

## Science Fair Resources

<p>United States Patent and Trademark Office          Customer Service: 1-800-786-9199 (toll-free); 571-272-1000 (local); 571-272-9950 (TTY)  <a href="http://www.uspto.gov">www.uspto.gov</a>  <a href="http://www.uspto.gov/patents/process/index.jsp">www.uspto.gov/patents/process/index.jsp</a>          Conducting a Patent Search -</p> <ul style="list-style-type: none"> <li>• <a href="https://patents.google.com/">https://patents.google.com/</a></li> <li>• <a href="http://www.freepatentsonline.com/">http://www.freepatentsonline.com/</a></li> <li>• <a href="https://worldwide.espacenet.com/">https://worldwide.espacenet.com/</a></li> </ul>	<p>USPTO Resources</p> <ul style="list-style-type: none"> <li>• 7 Step Search Strategy Guide and Video Tutorial  <a href="https://www.uspto.gov/learning-and-resources/support-centers/patent-and-trademark-resource-centers-ptrc/resources/seven">https://www.uspto.gov/learning-and-resources/support-centers/patent-and-trademark-resource-centers-ptrc/resources/seven</a></li> <li>• <a href="https://www.youtube.com/playlist?list=PL9BtHzl4w-dl2ia9lgtZ3o8KJYh_JPVQF">https://www.youtube.com/playlist?list=PL9BtHzl4w-dl2ia9lgtZ3o8KJYh_JPVQF</a></li> <li>• <a href="https://www.uspto.gov/video/cbt/ptrcsearching/">https://www.uspto.gov/video/cbt/ptrcsearching/</a></li> </ul> <p>Pro Bono Program</p> <ul style="list-style-type: none"> <li>• <a href="https://www.uspto.gov/patents-getting-started/using-legal-services/pro-bono/patent-pro-bono-program">https://www.uspto.gov/patents-getting-started/using-legal-services/pro-bono/patent-pro-bono-program</a></li> </ul> <p>Law School Clinic Certification Program</p> <ul style="list-style-type: none"> <li>• <a href="https://www.uspto.gov/learning-and-resources/ip-policy/public-information-about-practitioners/law-school-clinic-1">https://www.uspto.gov/learning-and-resources/ip-policy/public-information-about-practitioners/law-school-clinic-1</a></li> </ul> <p>USPTO Pro Se Assistance Program</p> <ul style="list-style-type: none"> <li>• <a href="https://www.uspto.gov/patents-getting-started/using-legal-services/pro-se-assistance-program">https://www.uspto.gov/patents-getting-started/using-legal-services/pro-se-assistance-program</a></li> </ul>
<p>National Aeronautics and Space Administration          NASA  <a href="https://www.nasa.gov/education/resources">https://www.nasa.gov/education/resources</a>  <a href="https://www.nasa.gov/stem">https://www.nasa.gov/stem</a>  <a href="https://www.jpl.nasa.gov/edu/teach/activity/how-to-do-a-science-fair-project/">https://www.jpl.nasa.gov/edu/teach/activity/how-to-do-a-science-fair-project/</a></p>	<p>National Oceanic and Atmospheric Administration          NOAA  <a href="https://www.noaa.gov/education">https://www.noaa.gov/education</a></p>
<p><b>Human Participants</b>          NIH tutorial, “Protecting Human Research Participants”  <a href="http://phrp.nihtraining.com/files/PHRP.pdf">http://phrp.nihtraining.com/files/PHRP.pdf</a></p>	<p><b>Human Participants</b>          Belmont Report, April 18, 1979  <a href="http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html">www.hhs.gov/ohrp/humansubjects/guidance/belmont.html</a></p>
<p><b>Human Participants</b>          Standards for Educational and Psychological Testing. (1999). Washington, DC: AERA, APA, NCME.  <a href="http://www.apa.org/science/programs/testing/standards.aspx">www.apa.org/science/programs/testing/standards.aspx</a></p>	<p><b>Human Participants</b>          American Psychological Association          750 First Street, NE Washington, DC 20002-4242          phone: 202-336-5500; 800-374-2721  <a href="http://www.apa.org">www.apa.org</a></p>
<p><b>Human Participants</b>          Information for students:  <a href="http://www.apa.org/science/leadership/students/information.aspx">www.apa.org/science/leadership/students/information.aspx</a> Information regarding publications:  <a href="http://www.apa.org/pubs/index.aspx">www.apa.org/pubs/index.aspx</a></p>	<p><b>Human Participants</b>          Educational and Psychological Testing          Testing Office for the APA Science Directorate          phone: 202-336-6000          email: <a href="mailto:testing@apa.org">testing@apa.org</a>  <a href="http://www.apa.org/science/programs/testing/index.aspx">www.apa.org/science/programs/testing/index.aspx</a></p>
