



The UNIVERSITY of
OKLAHOMA LIBRARIES
Special Collections



SOONER HORIZON

SPRING 2015
VOLUME 3, NUMBER 1

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The UNIVERSITY of OKLAHOMA LIBRARIES Special Collections

The Bizzell Bible Collection

The Harry W. Bass Business History Collection

The History of Science Collections

The John and Mary Nichols Rare Books and
Special Collections

The Western History Collections

The Daniel and Ruth Boorstin Collection

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ON THE COVER: Galileo, *Opere* (Bologna, 1656)

LETTER *from the* DEAN

As OU celebrates its 125th anniversary, we reflect on our growth and accomplishments as we look forward to the future. OU Libraries will add its six millionth volume to the general collection and its 100,000th volume to the History of Science collections within the year. The opening of the Peggy V. Helmerich Collaborative Learning Center last fall has revitalized and transformed student use of library space and currently serves an average of 1,200 visitors per day.

As the geographical and intellectual hub of campus, Bizzell Memorial Library embraces its status through an unprecedented enterprise this fall. The *Galileo's World* exhibition will introduce the world-class holdings of the History of Science Collections to larger audiences than ever before, with 20 galleries in seven locations across all three of the University campuses. This yearlong exhibition will illustrate the relationships between departments and between the sciences and humanities. It will encourage and facilitate student research through museum-quality exhibits and incorporate in-depth digital content that creates an experience that only a modern research library could provide.

Though our excitement for this exhibition is evident, it is only the beginning. *Galileo's World* has opened the doors to campus and to international partnerships that will pave the way for a new, more robust exhibit program. These partnerships create opportunities for our students and faculty to pursue new areas of scholarship and to work with premier researchers from across the globe.

It has never been more important than now to understand our own past. As children of the West shaped by the land and its history, Sooners are pioneers driven by a sense of possibility as demonstrated through *Path to Excellence*, the book being developed by our Western History Collections to celebrate our history through photographs, we seek to embody a Sooner renaissance of intellectual engagement and creativity, connecting us to the past and to the world, with a renewed vision of the possibilities that lie before the Sooner horizon.

Sincerely,



Rick Luce
Dean, University Libraries
Professor and Peggy V. Helmerich Chair
Associate Vice President for Research, Norman Campus

Bringing Worlds Together for OU's 125th Anniversary

The *Galileo's World* exhibition brings worlds together, connecting the world of Galileo with the world of OU during the University's 125th anniversary.

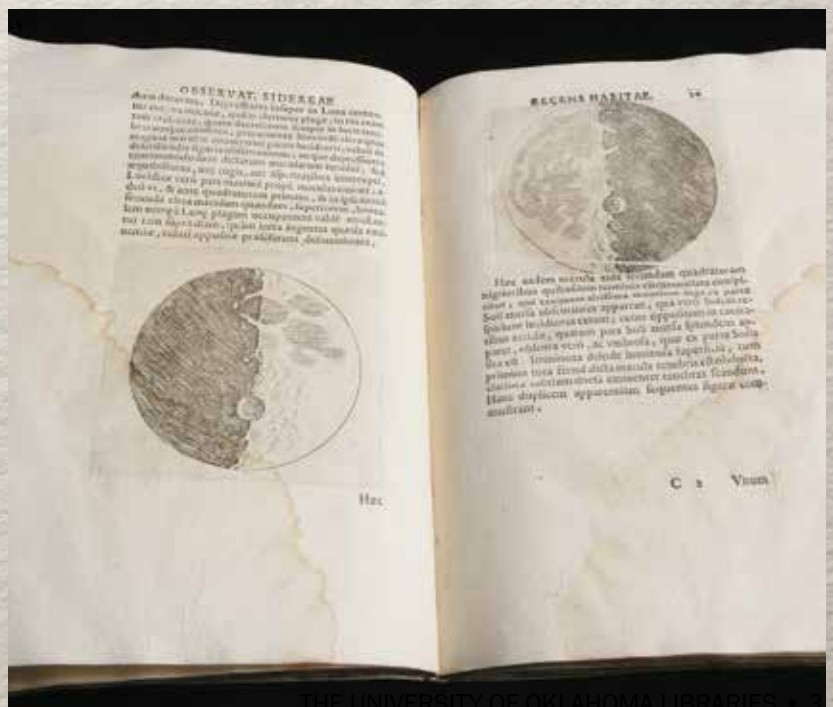
Galileo's World will be an "exhibition without walls," comprised of more than 20 distinctly themed exhibits distributed across seven locations. Exhibits in each major library—from the Bizzell Memorial Library at the heart of the Norman campus, to the Robert M. Bird Library on the Health Sciences campus and the Schusterman Library in Tulsa—connect the three University campuses. Joint-exhibitions at the National Weather Center, the Fred Jones Jr. Museum of Art and the Sam Noble Oklahoma Museum of Natural History will engage visitors at these renowned museums and research centers.

Beginning in August 2015, the *Galileo's World* exhibition will offer a once-in-a-lifetime opportunity to view a complete set of first editions of Galileo's printed works. Four of the OU copies contain Galileo's own handwriting. They will be joined by 300 matchless rare books and manuscripts, various interactive digital resources, and finely-crafted replicas of historical instruments, through a collaboration with the Museo Galileo in Florence.

Galileo's World makes unexpected connections and brings worlds together. Visitors to *Galileo's World* will participate in interactive conversations bringing together the vast range of the natural sciences and the broad spectrum of the humanities, relating the history of science to its present and its future, and exploring the cultural significance of scientific discovery. *Galileo's World* will connect every academic program of the University, sustaining a multidisciplinary conversation that brings our worlds together across time and space.

Announcing a new collaboration between the History of Science Collections and K12 educators: The OU Academy of the Lynx. Check out the oulynx.org blog and follow @oulynx on Twitter. Our aim with the Lynx is to foster collaboration between OU and educators—including K12 teachers, amateur astronomers, docents, and museum professionals—in the development and implementation of the *Galileo's World* exhibition.

Galileo, *Sidereus Nuncius* (Venice, 1610)





Holmberg Hall
University of Oklahoma
Norman, Oklahoma ©

The Western History Collections

125 YEARS OF OU MEMORIES

In 2015, the University of Oklahoma celebrates the 125th anniversary of its founding, which occurred on December 19, 1890. It was on this date that the first governor of Oklahoma Territory, George W. Steele, approved a bill for the establishment of a university in Norman. The Western History Collections, which holds the University Archives, will join in the celebration by exhibiting documents, photographs, and artifacts that trace the university's development over the years.

