



Digital Scholar Training Pilot Series

Fall 2014 Report

Helping Researchers Better Utilize the Web

Helping Researchers Better Utilize the Web

Contents



Overview	3
Perspectives from Digital Scholars	4
Key Data	6
Analysis of Individual Workshops	8
Outlook & Current Spring Workshop	11
Workshop-Related News Stories	14
Acknowledgement	15

Overview

The Digital Scholar Training Initiative was launched to train researchers in the use of digital approaches to advance their research and career goals.

To inaugurate the 2014 pilot series, we collaborated with the USC Office of Research; Experiment, a donation-based crowdfunding platform; and Symplur, a healthcare social media analytics company.

The Fall 2014 series was designed to help researchers use the World Wide Web as a unique resource to secure funding, expand their teams through networking, and increase the dissemination and impact of their research products (e.g., articles, data, software code, social media content). The series also helped researchers to inform and support their work through digital data in new ways, for example to identify and recruit patients online and to measure and include alternative metrics of scholarly impact (altmetrics) in their performance reviews.

The evaluation, using pre- and post-workshop surveys of participants, revealed substantial promise for the Digital Scholar initiative.

The Digital Scholar page is publicly available and provides easy access to workshop-related resources (<http://sc-ctsi.org/digital-scholar/>).

The screenshot shows the USC University of Southern California Digital Scholar Training Initiative website. It features sections for 'Fall 2014' and 'Spring 2015' workshops, including 'Become a Successful Digital Scholar' (Video and Slides, Workshop 1), 'Leverage Science Crowdfunding' (Training Video and Slides, Workshop 2), and 'Ask Us for Help!' (Request a free consultation today). The site also includes a 'Join the Conversation' section with social media posts from SoCal CTSI (@SoCalCTSI) and a 'Public Digital Scholar resources page' link: <http://sc-ctsi.org/digital-scholar/>.

Sample of Pre-Workshop Perspectives from Digital Scholar Trainees



"I suggest that all faculty be provided with this career development opportunity regardless of experience or rank."

– Frank Gilliland, Professor, USC



"At training level, we learn the way of research from our mentors but I feel this area is so recent and rapidly advancing that it is something that requires formal education."

– Shveta Gupta, MD, Fellow, Children's Hospital Los Angeles



"Clearly an important element of modern research and scholarship."

– Michael Selsted, Professor, USC



"I am eager to learn how to leverage my interest in digital media to enhance my research and teaching. The future is in digital communications and I believe that those of us who are most comfortable in the space will have incredible opportunities to leverage it to our professional advantage."

– Heather Wipfli, Assistant Professor, USC



"The 'Digital Scholar' video made me realize that having a social media presence for your research could benefit in more than one way."

– Sheetal Mitra, MD, PhD, Fellow, Children's Hospital Los Angeles



"This series sounds fantastic. I've been trying to find ways to extend the reach of my research findings to the public, but I don't really have much experience with social media so this sounds like exactly what I need!"

– Kathleen Page, Assistant Professor, USC



"I think that everyone that works with adolescents and young adults need to learn how to maximize the use of internet, mobile technology and social media in order to communicate with patients."

– Nancy Chang, Clinician, USC



"I have never considered crowdfunding but it is an interesting thought to raise money for pilot projects that could, in turn, lead to larger grants."

– Sheila Murphy, Professor, USC



View additional perspectives from our trainees online: <http://sc-ctsi.org/digital-scholar/trainee-voices>.

KEY DATA

Attendance

66 applications were received for the pilot series from faculty, SC CTSI KL2 scholars and TL1 trainees, postdoctoral scholars, and PhD students across 9 USC schools, 10 USC departments, and CHLA.

Satisfaction

87% of post-workshop respondents (40 out of 46 respondents) indicated they were very satisfied or satisfied with the workshop.

