



BRISTOL VISION INSTITUTE

## BVI REFRESH – Spring 2012

Welcome to BVI Refresh – the latest news from BVI.

### Professor Tom Troscianko 1953-2011



The inspiration behind Bristol Vision Institute, Tom Troscianko, sadly passed away on November 15th. His larger than life personality and enthusiasm were infectious and he is greatly missed. To celebrate Tom's life and work, there will be a full day of events in his memory on 30<sup>th</sup> March in Bristol. There will be an informal gathering in the morning followed by an afternoon of talks, with a party in Wills Building in the evening. Please register your interest at <http://tomtroscianko.eventbrite.co.uk>.

### Richard Gregory Lecture



The 2011 Richard Gregory Lecture, delivered by David Sproxton of Aardman Animations, was held in the Wills Great Hall in October. A capacity crowd of some 900 people enjoyed an entertaining and informative hour with special guests including Morph and Gromit! Many thanks to David for his time and effort in making this lecture a great success. The 2012 lecture will once again be held in October, with guest lecturer Professor Mike Land from the University of Sussex. More details will follow shortly.

### New book – Professor Majid Mirmehdi

A new book, 'Multi Modality State-of-the-Art Medical Image Segmentation and Registration Methodologies' documents the advances in image-guided surgery for cancer treatment. Published by Springer Publications, a table of contents and sample pages are available online at:

<http://www.springer.com/biomed/book/978-1-4419-8194-3>.

### IET Computer Vision Journal

Congratulations to Professor Majid Mirmehdi on his appointment as the new Editor-in-Chief from January this year. Majid's principle aims for the journal are to improve its impact factor and its turn-around rates for handling submissions and returning decisions. The remit of the journal includes aspects of human vision and cognition related to computational vision. All BVI colleagues working across these boundaries are very much encouraged to consider IET Computer Vision when submitting their work for publication <http://scitation.aip.org/IET-CVI>

### £1.6million research centre exploring decision making

This new centre for research into how decisions are made is a collaboration between Mathematics, Statistics, Computer Science, Psychology, Economics, Earth Sciences, Geography, Neurology, Education and Biology. Researchers at Bristol centre will carry out vision experiments on human volunteers in order to understand how decisions are made. The resulting models will then be used in the design of artificial decision making systems aimed at tackling a range of real world problems such as the allocation of visual attention in CCTV control room operator and visual threat detection. <http://www.bristol.ac.uk/decision-research/>

### Biometric Recognition of Great Apes



A three year collaborative project between University of Bristol's VI-Lab, Max Planck Institute for Evolutionary Anthropology, Fraunhofer Institutes and ISS has now started. The study will investigate the use of computer vision for detecting and identifying individual Great Apes, using camera trap networks in African habitats. Bristol Zoo and Leipzig Zoo are also local partners in the project. For information please contact [Dr Tilo Burghardt](mailto:Dr.Tilo.Burghardt).

### BBC Anchor Programme



The Bristol-BBC-Anchor collaboration is now entering its third year. Anchor is a collaboration between the BBC, the University of Bristol, UWE, Bristol City Council, Creative England and an alliance of creative industries and community organisations including Bristol Media. It reflects Bristol's reputation for the creation of world-class content, most notably from the award-winning BBC Natural History Unit, and in factual programming, wildlife content and animation. Anchor initiatives include a new drive in local schools and colleges to boost media and digital production skills; a project targeting harder-to-reach communities offering media and digital training to 18-25 year olds; a new micro-budget feature film initiative called iFeatures; a series of BBC Anchor Innovation Academy workshops, linked to Bristol Media, BBC Bristol and BVI; and Technology demonstrators such as the BVI AIYP project and the TSB SANE archive project. To find out more, talk to Dave Bull who chairs the Anchor Innovation Group or visit: <http://bristol-bbc-anchor.org>.

## REACT – Creative Economy Hub – Funding Opportunities



Funded by the Arts and Humanities Research Council, REACT is one of four UK Creative Economy Hubs and is a collaboration between Watershed and the universities of Bristol, Bath, Cardiff, Exeter and UWE. React will offer funding for company/university collaborations through iShed's sandbox scheme. Two Schemes, with a different theme will run yearly between 2011-2014 with six projects funded from each scheme. To qualify you must have a project that uses Arts and Humanities research with a Creative Economy partner. The first theme, launched in December 2011, is on the topic of 'Heritage'. Visit <http://www.react-hub.org.uk> for more details.

## IEEE Themes: Emerging Technologies for Video Compression



Dave Bull organised and chaired the prestigious IEEE Themes Workshop in October as part of the 2011 IEEE International Conference on Imaging Processing. With presentations on ideas that might underpin future directions in the field, it was clear that Bristol's work exploiting computer graphics for texture synthesis was world-leading in terms of rate-quality performance.

## Do cameras have to work like that?

A new project on revolutionary video acquisition methods has recently been funded by DSTL. Dave Gibson, Neill Campbell and Dave Bull have won the award, in collaboration with BAeSystems and XMOS, to develop new sampling methods that could revolutionise the way we capture moving images. This moves away from the conventional ideas of sequential frames with fixed spatial resolutions and dynamic range to a more content based and task-adaptive framework.

## BVI Management

The BVI Management team has now been expanded to include Professor Iain Gilchrist and Dr J Burn. Iain is based in Experimental Psychology and has been at University of Bristol since 1998 and his research is concerned with the link between vision and action.

Laszlo Talas from Biological Sciences studying for a PhD in Camouflage, has joined as Postgrad representative.

Please forward any suggestions for events or collaborations and any other comments to the management team. Please also provide your news items to Melanie:

[Melanie.stubbs@bristol.ac.uk](mailto:Melanie.stubbs@bristol.ac.uk).

## DIARY DATES

### 2012 Young Researchers Colloquium

This year's BVI Young Researchers Colloquium will be held at the University of Bristol on Friday 29<sup>th</sup> June in Merchant Venturers Building. Please submit your titles, authors and abstracts to [Melanie.stubbs@bristol.ac.uk](mailto:Melanie.stubbs@bristol.ac.uk) by April 20<sup>th</sup> 2012.

### Pervasive Media Studio – Lunchtime talks



The Pervasive Media Studio is a creative technologies collaboration between Watershed, University of the West of England and University of Bristol. Based at Watershed, in the heart of Bristol, it brings together creators from diverse backgrounds to research and produce new experiences. Every Friday at 1pm, the Pervasive Media Studio hosts free lunchtime talks. Bring your sandwiches along and enjoy talks on magic, vision, wearable computing and locating sound. The full programme is available at:

<http://www.pmstudio.co.uk/events>.

### Encounters Workshop on Animation and restoration: experiments with colour and stereoscopy



This one day workshop will be held as part of the 2012 Encounters Festival (18<sup>th</sup>-23<sup>rd</sup> September 2012).

For the first time publicly outside Russia, some recently digitized and restored colour animated films from the 1930's will be shown. Also, several stereoscopic (3-D) cartoons created during the 1970's will be presented. These were created using a system developed by Scientific Research Film – and Photo Institute (NIKFI) in Moscow, which received an Academy Award for this technological innovation in 1990. BVI will be conducting audience research during this event, and more details will follow.

Dr Birgit Beumers from BVI, who is organising the event will also be giving the BVI seminar on Friday 24<sup>th</sup> February.