There are two funded NSF proposals in this document.

The first, *Factors influencing plea bargaining decisions by prosecutors and defense attorneys*, begins on the next page.

The second, *Issue-specific jury instructions in eyewitness cases: Are they more effective than traditional safeguards?* begins at page 38 of this document.
Submit only ONE copy of this form for each PI/PD and co-PI/PD identified on the proposal. The form(s) should be attached to the original proposal as specified in GPG Section II.C.a. Submission of this information is voluntary and is not a precondition of award. This information will not be disclosed to external peer reviewers. DO NOT INCLUDE THIS FORM WITH ANY OF THE OTHER COPIES OF YOUR PROPOSAL AS THIS MAY COMPROMISE THE CONFIDENTIALITY OF THE INFORMATION.

PI/PD Name: Steven D Penrod

Gender: □ Male □ Female

Ethnicity: (Choose one response) □ Hispanic or Latino □ Not Hispanic or Latino

Race: (Select one or more) □ American Indian or Alaska Native □ Asian □ Black or African American □ Native Hawaiian or Other Pacific Islander □ White

Disability Status: (Select one or more) □ Hearing Impairment □ Visual Impairment □ Mobility/Orthopedic Impairment □ Other □ None

Citizenship: (Choose one) □ U.S. Citizen □ Permanent Resident □ Other non-U.S. Citizen

Check here if you do not wish to provide any or all of the above information (excluding PI/PD name): □

REQUIRED: Check here if you are currently serving (or have previously served) as a PI, co-PI or PD on any federally funded project □

Ethnicity Definition:
Hispanic or Latino. A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race.

Race Definitions:
American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American. A person having origins in any of the black racial groups of Africa.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

WHY THIS INFORMATION IS BEING REQUESTED:

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PIs/PDs. To gather information needed for this important task, the proposer should submit a single copy of this form for each identified PI/PD with each proposal. Submission of the requested information is voluntary and will not affect the organization’s eligibility for an award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. (The exceptions are the PI/PD name and the information about prior Federal support, the last question above.)

Collection of this information is authorized by the NSF Act of 1950, as amended, 42 U.S.C. 1861, et seq. Demographic data allows NSF to gauge whether our programs and other opportunities in science and technology are fairly reaching and benefiting everyone regardless of demographic category; to ensure that those in under-represented groups have the same knowledge of and access to programs and other research and educational opportunities; and to assess involvement of international investigators in work supported by NSF. The information may be disclosed to government contractors, experts, volunteers and researchers to complete assigned work; and to other government agencies in order to coordinate and assess programs. The information may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, “Principal Investigator/Proposal File and Associated Records”, 63 Federal Register 267 (January 5, 1998), and NSF-51, “Reviewer/Proposal File and Associated Records”, 63 Federal Register 268 (January 5, 1998).
Submit only ONE copy of this form for each PI/PD and co-PI/PD identified on the proposal. The form(s) should be attached to the original proposal as specified in GPG Section II.B. Submission of this information is voluntary and is not a precondition of award. This information will not be disclosed to external peer reviewers. **DO NOT INCLUDE THIS FORM WITH ANY OF THE OTHER COPIES OF YOUR PROPOSAL AS THIS MAY COMPROMISE THE CONFIDENTIALITY OF THE INFORMATION.**

**PI/PD Name:** Steven D Penrod

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REVIEWERS NOT TO INCLUDE:
**Factors influencing plea bargaining decisions by prosecutors and defense attorneys**

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- HUMAN SUBJECTS (GPG II.D.7)  
  Human Subjects Assurance Number  
  Exemption Subsection _______ or IRB App. Date _01/12/09_

- INTERNATIONAL COOPERATIVE ACTIVITIES: COUNTRY/COUNTRIES INVOLVED  
  (GPG II.C.2.j)  
  JA  
  KS  
  NL  

- HIGH RESOLUTION GRAPHICS/OTHER GRAPHICS WHERE EXACT COLOR REPRESENTATION IS REQUIRED FOR PROPER INTERPRETATION (GPG I.G.1)
Certificate for Authorized Organizational Representative or Individual Applicant:

By signing and submitting this proposal, the Authorized Organizational Representative or Individual Applicant is: (1) certifying that statements made herein are true and complete to the best of his/her knowledge; and (2) agreeing to accept the obligation to comply with NSF award terms and conditions if an award is made as a result of this application. Further, the applicant is hereby providing certifications regarding debarment and suspension, drug-free workplace, and lobbying activities (see below), nondiscrimination, and flood hazard insurance (when applicable) as set forth in the NSF Proposal & Award Policies & Procedures Guide, Part I: the Grant Proposal Guide (GPG) (NSF 09-1). Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U.S. Code, Title 18, Section 1001).

Conflict of Interest Certification

In addition, if the applicant institution employs more than fifty persons, by electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative of the applicant institution is certifying that the institution has implemented a written and enforced conflict of interest policy that is consistent with the provisions of the NSF Proposal & Award Policies & Procedures Guide, Part II, Award & Administration Guide (AAG) Chapter IV.A; that to the best of his/her knowledge, all financial disclosures required by that conflict of interest policy have been made; and that all identified conflicts of interest will have been satisfactorily managed, reduced or eliminated prior to the institution’s expenditure of any funds under the award, in accordance with the institution’s conflict of interest policy. Conflicts which cannot be satisfactorily managed, reduced or eliminated must be disclosed to NSF.

Drug Free Work Place Certification

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Drug Free Work Place Certification contained in Exhibit II-3 of the Grant Proposal Guide.

Debarment and Suspension Certification

(If answer "yes", please provide explanation.)

Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency? Yes ☐ No ☐

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Debarment and Suspension Certification contained in Exhibit II-4 of the Grant Proposal Guide.

Certification Regarding Lobbying

The following certification is required for an award of a Federal contract, grant, or cooperative agreement exceeding $100,000 and for an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding $150,000.

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure of Lobbying Activities,” in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Certification Regarding Nondiscrimination

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative is providing the Certification Regarding Nondiscrimination contained in Exhibit II-6 of the Grant Proposal Guide.

Certification Regarding Flood Hazard Insurance

Two sections of the National Flood Insurance Act of 1968 (42 USC §4012a and §4106) bar Federal agencies from giving financial assistance for acquisition or construction purposes in any area identified by the Federal Emergency Management Agency (FEMA) as having special flood hazards unless the:

(1) community in which that area is located participates in the national flood insurance program; and

(2) building (and any related equipment) is covered by adequate flood insurance.

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant located in FEMA-designated special flood hazard areas is certifying that adequate flood insurance has been or will be obtained in the following situations:

(1) for NSF grants for the construction of a building or facility, regardless of the dollar amount of the grant; and

(2) for other NSF Grants when more than $25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE  SIGNATURE  DATE

NAME  Jacob Marini

Electronically signed: Electronic Signature  Jan 15 2009  3:00PM

TELEPHONE NUMBER  ELECTRONIC MAIL ADDRESS  FAX NUMBER

212-237-8449  jmarini@hera.ijJay.cuny.edu  212-237-8471

* EAGER - Early-concept Grants for Exploratory Research  ** RAPID - Grants for Rapid Response Research
Project Summary

Intellectual Merit. There is a large body of psychological research on eyewitness memory, including both research on factors related to eyewitness accuracy and on the influence of eyewitness evidence on juror judgments. The research on eyewitness evidence largely ignores an important factor related to the adjudication of the majority of cases: plea bargaining. It is estimated that approximately 90 percent of cases are resolved through plea bargaining (Libuser, 2001). The existing research on the factors influencing attorneys' plea bargaining decisions suggest that plea bargaining decisions are largely driven by the strength of evidence against a defendant. Prosecutors are most likely to offer a plea bargain when the evidence is weak and defense attorneys are most likely to recommend a plea bargain when the evidence is strong. It is possible that aspects of eyewitness identification evidence may influence attorneys' plea bargaining decisions. However, it is unclear whether attorneys are sensitive to variations in the quality of eyewitness evidence or if they perceive eyewitness evidence to be universally strong. Research indicates attorneys report awareness about the influence of some witnessing factors on identification accuracy while demonstrating a lack of knowledge about the influence of other variables on accuracy. In addition, defense attorneys and prosecuting attorneys may have different levels of awareness of the relationships among different witnessing factors and identification accuracy. Thus, it is unclear how variations in eyewitness evidence strength will influence attorneys' actual behavior. In addition, it is not known how other legal factors (i.e., pretrial publicity, defendant's prior record) will interact with eyewitness evidence quality to influence attorneys' plea bargaining decisions.

Are the characteristics of eyewitness cases that end up in court similar to the characteristics of the larger universe of cases containing eyewitness evidence? The PI proposes two studies to investigate the factors that influence prosecutors' and defense attorneys' plea bargaining decisions. Study 1 explores whether prosecutors and defense attorneys are sensitive to variations in the quality of eyewitness evidence. Several factors related to eyewitness accuracy are manipulated. After reading the case summary, attorneys will rate their willingness to offer/recommend a plea bargain and their perceptions of juror verdict if the case were to go to trial. Study 2 manipulates the quality of eyewitness identification evidence and the presence of other legal factors that may influence prosecutors' and defense attorneys' plea bargaining behavior. The intellectual merit of the proposed research partly resides in its contribution to the understanding of the psychological and legal factors influencing attorneys' plea bargaining decisions. In addition the results of the proposed research will inform eyewitness research as to the types of eyewitness evidence that are most likely to make it to court.

Broader Impact

The proposed research is designed to inform the fields of psychology and law about attorneys' ability to distinguish between strong and weak eyewitness identification evidence. If the results indicate that attorneys are not sensitive to variations in eyewitness evidence quality, this could suggest the need for further attempts to educate attorneys about variables related to eyewitness accuracy. In addition, the proposed research will provide information about whether attorneys are sensitive to potentially exculpatory evidence about a defendant. Findings from the proposed studies will be published in widely available peer-reviewed psychology journals. The PI is frequently invited to present at continuing education conferences for lawyers, judges, criminal investigators and forensic practitioners. The knowledge gained from this research will be presented at legal education conferences across North America.

The proposed line of research will be conducted at John Jay College of Criminal Justice (CUNY), a mid-sized university with a student population of over 14,000 and a Minority and a Hispanic serving institution (HSI). The institution awards degrees at all levels (B.A., M.A. & Ph.D.). One of the goals of the psychology department is to provide students with opportunities to become integrally involved with empirical research. Funding of this project would allow for many research assistantships and provide students with opportunities to conduct related undergraduate honor's and master's thesis research. Our college population is primarily comprised of minority students (20% African American, and 45% Hispanic) from low-income families with a very large proportion being the first-generation in college. When hiring research assistants, priority consideration will be given to qualified candidates with financial need.
# TABLE OF CONTENTS

For font size and page formatting specifications, see GPG section II.C.

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Cover Sheet for Proposal to the National Science Foundation

- Project Summary (not to exceed 1 page) 1
- Table of Contents 1
- Project Description (Including Results from Prior NSF Support) (not to exceed 15 pages) *(Exceed only if allowed by a specific program announcement/solicitation or if approved in advance by the appropriate NSF Assistant Director or designee)* 15
- References Cited 4
- Biographical Sketches (Not to exceed 2 pages each) 2
- Budget (Plus up to 3 pages of budget justification) 3
- Current and Pending Support 2
- Facilities, Equipment and Other Resources 1
- Special Information/Supplementary Documentation 1
- Appendix (List below.) *(Include only if allowed by a specific program announcement/solicitation or if approved in advance by the appropriate NSF Assistant Director or designee)*
- Appendix Items:

*Proposers may select any numbering mechanism for the proposal. The entire proposal however, must be paginated. Complete both columns only if the proposal is numbered consecutively.*
Project Description

Proposal Objectives

Eyewitness memory is fallible. Mistaken eyewitness identifications are the leading cause of false convictions in the United States (Scheck, Neufeld, & Dwyer, 2000; Wells, Small, Penrod, Malpass, Fulero, & Brimacombe, 1998). Despite the unreliability of eyewitnesses, eyewitness identification evidence is a common type of evidence in criminal cases (Brigham & Wolfskeil, 1983). For these reasons, it is little wonder that eyewitness identification has generated more interest among researchers than any other topic in the field of psychology and law (McAllister, 1990). There have been decades of experimental research investigating the relationship between different eyewitness variables (e.g., stress, cross-race identification, exposure duration, lineup instructions, etc.) and identification accuracy (Wells & Quinlivan, 2008). In addition to factors relating to eyewitness accuracy, research has demonstrated that eyewitness evidence is very persuasive to jurors (Boyce, Beaudry, & Lindsay, 2007). Demonstrating the powerful nature of eyewitness evidence, Loftus (1975) found that juror judgments were influenced by eyewitness evidence even after learning that the witness was legally blind.

Most cases don’t go to trial, yet psycho-legal research does not take this into account. It is well known that the vast majority (estimates range from 80 to over 90% of cases) of criminal cases are settled through plea agreements (Libuser, 2001; Kramer, 2006; Covey, 2007). Plea bargaining is a filter in the legal system, allowing only a small percentage of cases to go to trial. Despite this, psycholegal research (including research on eyewitness evidence) has largely ignored plea bargaining as a research topic. Importantly, psychological research has not explored how and if plea bargaining influences the types of cases (and the characteristics of evidence) that make it to trial. Eyewitness research has primarily focused on the witnessing and investigation factors (termed estimator and system variables, respectively) related to eyewitness identification accuracy, as well as the influence of eyewitness evidence on jurors. However, researchers have not taken into account the influence of the quality of eyewitness evidence on plea bargaining decisions. Specifically, it is possible that factors related to eyewitness evidence (for example, the likelihood that the identification is correct) could influence prosecutors’ decision to offer a plea bargain and defense attorneys’ decisions to recommend a plea bargain. Thus, it is not known if the characteristics of eyewitness cases that end up in court are similar to the characteristics of the larger universe of cases containing eyewitness evidence. Are certain types of cases more likely to go to trial than others? More specifically, do characteristics of eyewitness evidence influence the likelihood that a case will continue to trial?

Prior research on attorneys’ decision making with regard to plea bargains suggests that evidence strength has a significant impact on plea decisions. In addition, economic models of plea bargaining and decision theory accounts of plea bargaining both include the probability of conviction (which is primarily driven by evidence strength) as a component of the model (Covey, 2007; Kramer, Wolbransky, & Heilbrun, 2007). Similarly, legal scholars often cite evidence strength as one of the primary driving influences in attorneys' plea decisions (Myers & Hagan, 1979; Burke, 2007; Pritchard, 1986). Thus, it appears clear that evidence strength is an important determinant of plea decisions, but it is unclear whether attorneys perceive positive eyewitness identifications as uniformly strong evidence or if attorneys are sensitive to variations in the quality of eyewitness evidence. There is evidence that a positive eyewitness identification of the defendant is viewed by attorneys as strong evidence. An archival analysis of felony cases in Indiana found that the presence of an eyewitness identification increased the likelihood that a prosecutor would take the case to trial (Myers & Hagan, 1979). Similarly, McAllister (1990) found that a positive eyewitness identification significantly reduced prosecutors’ desire to plea bargain and significantly increased defense attorneys’ desire to plea bargain, suggesting that attorneys perceived the eyewitness identification to be strong evidence. Other research suggests that attorneys may be sensitive to at least some of the factors related to eyewitness accuracy. For example, findings indicate that prosecuting and defense attorneys recognize that cross-race identifications may be less accurate than same race identifications and that a witness’s opportunity to view the perpetrator will influence the accuracy of the identification (Devenport, Culter, & Penrod, 1997; Brigham & Wolfskeil, 1983; Martire & Kemp, 2008).
Do prosecutors and defense attorneys recognize factors that make an identification weak or strong? And if so, does this sensitivity to evidence quality influence plea bargaining decisions? Finally, is eyewitness evidence in cases that go to trial systematically different from eyewitness evidence in cases that result in plea bargains? The proposed research examines these questions in two experimental studies using prosecuting and defense attorneys as participants. Study 1 investigates whether attorneys are sensitive to variations in the quality of eyewitness evidence. Prosecutors and defense attorneys are presented with information about a criminal case containing eyewitness evidence and asked if they would offer/recommend a plea bargain. Eyewitness factors related to identification accuracy are manipulated. Attorneys are also asked to predict how jurors would perceive the eyewitness evidence, and these predictions are compared to the responses of mock jurors to determine whether attorneys have accurate expectations regarding jurors' perceptions of eyewitness evidence. Study 2 investigates the influences of eyewitness identification factors and other legal factors that are thought to influence prosecutors and defense attorneys' plea decisions. Participants are presented with a case summary and are asked to make decisions about whether to offer/recommend a plea bargain. The quality of eyewitness evidence and the following other legal factors are manipulated: eyewitness confidence, strength of other incriminating evidence, case seriousness, prior record, media coverage, defendant's wishes, and defendant's claims regarding innocence. The proposed studies will shed light on the factors that influence attorneys' plea bargaining decisions and determine whether legal factors (such as prior record, crime seriousness, and pretrial media coverage) interact with the effect of the quality of eyewitness evidence on plea bargaining decisions. In addition, the proposed research investigates the accuracy of attorneys’ predictions of juror judgments of eyewitness evidence.

