

**JUDICIAL COUNCIL OF CALIFORNIA
ADMINISTRATIVE OFFICE OF THE COURTS**

455 Golden Gate Avenue
San Francisco, California 94102-3688

Report

TO: Members of the Judicial Council

FROM: Science and the Law Steering Committee
Hon. Ming W. Chin, Chair
Rod Cathcart, Committee Counsel, 415-865-7834; rod.cathcart@jud.ca.gov

DATE: February 7, 2007

SUBJECT: Final Recommendation on Science and the Law Policies (Action Required)

Issue Statement

The Science and the Law Steering Committee was charged with evaluating the general needs of the courts regarding science and technology issues. The committee found general satisfaction with how the judiciary is handling cases involving science and technology, as well as a consensus that ongoing communication between the California judicial branch and the science and technology communities will further the fair administration of justice. The committee believes that, if the Judicial Council sets science and the law policies as a priority, existing advisory committees and task forces can adequately monitor and evaluate effective approaches for responding to new developments in their areas of responsibility.

Recommendation

The Science and the Law Steering Committee recommends that the Judicial Council improve the judicial management of issues regarding science, technology, and the law by:

1. Directing the Governing Committee of the Center for Judicial Education and Research (CJER), through its Science and the Law Education Committee, to facilitate the exchange of information between the courts and the science and technology communities to assess emerging issues, resources, and potential partnerships relating to science, technology, and the law consistent with the guidelines approved by the Judicial Council in February 2006. The steering committee's report, which includes the guidelines, is attached at pages 6–11.
 - A. Appoint representatives from the science and technology communities to membership of the Science and the Law Education Committee.

- B. Report periodically to the Judicial Council on emerging issues in science and technology for further action by existing Judicial Council advisory committees, task forces, and working groups.
 - C. Integrate science and the law curriculum into new judge education by offering a course at the B. E. Witkin Judicial College.
 - D. Integrate science and the law curriculum into education for experienced judges at subject-matter institutes, the Continuing Judicial Studies Program (CJSP), and the biannual Statewide Judicial Branch Conference.
 - E. Develop judicial resources on science and the law such as streaming video broadcasts, benchbooks, updates on new developments, and an online Web presence.
 - F. Sponsor educational projects on science and the law in collaboration with California research organizations and institutes of higher learning, the Federal Judicial Center, and the National Center for State Courts.
 - G. Fund projects to develop science and technology faculty for judicial branch education.
2. Direct existing advisory committees and task forces to monitor the impact of science and technology in the California courts within the context of their areas of responsibility to identify priorities and recommend effective approaches, as follows:
- A. Access and Fairness Advisory Committee: Develop methods to improve access to online court resources for court users who are unfamiliar with computer technologies; and engage community resources (e.g., JusticeCorps, law students, and public libraries) in an effort to improve access to computer technologies.
 - B. Advisory Committees on Civil and Criminal Jury Instructions: Develop instructions to assist jurors in evaluating computer-generated evidence and high-technology demonstrative evidence.
 - C. Appellate Advisory Committee: Develop rules regarding the preservation of electronic presentations for the record on appeal (e.g., PowerPoint and animations).
 - D. Civil and Small Claims Advisory Committee: Develop meet-and-confer procedures to improve agreement on scientific and technological evidence; and develop uniform statewide standards for electronic discovery in collaboration with the Court Technology Advisory Committee.

- E. Court Interpreters Advisory Panel: Consider and recommend new technologies for communication, interpretation, and translation.
 - F. Court Technology Advisory Committee: Sponsor programs for judges to promote use of new technologies; develop baseline courtroom technology standards for evidence presentation; coordinate technology initiatives among other advisory committees and task forces; and develop uniform statewide standards for electronic filing, discovery, and records retention in collaboration with the other advisory committees, task forces, and working groups.
 - G. Criminal Law Advisory Committee: Evaluate procedures regarding discovery and the admission of forensic science evidence in California criminal proceedings.
 - H. Family and Juvenile Law Advisory Committee: Develop improved procedures for judicial consultation on the administration of psychotropic drugs in juvenile proceedings.
 - I. Task Force on Judicial Ethics Issues: Consider whether amendments to the Code of Judicial Ethics are needed to address judicial education or independent research on scientific issues.
3. Require that advisory committee and task force work plans include a science and the law component.

Rationale for Recommendation

In February 2005, Chief Justice Ronald M. George established the Judicial Council Science and the Law Steering Committee to evaluate the general needs of the courts regarding science and technology issues. In partnership with the Science and the Law Education Committee, the committee planned and produced California's first Science and the Law Conference, held on October 6–9, 2005, at the Salk Institute for Biological Studies. Data collected at the conference was the basis for the steering committee's interim report on judicial education, which the Judicial Council adopted in February 2006.

In October 2006, the Science and the Law Steering Committee conducted three regional roundtable discussions in Burbank (October 16), San Francisco (October 18), and Sacramento (October 19) at which representatives from the judiciary, bar, and science and technology communities discussed issues related to science and the law. The discussions generated more than 100 possible recommendations, which were included in meeting summaries distributed to all roundtable participants.

The combined report from the regional roundtables, which is attached at pages 12–34, highlights the most significant ideas and suggestions. The report also includes the results of opinion polls in which representatives were surveyed about policies relating to science and the law.

Science and technology issues arise in all case types and calendar assignments throughout the California courts. While there were some regional differences, in general participants expressed satisfaction with how the judiciary is handling cases involving science. There was an overwhelming consensus that ongoing communication between the courts and the science and technology communities is mutually beneficial. In addition, there was widespread agreement that education is the primary means to improve the courts' handling of science and technology.

In support of the recommendation, the Judicial Council should consider the following arguments and findings:

1. Participants at all three regional roundtables were satisfied with the current statutes and practice governing the selection and qualification of experts. Those with experience in the courts expressed confidence in the trier of fact's ability to weigh scientific and technical evidence.
2. Participants in all groups rejected the idea of proposing a policy that judges should select and appoint expert witnesses from a list of candidate slates maintained by institutes of higher learning or national academic societies. Any candidate slate is likely to be incomplete and have the potential for bias.
3. Participants at all three regional roundtables focused on education as the primary means to improve judicial decisionmaking as it relates to science. Education should focus on foundational science and improving science literacy. The State Bar shares common goals with the judiciary regarding education on science and the law.
4. Participants at all three regional roundtables observed that the impact of science and technology on the courts varies depending on the context. Advisory committees and task forces with oversight responsibility in particular areas are best suited to evaluating priorities and effective approaches.
5. Participants at all three regional roundtables enthusiastically endorsed the value of further, continuing roundtable discussions. An ongoing dialogue between scientists, lawyers, and judges with education as its focus will foster better mutual understanding and help bridge differences between the methods of science and the law. New developments in science occur faster than changes in the law. Judges should become better acquainted with scientific questions and learn to exchange ideas with scientists.