The exhibit will open this summer and will feature a rotating display of key historical items. Highlights include the academic cap and gown of OU's fifth president, William Bennett Bizzell, a 1905 Sooners football sweater, and the university's official copy of the charter that established OU. Student publications such as *The Whirlwind*, alumni scrapbooks, and other campus life memorabilia will help bring the university's past to life.

At first glance, university history might appear to be a dry subject, but the story of OU's first 125 years is as colorful and compelling as any contemporary best-selling novel. What is now Oklahoma's flagship university began as such in name only—there were no buildings, professors, or students yet in 1890—only the dusty streets of territorial Norman, and the surrounding prairie. But the people of the nascent state of Oklahoma were optimistic, hardworking, and eagerly sought opportunities for improvement. An institution of higher learning was a natural fit. Luckily, when OU's first president, David Ross Boyd, was appointed in 1892, he was equally optimistic and viewed the prospect of creating a new university as a wonderful opportunity. Once established, it became deeply rooted in the little town of Norman and the hearts of its people. The earliest generations of students and faculty quickly laid the foundations upon which many of OU's strong traditions were built: academic excellence, competitive athletics programs, and a tightly-knit campus community. Succeeding generations of Sooners continued building the university up, despite the challenges they faced over the years. Even during times of war, economic instability, political unrest, and social change, each graduating class has left the campus a better place. It is this spirit of strength in unity that is celebrated during OU's 125th anniversary.



TOP Colorized postcard of Holmberg Hall, which was built in 1918 and named for Fredrik Holmberg, the first dean of the College of Fine Arts, in 1938. **CENTER** The university's official copy of the bill that established OU, also known as "the charter." The territorial legislative assembly passed this bill December 19, 1890. **BOTTOM** Fire destroyed OU's first building in 1903. Jesse L. Rader Collection no. 22.

The early years of OU history are well-documented at the Western History Collections not only through official records in the University Archives, but also in photograph and manuscript collections that were given by OU alumni,

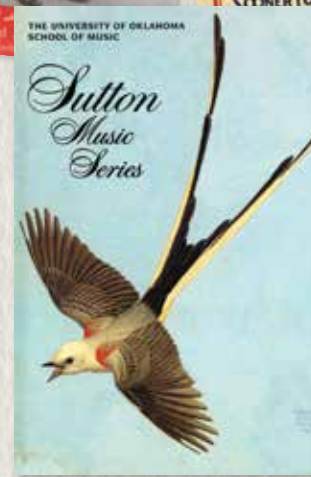
students, faculty, and staff. Our photograph collections alone could easily tell the full story of OU, with images reaching all the way back to the first classes held in the Rock Building in downtown Norman. Our manuscript collections contain memorabilia from every aspect of campus life, including student scrapbooks, dance programs, football game ribbons and tickets; an anti-Vietnam War demonstration armband; and even a handwritten copy of the OU Chant by its author, Jessie Lone Clarkson Gilkey.

For more information about the exhibit, contact the Western History Collections at 405-325-3641.

PATH TO EXCELLENCE

The Western History Collections is also marking the occasion by partnering with the OU Press to publish a book of university photographs, titled *Path to Excellence*. The book documents OU's journey from 1890 to 2015 in hundreds of black-and-white and color photographs, supplemented by colorful print items from the University Archives. *Path to Excellence* is expected to be released in the fall of 2015. It is one of a trio of OU Press books planned for the anniversary. The other members of the anniversary trio are an update of *The Sooner Story* that will include the years 1981 to the present, and David W. Levy's eagerly anticipated *The University of Oklahoma: A History, Volume 2, 1917-1950*. The 125th anniversary is also being commemorated through the *Live On, University Campaign*. This \$500 million fundraising initiative will provide permanent support for scholarships and fellowships, residential colleges, study abroad programs, and many other areas of campus. For more information on the campaign, visit <http://www.ou.edu/liveon.html>. For more information on the book, *Path to Excellence*, visit <http://www.oupublish.com/>.

O-K-L-A-H-O-M-A
 OUR CHANT ROLLS ON AND ON!
 THOUSANDS STRONG
 JOIN HEART AND SONG
 IN ALMA MATER'S PRAISE
 OF CAMPUS BEAUTIFUL BY DAY AND NIGHT
 OF COLORS PROUDLY GLEAMING RED AND WHITE
 'NEATH A WESTERN SKY
 OU'S CHANT WILL NEVER DIE.
 LIVE ON, UNIVERSITY!



TOP OU Mandolin Club, circa 1900. Emma A. Coleman Collection no. 49. PAMPHLETS, TOP TO BOTTOM Football program for the 1915 match against Kansas, held on Boyd Field in Norman. Record Group 20. The OU Independent Men's Association handbook, 1947. OU Collection no. 2483. Sutton Music Series program, 2001. Thomas Carey Collection box 4.



Federigo Cesi and Francesco Stelluti, *Apiarium* (Rome, 1625)

Science is Our Story

In the natural sciences, *Galileo's World* will present us with stories of physics, astronomy, mathematics, geology, natural history, microscopy, comparative anatomy, meteorology, chemistry, engineering and architecture, to name a few. For example, Galileo's friends in the *Academy of the Lynx* published one of the rarest works in the history of geology, a treatise on the origin of petrified wood (below right). Another member of the Lynx coined the name "microscope" for Galileo's compound-lens instrument, a "telescope accommodated for viewing small things very close up," while two other friends in the Lynx used Galileo's microscope to produce the first published microscopic observations, a study of the bee (above). Only a handful of copies are extant. Galileo's masterwork in physics includes an analysis of the bones of animals of differing size and weight, showing that a giant like Paul Bunyan would not appear simply as an extraordinarily large man with the same proportions (above right).

These stories intertwine the natural sciences and humanities, both in Galileo's age and at OU today. How many literature students know that Galileo gave lectures on Dante or wrote a book debating the literary merits of Tasso and Ariosto? Why did Galileo prefer to write in dialogue form, and in the vernacular? Do our students appreciate that, had it not been for Galileo's training

in music, his inclined plane experiment would have been unsuccessful? Or that Galileo's father played an important role in the invention of Italian opera? What new levels of understanding and mutual appreciation might our students acquire when they discover that, had it not been for Galileo's training in perspective drawing and Renaissance techniques for handling light and shadow, he would not have been able to make his telescopic discoveries?

