how to 'tilt' bunches of protons, which increases the bunches' surface area. This in turn increases the number of collisions of protons when bunches are fired at beams in the LHC, significantly increasing the amount of new data discovered.

More at your.manchester.ac.uk/week16

WEEK 16 APRIL

**15** MONDAY

**16** TUESDAY

**17** WEDNESDAY

**18** THURSDAY

19 FRIDAY Good Friday

20 SATURDAY 1st day of Passover

**21** SUNDAY Easter Sunday



### We can filter the colour from whisky

Manchester scientists can tailor the molecules that pass through Graphene-oxide membranes simply by making them ultrathin. This enables the technology to be expanded from saltwater desalination to removing impurities as small as a nanometre from non-water solvents, and even turn whisky – or whiskey – clear. Slainte.

More at your.manchester.ac.uk/week17

WEEK 17 APRIL

**22** MONDAY Easter Monday

23 TUESDAY St George's Day

**24** WEDNESDAY

**25** THURSDAY

**26** FRIDAY

**27** SATURDAY

28 SUNDAY



#### Time of day affects asthma tests

Asthma narrows the sufferer's airways more in the early hours of the morning than it does in the afternoon. We have shown that there is a significant increase in airway inflammatory cells in asthma patients in the morning compared to in the afternoon. Researchers at The University of Manchester believe this discovery could help better diagnose and treat asthma in the future.

More at your.manchester.ac.uk/week18

WEEK 18 APRIL

29 MONDAY Easter break ends

**30** TUESDAY

1 WEDNESDAY

2 THURSDAY

**3** FRIDAY

4 SATURDAY

**5** SUNDAY



# Major trauma centres make a major lifesaving contribution

A large-scale study has shown that the NHS in England has saved an additional 1,600 patients with severe injuries since major trauma centres were established in 2012. This represents an increase of nearly 20% in the odds of patients surviving severe injury.

More at your.manchester.ac.uk/week19

WEEK 19 MAY

6 MONDAY May Day Bank holiday • First Day of Ramadan

7 TUESDAY

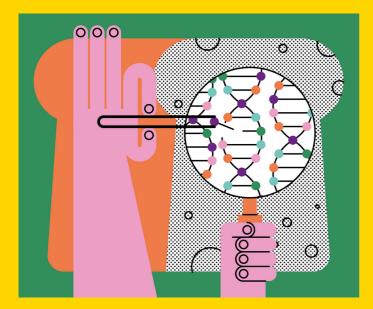
**8** WEDNESDAY

9 THURSDAY

10 FRIDAY

**11** SATURDAY

12 SUNDAY



# A yeast transformer may accelerate medicine development

Techniques used to speed up the evolution of the genome of baker's yeast by scientists at Manchester could help accelerate the development of new medicines. This new synthetic yeast strain can be transformed on demand for industrial biotechnology applications, such as the mass production of advanced medicines to treat illnesses such as Malaria and Tuberculosis (TB). More at your.manchester.ac.uk/week20

WEEK 20 MAY

**13** MONDAY

**14** TUESDAY

15 WEDNESDAY Semester 2 exams

**16** THURSDAY Semester 2 exams

17 FRIDAY Semester 2 exams

**18** SATURDAY

19 SUNDAY



#### What ichthyosaurs ate for breakfast

Researchers now know what at least one baby giant prehistoric ichthyosaur ate for its last meal. The stomach contents of an *Ichthyosaurus communis* were found to contain the remains of squid. This was the very first juvenile specimen of this species found with its last meal.

More at your.manchester.ac.uk/week21

WEEK 21 MAY

20 MONDAY Semester 2 exams

**21** TUESDAY Semester 2 exams

22 WEDNESDAY Semester 2 exams

23 THURSDAY Semester 2 exams

**24** FRIDAY Semester 2 exams

**25** SATURDAY

**26** SUNDAY



#### Excess urea can lead to dementia

The build-up of urea in the brain to toxic levels can cause brain damage – and eventually dementia. The study showed that excess urea levels are present long before dementia sets in, meaning that they could be used to help diagnose the condition. This knowledge could help develop new treatments.

