

Linda Hall Library Report 2013-2014



The Linda Hall Library  
5109 Cherry Street  
Kansas City, Missouri 64110

## President

Lisa M. Browar

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Linda Hall Library  
Science, Engineering & Technology  
Information for the World

[www.lindahall.org](http://www.lindahall.org)

## President's Message

It has been my privilege to lead the Linda Hall Library for over six years and during this time I have gained a lot of perspective. The Library is an international destination for advanced scholarship and research, attracting both seasoned and emerging scholars the world over to its collections. It is also a destination for anyone wishing to know more about science and the role it plays in contemporary life.



Coming from a decidedly unscientific background as I have, working at the Linda Hall Library has opened new worlds to me through an exposure to science, engineering, technology, and their histories.

I am filled with admiration for the scholars who use the Library's collections to revisit and re-imagine historical events. I similarly admire the speakers who deliver lectures of diversity and variety, and inform our lives with an understanding of science and its impact. Finally, I am so very proud of the Linda Hall Library staff members who devote their time and energy to building these magnificent collections and helping interpret them both for scholars and the general public. Such feelings of admiration and pride for those who make complex subjects accessible and relevant have given me renewed perspective on the importance of the Linda Hall Library to current scholarship, intellectual history, and the world around us.

The events and accomplishments of 2013 and 2014 chronicled in this report highlight some of the Library's more notable and memorable achievements. They are, however, the proverbial 'tip of the iceberg.' There is so much more taking place at this exceptional organization, and it awaits your discovery. I invite you to explore the collections and programs of the Linda Hall Library in the pages of this report, on our website ([www.lindahall.org](http://www.lindahall.org)), or in person. I promise that you, too, will acquire a new perspective.

A handwritten signature in black ink that reads "Lisa M. Browar".





# Linda Hall Library Report 2013 - 2014

Rio Obispo



WORKMEN'S CAMP AT C...  
A.B. Nichols led one of...  
Arriving May 31, 1904,  
erected a "shack in the...  
a year. During the ne...  
built to house, suppor...

the growth of the mosquito population and the spread of malaria, to secure a supply of clean water, to build a sewage system...



David McCullough press conference in the West Exhibition Hall





## Research

Monica Brannon, 2013 Research Fellow

Who uses the Linda Hall Library? A typical researcher is difficult to define. Consider these recent examples:

An academic researcher needed an article on 1960s Cold War-era technology. Within minutes Library staff responded with both the Russian original and the English translation.

An architectural historian in New York received help finding an early 20th century article on New York's historic Paterno building.

A student at the Kansas City Art Institute used the Library for research on extinct South American animals to support her senior thesis on natural history illustration.

An historian of science at the American University in Cairo spent two days at the Library researching 16th century astronomy.

The diverse backgrounds, hometowns, and affiliations of the thousands of researchers who use the Library each year attest to its local, national, and international importance. This diversity also extends to the 14 research fellows in residence during the past two years. Fellows' affiliations included Harvard University, Indiana University, The New School, National Autonomous University of Mexico, Missouri Western State University, the University of Lisbon, New York University, Indiana State University, the University of Texas at Austin, Virginia Tech, the University Wisconsin—Madison, the New University of Lisbon, and the University of Milan. The Fellows' research areas of interests were similarly wide-ranging. Topics included depictions of birds in art and culture, the history of rural electrification cooperatives, 19th century Jesuit astronomers in Lisbon, and the history of coastal erosion, to name just a few. Through a series of public lectures, the Fellows simultaneously shared their research results with members of the local community and, through live streaming technology, with an international community eager to learn more about science and its history.

36

Online research guides available on the Library's website

28,832

Average number of annual page views of the guides

1,227

Average number of reference questions answered each month



THE BACK STORY

Textual information explaining the historical context of the color diagram.

COGNOMICA  
NOTE  
Textual information providing a note on the diagram's nomenclature.

HOW THE DIAGRAM WORKS

Textual information explaining the process of color mixing and the diagram's function.



