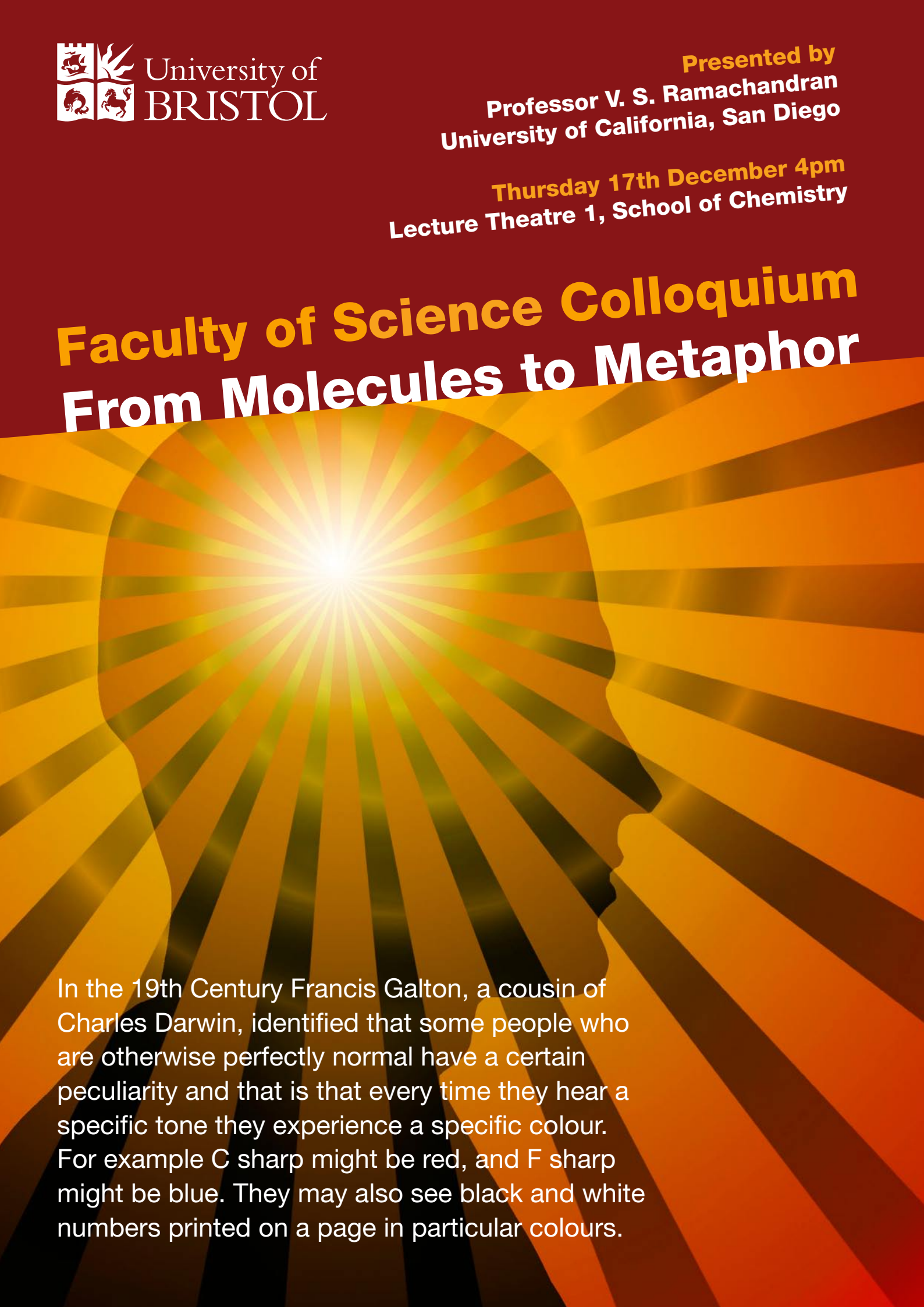


# Faculty of Science Colloquium From Molecules to Metaphor



In the 19th Century Francis Galton, a cousin of Charles Darwin, identified that some people who are otherwise perfectly normal have a certain peculiarity and that is that every time they hear a specific tone they experience a specific colour. For example C sharp might be red, and F sharp might be blue. They may also see black and white numbers printed on a page in particular colours.

**Thursday 17th December 4pm**  
**Lecture Theatre 1, School of Chemistry**

Prof. V.S Ramachandran argues that this oddity is a result of more prevalent processes of a kind that exist in early life, and that may lie at the centre of the way in which the brain develops complex representations which depend on associations that may not correspond to normal reality. Examples include metaphors and the richness of expressive art.

Prof. Ramachandram is an exceptionally distinguished neurologist. He is also highly renowned as a lecturer – he gave the 2003 BBC Reith Lectures.

#### **Lecture Synopsis**

What is the genesis of the way in which humans think? The traditional view is that perceptual processes are generally unstable in early childhood, and are rendered more useful by interacting with the environment. Prior to birth, the brain generates “test signals” which allow gross functional separation into separate sensory areas, but which still allow significant interactions between such areas. Postnatally, such interactions are reduced but not always to zero. The phenomenon of synaesthesia has been much studied recently since it involves apparently surprising interactions between very different sensory signals and modalities – a given digit may be perceived as “glowing” in a certain colour. Professor Ramachandran

argues that this apparent oddity is a result of more prevalent processes of that kind that exist in early life, and that may lie at the centre of the way in which the brain develops complex representations which depend on associations which may not correspond to normal reality. An example is metaphors – they are indicative of a way of thinking which is richer than a simple set of rules about how objects look and interact. Another example is the richness of expressive art, in which the artist injects the kind of complexity that is predicated by synaesthetic processes. Thus, the richness of our thinking may be a result of the way in which perceptual signals are handled by our brains during development.

**Whilst the lecture is free, we would be grateful to have an indication of numbers of people attending, therefore could you please email [vision-institute@bristol.ac.uk](mailto:vision-institute@bristol.ac.uk) if you plan to attend this lecture.**