



You are invited to a free, private showing of "Leonardo: 500 Years into the Future"

October 22, 2008 @ 5:30 pm – 8:30 PM

FREE admission for up to 500 IEEE, ASME and SVEC-society members and their guest

[Click Here](#) to reserve tickets!

The exhibition represents **the largest, most comprehensive exhibit ever** of the innovative art, science and engineering works of Leonardo da Vinci and his contemporaries. Explore the achievements of the Renaissance artist-engineers — Filippo Brunelleschi, The Sienese Engineers, and Leonardo da Vinci.

The Exhibition includes

- **Over 200 artifacts** including drawings, sculptures and life-size models of the art, architectural projects, machines and mechanisms of Renaissance artist-engineers
- Priceless works of art on loan from the Uffizi Gallery in Italy
- Interactive multi-media presentations put the machines and achievements of Leonardo da Vinci and the Renaissance artist-engineers into modern day context
- [Click Here](#) for more information!

Celebrating Innovation - An Evening for Engineers

FREE admission

October 22, 2008 @ 5:30 – 8:30 pm

Limited tickets available -[reserve now](#) at www.thetech.org/celebrating_innovation

Regular Exhibit Schedule and Tickets:

If you **can't make** our special, free evening (or if you'd like to **come again!**), there is a special discounted price for IEEE, ASME and SVEC-society members:

Adults - \$20

Seniors - \$15

Students w/ID - \$15

Children (up to 17 years) - \$12

Open daily, except December 25.

Monday - Wednesday 9am - 5pm

Thursday - Sunday 9am - 8pm.

To Purchase Tickets:

Online: Visit the [Tech Museum's Website](#)

By Phone: (408) 294-TECH (294-8324)



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TheTech[™]
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The Tech Museum Volunteer and Staff Magazine

August 2008

Leonardo: 500 Years into the Future

It's here. September 27 – January 4. The world premiere of the largest, most comprehensive Leonardo da Vinci exhibit ever! And it is the only U.S. appearance. This unprecedented exhibit will be at The Tech for 99 days only.

Leonardo: 500 Years into the Future extends beyond the paintings, innovations and designs of Leonardo da Vinci into the way he thought. But, it is not just about the cherished work of Leonardo da Vinci, it is about the engineering and scientific innovations and inventions of the Renaissance. It is about how a group of innovative thinkers, the Renaissance artist-engineers, expressed themselves and their ideas in the universal language of drawing.

Visitors will be able to explore over 200 artifacts including drawings and life-size working models of Leonardo and other Renaissance artist-engineers. And that's not all — the exhibition includes the spectacular two-story modern fiberglass model of Leonardo's Sforza Horse and two original Renaissance paintings by Leonardo's disciples on loan from the Uffizi Gallery: *Leda and the Swan* and *The Virgin and Child with St. Anne*.

Leonardo: 500 Years into the Future is one of the most exciting exhibitions ever to come to San Jose. While the possibility of a Leonardo exhibit at The Tech has been researched for years (Santa Clara County and Florence are sister counties), it took a small group of determined individuals to “seal the deal” from the Santa Clara County Sister-County Commission, the City of San Jose, and The Tech. And, the collegial relationship between Peter Friess and Paolo Galluzzi, Director of the Institute and Museum of the History of Science in Florence, Italy certainly helped.

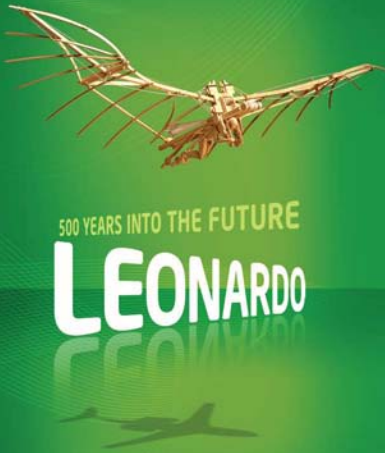
The creation of *Leonardo: 500 Years into the Future* was conceived by the Institute and Museum of the History of Science in collaboration with the Polo Museale Fiorentino and produced by Opera Laboratori Fiorentini in Florence, Italy.

