

Fathers (Predecessors) of Evolutionary Morphology

Aristotle (384-322 BC; Greek)

- Classification of organisms
- principles of:
 - Community of plan within groups of organisms (presages homology)
 - correlation of parts
 - succession of forms in development (presages “ontogeny recapitulates phylogeny”)
 - the “scale of nature”.

Andreas Vesalius (1514-1564 AD; Italian) Re-established the scientific method.

William Harvey (1578-1667; English, trained in Italy) Pioneered experimental demonstrations.

M. Malpighi (1628-1694; Italian) conceptions of organic structure.

Carolus Linneaus (1707-1778; Swedish) Binomial nomenclature in classification of organisms.

Georges-Louis Leclerc, Count Buffon (1707-1788; French) Principle of gradation of beings—man the prototype of a general plan, and all other animals are stages to reach the prototype.

Georges Cuvier (1769-1832; French)

- Study of structure and function together.
- Principles of harmony of structure and function, and of correlation.
- First to use hypothesis formation in morphology.
- Classification based on immutability of species.

Johann Wolfgang von Goethe (1749-1832; German) Unity of plan – nature of connections.

Richard Owen (1804-1892; English) Concepts of homology and analogy.

Karl Ernst von Baer (1792-1876; Estonian, worked in St. Petersburg, Berlin)

- Germ layer theory
- recapitulation theory.

Charles Robert Darwin (1809-1882; English)

- Principles of descent with change
- natural selection
- evolution