Some people regard history as over and done with, irrelevant and obvious. Yet history (and our understanding of it) is dramatic; for just as with the stories of law, politics, religion or international relations in our world today, it might have turned out otherwise. Galileo's treatise on the Bible and science quoted Augustine throughout and was positively affirmed by Pope John Paul II. To a contemporary observer, what could possibly go wrong? To navigate the politics of church, state, court and university in his time, Galileo became a shrewd and accomplished master of political science. Galileo's trial offers an anti-paradigm, a colossal failure both in terms of popular opinion and of legal theory. Indeed, the case against Galileo ultimately lacked a valid basis in legal theory, being deficient according to the prosecution's own terms. Even after the trial had

begun, most observers expected a diplomatic compromise would be worked out. The gallery, *The Galileo Affair*, will explore what went wrong.

Other stories of *Galileo's World* bring the worlds of Asia, America and the Middle East together. In a previous issue of *Sooner Horizons*, we discovered that Galileo had a friend who travelled to China and wrote works in Chinese. Later in this issue we will see that *Galileo's World* invites our students to ponder why one of the most impressive works of the Scientific Revolution portrays Galileo in Middle Eastern dress, or how the scientific revolution was influenced by native civilizations of central Mexico.

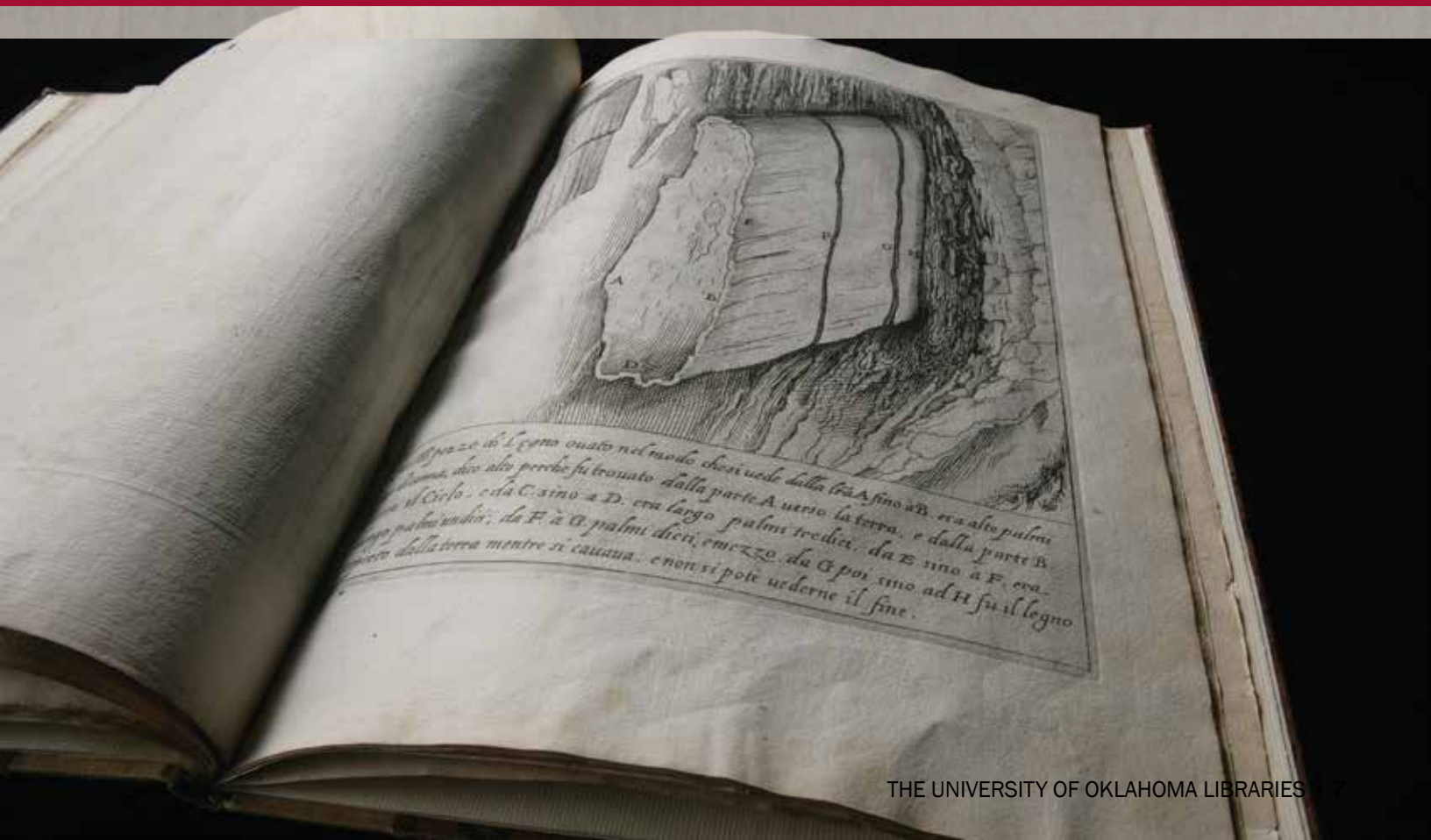
Galileo's World draws us into stories like these, and so brings the diverse worlds of a modern research university together. To engage such stories is an active experience. Thus—in addition to supporting the research of advanced scholars—special collections at OU Libraries invite students to enter the drama for themselves, to explore exhibitions as opportunities for undergraduate research. *Galileo's World* will put to rest the idea that a library exhibition consists of dusty cases full of musty old books; rather *Galileo's World* will be a form of performance

art. Together, through vigorous conversation, interactive digital assets and various exhibition-related activities, we will throw open the “windows upon worlds” which the rare books present to all of us. With this exhibition, OU becomes part of the ongoing story of Galileo.



Galileo Galilei, *Discorsi e dimostrazioni matematiche* (Leiden, 1638)

Francesco Stelluti, Federigo Cesi, *Trattato del legno fossile minerale* (Rome, 1637)





Bizzell Level 5 Renovation

A major renovation project now underway on the 5th floor of Bizzell Memorial Library will transform how students and the public experience special collections. With an area of approximately 10,000 square feet under construction, the project will reconfigure the old lobby, reading rooms and office areas into enhanced public access, research and exhibition spaces.