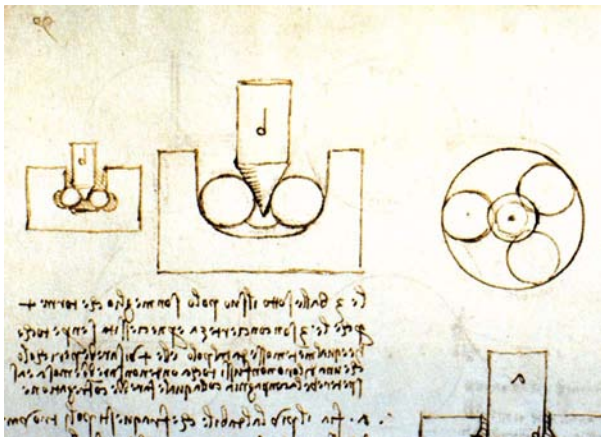
While elements of the exhibit have drawn record crowds in other cities like Paris, Beijing and Tokyo, this is the first time all elements have been together in one place. Unlike many “pre-packaged” museum exhibits, *Leonardo: 500 Years into the Future* is original. All that surrounds the exhibition — from how it is put together and flows to the facilities required to house the immense displays, to the shipping of 17 containers of exhibits from Italy, to the marketing, logistics and security — is being undertaken for the first time. Representatives from The Tech, including Peter Friess and Terry Boyle, and a team of many others have been working tirelessly with representatives from Italy to ensure a successful event.

It is our expectation that *Leonardo: 500 Years into the Future* will “inspire the innovator in everyone”, providing the opportunity to young and old alike to look back 500 years and discover the parallels between the Renaissance and Silicon Valley. It is about thinking in non-traditional ways, celebrating creativity and truly experiencing and discovering all that Leonardo da Vinci and the Renaissance artist-engineers contributed to the fields of art, science and engineering.

If you have questions, contact David Whitman, dwhitman@thetech.org.

- *Leonardo: 500 Years into the Future*
- *The Genius of Leonardo and The Renaissance Engineers!*
- *Trivia — Did You Know?*
- *Education Programs*
- *Exhibit Facts and Background*





Leonardo worked through the medium of drawing. Drawings about his ideas and experiments, like the ball bearing for cone-tipped vertical axle (right), depict the universal laws of equilibrium, geometric proportion and mechanical principles of movement.

The Genius of Leonardo and The Renaissance Engineers!

Leonardo da Vinci is celebrated as the visionary of extraordinary machines and mechanical devices that entered the common heritage of technical culture only several centuries after his death.

However, a close examination of the history of technology from the late fourteenth century to the end of the fifteenth century reveals that the “Leonardo phenomenon” was the logical outcome of a development of engineering and technical skills to which other talented figures contributed as well.

The first half of the exhibit provides tangible evidence of the fact that Leonardo’s universal intellectual experience, embracing arts, technology and science, was not an isolated phenomenon, but rather the creative culmination of a long process that persisted throughout the Renaissance.

This exhibit represents the remarkable achievements of fifteenth century artist-engineers — Filippo Brunelleschi, The Siense Engineers, and Leonardo da Vinci — bringing together over 200 artifacts, including drawings, sculptures and life-size models of the art, architectural projects, machines and mechanisms of the Renaissance. Didactic tools, including multi-media stations with interactive functions, put the machines and achievements of Leonardo da Vinci and the Renaissance artist-engineers into modern day context.

The visitor starts their journey through the Renaissance by focusing on Filippo Brunelleschi and The Dome of Florence Cathedral, one of the most important architectural projects of the entire Renaissance. Brunelleschi devised several boldly innovative solutions in building the dome that are brought to life by the working models in the exhibition.

The exhibit transitions from Brunelleschi to the Siense Engineers, specifically Taccola and Francesco di Giorgio. Between the Middle Ages and the Renaissance, Siena not only invented new art forms such as the famous Siense Gothic style, but also developed a set of technical specialties. In a series of elegant manuscripts, they demonstrated their skill in depicting machines and mechanical systems designed to move water, construct buildings, fight wars and harness natural energy.

Leonardo drew much inspiration from the inventiveness and drawings of the artist-engineers of his time. With Brunelleschi and the Siense Engineers as backdrop, Leonardo da Vinci invented some of the most significant mechanisms designed during the Renaissance. The visitor will see spectacular working models of these very designs, many of which are common to everyday life in the 21st century.

Another area of the exhibit explores the mind of Leonardo. Leonardo da Vinci is the epitome of the Renaissance man— most famous for his paintings yet also renowned as a scientist, engineer and inventor. In this part of the exhibit the focus is to encourage an exploration of the way in which Leonardo thought and to avoid considering Leonardo’s technical and scientific studies as separate from his reflections on the theory of art and from his artistic drawings and paintings.