6. Not all court users have access to computers, and not all are familiar with the use of computer technologies. The “digital divide” is a persistent phenomenon.
7. The goal of increasing the “science literacy” of the bench is consistent with the California Code of Judicial Ethics. However, conversations between judges about evidentiary matters pose some dangers. Care must be taken that information-sharing does not introduce bias, the perception of bias, or the receipt of evidence outside the record.

Alternative Actions Considered

The Science and the Law Steering Committee considered that a local approach to science and the law issues would not be feasible because of resource limitations and the need for uniformity. Policies that influence science and technology should be coordinated across the California judicial branch at a statewide level.

The steering committee does not recommend appointment of a new Science and the Law Advisory Committee. Existing advisory committees and task forces can adequately evaluate science and the law policies in the context of their particular areas of responsibility.

Comments From Interested Parties

The steering committee has received input from its members, CJER’s Science and the Law Education Committee, presiding judges, focus groups held at the 2005 Science and the Law Conference, and three regional roundtable discussions on science and the law held in October 2006 with representatives from the judiciary, bar, and science and technology communities. Rosters of roundtable participants are included in the attached combined report.

Implementation Requirements and Costs

The steering committee’s recommendation can be phased in and funded through the existing funding structure of the Administrative Office of the Courts.

Attachments

**JUDICIAL COUNCIL OF CALIFORNIA
ADMINISTRATIVE OFFICE OF THE COURTS**

455 Golden Gate Avenue
San Francisco, California 94102-3688

Report

TO: Members of the Judicial Council

FROM: Science and the Law Steering Committee
Hon. Ming W. Chin, Chair
Rod Cathcart, Committee Counsel, 415-865-7834

DATE: January 10, 2006

SUBJECT: Judicial Branch Education: Recommendation for Judicial Education on
Science and Technology (Action Required)

Issue Statement

The rapid and consistent evolution of science and technology and their impact on society are creating new challenges for the California judiciary. Maintaining and improving the professional competency of the California judiciary requires that the judicial branch, in its leadership role in education, take the next step by establishing and administering a statewide judicial education plan on science and technology.

Recommendation

The Science and the Law Steering Committee recommends that the Judicial Council establish a statewide judicial education plan on science and technology by

1. Approving the following guidelines for judicial education on science and technology, congruent with the ethical standards applicable under the California Code of Judicial Ethics:
 - A. Judicial education on science and technology should be made as widely available as possible to the California judiciary, including appellate justices, trial judges, subordinate judicial officers, and judges participating in the Assigned Judges Program, to assist them in their evaluation of scientific evidence and expert testimony, and to further the administration of justice.
 - B. The focus of judicial education on science and technology should be on increasing the “science literacy” of jurists in subject-matter areas that arise in the courtroom and court administration, including, but not limited to, the following key areas:

- (1) Computer Science and Digital Technology—education to assist in the evaluation of technological evidence, the presentation of evidence in the courtroom, and the use of computers in case and court administration.
- (2) Medical Science—education to assist in the evaluation of medical evidence and physician testimony.
- (3) Pharmacology—education on drugs to assist in the evaluation of addictive disorders and treatment issues.
- (4) Genetics—education on DNA and related science such as biochemistry and molecular biology as it relates to identification, privacy, predictive behavior, and other forensics issues.
- (5) Environmental Science—education to assist in the evaluation of environmental issues, including the California Environmental Quality Act (CEQA), land use, and water rights cases.
- (6) Agricultural Science—education on agronomy, genetically modified foods, and agricultural engineering.
- (7) Science and Business—education on commercial applications of science, such as biotechnology, nanotechnology, and other high-technology industries, as well as privacy issues implicated by certain applications.
- (8) Physics and Engineering—education on science underlying failure analysis, accident reconstruction, and forensics.

C. The educational framework for study of each of the key subject-matter areas should include the following components:

- (1) Glossary and vocabulary builders.
- (2) Primers for scientific literacy on the application of concepts and principles relating to life science, physical science, and technology.
- (3) Explanation and analysis of the scientific method, such as the use of observational data and mathematics (e.g., probabilities and statistics) as it relates to judicial inquiry (e.g., admissibility, burden of proof) and legal issues that arise in cases (e.g., causation).
- (4) Compendium of cases and statutes.

- (5) Case management practices, tips, and techniques.
 - (6) Judicial ethics and fairness colloquy.
 - (7) Codes of ethics and conduct for physicians, scientists, engineers, and other scientific professionals (e.g., bioethics and medical ethics).
 - (8) Case studies and applications for different court assignments (e.g., civil, criminal, juvenile, family, probate and collaborative courts).
2. Directing the Science and the Law Education Committee, appointed by the Governing Committee of the Center for Judicial Education and Research (CJER), to:
- A. Establish an ad hoc panel of judges and scientists to identify and consult on emerging issues in science and technology.
 - B. Develop a process for identifying and recruiting educators in science and technology who are able to communicate balanced information in plain English.
 - C. Liaison with the Judicial Technology Education Committee on judicial education.
 - D. Adopt a blended delivery mechanism for judicial education on science and technology.
 - E. Develop an online Science and the Law resource and Web site to give the judiciary access to a wide variety of materials.
 - F. With guidance from the Office of the General Counsel, build partnerships with scientific organizations and institutes of higher learning to maximize beneficial educational opportunities. Key considerations include the following:
 - (1) Potential partners share values consistent with those of the courts.
 - (2) Partnerships are structured to avoid actual or perceived conflicts of interest that could result from partnering with an entity
 - (a) That currently is, or is likely to become involved, in litigation before the court;
 - (b) That does or seeks to do business with the court; or
 - (c) Whose interests or the interests of its funding sources currently are, or are reasonably likely to come, before the court.

- (3) Ethical considerations under the California Code of Judicial Ethics for judicial officers attending co-sponsored educational opportunities.

G. Cooperate and coordinate with the federal judiciary on judicial education.

Rationale for Recommendation

In February 2005, Chief Justice Ronald M. George established the Judicial Council Science and the Law Steering Committee to evaluate the general needs of the courts, including guidance in developing effective education strategies and pertinent educational content on a variety of projects. In addition, the Chief Justice appointed Judge Michael T. Garcia to chair the Science and the Law Education Committee, whose members were appointed by the CJER Governing Committee to oversee continuing judicial education in science and the law with guidance from the Steering Committee.

