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Cover Letter

The perceived benefits of hiring the author as the ECOS science communication advisor

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ABSTRACT

This essay outlines the importance of the harmonious interplay of orderly observation, meticulous measurement and impeccable interpretation of results – as epitomized by '*The Scientific Method.*' It states that the clear and concise dissemination of scientific literature to the general public is of the utmost importance in this new age of post-factual politics, the article argues that the subsequent employment of an efficient and effective science communication advisor with relevant digital media expertise and tertiary education–such as that of the author–would be of great benefit to CSIRO.

Peer review under responsibility of CSIRO.

1. Introduction

There is no doubt that, with the advent of the internet and social media, we now have an unprecedented level of access the annals of accumulated human knowledge. This cover letter provides an overview of the current public perception of science within Australia, drawing on a convincing compilation of information from two national surveys conducted by Lamberts (2017; 2018). In addition to highlighting the importance of the effective communication of scientific findings, this cover letter also puts forth a compelling argument as to why the author would find the position of Communications Advisor at CSIRO not only to be a perfect fit in terms of his capabilities and qualifications; but it is also in alignment with his overarching values, beliefs and vision for his future as an environmental emissary and advocate of sustaiable living practices.

2. Current community attitudes towards science in Australia

Luckily in Australia, there is generally a high level of interest and trust in science. Accoridng to Lamberts (2018) at least two thirds of Australians feel that they are are well informed about science and believe that scientists, along with doctors and farmers, contribute considerably to society. Interestingly, online news websites, along with specialist websites – such as CSIRO – account for 32.7% and 21.5% of the commonly referenced sources of information respectively Lamberts (2018). Moreover, CSIRO is generally seen as the most trusted science institution in Australia – although that belief has been declining as of late (CSIRO, 2014).

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3. The scientific method

3.1. On the emotional nature of humans

Despite how logical we may think of ourselves to be, humans are at our core fundamentally emtional beings. The abilitty for humans to 'feel' was of vital importance during our evolutionary development. It was this intuative emotional intellignece allowed our ancestors to form strong social connections and bonds prior to the development of comlex language (Darwin, 1872).

These emotions, albeit very useful for social interractions of our nomadic foraging ancestors, tend to have a wide array of adverse effects in the modern age. They tend to dominate our thoughts and guide our decisions resulting in irrational behaviour and cognitive biases. The topic of emotions and logic has been of discussion amongst the classical philosophers and subsequent scientists since the advent of written language.

3.2. The origins of the scientific method

The invention of the scientific method is commonly attributed to Aristotle (384-322 BCE), who pioneered this empirical approach of observation in ancient Greece. This approach was further refined over the ages by both Kepler and Galileo. The latter of who, according to Einstein (1934) impressed it upon the world that conclusions of purely logical thinking, cannot give us any true knowledge about reality.

The principles of the scientific method involve formulating a hypothesis based on observations, via inductive reasoning; devising an experiment whereby measurement-based testing can be undertaken and deductions can be drawn from the hypothesis; either proving or disproving the formulated hypothesis based on the experimental findings. This logical problem solving approach allows for an individual to critically evaluate a body of evidence and come to a conclusion based on a set of verifiable facts–rather than ones own belief on a matter.

3.3. The importance of communicating science

The process of sharing, informing, educating and raising awareness of useful knowledge is critical to the functioning of society at large. We now live in a digital age where the access to information has never been so ubiquitous. Unfortunately, though, it is exactly this abundance of information that allows for the propagation of questionable content online which can leave individuals vulnerable to confusion and manipulation (Vosoughi Et al. 2018).

The ability to present facts in a palatable manner to the wider non-scientific community is vital for all major scientific institutions. Thus, convincing scientific communication can ensure that there is a high level of scientific literacy amongst industry, government and public stakeholders allowing for cordial communication and diligent decision making across all areas of society, especially in relation to complex issues such as climate change (Australian Academy of Science, 2015).