"A Catalogue of Simple and Mixt Colours, with a Specimen of..."  
Richard Waller, *Philosophical Transactions*

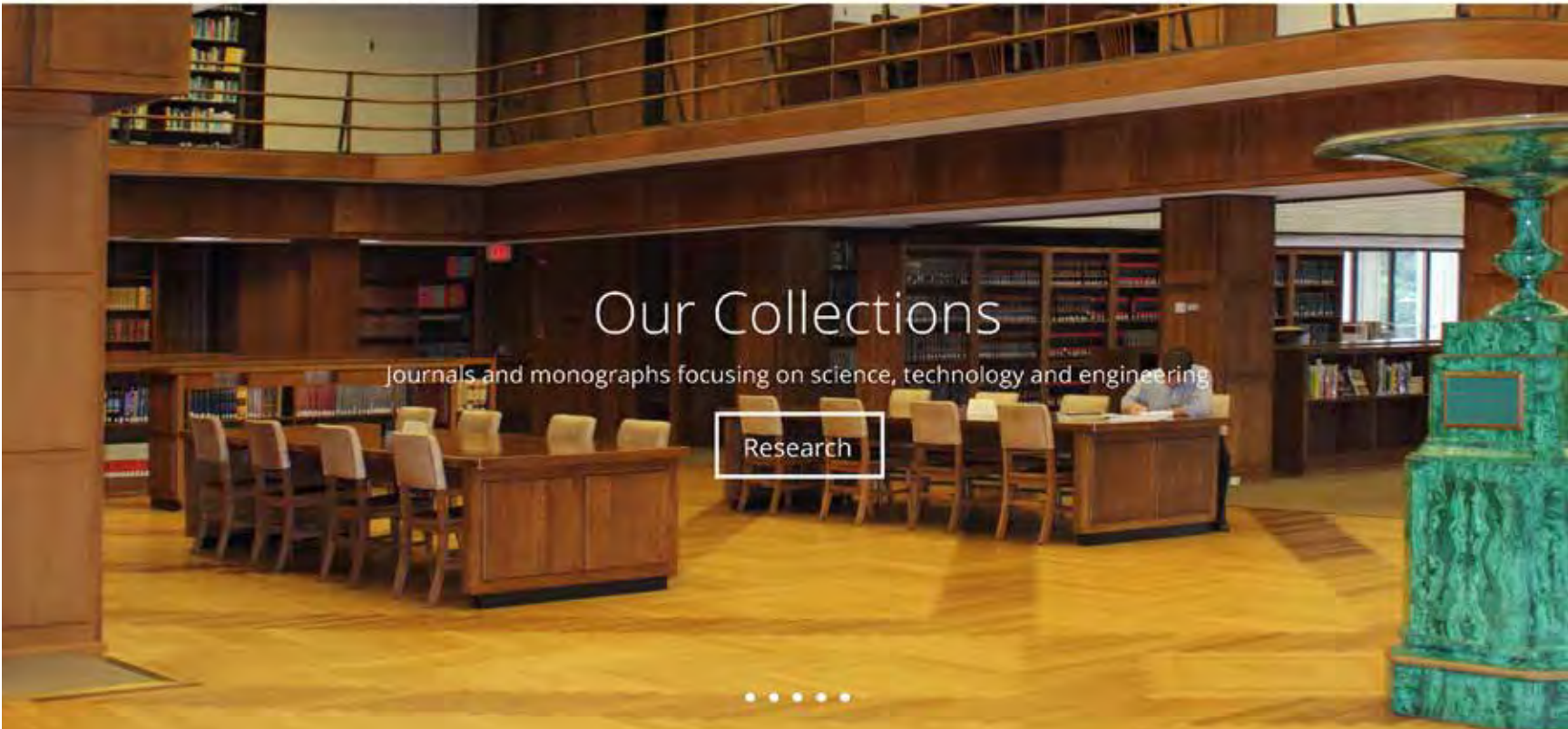


...ntallo," notes from a lecture given to the Göttingen Academy of Science, 1758.  
...thumously in Tobias Mayer, *Opera Inaedila*, 1773.



*Wheels, Pyramids and Spinning Tops* exhibition in the West Exhibition Hall





## Collections

Screenshot of page from the Library's new website design

The Linda Hall Library's research collection is widely known for its breadth and depth with 1.2 million volumes, including over 47,000 journal titles and material in 69 languages. In 2012, the Library and the Center for Research Libraries (CRL), a consortium of more than 200 academic libraries worldwide, formed a Global Resources Partnership to leverage the science, technology, and engineering collections of the two institutions in ways beneficial to CRL's members. During the past two years, the partnership has seen tremendous growth in document delivery requests filled by the Library, averaging over 11,000 filled requests per year to CRL member libraries and their patrons.

