

## **A Family Skeleton? Solving the Mystery of a Naval Surgeon on the Franklin Expedition**

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### **Abstract**

Sharing a family history online led to an apparent connection with Harry Goodsir, a Scottish doctor, museum curator and naturalist who had served as an Assistant Surgeon on the Franklin Expedition to find the North-West Passage. Many years after the disappearance of the expedition, searchers on King William Island in the Canadian Arctic were taken by local Inuit to a skeleton which was repatriated and identified as that of Lieutenant Le Vesconte, an officer on the expedition. Buried under the Franklin Memorial at Greenwich, the skeleton was re-examined in 2009 when the memorial was moved. The results of that examination suggested that the skeleton might be that of Harry Goodsir.

### **Keywords**

Harry Goodsir, surgeon, naturalist, Franklin Expedition, skeletal remains

### **Introduction**

Researching family history has becoming an increasingly popular hobby, made much easier in recent years by the digitisation of registration and census documents and their ready availability on the internet. After creating a family tree, the author shared this on the Ancestry website where the contributions of other researchers resulted in finding many previously unknown ancestors. This is an account of one such forebear, Harry Goodsir (1819-c1848), an assistant surgeon on the 1845 Franklin Expedition to find the North-West Passage.

## **A family tree**

The contact which resulted in the present story came from Michael Tracy in the United States. An amateur genealogist, he has devoted himself to tracing his Scottish ancestors in Fife and Angus and has published a series of biographical monographs about them.<sup>1</sup> He indicated that a research team in England was looking for direct female descendants of a Christian Goodsir (1717-1760) and Tessa (née Millar), wife of this author, was one such. The researcher concerned, Simon Mays of English Heritage, explained that to help identify skeletal remains they wished to compare mitochondrial DNA (mtDNA) from a skeleton under investigation with mtDNA from female descendants of Christian Goodsir. The hypothesis being investigated was that these might be the skeletal remains of Harry Goodsir, an assistant surgeon on HMS *Erebus*, one of the two naval vessels on the Franklin Expedition. As Harry Goodsir did not have any descendants and nor did any of his siblings, the search for family DNA had broadened out to the wider family and this author's wife, we were told, was the descendant of Goodsir's great aunt.

A comparison of mtDNA in such cases requires direct mother to daughter to granddaughter transmission in an unbroken female line, which did not apply in the case of this author's wife's, but the story was a fascinating one.

## **The Goodsir dynasty**

Figure 1 shows the family connection. Christian Goodsir was the aunt of Dr John Goodsir (1746-1816), a surgeon in Leven in Fife. His son, also John Goodsir (1782-1848), was a surgeon in Anstruther, Fife and the skeletal remains in question might be those of *his* son Harry Goodsir. Harry was the younger brother of John Goodsir (1814-1867), a pioneer of cell theory, Curator of Surgeons' Hall Museum and Professor of Anatomy at the University of Edinburgh.<sup>2</sup>

These brothers grew up and later practised medicine together in the Hermitage, a large house in Anstruther on the Fife coast, where their father had established his medical practice. On the wall of the house is a blue plaque which records modestly that 'John Goodsir lived here until 1840. At the College of Surgeons, Edinburgh he studied and lectured on cell life'.

It is indeed a modest claim when you consider that the distinguished German pathologist Rudolf Virchow (1821-1902) paid John Goodsir a generous tribute in dedicating to him the English edition of his seminal book *Cellular Pathology*. Virchow, who is generally credited with the formulation of cellular theory, described Goodsir as 'one of the earliest and most acute observers of cell-life both physiological and pathological'.<sup>3</sup>

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<sup>1</sup> Tracy MT. *Dr. John Goodsir (1746-1816): A Healer of Souls and Healer of Bodies*. Tinley Park IL: Michael T. Tracy; 2015; Tracy MT. *John Goodsir (1814-1867): A Scottish Anatomist and Pioneer of the Study of the Cell*. Tinley Park IL: Michael T. Tracy; 2014.

<sup>2</sup> Gardner D. John Goodsir FRSE (1814-1867): Pioneer of cytology and microbiology. *Journal of Medical Biography*. 2017; 25: 114-122.

