

Innovate UK

women in innovation
exhibition

infocus



Innovate UK

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Foreword

As the Chief Executive of the UK's innovation agency, I feel passionately that there is a need and an opportunity to encourage more women to pursue careers in innovative fields. We know a lack of visible role models is a key factor in discouraging women across the UK in believing they can achieve their business ambitions.

We launched our 'infocus women in innovation' campaign in 2016 to help tackle this and have worked hard to provide tangible support to those women wanting to take their business ideas to the next level.

I am truly inspired by our women in innovation award holders featured in this exhibition. I feel honoured to be a part of this initiative and pictured as an ambassador alongside other women who want to ensure they are doing all they can to encourage others.

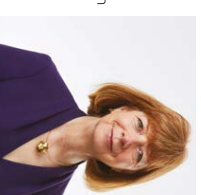
We are delighted to partner with Getty Images to create this exhibition, highlighting those very real role models so lacking today and establishing a lasting set of images that can start to redefine who an innovator is, and what a female innovator looks like. They really are someone just like you and me.

I hope you enjoy viewing the images and reading their stories as much as I have. And I hope this exhibition has helped bring innovation and innovators into focus.

We can all play a part to encourage greater diversity in innovation and to help others to dream big and reach their full potential.

Dr Ruth McKernan CBE

Chief Executive, Innovate UK



About the photographer

Amelia Troubridge (b.1974) is a British portrait and documentary photographer.

Amelia studied American studies at Middlesex University and SUNY New Paltz. In 1996, she won the Ian Parry award for her social documentary story, Dublin's Urban Cowboys. In 1998, she won a place on the World Press Photo Joop Swart Master class, in Amsterdam.

In 1999, she was runner up for The Infinity Young Photographer of the Year award by The International Center of Photography in New York. Amelia's first monograph, 'The Trouble with Amelia', was published in 2006 by Booth Libborn editions. Two other monographs have followed, Malta Diaries (Trolley books 2006) and Joan of Arc had style (Trolley books 2015).

Troubridge has been exhibited widely both nationally and internationally, including The Wallace Collection, Photolondon, Phillips De Pury,

Trolley books, Proud Galleries, Christies, London, World Press Photo, The Netherlands, London Design Museum and Visa for l image France.

Her work has been widely published and commissioned by the world's leading magazines and newspapers; TIME, Vanity Fair, The Observer, Stern, Esquire, Tatler, Conde Nast Traveller, Vice, Huck, Dazed & Confused, Sunday Times Magazine and The New York Times.

Says Amelia: "For many years I have taken inspiration from women in the workplace, and I have sought to celebrate their achievements and contributions to society. We have in recent years been given more opportunities to celebrate women as thinkers, leaders and innovators outside of traditional roles; this project has been an opportunity to celebrate women who despite having the odds stacked against them, are steadfastly putting time and energy behind the creation of their ideas and dreams."



I wanted to capture the spirit of these women and contribute visually to the re-defining of who women are today; to step away from the disempowering imagery of women that dominates the mainstream that we have become accustomed to seeing. This is at the core of what I do as a photographer; to create a visual record of the times we live in, of women who have shown so much courage and commitment. I have been constantly challenged and inspired by women that I have met through my career as a photographer. This is the first time I have had the chance to work closely with women who are genuine innovators and playing an integral part in shaping a better world for us all."

About the exhibition

One in 3 women say their gender has negatively impacted their career in innovation¹. This needs to change.

Innovate UK, the nation's innovation agency, believes that the most disruptive innovation can only occur when great and diverse minds meet and get access to proper support mechanisms to realise their ideas.

The participation of women in the innovation eco-system is crucial to the development of work that will truly change the world. Not only for these women themselves, but for everybody – boosting female entrepreneurship could deliver approximately £180 billion to the UK economy.²

Over the past year Innovate UK has focused its support on women working in innovation.

We are working to ensure their ideas are heard and that they have the resources, business support and self-belief to turn their ideas into successful businesses. This followed the insight that just one in 7 applications for business funding to Innovate UK came from women.

Pictured here are some of the 34 women in innovation award holders from Innovate UK's first competition solely for women. This group represents the UK's most promising female entrepreneurs.

The exciting innovations that these women are working on include the optimisation of cancer treatment, creation of sustainable alternatives to animal products and solutions to crises of air-pollution and waste.