The Library's website, the public portal to its collections and other resources, underwent a complete renovation in 2014. The result is an enhanced ability to engage researchers locally, nationally, and internationally with improved navigation and access to the Library's online catalog, research guides, online exhibitions, and digital collections, as well as to the Library's grounds. Visitors to the revised website will notice a new dynamic online map of the Library's arboretum made possible through the use of global positioning system (GPS) technology.

The Library's digital collection houses nearly 250,000 books, journals, and images that are freely available in full-text. New digital collections include "Geology, Paleontology & Theories of the Earth" and "Color and Optics."

Rare book acquisitions of note included three lithographic proof plates for John James Audubon's *The Quadrapeds of North America* (1849-1854), Louis Agassiz's *Methods of Study in Natural History* (1863), and the first edition of the original French text of Rene Descartes' *L'Homme* published in 1664. The Library was gifted the personal library collection of the late Dr. Ruth Patrick (1907-2013). Highlights of this collection include a copy of the 1745 edition of Robert Hooke's *Micrographia*, along with other books dating from the 16th through 19th centuries, including Louis Joblot's *Observations d'histoire naturelle, faites avec le microscope* (Paris, 1754-55), and Jan Swammerdam's *Histoire generale des insectes* (Utrecht, 1685).

# 1,200,000

Volumes in the collection

# 363,244

Monographs in the collection

# 10,000

Approximate number of volumes housed in the rare book vault

# 1472

Publication date of oldest book in the collection



Educators from Brazil tour the History of Science Center



Egyptian librarians visit the Digital Projects camera room







## Global and Local Community

The Linda Hall Library opened in 1946 in fulfillment of Herbert and Linda Hall's bequest establishing a library "for the use of the people of Kansas City and the public generally." Nearly 70 years later, the Library's commitment to its local and global communities is evident by the people who walk through the doors, the groups who tour the building, and by international researchers who utilize the Library's online resources.

In September 2013, a delegation of Egyptian library directors and information specialists touring American academic and research libraries visited the Linda Hall Library. The Library was also a stop on a nationwide journey taken by a group of Brazilian engineering professors and academic administrators in October 2013. While here, the groups toured the Library and participated in discussions with members of the Library's senior management team about the American system of education and the Library's role in the community.

Each year, thousands of people from the Kansas City metropolitan region come to the Library to do research, attend public lectures, and view exhibitions. In 2014, the Library collaborated with the Smithsonian Institution and the Kansas City Public Library to bring prominent Smithsonian scientists to Kansas City for a lecture series. Another highlight of the Library's community involvement is an annual exhibition of award-winning projects from the Greater Kansas City Science and Engineering Fair. The Library recognizes future scientists, engineers, and inventors by selecting outstanding projects for display in the Main Reading Room. In addition to the project display, the Library confers the Joseph C. Shipman Award for mastery of scientific writing demonstrated in either a project or paper. The projects on display reflect scientific curiosity, an in-depth understanding of the scientific process, and are visually impressive. The exhibition culminates in a Blue Ribbon Reception in the Library's Main Reading Room, an event celebrating student achievement and the Library's commitment to research and public education in the Kansas City community.