<sup>3</sup> Virchow R, Chance F. (ed) *Cellular Pathology. As Based upon Physiological and Pathological Histology*. English translation. Philadelphia: J.B. Lippincott; 1863.

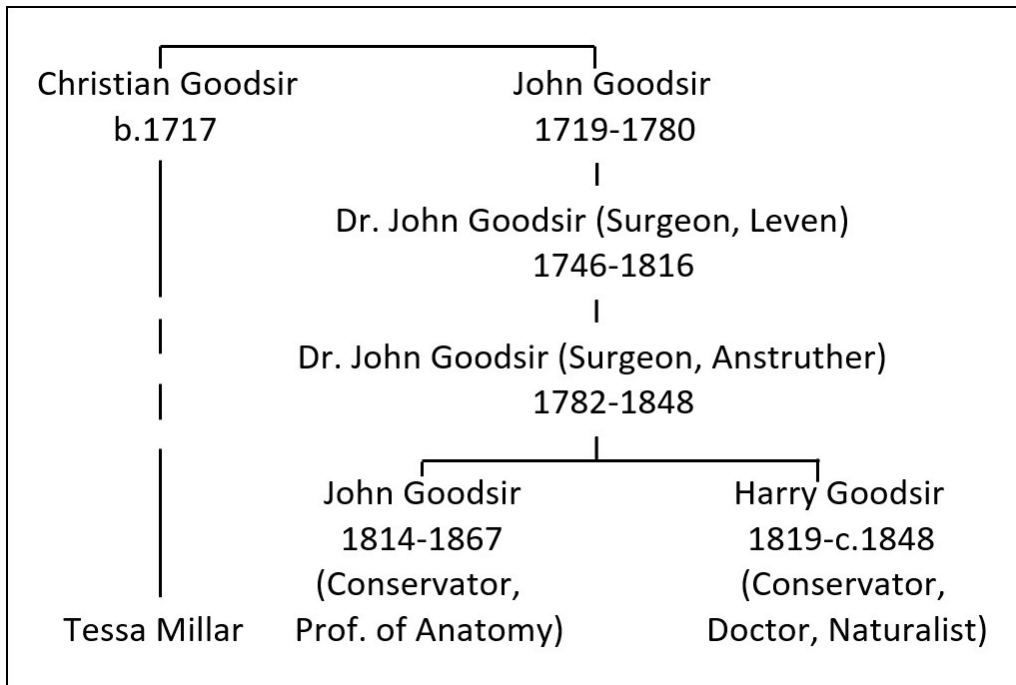


Figure 1. The Goodsir family tree. Compiled by the author.

Yet Goodsir's family and his pupils believed that John Goodsir had not been given sufficient credit for his innovative ideas on cellular theory. Indeed, his brother, Joseph Goodsir, campaigned hard to prevent Virchow being given the Fellowship of the Royal Society of Edinburgh but was unsuccessful.<sup>4</sup>

While a family member might be considered to be unduly biased, the historian Stephen Jacyna, reassessing Goodsir's contribution, concluded that Goodsir had indeed observed and confirmed that the cell nucleus was the germinal centre responsible for the formation of daughter cells in plant and animal tissues. Nevertheless, Virchow had given appropriate and indeed generous acknowledgement of Goodsir's pioneering work.<sup>5</sup>

## Harry Goodsir

John's younger brother Harry Goodsir grew up in Anstruther and, like his elder brother, from an early age collected and catalogued marine specimens from the shores of the Firth of Forth. These shores have for centuries been a rich hunting ground for those with an interest in marine biology. Harry Goodsir was fortunate to be collecting in an era when continuing improvements in microscopy enabled the study of ever smaller

<sup>4</sup> Donaldson KHC, Henry C. John Goodsir and local opposition to Rudolf Virchow's election to Fellowship of the Royal Society of Edinburgh in 1868. *Journal of the Royal College of Physicians of Edinburgh*. 2020; 50: 188-195.

