



DEDICATION & IDEALS

The Academy is dedicated to the principles and ideals espoused by Roger Bacon, a devoted 13th century thinker who was an eminent teacher and is credited with being the first modern scientist.

A biographical sketch of his life may be helpful to you in understanding The Academy and its founding philosophy and the ideals to which it aspires

Friar Bacon is most widely known among scholars as being one of the first people to use experimental methods in alchemy - the root of modern chemistry - and is also known for his application of geometry to the science of lenses, and early experiments in gunpowder. From his writing, and the events in his life, it is possible to see two sides to the man: a remarkably driven experimental scientist compared with his contemporaries, but also a man heavily influenced by the spiritual side of life reflected in his early leanings towards philosophy and his attachment to the Franciscan order. He was also remarkably outspoken for his day and often faced the ire of his superiors.



Roger Bacon 1214—1292

Logo:	Temple of Athena— The Greek Goddess of Wisdom and Virtue
Mascot (a symbol of good fortune):	The Owl
Motto (a guide to conduct):	Observe Keenly
Maxim (a general truth):	Truth Survives
Adage (a long-held belief):	Virtue Rewards
Colors:	
(purity):	White
(courage):	Purple
(tradition):	Gray

THE LIFE OF ROGER BACON

THE YOUNG TEACHER

Roger Bacon was born to a good English family in about 1214, and he grew up wanting to be a teacher. He went to Oxford University in England; and after obtaining his degree, he became a teacher on the staff of the University of Paris in the 1240's.

The writings of the Greek thinker Aristotle had been lost to Europe for over ten centuries and had recently been rediscovered. Bacon had studied Aristotle at Oxford and became very excited. He believed that Aristotle was a great thinker, and he taught his students in Paris about Aristotle's writings.



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BETRAYED BY THE "EXPERT"



Aristotle
384–322
BC

During this time, Bacon was also working with light rays and lens and doing many chemistry experiments. His experiments were based on some things that Aristotle had written about, but these experiments were not working out. He discovered that on many topics the famous and honored Aristotle was wrong. Years of hard work based on some of Aristotle's false teachings had to be thrown away. Perhaps worse was his realization that he had sent students out into the world with false knowledge.

Bacon was very disappointed at having wasted so much effort by trusting Aristotle. Although much of Aristotle's writing was correct, the errors made it risky to trust anything. Bacon began struggling with the problem of how to make knowledge trustworthy.

Bacon first decided that there was something fundamentally wrong in the way people judged what was true and false. In Bacon's day, people believed that arguing logically could prove the truth. Everyone thought Aristotle's arguments were logically correct so they judged Aristotle to be writing the truth. But Bacon knew, from his failed laboratory work, that Aristotle was wrong about many things he had written - even though Aristotle had very good rational arguments to support his views.

THE SOURCES OF ERROR

Bacon also studied other respected writers and found many to be wrong. When he tried to discover what had led these men astray in their writings, he came up with four central reasons for their errors - the four stumbling blocks to truth.

Reliance on faulty authority

Some were wrong because they had relied on a supposed "expert" who was wrong.

Reliance on popular opinion

Some were wrong because they relied on popular opinions or beliefs that were wrong.

Reliance on personal bias or vanity

Others were wrong because they just wanted things to agree with their pet ideas and to conceal their ignorance through pride.

Reliance on rational argument

And lastly and most dangerous, some were wrong because they had believed in a logical argument.



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These four sources of error were to be avoided at all costs. It is ironic that Aristotle had espoused these very points two thousand years earlier (and they are still taught today in courses in rhetoric) as the best strategies to use in winning a debate or in persuading an audience by oratory. Aristotle's stated goal, however, was merely to persuade the listener – not to find Truth.

THE PATH TO TRUSTWORTHY KNOWLEDGE

Bacon now set out to devise a systematic way of judging whether a statement was true or false and thereby obtain trustworthy knowledge. Bacon believed that "seeing might be believing" for experiments in his laboratory, but he was even unsure about whether personal bias could sneak in unsuspectingly to sway one's observations. Therefore, Bacon said that several people (the more the better) should do the experiment separately and independently to see if they all got the same results.

If many different people in different places at different times could do the same experiment and get the same results, then personal bias should be ruled out. What was seen and duplicated in the laboratory could be considered to be true. He wrote up his experiments in detail and had his students try to repeat them before he would trust the results.

Bacon summarized his belief clearly:

"Neither the voice of authority nor the weight of reason and argument are as significant as experiments from which come peace to the mind."



Scientific illustrations believed to be from one of Friar Bacon's manuscripts

PERSEVERING THROUGH ADVERSITY

Bacon's ideas threatened a number of the powerful teachers of his day, and he was forbidden to continue his experiments or work on his books. He sent a copy of his preliminary work to the Pope, Clement IV, who liked Bacon's ideas and wanted to see more. The Pope liked Bacon's view that by observing creation, one learned more about God. It is not clear whether Bacon had to continue his work in secret or whether Clement ordered that Bacon be allowed to continue his work. In any case, Bacon did continue his work.

It is believed that some time after Clement died, Bacon, his protector now gone, was imprisoned for his outspoken criticisms of current beliefs because there is a complete absence of any record of Bacon's activity from 1279 to 1289. His last work dates from about 1292 and is incomplete. We assume that he died then at the age of about 72.



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THE IMPACT OF BACON'S LIFE

It is difficult to accurately assess Bacon's influence in bringing about that revolutionary period in human thought - the Renaissance - that began several hundred years after his death. Whether his work was widely influential or whether the "scientific method" was independently rediscovered really makes no difference in judging the greatness of the man himself. His ethical standards in science and his relentless pursuit of truth stand as a beacon to inspire us all to the utmost in keen, objective observation and scrupulous honesty in all of our undertakings.

It is to Roger Bacon's beliefs that the Academy is dedicated. Furthermore, Bacon sets an example that each of us can emulate. We may have trouble imagining ourselves as a modern day Leonardo or a George Washington or a Martin Luther King. These great men had qualities of leadership and genius that we might find difficult to imitate.

But Bacon was a man whose source of greatness – his determination to always seek truth - is seeded within every one of us. There is no ability, nor accident of birth, nor any environmental factor that can possibly preclude any of us from nurturing this seed and achieving the same greatness as Bacon's. The only factor is our own self-determination - our own will to live an honest life and to seek truth in the universe.