Both committees planned and produced California's first Science and the Law Conference, held on October 6–9, 2005, at the Salk Institute, which is summarized in the attachment. Prior conferences held in 1999 and 2002 were co-sponsored with the Einstein Institute for Science, Health and the Courts with a more restricted focus on genetics and the courts.

At the California Science and the Law Conference, data was collected from approximately 100 participants who met in 10 focus groups to discuss the type of science education that would be most beneficial to the California judiciary, and the ways of delivering that education most effectively, given limited state resources. Clearly, science in the California courts is broader than genetics alone.

In support of the recommendation, the Judicial Council is asked to consider the following arguments:

1. Scientific issues are increasingly affecting the courts with regard to types of cases, evidence, and quality of expert testimony.
2. Policies that influence judicial education on science and technology should be coordinated across the California judicial branch.
3. Judicial education in science and technology enhances public trust and confidence in the judiciary by assisting the courts in meeting challenges created by the rapid and consistent evolution of science and technology, while managing expectations created by TV pop culture.
4. Judicial education in the use of courtroom technology in case management and the presentation of evidence creates efficiencies and cost savings.

5. Foundational education on science generally, and in specific subject-matter areas, will counterbalance a “fear factor”—the pervasive discomfort reported by many jurists concerning science and technology.
6. The goal of increasing the “science literacy” of the bench is consistent with the California Code of Judicial Ethics.
 - A. Jurists have different knowledge and experience levels about science and technology.
 - B. Jurists need education on their ethical responsibilities about their understanding of and ability in science.
7. Jurists reported science’s issues in the courtroom for criminal, civil, family, juvenile, probate, mental health, and collaborative court assignments.
8. The initial subject-matter categories reflect what jurists reported as the types of cases they have handled during the past year that brought science into the courtroom.
9. The California and federal judiciaries share common goals with respect to judicial education on science and the law.

Alternative Actions Considered

The Science and the Law Steering Committee evaluated California’s participation in the Advanced Science and Technology Adjudication Resource (ASTAR), a multistate consortium of the judiciaries of California, Maryland, and Ohio. The goal of ASTAR is to provide “resource judge certification” to a limited number of judges in advanced bioscience and biotechnology. After considerable thought and analysis of the consortium model, the Steering Committee decided to move in a different direction than “resource judge certification.” The focus group data from the Science and the Law Conference indicated that the California judiciary’s immediate educational need was to support foundational education on science in key subject-matter areas.

Comments From Interested Parties

We have received input from the Science and the Law Steering Committee, the Science and the Law Education Committee, presiding judges, and 10 focus groups held at the 2005 Science and the Law Conference in October. Additional input will come from three regional roundtable discussions on science and the law planned for 2006, which will include participation by the judiciary, attorneys, academics, scientists, and forensic experts.

Implementation Requirements and Costs

A plan for judicial education on science and technology can be phased in and funded through the existing funding structure for the Education Division/CJER of the Administrative Office of the Courts.

Attachment



Combined Report From Regional Roundtables on Science and the Law

OCTOBER 16-19, 2006



JUDICIAL COUNCIL
OF CALIFORNIA

SCIENCE AND THE LAW
STEERING COMMITTEE

Judicial Council of California Science and the Law Steering Committee

Committee Roster, December 2006

Hon. Ming W. Chin, Chair

Associate Justice of the Supreme Court

Hon. Judith Meisels Ashmann-Gerst

*Associate Justice of the Court of Appeal,
Second Appellate District, Division Two*

Ms. Linda K. Ashworth

*Geneticist, Biological Sciences Department
California Polytechnic State University*

Hon. George “Woody” Clarke

*Judge of the Superior Court of California,
County of San Diego*

Hon. Brenda Fay Harbin-Forte

*Judge of the Superior Court of California,
County of Alameda*

Hon. William C. Harrison

*Judge of the Superior Court of California,
County of Solano*

Hon. Thomas E. Hollenhorst

*Associate Justice of the Court of Appeal,
Fourth Appellate District, Division Two*

Hon. Susan Y. Illston

*District Judge
U.S. District Court, Northern District of
California*

Hon. Jack Komar

*Judge of the Superior Court of California,
County of Santa Clara*

Hon. Monica Marlow

*Judge of the Superior Court of California,
County of Shasta*

Hon. Douglas P. Miller

*Associate Justice of the Court of Appeal,
Fourth Appellate District, Division Two*

Mr. Christopher J. Plourd

*Attorney at Law
San Diego*

Mr. Ken Torre

*Executive Officer
Superior Court of California,
County of Contra Costa*

Governing Committee of the
CJER Liaison

Hon. Fumiko Hachiya Wasserman

*Judge of the Superior Court of California,
County of Los Angeles*

Science and the Law Education
Committee Liaison

Hon. Michael T. Garcia

*Judge of the Superior Court of California,
County of Sacramento*

*For more information about this report or
the work of the Science and the Law
Steering Committee, please contact*

Mr. Roderic Cathcart

*Senior Attorney
Education Division/CJER
Administrative Office of the Courts
455 Golden Gate Avenue
San Francisco, California 94102-3688
415-865-4200*

Contents

Overview	1
Rosters of Regional Roundtable Participants	
Southern California Meeting	2
Bay Area Meeting.....	4
Northern/Central California Meeting	6
Effects on Public Trust and Confidence	8
Evaluation of Scientific Evidence.....	10
Presentation of Scientific Evidence	12
Values: Ethics and Fairness	13
Opinion Polls: How to Read Them.....	13
First Opinion Poll—Combined Results	14
Second Opinion Poll—Combined Results.....	16
Comparison of Results by Meeting.....	18

Overview

The Science and the Law Steering Committee is charged with making recommendations to the Judicial Council to improve the California courts' use of science information in decision-making and the courts' use of technology in the administration of justice. As part of this process, the committee conducted roundtable discussions to assess resources and potential partnerships that could assist the judiciary in effectively managing issues regarding science, technology, and the law and to provide guidance on how the California judiciary might more effectively manage science-related issues in different case types and calendar assignments. Representatives from the judiciary, the bar, and the science and technology communities gathered in three regions:

1. Southern California on October 16, 2006, in Burbank;
2. The Bay Area on October 18, 2006, in San Francisco; and
3. Northern/Central California on October 19, 2006, in Sacramento.