<sup>5</sup> Jacyna LS. John Goodsir and the Making of Cellular Reality. *Journal of the History of Biology*. 1983; 16: 75-99.

specimens and, as a result, frequently new species were being discovered and named. From collecting in the rock pools, on beaches and foreshores, it was a natural progression for Goodsir to progress to study the rich marine haul dredged up by the local fishermen from the depths of the Forth.<sup>6</sup> As Henry Lonsdale, his brother's biographer, put it:

Almost every haul in the waters of the Firth brought up organisms, fitful in action and Protean in character; the faceless, shapeless, round, angular, and stellate forms; the gelatinous, pulpy, passively transient; the finny, scaly, and gliding-surfaced; the shelly, cretaceous, or bristling-defiant, mingling with the more harmonising and attractive.<sup>7</sup>

From childhood he also kept a small collection of live creatures which at one stage included a huge king crab and a seal, which he kept in a bath of saline. Goodsir created a list of marine creatures which he had preserved and catalogued and this was presented to the Cupar Literary and Antiquarian Society in November 1838, the first of a series of papers that would eventually mark him out as one of the country's leading naturalists.<sup>8</sup> Membership of two academic groups would help foster Harry Goodsir's interest in natural history and introduce him to scientific discipline.

While still at school at St Andrews he joined the Literary and Philosophical Society of St Andrews, a formidably impressive group of academic scientists. This society was centred around Sir David Brewster (1781-1868), Principal of St Andrews University, an eminent physicist, inventor of the kaleidoscope and mentor of Henry Fox Talbot (1800-1877), the inventor of calotype photography. The Society's members included John Adamson, a local doctor who learned the calotype process from Fox Talbot, and took the first photograph in Scotland, only the second in the UK. (Harry sat for a pioneering calotype portrait by Adamson in 1842, one of the earliest such portraits ever taken.) Other members included John Goodsir and the Manx naturalist Edward Forbes (1815-1854) whose friendship with Harry was to prove important. Charles Darwin (1809-1882) had joined and remained a corresponding member, as did Charles Babbage (1791-1871), the mathematician and inventor of the difference engine.

Harry's contributions to the 'Lit and Phil' contained original observations, including one noted in a memoir of a meeting in November 1842 which recorded that 'several of the animals described in this Memoir were first discovered by Mr. H. Goodsir'.<sup>9</sup>

Harry Goodsir became a medical student in Edinburgh where he shared a flat at 21 Lothian Street with his brother John and Edward Forbes. They founded and were at the heart of the Universal Brotherhood of Friends of Truth, a convivial and intellectually

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<sup>6</sup> Kaufman MH. Harry Goodsir and the last Franklin expedition of 1845. *Journal of Medical Biography*. 2004; 12: 82-89.

<sup>7</sup> Turner W, Lonsdale H. *The Anatomical Memoirs of John Goodsir*. Edinburgh: A&C Black; 1868.

<sup>8</sup> Kaufman. Harry Goodsir, 2004 (Note 6).

<sup>9</sup> Minute Book of St Andrews Literary & Philosophical Society 1838-1861. Library Special Collections, University of St Andrews.

stimulating group of young academics which included musicians and poets and which met in their flat.<sup>10</sup>

Along with Forbes and his brother John, Harry Goodsir joined another group of scientists, doctors and explorers, which was to further stimulate his interest in marine zoology and in Polar exploration and which would further enhance his growing reputation as a scientist. The Wernerian Natural History Society had been founded by Robert Jameson (1774-1854), Professor of Natural History at Edinburgh University. Members of this group included: Robert Knox (1791-1862), the comparative anatomist who inspired both John and Harry; Sir Charles Bell (1774-1842), surgeon, anatomist, neurologist; Sir James McGrigor (1771-1858), military surgeon; Robert Brown (1773-1858), botanist and discoverer of Brownian motion; and crucially, two corresponding members, the Arctic explorers William Scoresby (1789-1857) and Sir William Parry (1790-1855).

Goodsir's interest in natural history and in Arctic exploration was undoubtedly stimulated by association with such men. During his medical studies he continued to develop his interest and expertise in natural history, making extensive use of microscopy. His brother John had introduced microscopy into the medical curriculum in Edinburgh and was one of a group of pioneer microscopists based in Edinburgh.<sup>11</sup>

Much of the work on which many of his future publications were based was carried out in these student years. Goodsir qualified as a Licentiate of the Royal College of Surgeons of Edinburgh (LRCSEd) in 1840 and went into medical practice with his brother John in their father's practice in Anstruther.