More at your.manchester.ac.uk/week22

WEEK 22 MAY

**27** MONDAY Semester 2 exams

**28** TUESDAY Semester 2 exams

29 WEDNESDAY Semester 2 exams

**30** THURSDAY Semester 2 exams • Ascension Day

**31** FRIDAY Semester 2 exams

1 SATURDAY

2 SUNDAY



#### How to suck up pollution

An international team led by The University of Manchester has developed a revolutionary new material called MFM-300(AI). This metal-organic framework is highly selective. It can remove designated toxic gas molecules, particularly nitrogen dioxide, and is fully reversible, so it can do it over and over again. It has the potential to help clean up the polluted air in cities all over the world

More at your.manchester.ac.uk/week23

WEEK 23 JUNE

**3** MONDAY Semester 2 exams

4 TUESDAY Semester 2 exams • Eid al-Fitr

**5** WEDNESDAY Semester 2 exams

**6** THURSDAY

7 FRIDAY Semester 2 ends

8 SATURDAY

9 SUNDAY Whit Sunday



#### Retirement doesn't mean the end of work

Around one in every four retirees in the UK returns to work or 'unretires', mostly within five years of retiring. This information could help policymakers in their thinking about how to capitalise on a valuable pool of potential labour from highly qualified and educated people in later life.

More at your.manchester.ac.uk/week24

WEEK 24 JUNE

**10** MONDAY

**11** TUESDAY

**12 WEDNESDAY** 

**13** THURSDAY

14 FRIDAY

**15** SATURDAY

**16** SUNDAY Father's Day



#### **Graphene membranes can control waterflow**

Researchers at The University of Manchester have developed new 'smart' membranes created from graphene-oxide that can vary the water flow through them using an electric current. Further developments of this kind have a range of applications and could bring enormous benefits.

More at your.manchester.ac.uk/week25

WEEK 25 JUNE

**17** MONDAY

**18** TUESDAY

**19** WEDNESDAY

**20** THURSDAY

**21** FRIDAY Longest Day

**22** SATURDAY

23 SUNDAY



### Who is in this portrait of 'Shakespeare'?

The 'Grafton portrait' of an unknown young man at John Rylands Library has long been believed to be a likeness of William Shakespeare. Researchers have used facial recognition measurements to show there is a close consistency in features between the portrait and the famous engraving of Shakespeare by Martin Droëshout.

More at your.manchester.ac.uk/week26

WEEK 26 JUNE

**24** MONDAY Midsummer's day

**25** TUESDAY

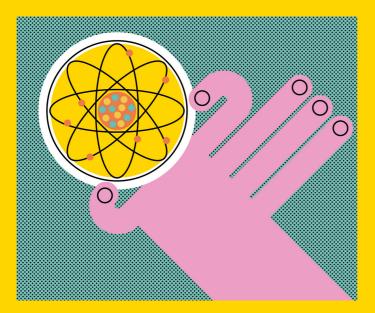
**26** WEDNESDAY

**27** THURSDAY

28 FRIDAY

29 SATURDAY

**30** SUNDAY



### How to create nano petri-dishes

Functional nanomaterials have huge potential in a wide range of applications, however directly observing them in their operating environments can be a challenge. Now a team at Manchester have found a way to combine graphene and boron nitride to create a perfect nano petri-dish. Samples inside the dish can be accurately imaged with single atom sensitivity.

More at your.manchester.ac.uk/week27

WEEK 27 JULY

1 MONDAY

2 TUESDAY

**3** WEDNESDAY

**4** THURSDAY

**5** FRIDAY

**6** SATURDAY

**7** SUNDAY



# Whales and dolphins are sophisticated and highly cultured

Manchester scientists are helping make important breakthroughs in understanding whale and dolphin society. They live in tightly-knit social groups, have complex relationships, talk to each other, and even have regional dialects. (There is no evidence yet whether this includes a Mancunian accent.) More at your.manchester.ac.uk/week28 WEEK 28 JULY

8 MONDAY Summer graduation

9 TUESDAY Summer graduation

**10** WEDNESDAY Summer graduation

11 THURSDAY Summer graduation

12 FRIDAY Summer graduation

**13** SATURDAY

14 SUNDAY



#### What came first, the bird's skeleton or its birth?

A fossil shorter than the length of your little finger is giving researchers at Manchester crucial information about how prehistoric birds lived. Because its sternum was largely made of cartilage and had not yet hardened into bone, it is believed that this bird would not have been able to fly when it was born.

