THE UNIVERSITY OF EAST ANGLIA MAGAZINE
2015/16

INSECT SOUP
How blending bugs holds the key to biodiversity

SPEAKING OF WRITING
The art of studying creative writing

THE SECRET LIFE OF FLOWERS
How 16th century observations paved the way for Darwin’s discoveries
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MY NORWICH, YOUR NORWICH

Radio 1 DJ Greg James meets student Oliver Sanham

NURSING’S CENTENARY

Edith Cavell’s part in the evolution of nursing
Impact is one of those words that is used a lot in higher education: what impact is our teaching having on students; who is our research impacting; what impact are our graduates having on the world when they graduate?

Over the past year, we have been gathering together stories from across the globe that demonstrate the breadth of UEA’s impact on our world. Historian Prof Stephen Church has been discovering the secrets of infamous monarch King John and debating with his fellow scholars whether a biography of someone long dead can actually be written.

Our pioneering creative writing programme has long been the envy of other UK universities and continues to go from strength to strength, as shown by the number of graduates who go on to achieve literary success. Novelist, poet, and alumnus Tim Clare explores why people choose to study creative writing, with the help of fellow graduates including Emma Healey and Tash Aw. Dr Lindsay Hall is hoping that her pioneering research into bacteria in the guts of babies will lead to a breakthrough in probiotics. By studying the different strains of bacteria in the human stomach, Lindsay aims to help premature babies to develop the same levels of internal beneficial bacteria as those born at full term.

So delve into this latest edition of Ziggurat, with additional stories about digital students, insect soup, and the evolution of nursing over the last 100 years. Explore the impact UEA’s staff, students, and alumni are having on the world.

Fiona Billings, Communications Officer
and Charlotte Burford, Alumi Relations Manager
Thousands of art lovers visited the groundbreaking ‘Francis Bacon and the Masters’ exhibition at the Sainsbury Centre for Visual Arts in summer 2015. Featuring major works by artists including Rembrandt, Titian, Michelangelo, Van Gogh, Picasso, and Matisse, the exhibition, on loan from the State Hermitage Museum, St Petersburg, formed the culmination of the Russian museum’s 250th anniversary celebrations.
WALK TOWARDS A HEALTHY LIFE

The risk of life-threatening conditions such as strokes and coronary heart disease can be reduced through regular outdoor walking in groups, according to research by Dr Sarah Hanson and Prof Andy Jones. As many as 29 per cent of adults in England do less than 30 minutes of exercise a week – leading to high resting heart rates, blood pressure and body fat levels.

MILLIONS FOR ANTIBIOTIC INVESTIGATIONS

UEA scientists searching for new antibiotics have been awarded almost £3 million by the Natural Environment Research Council and the Wellcome Trust. Funds will go towards investigating the defensive barrier that surrounds drug-resistant bacterial cells, and investigating whether the bacteria that help some ant species fight off infection could also help people fight off infection.

A MORE COLOURFUL FUTURE

The 250 million people affected by colour blindness worldwide have been given the chance to see television programmes in their true colours thanks to UEA spinout company Spectral Edge. Based on research from the School of Computing Sciences, the technology allows colour blind viewers to better differentiate between red and green.

HEALTH RESEARCH BOOST

The opening of the new £19 million Bob Champion Research and Education Building gave a boost to medical research on the Norwich Research Park in spring 2015. The building was supported by more than £2.2 million in philanthropic donations, and it will be home to a range of researchers, including those focusing on prostate cancer, antibiotic resistance, musculo-skeletal disease, and gastrointestinal diseases.
**Ziggurat**

**Tea Cuts Cancer**

Women who consume tea and citrus fruits are at a lower risk of developing ovarian cancer. Prof Aedin Cassidy found that these flavonol and flavanone-rich foods and drinks can reduce the risk of developing epithelial ovarian cancer, the fifth leading cause of cancer death among women.

**Feeling the Heat**

Data compiled by UEA’s Climatic Research Unit and the Met Office showed that 2014 tied with 2010 as the hottest year on record, with 2015 looking likely to be even warmer. This latest worldwide information will mean that all of the 10 warmest years on record have occurred in the 21st century.

**Global Impact of Diabetes**

Diabetes reduces employment opportunities and income around the world, according to a new study from Norwich Medical School. The researchers found that the disease led to a large cost burden not only in high-income countries, but also in low- and middle-income countries, where people with diabetes and their families face high costs for treatment.

**New Enterprise Hub**

The Enterprise Centre, a new campus development by UEA and the Adapt Low Carbon Group, opened for its first tenants in June. It includes an innovation lab, a 300-seat lecture theatre and working and teaching facilities, all designed to foster creativity and enterprise. Academics, students and commercial users will work side by side in what is set to be the UK’s greenest building. The new Master’s in Enterprise and Business Creation is also currently being taught there.

**UEA 2030**

The biggest-ever consultation about the future of the University was held with staff, students, alumni and stakeholders in spring 2015. Over 1,500 comments were posted on social media, the project website and on discussion boards across campus on the launch day. These have led to an in-depth exploration of where UEA should be heading in the years to come.
SNOOP DOGG ENDEARED HIMSELF TO THE CROWD BY WEARING THE FAMOUS YELLOW AND GREEN NORWICH CITY FOOTBALL CLUB COLOURS

PHOTO BY DAVE J. HOGAN

GETTY IMAGES
More than 50,000 people descended on campus in May to see international music acts including Taylor Swift, the Foo Fighters, and Snoop Dogg perform at the Radio 1 Big Weekend on Earlham Park. Students and staff nominated their “unsung heroes”, who were lucky enough to win tickets to attend the two-day event.
UNION REFRESHER
£6 million refurbishments to Union House are now complete. As well as a brand new entrance, the renovations have provided more space for use by clubs, societies and groups, a new dedicated Graduate Centre and a Student Media Centre (funded by the largest ever grant from the alumni fund) to house the UEA Media Collective. The LCR now boasts improved lighting, flooring, ventilation and sound.

TO PEE OR NOT TO PEE
Students Chris Dobson and Deborah Torr caused an international debate when they promoted their idea to save water by urinating in the shower. They appeared on BBC Radio’s Jeremy Vine show and the Today programme, and the issue was discussed on the BBC News Channel and the USA’s second most watched breakfast TV programme, The Today Show. Chris and Deborah went on to win the RWE npower Future Leaders competition, spending the summer in the Amazon looking at how indigenous tribes are affected by climate change.

AWARD-WINNING INSPIRATIONAL STUDENT
Student Union Women’s Officer Dolly Ogunrinde was named Inspirational Woman Student of the Year at the NUS Women’s Conference Awards 2015. The award was in recognition of her work at the Union, including enabling students to buy sanitary products VAT-free on campus, and working on the ‘Never OK’ campaign to raise awareness of sexual harassment.

NEED THE TOILET?
A computing sciences student has launched a free mobile app to help people find their closest public toilets. Jake Ruston, who has already loaded 100,000 toilets onto the app, hopes it will be particularly useful for people with conditions such as Crohn’s disease and irritable bowel syndrome (IBS).

LANDMINES
When everything from rubbish to rabbits can cause a false alarm when trying to clear landmines, the research of maths PhD student John Schofield is especially important. He has developed a new ‘stacking’ algorithm which reduces the effect of fluctuations in ground conditions on GPS signals making it easier to detect the precise locations of the landmines across the world.
WHAT’S THE WEATHER TODAY?

PICTURE THE SCENE: YOU’RE SITTING ON THE SUNNY TERRACE OF YOUR HOLIDAY RETREAT, SIPPING A GLASS OF ENGLISH WINE, TUCKING INTO A BOWL OF SUCCULENT BRITISH STRAWBERRIES. YOU FLICK TO THE WEATHER SECTION OF THE PAPER TO SEE WHAT THE DAY’S FORECAST HOLDS. RIGHT THERE, IN THAT MOMENT, EVERYTHING YOU’RE READING, EATING, AND DRINKING IS INFLUENCED BY ONE OF UEA’S MOST SUCCESSFUL SPIN-OUT COMPANIES – WEATHERQUEST.

Words Martha Henriques
UEA is renowned for its world-class meteorological and climate research. Against this background, Weatherquest – based on the UEA campus – was founded in 2001 with the primary aim of researching the weather and providing information to businesses and the public.

The diverse range of clients who subscribe to Weatherquest’s day-to-day weather services are a measure of its success. Siemens, one of the top three global producers of wind turbines, subscribes to Weatherquest forecasts to organise its schedule for manufacture and maintenance. The timing of building and repairing of turbines has to take into account upcoming storms and high winds.

Another of Weatherquest’s customers is the largest container port in the UK, Felixstowe. Anticipating changes in weather conditions is central to its safety and logistical planning.

Many people will be familiar with the weather information that Weatherquest provides to the Times and the International Times, as well as regional papers like the Eastern Daily Press, the East Anglian Daily Times and the Western Morning News. New recruits being trained up by the company provide meteorological reports and forecasts to the press that are read by hundreds of thousands of people every day.

PICK OF THE CROP
As well as providing essential weather information to businesses and media outlets, Weatherquest collaborates with researchers in academia and industry across the country. Berry Gardens, the largest producer of soft fruit in the UK, enlisted the services of Weatherquest to understand the impact of varying climate on soft fruit.

In 2013, the long winter had a damaging effect on soft fruit growth, and set production back by weeks. This forced Berry Gardens to import goods in order to meet demand – especially for the Wimbledon strawberry rush. Weatherquest worked with them to look at how they could adapt their business to account for UK climatic conditions, enabling them to better predict how to meet the demands of retailers, whatever the weather.

Steve Dorling, one of the co-founders of Weatherquest, started off at the Met Office before studying for his BSc and PhD at UEA. Academic positions in Canada followed before he returned to Norwich to teach and start up the company. He has always made the most of Weatherquest’s roots in meteorological and climate research at UEA: “The ‘weather services’ provided by Weatherquest are now merging into the new academic discipline of ‘climate services’,” said Steve. “UEA is famous for its work in climate science and so there are great opportunities to draw these activities together over the coming years.”

A recent example of this is research by PhD student Christopher Steele looking at the impact of sea breeze circulations on offshore wind energy. Weatherquest joined forces with the National Environmental Research Council to fund Christopher’s research. “Christopher’s project in wind modelling has helped us develop our services for the wind energy industry,” Steve said. It was a key factor in a new collaboration with a leading marine engineering company, James Fisher.

Weatherquest also supports PhD student Alistair Nesbitt, who is researching the influence of weather on vintage wines. The UK-focused project is timely, since recent years have seen increasing interest in the UK wine industry. Alistair’s research focuses on the industry and the growth of this market, and how wine can be reliably produced despite the UK’s fickle weather.

“
I'M A SELF-CONFESSIONED WEATHER GEEK, I LOVE TO STORM CHASE, TAKE PICTURES OF CLOUDS AND THE NIGHT SKY AS WELL AS RUN MY OWN WEATHER STATION IN MY BACK GARDEN. SO, FOR ME, IF IT’S WEATHER-RELATED, I ALMOST ALWAYS FIND IT EXCITING.”
CHRIS BELL
WEATHERQUEST

IMAGES,
SOFT FRUIT PRODUCERS, SUCH AS BERRY GARDENS, RELY ON WEATHERQUEST’S DATA
FAR RIGHT: PENNY TRANTER PRESENTS THE WEATHER ON CHRISTMAS DAY 1993
FOLLOW THAT STORM

Weatherquest employs several UEA environmental science graduates. Chris Bell, who came to UEA as a visiting student on his year abroad from Louisiana State University, has wanted to be a meteorologist for as long as he can remember. “When I was a small boy one of my first memories was seeing lightning strike a tree in the neighbour’s garden across the street from my house,” he said. “I was fascinated by it.” He even used to provide school weather reports when he was in primary school.

For Chris, the weather is more than a day job: “I’m a self-confessed weather geek, I love to storm chase, take pictures of clouds and the night sky as well as run my own weather station in my back garden. So for me, if it’s weather-related, I almost always find it exciting.”

Dan Holley, Operational and Broadcast Meteorologist and IT Specialist, is another UEA graduate snapped up by Weatherquest. “I grew up in Kent, where we often experienced active thunderstorms moving up from France on hot summer nights,” Dan said. “For as long as I can remember I used to get excited hearing on the TV forecast that storms were possible during the coming night. I’d stay up waiting for them to arrive, sometimes to no avail – such is the nature of site-specific thunderstorm forecasting!”

While still at UEA, and as part of his year in industry, Dan began presenting the weather on BBC Look East, fulfilling a childhood ambition even before he graduated. He still gets to present the weather on local TV and radio occasionally. “I am lucky to have my dream job in this field!” he said.

Dan isn’t the only recent student meteorologist to shine. In 2013, undergraduate Chloe Moore led a UEA team to win first prize in the annual RWE npower Energy Challenge by developing a strategy to improve the image of the energy sector. The UEA team sought to engage with older and more vulnerable energy consumers – they proposed a mobile Energy Advice Centre to tempt this group with a chance to discuss their energy concerns over free tea and biscuits. The concept won each of the four UEA team members £1,250.