# 244

International exchange partners

# 55

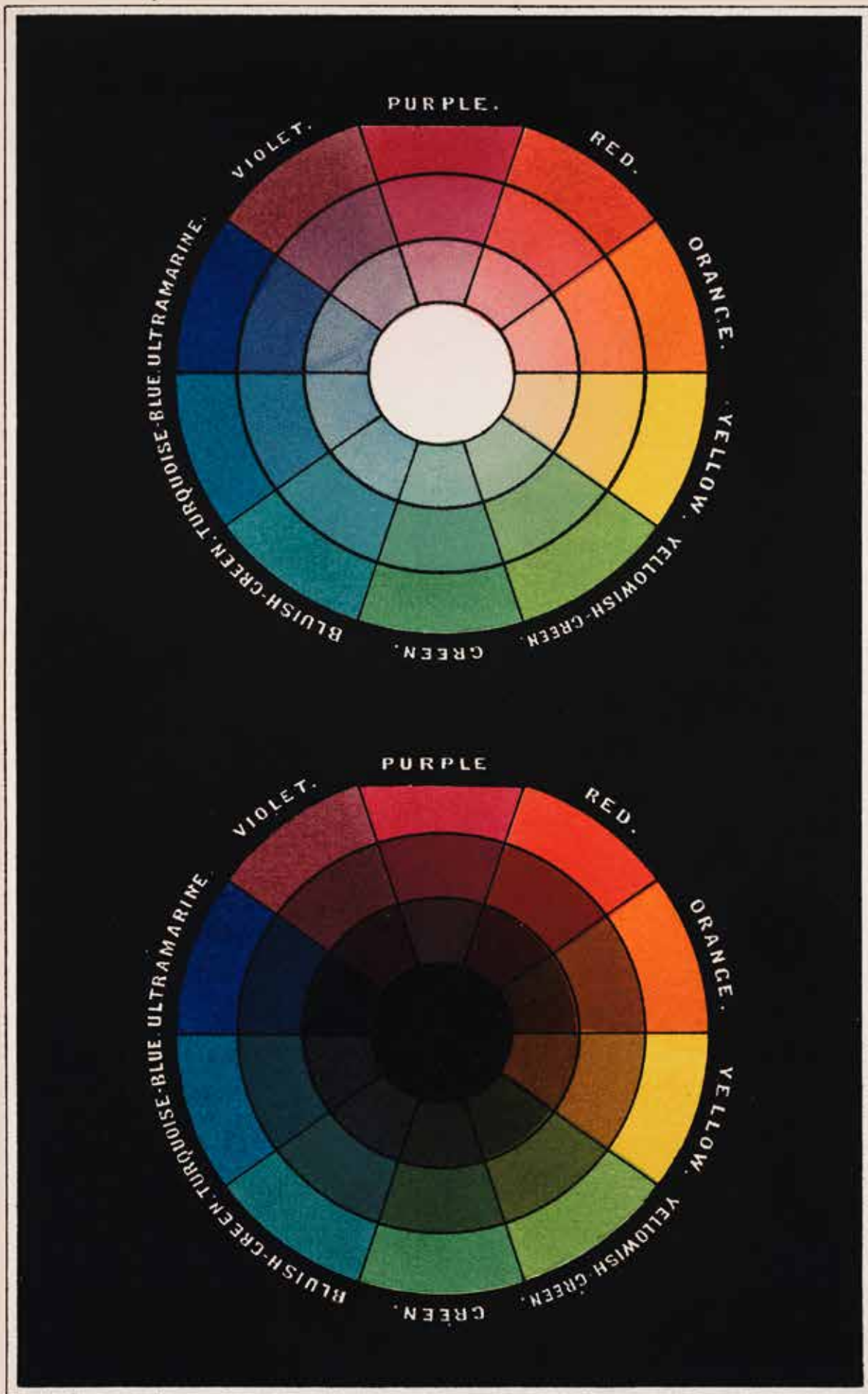
Countries represented by  
exchange partners

# 78

Science Fair students awarded Blue  
Ribbons by Library staff

# 37

Kansas City area elementary and  
high schools represented by the  
Blue Ribbon winners



Publ by I. Prang & Co. Boston.

*The reader will please note that some of the pigments used in printing this plate more especially the reds and violets are liable to change on continued exposure to light. Chemistry has not yet succeeded in discovering fast colors of these hues, which are at the same time adapted to printing.*





## Art & Science

"A picture is worth a thousand words." Someone who views an Audubon print or an intricate lithograph of a dinosaur skeleton can attest to the validity of this oft quoted statement. Like scientists, artists have a goal to "explain, illustrate, and educate." Visual journalist Oliver Uberti likened scientific illustration to "a search for a deeply personal line of inquiry," and said that the intersection of art and science "is a symbiotic relationship, because artists...use their art to share with the world the discoveries of science."

In 2013, the Library's lecture series and exhibitions explored the multidisciplinary aspects of art and science. As visitors to the Library discovered, the intersection of art and science is more than illuminating a scientific concept. Color, optics, nuclear physics, cyborg technology, computer animation, and 3D printing were some of the topics explored in the Library's year of art and science public programming.