Relation of the Proposed Work to the State of the Field

The majority of cases are resolved through plea bargaining. The 6th amendment of the United States Constitution guarantees all criminal defendants the right to a trial. The majority of criminal cases do not result in a trial, however. The criminal justice system faces obvious constraints with regard to time, money, and personnel, and thus does not possess the resources to bring each and every case to trial. The majority of criminal cases in the United States are resolved instead through a plea bargain (Libuser, 2001; Kramer, 2006; Covey, 2007). A plea bargain is a negotiated agreement between the prosecution and the defendant that allows for a determination of the case without going to trial. Specifically, the prosecution requests a guilty plea from the defendant in exchange for leniency toward the defendant in some form, typically a reduced prison sentence (Libuser, 2001; Burke, 2007; Hollander-Blumoff, 2007). There are two types of plea bargains, sentence bargaining, in which the defendant pleads guilty to a lesser charge that carries a shorter sentence, and charge bargaining, in which the defendant pleads guilty to one or more charges so that remaining charges are dismissed (Libuser, 2001). Both types of plea bargains result in a less severe sentence penalty than would result from a guilty verdict at trial. The plea agreement, once negotiated, must be approved by the judge (Libuser, 2001).

While necessary to prevent enormous backlogs of cases in our criminal justice system, plea bargains have benefits and drawbacks. The ability to negotiate a plea agreement is an effective way to dispose of cases for attorneys, especially defense attorneys, who have consistently large caseloads (Libuser, 2001). In addition, guilty defendants who accept a plea bargain are guaranteed to receive punishment for committing a crime (albeit a less severe punishment), whereas trials may result in acquittals even for guilty defendants (Libuser, 2001). One drawback to plea bargaining is that the defendant gives up his or her constitutional right to a trial. A more serious problem with plea agreements is that innocent defendants may be induced to accept a plea agreement (Libuser, 2001). Indeed, prosecutors design the terms of a plea bargain, and thus have the ability to make the plea agreements more or less appealing to defendants (Pritchard, 1986). It is possible that a defendant who is innocent may opt to take an attractive plea rather than face the uncertainty of trial and potentially longer sentence.

A negotiated plea agreement is the resolution of the vast majority of criminal cases in the United States. From the period of October 1, 2004 to September 30, 2005, 86% of all federal
criminal cases were resolved with a guilty plea (Bureau of Justice Statistics, 2005). If one excludes cases in which charges against the defendant were dropped, 94% of all federal criminal cases (91% of felonies, 95% of violent offenses) in this time period were resolved with a guilty plea (Bureau of Justice Statistics, 2005). Statistics reporting a high percentage of cases resulting in a guilty plea have been reported elsewhere (Libuser, 2001).

Are cases that go to trial different than those that do not? While it is clear that the majority of all cases result in a plea bargain, it is less clear whether the subset of cases that go to trial differ in any systematic ways from the larger population of all criminal cases. It is possible that the qualities of the evidence, the defendant, or the crime may influence plea bargaining decisions. Plea bargaining may be thought of as a type of filter for the criminal justice system, letting some cases through to trial while keeping other cases from making it to the courtroom. What factors influence whether cases go to trial or result in a plea bargain? Does attorney decision-making with regard to plea bargains impact the types of cases that make it to court? To answer these questions, first it is necessary to determine the factors that influence whether prosecuting attorneys decide to offer a plea bargain, and the factors that influence whether defense attorneys decide to recommend acceptance of the offer to their client. Research and common sense both suggest that plea bargain decision making must involve the estimation of the likelihood of different case outcomes (i.e., guilty verdict versus acquittal) (Hollander-Blumoff, 2007; Burke, 2007; Myers & Hagan, 1979). Case outcomes, while shaped by many factors, are driven primarily by the strength of the evidence against the defendant (Kalven & Zeisel, 1966). The choice to go to trial is risky for both parties as jury verdicts are unpredictable. Thus, both prosecutors and defense attorneys should prefer to go to trial with cases they can win. This would suggest a tendency among prosecutors to offer plea bargains in weak cases and a tendency among defense attorneys to advise acceptance of plea bargains in strong cases (Schneider, 2007; Pritchard, 1986). Indeed, the shadow-of-trial model has been applied to plea bargaining decisions, and assumes that the plea decision will flow from a consideration and comparison of the predicted trial outcome and the potential sentence at trial (Kramer et al., 2007; Bibas, 2004). Similarly, the probability of conviction is one component of the economic model of plea decision making such that a rational defendant should only accept a plea bargain if the reduced sentence of the plea is less than the trial sentence multiplied by the probability of conviction, minus the financial cost of going to trial (Covey, 2007).

Research indicates that strength of evidence against a defendant influences attorneys’ decisions with regard to plea agreements. Kramer and colleagues (2007) sent defense attorneys case summary vignettes and varied the strength of evidence against the defendant, whether or not the defendant wanted to accept the plea, and the severity of the potential sentence at trial. There was a main effect of evidence strength, such that the defense attorneys were more likely to recommend a plea to the defendant if the incriminating evidence was strong (Kramer et al., 2007). Similarly, survey research conducted with district attorneys found that prosecutors reported relying on aspects of evidence strength (e.g., confession evidence, eyewitness identification evidence, physical evidence) in plea bargaining decisions (Libuser, 2001).

A common type of evidence in criminal cases is eyewitness identification evidence. Eyewitness evidence can be very influential in court. However, a large body of research on basic memory processes and psychological factors of the identification procedure has definitively shown that all eyewitness identifications are not created equal. Indeed, research has identified many variables that influence eyewitness identification accuracy, such as opportunity to see the perpetrator, the amount of stress the witness is under, instructions to the witness, and aspects of lineup construction and presentation.

Eyewitness evidence: Identification factors related to eyewitness accuracy

Cross-race identification. A large body of research indicates that witnesses have difficulty accurately identifying individuals of a different race. Specifically, people are better at identifying faces of their own race than faces of other races (Brigham, Bennett, Meissner, & Mitchell, 2007). A recent meta-analysis of 39 studies of the cross-race effect estimated that the effect explained 15% of the variance in identification decisions (Meissner & Brigham, 2001). This meta-analysis also found that identification decisions of white witnesses were more likely to show the cross race effect than those of black witnesses (Brigham et al., 2007; Meissner & Brigham, 2001). The
results from a recent survey of eyewitness experts indicate that 90% of respondents reported that the cross-race effect was a reliable research finding (Kassin, Tubb, Hosch, Memon, 2001). Evidence suggests this effect may be attributable to differences in the quality of encoding processes for same and other race faces (Meissner, Brigham, & Butz, 2005). Specifically, it is possible that people employ greater attentional resources and encode more diagnostic information when viewing own-race faces (Meissner et al., 2005). Meissner and colleagues (2005) note that if the cross-race effect results from inferior encoding of other-race faces, the presence of other eyewitness identification factors that are influenced by encoding could exacerbate the impact of a cross-race identification. Consistent with this idea, the meta-analysis performed by Meissner and Brigham (2001) revealed an interaction between cross-race identification and duration of exposure, such that the effect size of cross-race effect was larger for shorter exposure times.

**Duration of exposure.** Research on exposure duration and memory has found that longer exposure to a visual stimulus is associated with improved recognition memory (Memon, Hope, & Bull, 2003; Potter & Levy 1969; Reynolds & Pezdek, 1992). Shorter exposure duration has been associated with increases in false alarms (Reynolds & Pezdek, 1992). A meta-analysis of 128 studies of eyewitness memory similarly found a consistent effect for exposure duration on recognition memory (Shapiro & Penrod, 1986). In addition, Memon and colleagues found that longer exposure times were associated with inflated witness confidence judgments when the target was present in the lineup (accurate and inaccurate witnesses did not differ in confidence level) (Memon, et al., 2003). A survey of eyewitness experts revealed that the effect of exposure duration on eyewitness accuracy is a generally accepted research finding (Kassin et al., 2001).

**Stress.** Research suggests that stress has a negative influence on eyewitness memory accuracy (Deffenbacher, Bornstein, Penrod, & McGorty, 2004). Two recent studies which have taken advantage of naturally occurring stress have provided additional support for this finding. Valentine and Mesout (2008) studied visitors to the Horror Labyrinth (a mirrored maze containing loud noises and screams) in the London Dungeon. Visitors were confronted in the maze by a frightening "scary person" dressed in a robe and theatrical makeup and later asked to identify this person in a lineup. There was a strong negative correlation between the amount of anxiety experienced in the maze and eyewitness accuracy (Valentine & Mesout, 2008). Morgan and colleagues (2004) investigated eyewitness memory in a naturally stressful environment: a prisoner of war camp in a military survivor school. During the mock captivity, military personnel underwent either a high stress interrogation in which they were threatened with physical harm or a low stress interrogation in which threat of physical injury was not present. Subjects were later shown photographic lineups and asked if their interrogator was present in the lineups. Accuracy of identifications was impaired in the high stress condition compared to the low stress condition (Morgan, Hazlett, Doran, Garrett, Hoyt, Thomas, Baranoski, & Southwick, 2004). A recent meta-analysis determined that stress has a negative impact on eyewitness accuracy, and that this effect manifested as a reduction in hits; stress did not influence the rate of false identifications (Deffenbacher et al., 2004).

**Biased lineup instructions.** Research has consistently demonstrated that biased lineup instructions increase the likelihood of false eyewitness identifications (Greathouse & Kovera, 2008; Clark, 2005; Thompson & Johnson, 2008). Lineup instructions are considered biased if they give the impression or explicitly inform the witness that the suspect is in the lineup (Steblay, 1997). In addition, biased instructions may not provide witnesses with a “No Choice” option. Meta-analytic studies investigating the effect of biased instructions on witness identification accuracy have found that biased instructions have a reliable effect on eyewitness accuracy, especially when instructions combine a suggestion of the suspect’s presence in the lineup and the absence of a “No Choice” option (Steblay, 1997; Clark, 2005). It appears that while biased instructions increase identification accuracy when the perpetrator is present in the lineup (because the witness is more likely to choose a photo), biased instructions significantly reduce identification accuracy when the lineup does not include the perpetrator (Clark, 2005; Steblay, 1997). The research literature suggests that biased lineup instructions increase the likelihood that a witness will choose someone from the lineup, and this increased choosing will result in false identifications when the suspect is innocent (Greathouse & Kovera; Steblay, 1997).
Lineup bias. Police lineups, whether photographic or live, contain the suspect and several distracter individuals, known as foils. In a fair lineup, foils should be plausible alternatives to the suspect and the suspect's identity should not be obvious from comparison across lineup members (Technical Working Group, 1999; Malpass, Tredoux, & McQuiston-Surrett, 2007). Lineup bias refers to the situation in which the suspect stands out from the foil members in some way (Malpass et al., 2007). To avoid unfair lineups caused by foil bias, foils are typically selected on the basis of a match-to-description strategy or a match-to-suspect strategy (Technical Working Group, 1999; Malpass et al, 2007). If a match-to-description strategy is used, foils match the description of the perpetrator given by the witness but may vary on characteristics not mentioned in the description. If a match-to-suspect strategy is used, foils that resemble the suspect are chosen. Problems arise if the suspect is distinctive in some way from the foils, as this could result in the selection of the suspect even by witnesses with a very poor memory (Malpass et al., 2007).

Lineup bias can be measured using a mock witness procedure, in which people who have not witnessed a crime are shown a lineup and asked to identify the suspect, and sometimes given a verbal description of the suspect (Malpass et al., 2007; Doob and Kirshenbaum, 1973). Identifications of the suspect above chance level would indicate the lineup is biased against the suspect. Research has shown that mock witnesses are more likely to choose an innocent suspect from biased lineups than from fair lineups, and this finding generalizes to both simultaneous and sequential lineups (Malpass et al., 2007; McQuiston & Malpass, 2002). Research has found that lineup bias increases the rate of false identification of innocent suspects (Malpass et al., 2007; Lindsay, Lea, Nosworthy, Fulford, Hector, LeVan, & Seabrook, 1991; Lindsay, Smith, & Pryke, 1999).

Lineup presentation. Lineup presentation has been shown to influence eyewitness accuracy (Lindsay & Wells, 1985; Steblay, Dysart, Fulero, & Lindsay, 2001; McQuiston-Surrett, Malpass, & Tredoux, 2006). Lineups are typically presented to witnesses in one of two formats, simultaneous presentation or sequential presentation. In simultaneous presentation, the lineup members are all presented to the witness at the same time. In the sequential lineup procedure, the lineup photographs are presented to the witness one at a time. Upon viewing each photograph, the witness is asked to indicate whether or not that photograph is the culprit. If the witness does not identify a photo, the administrator then displays the next lineup member in the sequence to the witness. According to the strictest form of sequential lineup presentation, the witness should not know how many photos the administrator has and the witness should view each photograph only once. Further, if the witness positively identifies a lineup member, the procedure is stopped and no additional photos are shown (McQuiston-Surrett et al., 2006). That said, research studies and actual police procedures vary according to whether this strict stopping rule is employed (Steblay & Dysart, under review).

Research suggests that the type of lineup presentation influences the type of judgments made by eyewitnesses. Specifically, the sequential lineup presentation allows witnesses to compare lineup members to one another, prompting the witness to use a relative judgment strategy that will result in a choice of the lineup member that looks the most like the perpetrator (Lindsay & Wells, 1985; Wells, 1984). The choice of the lineup member who is the closest match is clearly undesirable when the actual perpetrator is not in the lineup (i.e., the suspect is innocent). The sequential lineup presentation, by contrast, does not allow the witness to compare lineup members to one another, and thus forces the witness to use an absolute judgment strategy. The witness must compare each lineup member to his or her memory for the perpetrator (Lindsay & Wells, 1985). A large body of research has compared witness identification rates (focusing on both correct identifications of the perpetrator when the perpetrator is in the lineup and false identifications when the perpetrator is absent) across these two lineup presentation formats. In general, the findings show a "sequential superiority effect"; specifically, sequential lineups reduce the rate of false identifications of innocent suspects without substantial reductions in correct id ("hit") rates (Steblay et al., 2001; Steblay & Dysart, under review).

Sequential lineup presentation may reduce the negative effects of some other identification factors on eyewitness accuracy. Specifically, research suggests that the "sequential superiority effect" is stronger for biased lineups than fair lineups (Steblay & Dysart, under review; Lindsay, Lea, Nosworthy, Fulford, Hector, LeVan, & Seabrook, 1991).
Will variations in eyewitness ID affect attorneys’ perceptions of evidence strength?

Prior research makes it clear that attorneys’ plea bargaining decisions are influenced by the strength of evidence against the defendant. However, will attorneys perceive a positive identification of a suspect as uniformly strong evidence or will the attorney pay attention to the factors associated with eyewitness accuracy? There is evidence suggesting that attorneys perceive positive identifications as strong evidence (Myers & Hagan, 1979; McAllister, 1990). However, the courts assume that attorneys have an understanding of the factors that influence the fairness of the identification procedures (United State v. Wade, 1967; Kirby v. Illinois, 1972). Indeed, this assumption provides the rationale for the legal safeguard that allows defense attorneys to be present at identification procedures (Stinson, Devenport, Cutler, & Kravitz, 1996).

In order to determine whether certain identification factors influence the likelihood that a case will go to trial, it is necessary to investigate whether attorneys are sensitive to the factors that are related to eyewitness accuracy.

Several studies have examined attorneys’ knowledge and beliefs about eyewitness evidence. Defense attorneys appear to be more skeptical of eyewitness evidence than prosecuting attorneys, and a substantial proportion (34%) of defense attorneys estimated that false identifications of innocent suspects was a more frequent error than non-identifications of guilty suspects (Brigham & Wolfskeil, 1983). Rahaim and Brodsky (1982) surveyed defense attorneys about factors relating to eyewitness accuracy with 61 multiple choice questions about the influence of stress and cross race factors. On average, approximately half of the lawyers answered the stress questions correctly and only 22% chose the correct answers regarding cross-race identifications (Rahaim & Brodsky, 1982). In a survey of law enforcement officers, defense attorneys, and prosecuting attorneys in Florida, Brigham and Wolfskeil (1983) found that all three groups appeared to be aware of the cross-race effect, rating cross-race identifications (especially white witness/black suspect identifications) as less likely to be accurate than same-race identifications. A majority of defense attorneys (81%) and police officers (67%) correctly opined that arousal has a negative impact on eyewitness accuracy, while 48% of prosecutors thought that arousal leads to increased accuracy (Brigham & Wolfskeil, 1983). All three groups also seem to recognize that opportunity to view the perpetrator (including exposure duration) will influence eyewitness accuracy (Brigham & Wolfskeil, 1983). A great deal of research on these identification issues has been conducted in the 25+ years since the publication of the two aforementioned studies, possibly explaining the contradictory findings about knowledge of the cross-race effect.