4. Important information about the author

4.1. Brief history of the Author

Ever since the author can remember, he has been deeply fascinated by the mysteries of the universe, the infinite complexity of nature and the benefits that arise from a firm understanding of humanities place and space within our environment. Whether it was exploring his grandmothers Australian native garden, learning the Latin names of the indigenous flora and fauna of Victoria; or collecting sea shells and rocks from his family holiday adventures–the innate curiosity within was cultivated and nurtured by a myriad of social and environmental factors, resulting in his deep connection to nature and the philosophy of science. Naturally, his dream was to become the next David Attenborough or Carl Sagan: someone who explores the frontiers of humanities knowledge and eloquently shares this insightful information with the world – that was without a doubt what he knew he was placed on this planet to do in his current arrangement of atoms.

4.2. Man of Style

After graduating from university with a B.Sc, majoring in Biology and a B.Com majoring in HR and management, both with distinctions, he decided to pursue content creation and storytelling by founding a creative agency alongside a Men's Fashion and Lifestyle Publication *Man of Style*. The author wrote articles, curated digital content, oversaw the creative direction and liaised with clients. Facilitating the growth of the Man of Style team from a fashion blog to a fully fledged online publication with three employees a multitude of writers and a *strong social media presence*, collaborating with many of the world's top luxury brands.

4.3. The Phoenix School Program

After 2 years in an industry that was far from scientifically minded, the author came to the realisation that he was no longer pursuing his dreams of educating and inspiring individuals to not only think for themselves, but also understand and appreciate the value of science to society. Not long after the aforementioned realisation, he decided to delve back into the world of science, co-founding *The Phoenix School Program* (TPSP) – a STEM promoting charity that diverts scientific equipment and resources from landfill and donates them to schools in need. Since its inception TPSP has now donated in excess of $100,000 worth of equipment – some of which was donated by CSIRO – to Australian schools as can be seen in *Table 1 below*.

Table 1 – The Phoenix School Program Estimated Donation Values

Recipient Schools	Value of Donations
McKinnon Secondary College	$5,426
Sydney Rd Community College	$674
Brunswick Secondary School	$533
Glenroy College	$1,602
Preston High School	$3,000
Monash Uni (various recipients)	$96,636
Hazel Glen College	$4384.05

At the turn of the financial year, the authour decided to step down from his role as Managing Director at Man of Style to pursue his scientific

interests in the realms of biology and ecology. After scouring the internet for a vast array of ethical or sustainable jobs in biological sciences, the author found an opening at CSIRO that was a perfect harmony of his academic expertise and industry gained knowledge of media and communications.

5. Conclusion

There is no escaping communication, it is a biological neccecity of life, whether it be on a cellular level via hormones and neurotransmitters or on the level of the organism via spoken or written language. The effective proliferation of knowledge is equally as important on both a local an global scale. This distribution of information allows for our both our leaders and the public to make more informed decisions, based on evidence, that are life affirming and factor in both the organism and our environment. Ensuring the survival of not only our species, but all living organisms that comprise this beautiful biosphere we collectively inhabit and call home.

REFERENCES

Australian Academy of Science (2015), *The science of climate change: Questions and answers*, Australian Academy of Science, Canberra, Australia.

CSIRO (2014), *Community Attitudes Towards Science and Technology in* Australia, CSIRO Publications, Canberra, Australia

Darwin, C. (1872), *The expression of the emotions in man and animals*. London, United Kingdom.

Lamberts, R. (2018), *The Australian Beliefs and Attitudes Towards Science Survey – 2018.* The Australian National University. Canberra, Australia.

Pozzo, R. (2004), *The Impact of Aristotelianism on Modern Philosophy*. Washington, D.C.: Catholic University of America Press. Retrieved from http://www.jstor.org/stable/j.ctvfjczc6

Vosoughi, S., Roy, D. & Aral, S. (2018), 'The spread of true and false news online' *Science* Vol. 359, no. 6380 , pp. 1146–1151, viewed 11 July 2019, <DOI: 10.1126/science.aap9559>.

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