

University of Plymouth

PEARL

<https://pearl.plymouth.ac.uk>

Faculty of Science and Engineering

School of Biological and Marine Sciences

2023

1 ***Victrices scientiarum* of 1904 – who were the first women**
2 **elected as Fellows of the Linnean Society of London?**

3 Rich Boden^{1,2,3*}

4 1. School of Biological and Marine Sciences, University of Plymouth, UK.

5 2. Sustainable Earth Institute, University of Plymouth, UK.

6 3. Marine Institute, University of Plymouth, UK.

7 * Correspondence: rich.boden@plymouth.ac.uk

8 *“I hate to hear you talk about all women as if they were fine ladies instead*
9 *of rational creatures. None of us want to be in calm waters all our lives.”*

10 **Anne Elliot, *Persuasion* 1817 (Jane Austin, 1775-1817)**

11 I have taken the standpoint herein to write more about those Fellows who have not been
12 formally biographed, and less about those for whom commercial or research biographies are
13 easily available.

14 **Mary Russell, Duchess of Bedford, FLS FZS (26 September 1865 – ca.22 March 1937)**

15 Should the reader wish to read more, biographies by Buxton (2008), Curtis (1993) and Gore
16 (1938) are particularly recommended and contain many photographs.

17 Mary Du Caurroy Tribe was born in Stockbridge, Hampshire, to the Rev Walter H Tribe
18 (Archdeacon of Lahore) and Sophie Lander. The Rev Tribe valued the education of his
19 daughters, Mary being educated at Cheltenham Ladies’ College, under Dorothea Beale
20 (founder of St Hilda’s College, Oxford), and at 13 spent a year in Zurich, after which she
21 joined her parents in India. At the Ladies’ College, Mary studied chemistry and Latin. She
22 stated in later life that her “interest in matters medical began at Cheltenham [...] lectures on
23 Anatomy were given and I attended” (Buxton, 2008).

24 She met and married Lord Herbrand Russell, youngest son of the 9th Duke of Bedford, at St
25 Bartholomew’s Church, Barrackpore, India (1888). On the death of his brother (George, 10th
26 Duke of Bedford, 1852-93), he became 11th Duke of Bedford and Mary the Duchess of
27 Bedford. She was an animal lover, keeping an otter and a bat as a child (Buxton, 2008), a
28 keen photographer and accomplished painter. From photography, she moved into the
29 emerging fields of radiology and radiography, in which she became an acknowledged expert
30 and worked professionally as a radiographer after World War I. A Dutch friend, Herr
31 Blaauw, introduced her to ornithology and zoology, and she became Fellow of the Zoological

32 Society of London (1892). She was one of the first Honorary Life Members of the British
33 Ornithological Union (1910). Her ornithological journals from Fair Isle (1909–14) were
34 privately published as *A Bird-watcher's Diary* (Duncan, 1938).

35 An accomplished aviatrix having taken up flying in 1926, she broke the records for flights to
36 India (1929) and Cape Town (1930), getting carbon monoxide poisoning on the latter! She
37 died at 77 when her plane crashed into the North Sea near Great Yarmouth. Her body was not
38 recovered. A privately published biography was commissioned by her family, and a
39 scholarship endowed in her name at Cheltenham Ladies' College.

40 Her interests on her nomination form are “zoology”, and the form was signed by the His
41 Grace the Duke of Bedford, The Lord Avebury, H Seeley, A Günther and H Elwes.

42 **Professor Margaret Jane Benson, FLS (20 June 1859 – 20 June 1936)**

43 Shown in Figure 2, Benson was born in St Pancras to William Benson (architect) and
44 Edmunda Bourne (painter). She attended Bedford College (1879-1880) being awarded a B.Sc
45 from University College London (1891). She was Fellow of Newnham College, Cambridge
46 (1892-93), obtaining a D.Sc (1894). She became Head of the Botany Department, Royal
47 Holloway College (1893-1922). She was made Fellow of University College London (1903).
48 She was promoted to Professor of Botany (1912).

49 Benson's research concerned paleobotany, with her work on chalazogamy being significant.
50 She collaborated with D H Scott and F W Oliver, so it was no surprise to see they had
51 recommended her as a Fellow. Species of fossil ferns that she named include *Telangium*
52 *scotti* M.J.Benson (Benson, 1904) and *Cordaites felicis* M.J.Benson (Benson, 1912). She also
53 gave a description of *Botryopteris antiqua* Kidston (Benson, 1911). She died on her 77th
54 birthday at Highgate. She never married and had no issue. Her effects were valued at £10,540
55 13s [2017 economic power, £4.08m]. In 1927, Royal Holloway College dedicated a botany

56 laboratory in her name. Benson's herbarium, fossil slides and portrait are held in the archive
57 of Royal Holloway College.

58 Her interests on her nomination form are "botany" and it was signed by D H Scott, P Groom,
59 B D Jackson, Sir J B Farmer, F W Oliver and R W Phillips.

60 **Dame Catherine Crisp (August 1846 – 2 January 1931)**

61 Shown in Figure 1, we know little about Dame Crisp, but we know a lot about her husband,
62 Sir Frank Crisp, subject of "*The Ballad of Sir Frankie Crisp (Let it Roll)*" by George
63 Harrison, recorded on his album "*All Things Must Pass*" (1970, Apple). Catherine Howes
64 was born in 1846 at Great Redisham, Suffolk, daughter of George Howes, a carpenter, and
65 Maria Gymer, a blacksmith's daughter, who were unmarried. George died at 31 (1850) and
66 acknowledged Catherine was his daughter in his will, leaving her £4,000. Catherine went to a
67 Norwich boarding school and married Frank Crisp (lawyer, heavily involved in the Royal
68 Microscopical Society) in 1867, before moving to Adelaide Road, Hampstead (where the
69 Chalcots Estate now stands). They lived in West London and had a number of children,
70 moving to Friar Park in Henley-on-Thames (now the residence of George Harrison's widow,
71 Olivia) in 1889. Frank was Vice President of our Society and died in 1919, after which Friar
72 Park was sold, and Catherine resigned her Fellowship.