This report combines ideas and suggestions from the regional roundtables and the results of polls surveying representatives' opinions on statements relating to science and the law. Areas of combined agreement or disagreement are summarized. The report also includes tables comparing each meeting's poll results and graphs summarizing the results from all the regions. Separate and more detailed reports of each regional roundtable are also available from the Education Division of the Administrative Office of the Courts.

While there are some regional differences, in general participants did not express widespread discontent with how the judiciary is handling cases involving science-related issues. Recognizing that new scientific developments occur faster than changes in the law, participants agreed that ongoing communication between the courts and the science and technology communities would be beneficial. Education is the primary means to improve judicial decisionmaking as it relates to science. Care must be taken that education and information-sharing do not introduce bias or the perception of bias.

Rosters of Regional Roundtable Participants

The Judicial Council of California's Science and the Law Steering Committee sponsored three regional meetings of representatives from the judiciary, the bar, and the science and technology communities to discuss issues regarding science and the courts.

Southern California Meeting

Hon. Thomas Pearce Anderle
Judge of the Superior Court of California
County of Santa Barbara

Mr. Morgan Chu
Attorney at Law
Los Angeles

Mr. Mehul Anjaria
Vice President and Laboratory Director
Human Identification Technologies, Inc.

Hon. George "Woody" Clarke
Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of San Diego

Hon. Judith Meisels Ashmann-Gerst
Member, Science & Law Steering Committee
Associate Justice of the Court of Appeal,
Second Appellate District, Division Two

Ms. Judith M. Copeland
Attorney at Law
San Diego

Mr. Kenneth W. Babcock
Attorney at Law
Public Law Center

Prof. Judith Daar
Professor of Law
Whittier Law School

Hon. Earle Jeffrey Burke
Supervising Judge of the
Superior Court of California,
County of San Luis Obispo

Hon. Emilie H. Elias
Judge of the Superior Court of California,
County of Los Angeles

Ms. Sheila Calabro
Regional Administrative Director
Southern Regional Office
Administrative Office of the Courts

Ms. Ana España
Supervising Attorney
Dependency Section
San Diego County Public Defender

Hon. Ming W. Chin
Chair, Science & Law Steering Committee
Associate Justice of the Supreme Court

Mr. Barry A. J. Fisher
Crime Laboratory Director
Los Angeles County Sheriff's Department

Mr. Nick Chrisos
Senior Assistant County Counsel
Office of the County Counsel
County of Orange

Mr. Dean M. Gialamas
Director, Forensic Science Services Division
Orange County Sheriff's Department

Mr. John L. Haller
Attorney at Law
San Diego

Dr. Philip A. Hanger
*Assistant Deputy Director
Forensic Mental Health
County of San Diego
Health and Human Services Agency*

Hon. Brenda Fay Harbin-Forte
*Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Alameda*

Hon. Alice C. Hill
*Judge of the Superior Court of California,
County of Los Angeles*

Hon. Thomas E. Hollenhorst
*Member, Science & Law Steering Committee
Associate Justice of the Court of Appeal,
Fourth Appellate District, Division Two*

Hon. Joan K. Irion
*Associate Justice of the Court of Appeal,
Fourth Appellate District, Division One*

Hon. Michael P. Judge
*Public Defender
Los Angeles County Public Defender*

Ms. Lisa Kahn
*Forensic Science Advisor
Los Angeles County District Attorney's
Office*

Ms. Tressa Kentner
*Court Executive Officer
Superior Court of California,
County of San Bernardino*

Mr. Frederick H. Klunder
*Chief Information Officer
Information Systems and
Technology Bureau
Superior Court of California,
County of Los Angeles*

Dr. Steven Edwin Larson
*Physician
Clinical Professor of Biomedical Science
University of California at Riverside*

Ms. Janet I. Levine
*Attorney at Law
Los Angeles*

Hon. Michele D. Levine
*Judge of the Superior Court of California,
County of Riverside*

Dr. Alan McHughen
*Professor and Biotechnologist
University of California at Riverside*

Hon. Douglas P. Miller
*Member, Science & Law Steering Committee
Associate Justice of the Court of Appeal,
Fourth Appellate District, Division Two*

Dr. Jennifer Leigh Mnookin
*Professor of Law
UCLA School of Law*

Hon. Michael Nash
*Judge of the Superior Court of California,
County of Los Angeles*

Mr. Ronald G. Overholt
*Chief Deputy Director
Administrative Office of the Courts*

Mr. Robert M. Pepper
*Principal Deputy County Counsel
Office of the County Counsel
County of Riverside*

Mr. Christopher J. Plourd
*Member, Science & Law Steering Committee
Attorney at Law
San Diego*

Mr. Kent L. Richland
Attorney at Law
Los Angeles

Ms. Patricia Winzetta Robinson
Director, Private Conflicts Counsel
San Diego County Bar Association

Mr. Derek Rogers
Research Attorney
Court of Appeal, Second Appellate District,
Division Two

Hon. Dana M. Sabraw
Judge of the U.S. District Court,
Southern District of California

Mr. Ken Torre
Member, Science & Law Steering Committee
Executive Officer
Superior Court of California,
County of Contra Costa

Dr. Inder M. Verma
Professor of Biology
Salk Institute for Biological Studies

Mr. William C. Vickrey
Administrative Director of the Courts
Administrative Office of the Courts

Hon. Fumiko Hachiya Wasserman
Liaison, Science & Law Steering Committee
Chair, Governing Committee of the Center
for Judicial Education and Research
Judge of the Superior Court of California,
County of Los Angeles

Hon. Michael D. Wellington
Judge of the Superior Court of California,
County of San Diego

Mr. William M. Wood
Deputy Attorney General
California Department of Justice
Office of the Attorney General

Bay Area Meeting

Dr. Arthur Ammann
Clinical Professor of Pediatrics
University of California at San Francisco
Medical Center
President, Global Strategies for HIV
Prevention

Hon. Judith Meisels Ashmann-Gerst
Member, Science & Law Steering Committee
Associate Justice of the Court of Appeal,
Second Appellate District, Division Two

Ms. Linda K. Ashworth
Member, Science & Law Steering Committee
Geneticist, Biological Sciences Department
California Polytechnic State University

Mr. Peter Barnett
Criminalist
Forensic Science Associates

Hon. Laurel S. Brady
Judge of the Superior Court of California,
County of Contra Costa

Hon. Neal Anthony Cabrinha
*Judge of the Superior Court of California,
County of Santa Clara*

