

The NICHD Connection

Now seeking fellows: Science Communication Training and Awards Program

Three-minute Talks (TmT) Competition 2015

February 2015

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EDITOR IN CHIEF

Shana R. Spindler, PhD
Shana.Spindler@gmail.com

LAYOUT & DESIGN

Nichole Swan

PHOTOGRAPHY

Pixabay
Freelimages.com

CONTRIBUTORS

Nichole Swan

LEARN HOW TO EXPLAIN YOUR RESEARCH, IN THREE MINUTES OR LESS, IN A WAY THAT'S MEANINGFUL TO A BROAD SCIENTIFIC AUDIENCE.



Benefits of Participation

- » Professional training in speech development and presentation delivery
- » One-on-one coaching and feedback in a supportive environment
- » The opportunity to showcase your research for NICHD leaders and the public
- » The chance to receive financial support for a training activity or travel to a scientific meeting. **Use for travel is subject to travel ceiling availability.*
- » For winners: A professionally produced video of your talk for NIH promotional efforts and your own use

“The NICHD Three-minute Talk competition was a great training experience for me. The competition encouraged me to find a way to distill my thesis into a short, relatable statement that I can draw on when talking with other scientists. The training workshops helped me to learn how to engage an audience through a camera, which is a skill that is becoming more and more useful in the age of Skype and YouTube. Finally, each participant received a professionally mastered video of our three-minute talk. I think that including this video in my postdoc applications will be a useful way to make my application stand out.”
~ Alex Ritter, 2014 1st place winner (check out his winning [video](#))

“Competing in the three-minute talk dramatically improved my elevator speech, which helped in a very practical way during recent round robin job interviews. Producing the video, which I utilized on my LinkedIn page, was a unique opportunity to obtain experience and professional instruction on speaking into a camera. These experiences together did in fact assist me in getting a job offer, as an interviewer specifically commented on this and other communication awards as to why they chose to invite me to the interviews.”
~ Thomas Miller, 2014 finalist (see his video [here](#))

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Letter from the Editor

The 2015 Three-minute Talk (TmT) competition is now accepting applicants! This communication training and awards program is a unique opportunity to flex your presentation muscles with a chance to receive prestige, travel or training support, a professionally produced video of your research, and most importantly, communication skill development. See [this month's front page](#) for the TmT announcement with program details.

In preparation for your TmT presentations, we are devoting most of this issue to copyright regulations. Given the easy access to millions of images and videos via Internet search engines, navigating copyright protection has become a critical skill. I'll be honest; I knew very little about intellectual property laws before becoming editor of this newsletter. I've learned on the job, and boy has it been an eye-opening experience. From licensing to fair use doctrine, copyright rules can make for a steep learning curve. That's why we've summed up the copyright basics in this month's feature article "[The Arts: What You Need to Know About Copyrights](#)." Once you've mastered copyright regulations, test your new knowledge with [our quiz on page 8](#).

Plenty of fun announcements can be found inside too, including our [2014 Graduate Partnership Program graduates](#), [2015 annual retreat information](#), NICHD-hosted [February programs](#), and new [Postdoctoral Research Associate \(PRAT\) application procedures](#). Enjoy!

Your Editor in Chief,
Shana R. Spindler, PhD

Please send questions, comments, or concerns to Shana.Spindler@gmail.com.

Three-minute Talks

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Program Timeline and Details

Fellows should be committed to participating in the full TmT Competition program, including the workshop trainings, NICHD TmT competition, and—if selected as finalists—the NIH TmT competition.

February 23, 2015 **DEADLINE TO ENTER**

To enter, email your completed submission form to yvette.pittman@nih.gov, which includes the title of your talk and a brief description of your research (2–3 sentences max).

Up to 15 DIR fellows (predoctoral, postdoctoral, visiting, and clinical) will be invited to join the TmT Competition program. All 2014 finalists are also welcome to participate.

Submission form can be found at <https://science.nichd.nih.gov/confluence/display/fellows/Three-Minute+Talks>

February 23, 2015 **WORKSHOP #1 – IMPROVISATION FOR SCIENTISTS**

Led by Alan Alda Center for Communicating Science. This workshop will teach you how to prepare a talk for a general scientific audience and explain the significance of your research as it relates to human health.

March 18, 2015 (9-11 AM) **WORKSHOP #2 – SPEAKING ABOUT SCIENCE**

Led by public speaking coach Scott Morgan. This workshop will offer tips on storytelling and delivery, speaking in plain language, and creating an effective visual aid.