73 Her nomination form lists her interests as 'botany' and was signed by S H Vines, W C
74 Carruthers and A K L G Günther – notably *not* Frank Crisp, in contrast with Mrs Stebbing,
75 whose husband *did* sign her form!

76 **Miss Alice 'Alick' Laura Embleton (8 April 1877 – 14 March 1960)**

77 Images of Embleton can be found on the *Special Collections and Archives* blog for the
78 University of Cardiff (<https://scolarcardiff.wordpress.com/2018/03/05/scientist-and->

79 suffragist/) and in the *Women's Library Archives* of the London School of Economics –
80 specifically a 1914 portrait catalogued as GB 106 7VJH/5/10/07, part of Jack Holme's
81 papers. In a sense, Embleton was not a *victrix scientiae per se*, but perhaps a *victor scientiae*,
82 or even a "*victus scientiae*" (there is no neuter form of *victor/victrix*, I have made a third
83 declension approximation!). They appear on our records as "Miss Alice Embleton", but were
84 known for many years as "Mr Alick Embleton". It is tempting to view Alick through the
85 modern lens as a trans man or gender non-binary person, but those concepts did not exist. It is
86 worth noting that many gay or bisexual women of that time used male names and pronouns
87 and some wore 'male' clothing, effectively living 'as men', including Jack Holme (1881-
88 1969), chauffeur to the Pankhurst family and friend of Embleton. Out of respect for Alick,
89 who used both masculine and feminine pronouns, I use the gender-neutral "they" herein.
90 Embleton was born in Ewell, Surrey (1877) to John Embleton and Elizabeth Martin. They
91 studied at Sutton High School, leaving at age 15 for financial reasons. They attended the now
92 University of Cardiff on a scholarship, one of the first women to study for a science degree,
93 graduating with a B.Sc First Class (1899). In 1900 they won the *1851 Exhibition Science*
94 *Research Scholarship* of £150 for 2 years initially, extended to a further year (£150 in 1900
95 has an economic power of about £14.6k today – not dissimilar to Ph.D stipends). This was
96 used to undertake research at Newnham College, Cambridge and the Sorbonne, Paris. They
97 also won the Mackinnon Scholarship (Royal Society, 1904). This was for insecticide research
98 to improve crop production. They worked at what is now the Natural History Museum
99 (NHM) and were Sub Editor of the *Zoological Record*.

100 Embleton was regularly involved with our Society and was the first women to give a lecture
101 in our meeting room (1911), on the developmental biology of the genus *Parthenolecanium*
102 Šulc of the Hemiptera. In the 1911 census they are listed as 'cancer researcher' and they were
103 staying in Barnsley, Yorkshire, a guest of Charles and Cecelia (Celia) Wray, a pig dealer and

104 his daughter – Celia was a suffragist (a passionate one, based on the graffiti on the census
105 card!). Alick went on to have a close, probably romantic, relationship with Celia, and they are
106 recorded living together in the *England and Wales Register* (1939), at Saxmundham, Suffolk.
107 From 1909, Alick became more involved in the suffragist movement and less in science,
108 resigning Fellowship in 1917. They were photographed with Celia Wray and others,
109 petitioning at the *Barnsley Chronicle* (1910) for women’s suffrage. Letters between Wray,
110 Embleton and Jack Holme during World War I are held in the *Women’s Library Archives*, in
111 which masculine names and pronouns are used for Alick and Jack. A typical example of their
112 correspondence, Holme begins “My dear Alick” and ends “my best love to Celia, and
113 consider yourself properly kissed dear” (Holme, 1915*a*), yet in another “the censor reads
114 letters and one does not like to discuss one’s private business” (Holme, 1915*b*).

115 Alick Embleton died in 1960 at Bradfield, Essex. Their estate valued at £10,850 7s 8d (2017
116 economic power, £4m). She was pre-deceased (1954) by her [probable] life partner Celia
117 Wray.

118 **Mrs Grace Coleridge Toynbee Frankland FLS FRMS (3 October 1858 – 5 October**
119 **1946)**

120 The Society invested some years ago in Toynbee House, Wimbledon – named for Sir Joseph
121 Toynbee FRS (1815-66), otologist and prosector (Hawkins, 2004), and Mrs Frankland’s
122 father. Shown in Figure 3, Grace was born in Wimbledon to Sir Joseph and his wife Harriet
123 Holmes. She married Dr Percy Faraday Frankland (1882), son of the chemist Sir Edward
124 Frankland. Percy held Chairs at the University of Dundee and University of Birmingham,
125 both now have a ‘Frankland Building’, in his honour. In 2019, the latter commenced an
126 annual *Grace Frankland Memorial Lecture* series to honour Grace’s contribution to science

127 and the University. The author has in preparation a more detailed biography of Professor and
128 Mrs Frankland, to be submitted in 2020.

129 Mrs Frankland was self-educated in bacteriology and whilst credited as Prof Frankland's
130 "loyal secretary", she was undertaking research. Highlights include discovering *Bacillus*
131 *cereus* (Frankland and Frankland, 1887), isolated from the air of a cow shed. *B. cereus* is an
132 important human pathogen, causing gastrointestinal illness following consumption of
133 improperly stored, cooked rice. It is key in defence microbiology as the safer mimic organism
134 for *Bacillus anthracis*, causative agent of anthrax. She discovered *Flavobacterium aquatile*
135 ("*Bacillus aquatilis*", Frankland and Frankland, 1889), type species of the genus
136 *Flavobacterium*. Her most significant work was probably Frankland (1903), her popular
137 science book, *Bacteria in Daily Life*. She also co-authored several books with her husband
138 including Frankland and Frankland (1894) and Frankland and Frankland (1898).

139 An interesting comment on her scientific ability appears in a Swedish women's newspaper in
140 which she was subject to a front-page story (Eivor, 1905): "och dessutom genom själf
141 ständigt studium gjort sig väl bekant med de modärna bakteriologiska ska metoderna, såsom
142 de utöfvas af Kochs skola" ("and by continual self-study, [she] made herself familiar with the
143 modern bacteriological methods, as practiced in [Robert] Koch's school"). It notes that a
144 male UK scientist commented, "there are only a few men in the country that are Mrs
145 Frankland's equals and probably no women in the world". The Author back-translated this
146 from Swedish into English but cannot find any record of the original English quote in a
147 newspaper archive.