You'll notice here that a woman in innovation doesn't look a certain way. She doesn't have one background, one education, one location, one demeanour, one approach, or one style. We recognise, encourage and promote these differences and the diverse ideas they bring forward.

We hope that in partnering with Getty to create real depictions of women in innovation, and highlighting the many identities of female entrepreneurs, we can create a lasting legacy. It's this that will inspire other women to recognise their most entrepreneurial and innovative ideas, and to pursue their ambitions.

¹<https://www.gov.uk/government/news/women-in-innovation-research-reveals-barriers-and-opportunities>, Deloitte, Women entrepreneurs report, April 2016, comparison between working women and women engaged in early stage entrepreneurial activity.

Our innovators

Jenna Bowen

Since completing her PhD at Cardiff University's School of Pharmacy & Pharmaceutical Sciences in 2011, Jenna has focused on making real the notion of precision medicine. She is developing smarter diagnostic technology to help the medical sector deliver bespoke, personalised treatments for every patient. With healthcare resources under huge pressure, the need for this kind of smart approach to disease management grows day by day. With support from Innovate UK, Jenna's innovation will enable critical information to be received by healthcare professionals in under 15 minutes, to support quick and accurate diagnosis and treatment.



Jenna is pictured
in her lab at CMD
in Cardiff.



Pauline Dawes

After leaving school at 15, Pauline went on to study at the University of Cambridge and graduate with an MBA. Following her studies she began working in transport and engineering. Here, she quickly climbed to the top of this male-dominated sector. As Managing Director of SOMI Trailers, Pauline has drawn on her 10 years of professional experience to inform her innovation, leading the development of a trailer body that uses the space underneath trucks to transport greater loads with every journey. This could lead to a saving of 10,000 truck journeys a day in the UK alone.

The training and support provided by Innovate UK has accelerated SOMI's progress, enabling them to raise their profile to an international level.



Pauline is pictured in a café opposite one of London's arterial roads, the Westway.



Elena Dieckmann

Elena grew up in Nuremberg, Germany. After a brief foray into the working world in international management in Russia and the Middle East, she returned to academia to study at the Dyson School of Design Engineering and the Royal College of Art. Mother to a young daughter, Elena feels hyper-aware of the impact our society will have on future generations. It is this awareness that led her to co-found AEROPOWDER, a start-up turning waste feathers from the poultry industry into innovative materials.

With support from Innovate UK, AEROPOWDER's feather-based products use recycled material in a novel way and are sustainable in creation, use and disposal.



Elena is pictured in her lab in Imperial College London, the site of much of her and the team's work.



Fanzi Down

Fanzi is the mother of a 4-going-on-14 daughter, wife to a British husband, daughter to Chinese parents and, increasingly, an innovator. Fanzi runs the confectionary division at DPS Designs and is a co-founder of Picnic for Peace, an initiative to promote tolerance and multiculturalism.

The innovations developed at DPS Designs are used in both chocolate moulds and aerospace tooling. Her current project is designing a method where chocolate moulds can be used in creating much more intricate products.

With the help of the funding from Innovate UK, DPS Designs plan to develop this technology further and commercialise it.



Fanzi sits inside Hotel Chocolat, where her moulding techniques are put to work creating exquisite and intricate chocolates.



Carmen Hijosa

Carmen began her life in Spain, but her career has taken her across the globe, including the UK, Ireland, Germany and the Philippines. Having specialised in the design and manufacture of leather goods, Carmen discovered that she could make a non-woven textile - a fabric bonded together without knitting or weaving - from the long fibres in pineapple leaves. Her work resulted in the creation of Piñatex, a unique, natural and sustainable textile made from pineapple leaf fibres.

With the help of innovative UK, Piñatex is now entering into a new R&D phase to upgrade the product in order to be ready to enter into more stringent markets such as furnishing and automotive.



Carmen is pictured on her 'desk chair' at the Royal College of Art, where she's developing a new sustainable and biodegradable material made of pineapple leaf fibres.





Carmen is pictured at her home in Barnes. When she's working from home, Carmen likes to sit on a sparse single table or her sofa in the spare room; it's quiet, light, minimal and lends itself to focus.



When Carmen isn't working she loves spending time in her West London neighbourhood as well as with her beloved cat, Socks.



Hiking is great love of Carmen's – she has hiked all across Europe and her hiking boots are never far from her door. Hiking gives her the opportunity to experience the outdoors as well as giving her the chance to be free to think and be creative.