The floor houses four distinct special collections:

- History of Science Collections
- Bass Business History Collection
- John and Mary Nichols Rare Books and Special Collections
- Bizzell Bible Collection

Each collection will become more accessible and better known as a result of these renovations. They will share a common lobby, which will gain a more dignified atmosphere befitting a great research center. Near the elevator end of the lobby, visitors will orient themselves to exhibitions in a multimedia theater. At the far end of the lobby, the Roller reading room, along with an adjacent conference room, will provide an accessible and secure study space for students and researchers to examine special collections materials.

The new exhibition hall will bring more visitors to the Bass, Nichols and Bizzell areas of the floor than ever before. Every 5th floor exhibition, including *Galileo's World*, will draw from all four collections. This is one reason why exhibits will be interdisciplinary in character. (The word "World" in *Galileo's World* is important; *Galileo's World* is not a purely history of science exhibit, nor is it strictly about Galileo himself.)

The James G. Harlow, Jr. room will become a special events meeting room and classroom, distinguished by its unique combination of high tech with a rare books ambiance.

Behind the scenes, all four climate-controlled vaults on the 5th floor are now equipped with compact shelving, increasing the floor's capacity to maintain rare materials in safe and secure conditions.

Construction is currently on track to complete the renovation project by the end of the semester. Installation of *Galileo's World* will occur during the summer, toward an opening date of August 1. Stay tuned for another update in the next issue of *Sooner Horizons*.





Digitization Lab

Books included in the *Galileo's World* exhibition are being digitized by the University Libraries Digitization Lab. This ranges from first editions of the works of Galileo Galilei and Johannes Kepler, to Hernandez's 1651 study of natural history of Mexico, and many more. Digital images of the books will enhance the exhibits at each of the seven locations, and will be accessible through a new online repository allowing anyone with Internet access to explore these incredible rare books from anywhere in the world. Other digital images will be the basis for replicas of books, pages, and even objects such as globes for display or educational use.

Digital images enable even more exploration of the books and other works than one might imagine, because very high-resolution digital photography can capture details at or beyond the ability of the naked eye to see. For instance, the digital images can be resized in order to examine very fine details, including the evenness of the printer's ink, texture of the paper, and visible structure of the binding. Scholars and others can explore many such aspects of the books with very high-quality digital images. The digitized works in *Galileo's World* will become freely available online in the university's digital repository, easily accessible for scholarly and educational activities from teaching to research far beyond the timeframe of the *Galileo's World* exhibition. This enables *Galileo's World* to exist, not only over

months in the physical locations, but also in a timeless way, available for multitudes of interested people to discover and explore.

In 2012 the University Libraries digitization unit began digitizing rare books related to Galileo held in the History of Science Collections, with the acquisition of a very high-resolution digital camera. The dedicated Digitization Lab space opened in autumn 2013 with additional capabilities, including an overhead scanner that enabled high-resolution digitization of items as large as 29x38 inches. In fact, the first item digitized on that scanner was Federico Cesi's *Apiarium*, which will be part of *Galileo's World* and just barely fit on the scanner.

Nearly 40 undergraduate and graduate student employees from diverse academic disciplines have taken part in the digitization work that supports the *Galileo's World* exhibition since 2012. They have gained skills in digital photography, digitization best practices, project management, and working as a team to do excellent work, while working with amazing and often beautiful rare books and other materials. Alongside the two Digitization Lab staff members, they are proud to be a part of *Galileo's World*.

Barbara Laufersweiler
Coordinator, Digitization Lab



Recent Acquisitions: Vincenzo Coronelli

The tiny size of a volume by Vincenzo Coronelli belies its historical importance. In the *Epitome cosmografica* (Cologne, 1693), Coronelli explained how to use celestial and terrestrial globes and his techniques for constructing them. To make a globe, Coronelli printed sheets of map sections, called gores, which were then cut out and glued onto a wood and paper-maché base. The *Epitome cosmografica* describes how Coronelli famously constructed a pair of terrestrial and celestial globes for Louis XIV which measured 12 feet in diameter. Coronelli, a Franciscan theologian and astronomer who worked in both Italy and France, was one of the founders of modern geography and the most influential maker of celestial and terrestrial globes in the century after Galileo.

The History of Science Collections has long held the rare *Epitome cosmografica*, but in Fall 2014 were able to acquire a set of nine, exquisitely hand-colored gores designed for a 3-foot diameter Coronelli celestial globe. These nine gores will make a stunning visual complement to the *Epitome cosmografica* in the exhibit at the Fred Jones Jr. Museum of Art. The gores were designed by Arnold Deuvez and engraved by Jean-Baptiste Nolin in Paris in 1693 as a reprint of the 3.5 foot diameter celestial globe gores which

Coronelli printed in Venice in 1688. At the time, Coronelli's 1688 globe was the largest printed celestial globe, larger and more accurate than the globes by Blaeu and Hondius which preceded it. The 1693 Paris reprint was produced at the request of Coronelli's *Accademia Cosmografica*, with captions in Latin and additional text in French and Italian. The gores acquired by OU Libraries are reprints of this Paris printing, made with the original 1693 plates in 1800 and hand-colored at that time. These star maps will enable visitors to *Galileo's World*, as well as students and researchers at OU for years to come, to investigate the production of celestial globes in the tradition of the most important early modern globe and map-maker.

Coronelli's expertise extended beyond celestial globes to geographical globes and maps. The History of Science Collections has also recently acquired Coronelli's map of China, printed in Venice in 1696, which will be displayed in the *Galileo and China* gallery in Bizzell Memorial Library. Printed on two separate sheets, almost exactly 3 feet high and 4 feet wide in combined dimensions, it is one of the most impressive maps of China printed in Europe in the 1600's. Superior to any European China map to date, its notable identifications include the Great Wall of China, Beijing, Korea, and Taiwan. The

westernmost part of Japan is also visible. Detailed cartouches depict the tools of the surveyor and cartographer. The precision and thoroughness of the map reflects not only the importation of European cartographic methods into China by the Jesuits, but also the deep local knowledge and geographical skills of Chinese collaborators. In *Galileo's World*, a high-resolution digitized version on a large display will allow visitors to view Coronelli's China map alongside modern maps and compare their own favorite locales.