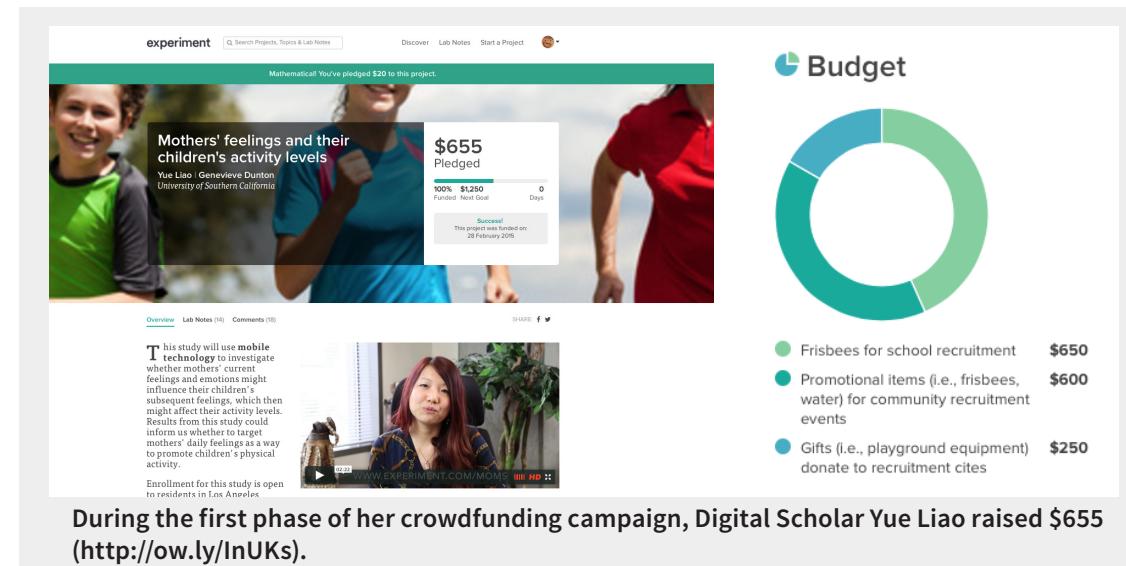
89% of post-workshop respondents (41 out of 46 respondents) said that they would recommend continued Digital Scholar training opportunities.

Crowdfunding

40% of participants (25 out of 63) indicated that they intend to begin a crowdfunding campaign in support of their research.

11% (7 scholars) are working on their campaigns either through our partner Experiment or the USC Ignite Initiative.

Yue Liao, Digital Scholar and USC PhD candidate in the Department of Preventive Medicine, completed the first phase of her crowdfunding campaign and raised **\$655** in support of her research project.



Social Media Listening

6% of participants (4 out of 63) indicated that they intend to use digital and social media data in support of their research.

"In order to commercialize my inventions for a new diagnostics of blood-brain barrier disorders, I am eager to utilize digital and social media data," said Sheng-He Huang, MD, Associate Professor of Research Pediatrics, Children's Hospital Los Angeles.

Danieli Salinas, MD, Assistant Professor of Clinical Pediatrics at Keck School of Medicine of USC, and physician of Pediatric Pulmonology at Children's Hospital Los Angeles, used social media data (Symplur Signals) to study the potential impact of an influencer (person or institution) on new non-approved therapies for cystic fibrosis. She completed her preliminary analysis and concluded that becoming an influencer in a specific hashtag of interest can be used as a tool to monitor and promote patient safety.

Analysis of Individual Workshops

Workshop 1: Become a Successful Digital Scholar

Instructor

Katja Reuter, PhD, Director, Digital Innovation and Communication, Southern California Clinical and Translational Science Institute (SC CTSI)

We provided an overview of Digital Scholarship and explored examples of scholars who have successfully used digital approaches to advance their research and careers.