Chloe said: “The Energy Challenge provided opportunities to enhance our future career prospects: the chance to network with those from the energy industry, to present at The Royal Institution of Great Britain, and an internship with npower.” Graduating in 2014 with a BSc in Climate Science, Chloe later joined Weatherquest as an operational meteorologist.

METEOROLOGY’S A-LISTER

Meteorologists from UEA’s School of Environmental Sciences are not new to the spotlight. Take Penny Tranter, a regular presenter with the BBC Weather Centre through the 90s until 2008.

Few people understand the real-world impact of meteorology better than Penny. From the age of 10, she knew that she wanted to be a weather forecaster. Like many UEA meteorologists, her enthusiasm for the subject was first sparked by personal experience: a severe storm at home in Ayrshire in the late 1960s. She still describes in great detail the destruction caused to the houses on her street: “blown down fences, roofs coming off, skylights coming in. The noise of the wind was so scary – it sounded like a train.”

As a BBC forecaster, Penny says her role was about consistency and communication. Her forecasting skills were vital, but the role was about working with the chief forecasters within the Met Office, who provided the forecasting framework. The television/radio forecaster’s job is to understand and interpret the information and put it in everyday English for audiences.

Today, Penny is an adviser for the Met Office (whose Chief Executive is UEA alumnus Rob Varley), with responsibility for the southwest of England. She is the point of contact supporting the emergency services and emergency planners in severe weather conditions. She provides weather guidance, not only to inform direct action by these services, but also to guide them in delivering the right safety messages for the public.

When Penny put herself forward to be on the Met Office forecasting team for the London 2012 Olympic and Paralympic sailing events, a colleague asked why on earth she would put herself forward for something that was going to be so hard. Penny’s response was defiant: “It’s going to be brilliant because it’s going to be such detailed forecasting that we’re having to do. It’ll be a huge challenge ... so yeah, I want to be part of it.” It’s impossible to ignore the infectious enthusiasm she has for her area.
STORM CHASING
WITH DAN HOLLEY

Each spring, the Great Plains of North America experience their main severe thunderstorm season from April through to June.

A sharpening temperature contrast – between warm, moist air moving northwards from the Gulf of Mexico, and cold air over Canada and the Rockies – coupled with a strong jet stream, brings the threat of large hail, damaging winds and occasional tornadoes.

2015 marked my fourth consecutive year storm chasing in the Plains, and once again failed to disappoint with a thunderstorm witnessed on all but the last day of the trip. Storm chasing is essentially one big road trip – you never know where you’re going, and often travel many hundreds of miles a day in search of the perfect storm. This year, in 16 days we racked up over 7,000 miles, with only fast food for sustenance.

Thunderstorms often don’t develop until late afternoon or evening, once the surface temperature has hit its peak, so you tend to do most of the chasing late in the day and well into the evening, having spent the morning/early afternoon getting into position and then waiting for thunderstorm initiation.

Storm chasing is so called because that’s what you spend most of the time doing; hunting down the elusive tornado is much harder and requires a lot of atmospheric ingredients to come together, which won’t necessarily happen every day. In fact, there are some days where forecasts can look promising but not even a thunderstorm develops for various reasons. It can be rather frustrating if you’ve driven for hours to get into position and waited for initiation, just for the day to end as a ‘bust’.

As a meteorologist with a strong interest in severe weather, storm chasing is fun on many levels – not only do I experience the power of nature first hand, but each day also serves as a challenge to my forecasting ability, and ultimately allows me to improve my forecasting skills.

I always find it fascinating how you begin the day with clear blue skies and hot sunshine, and yet just a few hours later you are chasing a severe thunderstorm capable of producing large hail and perhaps a tornado – nature at its best, and it gets your adrenaline pumping not knowing what might happen next, or where you might end up at the end of the day.

7,000 MILES RACKED UP IN 16 DAYS

DAN HOLLEY
METEOROLOGIST

FOLLOW DAN HOLLEY’S STORM CHASING ADVENTURES AT HTTP://BLOG.DANHOLLEY.CO.UK
KING JOHN

Magna Carta and the making of a tyrant
Roger of Wendover, had made John not just a disastrous end to his reign. Within a decade of his death, his body was in enemy hands, whether those of the French under the leadership of Louis son of the French king, and he had enemies in the north and in the south of England (to the French who had invaded west of his kingdom). He was buried at Worcester in his coronation cap which he had worn for seven days after he had been anointed with holy oil on the day of his coronation, Ascension Day, 27 May, 1199.

John had died on the night of the 18/19 October 1216, as a storm raged around Newark Castle, where he had come to rest after travelling from Lynn in Norfolk, and there could have been no doubt at all in the minds of those who placed his body in its tomb that their king had died an abject failure. He had started his reign as the de facto ruler of not just England but also large parts of what would become the kingdom of France. He was duke of Normandy and of Aquitaine, and count of Anjou. In addition, he enjoyed rulership of the kingdom of Ireland and overlordship of Wales, Scotland, Brittany, and claimed overlordship of the county of Toulouse. By 1204, he had lost Normandy, Anjou, and Poitou (the northern part of the duchy of Aquitaine), though he retained in his possession the southern part, Gascony. By his death, John had endured an extended conflict with the Pope, he had been forced to concede the terms enshrined in Magna Carta by his subjects who saw him as a tyrant, he had lost control of London (his capital city), of Westminster (where his Exchequer sat), of the south of England (to the French who had invaded under the leadership of Louis son of the French king), and he had enemies in the north and in the east of his kingdom. He was buried at Worcester in part because there was nowhere else suitable for him to be interred since so much of his kingdom was in enemy hands, whether those of the French or of his own barons.

No king's reputation can survive such a disastrous end to his reign. Within a decade of his death, the St Albans monk-chronicler, Roger of Wendover, had made John not just a failed king but one who was positively evil; by the time that Roger's successor at St Albans, Matthew Paris, in his Great Chronicle, came to augment Roger's work a decade after that, John had been cast into the depths of Hell.

"He spoiled the liberties and possessions of the barons and cuckolded them with their wives and deflowered their daughters, so that both God and men detested the king. John was insatiably avaricious, glutinous, and libidinous... and [amongst his crimes], like a latter-day Herod, he had the innocent children who were hostages to their parents' good behaviour mercilessly hanged."

It is this view that has come to inform our understanding of King John and although some historians have applied their ingenuity to reforming our perceptions of this man, in the popular imagination they have done so with little success.

Almost everything we think we know about John is a later concoction. To begin with, to call him 'Prince' John is an anachronism based on the later habit of calling the sons of the reigning English monarch 'prince'. In twelfth-century England, this practice had yet to take hold. In John's world, only some Welsh rulers – and some of the rulers in the Holy Land – were beginning to call themselves principes. Occasionally, political commentators used the word principes to refer to rulers in general, but no one called the sons of Henry II and Eleanor of Aquitaine 'princes'. During his early years, John was, simply, 'the king's son', and sometimes 'John Lackland'; later, when he assumed direct control of Ireland in 1185, he was 'John, son of the lord king of England and lord of Ireland'; after Richard's accession in 1189, he was 'count of Mortain' (his title in Normandy) and when issuing documents relating to Ireland, he was also 'count of Mortain and lord of Ireland'. In this book, therefore, before his accession to Richard's throne in 1189, he is referred to as 'John' or 'Count John', but never as 'Prince John'. And neither did this Count John have anything to do with the legendary character Robin Hood. That relationship, too, is a wholly later concoction; it was suggested in print first by John Major in 1521, both published in 1598.

That many of John's contemporaries saw John at the end of his reign as a tyrant is beyond doubt. While twelfth-century kings were regularly subject to rebellions and plots on their lives, no king before John faced the community of the realm determined to set limits on his power. In forcing John to concede the terms of Magna Carta and then in determining to unseat him and his dynasty from the throne of England, John's barons went further in their rebellion against their king than any of their predecessors. What they did in 1215 was unprecedented. To be sure, kings had been forced to concede charters to their subjects promising the reform of their realm before, most notably at the outset of their reigns. Henry I, for example, had set out a series of improvements to royal rule in his coronation charter, issued in 1100. This charter would go on to inform those who drew up the terms of Magna Carta, but it was fundamentally different from Magna Carta because it had been issued as a statement that the new king would rule differently from his discredited brother, William Rufus.

Extract taken from:
Biography has been a popular literary genre in the west since the earliest times. From Suetonius’s *Lives of the Caesars*, through the sacred biographies of the Christian martyrs and saints of the late antique and medieval worlds, to the accounts of deeds of modern sports stars and film stars, we ordinary mortals have been fascinated by the doings of great individuals and continue to be so. Yet writing biography is hardly an unproblematic task. For those of us who write biographies of the long dead, the very medium by which we access those people is itself problematic. We rely overwhelmingly, for example, on the written word, and yet, since no one lives his or her life through the written word, we are already at one remove from our subject.

As a biographer of a long-dead monarch, my task is made all the harder because, as one colleague delicately put it, I cannot have written a biography since I can say nothing of the inner man who was King John. He is, of course, right. I have no insights into the soul of King John. But I would counter his point by asking if a biographer can ever write about the inner life of his or her subject. Even if we have access to diaries and personal memoirs, letters and reminiscences from family, friends, and enemies, do we ever really know the exact nature of the demons and angels who drive all of us? It is hard enough fathoming the motivations of those we know best—our husbands, our wives, our families, our friends—let alone those we know only through the legacy of writing.

Does that make the biographical form a pointless exercise? Should, therefore, the biographer give up their task before it is begun, certain in the knowledge that they cannot access the real person who is the focus of the biography? Hardly surprisingly, I would argue that the pursuit of biography is not a fruitless exercise; that even if our knowledge is constrained by the weaknesses of our sources, and that even if we cannot know the inner soul of our subject, biography is worth doing because it sets the past within a framework that is comprehensible. The great historical tides that batter all of us are made more intelligible when set within the context of a life, a truism not lost on modern reporters, who look for individuals to act as voices articulating the impact of the greater events that are unfolding before them. Biography is a way of seeing the world on a human scale. This is why the form, despite all its problems and pitfalls, continues to be a popular genre for writers and readers alike. And this is why I elected to explore the bit of the past that fascinates me through the medium of biography.
WHEN MOST OF US LOOK AT A PRIMROSE, WE SEE A VERY PRETTY FLOWER. WHEN CHARLES DARWIN LOOKED AT A PRIMROSE, HE ALSO SPOTTED AN UNUSUAL FLORAL ARCHITECTURE AND – BEING DARWIN – CAME UP WITH A BRILLIANT EVOLUTIONARY EXPLANATION FOR IT.

WORDS BEA PERKS
Think of a flower, and one generally imagines a ring of petals encircling a bunch of filament-like stamens with pollen-covered tips (called anthers). The stamens make up the male sexual organs of the flower. In the centre of the flower you might find the female sexual organs, known as the stigma and style, which take you to the flower’s ovary.

Primroses are particularly interesting because half the plants have flowers with anthers higher than the stigma (so-called thrum-eyed), and half have their sexual organs arranged differently—with the stigma at the top, and the pollen-covered anthers lower down (so-called pin-eyed).

When Darwin spotted this, he was intrigued. After exquisite close observation, he ruled out the possibility that half the flowers were male and half female, and concluded that each flower was a hermaphrodite with fully functional male and female organs.

In November 1861, Darwin read his paper ‘On the two forms, or dimorphic condition, in species of *Primula*, and on their remarkable sexual relations’ at the Linnaean Society; the article was published in March the following year. Darwin hypothesised that having these two flower types within a species would actively promote insect-mediated cross-pollination. Having two flower types would reduce the risk of inbreeding.

What Darwin didn’t know was that the existence of these two flower types in primroses had been recorded throughout history. Recently, Philip Gilmartin, Professor of Plant Molecular Genetics in the School of Biological Sciences, was looking through 18th century illustrations of primroses included in a major publication of the time, *Flora Londinensis*. There, he spotted the two types of flower captured in a copper plate engraving dating back to the late 1700s. It predated Darwin’s observations by more than 70 years.

By library searches for the original texts and early prints, and with the help of the internet, a luxury not afforded to Darwin, Philip scoured the literature looking for any other historic descriptions of these flower types. He found examples going back from the 19th to the 16th centuries. Many people had seen the separate flower types, but only Darwin had offered an explanation for their existence.

Philip has just published the results of his search in the journal *New Phytologist*. “The review has brought together all the history into one place,” he says. “It’s not surprising that Darwin wouldn’t have known about the work from the 1500s. He was very well read, but accessing historical texts is now much easier than it was in Darwin’s time. The most surprising thing is that he hadn’t seen the observations from the late 1700s.”

When Darwin did later discover that others had observed the two flower forms just before him, he acknowledged their contributions, and gave them due credit in his later publications. However, there were further examples, uncovered by Philip, of which Darwin remained unaware.

“The genius was that he understood the purpose of this evolutionary adaptation,” says Philip. “What’s really exciting about his work on primroses is that he said he identified this as probably one of the most satisfying things that he ever found the meaning of.”

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**Fig. 1.**

Long-styled form  Short-styled form

*PRIMULA VERIS*
BENEFICIAL BUGS FOR BABIES

A new parent’s life can become overrun with sterilisers and antibacterial wipes, but a dose of the right bacteria could make all the difference to a newborn baby, especially if they were born preterm, discovers Bea Perks.

