

Ars Hermeneutica



2006
Annual
Report

Ars Hermeneutica

*Our mission is to advance
science and increase the public
understanding of science.*

*We envision a scientifically
literate America.*

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Ars Hermeneutica, Limited, is a nonprofit corporation dedicated to scientific research and education. The company is recognized as 501(c)(3) tax-exempt by the Internal Revenue Service and all contributions to Ars Hermeneutica are tax deductible as allowed by law.

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Meet Ars Hermeneutica, Limited

When we incorporated Ars Hermeneutica, Limited, in November 2004, it was in a relatively intense anti-scientific time. Global warming was claimed to be scientifically controversial and there were mounting rumors that the Republican White House was suppressing relevant scientific results. Darwinian evolution was claimed to be scientifically controversial and court cases were playing out that tried to force school districts to design their science curricula based on political or religious rather than scientific considerations. Allegations of political breaches of scientific integrity were rife.

American society has always had an uneasy relationship with enlightenment ideals: anti-intellectualism is a widespread national affliction. At its root is a critical failure to comprehend science, its results and methods, and its value in everyday life. That's why we created Ars Hermeneutica as a nonprofit research and education corporation with a commitment to improving the public understanding of science.

"Ars Hermeneutica" translates from the Latin as "the art of understanding and communication", which summarizes our interests in science, technology, engineering, and mathematics. It also encompasses our educational goals. Our name encapsulates our vision of a scientifically literate America and our strategy for achieving it.

Milestones: *Our Story thus Far*

- * November 2004
Ars Hermeneutica, Limited recorded as a nonprofit corporation in the state of Maryland
- * August 2005
Science Besieged online resource launched
- * September 2005
By-laws, conflict-of-interest policy, and non-discrimination policy adopted
- * September 2005
IRS Application for Recognition of Tax-Exempt Status completed and submitted
- * February 2006
Public presentation given called “Ars Hermeneutica: An Intimate Portrait”
- * April 2006
Board of directors increased to six members with election of four new board members
- * July 2006
Preliminary work begun for *Sun: The DVD*
- * October 2006
Company website moved to its own server
- * November 2006
Official notice of IRS recognition of 501(c)(3) tax-exempt status received; tax-exempt status is retroactive to founding of the company

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Education & Research Agenda

Contrary to cliché, we believe that those who do are also the best teachers. Ars Hermeneutica is dedicated to scientific research *and* public science education: two outlets for the same creative impulse. Our entire staff will participate in both research and education projects.

We've set our education direction towards developing and deploying innovative educational projects that create "Aha!" experiences, awakening the interest of children and adults in science, bidding them welcome and inviting them to explore science for themselves. Our first two projects are already underway: *Science Besieged* and *Sun: The DVD* are described in the next pages.

As we build our research capabilities from scratch, we will assemble a creative, flexible, cross-disciplinary team of researchers to tackle problems in systems science, technology assessment, and strategic analysis. Our attention will be directed towards those large, complex, and unique problems where discovering *how* to go about finding a solution is part of the problem.

Research at Ars Hermeneutica is done *in the public interest*. What we learn and what we earn from contracted research for congress, government agencies, and private business feeds into our education programs: science research and public education about science are two components of the same strategy.

Science Besieged

Science Besieged tells stories about how the threads of science and society are woven together into one strong fabric. It is a browsing encyclopedia of short pieces meant to enlighten, entertain, and entice readers, giving them motivation and an entry point into learning science for themselves. We take a positive approach to describing the mutual support that science and society give each other as a counterweight to anti-scientific attitudes.



Since its inception we've worked to create online a project skeleton, a small but representative collection of articles that indicate the scope, tone, and direction of the project. Our goal is to make the online resource attractive to potential volunteers and monetary contributors.

There are some 75 articles by 6 authors, with a total of 33,000 page views. "Citizens' Alliances for Science" is our most viewed article, with over 1,400 page views. Also popular are "Legislating the Value of PI" (1,300 views); "Darby, Montana School Board (900 views); and "Evolution and the Vatican" (800 views). Our "Book Notes" feature currently offers 38 articles about some interesting — and a few not-so-interesting books that illuminate the theme of science and society.

Visit <http://ArsHermeneutica.org/besieged/>

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The Sun Project

The sun is ubiquitous but taken for granted. The sun is also a rich source of potential science moments, the biggest and brightest example for concepts from nearly every scientific discipline. To us, that makes it a natural teaching laboratory.



