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Explaining Research

How to Reach Key Audiences to Advance Your Work

Second Edition

www.Explaining Research.com

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 Chamber of Commerce.org
- Amoeba Sisters videos, GIFs
- Astronomy Picture of the Day, NASA
- Bugwood Network insect and forestry images
- CalPhotos
- CDC Image Library
- <u>CDC Publish Health Image Library</u>
- Cell Image Library
- DNA animations by wehi.tv
- From DNA to protein 3D video
- Free Nature Stock
- Giphy animated GIFs
- Gratisography
- EurekAlert! multimedia gallery
- Free images general stock shots
- Free Science Animated Clipart
- Google Advanced Image Search
- HHS Image Galleries
- Hubble Space Telescope images
- Images in Your Blog Posts: Best Practices includes many image sources
- <u>Kurzgesagt In a Nutshell</u> science explainer animations
- <u>Life of Pix</u> photos and video
- National Digital Library, U.S. Fish & Wildlife Service
- Department of Energy and DOE national laboratories

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- How Stuff Works Web site illustrations, animations, and videos on science and technology
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- Microsoft Images clip art, photos, and images
- MorgueFile general stock shots
- Molecular Workbench
- NASA art gallery
- NASA images
- NASA video gallery
- National Institutes of Health Image Gallery
- NIH National Cancer Institute visuals online
- NIH National Institute for General Medical Sciences image gallery
- National Marine Sanctuaries Media Library
- National Science Foundation multimedia gallery
- NOAA Photo Library
- PhET interactive simulations for science and math
- Pixabay free and royalty-free images and video
- Public Domain Archive photos
- The Public Domain Project free historic footage
- Rgbstock general stock shots
- Twenty Animated GIFs That Explain How Things Work
- Unsplash general high-quality stock shots
- U.S. government master search page for images
- U.S. government YouTube channel for science & technology
- USDA Agricultural Research Service image gallery
- U.S. Fish and Wildlife Service National Digital Library
- Vecteezy freevector art, stock photos & videos
- Wellcome Images, more than 40,000 images from clinical and biomedical sciences
- WEHI.TV 3D biomedical animations, gifs and images
- Wikimedia Commons free images and video
- YouTube

Commercial sources for images, illustrations, animation and video

- Adobe Stock
- a Luna Blue stock video

- <u>Animation Factory</u> animated clip art, templates, backgrounds and videos. Science/Medical PowerPoint backgrounds
- Bigstock
- depositphotos
- Earth: Portrait of a Planet
- eduMedia
- <u>Envato Elements</u> subscription service for photos, video, presentation templates, website templates
- Getty Images
- iStockphoto photos, graphics, video, audio
- Molecular Expressions Photo Gallery
- NVTech
- Offset distinctive general stock shots
- Pond5 photos, illustrations, video
- Photos to Go Unlimited
- Pubic Domain Footage archival footage
- ScienceSlides
- Science Source science and medicine stock photos, illustration and video
- Shutterstock photos, video
- Wiley Interactive Concepts in Biochemistry
- XVIVO Scientific Animation

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- <u>Canva</u> presentation design software
- <u>Combining Colors in PowerPoint—Mistakes to Avoid</u>, Microsoft
- <u>Crystal Graphics</u> PowerPoint plugins for templates, animations, 3D
- <u>eMaze</u> online presentation designer
- GoogleDocs Presentations
- Haiku Deck for iPad and web presentations
- How to Insert 3D models into PowerPoint
- How to Embed Fully Interactive 3D Documents into PowerPoint See also ICM User's Guide

- Microsoft PowerPoint video training
- PDF3D for inserting interactive PDFs in PowerPoint
- Interactive PowerPoint
- LiveSlides embeds live web content into slides
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- Microsoft Photos
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- Molecular Modeling Basics: <u>Rotating molecules in Powerpoint part 2</u>
- 123PPT.com PowerPoint templates and video backgrounds
- OpenOffice.org Impress
- <u>Polyview-3D</u> for creating molecular models for presentations and web
- <u>Powered Templates</u> PowerPoint templates and video backgrounds
- The PowerPoint FAQ
- PowerPoint Heaven
- PresentationPro
- <u>Presenter</u> converts Powerpoint slides to eLearning content
- Prezi presentation software
- Screencast-O-Matic for recording action on a screen
- Slidebean for designing slide presentations
- <u>Screenflow</u> (Mac) for recording computer screen interaction, video, etc.
- SlideRocket
- Snagit for capturing and manipulating screen images
- <u>Snagit: Getting Started with Snagit</u> webinar
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- <u>Visme</u> for producing visual slides and infographics. <u>See also this tutorial</u>
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- Zamzar for converting file formats