While having a load of bacteria in our guts might sound rather unhealthy, it is absolutely essential for a healthy digestive system and, perversely, for fighting off infection. Most of us are familiar with the idea of probiotic yoghurts and drinks, and their supposed health benefits. But most of us are probably less familiar with the idea that we probably need so-called “good” or “friendly” bacteria from the very moment we are born.

How newborns get the good bacteria that they need, and what happens to them if they don’t get the right friendly bacteria, is only just beginning to be understood. Lindsay Hall, a senior lecturer in gastrointestinal sciences at UEA, is a pioneer in the field. She is beginning to build up a picture that suggests newborns need certain types of friendly bacteria to thrive, to fight infection and to build up a fully functioning immune system that will be with them for the rest of their lives. Her work could be of enormous benefit to newborns who haven’t got the good bacteria they need, particularly, she hypothesises, babies born prematurely and those delivered by caesarean section.

OUR INTERNAL ECOSYSTEM

If you count up all the cells in the human body, most of them wouldn’t be human. For every human cell in our bodies, it’s estimated that another 10 are microbial. They live all over the place – lining our mouth, nose, lungs, and, perhaps most significantly, our gut.

“When you talk of ecosystems, you think of the rainforests or the oceans, but in our gut we’ve got the most diverse ecosystem on the planet,” says Lindsay. We all know about the bacteria that cause disease, but these are only a fraction of the full microbial picture. The $153 million Human Microbiome Project, run by the National Institutes of Health in the USA, concluded that microbes contribute more genes responsible for human survival than humans themselves.

Bacterial genes are essential for human survival. Genes carried by bacteria in the gut, for example, allow humans to digest foods and absorb nutrients that would otherwise be unavailable.

‘LACTOBACILLUS’ AND ‘BIFIDOBACTERIUM’

Lindsay came to focus on the bacteria living in our bodies – the microbiota – in a roundabout way. She got her first degree in microbiology at the University of Glasgow, and was awarded a summer scholarship to carry out research abroad. She ended up at a centre for probiotic research in Canada, looking at Lactobacillus. Lactobacillus helps us digest food in the gut.

Although this was interesting, she put it to one side when she returned to the UK to complete a PhD in vaccine development at The Wellcome Trust Sanger Institute in Hinxton, Cambridge. After her PhD, she went over to Ireland to focus on chronic inflammatory diseases, such as ulcerative colitis and Crohn’s disease. She was based at the Alimentary Pharmabiotic Centre in Cork, where research is focused on the gut, and particularly on probiotics and microbiology. Her research was looking at the patient’s immune response rather than the microbiota, but a research group along the corridor was working on a member of the microbiota Bifidobacterium. Bifidobacteria are thought to regulate the balance between different bacterial species in the gut, and to inhibit harmful bacteria from taking over.

It was a perfect match, says Lindsay: her focus on the host, and her colleagues’ focus on Bifidobacterium. “It’s no good looking at the bacteria in isolation,” says Lindsay, “You need to look at the gut – where the bacteria live – at the same time.”

After Cork, she returned to the UK, with a background in pathogenic bacteria, in the microbiota, and in host immunology. She thought about what she was most interested in, and where there was a need for more research. “I thought, when do you get the microbiota? You get it at birth.”
WHEN YOU TALK OF ECOSYSTEMS, YOU THINK OF THE RAINFORESTS OR THE OCEANS, BUT IN OUR GUT WE’VE GOT THE MOST DIVERSE ECOSYSTEM ON THE PLANET."

DR LINDSAY HALL
SENIOR LECTURER IN GASTROINTESTINAL SCIENCES AT UEA AND WELLCOME TRUST NEW INVESTIGATOR

THE BIRTH OF A MICROBIOME

A literature search revealed that research was focused on the microbiota story in later life, but what she calls “the critical early window” – microbiota in infants – was relatively undiscovered. “If that’s when you get the microbiota, that suggests to me that’s going to have an impact later in life,” says Lindsay.

“The scientific view at the moment is that when we are born we become colonised with bacteria,” says Lindsay. “There’s some data that suggests that bacterial products, or maybe even whole bacteria, might get across the placenta and into the gut. So you might start programming things as early as in the womb. The current dogma is that you’re born relatively sterile, but that it’s only as you’re born that you start to pick up the bulk of your beneficial bacteria.”

It all makes evolutionary sense, she says. The birthing canal is known to be awash with Lactobacillus and Bifidobacteria, which are exactly the bacteria that the baby will need. “The mum has evolved to have the right bacteria in the right place at the right time,” says Lindsay. So as well as looking at the baby’s biota, her team is looking at mum’s biome.

Alongside this contribution from the mother, breast feeding is also known to promote these bacteria in several ways. Breast milk contains beneficial bacteria, as well as components that can be digested by these “pioneer” – but not pathogenic – bacteria in the baby’s gut. For example, Bifidobacteria can digest so-called milk oligosaccharides in breast milk that the infant is unable to digest. Following digestion, the bacteria produce smaller molecules that the host can absorb and acquire energy from.

“Bifidobacteria are one of the first groups of bacteria that turn up. If you’re a vaginally delivered, breast-fed baby, 80 per cent of your total community is Bifidobacteria. Which suggests it’s pretty important,” says Lindsay.

The problem at birth is that this ecosystem is unstable, with lots of factors affecting its development. Researchers are only beginning
to make the link between birth and the gut biota. “Babies born by caesarean section have far less, maybe only 10–20 per cent, of their Bifidobacteria,” says Lindsay. “Their community looks more like a skin microbiota community,” she says, “and where would you pick it up? You’d get it from being handled.” The problem is, says Lindsay, that those babies are far more susceptible to diseases and allergies and potentially infections. “That’s a link,” she warns, although the definite cause is yet to be confirmed.

IS BREAST REALLY BEST?
It’s the same with breast feeding. Healthcare professionals still debate the breast vs bottle question. In 2012 UNICEF looked at breast feeding rates, and the UK came out very low, recalls Lindsay. Only 69 per cent of women reported that they were breastfeeding exclusively at one week after birth, with fewer than 35 per cent still breastfeeding at six months. Babies that are formula fed have less Bifidobacteria, which could potentially be a problem, she says. Bottle-fed babies have been reported to have higher levels of disease in childhood and adulthood.

Lindsay would like to see her research used to help develop a baby’s formula that provides the bacteria that a newborn baby needs, and might have missed out on if they were delivered by caesarean section or bottle fed. “All we want to do is give back what they should already have,” she says.

“We’re isolating lots of new bacteria, and we’ll be screening them for their health-promoting ‘probiotic’ abilities to find out whether they can actually colonise,” she says. If they can’t colonise, they can’t help you – they just wash through. Some studies have found probiotic bacteria that were subsequently found not to colonise the gut. Even some probiotics on the market don’t colonise in the long term. “In infants, because the community is less complex, there’s a better chance of bacteria coming in and finding a niche and being able to settle down and grow,” says Lindsay. Adults have a more complex, relatively stable, ecosystem which doesn’t like other bacteria coming in: “Everyone’s happy and got their own place in the gut,” she says.

COCKTAIL FORMULA
Lindsay and her team are looking for particular strains of bacteria, or a cocktail of bacteria, that will set up the microbiota. They are looking at what makes these beneficial bacteria able to colonise the gut and modulate the host immune system by examining the bacterial genes involved. “Then we can take a much more targeted approach to probiotic discovery,” she says. Beyond this, it will be important to find out how the bacteria exist in the ecosystem. They won’t live in isolation in the gut, but surrounded by other bacteria and the host itself. “There are thousands of types of bacteria in the gut, and they all talk to each other and help each other. That’s why it’s so important that, before we come up with therapies, we need to nail this,” says Lindsay.

Lindsay’s focus is on premature babies. The vast majority of premature babies are born by emergency C-section, and they may not be fed breast milk because their mothers are not ready to produce milk. In addition, their lungs may not have developed properly, making them very susceptible to infection. They are treated with antibiotics and kept in sterile conditions. This is clearly essential, but it means that premature babies can’t acquire the friendly gut bacteria they need. “They’ve basically not got anything that would help them get the bacteria they’re missing,” says Lindsay.

The rate of preterm births is increasing markedly. “What they do now is basically a miracle, in terms of having the baby born and keeping it alive from 25, 24, 25 weeks,” she says. Working with clinicians and nursing teams at the Norfolk and Norwich University Hospital and at Addenbrooke’s Hospital in Cambridge, her team is screening premature babies, with the idea that one day they could develop a way of turning a premature baby’s microbiota into a full-term baby’s microbiota.

FROM CRADLE TO GRAVE
The team is following babies up to one year after starting on probiotics, but they hope to extend this to three years. “That’s still not long enough, because some childhood diseases might come up then, but everyone lives quite a long time and diseases take a long time to come up,” says Lindsay. “This will be something that we hope to keep going, following the cohort the whole way through.”

The project, codenamed Bambi, plans to recruit 400 premature babies – she’s currently up to 90 but hopes to hit the target in early 2016. This will be followed by analysing an enormous amount of data. “We would hope to have a publication, and this is me being super optimistic, by the end of 2016, early 2017.” If the research continues to show what early results indicate, Lindsay says that it could lead to a permanent change in the way premature babies are cared for in the UK.
Melissa studied for an undergraduate degree in microbiology, and continued on to do postgraduate work in veterinary microbiology at home in Canada before undertaking a PhD in immunology in Switzerland. Meeting Lindsay through collaborations inspired her to move to Norwich for postdoctoral research and join the team working on Bifidobacteria.

Melissa is focusing on a small area of Lindsay’s wider project, investigating the affects of the milk a baby drinks on its microbiota. She knows that breastfed babies experience a bloom (a sudden increase in the number of bacterial colonies) of Bifidobacteria bacteria that formula-fed babies do not and that their microbiota are “quite different”.

“I think that the breast milk is preferentially feeding the Bifidobacteria, because when you start to transition the baby off breast milk the Bifidobacteria population goes,” says Melissa. From this initial hypothesis, she theorises that the Bifidobacteria control what other bacteria colonise, thereby shaping the whole microbiota of the gut. So, she specifically wants to look at the impact of that bloom, to understand what is going on and how Bifidobacteria in the infant gut promotes child health, and hopefully enable the creation of a better formula that can more closely replicate the health benefits achieved by breast-feeding.

That’s an ambition shared by many, including the companies producing formula. However, while they apply themselves to mimicking breast milk as closely as possible, Melissa has a new take. Focusing on how to achieve the same end result after ingestion has garnered her a prestigious Marie Skłodowska-Curie Fellowship, recognition unusual for someone so early in their career.

Her method is less abstract than you might imagine. Melissa says: “I’m building a continuous culture where I can keep it growing as you would envision seeing in the gut of an infant.” She will then feed it breast milk and formula and trace what happens. In particular, she will focus on where the by-products of the Bifidobacteria are different between the two. “Then we can add it back in what we find is different in the breast-fed cultures compared to formula, with the hope to make a better formula that can make formula-fed infant gut bacteria more similar to those of breast-fed infants.”

“If we understand how the microbes in the guts of breastfed babies are interacting with each other, then we could begin to understand something new and significant about breast milk that we didn’t before, and why it has such a big health benefit for babies,” says Melissa.
THE UK’S FIRST MA IN CREATIVE WRITING WAS ESTABLISHED AT UEA IN 1970. HERE, TIM CLARE, A GRADUATE OF THE COURSE, TAKES A DEEPER LOOK AT THE ART OF LEARNING TO WRITE.

WORDS TIM CLARE
As an author – someone who makes his entire living from the transparently ludicrous enterprise of arranging words in a particular order then charging people for it – I stand astonished at our nation’s lack of imagination. Whatever happened to astronaut? Spy? Neurosurgeon? Ice cream tester? Coypu minder?

Still – I get it. From the outside in, with one’s nose pressed to the chilly pane of critical and commercial recognition, writing looks like a very sweet gig indeed. Pull whole universes from your head, colourful and variegated, like a handkerchief trick! Get paid handsomely! Appear at festivals to paying audiences who applaud you simply for doing your job!

The reality is a grubbier, duller affair of course, and I think most sensible adults know this. Even so, the desire to become a professional author looms large in many people’s lives. I know it did in mine. Stories are one of the most fundamental human currencies. When we create a story, we’re weaving a thread of ourselves into the great rope of human culture, creating something that resonates beyond our own life, perhaps continuing after we die. It’s hardly surprising that many of us feel a drive to be part of that.

**HOW TO WRITE A NOVEL**

Ever since the novel emerged as an artistic form, the path to becoming a novelist has been as follows: read lots of novels, sort of guess how they might have been put together, then try to replicate that imagined process. It’s a bit like becoming a clockmaker by purchasing hundreds of clocks and trying to abstract the basic principles of chronometry by watching the moving cogworks, reproducing sections through trial and error, then posting your prototype clocks to various wholesalers across the country, waiting nervously to see if they reply with: “Yes, this is a clock. We are prepared to sell it.”

Creative writing courses – a blanket term which covers everything from online self-study groups to three-year full-time creative-critical PhDs – gather a bunch of these rather quixotic aspiring clockmakers together, guided by a tutor who has – one would hope – successfully built at least one working clock, to work for a focused period on constructing, deconstructing and improving clocks.