Leonardo worked through the medium of drawing. Drawings about his ideas and experiments depict the universal laws of equilibrium, geometric proportion and mechanical principles of movement that govern all of man and nature. The exhibition showcases how Leonardo embraced art, technology and science, not as separate from one another, but as a whole.

This area begins by focusing on Leonardo’s youthful training in the workshop of Andrea del Verrocchio, which is brought to life in the film “Beyond the Visible, Rediscovering the Adoration” depicting Leonardo’s study for the Adoration of the Magi.

From this point, the exhibit weaves a story of Leonardo’s life and the progression of his works from anatomical drawings and explosions to detailed laws and principles of equilibrium, geometrical proportionality, and the mechanical principles of movement -depicted not only in machines but also in the human and animal form.

The visitor has the chance to see Leonardo’s innovative principles of design and motion mirrored in his artistic works, from sketches and drawings in his notebooks to paintings by Leonardo’s disciples: Leda and the Swan and The Virgin and Child with St. Anne, both on loan from the Uffizi Gallery of Florence, Italy.



The exhibition includes the spectacular 24 – foot modern fiberglass model of Leonardo’s Sforza Horse.



Model of the Dome of the Florence Cathedral by Filippo Brunelleschi, one of the most important architectural projects of the entire Renaissance.

Trivia — Did You Know?

15 – Day of Leonardo’s birth in April 1452 and age when he started an apprenticeship with the painter Andrea del Verrocchio in Florence

17 – Containers shipped from Italy for this exhibition and years Leonardo served Ludovico Sforza, Duke of Milan

21 – Estimated number of Leonardo’s half brothers and half sisters

70 – Weight, in tons, of bronze set aside to cast Leonardo’s Sforza Horse but used instead for cannons to defend Milan. Leonardo’s clay model of the horse was used for target practice by invading French troops in 1499

99 – Length of days of this exhibition

505 – Assessed value, in 1525 lire, of the Mona Lisa, thought at the time to be an “exceptionally high valuation for a small panel portrait”. Today the uninsured painting at the Louvre is considered priceless

6,600 – Weight, in pounds, of the fiberglass casting and steel frame of the Sforza Horse on exhibit outside The Tech Museum

33,000 – Weight, in pounds, of the base of the horse

24 – Height, in feet, of the Horse

13,000 – Estimated number of pages of Leonardo’s notes and drawings

30,000 – Area, in square feet, of Parkside Hall, site of the exhibition. Additional related exhibits are also on display throughout the museum, including original Renaissance artwork and models of modern technology.

30,800,000 = Price, in dollars, paid at auction in 2004 for Leonardo’s Codex Leicester. A virtual copy is part of the exhibition.

67 – Number of years Leonardo lived, April 15, 1482 to May 2, 1519

60 – Number of beggars Leonardo requested follow his casket to the Chapel of Saint-Hubert in the castle of Amboise, France

Education Programs

Youth Programs

Inventor’s Workshop

Saturday classes, 6 weeks

Fall Session I: September 20 – October 25

Fall Session II: November 1 – December 13 (no class November 22)

\$195/members, \$225/non-members

Leonardo, Artist and Engineer

Ages 12 – 18

Learn about the Renaissance and one of the greatest minds to come from that period. Explore the exhibit by sketching and thinking like Leonardo da Vinci. Students will sketch some of his simple machines and learn about the basic mechanics of art, drawing and design. With this knowledge they will be challenged to design and invent their own unique creations using a variety of mediums (pencil, pastel, paint, and wood).

Adult Programs

Leonardo and the Renaissance

Dates and times: TBA

\$45.00, includes guided tour with an art historian

Class is limited; reservations required.

This three-hour class will explore the world of Leonardo and give you a deeper understanding of his achievements. Don’t just visit the Leonardo exhibition; enhance your experience by learning more about the Renaissance and Leonardo’s contemporaries.

Master Artists Series

In tandem with the Leonardo exhibition, a special series of 2-day weekend art workshops, from October 18 to November 9, with visiting artists Karen Frey, Jim Mason, Don Williams, and others.

Saturday and Sunday

10:00am – 4:00pm

Workshops are limited; reservations required.

Each weekend workshop \$295/ members, \$325/ non-members; includes entrance to the exhibition.