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- Audience response software
- Polling software
- AhaSlides
- Meeting pulse
- Mentimeter
- HQama
- Pigeonhole Live
- Sli.do
- Social Q&A

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- Cartoon Bank
- CartoonStock
- Dan Rosandich custom and professional cartoons
- DesignCrowd <u>Photoshopped images</u>
- DesignCrowd Nerdimals
- <u>Einstein chalkboard sign generator</u>
- Newspaper clipping generator
- Newspaper generator (create fake newspaper page)
- <u>Pho.to</u> site for creating humorous photo effects
- <u>Photofunia</u> site for creating humorous photo effects
- Sidney Harris cartoons
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- Uncle Sam "I WANT YOU" custom sign generator
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- <u>Canva</u> web system for creating online and print graphics
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- Top Five 3D Molecular Visualization Technologies
- Venngage for making infographics. Both free and paid versions
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- Windows Movie Maker (Need to purchase Pro version for full features)
- Wondershare Filmora for creating Ken Burns effect slide show
- Best free alternatives for Windows Movie Maker
- XVIVO Scientific Animations
- 12 Best Online Photography Courses, Schools & Degrees from Online Courses Review

Science and medical illustrators

- 16 Medical Illustrators Doing Groundbreaking Work
- AXS Studio science and medical illustrations, animations, and interactive experiences
- Background Stories data visualization services
- <u>LetPub</u> scientific illustration
- SCIstyle scientific illustration
- <u>Somersault18:24</u> scientific illustration, cover art

Resources for VR and AR app development

- Arkitek Scientific
- AXS Studio medical illustrations, animations and interactive experiences

- Brio VR and AR company
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- <u>DesignCrowd</u> collection of highly creative Photoshopped images

- <u>Einstein chalkboard sign generator</u> (add your own text)
 <u>Newspaper generator</u> (create fake newspaper page)
- Pho.to site for inserting people's images into amusing scenes
- <u>PhotoFunia</u> for inserting people's images into amusing scenes
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- HostMonster
- lonos
- JustHost
- Network Solutions
- OneWorld Hosting
- Yahoo Hosting

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- Freewebs
- 99Designs web site design marketplace
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- TemplateMonster
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- Articulate 360
- authorStream
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- OpenShot Video Editor
- Pinnacle Studio 24
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- <u>vMix</u> for video production

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- NASA video gallery
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- IEEE Spectrum Video
- Kent's Video Chemical Demonstrations
- MIT Open Courseware
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- Nature YouTube video channel
- Nova ScienceNow
- Open Education Resource Commons
- Open Yale Courses
- YouTube

Outlets for syndicating and sharing videos

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- ScienceHack
- TeacherTube
- YouTube
- Vimeo
- We Share Science

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- Echo360

- Screencast.com
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Podcasting hardware and sound editing services and software

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- Adobe Audition
- Audacity
- Avid Pro Tools
- Audio Acrobat

- Apple Logix Pro X
- Electro-Voice RE50/B Microphone
- JK Audio Broadcast Host Digital Hybrid
- Magix Audio Cleaning Lab
- Sound Forge Audio Studio
- Type Studio transcribes podcasts to enable editing just by editing text
- WavePad Audio Editing Software
- Zoom H4N Handy Recorder

Podcast production, syndication, and distribution services

- Apple iTunes Store
- BlogTalkRadio science
- Liberated Syndication
- Spreaker

Wiki sites and resources

- <u>Confluence</u>
- PBWiki/PBworks
- Wikipedia
- Wikipedia comparison of wiki hosting services
- Wikipedia explanation of wikis
- Wikibooks textbook community
- Wiki.com
- Wiki.org