Which is to say, stories.

I studied on the Prose Fiction MA at UEA, a year-long course consisting primarily of workshops in which students submit extracts from work-in-progress for the group to offer feedback on. The writing I produced over the year was pants, but the skills I developed have helped me ever since.

**WASTE OF TIME**

As creative writing MAs have grown in popularity and number, it’s become increasingly fashionable in the literary world to pour scorn upon them. Last year, author Hanif Kureishi famously opined that creative writing courses are “a waste of time” and that “99.9 per cent” of students are “not talented” – comments particularly remarkable given that he had recently been made professor of the subject at Kingston University.

While most people dismissed his comments as desperate, conceited attention-seeking, I was surprised and annoyed to see that a significant, vocal minority felt he was confirming what they had always suspected – that creative writing courses are a scam, promising the impossible and perpetuated upon the talentless.

Obviously I have a dog in this fight. No one wants to feel like a mag, and I have devoted years of my life to studying creative writing. On the other hand, though I felt I knew from experience that Mr Kureshi was talking, so to speak, out of his hat, I realised other authors might have quite different views. I get a bit wound-up by this sort of debate, so I thought I’d consult some cooler heads, in search of nuance.

**UEA’S AWARD-WINNING NOVELISTS**

First off, I spoke to author Emma Healey, whose bestselling debut Elizabeth Is Missing won the Costa First Novel award, about her experiences of studying on the MA in Prose Fiction at UEA. The novel is told through the eyes of its elderly protagonist, Maud, who is determined to find out where her friend Elizabeth has gone, despite her deteriorating memory. I asked Emma how she had found the MA.

“I loved it,” she said. “I’d been writing my novel for about a year and a half. There’s a point where your friends can’t face another book discussion.” She found that the course offered an opportunity to talk about writing, and her own project, in far greater depth than you can manage by nudging friends and family for favours. “Most writers do something similar organically. The Bloomsbury Group was basically a workshop.”

The MA at UEA gave her a chance to dive into the process wholeheartedly, without feeling guilty. “Any artistic practice encourages self-indulgence, which can be very dull, like those jokes where you had to be there. Doing the MA makes you think about whether what you’re doing is self-expression, or self-indulgence.”

I brought up the criticism of creative writing courses in general, and the arguments over innate talent versus learned craft.

“I think the ‘can creative writing be taught?’ debate is to do with the general mysticisation of the arts. People love this myth that some are born as an artist. It seems bizarre to me. I don’t have a propensity towards maths, but if I did, I would have gone to study it. I would have learned the principles behind it.”
LIGHTBULB MOMENTS

“It seems strange to me,” Emma says, “that we don’t apply that to words. That’s what an MA does. There’s no heavily-guided teaching. I’d done a London writing workshop for a long time, but the year you spend on the MA gives you much more intensity. It packed 10 years of lightbulb moments into one year.”

I asked how someone could tell if studying on a creative writing MA would be useful for them. “I feel like the people who got the most out of the course already had a project with a certain amount of words. I turned up with 40,000 written. I’m really glad I had that. It took the panic out.”

She found the course was a useful preparation for the pressures of becoming a professional author. “The whole idea of an MA is workshopping. You want the feedback you could never have thought of yourself. You’re seeing your work through the eyes of other people.

“Another thing I felt was amazing was having to defend your work. Six people say they love this scene, five say they hate it – only you can decide who to listen to. You start forming a sense of who you’re writing for, and what sort of reader you want to please. That’s when you become a writer – when you’re not defending your work blindly.

“It’s harder in the very early stages. You’re workshopping your own ability to distinguish between good feedback and bad feedback. After a while, you’re able to trust yourself more, and think: ‘I know the voice.’

“It’s especially important when you enter the publishing world – you use those skills when you’re picking an agent and an editor. Which one do you go with? How do you take their suggestions? You need to be able to defend your decisions.”

SELF DEFENCE

Emma says: “The whole MA experience sets you up for that. When you meet your editor, it’s scary – especially if they’ve paid for your work. It was very unexpected for me how hard that was – you have to keep reminding yourself that the work is yours, and you have to be able to rely on your own critical faculties. The workshops recreate the professional situation of being an author before you know it exists.

“The MA teaches you to take responsibility for your own work. You don’t blame a tutor, classmate, editor or agent. You learn to say: ‘This is my book and I will ruin it in the way I want to ruin it.’”

Next I spoke to Tash Aw, author of Whitbread First Novel Award-winning The Harmony Silk Factory and, most recently, Five Star Billionaire. He studied on UEA’s MA in Prose Fiction the year before I did. I asked him about why he decided to take the plunge:

“I had half a novel on my hands,” he told me. “In fact I’d been struggling with it for years and had become blocked. I’d also been working full time at a job that didn’t leave me much emotional energy to devote to my novel, and I was getting desperate for a change in direction, something that would give me ventilation, new ideas. Nothing I did seemed to work; I was rewriting my novel and not really understanding why I was doing anything, so I decided to apply to UEA.

“I had no idea what a creative writing course would be like, no idea whether it would help me. But I’d heard about the MA, and reckoned that it would be a make or break experience – total strangers would read my novel, and either love it or destroy it, and I would finally regain some perspective on my work.

“It was tough to begin with, very intimidating. I wasn’t the least experienced writer in my group but [was] not the most experienced either. Some people seemed incredibly well-read, had great poise, had published short stories in famous magazines, a couple even had agents.

“I found it difficult to discern the cacophony of opinions – I’d never done a workshop before, and I think most people were trying to establish what the rules of etiquette were. There was a lot of posturing at the start, which I found difficult to handle.

“Whenever anyone said anything I wasn’t quite sure if they were being sincere; and even when they were sincere I didn’t know if they were ‘right’.”

MUTUAL SUPPORT

Like Emma, as the year progressed he began to get a sense of whose opinions he particularly valued in the group. “Eventually things settled down, and I began to discern those who read my work better than others, those whose opinions were more helpful for my writing. I found a mutual support group in the form of three or four other writers, made close friendships with them; they still read my work today and even help edit. I’m not sure if I ever came away from class thinking, ‘That was amazing,’ but throughout the year I definitely gained a greater awareness of myself as a writer.”

I asked for his take on the ‘can creative writing be taught?’ debate, interested to see whether he felt the same way as Emma. If I’m honest, my intent in asking them both was partly mischievous – sometimes authors are keen to play up the idea of creative talent as an innate, savantish mystery rather than the mundane product of hard work and self-discipline (as if the latter were somehow less laudatory!). I asked why he thought the question of whether creative writing can be taught remains such a popular – and contentious – subject.

“I think it’s to do with a simple misunderstanding of what a creative writing course is – which is in turn a confusion arising from the name ‘creative writing’. Of course you can’t teach someone to be creative; of course you can’t teach them to write. But that’s not what a creative writing course is designed to do.”
**SHARPENING INSTINCTS**

Tash says: “It’s meant to help writers gain a clearer idea of what they are doing as writers, to make them more aware of their voice – the current limits and the potential of their work. Being on a course requires you to read very widely – books you never really knew of, but more specifically, the work of your peers. You’ll read some wonderful writing but also a ton of pretty bad stuff. So you develop, in quite an intense fashion, greater critical faculties, a much sharper awareness of the process of writing; you sharpen your tastes, you know what to look out for in your own work and that of others. Writing is part instinctive, part deliberate – no one can teach you either part, but you definitely develop a greater sense of both on a creative writing course.”

Henry Sutton, who teaches on the MA at UEA, is very clear: “Fundamentally you can’t teach someone to be a writer. Either they have it or they don’t. What you can do, is teach them to be a better writer.

“You can’t teach inspiration. You can teach people to be better self-editors, to critique their work better. What marks out a writer isn’t technical prowess – it’s their own life experience. It’s important to make people understand that they’re going to be the ones making this work. A writer needs to ask themselves: who is my ideal reader? A lot will answer ‘well, myself’, but what do you mean by that? You’re certainly the ideal writer – you’re the only person who could have written this novel.”

What is his advice for anyone thinking about studying on the Creative Writing MA?

“Well, first you’ve got to get on. At UEA, students are selected on the strength of their writing sample and their interview. Bear in mind – it’s incredibly hard work. A lot of what we’re dealing with is really quite personal.”

I brought up a common criticism of creative writing courses – that they’re narrowing the range of styles and encouraging people to all write in the same way.

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### INSPIRATIONAL

Respectfully, I disagree with the notion that inspiration can’t be taught. Inspiration – literally ‘breathing in’ – can seem like a nebulous process that visits us in sudden miraculous blasts, but really it’s a practice of drawing in the world around us. You hoover up material, applying a particular kind of noticing, until two or more fragments react with one another – say, a snippet of overheard conversation between a five-year-old girl and a man carrying a wood axe, and a visit to an old barn with a mottled “HAPPY 50th BIRTHDAY JEAN” banner nailed to a rafter.

Aspects of the creative process only seem mysterious until you start paying attention to them. Studying on the Prose Fiction MA at UEA was, for me, a tremendously valuable process of demystification. Being an author might be many people’s dream job, but the accent is usually on ‘dream’. Committing to a year of study helps shift the emphasis to the job part – as unglamorous and vulgar as that might be – and the true business of any art: work.

Through The Difference Campaign, UEA alumni and friends are helping build a Creative Writing Scholarship fund to support future writers, poets and scriptwriters to study on our world-class MA programme. Find out how to get involved at www.uea.ac.uk/difference.
Greg James graduated from UEA in 2007 with a BA in Drama. He combined his studies with presenting and managing student radio station, Livewire 1350. After winning Best Male DJ at the 2005 Student Radio Awards, Greg went on to become a regular presenter on BBC Radio 1 and is now one of the station’s top talents with a fan base of millions.

Oliver Sanham graduated with a degree in Politics from UEA before embarking on an MA in Film, Television and Creative Practice. He became station manager of Livewire in 2014. Livewire now forms part of the Student Media Collective, which recently received a 50th Anniversary award to overhaul its facilities and technology, thanks to alumni donations.

Livewire 1350 has achieved many things since its launch in 1990 – but perhaps its proudest moment came when former station manager, Greg James, went on to achieve his lifelong dream of working as a primetime DJ on BBC Radio 1.

For Greg, joining the student-run station was top of his list of things to do from the day he arrived on campus. “I picked up a flyer about Livewire at the fresher’s fair, started working at the station straight away and basically didn’t leave for the next three years,” he said.

For current station manager Oliver Sanham, things worked out slightly differently. “I didn’t get involved until my third year and only then because some friends roped me into it,” he said. “But I quickly came to care about the station and getting involved has turned out to be the best thing I’ve ever done.”

Greg became the station manager in 2006 – albeit reluctantly – after two years working in different roles. “I didn’t particularly want the job – I’m a terrible boss and I’m very disorganised – but there was nobody else to do it and so I thought I’d give it a go.

“The best thing about student radio is that you can do every job and figure out what you’re best at. It helped me be certain that I wanted to be a presenter. As my mum says, presenting is the only job I can do.”

Meanwhile, Oliver’s experience has had the opposite effect. “For me, a radio show is only as good as the preparation and production that goes into it,” he said.

The chance to get out of the studio and organise outside broadcasts is something both Greg and Oliver rate as one of the most enjoyable and valuable parts of their time at Livewire.

Greg says his highlight as manager came when he got involved with Hearing Aid – an event that saw student radio stations across the country join forces to raise money for charity.

“We broadcast from the Blue Bar and we had everyone from comedians to live bands taking part,” he said. “There was a real team effort to pull it off and it felt brilliant. It was also great practice for what I do now. When I did a recent outside broadcast, I wasn’t scared because I’d done it all before when I was 18 and working at Livewire. The only difference is that now there are a few more people listening.

“The amazing thing about radio is being able to broadcast from anywhere. As long as you have a mic you can be anywhere and tell a story cheaply and easily. It’s a much more interesting and personable medium – and that’s why I love it so much.”

Just like Greg, Oliver plans to use his time at Livewire as a springboard for his future career. He hopes to use his acquired managerial and production skills to work for a socially responsible organisation after graduating.

Meanwhile, Greg’s career continues to go from strength to strength. After taking over from Scott Mills as host of the drivetime show, Greg’s next ambition is to do more TV – partly, he says, to avoid being pigeon-holed as ‘that Radio 1 guy’. In fact, a TV comedy he wrote – Dead Air – was picked up for a pilot by the BBC and aired in summer 2015.

“UEA is where it all started for me,” Greg said. “It was the place where I fell in love with radio and somewhere I always felt happy and comfortable. It’s probably not very cool to say you have so much love for the place you studied at – but, hey, I’m not very cool, so I’m saying it.”

Greg came back to UEA in July to accept an honorary doctorate and give a speech to the graduating class of 2015.

“He said: “I missed graduation the first time around so I’m looking forward to bringing my mum and dad along so they can see me go on stage and collect whatever it is that you collect. It’s amazing to be given an honorary degree. I can’t wait.”
"UEA is where it all started for me, it was the place where I fell in love with radio and somewhere I always felt happy and comfortable.”