In more recent research, Granhag and colleagues (2005) measured the beliefs of Swedish police officers, prosecutors, and judges about factors related to eyewitness accuracy. Granhag et al. used a survey instrument similar to the one employed by Kassin and colleagues (2001), which was used to measure perceptions of eyewitness experts about the reliability of research findings on a variety of identification factors. All three groups perceived simultaneous lineups to be associated with greater eyewitness identification accuracy than sequential lineups, an opinion that is not supported by research findings (Granhag, Stromwall, & Hartwig, 1996). Martire and Kemp (2008) also utilized a questionnaire similar to that used by Kassin et al. (2001) to assess beliefs about eyewitness identification accuracy among Australian public defenders. A majority of defenders believed that biased lineup instructions, short exposure to the perpetrator, exposure to mugshots, presence of a weapon, cross-race identification, stress, and sequential lineup presentation were associated with decreased eyewitness identification accuracy. There was not a consensus among attorneys in beliefs about lineup fairness, event violence, or the relationship between witness confidence and witness accuracy (Martire & Kemp, 2008).

It is important to recognize that survey research only provides self-report data; surveys cannot demonstrate that attorneys’ decisions are actually influenced by identification factors (Devenport, Penrod & Cutler, 1997). To assess behavior, it is necessary to experimentally manipulate the presence of identification factors and examine the influence on attorney decision making. Stinson and colleagues (1996) presented defense attorneys with videotapes of identification procedures in which the following variables were varied: whether the foils matched the description of the perpetrator (foil bias), whether the instructions informed the witness that the culprit may not be present in the lineup (biased instructions), and whether the lineup was presented simultaneously or sequentially (lineup presentation). Attorneys were more likely to
report the identification procedures were suggestive and less likely to report that the identification was fair if the lineup foils did not match the description of the perpetrator, indicating sensitivity to foil bias. Attorneys were more likely to report that the identification procedure was suggestive if they heard biased lineup instructions, although the lineup instructions did not influence perceptions of fairness. Defense attorneys had negative perceptions about sequential lineups. Specifically, attorneys were more likely to think identification procedure was suggestive if the lineup was sequential than if it was simultaneous, a belief that is not supported by research findings (Stinson et al., 1996). Thus, research suggests that attorneys may correctly recognize the relationship of some identification factors to eyewitness accuracy (i.e., cross race, exposure duration, stress, foil bias) and may have beliefs about other factors that are unsupported by research findings (lineup presentation).

Aside from evidence strength, what other legal factors influence attorneys decisions? The decision to offer or recommend a plea bargain is complex, and is likely influenced by multiple legal factors, including the likelihood of a conviction at trial. Legal scholars have identified many factors that may influence these decisions and survey research and experimental studies have investigated the relationship between some of these variables and plea bargaining behavior. It is likely that some of these factors are influential for both prosecutors' and defense attorneys’ decisions (e.g., evidence strength). However, prosecutors and defense attorneys may have different influences as well. Specifically, prosecutors act on behalf of their community, and are therefore influenced by public opinion about a particular case or a particular defendant. Thus, aspects of the case that could influence public outrage (i.e., crime seriousness, media coverage) and aspects of a defendant that could influence public outrage (i.e., prior record) may influence prosecutors independently of evidence strength. Defense attorneys, by contrast, are responsible to their clients and should be sensitive to the defendant's wishes, factors related to the defendant’s true guilt or innocence, and time restrictions related to current caseload.

Legal factors related to plea bargaining decisions

Prior record. Legal scholars have suggested that a defendant’s prior convictions can influence attorneys’ decisions to offer or recommend a plea bargain (Kramer, 2006; Kramer et al., 2007; Myers & Hagan, 1979). It is likely that prior record influences plea decisions in a way similar to evidence strength: if a defendant has a prior criminal record, it is less likely that a prosecutor will offer a plea and more likely that a defense attorney will recommend a plea bargain. In a survey of district attorneys, Libuser (2001) found that prior record was influential in prosecutors’ decisions to charge a defendant with a crime. Similarly, an archival analysis of prosecutorial decisions by Myers and Hagan found that the likelihood of proceeding to trial increased if the defendant had a prior record (Myers & Hagan, 1979).

Pretrial publicity. It is possible that media coverage of a case can influence a prosecutor’s decision to offer a plea bargain. Prosecutors are concerned with being perceived as “tough on crime”, and anecdotal evidence suggests that if a case has been highly publicized, prosecutors concerned with community sentiment are likely to risk the uncertainty of trial even if evidence in the case is weak (Pritchard, 1986; Libuser, 2001). An archival research study gathered information on all non-vehicular homicide cases occurring in Milwaukee from January 1981 to June 1982, and examined the relationship between media coverage and prosecutors’ plea bargain decisions (Pritchard, 1986). Media attention was operationalized as the average story length. Results indicated that media coverage was the strongest predictor of whether prosecutors offered a plea bargain, such that as media coverage increased, prosecutors were less likely to enter into plea negotiations (Pritchard, 1986). Other factors related to prosecutors’ plea decisions were whether the defendant and the victim were acquainted, the defendant’s prior record, the seriousness of the charge, and whether the defendant had been charged with multiple offenses.

Case seriousness. Similar to pretrial media coverage, case seriousness will influence the level of community concern over a case. As prosecutors wish to be perceived as crime fighters, it is likely that case seriousness has an effect on prosecutors’ decisions to offer a plea, independent from evidence strength. Specifically, prosecutors should feel more pressure to bring a case to trial if it is a serious case. In a survey with district attorneys, attorneys reported that the most influential factor in plea decisions was the seriousness of the case, such that pleas were more
likely to be offered in less serious cases (Libuser, 2001). Similarly, Myers and Hagan (1979) found that the legal seriousness of the case was positively associated with prosecutors’ decisions to go to trial. Danger posed to others, prior record, and evidence strength were also discussed as important factors (Libuser, 2001).

Witness confidence. Libuser (2001) found that the presence of eyewitness identification evidence influenced prosecutors’ decision to charge a defendant and the decision to offer a plea bargain. It is very likely that eyewitness confidence influences prosecutors’ perceptions of the quality and strength of the eyewitness identification evidence. Jury decision making research has found that eyewitnesses are frequently believed, and evidence suggests that eyewitness confidence influences jurors’ perceptions of eyewitness accuracy, with more confident witnesses perceived as more accurate (Boyce et al., 2007; Cutler, Penrod, & Dexter, 1990; Lindsay, Wells & Rumpel, 1981). It has been argued that identifications from witnesses who are not very confident will not end up in court, because prosecutors will not perceive the identification as strong evidence and will assume jurors will not be persuaded by the witness (Boyce et al., 2007).

Defendant’s preference. While the defendant makes the ultimate decision whether to accept a plea bargain, it is likely that the defense attorney’s recommendation is very influential on defendants. However, legal scholars note that a good defense attorney should consider his or her client’s wishes when making that recommendation (Hollander-Blumoff, 2007; Kramer, Wolbransky, & Heilbrun, 2007). Prior research suggests that a defendant’s preference about whether to plea or go to trial influences attorneys recommendations, although not in a straightforward manner. Kramer (2006) found a main effect of strength of evidence against a defendant on the likelihood that defense attorneys would recommend a plea bargain, such that defense attorneys were more likely to recommend a plea when the evidence was strong. However the effect of evidence strength was strongest when the potential sentence at trial was long and the defendant wanted to go to trial (Kramer, 2006).

Defendant’s innocence claim. Defense attorneys’ advice to their clients about a plea bargain is influenced by their perception of their client’s situation (Covey, 2007). One factor of a client’s case is whether they are truly guilty or innocent. Research has not addressed how perceptions of a client’s true guilt or innocence influence an attorney’s plea decision. It is possible that attorneys will be less likely to recommend a plea bargain to a client believed to be innocent. However, it is also possible that evidence strength or length of potential sentence may override this effect; specifically, if the evidence is strong or the length of potential sentence is long, attorneys may recommend a plea bargain even to clients they believe to be innocent so as to avoid prolonged incarceration. Thus, it is unclear how this variable will affect defense attorneys’ plea bargaining decisions.

General Plan of Work

The proposed research attempts to determine the psychological and legal factors that influence attorneys’ plea bargaining decisions. Study 1 investigates whether variations in the quality of eyewitness evidence influence plea bargaining decisions among prosecuting and defense attorneys. Several variables related to eyewitness accuracy are manipulated (e.g., cross-race, exposure duration, stress, lineup instructions, lineup presentation). In addition, Study 1 will manipulate the presence of a second witness who fails to identify the defendant and instead chooses a foil from the lineup. This manipulation is included to examine whether defense and prosecuting attorneys perceive a foil identification to be a form of exculpatory evidence. Attorneys will be asked to predict how jurors will respond to the eyewitness evidence and whether their case would be successful if taken to trial. These ratings will later be compared to actual assessments of the case and eyewitness evidence by mock jurors to determine whether attorneys can accurately predict juror judgments. Study 2 investigates the interactions between eyewitness evidence and other legal factors predicted to influence attorney judgments. Study 2 manipulates the quality of eyewitness evidence as well as other legal factors presumed to influence the plea bargaining decisions of prosecutors and defense attorneys, such as case seriousness, media attention, and the defendant’s wishes. Prior to Studies 1 and 2, a pilot study will be conducted in which prosecuting and defense attorneys answer open-ended questions
about what legal factors influence plea bargaining decisions. The results of the pilot will help determine which legal variables are manipulated in Study 2.

Studies 1 and 2 will be conducted simultaneously; attorney participants will each complete both studies. Attorneys will receive a randomly selected questionnaire from Study 1 and a randomly selected questionnaire from Study 2. For participants’ convenience, the proposed research will be conducted online.

The proposed studies utilize a fractional factorial design. Fractional factorial designs allow the researcher to explore the main effects and selected interaction effects of a large number of manipulated variables by confounding the main effects of one or more variables with higher order interactions (5-way and 6-way interactions in the proposed studies) (Stolle, Robbennolt, Patry, & Penrod, 2002). Fractional factorial designs require fewer participants than fully crossed factorial designs without loss of statistical power (Stolle et al., 2002).

Pilot study: What factors influence plea decisions?

Participants
Participants will be 20 defense attorneys and 20 prosecuting attorneys who will be approached through contacts in public defenders’ and District Attorneys’ offices. To encourage these busy professionals to participate, attorneys will receive $60 to compensate them for their participation.

Procedure and dependent measures
Attorneys will be recruited to participate via email. Attorneys who agree to participate will be sent a link to the online study and a personal identification number. After participants have been mailed payment, the link between their name and their personal identification number will be destroyed. Participants will log onto the website and input their personal identification number, indicating their consent to participate in the research. The first page of the website will present the following open-ended question to participants, “What factors are typically influential in your decision to offer/recommend a plea bargain?” Participants will be given space to type a response to the question. On the next page of the questionnaire, participants will be asked to indicate the importance of a number of legal factors (e.g., the seriousness of the crime, the defendant’s criminal record, the defendant’s desire to go to trial, the presence of eyewitness identification evidence, etc.) to their plea bargaining decisions. Ratings will be made on 7-point Likert-Type scales ranging from 1 (not at all important) to 7 (very important). Attorneys will also provide information about the frequency with which they engage in plea negotiations.

Attorneys’ open-ended responses will be coded. The results of the pilot study will inform which legal variables are manipulated in Study 2.

Study One: Influence of eyewitness identification factors on attorneys’ plea bargaining decision making

Participants
Participants will be 128 defense attorneys and 128 prosecuting attorneys who will be approached through contacts in public defenders’ and District Attorneys’ offices. Plea bargaining scenario questionnaires should take approximately 15-20 minutes to complete. Each attorney participant will receive one randomly assigned scenario from Study 1 and one randomly assigned scenario from Study 2. Thus, each participant will complete two plea bargaining questionnaires, resulting in about 40 minutes of participation. The order of the questionnaires will be counterbalanced. To encourage these busy professionals to participate, attorneys will receive $60 to compensate them for their participation. The researchers have experience recruiting large samples of defense attorneys and prosecutors and this experience makes us confident that this number of participants can be recruited within 7-8 months. In addition, 128 undergraduate students will be recruited from the Introductory Psychology research pool to participate as mock jurors for Study 1 only.
Design

The proposed study employs a $2^{7+2}$ fractional factorial design [2 (Cross race ID: Cross race v. Same race) X 2 (Duration of exposure: 1 min v. 15 min) X 2 (Stress: High v. Low) x 2 (Lineup instructions: Biased v. Unbiased) x 2 (Lineup fairness: Biased v. Fair) x 2 (Lineup presentation: Sequential v. Simultaneous) x 2 (Non-identifying co-witness: Present v. Absent)] x 2 (Witness confidence: High v. Moderate) x 2 (Attorney orientation: Defense v. Prosecution). ($2^{7+2} = 128$ experimental conditions, 2 observations per cell = 256 attorney participants. This amounts to 128 observations for main effects and 64 observations for two-way interactions.)

Procedure

Phase I: Attorneys will be recruited via email. Attorneys who agree to participate will be sent a link to the online study and a personal identification number. This number is used to keep responses anonymous. After participants have been mailed payment, the link between their name and their personal identification number will be destroyed. The online study will randomly assign prosecutors and defense attorneys to receive one questionnaire from Study 1 and one questionnaire from Study 2 (counterbalanced). When participants log onto the website, they will read an informed consent document and input their personal identification number to indicate their consent to participate in the research. Attorneys will be asked to assume the role of a public defender or prosecuting attorney, depending on their orientation, and will then read a brief description of a case in which the defendant is accused of robbing a local jewelry store. In all conditions, the defendant is described as a 23 year old black male. The case description specifies that the potential prison sentence for this offense is 10 years in prison. Attorneys will be provided with information about the eyewitness evidence against the defendant; specifically, attorneys will read a statement from a jewelry store employee who was present at the robbery and who made a positive identification of the defendant from a photo lineup. Attorneys will also be provided with a photocopy of the photographic lineup and information from the police report about the identification procedure. Several aspects of the evidence will be manipulated, resulting in 128 different versions of the eyewitness evidence presented in the attorney questionnaire. After reading the trial summary, attorneys will fill out a plea bargaining questionnaire and read a debriefing statement.

Phase II (Study 1 Only): Mock jurors will be recruited to participate through the undergraduate Introductory Psychology Research Experience Program. Interested participants will be emailed a link to the online study. Participants will first read an informed consent document and input their personal identification number to indicate their consent to participate in the research. Participants will be provided with a trial summary for a case in which the defendant is accused of the robbery of a local jewelry store. Participants will read opening statements from both parties and summaries of the prosecution and defense arguments. The only evidence in the case will be a positive eyewitness identification of the defendant by a jewelry store employee. Several aspects of the evidence will be manipulated, resulting in 128 different versions of the eyewitness evidence. After reading the trial summary, mock jurors will fill out a verdict questionnaire and read a debriefing statement.

Juror verdict decisions and jurors’ perceptions of the eyewitness evidence will be compared to attorneys’ assessment of probability of winning the case if it went to trial to determine if attorneys have accurate assessments of how jurors would perceive their case. No hypotheses are proposed about jurors’ sensitivity to eyewitness factors as attorneys’ sensitivity to eyewitness factors (and not juror judgments) are the primary focus of the study.

Cross-race identification. The race of the witness will be manipulated so that the witness is either a white male in his early 30s or a black male in his early 30s.

Duration of exposure. The duration of exposure to the perpetrator will be manipulated so that the witness either reports that he saw the perpetrator for 1 to 2 minutes or reports that he viewed the perpetrator for 15 minutes.

Stress. The presence of stress will be manipulated by varying whether the witness is personally threatened by the perpetrator and by the self-reported anxiety level reported by the witness. The police report will contain the statement that the witness gave to police officers following the robbery. In the high stress condition, the witness will report that the perpetrator
personally threatened him by saying “if you make any sudden movements, I will kill you”. In addition, the witness will report that he was terrified during the event and feared for his life. In the low stress condition, there will be no mention of the perpetrator speaking directly to the witness. The witness will report that he did not feel acutely afraid when he witnessed the crime.

**Lineup instructions.** The fairness of the lineup instructions given to the witness will be manipulated such that the instructions either explicitly inform the suspect that the perpetrator may not be present or do not mention this fact. Attorneys will read the police report from the identification procedure, which will provide information about instruction to the eyewitness. In the fair condition, the report will read, “Prior to the identification task, the witness was instructed that the perpetrator may or may not be present in the lineup. The witness was told to select the photo of the perpetrator if he is present, but otherwise to select the Not There option”. In the biased condition, the report will read, “Prior to the identification task, the witness was told to select the photo of the man he saw rob the jewelry store”.

**Lineup fairness.** The fairness of the lineup will be manipulated such that the foil photographs either match or fail to match the general description of the defendant. In the fair condition, all 5 foils match the general description of the defendant. In the biased condition, 3 of the 5 foils do not match the description of the defendant on at least two characteristics (e.g. hair, weight). Attorneys will be provided with a color photocopy of the lineup from which a positive ID was made, giving them access to information about the lineup foils.

**Lineup presentation.** The police report will contain a copy of the photographic lineup shown to the witness. In the simultaneous lineup condition, all six photos will appear in two horizontal rows of 3 photos on a single sheet of paper. In the sequential condition, the lineup will be presented to attorneys as separate photographs, each on their own sheet of paper. In the sequential condition, attorneys will be informed that the witness was shown the photographs one at a time, that they were not able to view any photo more than once, and that once the witness identified the suspect, the lineup procedure was stopped. In both lineup presentation formats, the suspect will be placed in position #4.

