

GENEALOGY DATABASE ENTRY

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Langley, John Newport

1852 - 1925

DEGREE: BA

DATE: 1875

PLACE: Cambridge

TEACHER/RESEARCH ADVISOR: Foster

renowned for his studies of glandular secretion and of the autonomic nervous system; showed that the drug jaborandi altered heart action by acting directly on the cardiac tissue; discovered that nicotine could selectively interrupt nerve impulses at the sympathetic ganglia, allowing a means of distinguishing those nerve fibers which ended in the nerve cells of a ganglion from those which merely ran through a ganglion without being connected with its nerve cells; mapped out the plan of most of the involuntary nervous system; clarified the basis for various pilomotor mechanisms (bristling of hair in cats and dogs, ruffling of feathers in birds) and contributed to clinical efforts to understand "referred" cutaneous pain in certain visceral diseases; developed the concept of "axon reflexes"; introduced the term "autonomic" as the adjective for the nervous system; suggested that nerve cells have receptors capable of reacting specifically with chemical bodies (drugs) or sometimes with nervous stimuli.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 8, p14-19.
2. *Dictionary of National Biography*; Smith, Elder & Co.: 1908-1986; (1922-1930), p478-481.
3. *J. Physiol.* **1926**, *61*, 1-27.
4. *Proc. Roy. Soc.* **1927**, *101B*, xxxii - xli.