GREG JAMES
PRESENTER
Before the beginnings of professionalisation in the mid-19th century, alcoholism, incompetence and cruelty had been endemic amongst those involved in caring for the sick. According to Florence Nightingale, nursing attracted those who were “too old, too weak, too drunken, too dirty, too stupid, or too bad to do anything else.” Impoverished, with no experience or training, nurses were notorious for stealing – one London nurse was caught drinking a patient’s prescription brandy, while another was known to steal clothes from children’s corpses.

CLEANING UP ITS ACT
Fortunately, the advent of training schools in 1848, complemented by Nightingale’s extensive reforms, meant that by the end of the century British nursing had improved immensely. In the 1880s, written reports by Eva Lückes, Matron of The London Hospital, suggested that all of her nurses were sober, clean, honest and respectable. Amongst Lückes’ nurses was Edith Cavell, who began her training in 1896. While modern nursing practice takes place in a very different technological environment, the fundamental elements of nursing practice that Cavell learned are shared by the profession today. Good outcomes for patients then and now are dependent on devoted nursing, underpinned by values of care, compassion, communication, and team work where the patient’s needs are at the centre of all decisions made.

Across Europe, nursing progressed at different speeds, yet by the start of the 20th century Belgium remained reliant on care by untrained nuns. By 1907, Cavell was qualified, with wide-ranging nursing experience, and was chosen by Dr Antoine Depage to set up Belgium’s first training school for nurses. Negative attitudes made this an arduous task – Belgians were suspicious about the nature of nursing, viewing it as a menial job associated with prostitution and immorality, and inappropriate for respectable women. Trainee nurses had things thrown at them in the street, and Cavell struggled to hire servants, who refused to wait on nurses. Persevering, Cavell worked tirelessly to train her recruits. Her duties included managing nurses and patients, administrative work and assisting the surgeon with operations. She contributed significantly to nursing literature, co-founding the journal L’Infirmiere and giving innovative lectures, such as ‘La Mort’ – focusing on the crucial importance of palliative care. The result was, in many ways, transformative. By 1912 it was clear that Belgium had accepted the new nurses – they staffed three private nursing homes, 24 communal schools and 13 kindergartens in Brussels. Success was confirmed in 1913, when Queen Elisabeth of Belgium specifically requested one of Cavell’s nurses to treat her broken arm.

A pioneer of modern nursing in Belgium, Cavell’s work has been eclipsed by the historical impact of her death at the hands of a German firing squad, and the propaganda campaign that followed. In its events marking 100 years since her death, UEA hopes to place the focus back on Cavell’s wish to be remembered as “a nurse who tried to do her duty.”
Nursing as a profession has undergone much change since the time of Edith Cavell, particularly over the last 60 years. Roles, professional practice, healthcare policy, education, and research have all undergone transformations. However, the essential professional principles of providing competent, evidence-based, patient-centred care are as relevant today as they ever were. Accounts of the history of nursing are inclined to focus on key names, such as Florence Nightingale (1820–1910), Mary Seacole (1805–1881), and Edith Cavell (1865–1915) to illustrate the early pioneering work undertaken by these remarkable individuals. The subsequent history of nursing can often be overlooked.

During the 20th century, the process of preparing for professional registration as a nurse moved from being NHS and hospital based to being located in higher education institutions. This change made nursing a genuine academic discipline, with theory taught in the same environments as other academic subjects, without removing the important element of learning in a variety of clinical practice environments. There are now at least 85 universities in the UK, including UEA, with health faculties providing education and research for nursing, midwifery and the allied health professions. While there was already a modicum of quality nursing research taking place, the move to higher education ensured it could not only flourish, but became recognised nationally and internationally as impacting on and improving the lives of patients and the patient experience of our healthcare system.

**LEADERSHIP AND INFLUENCE**

As medical and scientific advances made a difference to public health, the nursing profession changed and adapted to its new role – as a crucial partner with other healthcare disciplines in the delivery of quality, competent and patient-focused healthcare. The emergence of intensive care units in the 1950s, and the growth of other specialty areas, saw the expansion of nursing into many areas of expertise. Nurses began to work in more specialised care settings and assumed positions of leadership and influence in the delivery of healthcare.

In addition to their primacy in patient care, nurses became competent and proficient in procedures beyond the traditional role, including advanced and specialist practice, independent prescribing, leadership of organisations, policy design and implementation. Nurses continue to have an essential role in not just the physical or emotional care of patients, but in the management of social issues, prevention of disease, design, delivery as well as quality enhancement of healthcare education, and ensuring that research influences healthcare policy, delivery and clinical practice.
As we push on into the 21st century, the pace of change in healthcare continues, both nationally and internationally. Recent national reports and reviews on the quality of patient care, such as the Keogh report in 2013 (Review into quality of care and treatment provided by 14 hospital trusts in England: an overview report) and the final report of the Mid Staffordshire NHS Foundation Trust Public Inquiry in 2013, make sober reading. These reports and their recommendations strengthen the resolve of nurse education institutions and health providers to work collaboratively to address challenges and improve the patient experience across all healthcare environments.

At UEA, our aim is to develop future healthcare professionals who will challenge current practice, and lead and deliver excellent patient care. As one of the UK’s leading Schools of Health Sciences, we will continue to offer innovative and inspirational education programmes and high-quality research outputs to ensure nursing is at the forefront of improving the healthcare experience for patients and their carers.

**Alumna**

Alumna Lesley Williams has worked in nursing for over 50 years. When she began as a student nurse at the Royal Free Hospital, London, in 1961, the issues nurses faced were rather different than those of today. Students made do with a small library of reference books, fitting studying time in during the working day alongside all of their nursing tasks – anything from cleaning the ward to more clinical duties as they progressed through training. Students also had to know the name and diagnosis of every patient on the ward – normally between 30 and 52 people!

Lesley has seen the challenges for nurses change; they are now, she says, “to do with passwords, IT and targets”. But there are other differences too. Shift patterns are different and continuity with patients is challenging. Lesley used to get to know her patients over seven days or more, rather than only overnight. Despite the challenges, like most nurses, Lesley finds that the most rewarding times are spent at the bedside with the patients for whom she can make a difference.

Graduating from UEA’s Centre for Applied Research in Education (CARE) in 1987 was an important highlight of Lesley’s career – she was the first nurse to be awarded a Master’s by UEA – and she remains very proud of this achievement. In the years that followed, Lesley’s career flourished. She specialised in care for the elderly, taught in the Seychelles, received the Florence Nightingale Scholarship and became a Director of Nurse Education.

With over 50 years of experience, Lesley is well placed to advise student nurses about the challenges ahead. Her advice is: “start at the community hospital where small is effective and the foundation for implementing safe practice, then branch out to a specialist area.” She also recommends taking advantage of all opportunities available – and has helped UEA students by donating personal savings to fund student placements in developing countries.

Lesley believes these opportunities are invaluable because, “nurses need to learn the profession in other countries. How the basic equipment is often not there, but the principles can still be applied. These electives prepare them for the future and enable a broader insight into world health.”

The project, which began in 2009 thanks to a grant from The Alumni Fund, has helped student nurses travel to Columbia, Malawi, Sri Lanka, Haiti, Nepal, Tanzania, and Thailand. They return with a fresh perspective on healthcare provision and a deeper understanding of cross-cultural nursing practice.

Lesley hopes the opportunities will encourage students to widen their horizons and continue to “do different” long after they graduate, because, “for me,” she says, “nursing is, and always will be, a privilege.”

**International Student Experience**

Placements in developing countries have been part of UEA’s nursing curriculum since 2009, and have always been supported by the generous donations of Lesley and her fellow graduates. The project started in Malawi, but today students also visit Colombia, Thailand, India and Sri Lanka.

Alana Rush and Sadie Clark, in their second year of degrees in Learning Disabilities Nursing, are thinking about how they can change the stigma around learning disabilities worldwide.

They are about to embark on the challenge of a lifetime. Having observed the sense of social exclusion people with learning disabilities experience in the UK, the two friends are off to Sri Lanka, a country where, for some, a child born with any disability is thought to be the result of wrongdoings in the baby’s or parent’s previous lives.

The students hope to learn how a small charity set up in 1988 has gone on to help more than 4,000 people with a disability. With the support of volunteers and an established training programme, MENCAFEP works with the local community and disabled children in a positive, nurturing and loving way. No longer excluded, disabled children join in with their non-disabled peers, and share lessons together in school.

Reading about MENCAFEP has already inspired Sadie. “This charity has managed to succeed in a country where there are no resources, so why can’t we do it here?” she asks.

Alana hopes that the experience will aid her in her future career: “After I graduate, I hope to assist people with a learning disability to live the life they choose and enable this group of people to get their voice heard about the important things that matter to them.”

With a greater understanding of how MENCAFEP works, Alana and Sadie are more determined than ever to take this knowledge and set up their own social enterprise once they graduate, empowering the most vulnerable, giving them a voice and helping them live as full a life as possible.
IF YOU’RE LOOKING FOR A MIND-BLOWING SOUP RECIPE, ONE THAT’S RECEIVING RAVE REVIEWS WORLDWIDE AND RE-WRITING ALL THE RULES, LOOK NO FURTHER THAN UEA’S SCHOOL OF BIOLOGICAL SCIENCES.

WORDS BEA PERKS
The recipes coming out of Prof Douglas Yu’s lab make Iston Blumenthal’s creations look tame indeed. These are truly world-class soups. You wouldn’t want to eat one, though.

Doug’s insect soups might be made of flies, bees, or – his personal favourite – leeches. A special mention must also go to his newt poop soup, using a recipe developed – as are so many culinary masterpieces – in France.

It’s all very entertaining, but each of these soups is also re-writing ecology by speeding up investigation on a monumental scale. It’s a technique that shaves weeks, months, years off traditional ecological methods, saves money, and spares the need for cons of taxonomic expertise.

**FISH SOUP**
Fish soup? Sounds a bit tame, but this is no ordinary fish soup. If you want to know how many salmon are breeding in the great rivers in Alaska – which include some of the longest salmon runs in the world – you’d have a job counting all the fish. To circumvent this impossibility, Doug and his colleagues are trying to count the salmon using so-called environmental DNA (eDNA). eDNA is all around us; every living thing, and particularly every dead thing, sheds DNA into the environment. Doug’s fish soup is not made with beautiful, fresh Alaskan salmon, but with rotting salmon bodies. The returning fish concentrate all their energy into migration and reproduction, so their bodies shed mucous and tissue while swimming upstream. He and his colleagues are measuring the DNA released by the rotting bodies as a means of estimating the population size. More salmon means more shed tissue, and thus more eDNA. It’s not terribly appetising, but measuring the size of returning salmon populations across hundreds of streams will allow the state of Alaska to better ensure that the coastal fisheries let enough salmon escape to produce the next generation.

**NEWT POOP SOUP**
If that wasn’t unappetising enough, how about this? Great Crested Newts are a protected species in the UK and across Europe. Their numbers have been in decline since the 1940s. It is an offence to intentionally kill or injure a Crested Newt or to “intentionally or recklessly” damage, destroy or obstruct access to wherever newts live or breed.

Property developers and road builders must ensure that they do not harm newts. So ecologists are called in to make sure any nearby newts are safe. But counting newts in cold, dark ponds is not easy – it takes ages, it isn’t cheap, and it isn’t without controversy (was it definitely a Great Crested, or could it have been a Danube Crested, or even a Southern Crested Newt?).

Doug is applying an ingenious solution, developed by a small company in France. Don’t count newts, collect Newt poop. A pond water sample – spun down in a high-speed centrifuge to concentrate the few floating newt cells – will contain newt mitochondrial DNA if there are newts about.

Mitochondria are organelles found in nearly every animal cell. They have their own DNA, and pieces of that DNA can be used to identify species, even if the animal itself is not seen. Doug’s team applies a technique called qPCR (quantitative polymerase chain reaction). This uses a special machine that can make copies of mitochondrial DNA. The machine can be set up to only copy a Great Crested Newt-specific region of DNA, and thus determine whether Great Crested Newts were in a pond. Before the DNA era, an ecologist, by law, needed four separate visits spread over at least a month to determine that a pond was newt free and therefore safe for nearby development. Now, one visit to a pond and five days in a lab does the job.

**A SOUPÇON OF BEES**
No newts were harmed in the DNA decoding of those samples. The same cannot be said, alas, for the decoding of bee or fly soup. But the number of bees or other creepy crawlies that end up in Doug’s soups is tiny compared with the populations being studied.

There are an astonishing 300 species of bee in the UK. Their role in pollination is well known, but which species are responsible for pollinating what, where they all live, and whether their populations are healthy or declining, remain grey areas. Even with the necessary expertise, it is hugely time-consuming to count and identify all the bee species at just one particular location. Which is where the soup comes in.

If a sample of bees is taken from a specific location at a specific time, liquidised, and the resulting soup put through a DNA sequencer, many mitochondrial genomes – thousands for every individual in the sample – can be read and decoded simultaneously, allowing Doug to identify which bee species, and approximately how many bees per species, are in the sample. The whole process is more fiddly than that, of course, but it takes a fraction of the time needed to identify every bee under a microscope, and is more reliable.

