turnaround time' from submission to publication. In many cases, the journals ask authors to pay money while submitting their articles, which is an indirect indication that the article submitted will be uploaded on-line in next 2-3 days once the payment is received. In a few cases, journals ask the authors to first submit their manuscripts. Within a few days, they receive an e-mail from the journal editor stating acceptance of paper after which they are asked to deposit money in a particular bank account using electronic transfer. Journals claiming to have 'fast turnaround time' should be thoroughly checked for authenticity.

9. Contact details on 'contact us' page: Check the contact details. Most of the predatory publishers do not provide any contact address. By clicking 'contact us', a window opens up where authors are required to provide some details and are assured of a response from the journal editorial team. In other cases, a generic e-mail id is provided, which should sound warning bell.

These basic thumb rules also require use of sensible judgement on part of the researchers. When in doubt, it is also advisable to take help from those who have experience in publishing scholarly articles in scientific journals of repute. A

few simple steps can help researchers avoid being prey to scientific predators.

- 1. Sorooshian, S., *Curr. Sci.*, 2016, **110**(5), 766–767.
- 2. https://scholarlyoa.com/publishers/
- 3. Bajpai, M., *Br. Dent. J.*, 2015, **219**, 147; http://www.nature.com/bdj/journal/v219/n4/full/sj.bdj.2015.643.html#a1 (accessed 17 March 2016).

Manthan D. Janodia is in the Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal 576 104, India.

e-mail: manthan.janodia@gmail.com

Remembering Joseph Dalton Hooker

Anantanarayanan Raman

The 30th of June of 2017 will mark the 200th birth anniversary of Joseph Dalton Hooker, who was born as the second son to William Jackson Hooker and Maria Sarah Hooker née Turner in Suffolk, England. He died in Sunningdale, England, on 10 December 1911 at a ripe age of 94. His monumental seven-volume *Flora of British India* (1872–1897) is being consulted extensively even today not only within the Indian subcontinent, but throughout the world.

During his stay in India between 1848 and 1851, Hooker spent his time in



Joseph Dalton Hooker Source: *Popular Science Monthly*, The Science Press, New York, 1902.

Calcutta and its neighbourhood, mostly travelling further north, into the Himalaya and its foothills. He explored these natural areas for botanical novelties. His passion to explore plants seems to have been triggered in him by his botanistfather. Hooker's versatility of knowledge of natural materials was so profound that he powerfully radiates his brilliant knowledge about animals and landscapes and geomorphology, in addition to plants, in his articles and books. The two-volume Himalayan Journals are indeed an academic treat to anyone interested in India's fascinating natural history for the details they provide and the lucid prose in which the entire text is presented. Many have chronicled Hooker's life and work admirably^{2,3}.

As a young lad (7 years), Hooker attended his father's lectures in Botany at the University of Glasgow, which obviously enticed him to study plants for the rest of his life. Hooker started his professional life as a Royal Navy Surgeon after qualifying for M D from the University of Glasgow in 1839. He was recruited as an Assistant Surgeon in the Antarctica exploration fleet (H.M.S. Erebus, H.M.S. Terror, 1839-1843). This expedition made phenomenal discoveries⁴. Hooker, aged 22, looked for plants (including marine algae, which were published in the London Journal of Botany, co-written with William Harvey⁵) during this expedition. A collective edition of these various papers is available today as the *Botany of the Antarctic Voyage*⁶. During this trip, Hooker delved into the natural history of New Zealand and Tasmania. On his return to England, Hooker secured a government grant, which enabled him to travel to the Indian subcontinent in 1848.

In the document, which was later consolidated and published as the *Notes of a Tour in the Plains of India, the Himala* [read as *Himalaya*], and *Borneo*⁷, he indicates in the preface (p. iii), which explains his decision to travel to India for plant exploration and also to learn biogeography:

'Having accompanied Sir James Ross on his voyage of discovery of the Antarctic regions, where botany was my chief pursuit, I was anxious to add to my acquaintance with the natural history of the temperate zones, more knowledge of that of the tropics than I had hitherto had the opportunity of acquiring. My choice lay between India and the Andes, and I decided upon the former, being principally influenced by Dr Falconer, the Superintendent of the H.E.I.C. Botanic Garden at Calcutta. He drew my attention to the fact that we were ignorant even of the geography of the central and eastern parts of these mountains (sic. the Himalaya), while all to the north was involved in a mystery equally attractive to the traveller and the naturalist.'

The Falconer referred here was Hugh Falconer, who succeeded Nathaniel Wallich as the Superintendent of the Calcutta Botanic Garden (1848–1855). Although Falconer pursued plants avidly, he is better remembered today for his work on mammalian palaeontology⁸.