Figure 1: Qualitative feedback from workshop participants

60 Attendees | 24 Responses | 40% Survey Response Rate

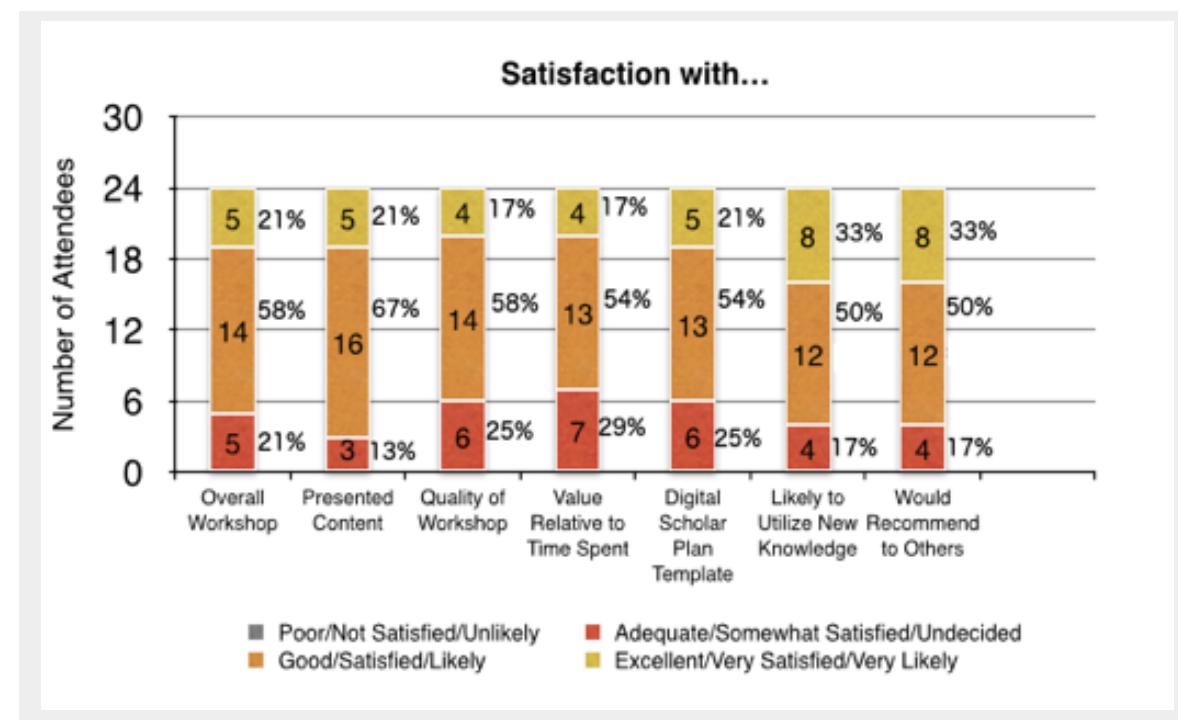


Table 1: Further qualitative feedback provided by participants

Strengths

- Well organized and touched on key elements
- Interesting and educational
- Provides good overview and foundation for those new to digital scholarship

Areas for Improvement

- Future workshops more hands-on, show how a tool can be implemented successfully
- Focus individual workshop on one online resource and work in small groups with monitors/TA

Workshop 2: Leverage Science Crowdfunding

Instructors

Katja Reuter, PhD, Director, Digital Innovation and Communication, Southern California Clinical and Translational Science Institute (SC CTSI)

Melanie Funes, PhD, Director, Evaluation and Improvement; Associate Director, Research Development, SC CTSI

Denny Luan, Co-founder and CEO, Experiment, a crowdfunding platform for science research; and **Andrew Wong**, director of partnerships and operations, Experiment

Participants received hands-on training, allowing them to apply the new knowledge and to develop their own crowdfunding campaign – in collaboration with the Experiment team.