More at your.manchester.ac.uk/week29

WEEK 29 JULY

**15** MONDAY Summer graduation

**16** TUESDAY Summer graduation

17 WEDNESDAY Summer graduation

**18** THURSDAY Summer graduation

**19** FRIDAY Summer graduation

**20** SATURDAY

21 SUNDAY



### We heal more slowly at night

Scientists at The University of Manchester were part of the team who discovered that our body clocks regulate wound healing by skin cells and optimise healing during the day. This means that cuts and burns heal approximately 60% faster if the injury happens during the day rather than at night.

More at your.manchester.ac.uk/week30

WEEK 30 JULY

22 MONDAY

23 TUESDAY

**24** WEDNESDAY

**25** THURSDAY

**26** FRIDAY

**27** SATURDAY

28 SUNDAY



#### Can't get no satisfaction

Britons are getting less satisfied with the food they eat in restaurants, along with the settings, the service and value for money. They are also a little less happy with the people with whom they are eating out. These are the findings of research by Professor Alan Warde showing how attitudes have changed since 1995

More at your.manchester.ac.uk/week31

WEEK 31 JULY

**29** MONDAY

**30** TUESDAY

**31** WEDNESDAY

1 THURSDAY

2 FRIDAY

**3** SATURDAY

4 SUNDAY



#### Arthritis drug reduces brain inflammation

A drug used to treat rheumatoid arthritis has been shown by researchers at The University of Manchester and Salford Royal NHS Foundation Trust to reduce harmful inflammation when given to patients in the early stages of a stroke. The study, funded by The Stroke Association, investigated the use of the drug Kineret<sup>©</sup>.

More at your.manchester.ac.uk/week32

WEEK 32 AUGUST

**5** MONDAY

**6** TUESDAY

7 WEDNESDAY

8 THURSDAY

**9** FRIDAY

**10** SATURDAY

11 SUNDAY Eid al-Adha



#### Zebra poo helps measure stress

Manchester researchers have found a new way to gain insights into the stress zebras are experiencing due to climate change and habitat fragmentation. The team are measuring the level of a key hormone in Cape mountain zebra's droppings in order to understand how these affect their society.

More at your.manchester.ac.uk/week33

WEEK 33 AUGUST

**12** MONDAY

**13** TUESDAY

**14** WEDNESDAY

**15** THURSDAY

**16** FRIDAY

**17** SATURDAY

**18** SUNDAY



#### A new mega-carnivorous dinosaur

An international team, including palaeontologists from The University of Manchester, have been following in the footsteps of *Kayentapus ambrokholohali*. This newly-identified species of mega-carnivorous dinosaur was four times larger than a lion, and roamed southern Africa 200 million years ago.

More at your.manchester.ac.uk/week34

WEEK 34 AUGUST

**19** MONDAY

**20** TUESDAY

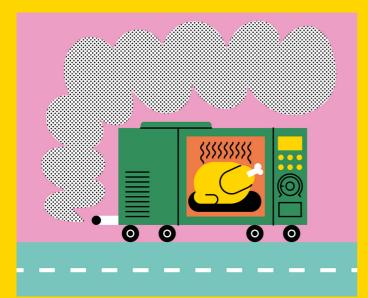
**21** WEDNESDAY

**22** THURSDAY

23 FRIDAY

24 SATURDAY

**25** SUNDAY



### Microwaves produce macro emissions.

Microwave ovens across the EU emit the same amount of carbon dioxide as 6.8 million cars, or three large gas-fired power stations. That's the finding of a new study carried out at The University of Manchester – the first comprehensive research into the overall environmental effects of microwaves.