Social networking sites

- <u>Academia.edu</u> for sharing papers
- Facebook
- <u>Flickr</u> photo-sharing site
- Google Scholar
- HubPages
- Instagram for sharing photos and videos
- <u>LabRoots</u> scientific social network
- Linkedin
- Meetup
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- Mix social bookmarking site
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- ResearcherID for managing professional profile
- ResearchGate networking site
- Twitter
- (Yahoo Groups has shut down. Here's a good <u>guide to alternatives</u>, <u>by Katie Horne</u>.)
- YouTube
- YouTube Help

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- RealClimate
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- · dlvr.it automated social media manager
- HootSuite Web-based system for managing multiple Twitter accounts
- NASA Social Media
- NetLingo Internet Dictionary
- Plurk
- SocialOomph for managing and scheduling social media
- Tumblr
- TweetDeck for managing Twitter feeds
- <u>TweetGrid</u> search dashboard for monitoring topics, events, etc.
- <u>Twhirl</u> destop application for managing social network accounts
- <u>Twilert</u> service for monitoring Twitter
- Twitter
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- Twitter basics guide for business users
- Twitter Guide Book, Mashable
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- Twitter search
- <u>Twittermail</u> provides email address for posting Tweets
- Twitter Mars Phoenix

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- <u>twtsurvey</u> polls via Twitter
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- AddThis service enables one-button sharing of content with multiple bookmarking sites
- Digg
- Del.icio.us
- Mix
- Reddit
- Social bookmarking, Wikipedia

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- Best Video Conferencing Apps and Software for Accessibility
- Best Video Conferencing: Join.Me vs GoToMeeting vs WebEx vs Zoom vs Skype vs TeamViewer vs AnyMeeting
- Which is More Secure: Zoom Vs Skype Vs Teams Vs Webex Comparison
- Zoom Vs Microsoft Teams, Google Meet, Cisco Webex and Skype: Choosing the Right Video-Conferencing Apps for You
- Zoom vs GoToMeeting: Which is the Best Video Conferencing Solution?
- Adobe Connect
- Beyond Built-in: Why a Better Webcam Matters
- BigMarker
- Elgato green screen
- Emart Photo Studio Backdrop
- eShow
- Eventsforce
- GoToMeeting
- GoToWebinar
- Green screen backdrop
- How to build a Zoom Virtual Background with Your Brand Logo, Thinktiv web tool for creating a logo background
- How to Look Good on Camera, Techsmith
- How to Look Good on Video Calls for Zoom, FaceTime, Skype
- How to Look Good on Zoom, Katie Fehlinger
- How to Remove Video Background without Green Screen
- How to Use a Script on Zoom, Katie Fehlinger

- How to use a green screen with Skype
- How to use Manycam for green screen
- Inexpensive Video Conferencing Lighting Solutions
- Livestorm
- ManyCam streaming production software
- Open Broadaster Software for video recording and live streaming
- On24
- <u>Skype</u> video calling software
- SparkoCam virtual webcam for creating a green screen
- vMix streaming production software
- Using vMix to create a Chroma Key Green Screen
- WebEx Meeting Center
- WebEx/ Skype/ Zoom Background removal for PC
- Webinar software comparison site
- Web and Video Conferencing Software Overview
- <u>WebAround</u> green screen
- Zoho Meeting
- Zoom
- Zoom accessibility features
- Zoom accessibility features and ADA compliance (video)
- Zoom closed captioning and live transcription
- Zoom: Hardware Solutions for your Hybrid Meetings
- Zoom Hosting Large Events: Webinars Vs. Meetings
- Zoom: Getting Started with Zoom Rooms
- Zoom training webinars

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- GreatBrook, <u>Tips for Selecting an Online Survey Software Tool</u>
- QuestionPro
- QuestionPro Survey Design Tips
- SurveyMethods
- Survey Monkey
- twtpoll polls via Twitter

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- Grammarly
- Hemingway Editor
- ProWritingAid
- Style Writer
- WhiteSmoke

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- Authors Guild
- National Association of Science Writers
- Society of Environmental Journalists

Books, articles, and websites on science writing and journalism

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- Bioscience
- Huffington Post
- New Scientist
- Popular Science
- Psychology Today
- Salon
- Science
- Scientific American
- Sky & Telescope
- Smithsonian
- The Conversation
- The Scientist
- Undark
- Vox

