

## UNIVERSITY OF OXFORD

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## re Dr Katherine Horton



I write in strong support of the application from Dr Katherine Horton for a position at your company.

I first met Dr Horton when I was on the appointment committee which interviewed her for a junior research fellowship at St. John's College Oxford a number of years ago. These research fellowships are extremely competitive positions made available at Oxford University by the University's constituent colleges. These fellowships provide the appointees with a high degree of individual intellectual freedom to pursue their own ideas for a period of up to four years. There are just a few such junior research fellowship appointments each year, and they attract very able young intellectuals across a wide range of academic disciplines. I remember Dr Horton's interview because at the time she stood out as exemplary even amongst the very able group of those we interviewed.

At the time Dr Horton had just completed her D.Phil. (Ph.D.) in the area of particle physics. The perceived "glamour" of the particle physics area, and the sophistication of the experiments taking place at Cern, means that it tends to attract the very best young physicists from across Europe to study this field of science. Dr Horton had been working on complex alignment issues within one of the detector systems at the Cern experiment, and her very high ability had meant that she had been able to come up with ideas to solve a problem which had existed for a number of years.

Dr Horton therefore impressed us with her clear and incisive thinking, demonstrating a very high level of intellect and a highly intelligent independent mind. She was clearly the best applicant in her area, and we appointed her to a junior research fellowship at St. John's.

During the first two years of her appointment Dr Horton continued to work in the particle physics area, basing herself jointly at Oxford and at the particle accelerator experiment in Cern. However, over this period she also started to use the freedom of the junior research fellowship she held to explore other intellectual ideas of her own. After two years she stepped away from her previous work on particle physics, returned to base herself completely in Oxford, and started to work seriously on ideas in new fields.

This is precisely the intention of the individual junior research fellowship appointments, allowing someone at an early stage of their career to explore their own intellectual ideas rather than them being bound by an employment contract to work in one fixed area.

During the final two years of her St. John's College junior research fellowship at Oxford I got to know Dr Horton very well indeed, and became increasingly impressed by her very high levels of intellect and intelligence.

Her intellectual ideas developed rapidly. During this period she initially started to explore ideas in the area of medical physics and engineering. This is currently a very active area of scientific work, and it is testimony to Dr Horton's very high level of intelligence and serious intellectual engagement that she very rapidly developed a position where she was giving lectures in the field, and developing collaboration with academics both within and outside of Oxford.

However, after a while it became evident that Dr Horton's interests were moving beyond the purely scientific, and towards the end of her junior research fellowship appointment she started to look into the idea of moving outside of science and developing her career in other areas. In particular, she started to explore ideas in the business and finance world, and has continued to explore this area since leaving Oxford. This is not unusual, and in my experience as an academic at Oxford I would say that roughly half of those who pass through our system (as undergraduates, or research students, or early career researchers and research fellows) stay within the academic field (either in academia or industry) and half move out of this to apply their intellect in business/finance/politics/etc.

In addition to her serious and dedicated intellectual engagement Dr Horton was also a dedicated member of St. John's College. The College is run by a governing body of the permanent members of its own academic staff, and although as a fixed term junior research fellowship appointment Dr Horton was not a member of this governing body, she did become the most engaged and active of her group of research fellows in working for improvements within the College. She worked hard to improve the junior research fellows' facilities (organising office space for them, arranging improvements to their living accommodation and related facilities, improving library facilities, etc.). Dr Horton was also a very active member of the College community, dining regularly at College lunch and so-called hightable (this is the formal evening meal at an Oxford College to which the fellows invite guests from many areas - academic, intellectual, political, business, public life, etc.). Dr Horton was excellent at this, always impressing others with her intellectual engagement and high level of interest in a wide range of topics.

In summary, I regard Dr Horton as a very highly capable individual. She has a very high level of intelligence and intellectual engagement with the world, and takes whatever she does seriously. She has a demonstrated ability in applying her mind to a range of areas, and a developed interest in business and finance. She has an ability to interact well with others.

In short I think she would make an excellent appointment as you seek to develop your business.

Yours sincerely,

Prof Steve J Elston Professor of Engineering Science, University of Oxford Official Fellow, St. John's College Oxford