Figure 2: Qualitative feedback from workshop participants

30 Attendees | 8 Response | 27% Survey Response Rate

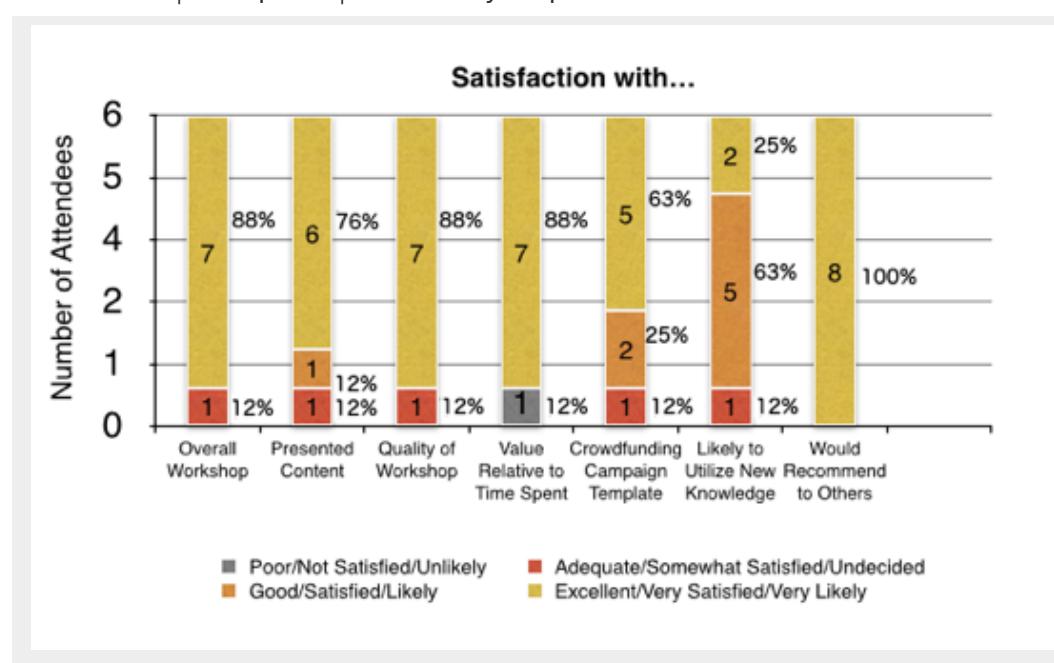


Table 2: Further qualitative feedback provided by participants

Strengths

“Knowing that SC CTSI will provide support for the crowdfunding campaign highly motivates me to launch one of my own. I would otherwise hesitate to do so.”

Information was clear and concise; helpful in understanding how we can raise funds aside from a grant

Areas for Improvement

Need to better accommodate CHLA-based researchers

Workshop 3: Accelerate the Dissemination and Impact of Your Research Findings

Instructor

Katja Reuter, PhD, Director, Digital Innovation and Communication, Southern California Clinical and Translational Science Institute (SC CTSI)

Attendees developed an overview of how to use web-based approaches and social media to accelerate the dissemination and impact of their research findings. We explored a range of tools to help attendees share their research outputs more broadly via digital and social media.

Figure 3: Qualitative feedback from workshop participants

19 Attendees | 8 Responses | 42% Survey Response Rate

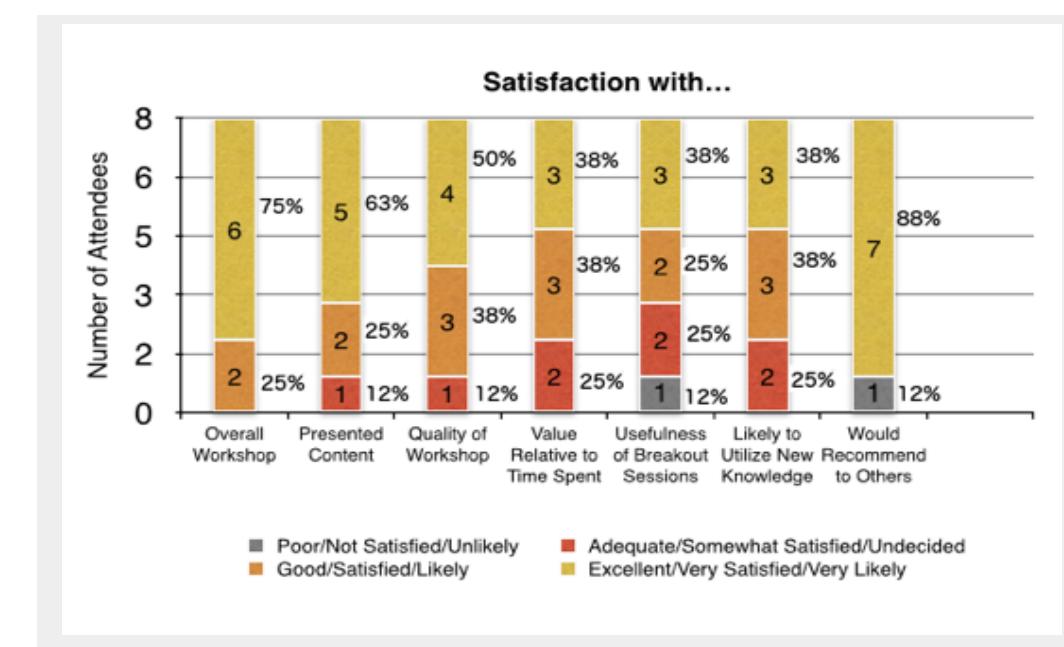


Table 3: Further qualitative feedback provided by participants

Strengths

Very informative (“I am learning a great deal from each of these workshops!”)

“While these tools are easy, they require work. But you’ve made a good case that having these things is helpful, career-wise.”

Breakout sessions were useful and informative

Areas for Improvement

More personalized presentations, More facilitators for breakout sessions

To allow for “hands-on” learning experiences, the class needs at least 3 hours, with 2 hours or 1.5 hours for didactic presentation and 1.5 or 1 hours for actual “hands on” work.