Ms. Enid Camps
*Supervising Deputy Attorney General
California Department of Justice
Office of the Attorney General
DNA Legal Unit*

Hon. Ming W. Chin
*Chair, Science & Law Steering Committee
Associate Justice of the Supreme Court*

Mr. David Coleman
*Public Defender
Contra Costa County Office of the Public
Defender*

Hon. Julie Conger
*Judge of the Superior Court of California,
County of Alameda*

Mr. Joseph W. Cotchett
*Attorney at Law
Burlingame*

Prof. David L. Faigman
*Professor of Law
Hastings College of the Law*

Prof. Virginia George
*Associate Professor
John F. Kennedy University School of Law*

Mr. Lance Gima
*Chief, Bureau of Forensic Services
California Department of Justice*

Hon. Ernest H. Goldsmith
*Judge of the Superior Court of California,
County of San Francisco*

Hon. Lois Haight
*Judge of the Superior Court of California,
County of Contra Costa*

Hon. Brenda Fay Harbin-Forte
*Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Alameda*

Hon. William C. Harrison
*Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Solano*

Dr. Terry C. Hazen
*Head, Center for Environmental
Biotechnology
Head, Microbial Ecology and
Environmental Engineering Department
Lawrence Berkeley National Laboratory*

Hon. Donna J. Hitchens
*Judge of the Superior Court of California,
County of San Francisco*

Hon. Thomas E. Hollenhorst
*Member, Science & Law Steering Committee
Associate Justice of the Court of Appeal,
Fourth Appellate District, Division Two*

Hon. Jack Komar
*Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Santa Clara*

Ms. Susan T. Kumagai
*Attorney at Law
San Francisco*

Ms. Mary Likins
*Forensic Nurse and Case Manager
Northern California Innocence Project
Santa Clara University School of Law*

Hon. Marilyn B. Miles
*Judge of the Superior Court of California,
County of Humboldt*

Mr. Thomas J. Nolan
*Attorney at Law
Palo Alto*

Hon. Mary Ann O'Malley
*Supervising Judge of the
Superior Court of California,
County of Contra Costa*

Mr. Thomas J. Orloff
Alameda County District Attorney

Dr. Carlton W. Purviance
*Evaluator, Clinical Psychologist
California Maritime Academy*

Ms. Ann M. Ravel
*County Counsel
Office of the County Counsel
County of Santa Clara*

Mr. Michael Gannon Reedy
*Attorney at Law
San Jose*

Ms. Kathleen Ridolfi
*Executive Director
Northern California Innocence Project
Santa Clara University School of Law*

Mr. Victor Rowley
*AOC/State Bar Emeritus
State Bar of California*

Hon. Pamela Samuelson
*Richard H. Sherman Distinguished
Professor of Law
University of California at Berkeley
School of Law – Boalt Hall*

Ms. Kathy Siegel
*Assistant Public Defender
Off of the Alameda County Public Defender*

Hon. Peter John Siggins
*Associate Justice of the Court of Appeal,
First Appellate District, Division Three*

Dr. Sharon H. Van Meter
*Forensic Pathologist
Adjunct Clinical Professor
Department of Pathology
Stanford University School of Medicine*

Hon. Marshall Whitley
*Judge of the Superior Court of California,
County of Alameda*

Mr. Braden Woods
*Assistant District Attorney
San Francisco District Attorney's Office*

Northern/Central California Meeting

Ms. Linda K. Ashworth
*Member, Science & Law Steering Committee
Geneticist, Biological Sciences Department
California Polytechnic State University*

Hon. Tani Cantil-Sakauye
*Associate Justice of the Court of Appeal,
Third Appellate District*

Hon. Ming W. Chin
*Chair, Science & Law Steering Committee
Associate Justice of the Supreme Court*

Dr. Carl Cranor
*Professor of Philosophy
University of California at Riverside*

Dr. John DeHaan
Criminalist
Fire-Ex Forensics, Inc.

Mr. David P. Druliner
Special Assistant Attorney General
California Department of Justice
Office of the Attorney General

Mr. Jay-Allen Eisen
Attorney at Law
Sacramento

Hon. Morrison England, Jr.
Judge of the U.S. District Court,
Eastern District of California

Ms. Karen Marie Flynn
Chief Assistant Public Defender
Office of the Public Defender
Sacramento County

Hon. Edward Forstenzer
Assistant Presiding Judge of the
Superior Court of California,
County of Mono

Hon. Brenda Fay Harbin-Forte
Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Alameda

Hon. William C. Harrison
Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Solano

Hon. Judy Holzer Hersher
Judge of the Superior Court of California,
County of Sacramento

Mr. Norman C. Hile
Attorney at Law
Sacramento

Mr. John D. Hodson
Attorney at Law
Vacaville

Hon. Thomas E. Hollenhorst
Member, Science & Law Steering Committee
Associate Justice of the Court of Appeal,
Fourth Appellate District, Division Two

Ms. Victoria M. Jacobs
Managing Attorney
Voluntary Legal Services Program of
Northern California

Hon. Michael P. Kenny
Judge of the Superior Court of California,
County of Sacramento

Hon. Jack Komar
Member, Science & Law Steering Committee
Judge of the Superior Court of California,
County of Santa Clara

Ms. Karen McDonald
Associate Dean, College of Engineering
Professor, Chemical Engineering and
Materials Science
University of California at Davis

Mr. Thomas G. Minder
Attorney at Law
Sacramento

Hon. James M. Mize
Assistant Presiding Judge of the
Superior Court of California,
County of Sacramento

Hon. William J. Murray, Jr.
Assistant Presiding Judge of the
Superior Court of California,
County of San Joaquin

Hon. Colleen M. Nichols
*Judge of the Superior Court of California,
County of Placer*

Ms. Susan Null
*Court Executive Officer
Superior Court of California,
County of Shasta*

Ms. Jerilyn Paik
*Attorney at Law
Sacramento*

Dr. Elizabeth Rindskopf Parker
*Dean, McGeorge School of Law
University of the Pacific*

Mr. Christopher J. Plourd
*Member, Science & Law Steering Committee
Attorney at Law
San Diego*

Hon. Catherine Denari Purcell
*Judge of the Superior Court of California,
County of Kern*

Ms. Anne Marie Schubert
*Deputy District Attorney
Sacramento County District Attorney's
Office*

Mr. Ken Torre
*Member, Science & Law Steering Committee
Executive Officer
Superior Court of California,
County of Contra Costa*

Mr. Frederic A Tulleners
*Director, Forensic Science Graduate Group
University of California at Davis*

Ms. Elizabeth Wictum
*Forensic Scientist
University of California at Davis*

Mr. Christopher Howard Wing
*Attorney at Law
Sacramento*

Effects on Public Trust and Confidence

The following suggestions and ideas are highlights of more than 100 preliminary recommendations made during the regional roundtables.