**Non-identifying co-witness.** The presence of a second witness who is unable to identify the defendant will be manipulated. In the non-identifying co-witness present condition, the police report will note that a second witness, a customer at the jewelry store, reported that she had also seen the perpetrator’s face during the robbery. The report will note that this witness viewed a photographic lineup containing the defendant’s photo and chose a foil photograph. In the non-identifying co-witness condition absent condition, the police report will not mention the existence of a second witness.

**Witness confidence.** The confidence level of the eyewitness will be manipulated such that the witness either expresses a moderate level of confidence or a high level of confidence about the positive identification of the defendant. This information will be presented in the police report of the identification procedure. In the moderate condition the witness claims to be 60% confident, and in the high condition the witness claims to be 95% confident.

**Dependant measures: Attorneys.** Attorneys will provide information about their actual experience with plea bargaining and eyewitness evidence. Attorneys will be asked to indicate how many of their cases result in plea bargains. They will also be asked to think about their most recent plea bargained case and to provide the reason for the plea decision. Attorneys will be asked how many of their cases involve eyewitness evidence and how often they are present at identification procedures.

Attorneys will be asked to make a judgment regarding a plea agreement. Specifically, prosecuting attorneys will be asked to decide whether they would offer this defendant a plea bargain. If prosecutors decide to offer a plea, they will be asked to indicate the terms of the offer (e.g., the reduction in prison time in exchange for a guilty plea). Defense attorneys will be asked to make a dichotomous yes/no decide whether to recommend a plea bargain to their client. In addition, defense attorneys will be presented with a scale of potential plea bargain offers, ranging from 1 year in prison to 9 years in prison. For each plea bargain option, defense attorneys will be asked to indicate the likelihood that they would recommend that offer to their client. All attorney participants will be asked an open ended question to explain their rationale for their plea decision.
Attorneys will be asked to rate the typicality and the suggestiveness of the identification procedure compared to other cases he or she has worked on. Attorneys will also be asked to indicate on a scale of 0%-100% the probability that this defendant is guilty. In addition, participants will be asked to indicate on a scale of 0%-100% the probability that they would win the case (probability of a guilty verdict for prosecutors and probability of an acquittal for defense attorneys) if it did go to trial. Finally, attorneys will be asked to indicate the likelihood that jurors would perceive the eyewitness to be accurate.

**Dependant measures: Jurors.** Mock jurors will be asked to make a verdict judgment, and will also be asked to rate their confidence in that judgment. Mock jurors will also rate the believability of the eyewitness and their perceptions of the fairness of the identification procedures.

**Hypotheses:**

*H1:* Two-way interaction of attorney orientation and cross-race such that defense attorneys will be less likely to recommend plea bargain if identification is cross-race, while prosecuting attorneys will be more likely to offer plea bargain if identification is cross-race.

*H2:* Main effect of stress such that if the identification was made under high stress, attorneys will be less likely to opt for a plea bargain than if identification was made under low stress, regardless of attorney orientation.

*H3:* Two-way interaction of attorney orientation and exposure duration, such that defense attorneys will be less likely to recommend plea bargain if identification was made after short exposure duration while prosecuting attorneys will be more likely to offer plea bargain if identification was made after short exposure duration.

*H4:* Two-way interaction of attorney orientation and lineup instructions, such that defense attorneys will be less likely to recommend plea bargain if police officer gave biased lineup instructions to the witness, while lineup instructions will not influence likelihood that prosecutors will offer plea bargain.

*H5:* Two-way interaction of attorney orientation and foil bias such that defense attorneys will be less likely to recommend plea bargain if foil lineup members do not match the description of the perpetrator, while prosecuting attorneys will be more likely to offer plea bargain if foil lineup members do not match the description of the perpetrator.

*H6:* Two-way interaction of attorney orientation and lineup presentation such that defense attorneys will be less likely to recommend plea bargain if lineup was presented sequentially, while prosecuting attorneys will be more likely to offer plea bargain if lineup was presented sequentially.

*H7:* Two-way interaction of attorney orientation and presence of a non-identifying co-witness, such that defense attorneys will be less likely to recommend plea bargain if there is a non-identifying co-witness, while the presence of a non-identifying co-witness will not influence prosecutors’ plea bargain decisions.

*H8a:* The likelihood that defense attorneys will recommend a plea bargain will decrease if more than one of the following factors is present: cross race, stress, short exposure time, biased lineup instructions, biased lineup, non-identifying co-witness.

*H8b:* The likelihood that prosecuting attorneys will offer a plea bargain will increase if more than one of the following factors is present: cross race, short exposure time, biased lineup.

**Study Two: Influence of eyewitness identification factors and legal factors on prosecuting attorneys’ and defense attorneys’ plea bargaining decision making**

**Participants**

Participants are the 128 prosecuting and 128 defense attorneys described above in Study 1.

**Design**

The proposed study employs a $2^{7+2}$ fractional factorial design [2 (Eyewitness identification: Good v. Poor) X 2 (Witness confidence: High v. Moderate) X 2 (Other incriminating evidence: Strong v. Weak) X 2 (Crime seriousness: High v. Low) X 2 (Previous offenses: None v. Prior record) X 2 (Media attention: None v. PTP) X 2 (Defendant insists on innocence: Present v. Absent)].
Absent) x 2 (Defendant opinion regarding plea: Trial v. Plea) x 2 (Attorney orientation: Defense v. Prosecutor)]. \(2^{12} = 128\) experimental conditions, 2 observations per cell = 256 attorney participants. This amounts to 128 observations for main effects and 64 observations for two-way interactions

**Procedure**

The procedure will be identical to that of Study 1. Attorneys will assume the role of a prosecuting attorney or a defense attorney, depending on their orientation. Attorney participants will receive information about a case in which the defendant is accused of robbing a local jewelry store. In all conditions, the defendant is described as a 23 year old black male. The case description specifies that the potential prison sentence for this offense is 10 years in prison. Similar to Study 1, attorneys will be provided with information about eyewitness evidence against the defendant in the form of police reports. In addition, attorneys will be provided with other legally relevant information about the crime and the defendant. Eyewitness evidence and other legal factors are manipulated, resulting in 128 different versions of the attorney questionnaire.

**Eyewitness identification.** The eyewitness evidence will be manipulated such that the factors surrounding the identification will either increase or decrease the likelihood that the identification is correct. The “good” and “poor” eyewitness identifications will be created based on research findings on factors related to eyewitness accuracy. The “good” eyewitness identification will be same race, long exposure duration, low stress, unbiased instructions, fair lineup, sequential presentation. The “poor” eyewitness identification will be cross-race, short exposure duration, high stress, biased instructions, biased lineup, and simultaneous presentation.

**Witness confidence.** The confidence level of the eyewitness will be manipulated such that the witness either expresses a moderate level of confidence or a high level of confidence about the positive identification of the defendant. This information will be presented in the police report of the identification procedure. In the moderate condition the witness claims to be 60% confident, and in the high condition the witness claims to be 95% confident.

**Other incriminating evidence.** The strength of “other” (i.e., non-eyewitness) evidence against the defendant will be manipulated. Specifically in the strong evidence condition, the defendant does not have an alibi for his whereabouts at the time of the crime, one of his fingerprints was found at the crime scene, and an acquaintance of the defendant phoned the police station to report that the defendant had told him he planned to rob the jewelry store. In the weak evidence condition, the eyewitness evidence is the only incriminating evidence against the defendant.

**Crime seriousness.** The seriousness of the crime will be manipulated such that the perpetrator’s act (i.e., jewelry store heist) is constant across conditions, but the damage caused by the perpetrator is either high or low. Specifically, in the low seriousness condition, the perpetrator robs the store of a necklace worth $3,000. In the high seriousness condition, the perpetrator robs the store of a necklace worth $1.2 million dollars.

**Previous offenses.** The defendant’s prior record will be manipulated such that the defendant either has a record of prior offenses or has no prior offenses. In the prior record condition, the defendant will have been charged with aggravated assault. This information will be presented to attorneys in the police report.

**Media attention.** Media attention will be manipulated such that attorneys will either be told that the case has been publicized in the local media or attorneys will be informed that there have been no media stories relating to the case.

**Defendant insists on innocence.** Whether or not the defendant vehemently insists on his innocence will be manipulated. Attorneys will be asked to assume that they have met with the defendant about this case. In the defendant insists on innocence present condition, attorneys will be told that during their meeting with the defendant, the defendant passionately and continuously insisted that he was innocent. In the defendant insists on innocence absent condition, no information is provided about the defendant’s claim of innocence.

**Defendant opinion regarding plea.** The attorneys will be informed that the defendant has either expressed a desire to take his case to trial or to negotiate a plea agreement with the prosecution.
Dependant measures. Attorneys will be asked to make a judgment regarding a plea agreement. Specifically, prosecuting attorneys will be asked to decide whether or not they would offer this defendant a plea bargain, and defense attorneys will be asked to decide whether or not to recommend a plea bargain to their client. In addition to this dichotomous measure, attorneys will be asked to provide a rating of the probability (0-100%) that they would offer/recommend a plea bargain to the defendant. Attorneys will be presented with a scale of potential plea bargain offers, ranging from 1 year in prison to 9 years in prison. For each plea bargain option, defense attorneys will be asked to indicate the likelihood that they would recommend that offer to their client, while prosecutors will be asked to indicate the likelihood that they would make that offer to the defendant. In addition, attorney participants will be asked an open ended question to explain their rationale for their plea decision. Attorneys will also be asked to indicate on a 7-point Likert-type scale the likelihood that the defendant will accept the plea agreement if one is offered/recommended.

Attorneys will be asked to indicate on a scale of 0%-100% the probability that this defendant is guilty. In addition, participants will be asked to indicate on a scale of 0%-100% the probability that they would win the case (probability of a guilty verdict) if it did go to trial.

Hypotheses:

H1: Two-way interaction of attorney orientation and eyewitness identification such that defense attorneys will be more likely to recommend plea bargain when the eyewitness identification is good than when it is poor, while prosecutors will be more likely to offer a plea when the identification is poor than when it is good.

H2: Two-way interaction of attorney orientation and witness confidence such that defense attorneys will be more likely to recommend a plea bargain when the eyewitness is highly confident than moderately confident, while prosecutors will be more likely to offer a plea when the eyewitness is moderately confident than when the eyewitness is highly confident.

H3: Two-way interaction of attorney orientation and other incriminating evidence such that defense attorneys will be more likely to recommend a plea bargain when other incriminating evidence is present then when it is absent, while prosecutors will be more likely to offer a plea when the eyewitness evidence is the only evidence in the case than when there is other incriminating evidence.

H4: Two-way interaction of attorney orientation and crime seriousness such that defense attorneys will be more likely to recommend a plea bargain when crime seriousness is high than when it is low, while prosecutors will be more likely to offer a plea when the crime seriousness is low than when crime seriousness is high.

H5: Two-way interaction of attorney orientation and criminal record such that defense attorneys will be more likely to recommend a plea bargain when the defendant has a criminal record than when there is no prior record, while prosecutors will be more likely to offer a plea when the defendant does not have a criminal record than when the defendant does have a prior record.

H6: Two-way interaction of attorney orientation and media attention such that defense attorneys will be more likely to recommend a plea bargain when the case has received a lot of media attention than when the case has not been publicized, while prosecutors will be more likely to offer a plea when the case has not received media attention than when the case has been highly publicized.

H7: Two-way interaction of attorney orientation and defendant insists on innocence such that defense attorneys will be more likely to recommend a plea bargain when the defendant does not repeatedly insist on his innocence. Whether the defendant insists on innocence will not influence the plea bargaining decisions of prosecutors.

H8: Three-way interaction of attorney orientation, eyewitness identification, and crime seriousness, such that when crime seriousness is low, prosecutors will be more likely to offer a
plea when eyewitness identification is poor than when it is good. However, when crime seriousness is high, the quality of eyewitness evidence will not influence prosecutors’ plea decisions. For defense attorneys, there will not be an interaction of crime seriousness and eyewitness identification.

H9: Three-way interaction of attorney orientation, eyewitness identification, and pretrial publicity, such that when the pretrial publicity is absent, prosecutors will be more likely to offer a plea when eyewitness identification is poor than when it is good. However, when the case has been highly publicized, the quality of eyewitness evidence will not influence prosecutors’ plea decisions. For defense attorneys, there will not be an interaction of pretrial publicity and eyewitness identification.

**Timeline of proposed research**

The proposed program of research will be conducted over the course of 10 months (September – July 2009). Studies 1 and 2 will be run simultaneously.

**Broader Impact of the Proposed Research**

The proposed program of research will serve to advance the education and research experience of an advanced graduate student. This student will gain experience with constructing a trial stimulus, designing materials, and data analysis. In addition, this student will also gain experience with the peer review and publication process by presenting the data at conference meetings and by taking a lead authorship role on the resulting manuscript. The results of the proposed research projects will be disseminated to the field through the channels of conference presentations and published manuscripts. The research will be presented at the American Psychology-Law Society conference or other similar conferences, such as American Psychological Association or Association for Psychological Science. Manuscripts will be submitted to peer-reviewed journals, such as Law and Human Behavior and Psychology, Public Policy, and Law.

This program of research represents an initial exploration of the factors influencing prosecuting and defense attorneys’ plea bargaining decisions. The results of this research have the potential to inform the field of psychology and law about what types of eyewitness evidence are most likely to make it to court. This information may allow researchers to focus on fact finders’ perceptions of eyewitness evidence that is characteristic of cases that result in trial. This research also provides information about whether attorneys are sensitive to potentially exculpatory evidence. For example, if one witness identifies the defendant from a lineup, but a co-witness chooses a foil, it might be reasonable to become skeptical of the positive identification. If the results of this research reveal that attorneys are not appropriately sensitive to variations in the quality of eyewitness evidence, this may suggest the need for improved education for attorneys about factors related to eyewitness accuracy, as well as the need for increased involvement of eyewitness experts in court.

**Results from prior NSF support most closely related to new proposal**

**NSF, Field and Lab Studies of the Effects of Pretrial Publicity on Jurors’ Trial Judgments. #0617152** ($275,000, 8/1/06-7/31/08). 3 studies completed – 1 dissertation drawn from data, 1 in progress. 1 MA thesis drawn from data, 1 in progress. 5 conference papers.

**NSF, Eyewitness Guessing and Accuracy #0421657. Co-PI: Lisette Garcia. ($212,836, 9/1/2004-8/31/06) 6 studies completed -- 3 MA theses drawn from the data ( those students--1 a minority student- are now in PhD programs , 6 conference papers.**

**NSF, Reducing Eyewitness Identification Errors #0319801. ($298,398, 7/15/03-7/15/06). 6 studies. 3 MA theses drawn from the data (all 3 students--1 a minority--are now in PhD programs), 5 conference papers**

**Note:** In addition to the 6 MA thesis students noted above, 21 other students have participated in the two eyewitness projects including 5 international, 2 African American, 4 Latino and 2 Asian American students. Nearly half are now in graduate programs -- 6 of them in PhD programs.
References


BIOGRAPHICAL SKETCH
STEVEN PENROD

445 West 59th Street N2131 email: spenrod@jjay.cuny.edu
John Jay College of Criminal Justice Office: 212-237-8877
New York, NY 10019-1199 Home: 914-591-2099

EDUCATION
PhD--Harvard, 1979: Committee: Reid Hastie, Tom Pettigrew, Charles Judd, and Charles Nesson

HONORS AND AWARDS
2005--APA Raymond D. Fowler Award for outstanding contributions to the professional development of students
2001-present-- Distinguished Professorship--John Jay College, CUNY
1999-2000--Gallup Professorship—University of Nebraska
1994-1995--Davis Professorship in Law--University of Minnesota
1986--APA Distinguished Scientific Award for an Early Career Contribution to Applied Psychology (Citation: American Psychologist, 42, 300-303).
1981--Second Prize American Psychological Association Division 13 Meltzer Research Award.
1980--Cattell Dissertation Award, NY Academy of Sciences.
1980--Soc. for Experimental Social Psych Dissertation Award.

