summiting the science of EVEREST

A JOURNEY OF DISCOVERY WITH DR MELANIE WINDRIDGE

APRIL 2018



Anglia Ruskin University





This is your chance to reach the next generation of scientists, engineers and adventurers.

By sponsoring this engaging outreach programme you can associate your organisation with everything that is exciting about science and innovation, inspiring a generation that could become both your customers and your future employees.







INTRODUCING MELANE





ABOUT ME

Dr. Melanie Windridge likes to combine her scientific knowledge with her love of adventure to promote a better appreciation of science.

She has a PhD in fusion energy, is Communications Consultant for fusion start-up Tokamak Energy, and works in education with the Ogden Trust, Anturus and Your Life. She is the author of Aurora: In Search of the Northern Lights and Star Chambers: the Race to Fusion Power. Melanie loves the mountains and believes science and exploration go hand in hand.

AFFILIATIONS

- Imperial College London Academic visitor in the Plasma Physics group
- Institute of Physics Member of the Plasma Physics Group, Science Communicators group and Women in Physics group
- Founder Ambassador of the Your Life campaign and a STEM ambassador
- Trustee of Edirisa UK, set up in 2005, which supports communities and education in Uganda
- Full member of the Alpine Club and on the committee



QUALIFICATIONS

PhD in Plasma Physics from Imperial College London, MSc in Physics from Bristol University, PADI Advanced Diver, RYA Competent Crew (sailing), OPAL French Proficiency

EXPERIENCE

- (never got there)



- Kilimanjaro (5895m) (October 2007)

- Various peaks in the Alps of PD-AD+ over various years since 2010, including Mont Blanc (4810m) via the Trois Monts route (2011), Y-Couloir on the Aiguille d'Argentiere (2012), south ridge of the Lagginhorn (2013), and the west ridge of Dent du Tsalion (2015)

- Mount Elbrus (5642m) (June 2013)

- Ski expedition in Svalbard in Winter (Feb 2015) enduring temperatures down to -36C

- Aconcagua (6962m) (Dec 2015)

- Chopiraju Oueste, Maparaju and Jatunmontepunchu (all 4400-4500m), Alpine Club expedition to Peru (June 2016)

- Snowed in in the Himalayas for two weeks in 2014 on way to Putha Hiunchili base camp



THE OPPORTUNITY



THE OPPORTUNITY

Dr Melanie Windridge is climbing Mount Everest in 2018 and is looking to raise up to £120k for an educational project to help inspire young people, especially girls and women, to reach new heights in STEM and business.

 Be part of a project showing the importance of technological innovation to human progress by examining risk on Mount Everest and the science that gets us to the top.

 Inspire children to study science and maths by showing the technological innovations that contribute to survival on Mount Everest and their relevance to our daily lives.





WHY AM I CLIMBING?

The project turns the usual criticism of Everest (crowded and becoming more dangerous) on its head - it's actually much safer, and that's mostly due to technological innovation and good management.

We live in a technological age. The UK faces a huge skills gap and needs young people with science and maths (STEM) skills in all industries. I want to help narrow the skills gap and improve diversity.

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GOALS



THE GOALS



To get to the top and to get home again



To help to increase number of students (especially girls) taking A-level STEM subjects via: **50,000+** views of our videos/blogs on technology in the mountains



5000+ children addressed during school visits and the lecture tour



50+ schools using our science activities in classrooms and science clubs



REACHING A WIDER AUDIENCE

Be part of a project showing the importance of technological innovation to human progress by examining risk on Mount Everest and how climbers can improve the odds.

- An engagement programme in conjunction with the Institute of Physics (IOP) to include: workshops in primary and secondary schools, live-tracking of the climb and "ask me anything" on-mountain video diaries

- A YouTube video series and associated blogs on the science of the summit - technological advances that improve performance and safety in the mountains (via IOP channels)
- A schools and public lecture tour
- A book on the science of the summit
- A film or TV tie-in for the book (subject to funding)





RISKS





WHAT ARE THE RISKS?