A. Southern California Regional Roundtable

1. Offer more judicial and legal education on science as a culture or process as distinguished from education on specific topics.
2. Offer more public education on the role of the courts regarding questions of science.
3. Provide additional funding for more systematic study of cases that use scientific evidence to determine their consistency, including whether the use of court-appointed experts in certain case types promotes consistency and whether use of court-appointed experts promotes consistency when there is wide disagreement on the underlying science.

4. Preserve the use of a jury of peers. Rule out professional juries.
5. Have available to judges an e-mail distribution list of background information about current scientific issues in both hard and soft sciences on the condition that the information is properly vetted to eliminate potential bias before distribution.
6. Develop a procedure for nonevidentiary tutorial hearings in civil matters when requested by the court or the parties.

B. Bay Area Regional Roundtable

1. Expand use of technology in self-help centers and provide more technological assistance in self-help centers to self-represented clients who lack computer skills.
2. Increase public education efforts and cooperative efforts with the bench and bar to teach the public about finality as a judicial value, judicial impartiality, and the role of the courts when science is an issue.
3. Develop bench resources for judges on certain kinds of scientific evidence (e.g., capacity and end-of-life issues), such as those that already exist for DNA evidence (for example, the President's DNA Initiative, available at www.dna.gov).
4. Provide additional funding to study effectiveness of postconviction review of scientific evidence.
5. Study mechanisms for reviewing changed circumstances in cases involving the elderly.

C. Northern/Central California Regional Roundtable

1. Offer more training of court officers about the needs of the disabled and better equipment and technologies for use by the disabled.
2. Provide additional funding for self-help center staff to assist low-income and elderly court users with self-help technologies.
3. Include judicial education on science in new judge curriculum such as a course at the B. E. Witkin Judicial College.
4. Require that electronic presentations be part of the record on appeal.
5. Adopt standards for allowing out-of-state witnesses to testify remotely (particularly in family law cases) in order to save costs, and identify when remote testimony is not appropriate.

6. Equip every courtroom with basic technology for evidence presentation that is available for all parties to use.
7. Encourage presentation methods that assist fact-finders who are accustomed to receiving information in written form.
8. Adopt transitional rules to assist with successful use of new technologies in courtrooms or by the courts.
9. Do not allow experts testifying in court to disclose prior service as a court-appointed expert to avoid the perception of undue bias.
10. Review process for hiring and vetting court-appointed experts, including funding restraints that may limit the pool.

Evaluation of Scientific Evidence

A. Southern California Regional Roundtable

1. Preserve current expert qualification standards. No change is recommended.
2. Study whether minimum qualification standards might be needed for certain disciplines or types of experts.
3. Consider whether more guidelines on the use of statistics are needed in certain case types.
4. Limit the admissibility of “soft science” predictions.

B. Bay Area Regional Roundtable

1. Study whether uniform criteria for evaluating expertise in the area of psychological evidence would promote consistency.
2. Review Evidence Code section 730 as a tool for dealing with conflicts between dueling experts.
3. Study whether the availability of a “neutral” lab at the court’s disposal might assist the court in evaluating claims of dueling labs.
4. Expand opportunities for judicial education on qualification of experts.
5. Establish more detailed criteria for evaluating expertise in the area of psychology.

6. Develop more guidelines for evaluating expert qualifications. More guidelines might be useful because the qualification threshold is so low.
7. Study whether advisory jury on certain scientific issues might be beneficial in certain types of complex civil cases.
8. Formalize a process that enables parties to agree on a panel of experts to decide scientific issues rather than a jury of peers.
9. Consider guidelines to define complex science cases and develop rules for bifurcating issues through the use of using advisory juries and stipulations regarding scientific issues.
10. Offer more judicial education on science and its methods geared to different levels of knowledge and experience.
11. Study whether the abuse-of-discretion standard for science should be replaced by the more stringent standard used for review on appeal.

C. Northern/Central California Regional Roundtable

1. Offer more judicial education on qualifications of experts, which would cover publications, peer review, experience, education, and membership in professional associations.
2. Offer more judicial education about different methodologies used in both soft and hard sciences.
3. Study whether higher qualification standards are desirable.
4. Include judicial education on science in assignment overview courses.
5. Study whether a complex civil litigation model for handling civil cases with complex science issues is desirable.
6. Offer more judicial education on science and promote a more active gatekeeper function for judges. Use *Daubert* approach.
7. Preserve the abuse-of-discretion standard on appeal for review of scientific issues.

Presentation of Scientific Evidence

A. Southern California Regional Roundtable

1. Adopt statewide minimum standards for court appointment in different fields.
2. Study possible mechanisms to have court-appointed psychiatrists available for consultation about the administration of psychotropic drugs to juveniles in dependency proceedings.
3. Study the Superior Court of Los Angeles County's relationship with the Los Angeles County Department of Mental Health as a model or potential resource for smaller courts that lack similar resources.
4. Clarify the role of the court-appointed expert in different case types.
5. Adopt a new jury instruction on giving weight to the content, not the presentation, of evidence.

B. Bay Area Regional Roundtable

1. Develop more specific guidance for the selection of experts and encourage parties to agree on experts based on those guidelines.
2. Pilot greater use of court-appointed experts in limited-jurisdiction cases (e.g., workers' compensation) to evaluate effectiveness.
3. Examine different methods for obtaining parties agreement on experts.
4. Preserve electronic presentations as part of the record for appellate review.
5. Appoint special masters to evaluate, before trial, the foundation for the use of complex animations or models.

C. Northern/Central California Regional Roundtable

1. Equip all courtrooms for effective PowerPoint presentations.
2. Educate judges to review PowerPoint presentations before use at trial.
3. Include PowerPoint presentations as part of the record on appeal.
4. Train judges to use electronic presentation tools for courtroom presentations.
5. Review standards for remote appearances.

Values: Ethics and Fairness

A. Southern California Regional Roundtable

1. Encourage continuing cross-dialogue. Further education and discussion are needed.

B. Bay Area Regional Roundtable

1. Encourage experts to make available to the court the ethical framework or code under which they are working.
2. Encourage continuing cross-dialogue. Further education and discussion are needed.

