

# Winston Churchill Travel Fellowship

## Sensory Fashion Stress Management Tools To Prevent A Bipolar Relapse

Dr Jenny Tillotson Churchill, Fellow 2013 (STEM Category)

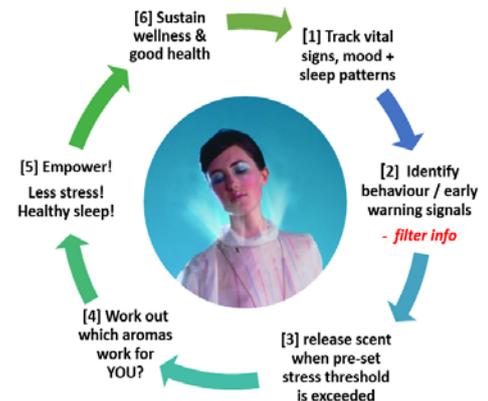
Jenny travelled to the east and west coast of America to explore **Sensory Fashion** stress management tools that can be worn to help reduce the risk of an acute bipolar disorder relapse and benefit other affective disorders (i.e. social anxiety and generalised anxiety disorder). Her Fellowship focused on a patented 'contextual' wearable technology device she has invented called **eScent®** which works as a real-time biofeedback scent intervention and can be discreetly embedded in 'smart' jewellery and clothing.

eScent® is an empowering and enabling platform technology and delivery device that emits evidenced-based fragrances triggered by a sudden change in mood, increased stress levels or disturbed sleep patterns. It forms a localised 'scent bubble'; an area of constant, detectable scent for the user based on a change in vital signs and biometric feedback, i.e., heartrate, galvanic skin response, stress-related body odour, blood pressure, pulse, EEG, movement and sound i.e., angry voice from irritable behaviour.

Jenny's finding will help incorporate the sense of smell into the realm of wearable technology, a field that has been unexploited but has wide-reaching applications in digital health, wellbeing, fashion, virtual reality, retail etc. Feedback received from the mental health community in America claimed that as a tracking device and self-management product, eScent® is likely to attract high levels of acceptability, and as a '**de-stigmatising**' fashion item will be easy to integrate into everyday items.

### Travel To Make A Difference:

1. Philadelphia: Monell Chemical Senses Center
2. Boston: MIT Media Lab (Affective Computing Group)
3. New York City: Icahn School of Medicine at Mount Sinai
4. New Jersey: Research Institute of Fragrance Materials
5. Baltimore: John Hopkins Medicine (Mood Disorder Centre)
6. San Diego: International Bipolar Foundation
7. San Diego: University of California San Diego
8. San Francisco: University of California San Francisco
9. Berkley California: Berkley's start-up Cluster
10. San Francisco: Posit Sciences (Neuroscience)



### Designing for Behaviour Change

Since returning from the USA (April 2014), Jenny has been working on the development of **eScent®** which is in the early stages of commercialisation. She has presented at the Anxiety Festival and the Quantified Self European Conference 2014. Forthcoming presentations are scheduled at the Science Museum, WOW Cambridge! and the *Fashion for the Senses Symposium* at the London College of Fashion. It is too early to see the full impact of the Fellowship but there is much interest in the work from both the mental health community and technology sector. As a Fellow of the RSA, Jenny is now applying for a Catalyst award to work with psychiatrists and a Psychologist of Fashion and she plans to publish her Fellowship report. She is currently working on a short film with further projects in the pipeline to alleviate stress and help recall memory for people with early stage dementia and olfactory interaction for Autism Spectrum Conditions.

### Dr Jenny Tillotson PhD RCA FRSA

Jenny Tillotson is Winston Churchill Fellow (2013), a Reader in Sensory Fashion at Central Saint Martins, Platform Leader in Wellbeing at the Textile Futures Research Centre (UAL) and entrepreneur. With over 15 years working at the intersection of wearable technology, fashion smell and wellbeing, Jenny is also a Visiting Scholar in the Institute of Biotechnology at the University of Cambridge, Fellow of the Royal Society of the Arts, Associate of the British Society of Perfumery, STEM Ambassador and the driving force behind a new invention called eScent®. This Fellowship is informed by her bipolar affective disorder diagnosis (22+ years) with the intention that eScent® will raise mental health awareness.

[jrt48@cam.ac.uk](mailto:jrt48@cam.ac.uk) +44 (0)7710 808157 @scentsory  
<http://www.linkedin.com/in/escent> <http://www.tfrc.org.uk/author/jenny/>