ABOVE *Epitome cosmografica* (Cologne, 1693)

BELOW Vincenzo Coronelli, *Celestial globe gores* (1693, 1800)



Reading room, Museo Galileo, Florence, Italy



Conservation Lab

The Museo Galileo in Florence is home to the collection of Galileo's scientific instruments and written works along with countless other artifacts pertaining to the history of science, making up the greatest collection dedicated to Galileo scholarship.

With the approaching exhibition, *Galileo's World*, and the founding of the University of Oklahoma's first conservation department and book arts program, it seemed an appropriate time and place to examine the enormous responsibility that library professionals have as stewards of history.

As a conservator I'm ever mindful of the deterioration caused by time and neglect or the destruction brought about by disaster. But in the mirror of time we clearly see that indifference has been the greatest destructive force in history.

A commitment toward the future often requires a renewed dedication to the past. In August of 2015, in celebration of its 125 anniversary, the University of Oklahoma will host an unprecedented exhibition, *Galileo's World*. In addition to the many developments that this new information dawn has brought, will be the founding of the University of Oklahoma's Rare Books and Manuscripts Conservation Department, renewing the University of Oklahoma's commitment to the preservation of our past in the midst of technological change.

Sean Richards
Director of Conservation

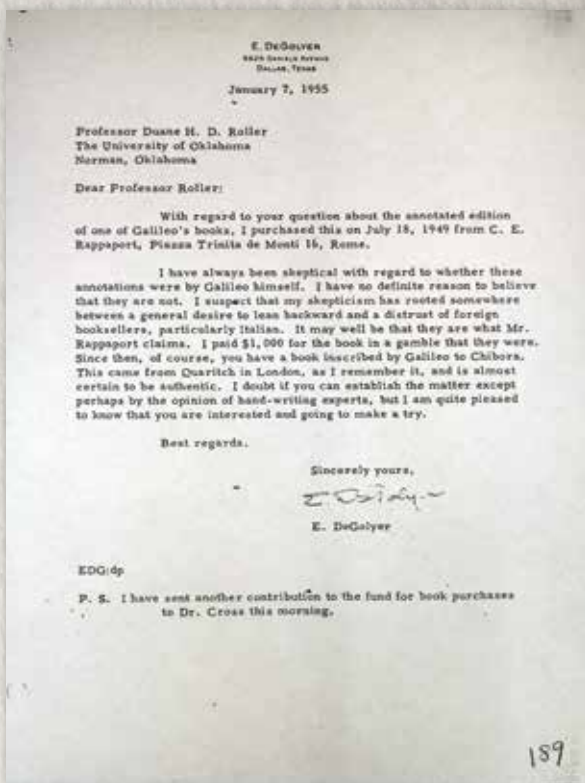


ROI: The OU Galileo Collection

With this issue of *Sooner Horizons*, we begin a column entitled "ROI," or "Return on Investment." In each future installment, the ROI column will explore some particular investment in OU Libraries that returned a reward far outweighing its initial cost, whether measured in monetary terms or cultural significance. In recognition of *Galileo's World*, we begin the series with Galileo's *Dialogo*, or *Dialogue on the Two Chief Systems of the World*, published in Florence in 1632.

The frontispiece (above) depicts Aristotle and Ptolemy on the left, holding an Earth-centered armillary sphere. On the right, Copernicus holds a sun-centered model of the universe. Just two systems appear in the *Dialogo*; Galileo nowhere mentions the Tychonic system favored by the Jesuits. As Galileo was already famous across Europe and didn't have to write in Latin, he instead wrote this work in Italian and as a dialogue. It was an immediate best-seller and remains in print today.

A letter has been preserved dated January 7, 1955 from Everette DeGolyer, the founder of the History of Science Collections, to Duane H.D. Roller, the first Curator. In this letter, DeGolyer reveals that he purchased the OU copy of the *Dialogo* for only \$1,000. DeGolyer regarded the book as overpriced due to a dubious claim that the annotations it contained were Galileo's



Letter from DeGolyer to Roller, Jan 7, 1955

Galileo's World will offer a once-in-a-lifetime opportunity to view in one setting a complete set of first editions of Galileo's printed works published during his lifetime.

own. But was the price outlandish? For comparison, a copy of the *Dialogo* sold at Sotheby's in 2010 for more than \$100,000, a 100-fold return on investment.

As DeGolyer noted, the OU copy contains several annotations. One annotation (right) says that the figure of falling bodies is "in error, it is upside down." It is a printer's error, corrected in the second edition. Another page displays a new sentence by the character Simplicio, to be inserted before a long paragraph by Salviati, the character in the dialogue who speaks for Galileo (below right).

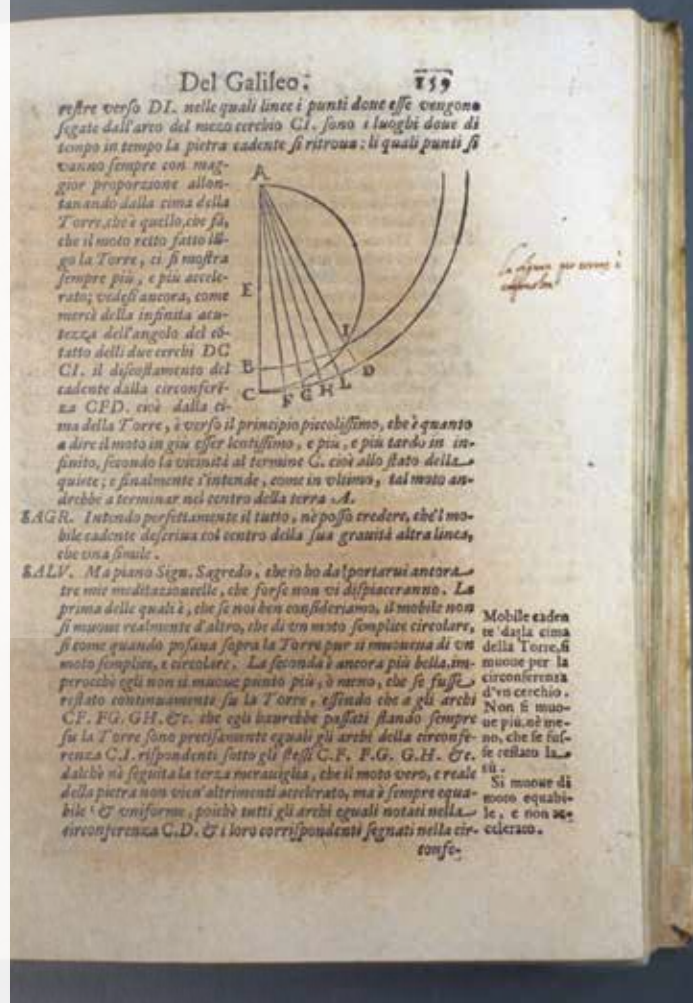
Roller invited Stillman Drake, a Galileo scholar and editor of Galileo's scientific manuscripts, to visit OU and examine the annotations. Drake concluded that they are Galileo's handwriting, in his own copy of the book. With authenticated annotations by Galileo, how would we calculate the return on investment now? Several zeros might be added at the end of the dollar value.