Anna Hill

Anna is an artist, designer, innovator and entrepreneur. She's motivated by the constructive, creative use of space technology and how it can solve some of our biggest environmental problems. As the co-founder of the River Cycleway Consortium Ltd, Anna is responsible for the Thames Deckway, a floating cycle and pedestrian path.

During her time living close to the river in Rotherhithe, Anna was inspired by the Thames and how greater use of the river could help London to deal with its growing congestion, pollution and cycling safety issues. With support from Innovate UK, floating cycle-paths will create a unique, high-impact, civil engineering project for smart cities that aims to provide safe, green transport infrastructure.

Anna is pictured in a spacesuit, in front of her ultimate inspiration: the planet.



Shakar Jafari

Shakar was born in Afghanistan, but she and her family were forced to move following the outbreak of war and loss of their home when she was just 6 years old. After 6 months of travelling, they arrived in Iran as refugees. It was here that Shakar discovered her passion for nuclear physics, radiation and the science behind its medical applications.

This passion was truly put to the test when Shakar's father was diagnosed with cancer. During the months before his death, Shakar promised him that she would try to make a difference to the lives of other people with his condition. Shakar is now the Founder and CTO of Truenovo Limited, which, with support from Innovate UK has developed a radiation detection system for cancer care that aims to save lives, money and offer a better quality of life to patients.



This picture was taken at the University of Surrey where Shakar received her PhD in medical physics and is a visiting research fellow.





Shakar likes to spend as much time as possible in her garden, where she feels she can properly unwind and reflect on her past and future. Shakar's father loved to garden and many of the flowers she has planted in her garden were favourites of her father.



Shakar sits on her daybed, half of her daughters' bunk bed turned upside down! Here she works, surrounded by the plants that remind her of home and her father. Often her daughters will join her to do their homework here.



Shakar is pictured at her dining table with her two daughters, Zahra and Sara; they game and code while Shakar works on a prototype. On the bookshelf behind, alongside her daughters' books, sit Shakar's MSc dissertation and PhD thesis, as well as awards from the UK and Afghanistan.

Donna Lyndsay

Donna wears many hats; she's a busy working mum, a school governor, business consultant, a geospatial data specialist – and now an innovator. As the Commercial Director of EarthSense, Donna has applied her 22 years' experience in the geographic information industry to commercialise the University of Leicester's most promising air quality monitoring research. With support from Innovate UK, EarthSense provides technology for the measurement and modelling of air quality across the UK, to inform real-time decisions on how to ensure everyone can breathe clean air.



Donna's pictured near her home in Exmoor, surrounded by the clean air that inspires her work.



Fiona Marston

Fiona, a passionate innovator in all aspects of her life, was inspired to follow a career in medical research by her mother's battle with a rare degenerative illness. If she were here, her mother would say that Fiona was born self-motivated. It's what's driven her 25 years' experience in health care, biotechnology and venture capital, and on to become CEO of Absynth Biologics, an organisation that addresses people's growing immunity to antibiotics.

The strategic support Fiona has received through Innovate UK's infocus women in innovation initiative is already having a positive effect on Absynth, and competitive grants have enabled the team to further support their focus on R&D.

Fiona is pictured within The Biohub at Alderley Park in Cheshire, where her lab is located.