**THERE ARE 300 SPECIES OF BEE IN THE UK**

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**IMAGES**
- RIGHT: A SOUPÇON OF LIQUIDISED BEES COULD BE USED TO FIND OUT WHERE SPECIES DIVERSITY IS HIGHEST
- BELOW: PROF DOUG YU WILL BE USING HIS METHOD TO IDENTIFY FLY SPECIES IN THE ARCTIC CIRCLE
- BOTTOM: DNA ANALYSIS OF NEWT POOP WILL HELP TO RECORD NUMBERS OF PROTECTED GREAT CRESTED NEWS
In some places, the main difficulty is picking them up quickly enough,” says Doug. Doug’s team has tracked down the extremely rare Annamite striped rabbit (Nesolagus timminsi), among many other species. So hidden, it wasn’t discovered until 1999 (and, coincidentally, spotted earlier this year in an independent UEA research project in Vietnam). Rare to us, but apparently a regular lunch to the leeches.

From British woodlands to Asian mountain ranges, Doug’s work takes him round the world. In fact, he spends half his time at UEA, and the other half at the Kunming Institute of Zoology in Kunming, China, where he runs an ecology research team.

Despite his surname, Doug, an American born and raised, has had to learn Chinese for his position in Kunming. “My Spanish is better than my Chinese,” he sighs. But his Spanish won’t help with his latest collaboration with researchers in Finland.

“IN NORTH-EASTERN GREENLAND THEY’VE BEEN COLLECTING INSECTS FOR 18 YEARS. THIS IS IN THE PERIOD OF GREATEST CLIMATE CHANGE SO WE’RE GOING TO GO THERE, EXTRACT THE DNA, AND READ IT ALL OUT. WE’LL BE ABLE TO FOLLOW HOW NATURE HAS CHANGED THROUGH 20 YEARS OF RAPID CLIMATE CHANGE, DOWN TO SPECIES LEVEL.”

PROFESSOR DOUG YU
SCHOOL OF BIOLOGICAL SCIENCES

This bee technique could be used to find out where species diversity is being conserved – perhaps there might be surprisingly healthy populations in city parks and allotments? It could tell researchers how species diversity is affected by different farming methods – do organic farms support more bees? How about wildflower strips next to intensively farmed fields?

It’s a technique that Doug and his collaborators have used in Borneo to show how even tropical forest that has been logged is worth buying up for biodiversity conservation. In fact lots of biodiversity, from insects to birds to mammals, is found in logged forests, and the lower prices allow buying up a lot more land. “Insect soup becomes a sensitive thermometer for the state of nature,” says Doug.

BLOOD-SUCKING DETECTIVES
Leech soup is a bit different. Nobody is trying to conserve leeches, but they provide a very useful sampling technique. Leech soup, which was originally developed elsewhere and Doug now applies on a huge scale, contains not only the DNA of the blood-sucking leeches themselves, but also a tiny amount of the DNA of the animals those leeches have fed on. This is fantastically useful if you’re looking for rare mammals, frogs, or birds that are hardly ever seen. Ecologists might never be able to see a rare and skittish muntjac deer species in person, but – if the muntjac is there – leeches are feeding on it.

By ‘souping’ and analysing tens of thousands of leeches collected by forest rangers in the Annamite mountains of Vietnam and Laos (“In some places, the main difficulty is picking them up quickly enough,” says Doug), Doug’s team has tracked down the extremely rare Annamite striped rabbit (Nesolagus timminsi), among many other species. So hidden, it wasn’t discovered until 1999 (and, coincidentally, spotted earlier this year in an independent UEA research project in Vietnam). Rare to us, but apparently a regular lunch to the leeches.

WAITER, WAITER, THERE’S A GAZILLION FLIES IN MY SOUP
“In north-eastern Greenland they’ve been collecting insects for 18 years,” says a wide-eyed Doug. “It’s really up there in the Arctic Circle; they only have about three months a year without snow. Basically it’s total flies. Some spiders and parasitic wasps, two butterflies, a few birds, the musk ox, and gazillions of flies.” There are row-upon-row of jars of preserved insects collected over that period, but it has not been possible to count and identify the hundreds of insect species in all the jars. “We’re going to extract the DNA and read it all out,” says Doug, “we’ll be able to follow how nature has changed through almost two decades of rapid climate change, down to species level.”

A lot of lab work these days can be outsourced, says Doug Yu. If you’re a field ecologist or a government agency that’s never done any molecular stuff, “You don’t want to scale up and build a whole new laboratory, at least not at first.” So, his team at UEA, together with collaborators at Imperial College London, have joined forces to build a company called NatureMetrics who will do it all for you.

The first thing they’re selling through NatureMetrics is detection of the Great Crested Newt in ponds. It’s a great place to start with plenty of potential clients, says Doug.

FOR MORE INFORMATION, VISIT WWW.NATUREMETRICS.CO.UK

NATURE METRICS

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The Digital Student

Words Helena Gillespie

At a recent conference I was told that students arriving at universities this year would each bring up to seven digital devices with them. This might include laptops, tablets and smartphones, as well as a host of other devices. We are certainly living in the age of the digitally enabled student. Even from their earliest years in schools, pupils are now using technology in their school-based learning, to find out about things, to present their ideas, to play with and explore concepts. Students come to higher education tooled up and expecting to use technology in their learning.

At UEA we have made significant investments in learning technology over the past few years, increasing the use of our virtual learning environment, embracing social media and ensuring good campus-wide Wi-Fi. We are ready for our digital students.

Yet, having access to the right technologies in the right places does not ensure successful digital learning. The transition into and throughout higher education is something most students find difficult at some stage. The increased demand for independent and scholarly work can be challenging, and technology can offer tempting apparent shortcuts to success. Wikipedia is one such shortcut, the bête noir of many academics. It has a reputation, somewhat undeserved, as an unreliable and oft-plagiarised source of information in student essays and reports. But when it is used with appropriate criticality by students it can be a useful starting point for research. However, using this and other digital media in university requires skill and understanding of the provenance and reliability of the information. This is an important skill to develop in preparation for entering the world of work.

Appropriate and thoughtful use of social media is also a skill that many students need to develop at university. We all create a digital footprint online and a digital shadow is sometimes created around us as others tag us in social media. Unfortunately, this sometimes leaves students with an online presence that they would prefer not to share with future employers or take into their future lives. Sadly, many students still struggle with understanding how to take control of this effectively. Thinking of the students I work with, I often see that digitally-enabled students are not the same as digitally-savvy students.

As Academic Director of Learning and Teaching Enhancement, I’m committed to helping develop effective digital students by constantly improving how we use technology for learning, and supporting the development of digital skills that will help UEA graduates embrace everything the 21st century offers us.
UEA RECOVERS FROM ELECTION FEVER

No amount of polling data could have prepared political experts for the results of the General Election in 2015. Ruth Jamieson explores UEA’s role in predicting, analysing and commenting on the political process.
With its shy Tories, red-faced pollsters, and shock result, the 2015 UK general election was anything but ordinary. How appropriate, then, that it inspired some extraordinary work from UEA staff and students, including a unique new forecasting model, a groundbreaking analysis of campaign communications, and dozens of articles featuring lively debate, analysis, and reportage by staff and students.

Dr Chris Hanretty, from the School of Politics, Philosophy, Language and Communication Studies, undertook the difficult task of forecasting the election. Chris’s research focuses on using statistical methods to answer a variety of questions. This means he was ideally placed to develop a new way to predict election results, working in collaboration with Dr Ben Lauderdale of the London School of Economics and Nick Vivyan of Durham University. The model comprised a unique way to combine current polling data with past electoral trends, analysing fresh information every day, to create a daily forecast. The model proved so compelling it was used by various media outlets throughout the election campaign, including the BBC’s flagship current affairs programme, Newsnight, for their regular ‘Newsnight Index’ feature.

**FLAWED FORECASTS**

Flaws in the polling data had an effect on the forecasting model’s results (we now know that the Conservatives took significantly more seats than the polling data suggested they would), but the model is still of value. Chris says: “Looking at past election data, we knew that opinion polls tend to exaggerate results. On the day of the election, the polls were saying it’s a dead heat. Our forecast allowed for some exaggeration and said the Conservatives would be ahead by one or two per cent. So, we thought they would be ahead. Did we think they’d be ahead by as much as they were? Never in a million years.” However, predicting the national vote share was only one part of the model. The second part looked at how the national vote share would translate into seats. Here, for the first time, Chris was able to use constituency polling data to see the relative strength of the parties. The second part looked at how the national vote share would translate into seats. Here, for the first time, Chris was able to use constituency polling data to see the relative strength of the parties. Then, via a complicated process Chris jokingly calls ‘smooshing’, all those polls were combined to create a national forecast. Flawed polling data may have cast a shadow over the forecasting model’s overall result, but the success of the second part of the model offers a silver lining. Chris says: “The Shy Tory theory, in which people, particularly those who vote Conservative, have trouble revealing how they are going to vote; the Lazy Labour Voter theory, in which polling companies are good at predicting how people would vote, but not who will actually go and vote; the Sampling theory; and the Questioning theory.”

**SHY TORIES?**

Chris says: “The Shy Tory explanation doesn’t stand up. If it were the case, people would be shy about voting UKIP too, but the polls got UKIP right. The Questioning explanation is problematic too. This is the idea that when you ask a straight up question, people just pluck the answer from the top of their heads. Instead you need to prime them with questions about issues that might influence their vote.” The trouble with that, says Chris, is that those issues change with every election. “If we go down that route, polling changes from being something rigorous and scientific to ‘let’s have a conversation and I’ll note down some of your answers,’’ he says.

“I think the answer is a combination of sampling and the polling companies getting the opinion of the general public right but messing up on who would actually vote; if everyone had voted, the result would have been closer to the polls. Maybe Labour voters were a little bit lazy and even though they said they’d vote, they turned out at lower rates than the Tories.” Whatever the explanation, it’s safe to say that innovative ways to predict election results, like Chris’s forecasting model, have never been more essential.

Meanwhile, Alan Finlayson, Professor of Political & Social Theory, also of UEA’s School of Politics, Philosophy, Language and Communication Studies, brought his expertise to bear on the communication styles colouring the election. Alan is a political theorist interested in classical theories about speech and rhetoric as well as the contemporary British political ideologies. Through his work with Dr Judi Atkins on britishpoliticalspeech.org, he has analysed party leader conference speeches dating back to 1895. He was also the winner of the Bernard Crick Prize for Best Piece 2014 for his article ‘Proving, Pleasing and Persuading? Rhetoric in Contemporary British Politics’.
THE DANGER OF NEGATIVE CAMPAIGNS

In April 2015, Alan gave a UEA London Lecture entitled ‘Why should I vote for you? Reason and rhetoric in the general election campaign’. He was joined in discussion by Labour peer Maurice Glasman and Conservative peer and UEA alumnus Thomas Strathclyde. Alan argued that profound changes in the way we do politics have seen a rise in arguments from ethos, that is arguments that focus on the leaders, at the expense of meaningful debates about policy. Noting that the campaigns were largely negative, he told the audience that “one terrible consequence of this is that the actual premise involved in political argument and political thinking never really get debated. Politicians argue over which individual is most competent to run the economy, but not what such competence might actually consist of.”

Alan says: “I’m interested broadly in how people communicate ideas. Amongst other things, that’s what politics is, people communicating their ideas and winning people over in order to reach some kind of common view and act to change the world. One of the interesting things about the general election was that the parties were not very effective at communicating ideas in a way that might motivate people to believe in them or share in them. This is partly due to the way the media works, how people access ideas and how they are presented. But some of it is to do with politicians who are not as skilled as they might be at speaking clearly, persuasively and movingly about their beliefs.”

Back on campus, the Eastminster blog at ueapolitics.org was alight with fiery debate and expert analysis. The blog, run by Senior Lecturer Dr Toby James, featured an exciting breadth of articles from staff and students. Contributors included everyone from former Labour Home Secretary, and current Visiting Professor Charles Clarke, to student Adam Kinghorn, and covered subjects as diverse as disability policy, televised debates and the effect of fixed-term parliaments. Yet more political analysis from UEA experts can be found on the University’s election coverage hub page (uea.ac.uk/about/media-room/general-election-2015). Features include Dr Paul Bernal, from UEA’s Law School, on political parties’ use of our online personal data, Prof John Street on music and politics, and Visiting Professor Robert Jones, of the Norwich Business School, on politics and branding.

THE FUTURE OF POLLING

So what’s next for UK politics? After failed polls and new lows for political rhetoric, we could be forgiven for feeling gloomy about the future, but UEA’s experts do offer hope. Chris predicts that the polling industry will learn from its mistakes. He says: “Forecasting will continue because the alternative is not people being more circumspect, but people just spouting off on what they think will happen. There’s a need for good faith attempts to work out what’s going to happen. Whether it’s the football game at the weekend or the election, we all want to know what’s coming down the line and that isn’t going to change.” Alan is hopeful that the EU referendum could see a return to quality political rhetoric. He says: “The general election gives rise to arguments about the quality of leader and their characters. But when you’ve got a question about a particular issue, as we have with the EU referendum, it ought to be possible to have an exchange of opinions and arguments about that issue.” And whatever happens next, we can be sure it’ll be covered with expert, in-depth and unique analysis on the Eastminster blog.