More at your.manchester.ac.uk/week35

WEEK 35 AUGUST

**26** MONDAY

**27** TUESDAY

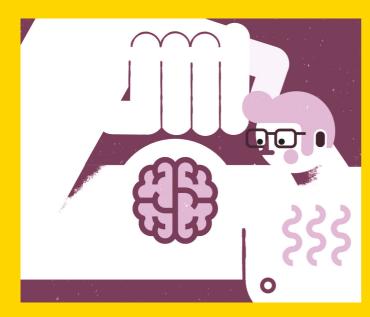
**28** WEDNESDAY

**29** THURSDAY

**30** FRIDAY Islamic New Year (1441)

**31** SATURDAY

1 SUNDAY



#### It's good to be strong

New research shows that the strength of your handgrip is an indicator of how healthy your brain is. The project surveyed 475,937 people throughout the UK and proved that in general stronger individuals performed better across a range of tests including reaction speed, logical problem solving, and multiple different memory tests.

More at your.manchester.ac.uk/week36

WEEK 36	SEPTEMBER
<b>2</b> MONDAY	
<b>3</b> Tuesday	
<b>4</b> WEDNESDAY	
<b>5</b> Thursday	
<b>6</b> FRIDAY	
<b>7</b> SATURDAY	
8 SUNDAY	
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#### A new fossil giant is uncovered

Fossil collector Paul De la Salle picked up a giant bone on a beach in Somerset. Manchester's Dean Lomax identified it as a jaw bone belonging to one of the largest animals ever to have lived, an enormous prehistoric marine reptile called an ichthyosaur. Lomax and his team believe the animal was as big as a blue whale, being around 26 metres long.

More at your.manchester.ac.uk/week37

**SEPTEMBER** WEEK 37 9 MONDAY **10** TUESDAY **11** WEDNESDAY **12** THURSDAY 13 FRIDAY **14** SATURDAY **15** SUNDAY You can make a donation by post using the enclosed donation

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#### Murk in the Irk

Researchers at The University of Manchester have recently completed a survey of Greater Manchester rivers including the River Irk and established that they are suffering from high levels of microplastic contamination. The Tame in Denton was shown to have the highest levels recorded so far anywhere in the world. More at your.manchester.ac.uk/week38

WEEK 38

#### **SEPTEMBER**

**16** MONDAY Semester 1 starts

**17** TUESDAY

**18 WEDNESDAY** 

**19** THURSDAY

20 FRIDAY

21 SATURDAY

22 SUNDAY



### Side effects and fringe benefits

A PhD project at Manchester has resulted in the discovery that a drug originally designed as a treatment for osteoporosis may help to treat some of the causes of baldness in men and women. It works by reducing the expression of SFRP1, a protein that suppresses hair growth. This new treatment may help ease the distress of people with hair loss.

More at your.manchester.ac.uk/week39

WEEK 39	SEPTEMBER
23 MONDAY	
<b>24</b> TUESDAY	
<b>-</b> 4 1020 <i>D</i> 7 (1	
25 WEDNESDAY	
<b>26</b> THURSDAY	
27 FRIDAY	

**28** SATURDAY

29 SUNDAY





#### Will the sun form a nebula?

Scientists were unsure what would happen when our Sun dies in around five billion years' time. Their questions centre on whether it is a sufficiently massive star to form a visible planetary nebula as it collapses. Thanks to the new data-model developed at Manchester to predict the life cycle of stars, we now feel more confident that it is.

More at your.manchester.ac.uk/week40

WEEK 40

#### **SEPTEMBER**

**30** MONDAY Jewish New Year (5780)

1 TUESDAY

2 WEDNESDAY

**3** THURSDAY

4 FRIDAY

**5** SATURDAY

**6** SUNDAY



# A copper-bottomed solution to contamination in hospitals

Doctors and nurses could soon be wearing uniforms coated with antibacterial copper, if the results of research carried out at The University of Manchester are put into practice. The Manchester team have helped to develop a brand-new material that binds on to fabrics and reduces contamination risks.