### **Doctor, curator and naturalist**

Both brothers had ambitions extending beyond country medical practice. Harry devoted himself increasingly to natural history and enhanced his growing reputation in the field with continuing observation, analysis, oral presentations and publication of papers. His brother John, stimulated and encouraged by Robert Knox, decided to pursue a career as an anatomist and, to further that ambition, left the practice to become Conservator of Surgeons' Hall Museum in Edinburgh. When John decided to move to the University as an anatomist, he recommended Harry as his successor as Conservator and Harry Goodsir was duly appointed in 1843. At this time the museum housed a huge anatomy and pathology collection, having acquired the collections of Sir Charles Bell and John Barclay (1758-1826) which had been methodically catalogued by Robert Knox. With some 50,000 visitors each year this had become one of the most important anatomical collections in the world.<sup>12</sup> Harry's career as a naturalist advanced further when he became a member of the British Association and was appointed Secretary of the Association's Zoology and Botany sub-section. In the three years to 1844 Harry produced no fewer than nineteen scientific papers. He contributed three chapters to

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<sup>10</sup> Gardner. John Goodsir, 2017 (Note 2).

<sup>11</sup> Jacyna LS. "A Host of Experienced Microscopists": The Establishment of Histology in Nineteenth-Century Edinburgh. *Bulletin of the History of Medicine*. 2001; 75: 225-253.

<sup>12</sup> Alberti SJMM. A history of Edinburgh's medical museums. *Journal of the Royal College of Physicians of Edinburgh*. 2016; 46: 187-97.

*Anatomical and Pathological Observations*, a major work in which his brother John described his ideas on cell theory, ideas that were to have a powerful influence on the thinking of Rudolf Virchow.<sup>13</sup>

Intent on a career as a naturalist, in 1845 Harry was appointed Acting Assistant Surgeon on the Franklin Expedition to find the North-West Passage but in letters home made no secret of his intention to act as a naturalist.<sup>14</sup>

### **Assistant Surgeon on the Franklin Expedition**

This appointment was arranged with the help of some influential patrons, including his friend and former Edinburgh flatmate Edward Forbes, by now Professor of Botany at Kings College, London, who sketched a portrait of Goodsir the night before they sailed (Figure 2).



Figure 2. Sketch of Harry Goodsir made by Edward Forbes. © The University of St Andrews. CC BY-NC Creative Commons Attribution-NonCommercial 4.0 International Public License. Courtesy of the University of St Andrews Libraries and Museums, ID: GPS-GoodsirH-1.

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<sup>13</sup> Goodsir J, Goodsir HDS. *Anatomical and Pathological Observations*. Edinburgh: Myles Macphail; 1845.

<sup>14</sup> Kaufman. Harry Goodsir, 2004 (Note 6).

Before setting sail Harry spent time in London with Forbes who introduced him to some of the leading naturalists and biologists in Britain and arranged for him to attend scientific meetings of societies including the Linnean Society, the Geological Society, the Ethnological Society, the Royal Society and the British Museum.<sup>15</sup> Although the Royal Navy did not generally designate the title of ‘naturalist’ even on voyages of discovery, naval surgeons acted as such throughout this period and on 2 May Goodsir delightedly wrote that the title of Naturalist had now been added to his commission.<sup>16</sup>

Before the expedition vessels HMS *Erebus* and HMS *Terror* set sail, daguerreotypes were taken of the officers of the *Erebus* and these were to prove valuable in the later identification of Franklin crew members.

During the voyage Harry was kept occupied with scientific projects and fired the enthusiasm of fellow officers, some of whom joined him in dredging for marine specimens.