148 The Franklands had a son, Dr Edward Frankland, a chemist who took up farming and writing
149 fiction following renal issues. He had three children: Dr Anthony Noble 'Bunny' Frankland
150 CBE CB (1922-2019, Director General of the Imperial War Museum), Mr Raven Frankland

151 (d. 1997, farmer, husband of Dr Juliet Frankland, mycologist), and Dr Helga Frankland MBE
152 (1921-2015, former academic at the University of Keele). Mrs Frankland's great grandniece
153 is Polly Toynbee (b. 1946), journalist.

154 Her papers are in the *John Rylands Library* at the University of Manchester, along with those
155 of Sir Edward and Prof Percy Frankland. Mrs Frankland's nomination form was signed by
156 The Marquis of Ripon, The Lord Avebury, Sir M Foster, H J Elwes, J R Green and W C
157 McIntosh.

158 **Dame Dr Maria 'May' Matilda Ogilvie Gordon FLS (13 April 1864 – 24 June 1939)**

159 An extensive research biography with photographs can be found in Wachtler and Burek
160 (2007). Gordon was born in Monymusk, Aberdeenshire to the Rev Dr Alexander Ogilvie and
161 Maria M Nicoll. The former was Headmaster of Robert Gordon's College (Aberdeen, 1872-
162 1901). May was educated at the Merchant Company Edinburgh Ladies' College. At 18 she
163 studied piano at the Royal Academy of Music, London, but left within a year to read science
164 at what is now Heriot-Watt University, completing her B.Sc at University College London at
165 the age of 26 (1890), having read geology, botany and zoology. In 1891 she moved to Berlin
166 with a Royal Society grant, but could not be admitted to the Friedrich-Wilhelms-Universität
167 (FWU, now the Humboldt-Universität zu Berlin), owing to laws concerning women studying
168 in the German Empire. She travelled from the Kingdom of Prussia to the Kingdom of Bavaria
169 (1891), with her friends Ferdinand, Freiherr von Richthofen, Professor at the FWU, and his
170 wife, Irmgard, Freifrau von Richthofen. She was able to study at the Ludwig-Maximilians-
171 Universität (LMU, München) and conducted research privately, outwith the LMU under Karl,
172 Ritter von Zittel (palaeontologist, Chief Editor of *Palaeontographica*) and Richard, Ritter
173 von Hertwig (zoologist and embryologist). In 1891 she began her lifelong focus on the
174 Dolomites in South Tyrol, travelling with the Freiherr and Freifrau von Richthofen. On the

175 evening they arrived, the Freifrau instructed Miss Gordon not to open her bedroom curtains.
176 In the morning, she was taken to be shown the striking view of the Dolomites. Judging by her
177 later recollection, it was love at first sight “I saw the Dolomites before me, a wonderful sight
178 such as I had never experienced before [...] it made an impression that stayed with me later
179 in life like a sight from God” (Von Klebelsberg, 1932). For her thesis (Ogilvie, 1893) she was
180 awarded the first D.Sc that the University of London awarded to a woman, and indeed the
181 first in the UK (Kölbl-Ebert, 2001). In 1900 she became the equivalent “first” at the LMU:
182 the first woman awarded a Ph.D (for the same work – nowadays this would be self-
183 plagiarism!).

184 Dame Gordon was an active member of the Liberal Party, Honorary President of the
185 Associated Women’s Friendly Society and National Women’s Citizens Association, and
186 President of the National Council of Women in Great Britain and Ireland (1916-1920). She
187 was Justice of the Peace and first woman to chair a London borough court. She formed the
188 Council for the Representation of Women in the League of Nations, and served on several
189 committees of the National Council of Women, including that on Maternity and Child
190 Welfare (1922). It is for all of this work that she was awarded a DBE and an honorary LL.D
191 (University of Edinburgh), both in 1935. She stood for the 1923 General Election as the
192 Liberal Party Candidate in Hastings (Craig, 1949). Amongst the many commemorations to
193 her memory is the fossil fern genus *Gordonopteris* (van Konijnenburg-van Cittert *et al.*,
194 2006), the type species (*Gordonopteris lorigae*) was discovered in the Dolomites.

195 Her nomination form was signed by Sir M Foster, W C McIntosh, H R Green, The Lord
196 Avebury, Sir W A Herdman and G S Boulger.

197 **Miss Gulielma Lister FLS (28 October 1860 – 18 May 1949)**

198 Haskins (1999) is a particular good biography of Miss Lister that also contains photographs.
199 Gulielma ‘Gulie’ Lister was born at Leytonstone to Susannah T Lister and Arthur H Lister.
200 From a Quaker family, she was probably named for Gulielma Penn (1644-96). The Listers
201 were a dynasty of biologists. Her paternal great grandfather was Joseph Jackson Lister FRS,
202 microscopist. The genus *Listerella* Cushman (1933) of the Retaria is named for him. His son
203 – Miss Lister’s uncle – was Joseph, the Lord Lister, pioneer of antiseptic surgery, famously
204 using phenol as a surgical disinfectant. It was for the Lord Lister that the genus *Listeria*
205 (Pirie, 1940, Pirie, 1927) in the Bacteria was named – though there was some controversy
206 over this, cf. Gibbons (1972). He discovered an organism used extensively in the dairy
207 industry, now *Lactococcus lactis* (Lister, 1873; Schleifer *et al.*, 1986). Miss Lister’s father
208 was an expert on the class Myxomycetes – it was for him that the genus *Listerella* E.Jahn
209 (Jahn, 1906) is named. Miss Lister’s brother – Joseph J Lister FRS – was a zoologist and
210 botanist, with four species endemic to Christmas Island named for him. It is easy to see where
211 Miss Lister’s early inspiration came from! Miss Lister spent a year at Bedford College at the
212 age of 16, where she studied botanical systematics (Ramsbottom, 1949; Creese, 2004). She
213 assisted her father in his work on the Myxomycetes, taking over his mantle when he died
214 (1908). She became responsible for Lister (1911) and (1926): editions of the *Monograph of*
215 *the Mycetozoa*, started by her father. Wakefield (1950) notes that she affectionately dubbed
216 the Myxomycetes “my creepies”!