PROFESSIONAL EXPERIENCE (highlights)
2001- Distinguished Professor of Psychology, John Jay College of Criminal Justice, CUNY
1999-2000 Gallup Professor—University of Nebraska
1995-2001 Dir of Law and Psychology Program-Univ of Nebraska
1995-2001 Prof of Psychology & Prof of Law-Univ of Nebraska
1991-1995 Director, Conflict and Change Center, Univ of Minnesota
1988-1996 Professor of Law, University of Minnesota
1988 Professor of Psychology, University of Wisconsin
1985-1988 Associate Prof of Psychology, University of Wisconsin
1985 Visiting Professor of Law, Indiana University
1983 Visiting Professor of Law, University of Wisconsin
1979-1985 Assistant Professor of Psychology, Univ of Wisconsin
1975-1979 Research/Teaching Asst--Psychology, Harvard Univ
1971-1973 Legal Officer in Naval Judge Advocate General Corps

MOST RELEVANT PUBLICATIONS

RELATED PUBLICATIONS
Penrod, S. & Kovera, M. B. Recent developments in North American identification science and


**SYNERGISTIC ACTIVITIES**

1. The PI is past-action editor for *Psychology, Public Policy and Law and Psychology, Crime and Law*


3. The PI’s prior research contributed to the development of NIJ Eyewitness Guidelines published as A Guide for Law Enforcement: Eyewitness Evidence:  

4. The PI’s empirical work is widely cited in Law Reviews--his co-authored work Inside the Jury is the 30th most-cited law book in the past 20 years (Shapiro, 2000)

5. The PI is on eight editorial boards and is Past-President of the Amer. Psychology-Law Society.

6. The PI served as the American organizer for the joint American-European Psychology and Law conference for 2003 and organized a two-day series of presentations for the 1999 joint meeting which resulted in an edited volume (with Peter Van Koppen, 2002) on Psychology in Adversarial versus Inquisitorial Systems.

**COLLABORATORS IN PAST 48 MONTHS**

Jennifer Dysart, Margaret Kovera, Jennifer Groscup L. E. Sullivan, Maureen O’Connor, James Doyle, Michelle Gaietta, James Levine, Gerald Lynch, Karen Terry, (John Jay-CUNY), Larry Heuer (Barnard), Kelly Smith, Maithilee Pathak-Sharma, Lisa Chrzanowski & Christina Studebaker (private practice), Dennis Stolle (atty), Jen Robbennolt (U of IL-law), Mark Patry (St Mary’s-CA), Kevin O’Neil (FL Gulf Coast), Peter Van Koppen (NISCALE (John Jay), Brian Bornstein & Kiernan McGorty (U of NE), Clive Hollin (Leicester Brad McAuliff (CA St-Northridge), Robert Nemeth (U of NE), Nancy Steblay (Augsburg), Ken Deffenbacher (U of NE-Omaha), Kerri Dunn (NJ), Meera Adya (Syracuse), Wendy Alberts (Leiden), Kaoru Kurosawa (Japan)

**GRADUATE AND POST-GRADUATE ADVISEES**

Post-Docs: Diane Sivasubramaniam, Maria Hartwig, Lisette Garcia  
Graduate Advisees: Lisa Chrzanowski, Rommel Roberts, Brian Wallace, Min Kim, Jen Tallon, Tarika Daftary, Sarah Greathouse
A. SENIOR PERSONNEL: PI/PD, Co-PI’s, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)
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<th>CAL</th>
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<th>Proposed</th>
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B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)
   | 1. (       ) POST DOCTORAL SCHOLARS | 0.00 | 0.00 | 0.00 | 0 |
   | 2. (       ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) | 0.00 | 0.00 | 0.00 | 0 |
   | 3. (       ) GRADUATE STUDENTS | 24,256 | 0 |
   | 4. (       ) UNDERGRADUATE STUDENTS | 0 |
   | 5. (       ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) | 0 |
   | 6. (       ) OTHER | 0 |

C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)
   | 1. STIPENDS | 0 |
   | 2. TRAVEL | 0 |
   | 3. SUBSISTENCE | 0 |
   | 4. OTHER | 0 |

D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)
   | TOTAL EQUIPMENT | 31,848 |

E. TRAVEL
   | 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS) | 1,500 |
   | 2. FOREIGN | 0 |

F. PARTICIPANT SUPPORT COSTS
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   | 2. TRAVEL | 0 |
   | 3. SUBSISTENCE | 0 |
   | 4. OTHER | 0 |

G. OTHER DIRECT COSTS
   | 1. MATERIALS AND SUPPLIES | 0 |
   | 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION | 0 |
   | 3. CONSULTANT SERVICES | 0 |
   | 4. COMPUTER SERVICES | 0 |
   | 5. SUBAWARDS | 0 |
   | 6. OTHER | 17,769 |

H. TOTAL DIRECT COSTS (A THROUGH G) | 55,441 |

I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE)
   personnel and fringe (Rate: 60.0000, Base: 36172)
   | TOTAL INDIRECT COSTS (F&A) | 21,703 |

J. TOTAL DIRECT AND INDIRECT COSTS (H + I) | 77,144 |

K. RESIDUAL FUNDS | 0 |

L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) | $ 77,144 |

M. COST SHARING PROPOSED LEVEL $ 0 | AGREED LEVEL IF DIFFERENT $ 0 |
### Summary Proposal Budget

#### Organization

**CUNY John Jay College of Criminal Justice**

#### Principal Investigator / Project Director

**Steven D Penrod**

##### Proposed Budget

<table>
<thead>
<tr>
<th>Category</th>
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<td>2. Publication Costs/Documentation/Dissemination</td>
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<td>M. Cost Sharing Proposed Level $</td>
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#### For NSF Use Only

**PI/PD Name**

**Steven D Penrod**

**Org. Rep. Name**

**Jacob Marini**

**Date Checked**

**Date Of Rate Sheet**

**Initials - ORG**

*Electronic Signatures Required for Revised Budget*
Budget Justification

A. Senior Personnel
[Total Requested for Senior Personnel Salary, Including Fringe: $9490]
Funds are requested for the PI’s salary for two weeks ($7592). The fringe rate for PI summary salary is 25% ($1898).

B. Other Personnel
[Total Requested for Other Personnel, Including Fringe: $26,682]
One graduate student is budgeted for day-to-day operations of the research program, including the creation of stimulus materials, set up and maintenance of the website, participant recruitment, and data collection ($25.50/hr x 19 hrs/wk x 48 wks (Sept-July 2009). This results in a request for $23,256. The fringe rate for graduate research assistant salary is 10% ($2,326). This graduate student will devote 50% of her efforts to this project during its duration.

Funds are requested for one Masters level student to assist with the recruitment of attorney participants. This student will receive $10/hour (fringe = 10%) for his or her assistance and will contribute 100 total hours to the project. This results in a request for $1,100.

Total Personnel Salary and Fringe Request: $36,172

E. Travel
Funds are requested for the PI and the graduate RA to attend the American Psychology-Law Society national conference and the American Psychological Association conference in 2010 to present the results of this research ($750/conference for domestic travel).

G. Other Direct Costs
1. Materials and Supplies.

6. Other.

Payments to Human Subjects. Funds are needed to pay human subjects for their participation in the research studies. For the pilot study (N=40; 20 prosecutors and 20 defense attorneys) and Studies 1 and 2 (N=256; 128 prosecutors and 128 defense attorneys), participants will receive $60 for their participation. This results in a request for $17,760.

I. Indirect Costs
The negotiated indirect cost rate at John Jay is 60% of Salaries and Fringe.
### Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

<table>
<thead>
<tr>
<th>Investigator: Steven Penrod</th>
<th>Other agencies (including NSF) to which this proposal has been/will be submitted.</th>
</tr>
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<tbody>
<tr>
<td><strong>Support:</strong></td>
<td>Current</td>
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<tr>
<td><strong>Project/Proposal Title:</strong></td>
<td>Field and Lab Studies of the Effects of Pretrial Publicity on Jurors’ Trial Judgments</td>
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<td><strong>Source of Support:</strong></td>
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<td><strong>Location of Project:</strong></td>
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| **Project/Proposal Title:** | Factors influencing plea bargaining decisions by prosecutors and defense attorneys |
| **Source of Support:** | NSF |
| **Total Award Amount:** | $59,500 | **Total Award Period Covered:** | 08/01/09 - 05/31/10 |
| **Location of Project:** | John Jay College of Criminal Justice / CUNY, NY |
| **Person-Months Per Year Committed to the Project.** | Cal: 0.00 | Acad: 0.00 | Sum: 0.50 |

| **Support:** | Current | Pending | Submission Planned in Near Future | *Transfer of Support |
| **Project/Proposal Title:** | Dissertation Research: Effects of Pre and Post Venire Publicity on Juror Decision Making |
| **Source of Support:** | NSF |
| **Total Award Amount:** | $12,000 | **Total Award Period Covered:** | 09/01/08 - 09/01/09 |
| **Location of Project:** | John Jay College of Criminal Justice / CUNY |
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| **Support:** | Current | Pending | Submission Planned in Near Future | *Transfer of Support |
| **Project/Proposal Title:** | New Media and the Courtroom: Televised "Forensic Science" and Legal Decision Making |
| **Source of Support:** | NSF |
| **Total Award Amount:** | $299,900 | **Total Award Period Covered:** | 08/01/09 - 07/31/11 |
| **Location of Project:** | John Jay College of Criminal Justice / CUNY |
| **Person-Months Per Year Committed to the Project.** | Cal: 0.00 | Acad: 0.00 | Sum: 0.50 |

| **Support:** | Current | Pending | Submission Planned in Near Future | *Transfer of Support |
| **Project/Proposal Title:** | Threats to Identification Reliability in Showups: Assessing the Lineup’s Poor (ly Studied) Sibling |
| **Source of Support:** | NSF |
| **Total Award Amount:** | $201,585 | **Total Award Period Covered:** | 08/01/09 - 07/31/11 |
| **Location of Project:** | John Jay College of Criminal Justice / CUNY |
| **Person-Months Per Year Committed to the Project.** | Cal: 0.00 | Acad: 0.00 | Sum: 0.50 |

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.*
Current and Pending Support
(See GPG Section II.C.2.h for guidance on information to include on this form.)
The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

<table>
<thead>
<tr>
<th>Investigator: Steven Penrod</th>
<th>Other agencies (including NSF) to which this proposal has been/will be submitted.</th>
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| Project/Proposal Title: The Decomposition and Recomposition of Eyewitness Behavior |
| Source of Support: NSF-Law and Social Sciences |
| Total Award Amount: $107,000 Total Award Period Covered: 09/01/09 - 02/28/11 |
| Location of Project: John Jay College of Criminal Justice - CUNY, NY |
| Person-Months Per Year Committed to the Project. Cal: 0.00 Acad: 0.00 Sumr: 0.50 |

| Support: ☐ Current ☐ Pending ☐ Submission Planned in Near Future ☐ "Transfer of Support" | |
| Project/Proposal Title: |
| Source of Support: |
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| Location of Project: |
| Person-Months Per Year Committed to the Project. Cal: 0.00 Acad: 0.00 Sumr: 0.50 |

| Support: ☐ Current ☐ Pending ☐ Submission Planned in Near Future ☐ "Transfer of Support" | |
| Project/Proposal Title: |
| Source of Support: |
| Total Award Amount: $ |
| Location of Project: |
| Person-Months Per Year Committed to the Project. Cal: 0.00 Acad: 0.00 Sumr: 0.50 |

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.*
FACILITIES, EQUIPMENT & OTHER RESOURCES

FACILITIES: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. USE additional pages as necessary.

Laboratory: Sufficient laboratory facilities are available to the PI at John Jay.

Clinical:

Animal:

Computer: A computer will be provided for the PI. A dedicated laptop computer is requested for the extensive data storage and analysis demands of the project.

Office: Office space will be provided for the PI and Sr Personnel at John Jay.

Other:

MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of each.

OTHER RESOURCES: Provide any information describing the other resources available for the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.
Impact Statement

John Jay College of Criminal Justice is a senior college within the City University of New York (CUNY). John Jay’s total student population has steadily increased in the last decade from 8,998 in 1993 to 13,000 in the Fall of 2004. The vast majority of the student body is pursuing undergraduate degrees. More than 135 nations are represented in its population. Sixty-one percent of the undergraduates are minority students, with 21% African-American and 37% Hispanic students. The College is a Minority and a Hispanic Serving Institution (HSI). The undergraduates originate primarily from lower income families living within the 5 boroughs of New York City, New Jersey, and lower New York State. Over 60% of these students are female.

In the Department of Forensic Psychology, John Jay awards baccalaureate, masters and PhD degrees. The undergraduate major in Forensic Psychology is one of the largest and most challenging majors in the College. Nationally, it awarded the third-largest number of bachelor degrees to Hispanic students in 2004. It is one of the only departments which requires statistics and/or research methods for completion of the major. Other core curriculum courses include Psychology and Law, Psychology of Criminal Behavior, and General Psychology. One of the current goals of the Psychology Department is to develop a strong program in empirical research. All eleven of the new faculty hires in the last three years are solid empiricists, demonstrating the Departmental dedication to research.

There is a strong interest among the undergraduate and masters degree students in the department to gain experience in this area of research. The PI already supervise and mentor several undergraduate and graduate students on research projects. Many students in the masters program are interested in gaining research experience, however there is little large scale research being conducted in the department which can involve these students. Although these students are interested in doing research, they are often forced to complete externships instead of research theses. The undergraduates who would like to gain research experience in furtherance of pursuing a graduate career in psychology are also lacking opportunities to do so.

The PhD program in forensic psychology was approved in November 2003 and the first ten students (from a pool of 140 applicants) was admitted in September 2004. Twelve more students (including 4 experimentally-oriented students) from a pool of 190 applicants will enter this September. These students will also be seeking research opportunities. In addition the PI, in his classes, regularly sees PhD students from the John Jay Criminal Justice program and from other PhD programs within CUNY.

It is one of the PI’s major teaching goals to provide continuing research opportunities for both undergraduates and graduate students (he is the recipient of APA’s 2005 Raymond D. Fowler Award for outstanding contributions to the professional development of students). The PI is confident that with funding for this project, enhanced research experiences will be provided for the Department and the John Jay community -- in addition to answering some crucial psycholegal questions.
List of Suggested Reviewers or Reviewers Not To Include (optional)

SUGGESTED REVIEWERS:
- Elizabeth Loftus eloftus@uci.edu
- Harmon Hosch hhosch@utep.edu
- Gary Wells glwells@iastate.edu
- Jack Brigham brigham@psy.fsu.edu
- Rod Lindsay lindsayr@psych.queensu.ca
- Edith Green egreene@uccs.edu
- Neil Brewer Neil.Brewer@flinders.edu
- Ray Bull ray.bull@port.ac.uk
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- Ed Geiselman Geiselman@psych.ucla.edu
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- Dan Yarmey yarmey@css.uoguelph.ca
- Mike Wogalter WogalterM@aol.com
- Daniel Wright dwright@fiu.edu

REVIEWERS NOT TO INCLUDE:
Issue-specific jury instructions in eyewitness cases: Are they more effective than traditional safeguards?

Steven D Penrod
PhD
1979
212-237-8877
spenrod@jjay.cuny.edu
**Certification for Authorized Organizational Representative or Individual Applicant:**

By signing and submitting this proposal, the Authorized Organizational Representative or Individual Applicant certifies that:

1. Statements made herein are true and complete to the best of his/her knowledge; and
2. Agreeing to accept the obligation to comply with NSF award terms and conditions if an award is made as a result of this application.

Further, the applicant is hereby providing certifications regarding debarment and suspension, drug-free workplace, lobbying activities (see below), responsible conduct of research, nondiscrimination, and flood hazard insurance (when applicable) as set forth in the NSF Proposal & Award Policies & Procedures Guide, Part I: the Grant Proposal Guide (GPG) (NSF 11-1). Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U. S. Code, Title 18, Section 1001).

**Conflict of Interest Certification**

In addition, if the applicant institution employs more than fifty persons, by electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant certifies that the institution has implemented a written and enforced conflict of interest policy that is consistent with the provisions of the NSF Proposal & Award Policies & Procedures Guide, Part II, Award & Administration Guide (AAG) Chapter IV.A; that to the best of his/her knowledge, all financial disclosures required by that conflict of interest policy have been made; and that all identified conflicts of interest will have been satisfactorily managed, reduced or eliminated prior to the institution’s expenditure of any funds under the award, in accordance with the institution’s conflict of interest policy. Conflicts which cannot be satisfactorily managed, reduced or eliminated must be disclosed to NSF.

**Drug Free Work Place Certification**

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Drug Free Work Place Certification contained in Exhibit II-3 of the Grant Proposal Guide.

**Debarment and Suspension Certification**

(If answer “yes”, please provide explanation.)

| Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency? | Yes ☐ | No ☒ |

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Debarment and Suspension Certification contained in Exhibit II-4 of the Grant Proposal Guide.

**Certification Regarding Lobbying**

The following certification is required for an award of a Federal contract, grant, or cooperative agreement exceeding $100,000 and for an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding $150,000.

**Certification for Contracts, Grants, Loans and Cooperative Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure of Lobbying Activities,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

**Certification Regarding Nondiscrimination**

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Certification Regarding Nondiscrimination contained in Exhibit II-6 of the Grant Proposal Guide.

**Certification Regarding Flood Hazard Insurance**

Two sections of the National Flood Insurance Act of 1968 (42 USC §4012a and §4106) bar Federal agencies from giving financial assistance for acquisition or construction purposes in any area identified by the Federal Emergency Management Agency (FEMA) as having special flood hazards unless the:

1. Community in which that area is located participates in the National flood insurance program; and
2. Building (and any related equipment) is covered by adequate flood insurance.