THERE ARE RISKS TO CLIMBING EVEREST, BUT WITH AWARENESS, SCIENTIFIC KNOWLEDGE AND GOOD USE OF TECHNOLOGY WE AIM TO MINIMISE THESE RISKS

RISK AREA	CONSEQUENCE
Unfamiliarity with equipment causing delays/problems	LOW
Cerebral/pulmonary odema	HIGH
Fall	HIGH
Avalanche	HIGH
Frostbite	HIGH
Death	HIGH
Failure to summit	LOW
Need to return another season	LOW
Traffic jams/queues on way up	MEDIUM
Run out of oxygen	HIGH
Lose a glove	MEDIUM
Bad weather causes delay	LOW
Bad weather when climbing	MEDIUM





Cerebral oedema (swelling)

Quick heartbeat, even when resting

Plumonary oedema (swelling due to fluid accumulated)

Frostbite on extremities

DEATHS

DEATHS PER CLIMBER GOING ABOVE BASE CAMP





you can see that it has decreased from a peak of around 10% in the mid-

So Everest is safer than it used to be.



SCHOOLS



Through connections at the Institute of Physics (IOP), both primary and secondary in the Islington area will engage with engage with pre-, on- and postmountain activities and interaction. Schools include:

- Gillespie Primary School

- St Andrews C of E Primary School

- Winton Primary School

- Capital City Academy

Public lecture tours will reach audiences nationwide







DETAILS





ROUTE MAP



CRITICAL TIMELINE



Raise awareness and generate sponsorship _{Sept - Dec}

Research and filming for videos

My YouTube series will be about the science and technologies that enable us to climb Everest. We will be interviewing companies about communications, clothing, weather forecasting and more.

Sept - Dec



Public launch & media interviews

Fitness training and conditioning

Training for high altitude is different to other sports as lack of oxygen degrades fitness. I'd like to increase my base fitness for better speed and recovery, and to improve core strength and balance for the exhausting summit ridge.

Sept - Dec

Promoting my journey

I will be giving schools' workshops with the IOP connecting the science of summiting Everest to their studies. As a role model for girls in both science and adventure, I hope that my travels will inspire them to explore for themselves.

Feb-March



Step up fitness training

Feb - March

Press articles and blogs

I will release blogs and videos on the science that gets us to the summit of Everest. Articles will be released first, with videos coming out after the climb and incorporating on-mountain footage.

March-April



Packing and panicking

March







SPONSORSHIP INFO

Everest is the ultimate challenge, regardless of your level. That's why people go; and why they go back. That's why it has the power to inspire so many.

We are looking for **£50,000** to cover the public engagement programme, which will include schools' workshops, public videos and a social media/PR campaign. Anything raised in excess of this will allow us to make further videos and increase our social activity and reach.

£120,000 would allow us to take an additional cameraman and make a documentary film of the climb.



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SPONSORSHIP PACKAGES

	BRONZE £5K	SILVER £10K	GOLD £25K
Logo on sponsorship website			
Sponsors' logos featured in book and videos			
Sponsors' logos on group kit such as tents and bags			
Local press			
Promotional use of photography (for internal & external communications)	ANS A		
Product endorsement (incl. blogs/videos)	11		
National broadcast and press media coverage	ATT		
Company motivational speech on return			
Banner/flag with sponsors' logos photographed on mountain			
Product or company t-shirt/logo photographed on the mountain			
Company flag on the summit of Everest			A.L. S. BARRIN
Logos on climber's kit		121	ATT I
Title sponsorship rights		1.	The second
Access to Melanie Windridge for up to 4 events for 1 year			
Unique employee development opportunity to join Melanie for trek to Everest basecamp (1 person included, extras £3000pp)			



EXPEDITION £50K





NEXT STEPS

Contact Melanie today to discuss sponsorship opportunities or/and to learn more about the journey ahead.

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THANKYOU