The exhibition, *Crayon and Stone: Science Embraces the Lithograph, 1800-1899*, surveyed the history of scientific illustration during the 19th century. A collaboration with printmaking students at the Kansas City Art Institute presented modern interpretations of lithographic artwork. *Wheels, Pyramids, and Spinning Tops: The Scientific Approach to Color* provided insight into the line between the sensation and the science of color.

Public lectures included Ken Lacovara's pioneering work in the use of laser scans and 3D printing technology to create replica dinosaur bones; Phillipe Collon's forensic use of nuclear physics to detect art forgeries; Neil Harbisson's "eyeborg" implant that enables him to hear colors; and Jason Schleifer's cartoon world brought to life in his role as Head of Character Animation at DreamWorks. The common thread among these and other programs was the intricate relationship between art and science. One discipline would not be the same without the other, and the way in which humans perceive the world around them is enhanced by this marriage of studio and laboratory.

83

Volumes digitized in the new color and optics collection

18,924

Individual text and image files in the collection

16

Original lithographs produced for the exhibition by Kansas City Art Institute students





Caitlin Silberman, 2014 Research Fellow, visiting with guests in the History of Science Center





# Panama Canal Centennial

Scale model of the Gatun Locks

For centuries, the narrow Isthmus of Panama seemed an ideal place to connect the Atlantic and Pacific Oceans. A failed French attempt at a ship canal in the late 19th century succumbed to tropical disease and financial problems. The U.S. took over the monumental challenge in 1904, opening the 50 mile long Panama Canal 10 years later on August 15, 1914. In the century since its opening, more than a million ships have passed through the Panama Canal, a testament to the ingenuity, tenacity, and skill of its builders. David McCullough has said that the story of the Canal's construction is "the story of colossal courage in the face of extreme adversity, colossal failure, and extraordinary success."

The Linda Hall Library was uniquely positioned to retell the story of the building of the Canal. Drawing on a wealth of unique material assembled by A.B. Nichols, Office Engineer during the Canal's construction, the gallery and online exhibition *The Land Divided, The World United* recounted the epic saga of the Canal's construction from the perspective of a civil engineer. Personal documents, photographs, blueprints, and maps revealed the magnitude of work and sacrifice that forever changed the economic and political landscapes of the world.

Pulitzer-prize winning author David McCullough headlined a year-long lecture series complementing the exhibition. Lecture topics ranged from the history of the Panama Railroad and a reforestation project in the Canal watershed, to fossil digs in current expansion sites. The Library also published a permanent web version of the exhibition, funded through a generous grant from the United Engineering Foundation.

10

Years A.B. Nichols spent in Panama during construction of the Canal

2,500

Photographs, schematics, and blueprints in the A.B. Nichols Panama Canal Collection