In addition, the *Dialogo* acquires cumulative value due to synergy with the books that surround it in the Galileo collection. *Galileo's World* will offer a once-in-a-lifetime opportunity to view in one setting a complete set of first editions of Galileo's printed works published during his lifetime. Very few libraries in the world hold more than half of these works in first editions.

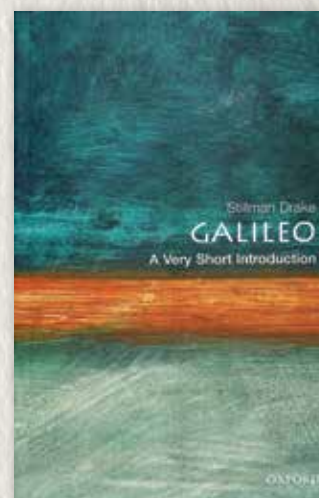
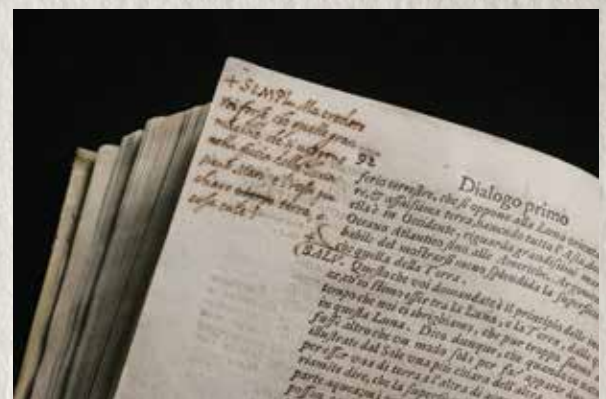
Moreover, the *Dialogo*, the book for which Galileo was put on trial, is only one of four first editions of Galileo held by OU, which Drake authenticated as containing Galileo's own handwriting. The others are the *Sidereus nuncius* (Venice, 1610), the first published report of telescopic observations; the *Compasso* (1606), Galileo's first and rarest work, a manual for an engineering instrument he invented and manufactured in his home; and the *Difesa* (1607), a defense of the *Compasso* against an imposter and plagiarizer who had impugned his character and stolen his intellectual property. In addition, a fifth OU copy was owned by Galileo himself and passed through his hands (*Il Saggiatore*, 1623).

Given the vigorous conversation that *Galileo's World* will engender, are we in a position now to begin to measure the significance for OU, or the cultural return on investment, which has accrued to DeGolyer's purchase of the annotated *Dialogo* for OU Libraries more than 60 years ago?

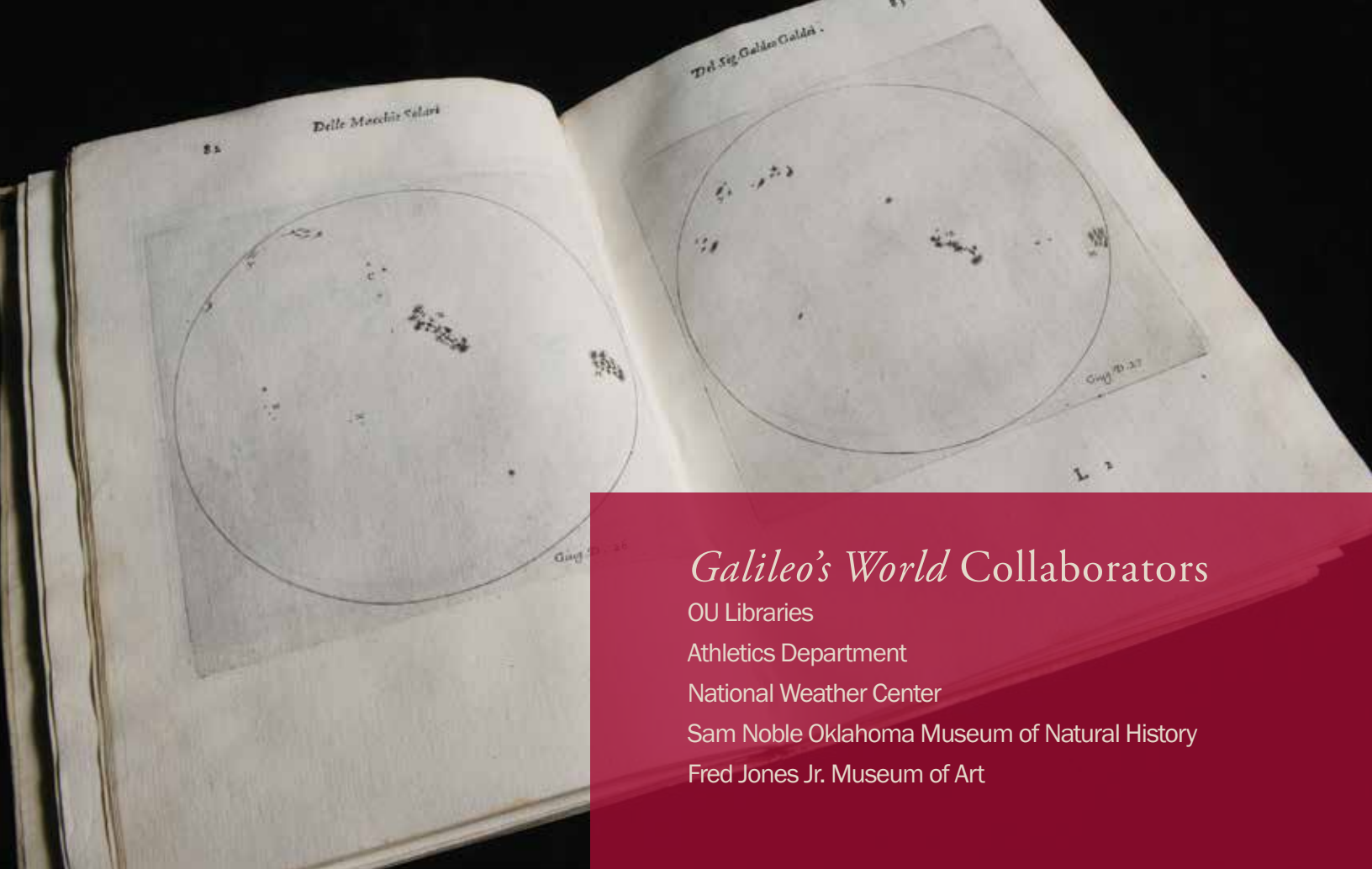
Kerry Magruder
Curator, History of Science Collections
The John H. and Drusa B. Cable Chair