Workshop 4: Utilize Digital and Social Media Data for Your Research

Instructors

Audun Utengen, MBA, Co-founder of Symplur, a healthcare social media analytics company, LLC and “The Healthcare Hashtag Project

Thomas Lee, BS, NHA, Co-founder of Symplur

Katja Reuter, PhD, Director, Digital Innovation and Communication, Southern California Clinical and Translational Science Institute (SC CTSI)

Attendees learned how the general public, disease communities, and health care professionals use the Web and social media, and how they may apply this knowledge to support their research efforts, e.g., science outreach and study participant recruitment.

Furthermore, attendees got access to Symplur Signals, an online application that provides 650+ million healthcare-related tweets and 200+ million user profiles from Twitter, all segmented by thousands of healthcare relevant topics.

The Symplur team also offered a free 30-minute explorative consulting session to each participant tailored to how their own research can leverage social media data.

Figure 4: Qualitative feedback from workshop participants

19 Attendees | 6 Responses | 32% Survey Response Rate

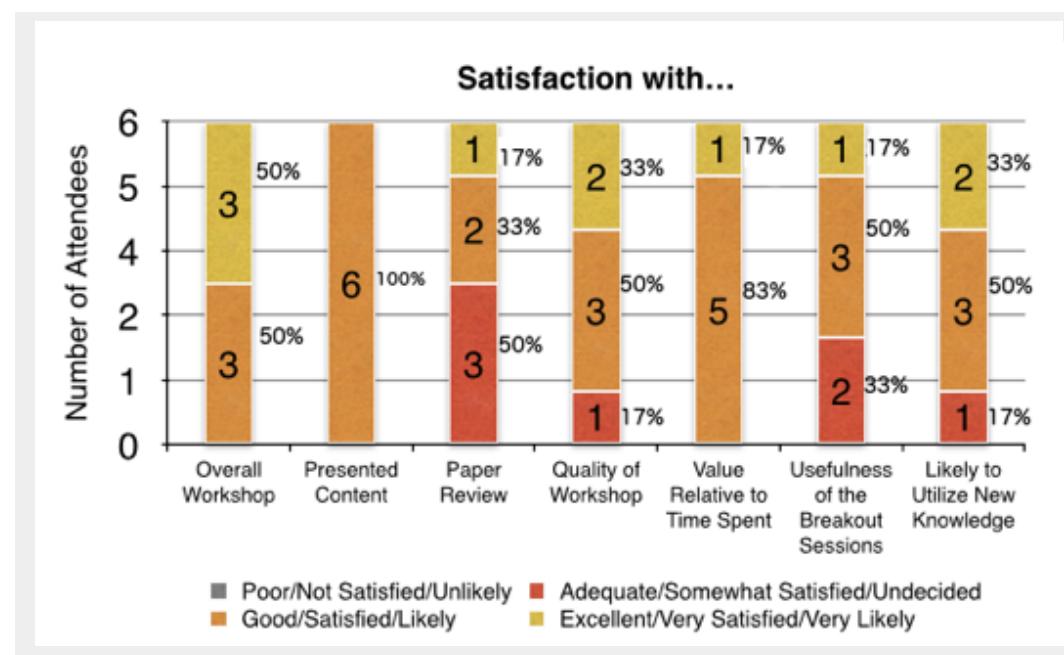


Table 4: Further qualitative feedback provided by participants

Strengths

Excellent training offering; very novel and new information provided

Areas for Improvement

Introducing tools that are less costly

Outlook & Current Spring 2015 Workshop Series

We propose to expand the workshop series and develop a more standardized curriculum, involving other USC schools, centers, groups, CHLA, and strategic industry partners.

Additionally, with a Data-Driven Assignment Grant from the USC Center for Scholarly Technology in support of the Office of the Provost's strategic focus on data literacy, SC CTSI has developed a 2015 spring workshop series in collaboration with the popular healthcare social media analytics company Symplur – tailored to students at all levels (<http://sc-ctsi.org/digital-scholar/#spring-2015>).

The spring series will allow students to develop marketable skills to analyze social media data, translate the data into compelling visuals that clearly communicate their key messages, and develop actionable insights that inform organizational strategy.