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant located in FEMA-designated special flood hazard areas is certifying that adequate flood insurance has been or will be obtained in the following situations:

1. For NSF grants for the construction of a building or facility, regardless of the dollar amount of the grant; and
2. For other NSF Grants when more than $25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

**Certification Regarding Responsible Conduct of Research (RCR)**

(This certification is not applicable to proposals for conferences, symposia, and workshops.)

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative of the applicant institution is certifying that, in accordance with the NSF Proposal & Award Policies & Procedures Guide, Part II, Award & Administration Guide (AAG) Chapter IV.B., the institution has a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students and postdoctoral researchers who will be supported by NSF to conduct research.

The undersigned shall require that the language of this certification be included in any award documents for all subawards at all tiers.

**AUTHORIZED ORGANIZATIONAL REPRESENTATIVE**

<table>
<thead>
<tr>
<th>NAME</th>
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<td>Jacob Marini</td>
<td>08/29/11</td>
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**TELEPHONE NUMBER**

| 212-237-8449 |

**ELECTRONIC MAIL ADDRESS**

| jmarini@hera.jjay.cuny.edu |

**FAX NUMBER**

| 212-237-8471 |

* EAGER - Early-concept Grants for Exploratory Research
** RAPID - Grants for Rapid Response Research
Project Summary

Intellectual Merit: As a result of studies of DNA exculpations of defendants we now know that jury convictions of misidentified defendants are the primary source of those DNA cases. The question naturally arises—can we find better ways to guide jurors in their assessments of eyewitness evidence? In January 2012 the US Supreme Court, in Perry v. New Hampshire, decided (8-1) the first case involving eyewitness identification considered by the Court since 1977. The court ruled that “it suffices to test [eyewitness] reliability through … the presence of counsel at postindictment lineups, vigorous cross-examination, protective rules of evidence, and jury instructions on … the fallibility of eyewitness identification … Eyewitness-specific jury instructions, which many federal and state courts have adopted likewise warn the jury to take care in appraising identification evidence.” The Court cited to a number of state and federal courts which are providing juries with eyewitness identification cautionary instructions addressing specific aspects of the identification. The largest step in this direction was taken by the New Jersey Supreme Court in August 2011 in a unanimous decision in State v. Henderson. The Henderson court 1. embraced experimental and meta-analytic findings concerning factors affecting eyewitness reliability, 2. made a series of explicit findings concerning a long series of System and Estimator variables (Wells, 1978); 3. delegated the task of drafting explicit jury instructions concerning those variables with an eye to making those instructions a standard feature of eyewitness identification cases and 4. expressed a general preferences for those instructions over the use of eyewitness expert testimony. Perry and Henderson) encompassed issues that are currently before the Pennsylvania and Oregon Supreme Courts in other eyewitness cases.

The viability of issue-specific instructions such as those advanced in Henderson and other cases has not been tested—though limited research on broad-based eyewitness instructions to jurors has demonstrated that general instructions do not effectively sensitize jurors to the types of factors embraced by the Henderson and other courts. Because issue-specific instructions may alert jurors to eyewitness accuracy factors beyond lay knowledge, it is possible that enhanced research-based issue-specific instructions paralleling expert testimony will more effectively improve jurors’ evaluations of eyewitness evidence as compared to more general instructions. We propose to examine whether issue-specific eyewitness jury instructions (specifically concerning cautionary instructions, feedback, stress, and cross-racial impairment) can be an effective method of sensitizing jurors to eyewitness evidence. In the proposed study we will manipulate the presence of these factors in trial evidence and the type of eyewitness instruction jurors receive (none vs. general vs. research based vs. expert testimony [which has been shown to produce increased juror sensitivity]) to test whether issue-specific eyewitness jury instructions are effective at sensitizing jurors to eyewitness evidence.

The challenge of educating jurors about eyewitness identification is evidenced in the fact that psychological research that has consistently failed to find sensitization effects for general eyewitness jury instructions but it is an open question whether issue-specific instructions tied to the particular facts of individual cases are similarly ineffective. Research shows that jurors often overestimate the likelihood of a correct identification and experience difficulty applying their knowledge about factors that influence eyewitness accuracy to specific cases. This research will add to the field’s understanding of how jurors process and apply information about eyewitness accuracy to evaluate eyewitness evidence in eyewitness cases, will add to the body of psychological literature on safeguards against faulty identification evidence and will provide guidance about the desirability and construction of issue-specific jury instructions.

Broader Impact: The implementation of issue-specific eyewitness jury instructions is gaining popularity with the court systems and the proposed research can provide courts with valuable information about how to construct effective eyewitness instructions and/or use expert testimony on eyewitness issues. The results from this research will provide attorneys with valuable information when preparing requests for admittance of eyewitness expert testimony and/or specific eyewitness jury instructions. The project will add to our research infrastructure through the training of PhD students. The PI will share his stimulus materials, measures and data sets with other researchers and will disseminate the research results at annual psychology-law conferences, scientific journals geared toward psychology and law, and law reviews. Undergraduates will participate in the research. The research site is a Minority and a Hispanic Serving Institution (HSI). Over sixty percent of undergraduates are minority students who originate primarily from lower income families living within the 5 boroughs of New York City, New Jersey, and lower New York State.
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For font size and page formatting specifications, see GPG section II.B.2.

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*Proposers may select any numbering mechanism for the proposal. The entire proposal however, must be paginated. Complete both columns only if the proposal is numbered consecutively.
Project Description-Proposal Objectives

US Supreme Court Embraces Eyewitness Jury Instructions. Two weeks before the filing of this grant proposal the US Supreme Court rendered its decision in *Perry v. New Hampshire*, the first case involving eyewitness identification considered by the Court since *Manson v. Brathwaite* in 1977. The court ruled (8-1) that eyewitness identifications are admissible unless it can be demonstrated that the police created suggestive (lineup and especially show up) identification procedures:

...we hold, it suffices to test reliability through the rights and opportunities generally designed for that purpose, notably, the presence of counsel at postindictment lineups, vigorous cross-examination, protective rules of evidence, and *jury instructions on both the fallibility of eyewitness identification* and the requirement that guilt be proved beyond a reasonable doubt „.

Our unwillingness to enlarge the domain of due process as Perry and the dissent urge rests, in large part, on our recognition that the jury, not the judge, traditionally determines the reliability of evidence. ... We also take account of other safeguards built into our adversary system that caution juries against placing undue weight on eyewitness testimony of questionable reliability. These protections include the ... right to confront the eyewitness....., cross-examination and [challenges to] the fallibility of such testimony during opening and closing arguments. *Eyewitness-specific jury instructions, which many federal and state courts have adopted, [fn7] likewise warn the jury to take care in appraising identification evidence. See, e.g., United States v. Telfaire, ... (“If the identification by the witness may have been influenced by the circumstances under which the defendant was presented to him for identification, you should scrutinize the identification with great care.”). (emphasis added, pp.15-16) [www.supremecourt.gov/opinions/11pdf/10-8974.pdf](http://www.supremecourt.gov/opinions/11pdf/10-8974.pdf)

Many Courts Use Eyewitness Instructions. Though the majority mentions cross-examination and argument in passing, their footnote 7 offers extensive cites to *eyewitness instructions* in Federal Circuits (3, 4, 5, 6, 7, 8, 9, 10, & 11) and state courts (AZ, CA, GA, IL, KA, MD, MA, MN, NH, NY, OK, PA, TN, UT, VT, and WV). The majority does not cite to NJ instructions...possibly because NJ instructions are now undergoing substantial revision by two committees working under the mandate of the NJ Supreme Court’s August 2011 unanimous decision in *Henderson* (discussed below). The committees will produce their new jury instructions for review by the NJ Supreme Court at the end of January 2012 (just after this proposal is filed).

The Growing Concern about Eyewitnesses. In her *Perry* dissent Justice Sotomayor noted:

This Court has long recognized that eyewitness identifications’ unique confluence of features—their unreliability, susceptibility to suggestion, powerful impact on the jury, and *resistance to ordinary tests of the adversarial process*—can undermine the fairness of a trial. (dissent, p 1)

Over the past three decades, more than two thousand studies related to eyewitness identification have been published. One state supreme court recently ... concluded that "[t]he research... is not only extensive," but "it represents the `gold standard in terms of the applicability of social science research to law.'".... *Henderson*.... "Experimental methods and findings have been tested and retested, subjected to scientific scrutiny through peer-reviewed journals, evaluated through the lens of meta-analyses, and replicated at times in real-world settings."

The empirical evidence demonstrates that eyewitness misidentification is "the single greatest cause of wrongful convictions in this country." Researchers have found that a staggering 76% of the first 250 convictions overturned due to DNA evidence since 1989 involved eyewitness misidentification. Study after study demonstrates that... jurors routinely overestimate the accuracy of eyewitness identifications; that jurors place the greatest weight on eyewitness confidence in assessing identifications even though confidence is a poor gauge of accuracy... (dissent pp.14-16—footnotes, referencing several of the PI’s publications, are omitted)

A New Emphasis on Instructions. The *Henderson* case to which Sotomayor refers was an eyewitness identification case in which the defendant was convicted, appealed, and won a reversal—which produced an appeal by the prosecution. The NJ Supreme Court remanded the case to a special master to conduct hearings evaluating scientific evidence concerning eyewitness
identifications and formulate recommendations about remedies for suggestiveness. The master heard and generated 2000 pages of testimony from experts (including Wells, Malpass and the PI) and filed an 88 page report including 200 scientific studies. Drawing on the master’s report, the Henderson Court, like Sotomayor, displayed broad familiarity with eyewitness identification pitfalls and embraced peer-reviewed experiments and meta-analyses (which play a role in our experimental manipulations) as sources of knowledge about factors influencing eyewitness identification accuracy:

The benefits of a meta-analysis are that greater statistical power can be obtained by combining data from many studies.” .... The more consistent the conclusions from aggregated data, the greater confidence one can have in those conclusions. More than twenty-five meta-analyses were presented at the hearing (pp. 42-43).

The Court saw a need to use instructions to educate jurors about factors that influence reliability:

[7]he Special Master found “that laypersons are largely unfamiliar” with scientific findings and “often hold beliefs to the contrary.” Defendant and amici agree. The State does not.... The debate relates largely to the need for enhanced jury instructions and the possible use of expert testimony. Left unanswered amidst many objections is this question: if even only a small number of jurors do not appreciate an important, relevant concept, why not help them understand it better with an appropriate jury charge? (p. 86-87)

[W]hen defendants can show some evidence of suggestiveness, all relevant system and estimator variables should be explored at pretrial hearings. .... the court system must develop enhanced jury charges on eyewitness identification for trial judges to use. We anticipate that identification evidence will continue to be admitted in the vast majority of cases. To help jurors weigh that evidence, they must be told about relevant factors and their effect on reliability. To that end, we have asked the Criminal Practice Committee and the Committee on Model Criminal Jury Charges to draft proposed revisions to the current model charge on eyewitness identification and address various system and estimator variables. With the use of more focused jury charges on those issues, there will be less need to call expert witnesses at trial. (emphasis added, pp. 5-6)

The jury instruction sentences are bolded above because the focus of this research proposal concerns the putative efficacy of issue-specific jury instructions concerning factors that may influence eyewitness reliability. Here is a New Jersey cross-race instruction that predates Henderson. It was also devised by the same two committees following a 1999 mandate from the Supreme Court. It will likely be the model for new instructions emerging from NJ and one of the standard instructions in the proposed study:

In deciding what weight, if any, to give to the identification testimony, you may consider the following factors.... The fact that an identifying witness is not of the same race as the perpetrator and/or defendant, and whether that fact might have had an impact on the accuracy of the witness's original perception, and/or the accuracy of the subsequent identification. You should consider that in ordinary human experience, people may have greater difficulty in accurately identifying members of a different race. New Jersey v. Cromedy, 727 A.2d 457 (N.J. 1999); NJ Criminal Jury Charges: http://www.judiciary.state.nj.us/criminal/charges/non2c032.pdf (p. 6) emphasis added

Topics for Issue-specific Instructions. The Henderson Court uses experimental research and meta-analyses as bases for adopting an unprecedented set of conclusions about system and estimator variables which will form the basis for a new set of jury charges. “System variables are factors like lineup procedures which are within the control of the criminal justice system. [Wells, 1978]. Estimator variables are factors related to the witness, the perpetrator, or the event itself -- like distance, lighting, or stress -- over which the legal system has no control.” (p. 49) Among the Court’s topics for instructions are the following (the court’s—highly abbreviated--language is used—quote marks and citations omitted). We note four factors which will be used in the proposed research (denoted with ●). We think it likely the Henderson Court’s language will be incorporated into jury instructions akin to the cross-race instructions from Cromedy above— drafting committees tend to adopt language previously endorsed by appellate courts on the grounds that
language is more likely to resist appeals/challenges. A set of interim instructions proposed by the murder division of the NJ Public Defenders office adopted this approach. We will use the NJ instructions as our “standard” and anticipate similar language.

System Variable Findings/(Targets for Instructions) in Henderson:

[T]he failure to perform blind lineup procedures can increase the likelihood of misidentification. (p. 53)

[O]The witness [should be instructed] that the suspect may or may not be in the lineup (pp. 53-54)

[A]ll lineup procedures must be recorded and preserved (p. 57)

[P]oorly constructed or biased lineups can affect the reliability of an identification . . . (p. 57)

[I]nformation received by witnesses both before and after an identification can affect their memory. (p. 58)

[M]ugshot exposure and mugshot commitment . . . create a greater risk of misidentification. (pp. 62-63)

[S]howups make it easier to make mistakes . . . showups . . . are inherently suggestive. (pp. 69-70)

Estimator Variable Findings/(Likely Targets for Instructions) in Henderson:

[H]igh levels of stress can diminish an eyewitness’ ability to . . . make an accurate identification. (p. 70)

[A] visible weapon can affect the reliability of an identification and . . . description of the perpetrator. (p. 74)

[W]itnesses consistently tend to overestimate short durations, . . . (p. 74)

[G]reater distance . . . and poor lighting conditions can diminish the reliability of an identification. . . . (p. 75)

[C]hildren . . . are more likely to make incorrect identifications than adults. . . . Showups in particular “are significantly more suggestive or leading with children.” [pp. 76-78]

[M]emory strength will be weaker at longer retention intervals . . . than at briefer ones. . . . (p. 79).

[A] witness may have more difficulty making a cross-racial identification . . . (p. 79)

[N]on-State actors like co-witnesses . . . can affect the reliability of identification evidence (pp. 84-85)

Pre-Trial Prescriptions for Judges. The Henderson Court formulates a set of prescriptions flowing from its conclusions, first with respect to an admissibility hearing: “To evaluate whether there is evidence of suggestiveness to trigger a hearing, courts should consider the following non-exhaustive list of system variables” (p. 113). The Court included a list of 9 system variables as per above, sometimes including multiple questions for trial courts to address. Furthermore the Court specified that: “If some actual proof of suggestiveness [exists], courts should consider the above system variables as well as the following non-exhaustive list of estimator variables [13 criteria as per above] to evaluate the overall reliability of an identification and determine its admissibility” (pp. 115-117).

Trial Prescriptions for Juries. All of this led the Court to conclude the following with respect to the jury trials (note that we will embrace their mid-trial instructions in the planned research):

... when identification is at issue in a case, trial courts will continue to “provide appropriate guidelines to focus the jury’s attention on how to analyze and consider the trustworthiness of eyewitness identification.” . . . . Based on the record developed on remand, we direct that enhanced instructions be given to guide juries about the various factors that may affect the reliability of an identification in a particular case. Those instructions are to be included in the court’s comprehensive jury charge at the close of evidence. In addition, instructions may be given during trial if warranted”. (pp. 122-123)

We anticipate, however, that with enhanced jury instructions, there will be less need for expert testimony. Jury charges offer a number of advantages: they are focused and concise, authoritative (in that juries hear them from the trial judge, not a witness called by one side), and cost-free; they avoid possible confusion to jurors created by dueling experts; and they eliminate the risk of an expert invading the jury’s role or opining on an eyewitness’ credibility. . . . (emphasis added, pp. 126-127)

Perry, Henderson and the Jury Instruction Paradigm. New Jersey is now headed down a path in which issue-specific instructions reflecting (to a degree that will be known precisely two weeks after this proposal is filed) scientific findings concerning factors that influence eyewitness identification accuracy. Such instructions will soon be a routine feature of eyewitness identification cases in New Jersey. In fact, there are reasons to believe that Perry and Henderson presage widespread
adoption of issue-specific instructions nationally and there are sound reasons to be concerned about such an eventuality. In its front page report on Henderson, The New York Times noted that the decision “is likely to have considerable impact nationally. “The state’s highest court has long been considered a trailblazer in criminal law, and New Jersey has already been a leader in establishing guidelines on how judges should handle such testimony....” Barry Scheck added, “It’s going to affect the way every state and federal court in the United States assesses eyewitness identification evidence, and what those courts tell juries about the factors that can increase the risk of misidentification. Brandon L. Garrett, who documented eyewitness misidentifications in 190 of the first 250 cases of DNA exoneration in his book, “Convicting the Innocent,” said the decision would provide a model for legislatures and courts around the country that “have been at a loss for what to do” and needed “a structure for how judges should handle identifications in the courtroom.” (August 25, 2011, p. A1) A NYT editorial observed: “The Supreme Court is scheduled to hear a major case about eyewitness identification in November, the first on this issue since that 1977 decision. The Roberts court should pay close attention to the well-grounded decision reached by the Rabner court in New Jersey.” (August 27, 2011, p. A18).