Sir John Franklin recorded that ‘Goodsir has collected very assiduously on the waters and from depths and he has procured many things which are rare and some of them unknown.’ He went on ‘... at a table in my cabin he draws and describes his animals as soon as they are taken. Every one, officer and man, is happy to collect for him; in fact he is a very general favourite on the ship’.<sup>17</sup>

James Fitzjames (1813-c1848), later Captain of HMS *Erebus*, also attested to Goodsir’s diligence and his popularity, writing:

He is long and straight ... is perfectly good humoured, very well informed on general points, in natural history learned, was Curator of the Edinburgh Museum, ... laughs delightfully, ... is enthusiastic about all ‘ologies, draws the insides of microscopic animals, catches phenomena in a bucket, looks at the thermometer and every other meter, is a pleasant companion, and an acquisition to the mess.<sup>18</sup>

The expedition stopped for supplies at Stromness in Orkney, crossed the North Atlantic and then berthed at Disko Bay on the west coast of Greenland to pick up supplies and to post letters. It was from here Harry posted what was to be his last paper, published posthumously. Appropriately it was a description of a marine genus *Forbesia*, first described by and named for his great friend Edward Forbes.<sup>19</sup> The medical and surgical journals from *Erebus* have not been discovered so a record of his duties as a surgeon on the expedition is lacking. He did make a diagnosis of consumption in one of the Inuit they met in Greenland but in a letter to his father he recorded that by the time they reached the Arctic Circle ‘We have not had more than 3 or 4 cases since we came

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<sup>15</sup> Harry Goodsir to his brother John Goodsir, 15 April 1845. Letter 21. HDS Goodsir Collection. Royal Scottish Geographical Society.

<sup>16</sup> Harry Goodsir to his brother John Goodsir, 2 May 1845. Letter 20(1). HDS Goodsir Collection. Royal Scottish Geographical Society.

<sup>17</sup> Franklin J. *Polar Record* 1947-1950; 5: 348-349.

<sup>18</sup> Fitzjames J. *The Nautical Magazine and Naval Chronicle for 1852*, London: Simpkin, Marshal & Co; 161.

<sup>19</sup> Goodsir HDS. On the anatomy of *Forbesia*. *Annals of Anatomy and Physiology* 1850; 53: 21-27.

out and these of nothing of more importance than a cold'.<sup>20</sup> Robert McCormick (1800-1890), who had been surgeon and naturalist on *Erebus* before the Franklin Expedition and who served on voyages in search of Franklin, published detailed accounts of conditions encountered on such voyages.<sup>21</sup> From these it is likely that Goodsir would have treated syphilis, pneumonia and diarrhoea. From Disko Bay the expedition sailed west to the entry to the North-West Passage where they were observed by whalers on 26 July, the last time the Franklin Expedition was seen by Europeans.<sup>22</sup>

## The search for Franklin

The disappearance of the Franklin Expedition provoked a national crisis – if the ships and crews were lost this would represent one of the greatest losses of life suffered by the Royal Navy in peacetime and would be a blow to national prestige. The British Government offered a £20,000 reward for finding the expedition or £10,000 for any credible information about its fate.

Prominent among the searchers was Sir John Richardson (1787-1865), an Edinburgh medical graduate who had accompanied Franklin on earlier expeditions. Richardson, aged sixty by this stage, wished to have a younger doctor and explorer as travelling companion and he chose John Rae (1813-1893).<sup>23</sup>

Rae was an Orcadian who qualified LRCSEd and then, as surgeon with the Hudson's Bay Company, gained an intimate knowledge of the Canadian Arctic and learned Arctic survival skills from the Inuit. While his first expedition with Richardson yielded little of value, on a later expedition (1851-54) he found, with Inuit help, important artefacts of the Franklin Expedition. He brought these to London, apparently unaware of the reward on offer, and was awarded reward money of £10,000. Rae, however, quoted the Inuit suggestion that the Franklin survivors had in desperation resorted to cannibalism, an idea that infuriated Lady Franklin, shocked Victorian society and blackened Rae's character, with Charles Dickens his most vociferous and influential critic.<sup>24</sup>

Rae's reputation was not restored until the twenty-first century when in 2014 a plaque to his memory was unveiled in Westminster Abbey.<sup>25</sup> Recent studies have confirmed the Inuit suggestion that Franklin survivors, facing certain death from starvation, had indeed resorted to cannibalism.<sup>26</sup>

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<sup>20</sup> Harry Goodsir to his father, 30 June 1845. Letter 39. HDS Goodsir Collection. Royal Scottish Geographical Society.