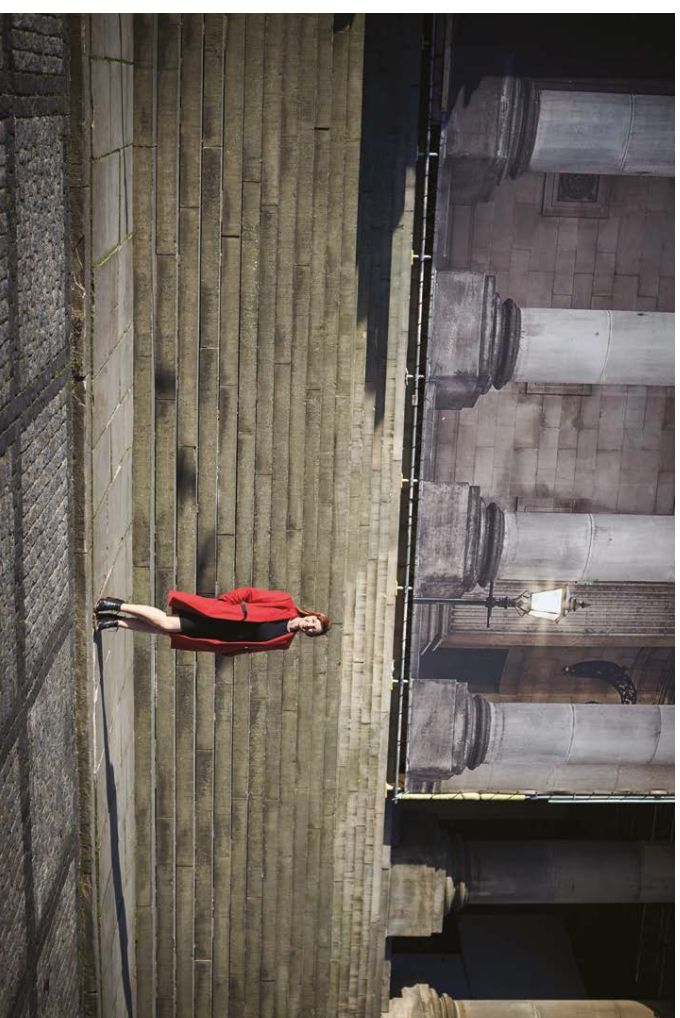


Carolyn Pearson

Having left school with only a handful of qualifications, Carolyn's passion for learning only really started when she took up part-time studies during her twenties. She achieved BAs in business and IT and an MBA with distinction, before completing the Cranfield School of Management's Advanced Development Programme in Leadership. After heading up tech teams within Sony, KLM and the BBC, Carolyn founded Maiden-voyage.com, a private social network through which professional women can connect when travelling on business.

With support from Innovate UK, Carolyn has built an 11,000-strong community in over 100 countries and, in doing so, helped ensure safety of women travellers all over the world.

Carolyn is shown in Leeds, the city where Maiden Voyage is based and just one of the many locations where the company has accredited female friendly hotels.



Rebecca Street

Rebecca is an established bridal designer, coupled with design technician for luxury design houses, including Alexander McQueen and Mulberry, with whom she's fitted clothes for celebrities like Kate Moss and Keira Knightly.

She is known for her sculpting skills, her technical knowledge of textiles and construction, and for pushing boundaries in the area of wearable technology. Rebecca's focus now is on her technique for applying precious metals to fabrics, which are washable; the immediate application for this is luxury fashion, yet with innovative UK's ongoing support, the additional implications of this technology range from medical devices to printed electronic circuits.



Rebecca is pictured with one of her own dresses, outside Imperial College London's physics labs.



Natwilai Utomprurkporn

Natwilai grew up and studied in Bangkok before receiving a scholarship to study global innovation design at Imperial College London and the Royal College of Art. This is where her fascination with drones began, and the seed was planted for her start-up, Getrik. Natwilai describes Getrik as 'Google Maps for large structure inspection' where drones are used to scan structures and create interactive 3D maps. Manual inspection using traditional scaffolding or rope access takes days or weeks to complete, and can cost thousands of pounds.

With Innovate UK's funding and support, Getrik is developing software that allows this process to be completed in a few hours, at a fraction of the cost.



Natwilai is pictured inside the Enterprise Lab, a hub for innovative start-ups at Imperial College London.



Natwiliat recently moved to Chelsea where she lives in a converted Police Station. She shares it with a group of young, like-minded people and loves that it challenges the notion of a usual Chelsea-dweller.



The space has all of its original fixtures, including cells, a front desk and a closed roof space, where Natwiliat can test drive her drones.



If she doesn't walk the 15 minutes to Imperial College, Natwiliat will work on two screens in her room; she feels at her most focused and comfortable in her 'Totoro dressing gown'!

Photos by Nicky Sims

Ambassadors

Innovate UK's infocus women in innovation campaign has been supported by a cohort of high-profile ambassadors. These are experts in innovation, business development, finance and people management – and generous providers of support and mentorship to our female innovators.



Pictured here (from left to right) are:

Barbara Domayne-Hayman, Chief Business Officer, Aulifony Therapeutics;
Naomi Weir, Deputy Director, Campaign for Science and Engineering;
Fiona Marshall, Founder and Chief Scientific Officer, Heptares Therapeutics;
Ruth McKernan CBE, Chief Executive, Innovate UK;
Sara Bell, Founder and CEO, Tempus Energy;
Jenny Tooth OBE, CEO, UK Business Angels Association.