Galileo Galilei, *Dialogo* (Florence, 1632)



Looking for a quick, accessible introduction by a Galileo scholar? Consider Stillman Drake, *Galileo: A Very Short Introduction*, by Oxford Press.



Galileo Galilei, *Istoria e dimostrazioni intorno alle macchie* (Rome, 1613)

Galileo's World Collaborators

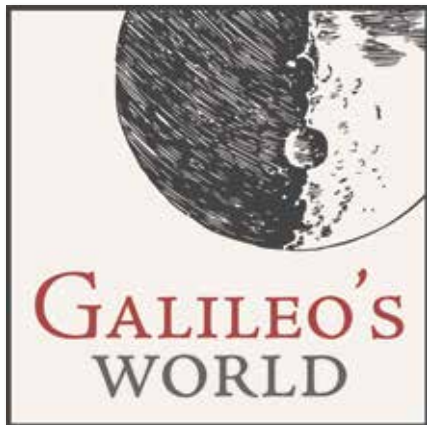
OU Libraries

Athletics Department

National Weather Center

Sam Noble Oklahoma Museum of Natural History

Fred Jones Jr. Museum of Art



Galileo's World Collaborators

It is fitting that the big idea of an “exhibition without walls,” distributed across campus and beyond, is “bringing worlds together.” The very idea of celebrating the University’s 125th anniversary in this way arose a year and a half ago through dialogue with many university partners. We began to recognize that an exhibition devoted to Galileo and his world offered great possibilities for expressing each institution’s mission at this moment in our history, thereby knitting the University into a more interlaced community. With this collaborative approach to the *Galileo's World* exhibition we seek to demonstrate the essence of the University that will live on into the next century and beyond. In this common effort, *Galileo's World* helps us reflect upon our history and tradition, connect it with our present experience, and deepen our capacity for innovation. A few of the partnerships that are making *Galileo's World* a reality are described below; these will be revisited and others added in the next issue of *Sooner Horizons*.

OU Libraries

Two and a half years ago the University of Oklahoma Libraries began a process of self-transformation. Signs of that transformation are already evident in the collaborative international partnerships made possible through the digitization laboratory and the opening of the Peggy V. Helmerich Collaborative Learning Center in Fall 2014. The ongoing establishment of an Innovation Hub for the research campus, a conservation and book arts laboratory, an exhibit preparation laboratory, and the renovation of 5th floor special collections indicate the first fruits of that transformative vision. When understood in this light, *Galileo's World* represents the inauguration of a new era for the Library in exhibit-based engagement.

Bizzell Memorial Library will greet visitors on the main floor by exploring the impact of Galileo, today. On the 5th floor, visitors will experience replicas of Galileo's compass and inclined plane, displayed in an interactive manner alongside the rare books. Classic astronomical instruments, including a celestial sphere, astrolabe, armillary sphere, orrery and sundial, will enable visitors to comprehend the motions of the heavens as they were understood in an era when music and astronomy were sister sciences.

The University Libraries, including the Schusterman Library of OU-Tulsa and the Robert M. Bird Library of the OU Health Sciences campus in Oklahoma City, will bring the campuses of the University together. Consider the common interest in medicine and the health sciences shared by all three OU campuses: How many of our students know that Galileo was once called as an expert witness to testify at trial about the physical effects of melancholia? That an OU first edition was inscribed by Galileo to a friend who was a physician in Venice? That another friend of Galileo's, a physician in Venice, invented a device to measure the pulse called a pulsilogium, an ancestor of the blood pressure cuff? That Mercurialis, one of the leading physicians of the Renaissance who was responsible for the Greek edition of the Hippocratic corpus, recommended Galileo for a university position? That publication of Galileo's *Dialogo* was held up for years due to an outbreak of plague? That physicians such as Borelli applied Galileo's physics of the lever and other simple machines to the working of the musculoskeletal system? These begin to suggest the connections visitors may explore on all three campuses, juxtaposing the tools and achievements of Galileo's era with those of OU today.



EXHIBITS

BIZZELL MEMORIAL LIBRARY

Galileo, Today

Tower of Piza sculpture by the OU College of Engineering

5TH FLOOR SPECIAL COLLECTIONS

Music of the Spheres

Galileo, Engineer

Galileo and China

Controversy over the Comets

The Galileo Affair

A New Physics

ROBERT M. BIRD HEALTH SCIENCES LIBRARY

Galileo and Health Sciences

SCHUSTERMAN LIBRARY

Galileo and the Scientific Revolution



Vincenzo Galilei, *Dialogo della musica antica et della moderna* (Florence, 1581)

EXHIBITS

HEADINGTON HALL

Galileo and Sports



Andreas Vesalius, *De humani corporis fabrica* (1543)

Athletics Department

With the acquisition of Vincenzo Galilei, *Dialogo della musica antica, et della moderna* (Florence, 1581; “Dialogue on Music, Ancient and Modern”), this year is the third consecutive year that OU Athletics has contributed a major rare book to the OU Libraries’ Galileo collection. Galileo’s father, Vincenzo Galilei, a significant musical theorist, was one of the inventors of Italian opera. His work provided an exemplar for Galileo’s own *Dialogo* (1632, “Dialogue on the Two Chief Systems of the World”), a masterful defense of the Copernican sun-centered cosmology for which he was put on trial. The father Galilei and the son Galileo shared a love for the lute, a robust debating style and an emphasis on experimental methodologies. Vincenzo Galilei’s *Dialogo* will be featured in the Music of the Spheres gallery.