217 She worked at the British Museum (Natural History) with her father (1880s) as he catalogued
218 Myxomycetes. Her role was principally in drawing and painting specimens. In 1903, the
219 British Mycological Society was founded, she was a Foundation Member, and highly active.
220 She was made Honorary Member (1924) for services to the Society. She was equally
221 involved with the Essex Field Club, regularly attending fungus forays for both groups.
222 Through her life, Miss Lister published 20+ reports of Myxomycetes (Lister, 1913; Lister,

223 1927; Lister, 1930; Lister, 1932) including many novel species (*e.g.*, Lister, 1921). It is of
224 note to the Society that her first publication was in *J. Linn. Soc. Bot.* (Lister, 1884).

225 She was noted for her kindness and lack of selfishness (Haskins, 1999) and was cultured and
226 artistic. She was described as “a perfect gentlewoman with an old-world courtesy”
227 (Waterhouse, 1973) who “possessed [...] the qualifications of the true scientist, an unbiased
228 mind to search after truth, and readiness both to learn and to teach” (Wakefield, 1950). She
229 inspired a number of other women, including Dr Agnes Arber FLS, whom she met when the
230 latter was at school, gifting her a mounted collection of the Myxomycetes.

231 She was President of the British Mycological Society (1912, 1932) and Essex Field Club
232 (1916-19), chaired the School Nature Study Union and was trustee of the Botanical Research
233 Fund (1917). She was on the Council of our Society (1915-17, 1927-31) and our became
234 Vice President (1929-31). In Waterhouse (1973), Elizabeth Blackwell remembers Miss Lister
235 attending meetings at the Society “entering the [meeting room] *and turning left into the*
236 *fourth or fifth row from the front*”, sitting with Miss Lorrain Smith. Miss Lister was a trend-
237 setter when it came to the behaviour of female Fellows at meetings, “remov[ing] her hat in
238 deference to the sexless character of a Fellow. It was an unusual thing for a lady to remove
239 her hat, but we all took our cue from Miss Lister and did the same”.

240 She was a correspondent of the Emperor Shōwa of Japan (Haskins, 1999). Following her
241 death, Wakefield (1950) wrote “Mycology has lost yet another of its outstanding workers,
242 and the [British Mycological] Society an old and much loved friend”. Her specimen
243 collections were given to the NHM, Stratford Museum and Kew Gardens. Seventy four
244 research notebooks were donated to the former (Creese, 2000 and 2004). She did not marry
245 and had no issue and left an estate valued at £37,448 13s 5d [2017 economic power, £5.7m].

246 Her papers at the NHM include a large number of fine watercolour paintings of specimens.

247 They must be requested well in advance at the Library.

248 Her nomination form was signed by W C Carruthers, G Murray, D H Scott, J G Baker, A

249 Gepp and A C Seward.

250 **Miss Ethel Sargent FLS (28 October 1863 – 16 January 1918)**

251 Miss Sargent is more completely biographed elsewhere in this publication {REF TO

252 **DIANNE EDWARDS' ARTICLE**} and in Arber & Stearn (1968), the latter including

253 photographs. After working for D H Scott at Kew in the early 1890s, she removed herself to

254 her private laboratory where she completed studies of plant development. She worked in her

255 laboratories at Reigate and Girton, studying paleobotany and botany, employing several key

256 women in biology, viz. Dr Ethel Thomas FLS (1897-1901) and Agnes Arber were her

257 Research Assistants (1897-1901; 1897 and 1902-03, respectively). She had a lasting

258 influence on Arber, based on an offprint of the obituary the latter wrote on Miss Sargent's

259 death, which the Author obtained, with a small handwritten note in which Arber expressed

260 sadness re: Sargent's passing – she was writing to Prof Seward. This has not been

261 authenticated but it is unlikely to be fake – the Author has since gifted it to Prof Dianne

262 Edwards PPLS, should any readers be interested in it. Miss Sargent died in her early fifties

263 from a stroke in Sidmouth, Devon – where she is buried – *not* at Girton per some reports.

264 Her nomination form was signed by D H Scott, P Groom, B D Jackson, Sir J B Farmer, F W

265 Oliver and R W Phillips.

266 **Miss Sarah Marianna Silver FLS (1879 – 1920, later Mrs Sinclair)**

267 Shown in Figure 1, we know little about Miss Silver, but more about her father, Stephen W

268 Silver, FLS, who owned a mercantile company after which the Silvertown area of London is

269 named. His wife was Sarah Constance, Lady Bodkin. Sarah Marianne Silver was born in
270 Regents Park and in 1905 was living at Letcombe Manor, Vale of White Horse, Berkshire.
271 Mr Silver's considerable private Library was purchased on his death by the Royal
272 Geographical Society of Australasia and shipped to Adelaide (1908). It is now the York Gate
273 Library, in the State Library of South Australia (Henderson, 2008). A cabinet stands in the
274 stairwell of Burlington House, gifted to the Society by Miss Silver in 1908 (Anon., 1926) –
275 this was then sold by the Society to raise funds but was bought by a Fellow and given back to
276 us!

277 Her nomination form gives her interests as 'botany' and was signed by her father, S W Silver,
278 J Britten and E A Petherick.

279 **Mrs Constance Sladen FLS (July 1848 - 17 January 1906)**

280 The Royal Albert Memorial Museum, Exeter, UK has a fine 1903 oil by Wells of Mrs Sladen
281 (a digital version is available *via* their website), she is also shown in Figure 1. Mrs Sladen
282 was born Constance Anderson in York, daughter of William Anderson and his wife Sarah.
283 She was one of four siblings - her brothers had the delicious names of Yarborough and
284 Tempest! As a young lady, she was an artist of some note, with works exhibited widely
285 (Gardiner, 2003), and was an expert on the archaeology of Yorkshire, contributing to works
286 on Castle Howard, York Minster *etc.* Her painting *York Minster (South East)*, was exhibited
287 in the 1879 *Fine Art & Industrial Exhibition* in York (Anon., 1879).