<p><b>Human Participants</b>          The Children’s Online Privacy Protection Act of 1998 (COPPA) (15 U.S.C. §§ 6501–6506)  <a href="http://www.ftc.gov/privacy/coppafaqs.shtm">www.ftc.gov/privacy/coppafaqs.shtm</a></p>	<p>European Patent Off  <a href="http://www.epo.org">www.epo.org</a>  <a href="http://www.epo.org/applying/basics.html">www.epo.org/applying/basics.html</a></p>
<p>ANS Task Force  <a href="http://www.anstaskforce.gov">www.anstaskforce.gov</a>          Aquatic Nuisance Species (ANS) Task Force  <a href="http://www.anstaskforce.gov">www.anstaskforce.gov</a>  <a href="http://www.anstaskforce.gov/Documents/ISEF.pdf">www.anstaskforce.gov/Documents/ISEF.pdf</a></p>	<p>APHIS  <a href="http://aphis.usda.gov/aphis/home">aphis.usda.gov/aphis/home</a>          Animal and Plant Health Inspection Service          Invasive Species List</p>

<p>Invasive Species Specialist Group  <a href="http://www.issg.org">www.issg.org</a>  The Global Invasive Species database contains invasive species information supplied by experts from around the world</p>	<p>Invasive Species Information  <a href="http://www.invasivespeciesinfo.gov/resources/lists.shtml">www.invasivespeciesinfo.gov/resources/lists.shtml</a>  Provides information for species declared invasive, noxious, prohibited, or harmful or potentially harmful.</p>
<p><b>Human Participants</b>  Code of Federal Regulation (CFR), Title 45 (Public Welfare), Part 46-Protection of Human Subjects (45CFR46)  <a href="https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46">https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46</a></p>	<p><b>Vertebrate Animals/Animal Care and Use</b>  Laboratory Animals, Institute of Laboratory Animal Research (ILAR), Commission on Life Sciences, National Research <a href="http://dels.nas.edu/ilar">http://dels.nas.edu/ilar</a></p>
<p><b>Vertebrate Animals/Animal Care and Use</b>  Guide for the Care and Use of Laboratory Animals, 8<sup>th</sup> Edition (2011)  <a href="http://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-Animals.pdf">http://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-Animals.pdf</a>  <a href="http://www.nap.edu/catalog.php?record_id=12910">www.nap.edu/catalog.php?record_id=12910</a></p>	<p><b>Vertebrate Animals/Animal Care and Use</b>  Guidelines for the Care and Use of Mammals in Neuroscience and Behavioral Research (2003), Institute for Laboratory Animal Research (ILAR)  <a href="https://www.nap.edu/catalog/10732/guidelines-for-the-care-and-use-of-mammals-in-neuroscience-and-behavioral-research">https://www.nap.edu/catalog/10732/guidelines-for-the-care-and-use-of-mammals-in-neuroscience-and-behavioral-research</a></p>
<p><b>Vertebrate Animals/Animal Care and Use</b>  To order these ILAR publications contact: National Academies Press  500 Fifth Street, NW Washington, DC 20055  phone: 888-624-8373 or 202-334-3313; fax: 202-334-2451, <a href="http://www.nap.edu">www.nap.edu</a></p>	<p><b>Vertebrate Animals/Animal Care and Use</b>  Federal Animal Welfare Act (AWA)  7 U.S.C. 2131-2157  Subchapter A - Animal Welfare (Parts I, II, III)  <a href="https://www.nal.usda.gov/awic/animal-welfare-act">https://www.nal.usda.gov/awic/animal-welfare-act</a></p> <p>Document is available from:  USDA/APHIS/AC  4700 River Road, Unit 84  Riverdale, MD 20737-1234  email: <a href="mailto:ace@aphis.usda.gov">ace@aphis.usda.gov</a>  phone: 301-734-7833; fax: 301-734-4978  <a href="http://awic.nal.usda.gov">http://awic.nal.usda.gov</a></p>
<p><b>Vertebrate Animals/Animal Care and Use</b>  Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching (Agri-Guide)  Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC International) <a href="https://www.aaalac.org/">https://www.aaalac.org/</a>  <a href="https://www.aaalac.org/about/Ag_Guide_3rd_ed.pdf">https://www.aaalac.org/about/Ag_Guide_3rd_ed.pdf</a></p>	<p><b>Vertebrate Animals/Animal Care and Use</b>  Guidelines for the Use of Fish in Research (2014), American Fisheries Society.  <a href="http://www.fisheries.org">www.fisheries.org</a>  <a href="https://fisheries.org/docs/wp/Guidelines-for-Use-of-Fishes.pdf">https://fisheries.org/docs/wp/Guidelines-for-Use-of-Fishes.pdf</a></p>