Thanks to financial assistance provided by the OU Athletic Department, the University has acquired for the *Galileo’s World* exhibition, in addition to the dialogue of Vincenzo Galilei, an original Galileo-related manuscript by Oratio Grassi (1623, described in a previous issue of *Sooner Horizons*) and a beautiful work relating Renaissance art to Galileo and the telescope (Lorenzo Sirigatti, 1596, to be described in the next issue). It was in our initial desire to say thank you for the Grassi manuscript that the idea for *Galileo’s World* was born.

“Coach Galileo” will offer advice to the Sooners in an exhibit located in Headington Hall, where athletes will strike the poses of the muscle men of Vesalius (left, 1543) in a complimentary fashion to the posture of the Heisman trophy. We look forward to the grand finale of the *Galileo’s World*, a “Stadium under the Stars” event in fall of 2016.

National Weather Center

The National Weather Center, a central partner in OU's research enterprise, will host exhibits related to the thermometer, barometer, and space science. Meteorology encompasses the large and the small, as suggested by the Copernican cosmic section of Thomas Digges and the treatise on the snowflake by Johann Kepler. The history of meteorology demonstrates that it has always addressed interdisciplinary problems by adopting innovative methodologies. Meteorological investigations have, throughout history, explored emerging research problems that require multidisciplinary expertise.

How many of our students will appreciate that this cosmic section, the first defense of Copernicus in England, was published in a meteorological work? Or consider how Kepler likewise encompassed the realms of astronomy and meteorology. Kepler printed the *Strena* in 1611, a 24-page study of the snowflake, as a New Year's greeting for some friends. In it Kepler distinguished the way organisms grow, by differentiation, from the growth of crystals (like the snowflake) by accretion. The work stimulated inquiry in mineralogy for the next two centuries. As recently as 1998, Thomas Hales provided a mathematical proof of "Kepler's conjecture" about crystal packing. The *Strena* is quite rare, and illustrates the depth of the OU Kepler collection which includes all major works published during his own lifetime.



Johann Kepler, *Strena* (1611)



EXHIBITS

NATIONAL WEATHER CENTER

Galileo and Experiment

Galileo and Kepler

Copernicus and Meteorology

Galileo and Space Science

Oklahomans and Aerospace



ABOVE AND BELOW: Francisco Hernandez, *Nova Plantarum, animalium et mineralium Mexicanorum historia* (Rome, 1651)

EXHIBITS

SAM NOBLE OKLAHOMA MUSEUM OF NATURAL HISTORY

Galileo, Natural History and the Americas

Eyes of the Lynx: Galileo and the Microscope

Sam Noble Oklahoma Museum of Natural History

Just last year, the Sam Noble Oklahoma Museum of Natural History was awarded the National Medal for Museum and Library Service, the nation's highest honor conferred on museums and libraries for service to the community. This award-winning museum is hosting two exhibits devoted to microscopy and the natural history of the Americas.

Galileo's colleagues in the Lynx contributed to many studies of the natural history of plants, animals and minerals, including the most significant early natural history of America to be printed in Europe. In the late 16th century, Francisco Hernandez lived among the Aztecs in central Mexico and collected their knowledge of plants and medicine, preserving the Aztec names. The result was this monumental work, incorporating approximately 800 woodcut illustrations. Federigo Cesi and the Lynx issued a few preliminary copies in 1628. Widely anticipated as a guide to the "fountain of youth," Francesco Stelluti finally printed a revised version in 1651. The Oklahoma copy consists of the original sheets of the 1628 printing together with a later preliminary gathering of five leaves including the later frontispiece and title page.

This story will help OU students recognize that European progress in the life sciences, as far back as the Scientific Revolution, directly depended upon the natural knowledge of Native Americans.



Fred Jones Jr. Museum of Art

The Fred Jones Jr. Museum of Art is known for its fine collections of Impressionist and Post-Impressionist art, 20th century American paintings, as well as Native American and Southwestern art. Their exhibit will explore the connections between science and art.

Among the books to be displayed is the OU copy of the *Sidereus nuncius*, the first published report of observations made with a telescope, which Galileo published in Venice in 1610. Galileo discovered four satellites of Jupiter and mountains on the Moon. It made Galileo an international celebrity almost overnight. The OU copy was inscribed by Galileo himself in the lower right corner, to Gabriele Chiabrera, a poet in the Medici court.

Visitors to *Galileo's World* at the museum will explore connections between Galileo's telescopic discoveries and Renaissance art. Another gallery will feature depictions of the moon, stars and constellations from the holdings of the FJMA and from the History of Science Collections, such as the Coronelli celestial gores described earlier in this issue.

Johann Hevelius, the leading telescopic observer of the mid-17th century, published the first comprehensive lunar atlas less than 40 years after Galileo's telescopic discoveries. With income from the family brewery, Hevelius constructed the largest telescopes then known and operated the most sophisticated observatory in Europe. The massive *Selenographia* (Gdansk, 1647) accomplished the mapping of the moon and set a new standard for precision that remained unmatched for a century. Forty stunning copper-plate engravings portray topographical relief along the moon's shadow-line, or terminator, at every conceivable angle of solar illumination (above right). Three double-leaf plates depict the entire lunar surface as composite representations of these individual topographical studies. In addition, the *Selenographia* contains nearly 70 full-page engravings.

On the frontispiece (below right), Hevelius celebrates science as the heritage of many cultures. Here, in one of the most impressive works of the Scientific Revolution, Hevelius portrays Galileo in Middle Eastern dress, with a turban, as a tribute to the tradition of medieval Islamic optics.

This first edition of the earliest true lunar atlas was added by the University Libraries to the History of Science Collections on the occasion of the investiture of David L. Boren as the 13th president of the University of Oklahoma, September 15, 1995.



ABOVE AND BELOW: Johann Hevelius, *Selenographia* (Gdansk, 1647)

EXHIBITS

FRED JONES JR. MUSEUM OF ART

*Galileo's World: The Artful
Observation of the Cosmos*





Francis Bacon, *Instauratio magna* (London, 1620)

CURRENT EXHIBITIONS

Fall 2014–Spring 2015

The George & Cecilia McGhee Artifact Collection: A Voyage through China, Mesoamerica and the Middle East, Monnet Hall room 300

Spring–Summer 2015

Transforming the Oklahoma Prairie: More Than a Century of Trees from David Ross Boyd to David L. Boren, Monnet Hall room 300

UPCOMING EXHIBITION

Fall 2015 - Fall 2016

Galileo's World

For additional information, please contact:
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