

GENEALOGY DATABASE ENTRY

©Vera V. Mainz and Gregory S. Girolami 1998

Ludwig, Karl Friedrich Wilhelm

1816 - 1895

DEGREE: PhD

DATE: 1839

PLACE: Marburg

TEACHER/RESEARCH ADVISOR: Fick/Bunsen

opponent of the view that a "vital force" governs the life processes of living organisms; proposed that urine is the result of osmosis through semipermeable membranes in the kidneys; invented the kymograph for recording the movement of organs (e.g. the heart), and a pump for sampling blood gases; studied gas exchange in the lungs; invented the method of organ perfusion; studied digestion and absorption of proteins and sugars; studied mechanism of anticoagulants and founded study of regulatory processes in the body.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 8, p540-542.
2. *Science* **1916**, 44, 363-375.
3. *A Biographical Dictionary of Scientists*; Williams, T. I., Ed.; Wiley: 1969; p341.
4. *Proc. Roy. Soc.* **1895**, 59, i-viii.
5. Asimov, I. *Asimov's Biographical Encyclopedia of Science and Technology* (2nd Ed.); Doubleday: 1982; p390-391.
6. *Pop. Sci. Monthly* **1897-8**, 52, 338-353.
7. *The Physiologist* **1962**, 5, 293-299.
8. *Sci. Prog.* **1895**, 4, 155-176 and 323-334.
9. *Revue Scientifique* **1895**, 4, 97-105.
10. *Biographische Blatter* **1895**, 1(part 3), 265-279.
11. *Allgemeine Deutsche Biographie*; Duncker & Humblot: 1967-1971 Reprint; vol. 52, p123-131 and vol. 55, p895-901.
12. *Neue Deutsche Biographie*; Duncker & Humblot: 1953-1990; vol. 15, p429-430.
13. Rothschild, K. E. *History of Physiology*; Risse, G. B., transl.; Krieger Publ. Co.: 1973; p204-212.