288 She met Walter Percy Sladen in 1870 in her early 20s, though they did not marry until she
289 was 42 (1890). Percy was a skilled natural historian with an emphasis on the *Asteroidea*. He
290 was elected as a Fellow of our Society (1876) and the Zoological Society of London (1877).
291 By 1880 Percy was an authority on the Echinodermata. In 1881 he identified and published
292 starfish found in the voyage of *HMS Challenger* – it took 10 years to write was almost a

293 thousand printed pages. In 1898 he inherited Northbrook Park, Devon (demolished in 1954)
294 and retired there. He died in Florence (1900). Constance, meanwhile, we know *relatively*
295 little about - she does not declare specific interests on her nomination form. After Percy's
296 death, she curated and doggedly promoted his works, taking some interest in natural history
297 herself (Gardiner, 2003). She endowed the *Percy Sladen Memorial Trust* (administered by
298 our Society) to support field biology. It was her wish that Percy's Library and Collection
299 remain intact but the major museums would not accept it. In 1903 the Royal Albert Memorial
300 Museum in Exeter accepted it (Rowe, 1974). Sadly she did not live to see it open to the
301 public (1910), as she died in 1906 aged 57. She left an estate valued at £329,808 12s 8d
302 (economic power in 2017, £303.7m). She had no issue.

303 Her nomination form was signed by Sir W A Herdman, F D Goodman, W C Carruthers, H G
304 Seeley and B D Jackson.

305 **Miss Annie Lorrain Smith FLS (25 October 1854 – 7 September 1937)**

306 Shown in Figures 1 and 4, Miss Lorrain Smith is variably styled as “Lorrain Smith”,
307 “Lorraine Smith”, “Lorrain-Smith”, and “Smith”! The name originates from the surnames of
308 her parents, the Rev Walter Smith and Margaret Lorrain Brown. The latter's mother was
309 Jannet Lorrain, thus “Lorrain Smith” is a double-barrelled surname: some of her siblings
310 hyphenated it, but Miss Lorrain Smith did not.

311 Miss Lorrain Smith was raised in Scotland, educated at Edinburgh, Tübingen and Orléans,
312 and worked as a governess until she was 34 (1888). She studied botany at the Royal College
313 of Science (now Imperial College London) under D H Scott. He was impressed by her ability
314 and found her work at what is now the NHM. Women could not be employed here, thus she
315 was paid from some outside fund: this continued for 40 years. She worked on cryptogamic
316 botany and fungal identification. Amongst her achievements at the Museum were the

317 remounting of the de Bary Collection and setting up the exhibition of the Fungi in the
318 Botanical Gallery. In 1884, the Rev J M Crombie FLS FGS produced the first edition of *A*
319 *Monograph of the lichens found in Britain, Part I*. She took over the *Monograph* after his
320 death and wrote *Part II* (1911) and a second edition of *Part I* (1918), followed by a summary
321 version, *A Handbook of the British Lichens* (1921) and *Lichens* (1921), a more general text.

322 She lived with her sister in West London much of her life, working until she was 80 when her
323 health began to fail. She died just before her 83rd birthday (1937). She was very cultured, well
324 travelled, warm-hearted and generous, much like her friend Miss Lister. She was awarded a
325 Civil List pension (1931) “in recognition of her services to botanical science”, and OBE
326 (1934) “for services to mycology and lichenology”. She was sister of James Lorrain-Smith
327 (1862-1931), inventor of ‘Eusol’. Her niece was Dame Isabel Graham-Bryce (1902-97,
328 nurse) and her grandnephew Dr Alastair Graham-Bryce (1935-2012, engineer and co-founder
329 the Imagineering Foundation). Her papers are in the NHM Library. Of particular note are her
330 lecture notes from when she studied under Scott.

331 Miss Lorrain Smith’s nomination form was signed by G Murray, J Britten, A Gepp, E G
332 Baker, A B Rendle, V H Blackman and D H Scott.

333 **Mrs Mary Anne Stebbing FLS (11 September 1845 - 21 January 1927)**

334 Mrs Stebbing was erased from our history! In Burlington House hangs the 1905 painting by
335 James Sant CVO RA showing the first female Fellows around the dais in the Meeting Room.
336 Frank Crisp (husband of Catherine) commissioned this at a cost of £300 [economic power in
337 2017, £288,100]. In the right-centre foreground, Mrs Stebbing was shown, facing left (Figure
338 1). Crisp wrote (1905) to B D Jackson, enraged that Mrs Stebbing took centre stage: “if I pay
339 £300 for a picture, I should prefer that another ‘Fellow’s wife should not be the selected
340 figure!” and “we must surely have at the table a lady fellow who has done something [...] not

341 one without a record”. Newspapers were negative about the painting– *The World* found it
342 “rendered comic by the figure [of Mrs Stebbing]”. Crisp withheld it from the Society and it
343 was not until his death (1919) that Dame Crisp gifted it to us – albeit altered by a hand other
344 than Sant. Not only was Mrs Stebbing overpainted with an empty chair, her husband
345 (originally behind her to the right, leaning on the bench, per Figure 1) has also been erased!
346 Crisp was not a fan of the Stebbings! This seems to stem from feeling neither was worthy of
347 Fellowship.

348 Mrs Stebbing was born Mary Anne Saunders in Wandsworth, to William W Saunders FRS
349 FLS FZS (Treasurer of the Society, 1861-73) and his second wife Mary Anne Mello. Her
350 family was scientific, thus it is easy to see where her interests came from – her father founded
351 the Holmesdale Natural History Club (1857) and held collections of the Coleoptera,
352 Lepidoptera, Diptera and the Hymenoptera. He edited several works that described his
353 collections, *viz.* the *Insecta Saundersiana* and the *Refugium Botanicum*, each published over
354 20+ years. Her brothers George S Saunders FRS FLS FES and Edward Saunders FRS were
355 also entomologists. Mary Anne married the Rev Thomas R R Stebbing FRS FLS (1835–
356 1926) in 1867. The Rev Stebbing was a zoologist with an interest in the *Crustacea* and
357 worked as a teacher and clergyman (ordained into the Church of England aged 24) – they ran
358 a boarding school near Torquay. Mrs Stebbing was already a keen botanist and a scientific
359 illustrator, but the Rev Stebbing did not take much of an interest until the time that they met.
360 He was influenced by William Pengelly FRS FGS, and became an avid supporter of Darwin
361 after reading Darwin (1859), resulting in his publishing several popular essays on
362 ‘Darwinism’ – he was then banned by the Church from preaching! He produced monographs
363 on Amphipoda collected during the *HMS Challenger* expedition (1872-76) and on the
364 Cumacea. He was elected as a Fellow of our Society (1895) and the Royal Society (1896),
365 winning the Linnean Medal (1908). The Rev Stebbing actively campaigned for admission of

366 female Fellows and obtained the supplementary Royal Charter that permitted female Fellows
367 (1904). The contributions of Mrs Stebbing were not in her own name, since she only
368 contributed to her husband's work (Shteir & Lightman, 2006).