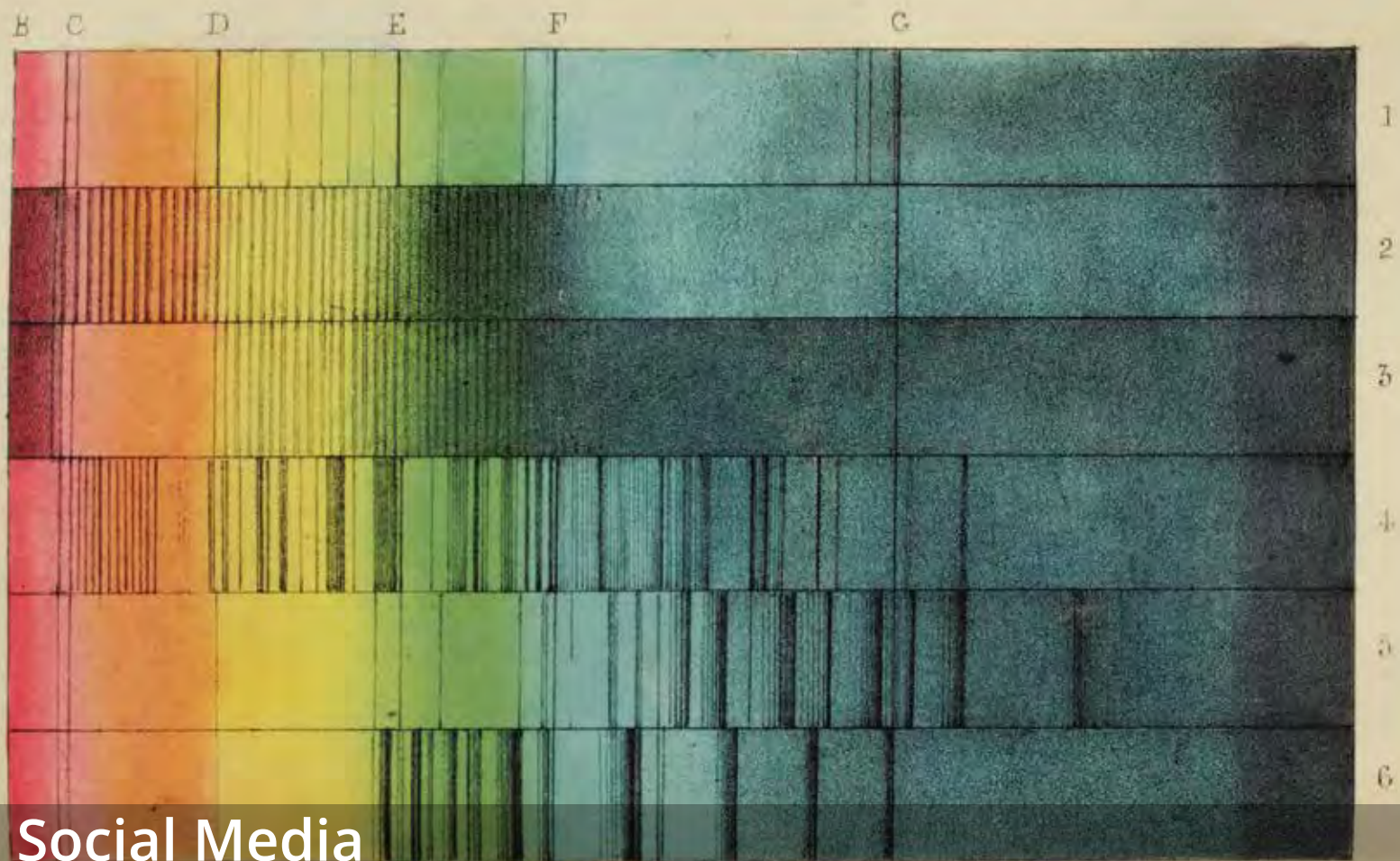
100

Notebooks with maps, drawings, postcards, and personal observations in the collection

100

Percent of the Nichols Collection digitized and available on the Library's website

*Spectra of Daylight through Coloured Gases & Vapours.*



## Social Media

Plate from William Allen Miller's article *On some cases of lines in the prismatic spectrum*, 1845

What do an article about a groundskeeper cutting open a persimmon seed, an image of the spectra of daylight, and a lecture on time travel have in common? The three items were the most liked, most reblogged, and most watched posts on the Linda Hall Library's Facebook, Tumblr, and Vimeo sites.

Communicating and sharing information have always been hallmarks of librarianship, and the growth of social media has enabled the Library to extend its collections and services, and enhance its public profile beyond its traditional reach. During the past two years, Library staff members have posted, shared, uploaded, or tweeted information almost daily on a variety of topics from the ones mentioned above to updates on research guides, lectures, and interesting science information of note.

The Library's Twitter feed has added numerous followers who receive real-time photos from events, images of the flora and fauna from the arboretum, and up-to-the-minute information on the Library's programs and services. A new and popular social media feature, "Scientist of the Day," reaches hundreds of visitors to the Library's website and Tumblr site each day. Lecture videos available on the Linda Hall Library's Vimeo channel have been viewed by over 21,000 people in 121 countries on six continents, a testament to the wide reach of social media. The Library also began live streaming many of its lectures enabling people around the world to become lifelong learners at the Linda Hall Library no matter where they live.

5

Number of Library social media platforms

20

Percent increase of new Facebook followers during 2014

87

Lecture videos available on the Library's website

121

Countries where videos have been watched



*History isn't just about politics and war. History is about science and engineering and all that this library is about...and never more so than in the time in which all of us are alive.*

David McCullough  
October 2, 2014

## Mission Statement

The Linda Hall Library is a guardian of the collective intellectual heritage with regard to science, technology, and engineering disciplines; a destination for advanced research and scholarship, and a center for public education in the sciences.

Additionally, the Library's grounds are maintained as an urban arboretum that is open to the public for education and enjoyment.



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Science, Engineering & Technology  
Information for the World

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