Digital Scholar Training Initiative
Helping Researchers Better Utilize the Web
Powered by SC CTSI

Fall 2014 Spring 2015

Using Social Media Data to Gain Community Insights and Inform Organizational Strategy
Join us for a special workshop series in collaboration with the popular healthcare social media analytics company Symplur – tailored to students at all levels.
This workshop series will allow you to develop marketable skills to analyze social media data, translate the data into compelling visuals that clearly communicate your key messages, and develop actionable insights that inform organizational strategy. You will be able to apply these skills in practice – for instance, when:

- Doing marketing research to inform a new product idea;
- Developing a communication plan; or
- Conducting a preliminary analysis in support of your research idea.

The three best workshop products (i.e., data analyses and infographics) will be featured in a news story and on the Symplur blog.

Instructors

- Katja Reuter, PhD, director of Digital Strategies and the electronic Home program, Southern California Clinical and Translational Science Institute (SC CTSI)
- Audun Utengen, MBA, Co-founder of Symplur, a healthcare social media analytics company, LLC and “The Healthcare Hashtag Project
- Thomas Lee, BS, NHA, Co-founder of Symplur

Using Social Media Data to Gain Insights into Community Trends
Training Video
Voices from our Trainees
Symplur Demonstration
Workshop Description and Schedule
Watch Videos
Download Mouse Activities

Spring 2015 workshop series page:
<http://sc-ctsi.org/digital-scholar/#spring-2015>

Workshop-Related News Stories

SC CTSI Launches New Digital Scholar Initiative To Help Researchers Better Utilize the Web

Interested researchers at USC and CHLA are invited to apply by Sep 8, 2014.

PUBLISHED 26 AUG 2014

SHARE

"There has never been a better moment for researchers to use the World Wide Web as a unique resource to secure funding, expand their teams through networking, increase the reach and impact of their research, and inform their work through digital data in new ways," said [Katja Reuter](#), PhD, director of Digital Strategy and the eHome program at the [Southern California Clinical and Translational Science Institute \(SC CTSI\)](#).

[Complete the application now](#)



This workshop series, which is designed for faculty, clinician-scientists, post-doctoral scholars, and PhD students, will provide researchers with the knowledge they need to take advantage of these untapped opportunities.

Participants will get an overview of various digital scholarship approaches and receive hands-on training, allowing them to apply the new knowledge to advance their specific research and career goals. The training will have a special focus on clinical and translational health sciences.

Digital Scholar Workshop Series at a Glance

Application deadline is Sep 8, 2014. Awardees will be informed by Sep 12, 2014.

- Workshop 1: [Become a Successful Digital Scholar](#); Tuesday, Sep 23, 2014, 1-3pm
- Workshop 2: [Leverage Crowdfunding](#) - In collaboration with Experiment, a donation-based crowdfunding platform; Tuesday, Oct 7, 2014, 1-3pm
- Workshop 3: [Accelerate the dissemination and impact of research findings](#); Tuesday, Oct 21, 2014, 1-3pm
- Workshop 4: [Utilize Digital and Social Media Data for Your Research](#) - In collaboration with Symplur, a healthcare social media consultancy group; Tuesday, Nov 4, 1-4pm

Designed for: Faculty, clinician-scientists, post-doctoral scholars, PhDs; USC/CHLA community
Location (all workshops): USC Health Sciences Campus, CSC, Harkness Auditorium, 2250 Alcazar Street, Los Angeles, CA 90089

"The evolution of the Internet and Web has created a revolution, changing virtually every aspect of our society. The changes extend to scientific research, from science philanthropy, collaboration, and intellectual property to communicating science and participating in research," said [Randolph Hall](#), vice president of research and a professor in the Daniel J. Epstein Department of Industrial and Systems Engineering, who is supporting this new series through the USC Center for Excellence in Research.

Partnering with Experiment, Crowdfunding Experts

For one of the four workshops, "[Leverage Crowdfunding: How to obtain alternative seed funding](#)," SC CTSI is partnering with [Experiment](#), a donation-based for-profit crowdfunding platform built for scientists to raise funds through engaging with a community of science patrons.

"Although science crowdfunding is still in its infancy, there are a few encouraging examples where researchers in academia or the private sector have successfully used it to supplement and substitute their grants," said Reuter. "Few researchers are comfortable with online crowdfunding. We hope that in the future it will become second nature."