More at your.manchester.ac.uk/week41

WEEK 41 OCTOBER

7 MONDAY

8 TUESDAY

9 WEDNESDAY Day of Atonement

**10** THURSDAY

11 FRIDAY

**12** SATURDAY

**13** SUNDAY



### Footsteps could help diagnose dementia

The way you walk is unique – and Al can recognise you by your footsteps with close to 100% accuracy. Researchers at Manchester are developing a new approach that uses footstep recognition; one of the benefits of this may be the ability to identify signs of neuro-cognitive degeneration in real time. More at your.manchester.ac.uk/week42

**OCTOBER** WFFK 42 14 MONDAY **15** TUESDAY **16 WEDNESDAY 17** THURSDAY **18** FRIDAY **19** SATURDAY

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**20** SUNDAY



## A quick word helps stroke recovery

A new treatment developed at Manchester has been proven to enhance recovery of speech in stroke patients, with stronger results than existing approaches. The treatment shows patients photos of target words on a laptop and then puts a time pressure on naming, from initially three seconds to name the object they feature. The time allowed is progressively decreased to one second, which is more typical for people over 65. More at <a href="mailto:your.manchester.ac.uk/week43">your.manchester.ac.uk/week43</a>

WEEK 43 OCTOBER

**21** MONDAY

**22** TUESDAY

**23** WEDNESDAY

**24** THURSDAY

25 FRIDAY

**26** SATURDAY

27 SUNDAY BST Ends



## What colour is antihydrogen?

Manchester scientists are at the forefront of the investigation into why the Universe is made of matter. They're doing it by studying antimatter in immense detail, starting by comparing antihydrogen with hydrogen. This has led them to discover what colour antihydrogen is.

More at your.manchester.ac.uk/week44

WEEK 44 OCTOBER

**28** MONDAY

**29** TUESDAY

**30** WEDNESDAY

**31** THURSDAY Halloween

1 FRIDAY

2 SATURDAY

**3** SUNDAY



### **Knowing your Bible can extend your life**

Anne Askew, a radical Tudor Protestant, used her nuanced theological expertise to evade religious persecution and interrogators. After Anne was driven from her home by her Catholic husband, she became one of the first women in England to seek a divorce. She was eventually martyred in 1546.

More at your.manchester.ac.uk/week45

WEEK 45 NOVEMBER

4 MONDAY

**5** TUESDAY Guy Fawkes

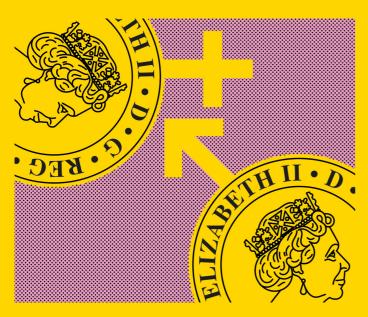
**6** WEDNESDAY

7 THURSDAY

8 FRIDAY

9 SATURDAY

**10** SUNDAY Remembrance Sunday



#### Minding the pay gap

The pay gap between men and women may be falling in the UK, but was still as high as 13.4% in 2015. Professor Wendy Olsen explains that one of the main reasons for the decline is the rise in part-time working. But women still earn an average of £1.62 less an hour than men. And while some of this can be put down to spending less time in full-time work, 57p of it is still 'unexplained'. More at your.manchester.ac.uk/week46

**NOVEMBER** WFFK 46 **11** MONDAY **12** TUESDAY **13** WEDNESDAY **14** THURSDAY **15** FRIDAY **16** SATURDAY **17** SUNDAY



### Copying helps people with Parkinson's

We often unconsciously imitate the behaviour of people with whom we are interacting. We also use imitation deliberately to learn or improve movements. Researchers have found that people with Parkinson's still show these types of imitation. This means that observing and imitating other people's actions can potentially help people with Parkinson's to practise and control their own movements.

More at your.manchester.ac.uk/week47

**NOVEMBER** WFFK 47 **18** MONDAY **19** TUESDAY **20** WEDNESDAY **21** THURSDAY 22 FRIDAY 23 SATURDAY **24** SUNDAY You can make a donation by post using the enclosed donation

form, give securely online at your.manchester.ac.uk/gifts/diary

or call +44 (0)161 306 6021 9am to 5pm Monday - Friday.