<sup>21</sup> McCormick R. *Voyages of Discovery in the Arctic and Antarctic Seas, and Round the World*. London: Sampson Low, Marston, Searle and Rivington; 1884.

<sup>22</sup> Cyriax R. *Sir John Franklin's Last Arctic Expedition: A Chapter in the History of the Royal Navy*. London: Methuen & Co; 1939.

<sup>23</sup> McGoogan K. *Fatal Passage: The True Story of John Rae, the Arctic Hero Time Forgot*. Toronto: HarperCollins; 2002.

<sup>24</sup> McGoogan. *Fatal Passage*, 2002. (Note 23).

<sup>25</sup> Westminster Abbey. Dr John Rae. Available at <https://www.westminster-abbey.org>

<sup>26</sup> Mays S, Beattie O. Evidence for End-stage Cannibalism on Sir John Franklin's Last Expedition to the Arctic, 1845. *International Journal of Osteoarchaeology*, 2016; 26: 778–786.



In 1859, when all hope of finding Franklin survivors had been lost, a note from survivors was found on King William Island in the Canadian Arctic. Written in 1848, it gave the tragic news that by then Franklin and 23 of his crew were dead, that the ships were icebound and that the survivors were heading south on foot for the Canadian mainland.<sup>27</sup>

Figure 3 shows the route now known to have been followed by the expedition. Having rounded Cornwallis Island, the ships sailed south towards King William Island where they became icebound and were abandoned.



Figure 3. Map showing the route thought to have been taken by the Franklin Expedition. Hans van der Maarel, Franklin's Lost Expedition, Wikimedia Commons. Creative Commons Attribution Share-Alike 4.0 International.

One of the most gruesome discoveries was of the finding on Beechy Island of the bodies of three Franklin sailors, so well preserved in the permafrost as to be readily recognisable. In 1986 when post mortem examination of these remains was carried out, it was found that one, William Hartnell, had already had an autopsy carried out shortly

<sup>27</sup> National Maritime Museum. John Franklin's final North-West Passage expedition 1845. Available at <https://www.rmg.co.uk>

after death, almost certainly performed by Harry Goodsir, who had conducted autopsies in his Edinburgh days.<sup>28</sup>

### **A skeleton is found and repatriated**



Figure 4. The Franklin Memorial in the Chapel, Old Naval College, Greenwich. Photograph by the author.

Charles Hall (1821–1871), an American explorer, made the finding most relevant to the present narrative. Hall was taken by Inuit in 1869 to a grave on the south end of King William Island just north of the Canadian mainland. It is now established that, having abandoned their icebound ships off the north coast of the island, some of the survivors travelled south down the west of the island, heading for the mainland. Inuit testimony and relics found along the route suggest that some survivors made it to the south coast of the island and it was here that the grave was found. The grave contained a virtually complete skeleton. Hall handed over the skeleton to the Royal Navy which returned it to London where it was examined by Thomas Henry Huxley (1825-1895), President of

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<sup>28</sup> Beattie O, Geiger J. *Frozen in Time: Unlocking the Secrets of the Franklin Expedition*. New York: MJF Books; 2004.

the Royal Society and the leading biologist of the day. As a young naturalist Huxley had been mentored and promoted by Goodsir's student friend Edward Forbes. Huxley pronounced that the skeleton was that of a male, 5ft 10in in height, at least 30 years old and with a prominent nose and chin and square set jaw. On the basis of this information the Admiralty pronounced the remains to be those of Lt Henry TD Le Vesconte and they were buried under the Franklin Memorial in the Painted Hall at the Old Royal Naval College, Greenwich.