Our first chapter is *Sun: The DVD*, a compilation of short animations created with spectacular solar images from NASA's SOHO mission. The DVD is designed to present features of the sun that most people have never seen before, in dramatic ways that most will not soon forget.

In The Pipeline

- * A "PI-athalon" event to increase math interest, decrease math anxiety, and raise money for schools and for Ars Hermeneutica;
- * Science Caravans that bring walk-in solar observatories into neighborhoods to create a unique science experience for kids and adults;
- * Science in America, a project to measure and report periodically on scientific literacy;
- * An Ocean Project, a companion to the Sun Project that uses the oceans as learning lab;
- * A national mentoring program for science and math teachers.

Setting Out on our Mission

There are many rewarding reasons to learn about science, but why *should* someone learn about science? The best reason I can think of is this: everyone can use a good snake-oil detector.

An educated citizen is the ideal participant in a democracy. Ponder today's public-policy topics: global warming, stem-cell research, bird-flu epidemics, biohazardous warfare, "peak oil", alternative energies, endangered species, etc. Without some grounding in rational skepticism and analytical reasoning, a person can't even enter the conversation, let alone distinguish the charlatans and demagogues who are driven by their own agendas and who try to manipulate science for their own ends rather than the public good. Without some skills in rational skepticism and analytical reasoning, this citizen is disenfranchised and too easily exploited.

We believe that many want to be interested in science but are so overwhelmed by the imposing and seemingly impenetrable edifice of science that they are discouraged. The challenge we've accepted is to show people the way in and to excite their interest in science so that they can discover science on their own. We intend to catalyze their personal science experience.

We have chosen to begin our business by emphasizing our educational projects before our

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research projects because that seems the most likely way to bootstrap the company into an operational organization. Initially, we will function as a research institute with a staff of visiting scholars organized around a particular project as a practical way to assemble our core research staff.

A friend asked recently whether small contributions would be useful given the size of the budget we need to operate even small programs. My answer was an emphatic “yes!” Along with our tax-exempt determination, Ars has been granted provisional status as a public charity with broad community support. Our status will be revisited by the IRS in a few years and the best way to retain our public-charity status is to show off our long list of individual contributors.

We plan for our research to provide financial and creative support for our educational programs, but improving the public understanding of science is a big job. Ars today is a handful of motivated but unpaid people. In 15 years I expect Ars Hermeneutica to be a vibrant, unique, well-respected and nationally recognized organization of about 2,000 people. We’ve got some work to do to get there.

There’s plenty for volunteers to do that is critical to our success. Talk to us about how your interests and skills can help. Thank you for your continuing support.

Jeff Shaumeyer, President

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Donors

Ars Hermeneutica gratefully acknowledges the generous spirit of its donors during its first, highly abbreviated tax-exempt year.

S. W. Anderson
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J. M. Gross

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J.N. Shaumeyer
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Income Statement

Ars Heremeneutica, Limited operates on a fiscal year that begins on 1 January. In 2006 Ars Hermeneutica had total income from cash and in-kind donations of \$901, with expenditures of \$40.

For suggestions about how to contribute to Ars Hermeneutica, please visit our website and click on "Support Ars".

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Excerpt from "Legislating the Value of Pi"

The most famous — and only known — case of a state legislature in the US attempting to create by law a new value for π was that of Indiana in 1897; it has become legendary, and the basis of myth and hoax. Although it has come to represent the occasional ignorance of innumerate legislators, it was not so obviously a bad idea at the time.

The bill was introduced to the house by legislator Mr. Record, but it was reported that "Mr. Record knows nothing of the bill with the exception that he introduced it by request of Dr. Edwin Goodwin of Posey County, who is the author of the demonstration." The bill began in the Committee on Canals (aka the Committee on Swamp Lands), whose chairman tried unsuccessfully to send it to the Committee on Education.

Redefining the value of π seems not to have been its principal goal, but a side effect. In fact, the bill seems to have offered four different, new values for π . Rather, the bill was aimed at benefiting its author, who claimed to have patented a new method for "squaring the circle", which he proposed to let the state of Indiana use free of charge if they would pass his bill! Its opening statement is clear:

A bill for an act introducing a new mathematical truth and offered as a contribution to education to be used only by the State of Indiana free of cost by paying any royalties whatever on the same, provided it is accepted and adopted by the official action of the legislature of 1897.

More: http://ArsHermeneutica.org/besieged/Legislating_the_Value_of_Pi