369 Her nomination form was signed by B D Jackson, D H Scott, W A Herdman, H G Seeley, the
370 Rev T R R Stebbing (her husband), and G Saunders.

371 **Miss Emma Louisa Turner FLS MBOU (1866 - 13 August 1940)**

372 Shown in Figures 1 and 5, Miss Turner was born in Speldhurst, Kent to John Turner (grocer
373 and draper) and Emma Overy (a farmer's daughter). There were no scientists in Emma's
374 family, but she was privately educated and taught some science (Haines, 2001). Her life
375 before 1900 is somewhat obscure, but she comments (Turner, 1924) that prior to *ca.*1912, she
376 needed to be "within easy reach of [her family] home". Her father died in 1913, and mother
377 may have died decades before, necessitating Miss Turner's assistance. She was an
378 ornithologist and bird photographer. She discovered the latter in 1900, having met Richard
379 Kearton (1862-1928), then dedicated her life to photography and study of birds in East
380 Anglia. Her book *Broadland Birds* (Turner, 1924) is a delightful autobiography of her life on
381 what is now known as Turner's Island and the myriad avine friends she made, each of which
382 she describes as though a family member.

383 Her nomination form was signed by B D Jackson, W A Herdman, the Rev T R R Stebbing, G
384 S Boulger and G Saunders.

385 **Dr Lilian Jane Veley FLS (*nee* Gould, 19th February 1861 - 2nd December 1936)**

386 Shown in Figure 1, Dr Veley was daughter of Katherine E Gould and the Rev John N Gould.
387 Educated Somerville College, Oxford on a scholarship (E B Poulton was her advisor), she
388 was awarded a B.A. Natural Sciences (spec. animal morphology) First Class (1894). She

389 married Victor H Veley (1856-1933) in 1895. She was awarded her D.Sc from Trinity
390 College Dublin (1905, a ‘steamboat lady’). Her first research papers were on butterfly larvae
391 and amoeba, whilst at Oxford. On marriage she became Director of Braddow Brewery Co.,
392 Essex and became a microbiologist of alcoholic beverages with papers in *Nature* and on
393 organisms living in rum, as well as a book on the latter (1898). She was one of the first to
394 breed Siamese cats in Europe (her brother Edward B Gould (1847–1916) was Consul in Siam
395 and brought two cats back in 1884: the first in the UK). She co-founded Siamese Cat Club
396 (1901). Photos of her cats are in the *National Archives*.

397 **Miss Ellen Ann Willmott (1858-1934)**

398 For a more detailed account of her life, the biography by Le Lievre (1980) is recommended,
399 which was re-published in 2008 with an e-book version available. It contains abundant
400 photographs of Miss Willmott, and details of her life and gardens.

401 Miss Willmott was an avid – some would say obsessive – gardener. She lived at Warley
402 Place, Essex, the daughter of Frederick Willmott and his wife Ellen. Miss Willmott
403 transformed grounds into one of the most famous gardens in UK with over 100,000 species of
404 plant! As she got older, she suffered from a progressive form of dementia and became
405 increasingly eccentric, booby trapping her garden and carrying a gun, paranoid about
406 intruders and thieves. She was arrested for shoplifting at one stage. Her fortune was entirely
407 spent on gardening, eventually dying near-penniless, her hobby having become an obsession
408 that consumed her.

409 Her nomination form was signed by The Lord Avebury, H Deuce, Sir J B Farmer, F D
410 Godman, O Stapf and F Crisp.

411

412 **ACKNOWLEDGEMENTS**

413 The Author is indebted to Mrs Lynda Brooks, Librarian of the Linnean Society of London,
414 and the other staff of the Society, past and present, for their interest, facilitation and
415 encouragement – particularly our current President, Dr Sandy Knapp and our Past President,
416 Prof Dianne Edwards. Thanks are also given to Prof Edward Haskins, Department of
417 University of Washington, USA; Ms Nicola Allen, Archivist of the Bedford Estates and His
418 Grace Andrew Russell, 15th Duke of Bedford; Mr Tom Cumming, Robert Gordon's College;
419 Mr Ian Beavis, Tunbridge Wells Museum & Art Gallery; Mr John Wilby of King's College
420 London; Mr John Hodgson of the University of Manchester; the late Dr Noble Frankland, Ms
421 Linda Frankland, Mr Roger Frankland; Ms Helen Morgenroth and Ms Holly Burbage of the
422 Royal Albert Memorial Museum; Ms Sue James, Sutton High School, and Chris Kennedy,
423 Royal Microscopical Society.

424 Research costs for archive access *etc* were met privately by the Author.

425 **REFERENCES**

426 **Anonymous (1879)** *Fine art & industrial exhibition, York, 1879, fine art department.*
427 Johnson & Tesseyman, York.

428 **Anonymous (1925)** Benefactions. *Proc. Linn. Soc. Lond.* **138**: 101-104.

429 **Arber, M. A. and Stern, W. T. (1968)** List of published works of Agnes Arber, E. A. N.
430 Arber and Ethel Sargant. *Biographical Notes. Arch. Nat. Hist.* **4**: 370-384.

431 **Benson, M. J. (1904)** *Telangium scotti*, a new species of *Telangium (Calymmatotheca)*
432 showing structure. *Ann. Bot.* **18**: 161-177.