## There are dust diamonds in space

Manchester researchers have helped to discover some of the tiniest diamonds in the universe swirling around three infant star systems in the Milky Way. These nanodiamonds are probably formed out of a superheated vapour of carbon atoms. Because they are so small they can spin at exceptional speeds, producing microwave radiation that can be detected from Earth. More at your.manchester.ac.uk/week48

WEEK 48 NOVEMBER

**25** MONDAY

**26** TUESDAY

**27** WEDNESDAY

**28** THURSDAY

29 FRIDAY

**30** SATURDAY St Andrew's Day

1 SUNDAY 1st Advent



# Western women are becoming more left wing than men

Rosalind Shorrocks, Lecturer in Politics, recently carried out research which suggests that younger women across Western Europe and Canada are more likely to vote for left-wing political parties than their male contemporaries. She also found a possible link between the decline of religiosity and this left-leaning tendency.

More at your.manchester.ac.uk/week49

WEEK 49 DECEMBER

2 MONDAY

**3** TUESDAY

4 WEDNESDAY

**5** THURSDAY

**6** FRIDAY

7 SATURDAY

8 SUNDAY



# It may soon be easier to diagnose Growth Hormone Disorder

A single new blood test combined with an algorithm analysing 347 genes could revolutionise the way Growth Hormone Disorder is diagnosed. The team from The University of Manchester, working on the new test, believe it has the potential to replace the current lengthy and stressful diagnosis process within two to five years.

More at your.manchester.ac.uk/week50

WEEK 50

#### **DECEMBER**

- 9 MONDAY Winter graduation
- 10 TUESDAY Winter graduation
- 11 WEDNESDAY Winter graduation
- 12 THURSDAY Winter graduation
- 13 FRIDAY Winter graduation
- 14 SATURDAY Christmas break starts
- **15** SUNDAY





### A virus is causally linked to Alzheimer's

Herpes simplex virus type 1 (HSV1 - known as the cold sore virus) increases the risk of developing Alzheimer's disease. A Manchester scientist with an Edinburgh academic have produced a commentary explaining the results of a study from Taiwan. These showed that patients with severe symptoms of HSV1 infection who were treated with anti-viral drugs were ten times less likely to develop Alzheimer's than those who were untreated. More at your.manchester.ac.uk/week51

WEEK 51 DECEMBER

**16** MONDAY

**17** TUESDAY

**18 WEDNESDAY** 

**19** THURSDAY

20 FRIDAY

21 SATURDAY

22 SUNDAY Shortest Day



#### Grandpa's got a new frog

A spectacular new species of frog has been identified by a University of Manchester herpetologist. Sylvia's Tree Frog, *Cruziohyla sylviae*, has been named after the three-year-old granddaughter of the scientist who identified it. Live examples of this extremely rare frog can now be viewed at the Manchester Museum by anyone supporting their amphibian conservation project.

More at your.manchester.ac.uk/week52

WEEK 52 DECEMBER

**23** MONDAY

**24** TUESDAY

25 WEDNESDAY Christmas Day

26 THURSDAY Boxing Day

**27** FRIDAY

28 SATURDAY

29 SUNDAY



#### Spiders once had long tails

Spiders used to have long tails, according to a new discovery by an international group of scientists. They have been studying a 100-million-year-old fossil of a hitherto unknown species found in Myanmar. *Chimerarachne yingi* is similar to some species still living in East Asia, apart from its unique tail.

More at your.manchester.ac.uk/week53

WEEK 53 DECEMBER

**30** MONDAY

**31** TUESDAY New Year's Eve

1 WEDNESDAY

2 THURSDAY

**3** FRIDAY

4 SATURDAY

**5** SUNDAY



#### What will you help add in 2019?

Researchers at The University of Manchester need your support to advance the boundaries of our understanding. Will you back projects that may bring no short-term commercial benefits but will help us understand the world better? Can we count on you to support research that adds to the sum of human knowledge and might change the world but may never add to anyone's bank balance?