April **COACHING SESSIONS (INDIVIDUAL AND GROUP)**

You will have the opportunity to participate in a group coaching session with Scott Morgan and up to two one-on-one coaching sessions with NICHD communications staff. These practice sessions will provide you with additional help and feedback on speech development and delivery.

May **NICHD TmT COMPETITION***

Of the NICHD's 15 contestants, five finalists will advance to the next round and be awarded support for approved training or travel.

June **NIH TmT COMPETITION***

Of all NIH finalists, 1st, 2nd, and 3rd place winners will receive additional support for approved training/travel and the opportunity to have their talk professionally produced for video.

*Competition rules and judging criteria are available at <https://science.nichd.nih.gov/confluence/display/fellows/Three-Minute+Talks>

QUESTIONS?

Contact Yvette Pittman (yvette.pittman@nih.gov, 301.496.3014).

The Arts: What You Need to Know About Copyrights

By Shana R. Spindler, PhD, with research by Nichole Swan

After an extensive search through Google images, you find the perfect cartoon graphic of DNA for your conference presentation. You don't see any copyright marks on it (you know, that little © that appears on some images and websites), so you're in the clear to use it, right?

WRONG.

Even if an image does not explicitly state a copyright, you could still be committing copyright infringement if you use it without permission or payment. So what is a copyright anyway, and what does it protect?

According to the United States Copyright Office, "copyright is a form of protection grounded in the U.S. Constitution and granted by law for original works of authorship fixed in a tangible medium of expression."¹ In non-legalese: if you make it, you own it. Both published and unpublished works, such as photography, video, literature, computer software, music, and architecture, fall under copyright protection at the moment they are created—no special markings or symbols required. While copyright protection does not apply to ideas or discoveries, which require a patent, the tangible way ideas are expressed (like an artistic diagram) may be copyrighted.

Surprised? You're not alone. Today, the Internet is rampant with copyright infringement. It's no wonder why someone who doesn't know much about copyright law might be confused. Don't worry; we'll wait while you take down all of those copyrighted images from your blog...

All done? Great, let's continue.

USING COPYRIGHTED IMAGES

If you find an unmarked image online that you'd like to use, it's best to track down the actual source of the image. Do not—and this is worth repeating—do not risk copyright infringement by selecting "save image as" to use the content in your work. If you can't find the person who created the image, skip it and look elsewhere. Once you've tracked down the image source, you may need to pay for the image or request permission to use it.

But what about photographers, illustrators, musicians, etc., who want to provide their content for free with certain restrictions? How can they avoid spending hours creating licenses or responding to permission requests? The Creative Commons license is an elegant solution to this problem.

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What You Need to Know About Copyrights (continued from page 4)

Creative Commons, a nonprofit organization dedicated to creative content sharing through free legal tools, was founded in 2001. By 2002, it released its first set of free copyright licenses.² A Creative Commons license allows content creators to supplement their copyright with a legal way to offer their work with “some rights reserved.” When you see a Creative Commons license associated with a creative work, you will quickly know how, where, and to what extent you can use that content. Some of the most popular sites to incorporate Creative Commons licensing include Flickr; Google, Public Library of Science, Wikipedia, and the [NIH 3D Print Exchange](#), but the list goes on.³

Here are two examples of a Creative Commons license button:



(images: creativecommons.org)

Each assembly of icons represents what a user can or cannot do with a creative work. In the first example, the license indicates that the content creator would like to receive credit for the work, but otherwise the user is free to use or modify the content for personal, commercial, or not-for-profit (as is the case for government) redistribution. In the second example, the license indicates the content user must give credit, cannot use the content for a commercial use, and must not make any changes to the content before redistribution. All Creative Commons license descriptions—there

are several—can be found on the [Creative Commons website](#).

For individuals who would like to waive all rights to their work, they can enter their creative content into the public domain. When you see that something is in the public domain, you are free to use the work for commercial or personal use, without attribution, and without restriction. In general, content in the public domain is the safest type of content to use without worrying about copyright infringement. But don't assume that you can copy the work of something in the public domain and present it as your own. That would be plagiarism—something for another article entirely.



Other works contained in the public domain include those with expired copyright (in general, the life of the author plus 70 years) and works of the United States Government (we already paid for it with our taxes, right?). Even if a work meets one of these criteria, never assume a copyright is expired or absent. Some older works may stay under copyright, and different countries have their own copyright regulations. It's best to assume EVERYTHING is under copyright until you know with certainty that it's not.