433 **Benson, M. J. (1911)** New observations on *Botryopteris antiqua*, Kidston. *Ann. Bot.* **25**:
434 1043-1057.

435 **Benson, M. J. (1912)** *Cordaites felicis*, sp. nov., a Cordaitean leaf from the Lower Coal
436 Measures of England. *Ann. Bot.*, **26**: 201-207.

437 **Buxton, M. (2008)** *The high-flying Duchess: Mary du Caurroy Bedford 1865-1937.*
438 Woodperry Books, Leicestershire, UK.

439 **Craig, F. W. S. (1949)** British parliamentary election results 1918-1949. *Political Reference*
440 *Publications, Glasgow.*

441 **Creese, M. R. (2000)** *Ladies in the laboratory? American and British women in science,*
442 *1800-1900: a survey of their contributions to research.* Scarecrow Press, Folkestone.

443 **Creese, M. R. (2004)** Lister, Gulielma (1880-1949) *In*: Harrison, B. (Ed) *Oxford dictionary*
444 *of national biography.* Oxford University Press, Oxford, UK.

445 **Crombie, J. M. (1894)** *A monograph of lichens found in Britain*, Part I. 1st Edition. Longman
446 & Co, London.

447 **Curtis, L. (1993)** *Winged Odyssey: biography of Mary, Duchess of Bedford.* Air Research
448 Publications: Walton-on-Thames.

- 449 **Cushman, J. A. (1933)** Some new foraminiferal genera. *Contrib. Cushman Lab.*
 450 *Foraminiferal Res.* **9**: 32-38.
- 451 **Darwin, C. R. (1859)** *On the origin of species by means of natural selection, or the*
 452 *preservation of favoured races in the struggle for life.* John Murray, London, UK.
- 453 **Duncan, A. (1938, editor)** *A bird-watcher's diary.* Private press.
- 454 **Eivor (pseudonym) (1905)** En kvinnlig bakteriolog. *Idun*, **26**: 325-316.
- 455 **Frankland, G. C. (1903)** *Bacteria in daily life.* Longman: London.
- 456 **Frankland, G. C. and Frankland, P. F. (1887)** Studies on some micro-organisms obtained
 457 from Air. *Phil. Trans. Roy. Soc. Lond. B.* **178**: 257-288.
- 458 **Frankland, G. C. and Frankland, P. F. (1889)** Ueber einige typische Mikroorganismen im
 459 Wasser und im Boden. *Z. Hygiene.*
- 460 **Frankland, P. F. and Frankland, G. C. (1894)** Micro-organisms in water, their
 461 significance, identification and removal together with an account of the bacteriological
 462 methods employed in their investigation. *Longmans, Green and Co, London, UK.*
- 463 **Gage, A. T. and Stern, W. T. (1988)** *A bicentenary history of the Linnean Society of*
 464 *London.* Linnean Society of London, London.
- 465 **Gardiner, B. G. (2003)** A biography of Percy Sladen (1849 – 1900). *The Linnean.* Special
 466 Issue 4.
- 467 **Gibbons, N. E. (1972)** *Listeria* Pirie – whom does it honor? *Int. J. Syst. Bacteriol.*, **22**: 1-3.
- 468 **Gore, J. (1938)** *Mary Duchess of Bedford (1865-1937).* John Murray: London.
- 469 **Haines, C. M. C. (2001)** *International women in science: a biographical dictionary to 1950.*
 470 ABC-CLIO Inc., Santa Barbara, California, USA.
- 471 **Haskins, E. F. (1999)** Miss Gulielma Lister F.L.S. remembered. *Mycologist*, **13**: 54-56.
- 472 **Hawkins, J. E. (2004)** Sketches of otology part 2: origins of otology in the British Isles:
 473 Wilde and Toynbee. *Audiol. Neurotol.*, **9**: 129-134.
- 474 **Henderson K. (2008)** The York Gate Geographical and Colonial Library – the emerging rift
 475 between tangible and intangible cultural heritage – a South Australian case study. *16th*
 476 *General Assembly and International Scientific Symposium of the International Council on*
 477 *Monuments and Sites.* Accessible at:
 478 https://www.icomos.org/quebec2008/cd/toindex/77_pdf/77-FgBM-13.pdf
- 479 **Holme VJ (1915a)** Letter to Alick Embleton from Mladenovatz, Serbia. Dated 14th July
 480 1915. Papers of Vera (Jack) Holme. Item: GB 106 7VJH/2/5/03. *Women's Library Archives,*
 481 London School of Economics, London, UK.
- 482 **Holme VJ (1915b)** Letter to Alick Embleton from Mladenovatz, Serbia. Dated 1th August
 483 1915. Papers of Vera (Jack) Holme. Item: GB 106 7VJH/2/5/04. *Women's Library Archives,*
 484 London School of Economics, London, UK.
- 485 **Jahn, E. A. W. (1906)** Myxomycetenstudien. *Ber. Deut. Bot. Ges.*, **24**: 538-541.