In 1938 the remains were moved with the Memorial from the Painted Hall to the Chapel and in 2009 they were moved again to their present site under the Franklin Memorial in the chapel vestibule (Figure 4). During this latter move a scientific analysis was undertaken by a team led by Simon Mays of English Heritage.<sup>29</sup>

### **The skeleton examined**

Fragments of clothing adhering to the bones suggested that the remains were those of an officer. The skeleton was of a Caucasian male aged between thirty and forty years. To try to identify where the individual had grown up, samples of tooth enamel were examined for oxygen and strontium isotope ratios. Oxygen isotopes are taken up from early years by tooth enamel, which is not remodelled, so that the ratio of oxygen isotopes is fixed and gives a geographical 'signature' of water drunk in childhood and this remains unchanged throughout life. In the same way strontium isotopes in soil are taken up by plants and incorporated into the local food chain. So the strontium isotope ratio gives a geographical signature of food consumed in childhood in an era when individuals ate almost exclusively a locally produced diet.

From oxygen and strontium isotope ratio analysis of tooth enamel Mays and colleagues observed that it was '... highly unlikely that the oxygen isotope ratio of the Franklin sailor could have been obtained in western Britain', that the sailor '... spent his early childhood in central or eastern Scotland or England ...', and that taken together '... results preclude the western seaboard, most of southwest England ...' as the location where the sailor grew up. They concluded that 'Given that Le Vesconte spent his childhood in Devon, the results indicate that the current remains are unlikely to be his'.<sup>30</sup>

So whose were they? There were other clues. Foremost among these was a precisely placed gold filling in a maxillary premolar tooth shown in Figure 5. These were unusual in nineteenth-century skeletons as there were relatively few dentists who practised this technique in the 1830s but the Edinburgh dentist Robert Nasmyth (1791-1870), surgeon-dentist in Scotland to Queen Victoria, did so. Nasmyth was a close friend of Harry Goodsir's father and John Goodsir had been his dental apprentice for two years after which they corresponded for many years. Nasmyth's reputation for the technique of gold

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<sup>29</sup> Mays S, Ogden AA, Montgomery J, Vincent S, Battersby W, Taylor GM. New light on the personal identification of a skeleton of a member of Sir John Franklin's last expedition to the Arctic, 1845. *Journal of Archaeological Science*. 2011; 30: 1-12.

<sup>30</sup> Mays. New light, 2011. (Note 29).

filling was an international one. He wrote an article describing his technique in detail for the *Boston Medical and Surgical Journal*.<sup>31</sup>



Figure 5. Photograph and X-ray showing filling in pre-molar tooth. Courtesy of Simon Mays.

A further clue was the presence of a dental malocclusion (Angle class 2, division 2). This was a rare malformation, estimated to occur in only four percent of the population.<sup>32</sup> The clinical features of this include a bulky lower lip. By studying Goodsir's Daguerreotype image, Mays and colleagues concluded that '... Goodsir is the most likely [candidate] as his lower lip appeared the most bulky and prominent of the photographed officers with a deep sublabial groove'.<sup>33</sup>

Finally they conducted a facial reconstruction from the skeletal skull which showed an 'excellence of fit' with Goodsir's face on the pre-departure Daguerreotype as shown in Figure 6.

<sup>31</sup> Nasmyth R. *Dental Surgery*. *Boston Medical and Surgical Journal*. 1838; 19: 17.

<sup>32</sup> Angle EH. *Classification of malocclusion*. *Dental Cosmos*. 1899; 41: 248-264.

<sup>33</sup> Mays. *New light*, 2011. (Note 29).



Figure 6. Harry Goodsir daguerreotype (left) compared with skeletal facial reconstruction (right). Courtesy of Alan Ogden. Daguerreotype © The National Maritime Museum, Greenwich, London.

## **Conclusion**

Although not conclusive, these results were very suggestive that the skeleton was that of Harry Goodsir. Hence the search for mtDNA from a descendant. Harry Goodsir and his siblings did not have any descendants and so the search expanded to descendants of his aunts and uncles. As yet a relative fulfilling the criteria for DNA analysis has not been found. In these circumstances a definitive identification would require DNA from the remains of his brothers John and Robert, both of whom are buried in Dean Cemetery in Edinburgh. Given the considerable legal, ethical and financial implications it seems unlikely that exhumation for this purpose will go ahead and therefore the identity of the skeleton may never be proven beyond doubt.

## **Biographical Details**

Iain Macintyre is a retired surgeon and former President of the British Society for the History of Medicine.

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