Online article sites

- EzineArticles
- Payloadz

Illustrations of "grabber" feature beginnings

- Tell a story about someone involved in the article: "<u>Allergy Action</u>" (lede only)
- Craft a 'what if" scenario: "Sound Thinking"
- Describe a moment of discovery, reconstructed from an interview:
 "Unearthing Ostensible Ancestors" (lede only)
- Describe a vignette of field work: "<u>Tweet Mystery of Life</u>" (lede only)
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- AAAS SciLine
- Association of Science and Technology Centers
- ASTC Science Center Statistics 2016
- Center for Informal Learning and Schools
- HHMI education programs
- National Science Teachers Association
- NIH Office of Science Education, NIH Curriculum Supplements
- NSF Directorate for Education and Human Resources
- Salk Institute education outreach
- Science and Entertainment Exchange of the National Academy of Sciences
- Science Cafés

General references, resources and opportunities for involvement

- AAAS annual meeting
- Adopt-a-Physicist
- Association for Women in Science
- <u>Biointeractive</u>, Howard Hughes Medical Institute resources for science education
- <u>Car and Vehicle STEM experiments</u> visual guides for experiments explaining car functions
- <u>Center for Informal Learning and Schools</u>
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- <u>Coding Bootcamps and Certificates</u>, <u>Are Coding Bootcamps Worth It?</u>, <u>Best Online Coding Bootcamps</u>, <u>BestColleges</u>
- <u>College Guide for Students with Disabilities and Their</u>
 <u>Parents</u>, <u>IvyPanda</u> blog (Thanks to Yvonne McQuarrie for the link!)
- Davis, Andrea, <u>Science Experiments for All Around Your Home</u>, HomeAdvisor
- Earthwatch Institute

- Explaining Newton's Laws of Motion by Examining a Car Accident (Thanks to Keri Evans for the link!)
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- Girls Who Code
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- HomeAdvisor, <u>Home Energy Conservation for Kids</u> resource collection
- <u>Kids' Coding Activities Guide</u>, Router-Network.com (Thanks to Hailey Dawn Stratton for the link!)
- <u>Kids' Computer Basics: Keyboarding</u>, Router-Network.com (Thanks to Hailey Dawn Stratton for the link!)
- <u>Kid's Online Learning Tools for Science, Technology and Beyond!</u>, Best Kid Stuff (Thanks to Hannah Nelson for the link!)
- Labster virtual labs
- League of Women Coders
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- NIH Office of Science Education, NIH Curriculum Supplements
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- <u>Periodic Videos</u>: interactive periodic table with a video lesson about each element
- PhET, online simulations in physics, chemistry, math, biology, and earth science

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- Salk Institute education outreach
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- <u>Supercourse</u>, a global repository of lectures on public health and prevention
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- TeacherTube an online community for sharing educational videos
- The Science Behind Glass
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- <u>Understanding Science</u>, resource for teachers from the <u>Coalition on the</u>
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- <u>American Astronomical Society Public Policy Page</u>
- American Chemical Society
- American Geophysical Union

- American Physical Society
- American Physiological Society
- Association for Women in Science Advocacy and Public Engagement
- Association of American Universities
- COMPASS Communication Tools & Resources
- DOE Office of Congressional and Intergovernmental Affairs
- <u>Federation of American Societies for Experimental Biology, Policy &</u>
 Government Affairs
- NIH Office of Legislative and Policy Analysis
- NSF & Congress
- NSF Office of Legislative & Public Affairs
- National Science Teachers Association
- Society for Neuroscience Advocacy Network

General research advocacy groups

- Coalition for National Science Funding
- Council on Governmental Relations
- National Association for Biomedical Research
- STEM Education Coalition
- Task Force on the Future of American Innovation
- The Science Coalition

Issue advocacy groups

- Audubon
- Center for Science in the Public Interest
- Environmental Defense Fund
- Friends of the Earth
- Mars Society
- NASA Watch
- National Wildlife Federation
- Natural Resources Defense Council
- Ocean Champions
- Planetary Society
- Space Politics
- Union of Concerned Scientists

Federal science policy offices & committees & contact information

- BeBusinessEd, How to contact Congress
- Congressional committees

- Science & Policy links, National Science Foundation
- Office of Management and Budget
- Office of Science and Technology Policy
- U.S. House of Representatives committee offices
- <u>U.S. House of Representatives Committee on Science, Space and Technology</u>
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- Help a Reporter Out
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