Hooker indicates that both Hugh Falconer and George Eden (the Lord Auckland, the First Earl of Auckland) proposed to him to survey Sikkim, 'as being ground untrodden by traveller or naturalist'.

While travelling from Britain to India, he came across James Andrew Broun-Ramsay (The First Marquess of Dalhousie) and his wife Susan Hay in Cairo, Egypt. At this point, Dalhousie, the Governor General of India, directed him to join his entourage in Moozuffer, belonging to Indian Navy. Sailing in Moozuffer, Hooker travelled to India touching Aden and Kandy (Ceylon, Sri Lanka) en route. The Dalhousie party including Hooker arrived in Madras on 5 January 1848 and was received by Governor George Hay (the Eighth Marquess of Tweeddale), who, incidentally was also the father of Susan Hay. Hooker arrived in Calcutta taking the land route from Madras, crossing the Vindyas, travelling via the Narmada valley, and using various travel means, including an elephant ride. In his Himalayan Journals, Hooker waxes eloquently on the disciplined, charming behaviour of the elephant he rode on. On reaching Calcutta, he concentrated in his tour of Sikkim, which included an unfortunate event of being jailed by the Chogyal of Sikkim, Tsudphud Namgyal. When Hooker spent his time collecting

plants in the Khasia Mountains, he was accompanied by one of his close mates, Thomas Thomson, who will be remembered for enabling Hooker to complete *Flora Indica*⁹. On reaching the banks of the Hoogly, Hooker concludes his India land travel impression with a crisp and enchanting note, written on 20 January 1848:

'Here I am on the banks of the Hoogly at last, with our excellent friend Wallich's pet, the H.E.I.C. Botanic Garden, looking me full in the face from the side of the river opposite to where I now am.'

Charles Darwin was one of Hooker's close professional associates. Several letters, transacted between them, offer fascinating reads on the evolution of biology and biogeography¹⁰. The other remarkable professional companion of Hooker was George Bentham, and many students of botany in India will recall with either fondness or detest(?), the Bentham and Hooker system of plant classification¹¹.

Most of my readers would know the remainder of the life of this British botanist, plant explorer and natural historian, who contributed severally and immensely to Indian biology. The Rhododendrons of the Himalaya and Impatienses of the subcontinent continue to flower brilliantly and spectacularly, remaining silent, but as colourful memorials to this lover of Indian plants.

 Hooker, J. D., Himalayan Journals (the Notes of a Naturalist in Bengal, the Sikkim, and the Nepal Himalaya, the Khasia Mountains, &c.), John Murray, London, 1855, two vols, p. 1061.

- Allan, M., The Hookers of the Kew, 1795–1911, Joseph, London, 1967, p. 273.
- Desmond, R., Sir Joseph Dalton Hooker: Traveller and Plant Collector, Antique Collectors Club & Royal Botanic Garden Kew, London, 1999, p. 286.
- Ross, J. R., A Voyage of Discovery and Research in the Southern and Antarctic Regions, during the Years 1839–43, John Murray, London, 1847, two vols, p. 813.
- Hooker, J. D. and Harvey, W. H., London J. Bot., 1845, iv, 249–276, 293–302.
- 6. Hooker, J. D., The Botany of the Antarctic Voyage of H. M. Discovery Ships Erebus and Terror in the Years 1839–1843 under the Command of Captain Sir James Clark Ross, Reeve Brothers, London, 1844–1869, three vols, pp. 1471+698 plates.
- 7. Hooker, J. D., Notes of a Tour in the Plains of India, the Himala, and Borneo; Being Extracts from Private Letters of Dr. Hooker written during a Government Botanical Mission to those Countries (Part 1, England to Calcutta), 1848, p. 57.
- 8. Bettany, G. T., https://en.wikisource.org/wiki/Falconer.Hugh (DNB00), 1895–1900 (accessed on 20 October 2016).
- Goyder, D., Griggs, P., Nesbitt, M., Parker, L. and Ross-Jones, K., Cutis's Bot. Mag., 2012, 29, 66–85.
- Darwin, F. (ed.), The Life and Letters of Charles Darwin, including An Autobiographical Chapter, D. Appleton & Co., New York, USA, 1888, two vols, p. 951.
- Bentham, G. and Hooker, J. D., Genera Plantarum ad Exemplaria Imprimis in Herbariis Kewensibus Servata Definita, Reeve & Co., London, 1862–1883, three vols, p. 5844.

Anantanarayanan Raman is in the Charles Sturt University, P.O. Box 883, Orange, NSW 2800, Australia. e-mail: araman@csu.edu.au