C. Northern/Central California Regional Roundtable

1. Consider rules for nonevidentiary tutorials to educate the judge, attorneys, and parties about science issues.
2. Offer more judicial ethics education on judges' disclosure obligations.
3. Provide incentives and be at the forefront in the development of new technologies for interpretation and translation.

Opinion Polls: How to Read Them

Two opinion polls were conducted at each meeting. Meeting participants were divided into groups, and each group collectively rated the statements. The following graphs and tables summarize and compare the results of the polls. The columns of different colors in each graph represent the different statements used in the opinion poll. Each opinion poll consisted of 10 statements.

The vertical axis of the graph is the evaluation scale for the poll statement. The higher the rating the stronger the agreement. These are average ratings.

Evaluation Scale

5 = Strongly Agree

3 = Agree

1 = Slightly Agree

0 = Neutral or Lack of Consensus (Comments in regional reports help explain these responses.)

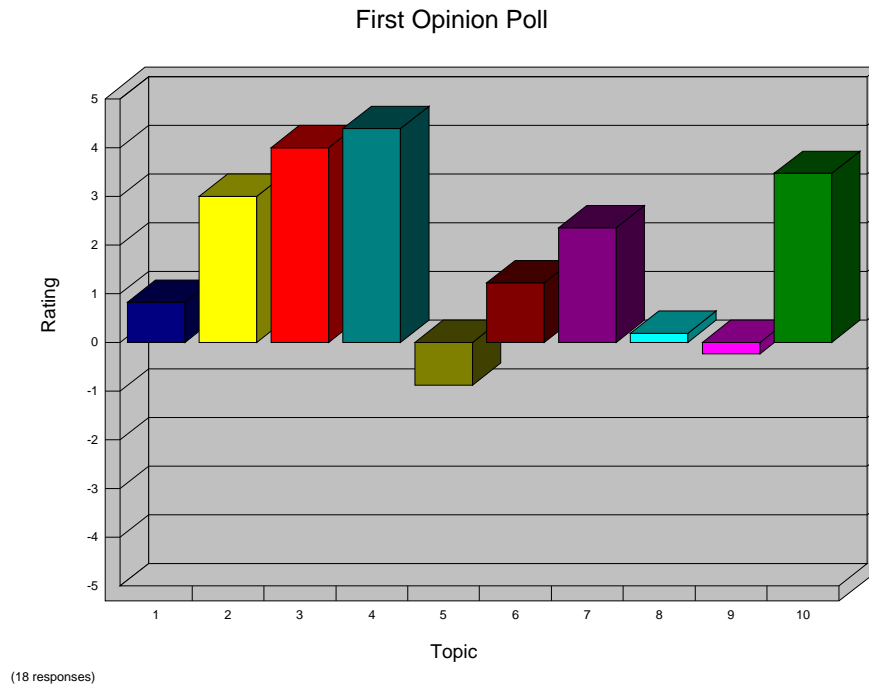
-1 = Slightly Disagree

-3 = Slightly Agree

-5 = Strongly Agree

The horizontal axis of the graph enumerates the different poll statements, which are listed in the table following the graph. The table column titled “variability” indicates the rating’s measure of reliability. Higher variability scores indicate higher levels of disagreement among individual groups of participants. Lower scores are more reliable.

First Opinion Poll—Combined Results



Poll Statements

Poll Statements	Average Rating	Variability
1. Judges lack the scientific literacy necessary for good decision-making.	0.8	47%
2. A judge should be allowed to consult with another judge specially trained in science to improve his or her understanding of scientific evidence.	3.0	38%
3. A judge's education on science and technology should not impact his or her disqualification and disclosure obligations.	4.0	27%
4. To promote better use of science in the law, a committee of scientists and judges should be established to advise the judiciary on emerging issues from the world of science.	4.4	17%
5. Too much "junk" science is getting into courts.	-0.9	39%

Poll Statements	Average Rating	Variability
6. A judge should be allowed to obtain advice from a disinterested third-party expert on science if the judge affords the parties a reasonable opportunity to respond.	1.2	71%
7. There is a need for an institutional link between the state courts and the science and technology communities.	2.4	53%
8. Fact finders give undue weight to unchallenged forensics evidence.	0.2	51%
9. There is a need for alternative methods for resolving science cases.	-0.2	65%
10. Judges need to become better acquainted with scientific questions and learn to exchange ideas with scientists.	3.5	40%

Areas of Consensus

<i>A judge should be allowed to consult with another judge specially trained in science to improve his or her understanding of scientific evidence.</i>
<i>A judge's education on science and technology should not impact his or her disqualification and disclosure obligations.</i>
<i>To promote better use of science in the law, a committee of scientists and judges should be established to advise the judiciary on emerging issues from the world of science.</i>
<i>Judges need to become better acquainted with scientific questions and learn to exchange ideas with scientists.</i>

The “Areas of Consensus” section lists those statements with which there was consensus among all three focus groups.

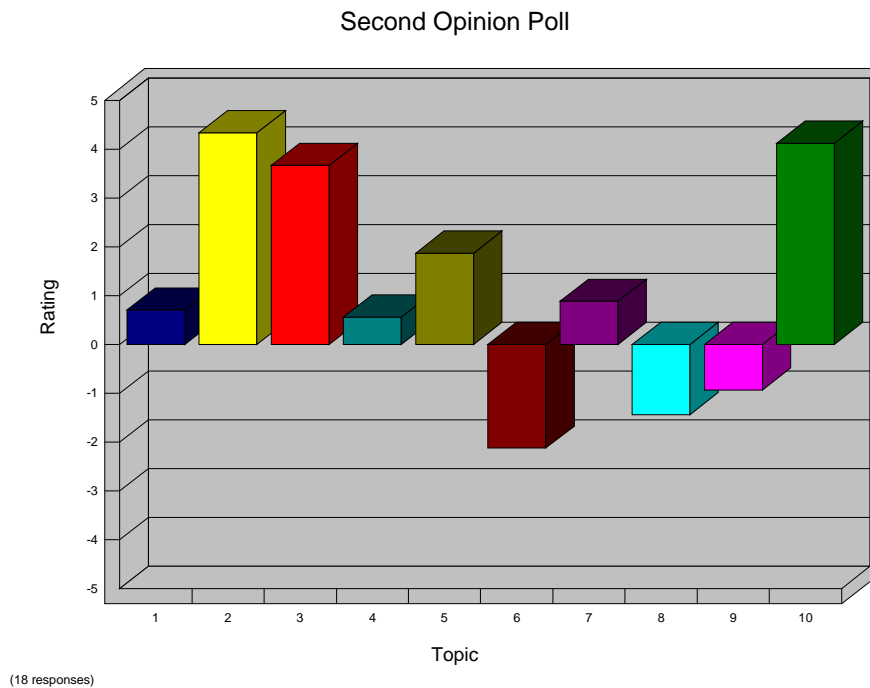
Agreement on the poll statements reflects consensus on broad policies. Different groups understood and examined the statements differently with respect to details and resolving ambiguities in the wording. For example:

Conversations with other judges about evidentiary matters pose some dangers. “Science” was understood to refer to general background information.