BUT, BUT, I DIDN'T KNOW IT WAS COPYRIGHTED

Please note: ignorance doesn't hold up in court on this one. Do a quick Internet search and you'll find several examples of bloggers and

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What You Need to Know About Copyrights

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small companies who were sued for copyright infringement because they unintentionally posted a copyrighted image. You are financially liable for copyright infringement even if the infringement was by accident, quickly remedied, done with or without modification to the original content, results in no commercial income, or even if you linked back to the original source and cited the content creator!

There are, however, some exceptions to the rule—but this is where it gets tricky. Under “fair use” doctrine, the United States Copyright Office states that copyrighted material may be used for “various purposes for which the reproduction of a particular work may be considered fair, such as criticism, comment, news reporting, teaching, scholarship, and research.”⁴ However, the Copyright Office also states that “the distinction between what is fair use and what is infringement in a particular case will not always be clear or easily defined. There is no specific number of words, lines, or notes that may safely be taken without permission. Acknowledging the source of the copyrighted material does not substitute for obtaining permission.”⁴

In the research and academic setting, you’ll likely come across situations where fair use

rules allow you to use copyrighted material without permission. For example, if you are teaching a class and would like to show a figure from a published paper for learning purposes, you are allowed to do so—just be sure to include proper citations. But even with “fair use” doctrine, you should request permission before using copyrighted material if you have any doubts. Why take the chance?

HOW TO FIND ONLINE MEDIA YOU CAN USE

If you are looking for free online images, one good place to start is with a search filter. Google, for example, has an [advanced search](#) filter called “usage rights.” In the “usage rights” drop down menu, you will find several options, including:

- » Not filtered by license
- » Free to use or share
- » Free to use or share, even commercially
- » Free to use, share, or modify
- » Free to use, share, or modify, even commercially

Your image results will only return content that matches your selected criteria. Always verify the usage license for any image before reusing it and be sure to give proper attribution when required.

Stock image sites are another valuable source

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What You Need to Know About Copyrights (continued from page 6)

for online content. Use your favorite search engine to type the keywords: “stock image site” or “stock image sites public domain” and browse away. If you go to the front page of *The NICHD Connection*, you’ll find stock photo website attribution at the end of the table of contents menu. Each website has unique licensing terms that must be followed carefully. Don’t assume every image is free to use.

We’ve now covered the purpose of copyright law, how to avoid copyright infringement, consequences of copyright infringement, and how to find and use free images online without breaking copyright law. The bottom line: before using images or other creative media you find on the Internet, make sure you know if the image has a copyright, and if so, the terms of use as stated by the copyright owner.

If you have additional questions about using images or other creative media in your publications and presentations, please contact Nichole Swan at jonasnic@mail.nih.gov.

DISCLAIMER: This article in no way substitutes for legal information or advice.

For a great discussion on intellectual property in the sciences, specifically copyright protection related to 3D printing, check out the Policy Panel discussion from the [2015 NIH Bioinformatics festival](#). Forward to the 3:36:20 mark in the video for the beginning of the panel session.

REFERENCES:

1. “Copyright in General.” *United States Copyright Office*. Accessed 27 January 2015. <http://copyright.gov/help/faq/faq-general.html#automatic>
2. “History.” *Creative Commons*. Accessed 27 January 2015. <http://creativecommons.org/about/history>
3. “Who Uses CC?” *Creative Commons*. Accessed 27 January 2015. <http://creativecommons.org/who-uses-cc>
4. “Fair Use” *United States Copyright Office*. Accessed 27 January 2015. <http://www.copyright.gov/fls/fl102.html>

How Copyright Savvy Are You?

Test your copyright knowledge with *The NICHD Connection* copyright quiz:

- 1) An image is only under copyright if it has a copyright symbol.
True or False
- 2) You are free to use figures from your own publications in your thesis without citing the journals in which they are published—they are your figures after all.
True or False
- 3) You may be committing copyright infringement by reusing an image you find online, even if you cite and link to the original source.
True or False
- 4) A Creative Commons license replaces copyright protection.
True or False
- 5) You are free to use public domain images without permission.
True or False
- 6) If an image appears in a Google image search, it is in the public domain.
True or False
- 7) You are financially liable for copyright infringement even if the infringement was by accident.
True or False
- 8) The distinction between what is fair use and what is copyright infringement is clear and easily defined.
True or False
- 9) As long as you slightly modify or recreate an existing image you find online, you can use it.
True or False
- 10) You paste a figure from a *Nature* publication into a presentation for a biology class you are teaching. The presentation will only be used for teaching purposes during that class, and the figure is properly cited. You still need to request permission from *Nature* to use the figure.
True or False

See page 9 for answers!