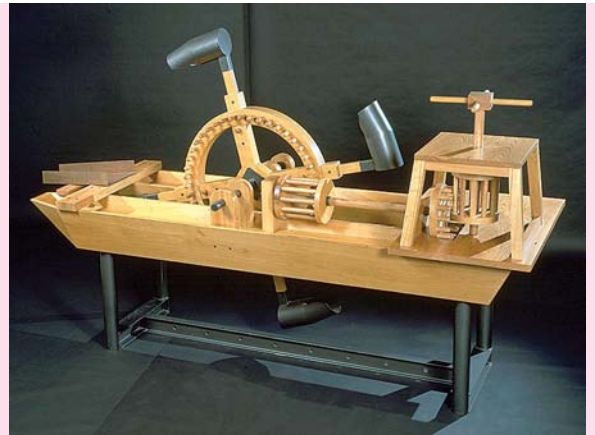
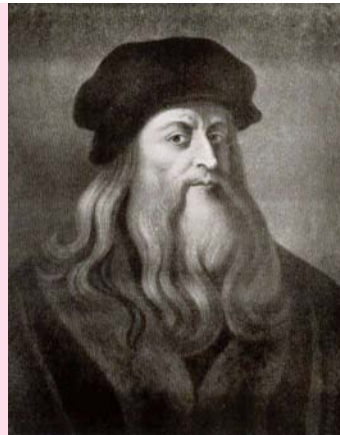


Exhibit Facts and Background

Leonardo: 500 Years into the Future was conceived by the Institute and Museum of the History of Science in Florence in collaboration with the Polo Museale Fiorentino and produced by Opera Laboratori Fiorentini in Florence, Italy.

Curator: Professor Paolo Galluzzi, Director, Institute and Museum of the History of Science in Florence

Uffizi Gallery

The Uffizi Gallery, one of the museums of the Polo Museale Fiorentino, is one of the most famous museums of paintings and sculpture in the world. Its collection of Primitive and Renaissance paintings comprises several universally acclaimed masterpieces of all time including works by Giotto, Simone Martini, Piero della Francesca, Fra Angelico, Filippo Lippi, Botticelli, Mantegna, Correggio, Leonardo da Vinci, Raphael, Michelangelo and Caravaggio. German, Dutch and Flemish masters are also well represented with important works by Dürer, Rembrandt and Rubens.

The Institute And Museum Of The History Of Science

The Istituto e Museo di Storia della Scienza [IMSS] was founded in 1927 at the initiative of the University of Florence under the name of Istituto di Storia delle Scienze. According to its Statute, its function was that of collecting, cataloguing and restoring ancient instruments and devices of historical and scientific interest. The IMSS was founded within a particular historical and cultural context in which, starting from the 1920s, several initiatives were launched in Florence for the purpose of conserving and capitalizing on Italy's historical/scientific heritage.

In the course of its history, the IMSS has constantly been a paragon, on both the national and the international level, for history of science research and for the issues involved in giving importance to the study of scientific instrumentation of historical interest.

The Curator - Paolo Galluzzi

Paolo Galluzzi received a degree from the University of Florence in 1968 where he studied under Eugenio Garin. From 1970 to 1980, he was a Researcher at the Lessico Intellettuale Europeo in Rome where he was

responsible for the production of the monumental *Lessico delle opere di Galileo* on digital support. From there, he was appointed Professor of the History of Science at the University of Siena and, since 1994, he has been a Full Professor of History of Science at the University of Florence. Recently, he was Visiting Professor to the Department of the History of Science at Harvard University. He has also held courses and seminars at Princeton University, UCLA, the University of Hamburg, the Centre Koyré, the Ecole des Haute Etudes (Paris) and New York University, as well as in many other universities and institutes around the world.

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Tickets And Exhibition Hours

Exclusive U.S. appearance; world premiere
The Tech and Leonardo: 500 Years into the Future is open Monday to Wednesday from 9:00 am to 5:00 pm, and Thursday to Sunday from 9:00 am to 8:00 pm, closed December 25.

Leonardo: 500 Years into the Future is ticketed separately. Tickets are timed tickets, offered at 15-minute intervals. Advance purchase is highly recommended. Tickets include access to all of the galleries and exhibits in The Tech.

	Member	Non-member	Groups of 15 or More
Adults	\$15	\$25	\$20
Youth	\$12	\$15	\$12
Seniors	\$12	\$20	\$15

Add a standard IMAX Film – \$4 Non-Members;
\$2 Members (all ages and groups)

Editorial Team

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