Attendees will have the opportunity to develop crowdfunding campaigns with the Experiment team, post their campaigns on the Experiment website and get marketing support to try to achieve their funding goals.

"We're excited to be participating in this innovative training with USC and SC CTSI to share our insights from over 400 crowdfunding research projects, and help scientists navigate the digital age" said [Cindy Wu](#), co-founder at Experiment.com. "We believe the real value of research is in the process and engagement with the public. Donors get to be part of the research experience real-time, whilst researchers get to engage with real people who care about their research."

Partnering with Symplur, a Social Media Consultancy

In a second partnership, SC CTSI will be joined by experts from [Symplur](#), a healthcare social media consultancy, to highlight novel digital and social media data strategies in support of research. [This workshop](#) will focus on how to use this type of data, its limitations, and how to find and engage potential research participants online.

"With over 80 percent of Americans seeking health information online and nearly 70 percent of all Internet users in the United States using digital and social media, the impacts of this trend on health and research provide a huge opportunity that – for the most part – is still untapped," said Reuter.

The Symplur team will introduce participants to its new Signals application that provides access to more than 500 million healthcare related tweets and 185 million user profiles from Twitter, all segmented by thousands of healthcare relevant topics. Additionally, the team will offer a free 30-minute explorative consulting session to each participant tailored to how their own research can leverage social media data.

"We've observed a tremendous growth in public social media use by both healthcare providers and patients in recent years. The data that is being collected is incredibly rich and the insights and stories that can be found from analyzing it are profound. This workshop is on the forefront of research in digital healthcare. We couldn't be more excited to collaborate with USC on this ground-breaking training series," said [Audun Utengen](#), MBA, co-founder of Symplur.

This workshop will provide researchers with the knowledge they need to leverage these untapped opportunities.

The series is supported by the USC Office of Research and SC CTSI and is being developed in collaboration with:

SC CTSI Gets Help from Experiment to Teach Scientists at USC and CHLA New Skills in Crowdfunding

SC CTSI initiative introduces researchers to novel online approaches to raise funds and increase the visibility of their research.

PUBLISHED 07 OCT 2014

WRITTEN BY PAUL KARON

SHARE 

With competition for traditional sources of research dollars growing stiffer every year, the [Southern California Clinical and Translational Science Institute](#) (SC CTSI) has launched an initiative to help scientists become experts in the latest digital and social media fundraising techniques to advance their work and careers.

The recent workshop is part of a new [Digital Scholar Training Initiative](#) that provides lectures, hands-on training, and consultations to help researchers use the Internet and Web as a unique resource.



"It's critical right now that researchers develop real expertise with increasingly important digital approaches and social media tools, including crowdfunding," said [Katja Reuter](#), PhD, director of Digital Strategy and the electronic Home for Clinical and Translational Research program at SC CTSI. "Researchers can use these tools to obtain funding, expand their teams through networking, increase the impact of their research products, and tap new sources of digital data to gain new insights."

Science gets social

Crowdfunding is the practice of raising money from a large number of contributors. To appeal to the public, project organizers typically create a video and describe their goals for the venture and the funding sought. On many platforms, the campaign only gets the money if contributors pledge enough to meet the organizers' funding target.

For the Digital Scholar workshop, SC CTSI invited a team from [Experiment](#), a science-oriented crowdfunding platform built for scientists. Since 2010, Experiment has funded nearly 200 projects, with more than \$1 million raised, said co-founder and CEO Denny Luan, making it the largest science-focused crowdsourcing platform.

Luan provided guidelines and strategies for creating successful crowdfunding project videos and write-ups. "Researchers need to learn how to communicate through social media and connect with their potential constituency of supporters," said Luan.

Workshop attendees prepare crowdfunding campaigns

"I have been interested in crowdfunding as many of my business friends have utilized this method for their startup companies, and I never thought about its utility in funding my clinical research projects. That's a phenomenal idea," said workshop attendee [Salima Thobani](#), MD, assistant professor in pediatrics at USC who after the workshop has begun to work on her own campaign.

"After the workshop, I have a better understanding of crowdfunding. The direct connections with the public could provide an important new way to strengthen research in general," said [Todd Chang](#), MD, assistant professor of pediatrics at USC and associate fellowship director in pediatric emergency medicine at CHLA, who is currently working on his crowdfunding campaign. [Additional perspectives from Digital Scholar trainees](#)

Researchers interested in developing digital scholarship skills are invited to view the resources on the [Digital Scholar webpage](#) and contact SC CTSI for help.