Copyright Quiz Answers

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1) **False**

All creative works are under copyright from the moment they are created. No specific symbol is needed.

2) **False**

You should always cite the source of a published figure—even your own. Note though, “permissions for use” vary among publishers. Some publishing companies, but not all, require that you obtain permission, or in some cases pay, to reuse your images. Click below for the permission request pages of several popular journals and publishing companies:

[Nature Publishing Group](#)

[Science Magazine](#)

[Public Library of Science](#)

[New England Journal of Medicine](#)

[Proceedings of the National Academy of Sciences](#)

3) **True**

Depending on how you’ve used the image (commercial versus scholarly applications, for example), you may be committing copyright infringement, even with proper attributions. You’re safe if fair use doctrine applies, but obtain permission if you are uncertain.

4) **False**

A Creative Commons license never replaces copyright protection. The license is meant to supplement the copyright by listing what someone can or cannot do with a creative work, according to the copyright owner.

5) **True**

Public domain images are free to use without permissions—just be sure the image is actually in the public domain!

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Copyright Quiz Answers

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6) **False**

Just because an image shows up after an Internet search does NOT mean it's in the public domain. Always check for copyright and licensing information BEFORE using an image.

7) **True**

You are financially liable for copyright infringement even if the infringement was by accident.

8) **False**

Even the United States Copyright Office says that fair use doctrine "will not always be clear or easily defined."

9) **False**

Modifying an existing image may go against the license of an image that would have been free to use without modification. Always check for image licenses (commonly seen as a Creative Commons license). When in doubt, ask permission.

10) **False**

This example falls within fair use doctrine. By using a figure for teaching purposes, you are not infringing upon the copyright. BUT, if you're in doubt whether a use qualifies as teaching, scholarship, or research purposes, ask permission.

HOW'D YOU DO?

8 to 10 correct: Nice job! You read the article, didn't you?



5 to 7 correct: Close, give the article one more read.



1 to 4 correct: We're guessing you skipped ahead, but that's ok. Read this month's feature on copyrights and try again.



Congratulations to Our 2014 NICHD Graduates

Three NICHD Graduate Partnerships Program students received their doctoral degrees in 2014. Please join *The NICHD Connection* in congratulating our graduates:



ERIK NIKO ESPIRITU GUTIERREZ, PHD

Dissertation Title: "Role of Translation Factor eIF5A and its Hypusine Modification in Synthesis of Polyproline Proteins"
NICHD Mentor: Dr. Thomas E. Dever
Partner School: Johns Hopkins University

(photo courtesy of Dr. Gutierrez)



XIAOZHUO LIU, PHD

Dissertation Title: "Generation of Induced Pluripotent Stem Cells for the Study of Autism Spectrum Disorder"
NICHD Mentor: Dr. Owen M. Rennert
Partner School: The Chinese University of Hong Kong

(photo courtesy of Dr. Liu)



MICHAEL SHAOFEI ZHANG, PHD

Dissertation Title: "Mechanistic Study of RanGTPase Guanine Exchange Factor (RCC1) Dynamics in Mitosis"
NICHD Mentor: Dr. Mary Dasso
Partner School: The Chinese University of Hong Kong

(photo courtesy of Dr. Zhang)

February Announcements

SAVE THE DATE! ELEVENTH ANNUAL NICHD FELLOWS RETREAT, MAY 1ST

The Eleventh Annual Meeting for Postdoctoral, Clinical, and Visiting Fellows and Graduate Students is just a few months away, and it will be held at the Smithsonian's National Museum of the American Indian in the heart of DC.

It will allow you to step away from the lab for a day to network and participate in a career exploration session and, of course, to learn more about recent scientific developments in NICHD.

This year's theme is "Communicating Science." Several great speakers will join us, including two keynote addresses covering science careers, job searching, and networking. You'll be able to interact with several NICHD alumni from various career paths—the steering committee has invited representatives from academia, industry, science writing, and government (policy, research and administration).

Online registration will go live on **February 23** at <http://retreat.nichd.nih.gov>. Don't forget to sign up! For more information, contact Yvette Pittman at yvette.pittman@nih.gov.

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February Announcements

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PRAT NOW ACCEPTING APPLICATIONS—CHECK OUT THE NEW PROCESS

The Postdoctoral Research Associate (PRAT) Program supports postdoctoral fellowships within the NIH Intramural Research Program. In addition to professional development activities, it provides research training in all areas supported by NIGMS. You must be citizens or permanent residents of the United States and have started your NIH postdoctoral training no later than October 2013. More information about the program can be found at <http://www.nigms.nih.gov/Training/Pages/PRAT.aspx>.