Follow the blog at http://www.ueapolitics.org/eastminster.
As a student, it’s easy to forget the small matter of what you’re going to do after graduation. And suddenly, as you approach the end of your degree course, the realisation that you’re going to have to start thinking about a career comes down on you like a ton of bricks. Even if you know the type of industry you want to enter, navigating your way there can seem like an uphill struggle. This is where mentoring can step in, providing direction of immeasurable worth to those who reach out.

This year, students Amy McGinlay and Amy Gibbs, among many others, have gained valuable advice on taking those first steps into graduate employment. It’s advice from those who have been in their position and since gone on to successful, fulfilling careers. The University’s mentoring programme offers one-to-one sessions with mentors who provide students with guidance, support, and inspiration around their chosen career path.

The programme offers students two options: six-month mentoring and Insider Insights. The former builds self-confidence through connecting students with a graduate, or other career professional, to help the student make plans for the future. The latter is a one-off arrangement, designed for those who already know which sector they would like to go into, and offers information on how to progress and go further.

Amy McGinley, a second-year International Relations and Modern History student, had a very loose idea of the career path she wanted to take. She knew that she wanted to pursue something related to international security, but felt that she could benefit from the support of someone who had experience in the field.

Amy applied for the six-month programme because she felt it would be helpful to know what skills and experience were necessary to embark on a career in international relations. She was matched with Sir Robert Fulton, a UEA alumni and former Royal Marines officer, who also served as Governor of Gibraltar.

The guidance given by Sir Robert has increased Amy’s confidence in networking, assuring her that the worst thing anyone can ever say is “no”. In fact, Amy reports that she is now far more aware of the options available to her both nationally and internationally and that being matched with Sir Robert was inspiring. “He has much experience within a security field, as well as a politics one, ensuring he can give practical careers advice,” she says.

Third-year English Literature student Amy Gibbs opted for the Insider Insights programme. Matched with Joanna Coles, Editor-in-Chief of Cosmopolitan US, Amy was extremely excited to have the opportunity to speak with someone who had advanced so far along their career path. Before the mentoring programme, Amy knew she wanted to continue to work with words, most notably in an editorial role in a publishing house. Knowing that Joanna had also started off as a UEA graduate gave Amy the assurance she needed to push on with her efforts, with the added bonus of...
Joanna clearly loves her job. “No day is the same. I travel, I can dream up ideas and make them happen, I mix with a wide range of interesting folks, and my job is as big as I can make it. Plus I work with great people. The best thing I can say is I have never had a day in my working life – apart from nine months on the night news desk at *The Daily Telegraph* where I started work at 6pm – where I dreaded going into the office,” she says. “It has never felt like work. It has been hard, challenging, sometimes I have made the wrong decision, sometimes I have had to ride a critical press, but it has never ever felt like something I didn’t want to do. And sometimes people love what you are trying to do and they get it, and you enjoy moments of success.”

Joanna told Amy how she moved between several publication titles, before landing her position at *Cosmopolitan US*. Amy learned that getting ahead did not always happen through conventional methods. Joanna progressed by approaching people who were not necessarily advertising positions.

“Talking to people is the easiest way to find out what’s going on, so you need to call or email people and ask for their help,” she says. She explained that the only job she ever saw advertised was her very first job – graduate trainee – after that every job she got was from a tip off from a friend or because someone called her.

Be open to all opportunities, she urges. “Building a network of loose social ties is essential and you are more likely to hear of something from someone you might have only met a couple of times than a best friend,” says Joanna. “I try to stress the importance of staying in touch with people if you have done an internship in the past – let them know you are now leaving UEA and looking for something more permanent,” she says. “They may know someone who is looking for someone even if they are not looking themselves.” You have to use a social network to get the word out that you are available, adds Joanna, and it’s always better to call than to email. “Better still meet in person,” she says. “Call people up and ask for 10 minutes of their time to ask their advice. Everyone has 10 minutes.”

Several snippets of guidance given by Joanna have stuck with Amy word for word, and she feels they will help her for a long time, including how it’s okay to ask questions and how to always leave with a contact from networking events. It was this advice regarding networking and meeting other professionals that Amy found particularly helpful, as she had never attended, or heard of, the networking events that she might find inspiring.

“Now that I have Joanna’s insight and feel confident, I’ll be able to make some good connections at any future events I attend,” said Amy.

**UEA ALUMNA JOANNA COLES, EDITOR OF ‘COSMOPOLITAN US’, ON WORKING OVERSEAS**

“Working away from your family is hard, and changing countries is hard too. It can be lonely and you can feel as if you have no familiar back up. But the advantages can be huge. Freedom to start afresh and also to learn about another place, embrace a new culture, learn a new language, live a completely different life than the one you thought you would end up living. It’s exciting to travel and learn about a new place. And the more global you are, the better for big companies who need a sophisticated, tolerant workforce. I would urge anyone who has the opportunity to work abroad to try it for at least one year. The more global you are, the better paid you will be too.”

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... and do you have any questions for us?

Don’t just sit there, gaping blankly when this classic interview question comes up. If you can’t think of anything, Joanna Coles has a few suggestions:

- Tell me the best aspects of your job.
- How would you describe the company culture?
- Are there people you can point to that started in this position that have been moved on within the company?

And don’t forget to dress smartly for an interview!

For alumni who have something to give, sharing knowledge with current students can be rewarding and inspiring, offering another perspective on the work you do. You can register your interest in the programme by contacting the Mentoring team on 01603 597637 or at careermentors@uea.ac.uk.

If you are a recent graduate and believe you could benefit from the programme, you can also contact the team for guidance.
Thanks to the generosity of over 3,000 alumni and friends, UEA’s most ambitious fundraising campaign to date, The Difference Campaign, continues to go from strength to strength as we approach our target of raising £50m by 2016.

With over £42m raised so far, the impact of philanthropy has already been seen on campus with the opening of The Bob Champion Research and Education Building, the awarding of over 350 scholarships, and countless new extra-curricular opportunities for students.

We are now setting our sights high for the future with plans to build a new Centre for Food and Health, the renovation of the historic Earlham Hall and the launch of a new Enterprise Fund.

To find out more and become part of The Difference Campaign, visit our website or see the enclosed donation form.

W: www.uea.ac.uk/difference
E: giving@uea.ac.uk
T: +44 (0)1603 593776

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WILL POWER

A gift in your Will is a lasting way to support UEA’s future

Whether you want to help find a cure for cancer, offer scholarships to students from low-income households, or provide resources for generations of future students, your gift to UEA can have a powerful impact on the future of society and human knowledge for years to come.

To find out how your legacy could make a difference, and to receive an invitation to our Legacy Reception event in London on Wednesday 25th November 2015, contact Joyce Griffin, Development Manager.

Tel: +44 (0)1603 592114
Mobile: +44(0)7876 257735
Email: j.griffin@uea.ac.uk
Web: www.uea.ac.uk/difference/making-a-gift
WHERE ARE THEY NOW?

AT UNIVERSITY YOU OFTEN SPEND A LOT OF TIME WITH FELLOW STUDENTS FROM YOUR COURSE. GRADUATES OF THE MSC IN BRAND LEADERSHIP KEEP THAT UP EVEN AFTER THEY’VE LEFT.

In 2009, UEA launched the world’s first postgraduate course in brand leadership. The course leader, Robert Jones, is a brand consultant with the somewhat whimsical title of ‘Head of New Thinking’ at Wolff Olins in London; he is also a visiting professor at UEA. He says: “I created the course partly because there’s almost no professional education around in branding.”

In true UEA style, the brand leadership family keep in close touch with each other, getting together twice a year to catch up and meet the new students joining their ranks. Some of the very first cohort have taken the time to tell us about what they are doing now, including Graham Gannon who works at Google, which often plays host to the biannual socials.

Graham Gannon studied at UEA as an undergraduate and returned to the business school to take the MSc. He now works for Google where he manages rapid prototyping on the Global Reporting and Analytics team.

“I work on the internal data and analytics team for our own internal tools. We have a lot of data at Google and we use that for advertising, marketing and sales. I build the platforms that help all of those teams get access to the complicated data.

“I’m a product owner, which means I do a little bit of everything: requirements gathering, working with the engineers, working with senior leadership, working with management, and working with the actual people themselves. I’m specifically on the rapid deployment team, so I build stuff very quickly to help fill immediate needs for the business.

“I’m on the global team, so day to day I’m going to different offices, getting different opinions, different views, sitting in lots of meetings trying to understand what the needs are. I take all of that and work with the engineers to put a plan together to build something, deliver it and help it get used.

“The best thing about my role is that I get to work with some of the smartest people in the world on very complicated problems that impact the entire business.”

Masha Gribova is from Russia and chose to come to the UK particularly because of the brand leadership programme.

“I now work at an independent branding agency, Heavenly, in London. We use creativity to solve commercial and cultural challenges and energise organisations, their teams and offers. I work as a client manager and am responsible for the overall delivery of a project.

“Prior to joining Heavenly I worked as a client manager at the branding agency Closer London and was a strategy intern at Interbrand London and Fitch.”

Anna Tyurina also originally comes from Russia. She now works at Fitch, the world’s leading retail and brand consultancy.

“I work as a client manager. This means I’m managing all activities of the team, as well as relationships and communications with various clients. Basically, I’m the person responsible for the project being delivered on time, budget and to a Fitch standard. Fitch’s culture is very democratic and collaborative, so in practice I work closely with strategy and design teams, contributing to strategy creation, taking part in workshops, ideation sessions etc.

“On my way to Fitch I was a strategy intern in another great design agency called The Plant, which specialises in the arts and food sectors and was co-founded by Jamie Oliver.”

Sandeep Dighe has taken opportunities around the world since his MSc.

“I am currently working with a brand consultancy called Principals in Sydney, Australia. It is one of
I am working as a brand strategy consultant. I am responsible for developing strategies for some of the great brands to help them succeed in their objectives and achieve their ambitions. I look out for new opportunities in the market, research them, identify the business problem, do interviews, focus groups, research and analysis, facilitate workshops, find insights, make presentations, deliver them to the client, resolve the business problem and develop a strategy for the future.

“After UEA, I worked with a brand consultancy called venturethree in London, working with some of the top global, European and Indian brands. After that I worked with FutureBrand in Singapore working with some of the top brands in Southeast Asian countries.”

May Al Khalifa came to Norwich from Bahrain to study on the course and has returned there to work for Tamkeen, a semi-government organisation that helps small to medium enterprises.

“My position is Marketing Communications Specialist. I am the brand guardian of Tamkeen. Our department takes care of implementing the brand guidelines, as well as all advertising and other forms of communication. I have worked at agencies and other institutions, all around the same focus: marketing and branding.”

Shamsul Islam studied marketing in Bangladesh before coming to Norwich, and he now works in London.

“I work at OMD UK. We're one of the top three media and communications agencies working globally. We have the pleasure of working with some of the most exciting brands in the world – Pepsico, Disney, McDonald's, Channel 4, easyJet and Tourism Australia, to name a few.

“I'm an account manager in the social advertising team. In short, I help my clients navigate the world of social media advertising – which platforms to use, how to use it, how to best advertise from it, etc. My job is to understand how social media fits into the overall communications structure for my clients, and guide them on the best possible route.”

“THE BEST THING ABOUT MY ROLE IS THAT I GET TO WORK WITH SOME OF THE SMARTEST PEOPLE IN THE WORLD ON VERY COMPLICATED PROBLEMS THAT IMPACT THE ENTIRE BUSINESS.”

GRAHAM GANNON
AGENCY LEAD, GOOGLE
Music has been part of the University since its earliest days. UEA’s first Vice-Chancellor, Frank Thistlethwaite, sought the advice of Suffolk composer and founder of the Aldeburgh Music Festival, Benjamin Britten, in 1963. His and his suggestions were instrumental in shaping the music programme.

Words Hannah Abbott

One piece of advice received was that practical music should play a prominent part in the cultural life of a university. Another was to consider Philip Ledger as Director of Music. Philip took up the post in 1965 and the music society gave its first performance, of ‘Dido and Aeneas’, before the School of Fine Art and Music had even come into existence.

Current Director of Music at UEA, Stuart Dunlop, is a huge advocate of what he describes as “musical citizenship”. Stuart has many ambitions for supporting the music programme, some of which are already underway (for example, adding a brass band in association to benefit UEA’s brass players) and some are long term. One thing is clear: he is keen to build relationships, centred around music, that will benefit UEA and the wider community.

“Everyone at UEA makes music on the same basis” he says. “It is open for everybody.

“What we hope to do is make it possible for all sorts of people to make music in all sorts of ways – in the formal sense, exemplified by choir and orchestra, but also less formally.” To that end, Stuart is keen to shine a spotlight on the huge amount of student-led music-making that takes place through Student Union societies. Currently UEA has a concert band, big band, clarinet and sax ensemble, show choir, flute choir, a capella players (and some are long term. One thing is clear: he is keen to build relationships, centred around music, that will benefit UEA and the wider community.

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There has been a huge increase in staff and student use of the practice rooms over the last two years, and Stuart faces challenges around managing demand and finding rehearsal spaces. But his view is that: “practice rooms should be as freely available as possible, whether you want to noodle on a piano or do hard-core practice. This supports people to further develop whilst doing their degree – making it possible for them to have ambition or to keep developing and go out into the world as musical citizens – continuing with what has been part of their life throughout school.”

