










# List of microbiologists









**This is an old revision of this page, as edited by Ajpolino (talk | contribs) at 04:56, 18 December 2017 (*Add missing photos*). The present address (URL) is a permanent link to this revision, which may differ significantly from the current revision.**


Major contributions to the science of microbiology have spanned the time from the 17th century to the present day. The following is a list of prominent microbiologists who have made significant contributions to the study of microorganisms. Many of those listed have received a Nobel prize for their contributions to the field of microbiology. The others are typically considered historical figures

whose work in microbiology had a notable impact in the field. Those microbiologists who currently work in the field have been excluded unless they have received recognition beyond that of being on the faculty in a college or university.

## Microbiologists

Year	Microbiologist		Country	Contribution summary
36BC		<u>Marcus Terentius Varro</u>	Roman	earliest proposal of the germ theory. <sup>[1][2][3]</sup>
1670s		<u>Antonie van Leeuwenhoek</u>	<u>Dutch Republic</u> (modern-day Netherlands)	Often considered to be the first acknowledged microscopist and microbiologist. Van Leeuwenhoek was the first to observe and experiment with microscopic organisms (animalcules), using simple single-lensed <u>microscopes</u> of his own design. <sup>[4]</sup>
1860		<u>Ignaz Semmelweis</u>	Hungarian	developed <u>statistical analysis</u> that demonstrated that rigorous hand-washing techniques and rules in the maternity ward significantly reduced the mortality of women giving <u>birth</u> in the hospital setting. <sup>[5]</sup>
1884		<u>Hans Christian Gram</u>	Denmark	Developed the gram-staining technique that is used to identify and classify bacteria. <sup>[6]</sup>
1898		<u>Kiyoshi Shiga</u>		isolated a cause of bacterial <u>dysentery</u> . <sup>[6][7]</sup>
1880		<u>Charles Lavarán</u>	France	discovered <u>malaria</u> is caused by a <u>protozoan</u> . <sup>[6]</sup>
1951		<u>Max Theiler</u>	South Africa	Received the Nobel Prize in Physiology and Medicine "for his discoveries concerning <u>yellow fever</u> and how to combat it" <sup>[8]</sup>

1870		<u>Joseph Lister</u>	Scotland	created and applied aseptic surgical technique. <sup>[6][9]</sup>
1765		<u>Lazzaro Spallanzani</u>	Italian	proved that bacteria did not arise due to spontaneous generation by developing a sealed, sterile broth medium. <sup>[6][10]</sup>
1901		<u>Emil Adolf von Behring</u>	<u>Germany</u>	The Nobel Prize for Physiology and Medicine "for his work on serum therapy, especially its application against diphtheria, by which he has opened a new road in the domain of medical science and thereby placed in the hands of the physician a victorious weapon against illness and deaths" <sup>[11]</sup>
1861		<u>Louis Pasteur</u>	French	developed the germ theory of disease, identified yeast as the responsible agent in fermentation, developed pasteurization, proved that bacteria do not arise spontaneously, trained other microbiologists. <sup>[6]</sup>
1884		<u>Fanny Hesse</u>	German	Discovered the use of agar agar that is used in bacterial culturing. <sup>[6][12]</sup>
1796		<u>Edward Jenner</u>	English	discovered and applied vaccination techniques against smallpox. <sup>[6]</sup>
1952		<u>Selman Abraham Waksman</u>	United States	received the Nobel Prize in Physiology and Medicine for the identification of streptomycin; an antibiotic effective against tuberculosis" <sup>[13]</sup>
1902		<u>Sir Ronald Ross</u>	<u>United Kingdom</u> <u>India</u>	The Nobel Prize in Physiology or Medicine "for his work on malaria, by which he has shown how it enters the organism and thereby has laid the foundation for successful research on this disease and methods of combating it" <sup>[14]</sup>

1905		<u>Robert Koch</u>	<u>Germany</u>	The Nobel Prize in Physiology or Medicine "for his investigations and discoveries in relation to <u>tuberculosis</u> " <sup>[15]</sup>
1907		<u>Charles Louis Alphonse Laveran</u>	<u>France</u>	The Nobel Prize in Physiology or Medicine "in recognition of his work on the role played by <u>protozoa</u> in causing diseases" <sup>[16]</sup>
1927		<u>Julius Wagner-Jauregg</u>	<u>Austria</u>	The Nobel Prize in Physiology or Medicine "for his discovery of the therapeutic value of <u>malaria inoculation</u> in the treatment of <u>dementia paralytica</u> " <sup>[17]</sup>
1928		<u>Charles Jules Henri Nicolle</u>	<u>France</u>	"The Nobel Prize in Physiology or Medicine for his work on <u>typhus</u> " <sup>[18]</sup>
1939		<u>Gerhard Domagk</u>	<u>Germany</u>	The Nobel Prize in Physiology or Medicine "for the discovery of the <u>antibacterial</u> effects of <u>prontosil</u> " <sup>[19]</sup>
1945		<u>Sir Alexander Fleming</u>	<u>United Kingdom</u>	The Nobel Prize in Physiology or Medicine "for the discovery of <u>penicillin</u> and its curative effect in various <u>infectious diseases</u> " <sup>[20]</sup>
		<u>Sir Ernst Boris Chain</u>	<u>United Kingdom</u>	
		<u>Howard Walter Florey</u>	<u>Australia</u>	