Of course, the “major” Supreme Court case is Perry and as we have seen above, the Court gave a very warm embrace to “jury instructions on ... the fallibility of eyewitness identification.” Perry is not the only major pending eyewitness case which could be directly impacted by the analysis and prescriptions in the Henderson case. The Innocence Network has filed similar briefs and arguments in cases such Commonwealth v. Walker and State v. Lawson. The Pennsylvania Supreme Court accepted Walker for review to determine: “(1) whether the trial court should have had the discretion to allow the Petitioner to present expert testimony regarding human memory, perception, and recall, and (2) whether the Court permit expert scientific testimony, whether it be for the defense or prosecution, on how the mind works as long as the testimony has reached general acceptance”. Of course, one answer to those questions would be to adopt an approach similar to Henderson and Perry with an emphasis on instructions. The issues in Lawson include the burden of proving that an eyewitness identification obtained through concededly suggestive procedures was nonetheless independently reliable (an issue similar to Henderson) and whether suggestiveness can be cured at trial by cross-examination, expert testimony, closing arguments, and jury instructions. Decisions should emerge very soon in Walker and Lawson.

Other Examples of Issue-Specific Instructions. Although no other state has yet endeavored to fashion a “full” set of issue-specific instructions in the manner proposed by the Henderson court, there are many examples of such instructions scattered across jurisdictions—as noted by the majority in footnote 7 in Perry. Massachusetts requires a special jury instruction when there is no corroboration of a single identification (Commonwealth v. Montiero, 2001). Juries in Connecticut receive a jury instruction when the eyewitness was not informed that the suspect may or may not be in the lineup (State v. Ledbetter, 2005). California courts allow cautionary instructions to jurors in cross-race cases and special instructions when the eyewitness was exposed to identification procedures that do not align with established best practices (People v. Harris, 1989). Benton, et al. (2006), note that Florida, Maine, the 7th, 8th and 11th circuits have explicitly rejected expert testimony in favor of cautionary judicial instructions. In Utah the court denied the defendant’s request to admit eyewitness expert testimony (State v. Brink, 2007). Instead, the trial judge allowed the defense to submit eyewitness jury instructions tailored to the specific facts of the case. The Utah Court of Appeals ruled that the specific instructions addressed all the factors the expert would have testified about and therefore, the specific instructions were sufficient to educate the jury.

What Effects Should Instructions Have on Jurors? In the PI’s series of late1980s (NSF-funded) studies on jury sensitivity to eyewitness evidence (a model source of measures for the proposed study) and the effects of expert testimony on jurors’ evaluations of eyewitness evidence, my students (particularly Cutler) and I examined three effects of expert testimony on jury decision-making. The same effects can emerge from other practices intended to improve jurors’ skills in evaluating eyewitness identification. First, expert testimony (or cross-examination or judicial instructions) may
confuse jurors, which may result in misapplication of the testimony or total disregard of the testimony in their decision making process. Second, expert testimony (or cross-examination or judicial instructions) may make jurors skeptical of the accuracy of eyewitness identifications which may simply lead to fewer convictions. Finally, expert testimony (or cross-examination or judicial instructions) may sensitize jurors to factors that influence accurate eyewitness identifications. Sensitivity refers to both knowledge of how a given factor influences eyewitness memory and the ability to render decisions that apply and reflect that knowledge. Basically one would like to see an interaction between instructions or expert testimony and good versus poor eyewitness evidence such that cautionary instructions or expert testimony reduce the impact of identifications when they are made under poor circumstances. As shown in the figure, that is the effect I observed for expert testimony in the 1989 studies of expert testimony (Cutler, Dexter, & Penrod, 1989; Cutler, Penrod, & Dexter, 1989). Note the strengthened rating for prosecution evidence in good witnessing conditions occurred even though the expert was testifying for the defense!

Mere skepticism—which could have been reflected in a dashed line beneath and parallel to the solid line in the figure—is probably not a desirable outcome (see Pezdek et al. 2010 for evidence it does not occur) and it is desirable to implement research designs that can test for these effects in order to ascertain exactly how each safeguard affects jurors evaluations of eyewitness evidence. This means using designs which manipulate evidence and the presence/absence of remedies (Leippe, 1995; Leippe & Eisenstadt, 2009).

**But, Do Eyewitness Instructions Work?** The American Psychological Association filed amici briefs in Perry and Walker (APA amicus briefs, 2011). The briefs review much of the research reviewed by the Henderson special master, by the Henderson court and by the Innocence Network in its Perry brief. Strikingly, one APA conclusion is rather different that reached in Henderson and Perry:

[R]esearchers have tested the impact of eyewitness-related instructions on jurors’ decision-making. See Cutler & Penrod, Mistaken Identification at 255-268 (summarizing studies). They have found that a common eyewitness-related instruction “proved completely ineffective at sensitizing jurors to eyewitness evidence.” See Cutler et al., [ ](1990) (Fntt 15: The instruction, which runs approximately ten paragraphs, was approved for use by federal courts in ... Telfaire, ... 1972). Other studies have found likewise. See Greene, ... (1988) (“Jurors who heard [a commonly given] instruction were no more sensitive to factors known to be problematic to eyewitness identification than were jurors who had no instruction.”).

Opponents of the testimony discussed herein sometimes contend that voir dire, cross-examination, and jury instructions adequately safeguard against erroneous identifications. See, e.g., Devenport et al., [in] (Cutler ed., 2009). But these procedures (alone or in combination) are not an effective substitute. *None of them provides a jury with actual evidence, i.e., substantive scientific information from a witness or other source of admissible information, regarding eyewitness testimony...See Cutler & Penrod, Mistaken Identification...*(1995). (emphasis added)

**Efficacy of General Instructions in Eyewitness Cases.** The courts have a reasonably long tradition of attempting to improve juror judgments about eyewitness identifications through jury
instructions (Neil v. Biggers, 1972; United States v. Telfaire, 1972). However, unlike the issue-specific eyewitness jury instructions contemplated in Henderson, most prior instructions drafted by the courts admonish jurors to consider a standard set of variables, irrespective of the factors present in a specific case. In Telfaire, the instruction was designed to direct the attention of the jury to factors associated with the crime that might influence the accuracy of the identification. The instruction highlighted factors including exposure duration, the conditions under which the identification was made, the retention interval, and the strength of the identification (or eyewitness confidence). The Telfaire instructions received criticism from the psycho-legal community, for although the instructions did address some factors that science indicates are relevant to eyewitness identification accuracy, other factors that science has found to be predictive, such as the weapon focus effect or the cross-race effect, were not addressed in the instructions. Furthermore, some factors included in Telfaire, such as witness confidence, do not accurately reflect scientific findings.

Research testing the effectiveness of Telfaire or instructions similar to Telfaire indicates that the instructions do not sensitize jurors to eyewitness identification evidence (Cutler, Dexter & Penrod, 1992; Greene, 1998; Ramirez, Zemba, & Geiselman, 2000—all good sources of DVs). For example, Cutler et al. (1992) presented jurors with a videotaped mock trial which included testimony from an eyewitness and manipulated the presence of an expert witness and the presence of jury instructions that were similar to those outlined in Telfaire. The Telfaire instructions (vs. the no expert control) produced non-significant main effects on all dependent measures of juror perceptions of the eyewitness evidence. Most important, no significant interactions emerged between Telfaire and manipulations of witness accuracy. The Telfaire instruction did not influence jurors’ evaluations of the eyewitness identification evidence – there were neither skepticism effects nor sensitizing effects.

Greene (1998) manipulated the presence of Telfaire instructions and the strength of the identification evidence. When the evidence was weak, there were no differences in verdict between instruction conditions. When the evidence was strong, those who heard Telfaire instructions were significantly less likely to convict. Thus, Telfaire instructions may have desensitized jurors to eyewitness evidence. In a second study, Greene (1998), revised the Telfaire instructions by simplifying the legal terminology, reorganizing the instructions into a more hierarchical order, and altered the variables witnesses were to consider to better reflecting accepted scientific findings. The strength of the identification evidence was manipulated, and jurors received either no instruction, Telfaire instructions or revised Telfaire instructions. The revised instructions led to the lowest percentages of convictions, the highest percentages of acquittals, and the lowest percentages of hung juries. Data from the no instruction and standard Telfaire instruction conditions were nearly identical. Thus, the revised instructions appeared to produce skepticism and the unrevised Telfaire instructions had no effect. In general, research has failed to find sensitization effects when Telfaire or Telfaire like instructions are administered to jurors.

**Issue-Specific Instruction Research.** The adoption of eyewitness jury instructions that address specific factors associated with mistaken identifications predates Henderson and has been promoted by legal scholars as an attractive alternative to other safeguards due to its ease of administration, consistency, non-adversarial approach, and cost effectiveness (Park, 2003; Walters, 1985; Wise, Dauphinais, & Safer, 2007). As leading evidence scholar Roger Park has noted: “The effect of bad judicial instructions, such as those based on United States v. Telfaire, has been examined in several studies but not much attention has been paid to the effect of good instructions. Instructions that sensitized the jury to factors that the research indicates are more important might work, especially if framed in plain language that appealed to common sense, and they would avoid the expense and side effects of expert battles (Park, 2003, p. 307). The American Bar Association’s (ABA) resolution on eyewitness accuracy recommends case-tailored judicial instructions in conjunction with expert testimony (a condition we will include in our research). While some legal scholars agree with the ABA’s recommendation (Tablets, 2006; Cutting, 2007), others remain skeptical about the effectiveness of jury instructions and advocate expert testimony as the only effective mechanism to educate the jury on factors associated with mistaken identifications (Friesland, 1990). There is little consensus within the legal community as to what combination of safeguards should be implemented
and less agreement on what actually works.

Research on the Telfaire instructions raises questions about the efficacy of issue-specific instructions such as those contemplated in Henderson—indeed, in reviews of a prior iteration of this proposal we saw comments along the lines of “why use NSF funds to again demonstrate that instructions do not work?” Although it was not our intent it seems we conveyed the impression that our expectation was that issue-specific instructions would not and could not work! In fact, it is our expectation that we can devise instructions that will work well as expert testimony—but we anticipate that such instructions will have to be more “instructive” or detailed and perhaps reference scientific research findings in order to achieve efficacy. In short, we anticipate that effective instructions will have to be heavier-handed than something like the current New Jersey Cromedy instruction.

**Why Issue-Specific Instructions Might Work**

The first aim of this research is to examine whether case-specific eyewitness jury instructions such as those NJ will shortly employ are effective at sensitizing jurors to eyewitness evidence (and as effective as alternative approaches such as expert testimony). Clearly judicial “theory” is that they work and courts are putting that theory to practice. Theoretically, one effect of instructions would be to provide jurors with knowledge they did not previously possess—knowledge that could then be applied to the facts of a case in a critical manner. It is also possible that instructions could have salutary effects even if they did not increase juror knowledge (perhaps because jurors already know as much as is conveyed in instructions or because they do not comprehend or remember the instructions). Dual-process theories of attitude change such as Petty & Cacioppo’s (1986) Elaboration Likelihood Model (ELM) suggest that instructions can influence jurors evidence evaluations—either because instructions will prompt jurors to more systematically evaluate trial evidence (a “Central” route) or because the judge, as an authority, will prompt skepticism on the part of jurors (a “Peripheral” route). Although it makes sense for these reasons that instructing jurors on case-specific identification accuracy factors would improve jurors’ evaluations of eyewitness evidence, no empirical research has tested the assumption.

**Prior Knowledge Deficiencies?**

One of the possible reasons that general forms of eyewitness jury instructions have failed to sensitize jurors to eyewitness factors is related to the court’s underestimation of juror knowledge about relevant eyewitness accuracy factors. Research on learning and text comprehension has consistently demonstrated that relevant prior knowledge is positively associated with text comprehension (Alvermann & Hague, 1989). The courts have often expressed a belief that factors affecting eyewitness accuracy are common knowledge. A substantial body of research on juror knowledge about factors influencing eyewitness accuracy, however, indicates that jurors possess only modest levels of awareness about factors that negatively impact eyewitness identification accuracy. These studies generally use one of three methodologies (see Wells, 1984): the questionnaire study in which lay persons are queried about factors that influence eyewitness memory with multiple-choice items (studies we will draw upon in formulating our DVs—see especially Desmarais & Read, 2010; Schmechel, et al. 2006; Yarmey & Jones, 1983); the prediction study in which the witnessing conditions of an eyewitness experiment are described to the subject and the subject predicts the identification accuracy rates (e.g., Brigham & Bothwell, 1982; Leippe, Wells, & Ostrom, 1978), and the mock-jury study (Cuter & Penrod, 1995; Lindsay, Wells, & Rumpel, 1981) in which mock-juries (or jurors) try a case involving eyewitness evidence. While each methodology has its advantages and disadvantages, studies employing these designs have generally converged on the conclusion that jurors have difficulty in eyewitness cases (Read & Desmarais, 2009, 2010), across study methods research findings generally indicate that jurors’ hold misconceptions about some factors that influence eyewitness accuracy—but...

**Knowledge/Comprehension is Not Enough.** Although jurors display knowledge deficiencies, a more important consideration is that even when they appear to possess appropriate knowledge, they do not make use of that knowledge when evaluating cases containing eyewitness identifications. In other words, although comprehension can be an issue (and will, of course, be included among DVs in the proposed studies) our expectation is that we will observe results similar to those the PI observed in Cutler, Penrod & Dexter (1989) where a large sample of mock jurors (n=634) including
96 experienced jurors) evaluated a videotaped trial in which there were two levels of witnessing conditions (WIC): good and poor and an expert (the PI) testified or did not. As in the proposed research jurors’ knowledge about witnessing factors, recall of evidence and expert testimony (instructions) were assessed (and were at high levels). As shown in the adjacent table which reports effect sizes (d’s), whether they heard expert testimony or not, jurors believed that disguise, retention interval, lineup instructions and confidence would all have appreciable relationships with identification accuracy, but jurors were unaware of the effects associated with weapon visibility in the absence of expert testimony. The presence of expert testimony improved juror knowledge of the effects of weapon visibility. Of course, if juror knowledge had been applied to Good and Poor WIC we would not be surprised to see similar, large effect sizes in the inferences jurors made and in their judgments—whether or not jurors heard expert testimony. However, as shown in the table, the WIC manipulation had minor effects in the absence of expert testimony—but fairly substantial effects when the expert testified. This indicates that expert testimony prompted critical evaluation of the eyewitness evidence. Of course, the big question in the proposed research is whether issue-specific instructions can produce similar effects on inferences and judgments.

### Reliance on Other (the Wrong) Factors?

What factors do jurors rely on when evaluating eyewitness accuracy? Rather than gathering jurors’ knowledge about a predetermined set of factors, Shaw, Garcia, and McClure (1999) asked jury eligible individuals to list the most important factors they would consider when evaluating the accuracy of eyewitness identifications. Free recall responses indicate that jurors overwhelmingly rely on estimator variables. The most frequent factors jurors listed related to the characteristics of the eyewitness (e.g. vision, age), the crime (e.g. lighting), and the eyewitness testimony (e.g. level of detail). Less than 1% of the listed factors could be categorized as system variables (such as lineup instructions or lineup presentation mode)—one reason we want to use both system and estimator instructions.

Note the factors jurors are in instructed to rely on in Telfaire are similar to the types of factors jurors claim to rely on without instruction (though Telfaire is also vague about the conclusions jurors are to draw from evidence—issue-specific instructions with language like that found in Cromedy “You should consider that in ordinary human experience, people may have greater difficulty in identifying members of a different race” likely pack more Direct and Peripheral-processing punch akin to expert testimony—even with respect to factors jurors already “know”). Many other factors that are likely to be present in a case, such as stress, violence, cross-race identifications, weapon presence, lineup administrator knowledge (and the feedback effect), mugshot exposure effects, and lineup presentation mode are not addressed in general eyewitness jury instructions, nor are these factors that research indicates jurors consider on their own when evaluating identification accuracy—instructions may be particularly potent with those factors. That is, with eyewitness jury instructions that supply information about factors jurors would not normally generate on their own (e.g. cross-race identifications, biased pre-identification instructions—as in the proposed research), jurors’ sensitization effects may be greater than when the instructions only contain information about factors jurors all ready consider when evaluating eyewitness evidence (e.g. level of detail).
In its review of studies of juries and eyewitness evidence the NJ Supreme Court noted in *Henderson*:

Survey studies [of juror knowledge] have generated varied results.... Mock-jury studies provide another method to try to discern what jurors know. [A] study (by Cutler, et al., 1990) revealed that mock-jurors “were insensitive to the effects of disguise, weapon presence, retention interval, suggestive lineup instructions, and procedures used for constructing and carrying out the lineup” but “gave disproportionate weight to the confidence of the witness.” ... Neither juror surveys nor mock-jury studies can offer definitive proof of what jurors know or believe about memory. But they reveal generally that people do not intuitively understand all of the relevant scientific findings. As a result, there is a need to promote greater juror understanding of those issues. (pp. 87-90)

**Wording of Issue-Specific Instructions.** Of course, the effectiveness of issue-specific instruction will also likely depend on the quantity and quality of information contained in the instruction (particularly with respect to Direct Route critical evaluation of evidence). Therefore, to be effective, it is critical that issue-specific instructions contain enough information to educate jurors about the influence of a specific factor on identification accuracy. Although states across the country have begun to adopt specific jury instructions on a variety of factors associated with eyewitness identification accuracy, there is no uniform agreement concerning the content of the specific instructions. For example, numerous wordings have been proposed for addressing cross-race identifications. The instructions originally proposed by the defendant in the *Cromedy* case read:

You know that the identifying witness is of a different race than the defendant. When a witness who is a member of one race identifies a member who is of another race we say there has been a cross-racial identification. You may consider, if you think it is appropriate to do so, whether the cross-racial nature of the identification has affected the accuracy of the witness’s original perception and/or accuracy of a subsequent identification.

