

= Doris Mackinnon =

Doris Mackinnon (30 September 1883 ? 10 September 1956) was a British zoologist . Born in Scotland , her father was a Consular Agent and her mother managed a " women 's home " . Influenced by Maria Gordon , Mackinnon studied botany and geology at Aberdeen University , graduating in 1906 . She received the " Carnegie scholarship " , studying abroad for two years before returning to Scotland . She achieved her doctorate from Aberdeen University in 1914 , becoming a lecturer at Dundee University in 1916 .

During World War I , Mackinnon worked in military hospitals in Britain , researching and helping to diagnose amoebic dysentery . Her work in the military hospitals fuelled her interest in the topic , which she focussed on during the following years . In 1919 , Mackinnon joined King 's College , London as a lecturer and became Chair of Zoology in 1927 , the first female Chair at the college . She remained in the role as Chair and professor for 22 years . Her research work focussed on parasitic protozoa , and she gave many lectures on the subject over the period of 30 years . She also gave broadcast lectures for schools .

= = Biography = =

Doris Livingston Mackinnon was born on 30 September 1883 in Aberdeen . Her father , Lachlan Mackinnon , worked as an advocate and Consular Agent for France and Belgium . In his spare time , he was an amateur scientist , interested in botany , ornithology and astronomy . Her mother , Theodora Thompson Mackinnon , granddaughter of George Thompson , founded and managed a " women 's home " for unemployed women . Mackinnon had three siblings . One sister became a silhouette artist whilst the other , Lillias Mackinnon , became a concert pianist . A brother became an author .

Encouraged by Maria Gordon , Mackinnon studied botany and geology at Aberdeen University , receiving her B.Sc. in 1906 with a distinction . She was awarded the " Carnegie scholarship " , affording her the chance to study for a year under Richard Hertwig in Munich . Afterward , she joined Milano Vlès to research at Station biologique de Roscoff and then relocated to the Quick Laboratory under George Nuttall . Mackinnon returned to Aberdeen in 1908 , where she became an assistant to John Arthur Thomson at Aberdeen University . In 1909 , she became an assistant to D 'Arcy Thompson at University College , Dundee . Whilst there , she worked on her thesis " Studies on protozoa " , which she submitted to Aberdeen University in 1914 , receiving her doctorate . Within two years , in 1916 , Mackinnon was promoted to lecturer in Dundee .

Whilst at Dundee , Mackinnon was given a leave of absence to help with the war effort during World War I. She worked in military hospitals in Liverpool and Southampton , where she used her knowledge of protozoology to help diagnose amoebic dysentery and other infections for the War Office . In 1918 , she was recalled to University College , Dundee , as D 'Arcy Thompson had taken a new role at St Andrews University , Mackinnon became the acting head of zoological department .

Mackinnon joined King 's College , London , first as a lecturer in 1919 under Arthur Dendy ; she was promoted to reader two years later . When Julian Huxley resigned as Chair of Zoology in 1927 , Mackinnon stepped up to the role which held also the title of Professor , where she would remain until her retirement in 1949 . In doing so , Mackinnon became the first female chair at King 's College . Her department produced notable academics such as Francis Brambell . After retiring , Mackinnon worked on an undergraduate textbook , " An introduction to the study of protozoa " . She fell ill before it was published , eventually dying from a stroke on 10 September 1956 , so the book was completed and edited by R. S. J. Hawes .

= = Work = =

Between May 1917 and May 1918 , Mackinnon worked at the University War Hospital in Southampton with William Fletcher from the Royal Army Medical Corps , focussing on the diagnosis and treatment of dysentery . The pair focussed on two forms of *Shigella dysenteriae* which had been

identified by Simon Flexner and Kiyoshi Shiga . They discovered that the Flexner bacillus could go into intermission and be undetectable for periods of four to five weeks , making it very difficult to say when someone was no longer a carrier . They also found that men who were carriers of Shiga 's bacillus would be prone to depression and would be no longer fit to be soldiers .

Mackinnon published over 40 academic papers , primarily on parasitic species of protozoa (especially flagellates and sporozoa) . She had a reputation for her skill as a lecturer , which stemmed from her time at University College , Dundee . Mackinnon gave broadcast talks for schools and numerous lectures , with a reputation that she never repeated a lecture in 30 years of teaching . These included lectures on the diseases spread by flies , and how good hygiene and the prevention of flies breeding could stop typhoid . She also set up a research centre in protozoology , the only non @-@ medical protozoological research centre in Britain .

= = Recognition = =

During the 1930s , two genus of protozoa , *Dorisa* and *Dorisiella* , were named after Mackinnon in recognition of her work . In 1943 , for the 50th anniversary of their first women 's admissions , Aberdeen University awarded Mackinnon and two other women an honorary LL.D. When Mackinnon retired in 1949 , she was elected professor emeritus of Kings College . She became a fellow of the Linnean Society of London and served on their council .

= = Select bibliography = =

Books

Mackinnon , D. L. ; Hawes , R. S. J. (1961) . An introduction to the study of protozoa . Oxford : The Clarendon Press .

Journals