<p><b>Vertebrate Animals/Animal Care and Use</b>  Euthanasia Guidelines  AVMA Guidelines on Euthanasia (2020)  American Veterinary Medical Association  <a href="http://www.avma.org/KB/Policies/Documents/euthanasia.pdf">www.avma.org/KB/Policies/Documents/euthanasia.pdf</a></p>	<p><b>Alternative Research and Animal Welfare</b>  The National Library of Medicine provides computer searches through MEDLINE:  Reference &amp; Customer Services  National Library of Medicine 8600 Rockville Pike  Bethesda, MD 20894  888-FIND-NLM or 888-346-3656; 301-594-5983;  email: <a href="mailto:info@ncbi.nlm.nih.gov">info@ncbi.nlm.nih.gov</a>  <a href="http://www.nlm.nih.gov">www.nlm.nih.gov</a>  <a href="http://ncbi.nlm.nih.gov/pubmed">ncbi.nlm.nih.gov/pubmed</a></p>

<p><b>Alternative Research and Animal Welfare</b> National Agriculture Library (NAL) provides reference service for materials that document a) Alternative Procedures to Animal Use and b) Animal Welfare. Animal Welfare Information Center National Agriculture Library 10301 Baltimore Avenue, Room 410 Beltsville, MD 20705-2351 phone: 301-504-6212, fax: 301-504-7125 email: awic@ars.usda.gov www.nal.usda.gov/awic</p>	<p><b>Alternative Research and Animal Welfare</b> Institute of Laboratory Animal Resources (ILAR) provides a variety of information on animal sources, housing and handling standards, and alternatives to animal use through annotated bibliographies published quarterly in ILAR Journal. ILAR— The Keck Center of the National Academies 500 Fifth Street, NW, Keck 687 Washington, DC 20001 phone: 202-334-2590, fax: 202-334-1687 email: ILAR@nas.edu <a href="http://dels.nas.edu/ilar">http://dels.nas.edu/ilar</a></p>
<p><b>Alternative Research and Animal Welfare</b> Institute of Laboratory Animal Resources (ILAR) provides a variety of information on animal sources, housing and handling standards, and alternatives to animal use through annotated bibliographies published quarterly in ILAR Journal. ILAR— The Keck Center of the National Academies 500 Fifth Street, NW, Keck 687 Washington, DC 20001 phone: 202-334-2590, fax: 202-334-1687 email: ILAR@nas.edu <a href="http://dels.nas.edu/ilar">http://dels.nas.edu/ilar</a></p>	<p><b>Alternative Research and Animal Welfare</b> Quarterly bibliographies of Alternatives to the Use of Live Vertebrates in Biomedical Research and Testing may be obtained from: Specialized Information Services NLM/NIH 2 Democracy Plaza, Suite 510 6707 Democracy Blvd., MSC 5467 Bethesda, MD 20892-5467 phone: 301-496-1131; Fax: 301- 480-3537 email: <a href="mailto:tehip@tehl.nlm.nih.gov">tehip@tehl.nlm.nih.gov</a> <a href="https://www.sis.nlm.nih.gov">https://www.sis.nlm.nih.gov</a> <a href="http://toxnet.nlm.nih.gov/altbib.html">http://toxnet.nlm.nih.gov/altbib.html</a></p>
<p><b>Alternative Research and Animal Welfare</b> <u>Johns Hopkins Center for Alternatives to Animal Testing (CAAT)</u> has worked with scientists since 1981 to find new methods to replace the use of laboratory animals in experiments, reduce the number of animals tested, and refine necessary tests to eliminate pain and distress. email: <a href="mailto:caat@jhsph.edu">caat@jhsph.edu</a> <a href="http://caat.jhsph.edu/">http://caat.jhsph.edu/</a></p>	<p><b>Alternative Research and Animal Welfare</b> Quality Assurance Manuals (for appropriate species) Such as: Poultry: <a href="https://www.bordbia.ie/industry/farmers/quality/PoultrySchemeStandards/Poultry%20Producer.pdf">https://www.bordbia.ie/industry/farmers/quality/PoultrySchemeStandards/Poultry%20Producer.pdf</a> Beef: <a href="https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf">https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf</a> Pork: <a href="http://www.pork.org/">http://www.pork.org/</a></p>
<p><b>Potentially Hazardous Biological Agents</b> American Biological Safety Association: ABSA Risk Group Classification — list of organisms <a href="http://www.absa.org">www.absa.org</a></p>	<p><b>Potentially Hazardous Biological Agents</b> American Type Culture Collection (ATCC) <a href="http://www.atcc.org">www.atcc.org</a></p>
<p><b>Potentially Hazardous Biological Agents</b> Bergey's Manual of Systematic Bacteriology website — follow the links for resources and microbial databases for a collection of international websites of microorganisms and cell cultures. <a href="https://www.bergeys.org">https://www.bergeys.org</a></p>	<p><b>Potentially Hazardous Biological Agents</b> Biosafety in Microbiological and Biomedical Laboratories (BMBL) — 4th Edition. Published by CDC-NIH <a href="https://www.cdc.gov/labs/BMBL.html">https://www.cdc.gov/labs/BMBL.html</a></p>