About our campaign

We launched our infocus women in innovation campaign and awards programme in 2016 to get more women innovating in UK businesses.

We were looking for potential – people who had the talent to be the business leaders of the future.

The response was stunning: over 1,700 registrations of interest and 442 final applications, of an excellent quality. We selected 15 winners who would each get a £50,000 grant to develop their ideas. These women, plus a further 19 (making 34 in total), were also awarded a tailored package of business support and connections, including the opportunity to work with a senior business mentor. The programme is running from January 2017 to January 2018.

It is early days but our award holders are already making great steps towards realising their ideas, and building a

solid reputation as they go. Examples include Elena Dieckmann of Aeropowder, recognised as Forbes 30 under 30, Becky Sage of Interactive Science, who won a place on Nordic business accelerator, xEdu, and Rachel Gawley of AppAttic, named on the Disrupt100 list for 2017.

In addition, our award holders have managed to secure additional funding for their businesses from the UK and overseas markets.

These women in innovation are committed and high performing with the drive and tenacity required to build thriving businesses.

Our support for female innovators doesn't stop here. With the Digital Catapult and the British Consulate General Boston, we are planning to host a delegation of female entrepreneurs from the UK who work in human and machine interaction to Boston.

There's more, too, for our infocus campaign for diversity and inclusion. This is all about finding, celebrating and supporting the very best talent for innovation, no matter where it comes from.

Before the end of the year we will launch a new infocus action to make a positive

difference to another group of people from a diverse background. We will work with like-minded organisations to support budding innovators to take their ideas forward, and give them opportunities to create and grow successful businesses – and in turn grow the UK economy.

We'll also work with the Research Councils and across government through the creation of UK Research and Innovation to make sure this approach works for everyone.

This work would not be possible without the help of our ambassadors, senior business mentors and colleagues from the Enterprise Europe Network and Knowledge Transfer Network. Thanks must also go to Sarah Turner from Angel Academe and Denis Wouffe from the Women's Business Council for their input and advice.





Winners (Front Row): Elena Dieckmann, Founder of AeroPowder, Stobhan Gardner, CEO of HEROTECH18, Anna Hill, Founder of River Cyclway Consortium, Christine Boyle, Founder of Senergy Innovations, Carmen Hiposa, Ananas Anam, Dr Rebecca Sage, Managing Director of Interactive Scientific, Natwalia Uroonprukpoom, Founder of Geotitk Ltd, Franzi Down, Founder of DPS Designs, Rachel Gawley, AppaTic, and Dr Shakardokht Jafari, Truelivvo, (Back Row): Emma L. Scaats, CEO of CN Bio Innovations, Kym Jarvis, Viridian Consultants, Pauline Dawes, Owner of SOMI Trailers, Loin Gresser, Dem Dx, and Anne Rogues, Aurora Medical, at the women in innovation awards at the RSA, London, 15th November 2016.

Photo by Adam Gasson

The Infocus women in innovation exhibition has been hosted by Innovate UK in partnership with Getty Images Gallery:

About Getty Images: Getty Images is the most trusted and esteemed source of visual content in the world, with over 200 million assets including photos, videos, and music, available through its industry-leading sites www.gettyimages.com and www.istockphoto.com. The Getty Images website serves creative, business and media customers in almost 200 countries and is the first place people turn to discover, purchase and share powerful visual content from the world's best photographers and videographers. Getty Images works with over 200,000 contributors and hundreds of image partners to provide comprehensive coverage of more than 130,000 news, sport and entertainment events, impactful creative imagery to communicate any commercial concept and the world's deepest digital archive of his toric photography.

About Getty Images Gallery: Getty Images Gallery is London's largest independent photographic gallery and was founded in 1996. Located on Eastcastle Street, just a stone's throw from Oxford Circus, Getty Images Gallery showcases stunning exhibitions on a regular basis. The majority of the imagery on display in the Gallery is taken from Getty Images' archival and contemporary libraries and is available to buy as fine art prints in a variety of sizes and framing options.

Innovate UK is the UK's innovation agency. Innovate UK works with people, companies and partner organisations to find and drive the science and technology innovations that will grow the UK economy - delivering productivity, new jobs and exports. Our aim at Innovate UK is to keep the UK globally competitive in the race for future prosperity.

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