- 486 **Kölbl-Ebert, M. (2001)** On the origin of women geologists by means of social selection:
487 German and British comparisons. *Episodes*, **24**: 182-193.
- 488 **Le Lievre A (1980)** *Miss Willmott of Warley Place: her life and her gardens*. Faber: London.
- 489 **Lister, J. (1873)** A further contribution to the natural history of bacteria and the germ theory
490 of fermentative changes. *Quart. Microbiol. Sci.*, **13**: 380-408.
- 491 **Lister, G. (1884)** On the origin of the placentas in the tribe *Alsineae* of the order
492 *Caryophylleae*. *J. Linn. Soc. Bot.* **20**: 423-429.
- 493 **Lister, G. (1911)** A monograph of the mycetozoa. A descriptive catalogue of the species in
494 the herbarium of the British Museum. 2nd Edition. *Witherby, London*.
- 495 **Lister, G. (1913)** Mycetozoa found during the Fungus Foray at Haslemere, Sept 23rd – 26th
496 1913. *Trans. Brit. Mycol. Soc.*, **4**: 221-223.
- 497 **Lister, G. (1925)** A monograph of the mycetozoa. A descriptive catalogue of the species in
498 the herbarium of the British Museum. 3rd Edition. *Witherby, London*.
- 499 **Lister, G. (1927)** Mycetozoa gathered during the Hereford Foray. *Trans. Brit. Mycol. Soc.*,
500 **12**: 86-87.
- 501 **Lister, G. (1930)** Mycetozoa gathered during the Bristol Foray. *Trans. Brit. Mycol. Soc.*, **15**:
502 10-11.
- 503 **Lister, G. (1930)** Mycetozoa of the Belfast Foray. *Trans. Brit. Mycol. Soc.*, **17**: 14-15.
- 504 **Lorrain Smith, A. (1911)** *A monograph of the British lichens*. Part II. *Longman, Green &*
505 *Co, London*.
- 506 **Lorrain Smith, A. (1918)** *A monograph of the British lichens*. Part I. 2nd Edition. *Longman,*
507 *Green & Co, London*.
- 508 **Lorrain Smith, A. (1921)** *A handbook of the British lichens*. *Longman, Green & Co,*
509 *London*.
- 510 **Officer, L. H. and Williamson, S. H. (2017)** Five ways to compute the relative value of a
511 UK pound amount, 1270 to present. *Measuringworth.com*.
- 512 **Ogilvie, M. M. (1893)** Contributions to the geology of the Wengen and St. Cassian Strata in
513 southern Tyrol. *Quart. J. Geol. Soc. Lond.*, **49**: 1-78.
- 514 **Pirie, J. J. H. (1927)** A new disease of veld rodents “Tiger River Disease”. *Publ. S. Afr. Inst.*
515 *Med. Res.*, **3**: 163-186.
- 516 **Pirie, J. J. H. (1940)** The genus *Listerella* Pirie. *Science*, **91**: 383.
- 517 **Ramsbottom, J. (1949)** Miss Gulielma Lister. *Nature*, **164**: 94.
- 518 **Ridley, M. S. (1881)** *A pocket guide to British Ferns*. David Rogue, London.
- 519 **Rowe, F. W. E. (1974)** Catalogue of the Sladen Collection, Albert Memorial Museum,
520 Exeter. *Biol. J. Linn. Soc.* **6**: 179-243.

- 521 **Schleifer, K. H., Kraus, J., Dvorak, C., Kilpper-Bälz, R., Collins, M. D., Fischer, W.**
522 **(1985)** Transfer of *Streptococcus lactis* and related streptococci to the genus *Lactococcus*
523 gen. nov. *Syst. Appl. Microbiol.*, **6**: 183-195.
- 524 **Shtier, A. and Lightman, B. (2006)** *Figuring it out: science, gender, and visual culture.*
525 Dartmouth College Press, USA.
- 526 **Turner, E. L. (1922)** *Broadland birds.* Country Life, United Kingdom.
- 527 **Van Konijnenburg-van Cittert, J. H. A., Kustatscher, E., Wachtler, M. (2006)** Middle
528 Triassic (Anisian) ferns from Kühwiesenkopf (Monte Prá Della Vacca), Dolomites, Northern
529 Italy. *Palaeontology*, **49**: 943-968.
- 530 **Von Klebelsberg, R. (1932)** Die Dolomitengeologin: Maria M. Ogilvie Gordon. *Der*
531 *Schlern*. **13**: 492-496.
- 532 **Wachtler, M. and Burek, C. V. (2007)** Maria Matilda Ogilvie Gordon (1864-1939): a
533 Scottish researcher in the alps. In: Burek, C. V. and Higgs, B. (*eds*) The role of women in the
534 history of geology. *Geol. Soc. Lond. Special Pubs.* **281**: 305-317.
- 535 **Wakefield, E. M. (1950)** Miss Gulielma Lister. *Trans. Brit. Mycol. Soc.* **33**: 165-166.
- 536 **Waterhouse, G. M. (1973)** Obituary Elizabeth Marianne Blackwell. *Trans. Brit. Mycol. Soc.*
537 **61**: 611-614.
- 538 **Welch, A. (1791)** In Extracts from the Minute Book of the Linnean Society. *Trans. Linn.*
539 *Soc. Lond.*, **2**: 353-354.

540 **Figure 1.** Sant's 1905 *First Admission of Women Fellows*, original without the erasure of The
541 Rev and Mrs Stebbing. From the Collection of the Linnean Society of London reproduced
542 from Gage and Stern (1988). From left: Miss Turner, Miss Lorrain Smith, B D Jackson
543 (General Secretary), Miss Silver, Dr Veley (signing the Book), Mrs Sladen, D H Scott
544 (Botanical Secretary), Mrs Crisp (receiving the Hand of Fellowship), W A Herdman
545 (President), Mrs Stebbing, F Crisp (Treasurer), the Rev T R R Stebbing (Zoological
546 Secretary). Copyright © Linnean Society of London.

547 **Figure 2.** Prof Margaret J. Benson. From a cabinet print by Maul & Fox of Piccadilly, from
548 the Library of the Linnean Society of London. Accessioned 22nd February 1911 (ref.
549 PP/B/25). The original photographer's reference is 236762. Digitisation by the Author in
550 2017. Copyright © Linnean Society of London.

551 **Figure 3.** Mrs Grace Coleridge Toynbee Frankland. From a cabinet print by Maul & Fox of
552 Piccadilly, from the Library of the Linnean Society of London. Accessioned 6th March 1906
553 (ref. PP/F/10) and dated 1906 by the photographer. Photographer's reference is 227425.
554 Digitisation by the Author in 2017. Copyright © Linnean Society of London.

555 **Figure 4.** Miss Annie Lorrain Smith FLS. From a cabinet print by Maul & Fox of Piccadilly,
556 from the Library of the Linnean Society of London. Accessioned 21st February 1907 (ref.
557 PP/S/33). Photographer's reference is 230365. Digitisation by the Author in 2017. Copyright
558 © Linnean Society of London.

559 **Figure 5.** Miss Emma Louise Turner FLS. From a cabinet print by Maul & Fox of Piccadilly,
560 from the Library of the Linnean Society of London. Accessioned 17th February 1908 (ref.
561 PP/T/20). Photographer's reference is 232544. Digitisation by the Author in 2017. Copyright
562 © Linnean Society of London.