# References

---

1. Adler, Robert (2004). *Medical firsts : from Hippocrates to the human genome*. Hoboken, N.J: John Wiley & Sons. ISBN 978-0471401759. " "Precautions must also be taken in the neighborhood of swamps...because certain minute creatures grow there which cannot be seen by the eyes, which float in the air and enter the through the mouth and nose and there cause serious diseases."
2. (R.R. I.12.2) ([http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Varro/de\\_Re\\_Rustica/1\\*.html#12.2](http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Varro/de_Re_Rustica/1*.html#12.2)) (*The Mole* magazine, Royal Society of Chemistry, March 2014 issue, p. 3) (<http://www.rsc.org/eic/mole>)
3. 2,000 Years of Changing Perspectives on Malaria: 2,000 Years of Changing Perspectives on Malaria ([http://www.medscape.com/viewarticle/811176\\_5](http://www.medscape.com/viewarticle/811176_5)), accessdate: September 9, 2015
4. Lane, Nick (6 March 2015). "The Unseen World: Reflections on Leeuwenhoek (1677) 'Concerning Little Animal'." *Philos Trans R Soc Lond B Biol Sci*. 2015 Apr; 370 (1666): 20140344. [doi:10.1098/rstb.2014.0344]
5. "Ignaz Semmelweis (1818-65)" (<http://www.sciencemuseum.org.uk/broughttolife/people/ignazsemmelweis.aspx?keywords=microbiologist>). London, UK: Science Museum, London-Brought To Life, Exploring the History of Medicine. Retrieved 2015-09-07.
6. Pommerville, Jeffery C. (2014). *Fundamentals Of Microbiology*. Burlington, Massachusetts: Jones and Bartlett Learning. ISBN 9781449688615.
7. A. F. Trofa, H. Ueno-Olsen, R. Oiwa, M. Yoshikawa: *Dr. Kiyoshi Shiga: Discoverer of the Dysentery Bacillus*. In: *Clinical Infectious Diseases*. 29, 1999, S. 1303, doi:10.1086/313437 (<http://doi.org/10.1086%2F313437>).
8. "The Nobel Prize in Physiology or Medicine 1951" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1951/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1951/index.html)). Nobel Foundation. Retrieved 2015-09-07.
9. "Joseph Lister (1827-1912)" (<http://www.sciencemuseum.org.uk/broughttolife/people/josephlister.aspx>). London: Science Museum, London-Brought To Life, Exploring the History of Medicine. Retrieved 2015-09-07.
10. dictionary of medical eponyms: Whonamedit - dictionary of medical eponyms (<http://www.whonamedit.com/doctor.cfm/2234.html>), accessdate: September 9, 2015
11. "The Nobel Prize in Physiology or Medicine 1901" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1901/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1901/index.html)). Nobel Foundation. Retrieved 2015-09-07.
12. Walter and Fanny Hesse: *Walter and Fanny Hesse* (<http://highereducation.com/sites/default/files/0072320419/20534/hesse.html>), accessdate: September 9, 2015
13. "The Nobel Prize in Physiology or Medicine 1952" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1952/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1952/index.html)). Nobel Foundation. Retrieved 2015-09-07.
14. "The Nobel Prize in Physiology or Medicine 1902" ([https://www.nobelprize.org/nobel\\_prizes/medicine/laureates/1902/index.html](https://www.nobelprize.org/nobel_prizes/medicine/laureates/1902/index.html)). Nobelprize.org. 2014. Retrieved 2015-09-07.
15. "The Nobel Prize in Physiology or Medicine 1905" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1905/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1905/index.html)). Nobelprize.org. 2014. Retrieved 2015-09-07.
16. "The Nobel Prize in Physiology or Medicine 1907" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1907/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1907/index.html)). Nobel Foundation. Retrieved 2015-09-07.
17. "The Nobel Prize in Physiology or Medicine 1927" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1927/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1927/index.html)). Nobel Foundation. Retrieved 2015-09-07.
18. "The Nobel Prize in Physiology or Medicine 1928" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1928/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1928/index.html)). Nobel Foundation. Retrieved 2015-09-07.
19. "The Nobel Prize in Physiology or Medicine 1939" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1939/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1939/index.html)). Nobel Foundation. Retrieved 2015-09-07.

20. "The Nobel Prize in Physiology or Medicine 1945" ([http://nobelprize.org/nobel\\_prizes/medicine/laureates/1945/index.html](http://nobelprize.org/nobel_prizes/medicine/laureates/1945/index.html)). Nobel Foundation. Retrieved 2015-09-07.

---

Retrieved from "[https://en.wikipedia.org/w/index.php?title=List\\_of\\_microbiologists&oldid=815936594](https://en.wikipedia.org/w/index.php?title=List_of_microbiologists&oldid=815936594)"

■