SC CTSI Teams Up with Symplur to Introduce Researchers to the Power of Social Media Data

Scientists learn how popular social media platforms can serve as near-limitless sources of data for study of human health.

PUBLISHED 04 DEC 2014

WRITTEN BY PAUL KARON

PHOTO CREDIT BRUCE PARK

SHARE  11

Hundreds of millions of people discuss their medical conditions on social media platforms every day, often forming connections for information and support. These conversations can be vital to investigators, as well – if they know how to obtain and analyze the data that resides in them.

"Most people think of social media primarily as a way to stay in touch with friends or watch amusing videos, but it has also emerged as a forum for conversations about a great many important topics, including health," said Katja Reuter, PhD, Director of eHome and Digital Strategies programs at the [Southern California Clinical and Translational Science Institute](#) (SC CTSI). "Fortunately, tools are being developed that can help researchers leverage that wealth of digital data in many ways: for research insights, to identify disease communities, to engage potential participants and to enroll them in research studies."

The SC CTSI has conducted a series of "[Digital Scholar](#)" workshops to teach researchers about the many scientific opportunities in digital technology and the social web. A recent workshop focused on analyzing data in the microblogging platform Twitter, one of the largest social media applications, with hundreds of millions of users worldwide.



[Twitter](#) is known for its 140-character "tweets" – short sentences or snippets of information, often including web links that users compose on

computers or smartphones and broadcast openly to followers. Many of Twitter's users organize into online communities that share common health interests, such as diabetes, cancer, or other conditions, through the use of hashtags (#) that denote category titles.

"This seminar was life-changing for me. It made me realize that social media, in regards to health care, can be used in a constructive and proactive way," said [Danieli B. Salinas](#), MD, assistant professor of pediatrics and preventive medicine, USC and the Division of Pediatric Pulmonology at [Children's Hospital Los Angeles](#). "I can see now that online communities are here to stay and as any community it needs health care providers to be complete. Let's be part of this community!"

How social media data can inform research

Because Twitter is essentially a public forum – as opposed to the more private conversations users post on social media giant Facebook – it's particularly well-suited to research, explained [Thomas M. Lee](#), BS, NHA, a co-founder of the California-based healthcare social media consultancy [Symplur](#). "Because of the pure volume and diversity of conversations that are happening, Twitter is a treasure trove of interesting stories and insights," said Lee.



At the workshop, Lee and co-partner [Audun Utengen](#) demonstrated the company's tools designed to help health researchers mine Twitter data.

"If you're looking for research subjects, or a specific disease or condition, we have that information," said Audun Utengen, MBA. "We can help researchers in many ways, like finding specific types of participants, such as people in the Los Angeles area who self-identify as having diabetes."

Several workshop attendees said they would explore social media, both as a tool in research and as a way to connect with patients.

Learn more about the workshop: Visit <http://sc-ctsi.org/digital-scholar/>

Acknowledgement

Founder and lead instructor of the Digital Scholar Training Series: Katja Reuter, PhD, Director of Digital Innovation and Communication at SC CTSI.

The launch of the Digital Scholar Training Initiative in 2014 was supported by the USC Office of Research; the donation-based crowdfunding platform Experiment; the healthcare social media analytics company Symplur; and SC CTSI's Workforce Development, Research Development, and Digital Innovation and Communication core groups.

The following groups and people helped to make this series a success. Thank you!

SC CTSI

Sarah Hamm-Alvarez, PhD
Melanie Funes, PhD
Francis Ukpolo, MBA
Praveen Angyan, MS
Jonathan M. Samet, MD, MS
Jeanne Dzekov
Cecilia Patino-Sutton, MD, PhD
Annie Hong
Aileen Dinkjian, MPH
April Bagaporo
John Burgos, MBA, MIS

Experiment

Denny Luan
Andrew Wong
Cindy Wu

USC Office of the Provost

Mark Todd, PhD

USC Advancement

Tracey Vranich
Iyoni Rice

“Clearly an important element of modern research and scholarship.”

– Michael Selsted, Professor, USC

The Southern California Clinical and Translational Science Institute (SC CTSI) is part of the Clinical and Translational Science Awards (CTSA) network funded through the National Center for Advancing Translational Sciences (NCATS) at the NIH (Grant Number UL1TR000130).