<p><b>Potentially Hazardous Biological Agents</b> World Health Organization Laboratory Safety Manual <a href="http://www.who.int/diagnostics_laboratory/guidance/en">www.who.int/diagnostics_laboratory/guidance/en</a></p>	<p><b>Potentially Hazardous Biological Agents</b> Canada — Agency of Public Health — list of non-pathogenic organisms <a href="https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment.html">https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment.html</a></p>

<p><b>Potentially Hazardous Biological Agents</b>  American Society for Microbiology  <a href="https://www.asm.org">https://www.asm.org</a></p>	<p><b>Potentially Hazardous Biological Agents</b>  Microbiology Society  Charles Darwin House  12 Roger Street  London  WC1N 2JU  UK  <a href="mailto:education@microbiologysociety.org">education@microbiologysociety.org</a>  <a href="http://microbiologyonline.org">http://microbiologyonline.org</a></p>
<p><b>Potentially Hazardous Biological Agents</b>  NIH Guidelines for Research Involving Recombinant DNA Molecules. Published by National Institutes of Health.  <a href="https://osp.od.nih.gov/wp-content/uploads/2013/06/NIH_Guidelines.pdf">https://osp.od.nih.gov/wp-content/uploads/2013/06/NIH_Guidelines.pdf</a></p>	<p><b>Potentially Hazardous Biological Agents</b>  OSHA—Occupational Health and Safety Administration  <a href="http://www.osha.gov">www.osha.gov</a></p>
<p><b>Hazardous Chemicals, Activities or Devices</b>  <u>General Lab/Chemical Safety</u>  Safety in Academic Chemistry Laboratories, Volumes 1 and 2, 2003. Washington, DC: American Chemical Society. Order from (first copy free of charge): American Chemical Society Publications Support Services, 1155 16th Street, NW Washington, DC 20036, phone: 202-872-4000 or 800-227-5558 email: <a href="mailto:help@acs.org">help@acs.org</a>  <a href="http://www.acs.org/education">www.acs.org/education</a></p>	<p><b>Hazardous Chemicals, Activities or Devices</b>  General Howard Hughes Medical Institute has resources for working with cell cultures, radioactive materials and other laboratory materials.  <a href="http://www.hhmi.org/developing-scientists/resources">http://www.hhmi.org/developing-scientists/resources</a></p>
<p><b>Hazardous Chemicals, Activities or Devices</b>  Environmental Protection Agency (EPA) website for green chemistry  <a href="http://www.epa.gov/greenchemistry">www.epa.gov/greenchemistry</a></p>	<p><b>Hazardous Chemicals, Activities or Devices</b>  Safety and Data Sheets (SDS)  <a href="http://www.flinnsci.com/msds-search.aspx">www.flinnsci.com/msds-search.aspx</a>  A directory of SDS sheets from Flinn Scientific Inc. that includes a ranking of hazard level and disposal methods.</p>
<p><b>Hazardous Chemicals, Activities or Devices</b>  <a href="http://www.ilpi.com/msds/index.html">www.ilpi.com/msds/index.html</a> - A listing of numerous sites that have free downloads of SDS sheets.  NFPA (National Fire Protection Association) 704 Standard for guidance on Chemical Reactivity and Instability:  <a href="https://en.wikipedia.org/wiki/NFPA_704">https://en.wikipedia.org/wiki/NFPA_704</a></p>	<p><b>Hazardous Chemicals, Activities or Devices</b>  Pesticides  National Pesticide Information Center  <a href="http://npic.orst.edu/ingred/products.html">http://npic.orst.edu/ingred/products.html</a>  Describes the various types of pesticides and the legal requirements for labeling. Provides links and phone numbers to get additional information.</p>
<p><b>Hazardous Chemicals, Activities or Devices</b>  Environmental Protection Agency  <a href="http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1">http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1</a>  A database of product labels. Enter the product name or company name to view the approved label information of pesticides which are registered with the agency.</p>	<p><b>Hazardous Chemicals, Activities or Devices</b>  DEA Controlled Substances  Drug Enforcement Agency website:  <a href="https://www.dea.gov">https://www.dea.gov</a>  Controlled Substance Schedules—a list of controlled substances:  <a href="http://www.deadiversion.usdoj.gov/schedules">www.deadiversion.usdoj.gov/schedules</a></p>