The NICHD Office of Education is here to offer our support as you go through the application process. The submission deadline (**March 17, 2015**) is rapidly approaching, and postdoc applicants must now apply with the NIH F12 funding mechanism.

If you are planning to apply this cycle, but were unable to attend our informational session held February 2, 2015, please contact Yvette Pittman (Yvette.Pittman@nih.gov) for details on how to prepare for this NIH application submission. Intramural NICHD has established a review committee of senior PIs who are willing to read through your applications and offer editorial and scientific guidance.

NEW RESOURCE FOR PUBLIC HEALTH TRAINING OPPORTUNITIES

From the Association of American Medical Colleges STAT (Short, Topical, and Timely) Jan 26, 2015, **newsletter**: The AAMC has launched a new Web-based resource of public health training opportunities for learners across the medical education continuum. **Public Health Pathways** is a searchable database of domestic and international public and population health training opportunities in academic, government, and community settings for pre-med students, medical students, residents, and post-residents.

February Events

MONDAY, FEBRUARY 2, 11 AM

Informational Session for Prospective PRAT Applicants:
Postdoctoral Fellowships at the NIH
Bldg. 31, Room 2A48

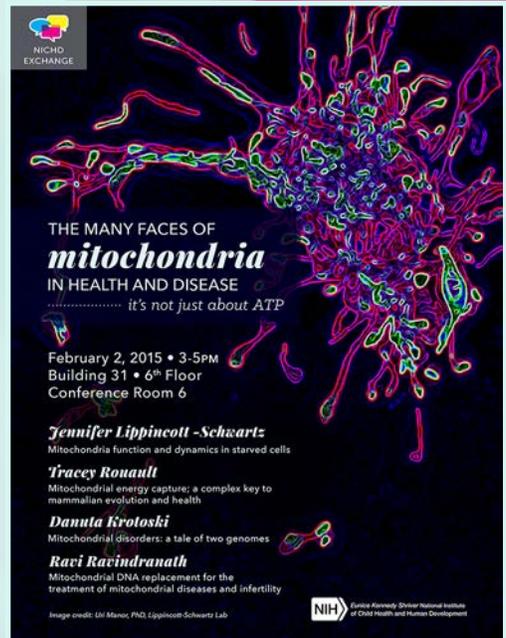
MONDAY, FEBRUARY 2, 3 – 5 PM

The NICHD Exchange quarterly meeting
"The many faces of mitochondria in health and disease - it's
not just about ATP"
Building 31, 6th floor, Conference Room 6

Speakers to include:

- » Tracey Rouault - "Mitochondrial Energy capture; a complex key to mammalian evolution and health"
- » Jennifer Lippincott-Schwartz - "Mitochondria function and dynamics in starved cells"
- » Danuta Krotoski - "Mitochondrial disorders: a tale of two genomes"
- » Ravi Ravindranath - "Mitochondrial DNA replacement for the treatment of mitochondrial diseases and Infertility"

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February Events

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TUESDAY, FEBRUARY 24, 12 – 1 PM

Postbac Career Session: "The Application Process and Life as a Medical Student"

The NICHD Office of Education is hosting a panel of medical students and clinical fellows on **February 24, 2015**, to answer postbacs' questions on anything and everything about applying to medical school and life as a medical student.

Topics may include qualities of a strong application, survival tips for the intense course load, important factors when choosing a program, a description of a typical day either in school or practicing medicine, how to handle being wait-listed, and what panelists wish they had known or done differently before entering their MD programs.

If you wish to attend this lunchtime session, please register with Yvette Pittman at yvette.pittman@nih.gov. Pizza will be provided.

FRIDAY, FEBRUARY 27, 10 -11 AM

For All New Fellows: NICHD Postdoc Orientation
Room 2A48, building 31

What unique opportunities are available to you at the NICHD? You can learn the answer at our quarterly NICHD postdoc orientation. This orientation is separate from all of the other orientations, and it supplements the NIH-wide Office of Intramural Training and Education session. If you recently joined an intramural NICHD lab as a postdoc or visiting fellow, please plan to attend this NICHD-specific event.

Led by the NICHD Office of Education, the orientation will highlight both NICHD and NIH-wide intramural resources for postdoc fellows. Topics will include career-planning tools, grant opportunities for fellows, ideas for presenting your science locally, and the core facilities available to you. You will have the opportunity to meet fellows from other research areas and in different buildings. And we will share information on our key programs that support your professional development, complementing the mentored experience you will have at the bench.