Asked what musical citizenship really means, Stuart says: “here at UEA we value the active making of music, not simply its consumption. If you value music for its own sake, all sorts of tangential benefits accrue.” He describes music-making as “an exercise in teamwork, in flexibility, in listening, in management” and is clearly passionate about the way in which music can enrich everybody’s life.

“My function, beyond the music-making, is to listen and spot connections across the University to help things happen.” That includes exploring links between music and other disciplines at UEA, such as health, where there is research taking place into dementia, including the benefits of music in treatment.

ALDEBURGH MUSIC

For more than 60 years, Aldeburgh Music has been one of the UK’s most treasured performance centres and, for almost as long, UEA has been proud to call it not just a neighbour but also a friend.

In 1967, the University Choir sang at the royal opening of the Snape Maltings concert hall and that same year Britten himself conducted the choir in the Norwich premiere of his ‘War Requiem’.

With a long history of outstanding achievements, the East Anglian landmark is now tuning up for an exciting future after appointing a new Chief Executive – former BBC Radio 3 Controller and Director of The Proms, Roger Wright.

In March 2015, Roger visited the University to speak to Stuart, in front of an audience, about the need for inspirational role models and his vision for keeping up the tempo of Aldeburgh Music’s success.

“The work that Aldeburgh Music does in the community and its commitment to the development of young musicians has proved time and again how much of a power to change lives – and the opportunity to be part of that really excites me.”

Aldeburgh Music was founded in 1948 by Benjamin Britten, Peter Pears and Eric Crozier as part of plans to hold the first Aldeburgh Festival of Music and the Arts. The festival has since become an annual highlight on the music calendar, and the centre has gone on to offer an impressive year-round programme.

Besides discussing his new role at Aldeburgh Music, Roger spoke passionately about the need for inspirational role models – particularly for young people.

“I think exposure to all kinds of music at a young age is absolutely key, as is having inspirational figures in your life that push your interest further – at the BBC we called this having a ‘trusted guide’.

“I know the power of this because I had a music teacher at school that encouraged me to listen to new music that I’d never heard before. He’d covertly slip me the scores for ‘new’ works on a Friday afternoon, mentioning that they weren’t on the syllabus, but that I should check them out. The very fact that they weren’t on the syllabus piqued my interest and, after that, I felt like a whole new world quietly opened up to me – a very special world.”

Roger admits there are challenges facing the whole of music, such as public funding cuts, technological changes and an increase in the demands on an audience’s time. However, he remains optimistic about music’s continuing value in the world.
You may well recognise the voice of alumnus Zeb Soanes, if not his picture. Amongst many other things, Zeb is a Radio 4 newscaster and regularly puts the nation to bed with the Shipping Forecast. However, to many of you he may be familiar as one of the faces of the BBC Proms, which he has presented since 2006, working with Directors Nicholas Kenyon and Roger Wright and now interim Director, Edward Blakeman.

How did you come to work at the BBC? Outside my drama degree at UEA I was always involved in extra-curricular productions – there was a ridiculous period when I was rehearsing four plays at once.

During my first year I was a member of an improvised comedy team called Impromania. We performed in the Steve Biko Room on campus and upstairs at the York Tavern, off Unthank Road. I've always been a good mimic and was known in the team for my quick impressions and characters.

We did a big Comic Relief show in the LCR. Radio Norfolk invited me in to see what else I could do and for the next year I went into the studios on Tuesday afternoons to record trailers in a variety of famous voices for which I was paid in pints of Guinness at The Surrey Tavern – the BBC has since started paying me more appropriately – in tea and biscuits. Radio Norfolk were very good to me and after I graduated offered me regular work in the Newsroom and my own arts preview, which was a fantastic hands-on grounding in radio.

Radio Norfolk were very good to me and after I graduated offered me regular work in the Newsroom and my own arts preview, which was a fantastic hands-on grounding in radio. It’s ironic that, having intended to be an actor being anyone other than myself, I have ended up building a career in my own voice – although I still impersonate my BBC colleagues (though not on air, often ...).

What was it like to be the sole voice of BBC Four for its first months? Apparently the Controller of BBC Four chose me to launch the channel because he thought I sounded as if I was hosting a good dinner party. It was very exciting to be the first person to say “Welcome to a new television channel,” showing all the kinds of programmes I wanted to watch. Writing and announcing my links was a real pleasure and I hope that came across.

What about the Proms? What is it like to be involved in such an iconic event? My connection to the Proms began when I was at BBC Four. A couple of years later the Proms were looking for new young presenters who were passionate about classical music and I was invited to screen test. I had to interview Sean Rafferty from Radio 3 and we talked about Benjamin Britten and my home county of Suffolk.

My first live TV appearance was incredibly nerve-wracking. I was used to live broadcasting but as a disembodied voice. Suddenly I was surrounded by a film crew, several thousand promenaders and the terrifying, all-seeing, unblinking eye of the TV camera. Michael Burke gave me the best advice: “Just imagine the camera is smiling at you.” It was such a simple thing to say but psychologically very helpful.

Is there a Prom that stands out? I can’t pick a single Prom, but for sheer number of interviews, presenting the Last Night of the Proms in Hyde Park was tremendous – including Bryan Ferry, Nigel Kennedy and Joseph Calleja. The interview I enjoyed most was with the pianist Andras Schiff, who described what he saw in his mind whilst he was playing – but every prom is a special experience. The Albert Hall becomes a factory for producing music during the Proms season and to be backstage surrounded by instrument cases, rehearsing musicians and bits of TV equipment is something really special.

Zeb Soanes studied Drama at UEA from 1994-97.

“I THINK EXPOSURE TO ALL KINDS OF MUSIC AT A YOUNG AGE IS ABSOLUTELY KEY, AS IS HAVING INSPIRATIONAL FIGURES IN YOUR LIFE THAT PUSH YOUR INTEREST FURTHER – AT THE BBC WE CALLED THIS HAVING A ‘TRUSTED GUIDE’.”

ROGER WRIGHT
CHIEF EXECUTIVE OF ALDEBURGH MUSIC
A secure base is at the heart of any successful caregiving environment – whether within the birth family, foster care, residential care or adoption. A secure base is provided through a relationship with one or more caregivers who offer a reliable base from which to explore, and a safe haven for reassurance when there are difficulties. A secure base promotes security, confidence, competence and resilience.

With this in mind, social workers and academics at UEA’s Centre for Research on Children and Families have developed the Secure Base Model, designed to help those working with children and families to understand the strengths of and difficulties facing caregivers and their children. Originally developed for work with foster carers, this groundbreaking model can be applied to a full range of caregivers from birth and adoptive parents all the way to workers looking after children in residential care.

A MODEL FOR ALL CULTURES
Developed through a range of projects led by Gillian Schofield and Mary Beek from the School of Social Work, the innovative model can apply to children and young people at any stage of their development. And, as pioneering recent work in China and Thailand shows, it can be successfully adapted to different cultures too.

Drawn from attachment theory (a psychological model that describes the dynamics of long-term interpersonal relationships) and original research into the experiences of children in long-term foster care, the Secure Base Model outlines five dimensions of caregiving, each of which has a developmental benefit. These dimensions, such as sensitivity and acceptance, overlap and interact to create a secure base for a child from which they can develop and thrive. First developed for use in the UK, the model is of particular benefit for children and young people with a history of neglect or abuse. Its use in China and Thailand demonstrates its strength in tackling the challenges associated with providing foster care for institutionalised children with no experience of family life.

GOVERNMENT APPROVED
The model launched in 2006, when the team published a DVD, training programme and book called the Attachment Handbook for Foster Care and Adoption. The following year it was recommended in the Government White Paper, ‘Care Matters’, before being included, in 2008, in Skills to Foster, the UK’s core training for new foster carers produced by the Fostering Network. As the model took off in the UK, it was also embraced across Europe. It has been included in Norway’s national training programme for foster carers since 2007. It has been launched in
France and Italy and been the focus of practice development workshops in Ireland, Northern Ireland, Spain, Scotland, and Sweden. Gillian has spoken about the model at meetings in Australia and New Zealand.

**WIDELY ACCESSIBLE**

One reason the model has proved so successful is that it is easily understood by foster carers, not just academics and social workers. Nevertheless, it is an important tool for social workers. Gillian says: “A lot of social workers know about attachment theory. The model is a way of translating it into practice.”

The model’s phenomenal success can also be attributed to its ability to easily cross cultures. Not only has it won over social workers, psychologists and foster carers in Europe, it is also making a difference in China and Thailand. Gillian says: “In all cultures, babies and children from troubled backgrounds need carers who are available and sensitive to their needs. But how this is communicated in training for foster carers in Thailand and China may be rather different to the UK.”

Mary Beek, researcher on the project and also a practitioner, is spearheading the model’s introduction in China and Thailand. She is working with Care for Children, a project that helps children transfer from institutional care to foster care in countries with no history of formal foster care. The Secure Base Model forms the core of their training programme for workers and foster carers.

**CULTURAL SENSITIVITY**

Mary says: “The implementation of the model in these very different contexts and cultures involves a very careful process of knowledge transfer. This includes sensitivity to differences regarding concepts of childhood, parenting and the family, and adapting the presentation of the model to suit Thai and Chinese norms and preferences in terms of teaching and learning.”

For example, attention is paid to the transferability of metaphors, which can be inappropriate or even offensive when translated. “We also check the meanings of key words and phrases, adjusting case studies and examples to fit with social and religious cultures,” says Mary.

**Cartoons for Carers**

Together with local workers, she has had to get creative in order to find ways to effectively communicate the model. “In Thailand, cartoons are used to convey concepts and ideas in many aspects of life. The Care for Children Thailand training team includes an artist who has developed cartoon stories to represent the five dimensions of the Secure Base model,” says Mary. “Training exercises and case studies have also been developed using cartoons. The artist is currently working on a cartoon animation of parent/child interactions which summarises the Secure Base Model in a way that is readily accessible to a wide range of audiences.”

By regularly sitting down with policy makers, training organisations and practitioners, and thinking creatively about how to disseminate their research, Gillian and Mary have ensured their ideas are translated into real, practical change across the globe. However, for Gillian, the success of the model isn’t just about maximising international impact. She says: “It is extremely rewarding to sit down with a social worker and hear that a foster carer is now better able to help a child with his difficult behaviour. Or to hear about a child who is now able to trust their foster carer and accept their love and care. For me, the notion that even one child has benefited is very inspiring.”

Find free downloadable materials for social worker, trainers and carers to use at [www.uea.ac.uk/providingasecurebase](http://www.uea.ac.uk/providingasecurebase).
NEW ARCHIVE REVEALS LESSING’S LOVE LETTERS

The gift of papers from renowned author Doris Lessing provided the basis for the latest of UEA’s immense creative writing offerings – the British Archive for Contemporary Writing.

Words Prof Chris Bigsby

In July, UEA launched the British Archive for Contemporary Writing, one more piece in the literary mosaic which is UEA and Norwich. Over the years UEA’s creative writing programme has produced a string of prize-winning authors, the British Centre for Literary Translation founded by W.G. Sebald, and a year-round literary festival, along with special festivals on crime fiction and writing for young people. In addition, the University now offers a home for writers’ papers, drafts of their work and correspondence.

When Doris Lessing, a Distinguished Fellow of Literature of the University, died, she bequeathed her papers to UEA – including seven hand-written diaries. A one-time lover, at her request, donated a series of remarkable letters which she wrote to him during her early years in Rhodesia, while Margaret Drabble gave us her correspondence with Doris. At the same time we acquired the archive of a literary agency, which includes the correspondence of another Nobel Prize winner, Nadine Gordimer. Add this to holdings which already include letters from J.D. Salinger, along with a wide range of other material, and it seemed the right moment to commit ourselves to providing a place where students, academics and, indeed, members of the public could be offered an insight into the processes whereby books come into existence.

Unlike the major American archives, UEA has no funds to acquire authors’ papers. We are dependent on gifts and bequests. However, we are uniquely placed to create a new kind of archive alongside the more conventional one. Accordingly, we have created The Storehouse.

This will enable writers early in their careers to lodge their papers with us, long before they would normally have become available. Instead of their storing them in lofts, garages, cellars, we will catalogue and preserve them in a temperature-controlled environment. Eventually, these writers may choose to gift those papers to UEA or seek to sell them elsewhere, but meanwhile we will be building a unique collection. We have begun with our own distinguished alumni: Tash Aw, Amit Chaudhuri and Naomi Alderman. Conversations with half a dozen others are underway.
1st Prize
SARAH PIKE

“The members of the Fell and Mountaineering Society quickly became my best friends at UEA. It seemed like every other week we set out in a Union minibus for a different adventure. This photo was taken after a rigorous ascent in the Brecon Beacons.”

Congratulations Sarah for this winning snap showing UEA life beyond campus.

Commended
UMUT YUKARUC

Send your pictures as an attachment or upload using a file sender such as Dropbox or Google Drive to tweet@uea.ac.uk.
MUMMIES, ROBOTS, YOUTUBE, ALIENS, ANTS, DUATHLONS
WHAT COULD YOUR UEA BE ABOUT?

VISIT US IN 2016
18 JUNE
2 JULY
10 SEPTEMBER
22 OCTOBER

www.uea.ac.uk/opendays