No changes to a judge’s disclosure and disqualification obligations are needed for science and technology. No amendments to the Code of Judicial Ethics were recommended. The current rules suffice. In general, a judge does not disclose education, but disclosure may be advisable depending on the specificity of the training and the provider.

Continuing dialogue between scientists and judges should be in the context of “education.” Conversation should not be limited to emerging issues. Better mutual understanding will help bridge the differences between science and law.

Second Opinion Poll—Combined Results



Poll Statements

Poll Statements	Average Rating	Variability
11. The traditional adversary system is effective for resolving complex science disputes.	0.7	42%
12. Information sharing among judges on how to handle complex scientific issues should be encouraged.	4.3	24%
13. Parties should be required to meet and confer on scientific issues in order to determine areas of agreement and disagreement.	3.7	31%
14. Courts should go beyond the parties' opposing experts and appoint independent experts for advice on science.	0.6	57%
15. Existing procedures for determining expert witness qualifications are adequate.	1.9	47%

Poll Statements	Average Rating	Variability
16. Judges should select and appoint expert scientific witnesses from a list of candidate slates maintained by institutes of higher learning or national scientific and engineering societies.	-2.1	50%
17. Uniform standards are needed to govern the use of computer generated animations and models during trial.	0.9	52%
18. Judges need to assure that sophisticated visual presentations do not unduly advantage wealthier parties.	-1.4	57%
19. Too much traditional forensic evidence is admitted without requiring documentation of proficiency testing.	-0.9	59%
20. Uniform statewide standards are needed for electronic discovery.	4.1	27%

Areas of Consensus

<i>Information sharing among judges on how to handle complex scientific issues should be encouraged.</i>
<i>Parties should be required to meet and confer on scientific issues in order to determine areas of agreement and disagreement.</i>
<i>Uniform statewide standards are needed for electronic discovery.</i>

As noted earlier, agreement on the poll statements reflects consensus on broad policies. Different groups understood and examined the statements differently with respect to details and resolving ambiguities in the wording:

Conversations among judges about procedure and the law should be encouraged. Conversations about evidentiary matters pose some dangers.

There is value in narrowing the scope of a scientific issue in dispute as early as possible in complex civil cases. More consistent use of the “meet and confer” process would be beneficial. There was no agreement in the context of criminal cases.

E-discovery is a burgeoning area. The bench and bar would benefit from joint education on information technologies, costs, and burdens.

Area of Disagreement

Judges should select and appoint expert scientific witnesses from a list of candidate slates maintained by institutes of higher learning or national scientific and engineering societies.

Participants in all groups expressed general satisfaction with the current statutes and practice governing the selection and qualification of experts. Scientists were of the view that the threshold was too low, but those with experience in the courts by and large supported a low threshold, having more confidence in the trier of fact’s skepticism in weighing evidence. Any candidate slate is likely to be underinclusive and have the potential for bias.

Comparison of Results by Meeting

Poll Statements	Burbank		San Francisco		Sacramento	
	Average Rating	Variability	Average Rating	Variability	Average Rating	Variability
1. Judges lack the scientific literacy necessary for good decision-making.	0.2	39%	1.8	19%	0.7	62%
2. A judge should be allowed to consult with another judge specially trained in science to improve his or her understanding of scientific evidence.	2.7	44%	2.5	42%	3.8	17%
3. A judge's education on science and technology should not impact his or her disqualification and disclosure obligations.	4.0	20%	3.5	36%	4.6	15%
4. To promote better use of science in the law, a committee of scientists and judges should be established to advise the judiciary on emerging issues from the world of science.	4.7	14%	4.2	17%	4.3	18%
5. Too much "junk" science is getting into courts.	-1.2	43%	0.0	31%	-1.2	37%
6. A judge should be allowed to obtain advice from a disinterested third-party expert on science if the judge affords the parties a reasonable opportunity to respond.	2.0	41%	1.3	78%	0.3	82%
7. There is a need for an institutional link between the state courts and the science and technology communities.	1.8	35%	3.7	35%	1.4	73%

Poll Statements	Burbank		San Francisco		Sacramento	
	Average Rating	Variability	Average Rating	Variability	Average Rating	Variability
8. Fact finders give undue weight to unchallenged forensics evidence.	0.5	58%	-0.4	55%	0.4	32%
9. There is a need for alternative methods for resolving science cases.	-1.0	61%	2.0	66%	-1.3	49%
10. Judges need to become better acquainted with scientific questions and learn to exchange ideas with scientists.	2.3	49%	4.6	15%	3.7	31%
11. The traditional adversary system is effective for resolving complex science disputes.	0.5	30%	0.6	51%	1.0	44%
12. Information sharing among judges on how to handle complex scientific issues should be encouraged.	4.2	37%	4.5	15%	4.3	14%
13. Parties should be required to meet and confer on scientific issues in order to determine areas of agreement and disagreement.	3.5	15%	4.2	17%	3.3	48%
14. Courts should go beyond the parties' opposing experts and appoint independent experts for advice on science.	-1.3	39%	1.2	54%	2.2	54%
15. Existing procedures for determining expert witness qualifications are adequate.	1.0	30%	3.7	37%	1.8	54%
16. Judges should select and appoint expert scientific witnesses from a list of candidate slates maintained by institutes of higher learning or national scientific and engineering societies.	-3.7	29%	-0.4	43%	-2.0	53%
17. Uniform standards are needed to govern the use of computer generated animations and models during trial.	0.8	48%	1.2	49%	0.6	58%
18. Judges need to assure that sophisticated visual presentations do not unduly advantage wealthier parties.	-1.0	69%	-1.3	44%	-2.3	51%

Poll Statements	Burbank		San Francisco		Sacramento	
	Average Rating	Variability	Average Rating	Variability	Average Rating	Variability
19. Too much traditional forensic evidence is admitted without requiring documentation of proficiency testing.	-1.3	66%	0.6	63%	-2.0	21%
20. Uniform statewide standards are needed for electronic discovery.	4.2	37%	4.3	18%	3.8	19%