Although these instructions provide the jury with a definition of cross-race identification, this version of the instructions does not provide the jury with information about how to factor the issue of cross-race identifications into their decision-making process (are cross-race identifications more or less accurate?). Considering the defense was requesting that these instructions replace eyewitness expert testimony, it is doubtful that these instructions alone would provide juries with any additional knowledge to aid them in determining the accuracy of the witness’s identification. An alternative cross-race instruction was provided in Chief Judge Bazelon’s concurring opinion in *Telfaire*, (1972):

In this case the identifying witness is of a different race than the defendant. In the experience of many it is more difficult to identify members of a different race than members of one’s own. If this is also your own experience, you may consider it in evaluating the witness’s testimony. You must also consider, of course, whether there are other factors present in this case which overcome any such difficulty of identification. For example, you may conclude that the witness has had sufficient contacts with other members of the defendant’s race that he would not have greater difficulty in making a reliable identification.

Although Bazelon’s instructions mention that accurate cross-race identifications are more difficult than same-race identifications, the instructions do not provide the jury with, nor refer to, scientific findings related to cross-race identifications. Instead, jurors are asked to rely on their own personal experiences with identifying other race individuals. Jurors are unlikely to have had many personal experiences in which they are systematically provided feedback about their ability to identify other race individuals. In addition, although the instructions provide the jury with one example of a factor that may influence the accuracy of a cross-race identification, no information is provided about how much contact is necessary to effectively improve cross-race identification, nor are additional factors provided. In fact, the meta-analysis of cross-race identification research by Meissner and Brigham (2001) indicates that variations in cross-race contact are a minor factor in own race bias: “Overall, contact appears to play a small, yet reliable, mediating role in the ORB, accounting for approximately 2% of the variability across participants.” (p. 17). This point can be incorporated into instructions.

**Expert Testimony.** We will include expert testimony as an alternative method to sensitize jurors to
eyewitness evidence. Cutler, other colleagues and I (1989) manipulated both witnessing conditions and the content of expert testimony—four factors were manipulated: witnessing and identification conditions (WIC), witness confidence, form of testimony, and expert opinion. The design was complemented with conditions in which WIC and witness confidence were crossed but no expert testimony was presented (control conditions). Thus, jurors heard trial testimony that consisted of descriptions of the WIC that prevailed during the crime and later identification. WIC was varied, in light of experimental research findings, to produce WIC that would be associated with greater or lesser witness accuracy. WIC (good/poor) was crossed with the presence (or absence) of testimony by an expert who described the effects of various factors which influence identification accuracy. Participants presented with an expert heard testimony about the relative magnitude of the effects and percentages of correct identifications obtained in eyewitness identification experiments.

The effects of the types of expert testimony on juror knowledge were few and inconsistent—but all jurors who heard some form of expert testimony displayed greater sensitivity—it gave more weight to witnessing and identification conditions (differentiating witnesses and conditions more and less likely to have produced correct identifications) and less weight to witness confidence when evaluating the accuracy of the identification. Importantly, expert testimony did not cause jurors to be more skeptical of the eyewitness evidence.

**Study Plan: Sensitizing Jurors to Eyewitness Evidence**

Because there is currently no empirical research designed to specifically test the effectiveness of issue-specific instructions on juror sensitization to various forms of eyewitness evidence, we are proposing a study (depending on the results of the first study we might propose further studies in a later proposal) with an eye to comparing the efficacy of standard instructions of the type we think are likely to emerge from New Jersey (in addition to the existing *Cromedy* cross-race instruction) versus enhanced instructions of our own devising which will include summaries of research findings (e.g., numbers of students and sample sizes) and effects sizes (characterizations of the effects—mostly in percentage terms—that factors can have)—which we anticipate will be more potent versus expert testimony (of the variety that has been offered in New Jersey courts) versus no instructions versus, as recommended by the ABA a combination of instructions and expert testimony. We will manipulate the presence/absence of several different system variables embraced in the *Henderson* decision. This design will allow us determine the relative effectiveness of “standard” case-specific instructions at sensitizing jurors as opposed to instructions and/or expert testimony that provide jurors with a summary of eyewitness identification research findings, including effect sizes.

We will manipulate the presence of two System and two Estimator variables embraced by the *Henderson* court and the type of eyewitness instruction jurors receive. Jurors will watch a videotaped robbery trial, render verdicts, deliberate and provide various ratings of the trial evidence. The trial will be edited to contain the appropriate pieces of evidence and safeguards.

**Design:** A 2 (Race of witness: cross-race identification vs. same-race identification) X 2 (High stress vs. low stress) X 2 (Confirmary feedback vs no feedback) X 2 (Lineup instructions: biased vs. unbiased) X 5 (Type of instruction: none vs. “standard” court-style instruction vs. “enhanced” research-based vs. expert testimony vs. standard+expert testimony) factorial design will be implemented. 480 participants will be recruited in groups of 6 and their deliberations of up to 45 minutes will be videotaped.

Note that this design permits tests on the effects of different types of instruction in four different substantive areas (two estimator and two system variables, using variables that vary in their intuitive availability [per Shaw et al. 1999: race—43%, “emotional state”--27%, “handling of evidence”—25% [but 0% for feedback and biased instructions]—240 jurors/40 juries per level for each). It will also be possible to gauge the impact of witnessing variables on DVs individually and in combinations (e.g., 0, 1, 2, 3, or 4 factors present) to see whether evidence effects are cumulative and/or interactive and whether that is true with and without various forms of instruction. For instruction type there will be 96 jurors/16 juries per level. With only 5 juries per cell for the 4 evidence x 5 instruction conditions, we
do not anticipate analyses at that level. We anticipate the most fine-grained analyses at the juror level might comparisons of two of the five instruction conditions in interaction with two other variables [e.g. cross-race identifications and biased instructions]. For such analyses there will be 192 degrees of freedom available for the overall 1-degree of freedom interaction term and 24 observations per cell for simple effect analyses [power = .8 for effects of r = .4 and .6 for r = .3].

**Participants.** 480 community members will participate in the study (we will be seeking 80 juries and will need to over-recruit for each session to assure we have a minimum of 5 per jury—we will recruit 7 per session and have budgeted for 6.5 to appear=520+100 for pretesting). Advertisements for research participants will be placed on the website craigslist.com (which we have used successfully in prior jury research). Interested participants will be given a number to call to schedule a study time—convicted felons and non-English-speakers will be excluded. Participants will be pre-screened to ensure they are 18 years of age or older and a US citizen. Prior studies that have collected data from participants recruited via craigslist.com has resulted in a diverse sample, roughly comparable to the demographic makeup of New York City residents -- approximately 60% of the participants were female (compared to 52% female New York City residents according the 2006 census data). Study participants’ ethnicities included 45% white (vs. 60%) 29% black (vs. 17%), 6% Asian (vs. 7%), and 12% Hispanic (vs. 17%). Approximately 30% of study participants reported “college graduate” as their highest level of education (vs. 27%). Study participants reported a wide range of ages and occupations. Although not a perfect comparison, craigslist.com participants are quite diverse in terms of gender, age, ethnicity, age, and occupation.

**Mock trial:** In order to maximize ecological and external validity, jury-eligible participants will view a videotaped robbery trial based on an actual transcript. The trial will be filmed in a mock courtroom. Professional New York City actors will be hired to play the roles of witnesses and a police officer. In past mock trials we have filmed in New York City, we have been able to hire attorneys who moonlight as actors. We will again hire practicing attorneys to play the roles of prosecutor and defense attorney. We will use an actual expert and we will use a senior faculty colleague from another university for the judge (this will permit us to handily recruit the “judge” for taping additional instructions for future studies if needed). The central piece of evidence in the trial is an eyewitness identification of the defendant made by a patron of the convenience store that was robbed. The trial will be adapted from an actual case containing eyewitness evidence—with no corroborating evidence. Actors will be provided with a summary of trial evidence and an edited version of the actual transcript. The actors will be instructed to follow the basic script, but they will be allowed spontaneity in their responses. The filmed trial will be approximately 60 to 90 minutes in length (which means sessions can run as long as 90 + 45 (deliberation) + 30 (DVs) minutes. All manipulations in the trial will be filmed at once and will be edited later to create separate versions of the trial. The PI has extensive experience filming mock trials for the purposes of conducting large factorial design studies and has successfully filmed and edited trials for such studies. The research assistants in the lab are experienced at editing videotaped trials.

**Witnessing and identification conditions (WIC) manipulations:** These manipulation have been chosen because they are well-studied, have appeared in meta-analyses (Deffenbacher et al., 2004; Douglas et al., 2010) Meissner & Brigham, 2001; Steblay, 1997), can be characterized as producing substantial effects, commonly appear in actual cases (based on the PIs experience consulting in several hundred cases—and testifying in over 150 cases--over the past thirty years) and represent both estimator variables (which jurors appear to generate as influences on their own (Shaw et al., 1999) and system variables (which jurors do not spontaneously generate). We will edit the content of testimony during the trial to manipulate the eyewitness conditions and the identification procedures. For the cross-race manipulation, the white eyewitness will either describe the perpetrator as a black male or a white male (and videos will be edited to show a black or white male actor as the defendant as apt). For the stress manipulation, the witness will either testify that he/she was not particularly frightened or was extremely frightened. For the feedback manipulation the witness will wither testify that the police officer indicated that he/she identified the suspect and
then registered their confidence or will testify that confidence was recorded immediately. For the instruction bias manipulation, when describing the identification procedures, the police officer will either testify that unbiased instructions were administered to the eyewitness (i.e. the police officer will testify that he/she instructed the participant that the perpetrator may or may not be in the lineup etc) or that biased instructions were administered (i.e., the police officer will testify that he/she instructed the participant that they have a suspect and would like her to view a lineup).

**Instruction manipulations:** We want to test instructions that courts might plausibly adopt (not too heavy-handed (leaving discretion to jury), relatively easy for an instruction committee to update periodically, not too long, minimal legal or social science jargon) and thus the plan is to draw upon the actual instructions generated by the New Jersey instruction committees (which, as noted, will report their recommendations at the end of January 2012). We also plan to use factors which have been the subject of meta-analyses, which as noted above, is a criterion that has been embraced in *Henderson* and *Perry* and is likely to be embraced by other courts. We anticipate our “standard” instructions will resemble the instructions in *Cromedy* (see above p. 2)—but have hesitated piloting any instructions due to our desire to attain maximum ecological validity in our research (note however: though it would be nice to know how comprehensible the new NJ instructions are, they will be placed in use irrespective of their comprehensibility and are thus worthy targets for research). As per language in *Henderson*, to maximize effectiveness, instructions will be delivered at the end of the prosecution case (the point at which the court would know which instructions are apt) and at the end of the trial. Instructions will be pilot-tested for comprehension/sensitization with a stripped-down trial. We anticipate that our “standard” instructions will look like the following (the Court’s words):

- Identification procedures should begin with instructions to the witness that the suspect may or may not be in the lineup or array and that the witness should not feel compelled to make an identification....Without an appropriate warning, witnesses may misidentify innocent suspects who look more like the perpetrator than other lineup members....The failure to give proper pre-lineup instructions increases the risk of misidentification. (pp. 53-54)

- Information received by witnesses both before and after an identification can affect their memory....Confirmatory or post-identification feedback ...occurs when police signal to eyewitnesses that they correctly identified the suspect. That confirmation can reduce doubt and engender a false sense of confidence in a witness. Feedback can also falsely enhance a witness’ recollection of the quality of his or her view of an event.... [prompting] significantly more . . . confidence in their decision..., inflat[ing] their reports to suggest better witnessing conditions at the time of the crime, stronger memory at the time of the lineup, and sharper memory abilities in general. The effects of confirmatory feedback may be the same even when feedback occurs [days] after an identification. ... [C]onfirmation ... must be recorded in the witness’ own words before any possible feedback. ... [C]onfirmatory feedback from non-State actors can also... distort memory, create a false sense of confidence, and alter a witness’ report of how he or she viewed an event. [pp. 58-61]

- **Even under the best viewing conditions, high levels of stress can diminish an eyewitness’ ability to recall and make an accurate identification.** [H]igh levels of stress are likely to affect the reliability of eyewitness identifications. There is no precise measure for what constitutes “high” stress, which must be assessed based on the facts presented in individual cases. (pp 70-.72)

- **Cromedy instruction** (see above p. 2)

**Enhanced Issue-Specific Instructions.** It is not clear that the content in these instructions (including *Cromedy*) would be sufficient to sensitize jurors’ evaluations of eyewitness evidence. A particular problem is that the instructions do not indicate how much of a difference a factor can make—a 2% drop in accuracy? A 20% drop? It is possible that issue-specific instructions can be enhanced by informing jurors of eyewitness identification research that is relevant to the issue. We propose that specific instructions that are closer in content to expert testimony and include information about the volume of research and summaries of findings reflecting the magnitude of impact variables have on accuracy will more effectively sensitize jurors to eyewitness evidence.

In each condition that receives eyewitness instructions, the instructions will address the relevant
witness and identification factors present in that condition. Some jurors will hear instructions that only inform jurors generally about the appropriate witnessing and identification factors. The research-based instructions will draw on elements of the expert testimony and jurors will be presented with a summary of experimental research findings related to each of the factors together with a statement about the magnitude of the effect associated with each factor. The content of these instructions will mirror, in heavily-condensed form, the content of traditional expert testimony which other jurors will hear. For example, an enhanced “instruction bias” instruction might contain the following language (in addition to the “standard” instruction above)—all but the bracketed phrase drawn directly from Henderson. Instructions will be pretested to assure jurors understand them.

In more than 20 studies involving more than 2500 research participants researchers found that telling witnesses in advance that the suspect may not be present in the lineup, and that they need not make a choice, led to more reliable identifications in target-absent lineups. In one experiment, 45% more people chose innocent fillers in target-absent lineups when administrators failed to warn that the suspect may not be there.

In the stress instruction jurors might be informed (based on Deffenbacher et al. 2004, Morgan et al. 2004 and Valentine & Mesout, 2008): “in nearly 30 studies involving more than 1500 participants, experiencing a variety of forms of stress, high stress reduced correct identifications by more than 40%.” Similar language can be produced from Meissner & Brigham’s (2001) cross-race meta-analysis (91 comparisons, over 5,000 participants) showing the odds ratio for correct identifications=1.4, mistaken identifications=1.56 and overall=2.23 and from the Douglass & Steblay (2006) feedback meta-analysis (20 tests and over 2400 participants) with effect sizes up to $d = .82$.

We acknowledge a natural confound between type of instruction and amount of information provided, but we will leave it to future research to sort out the exact source of effects (e.g. more length versus particular contents)—our primary goal is first demonstrating/detecting effects. The trial will contain opening and closing statements and direct and cross-examination of the character witness, police office, and eyewitness. For each condition, we will edit testimony to reflect the proper witnessing and identification factors.

**Expert testimony manipulation.** The expert will reflect testimony the PI has given is scores of actual cases—it will summarize relevant research findings from meta-analyses together with effect sizes and an explanation of effect sizes couple with results from an example study. Cross-examination of the expert will remain constant and will consist of cross-examination questions similar to those that the PI has undergone in his own testifying experiences (e.g. payment, side usually testified for, attack on general acceptance, student-based research, etc). To ensure realistic testimony, the content of the expert’s direct testimony and cross-examination will be reviewed by two other eyewitness experts who commonly testify in court. We will also incorporate a condition—advanced by the ABA as noted above—that combines instructions and expert testimony.

**Dependant measures:** Subsequent to viewing the mock trial and prior to deliberations participants will render a verdict, provide confidence ratings, and rate the accuracy of the identification—after deliberation they will provide the same ratings and rate the believability of the witnesses rate the impact of each of witnessing and identification factors present in the case, answer recall questions concerning the evidence, instructions and/or expert testimony and will rate the witnesses’ testimony on a number of dimensions. All materials will be piloted with student participants. Deliberations will be fairly lighted coded with a focus on discussion of the critical eyewitness evidence variables and the ways in which the volume and nature of the deliberations are changed by instructions/experts.

**Procedure.** Up to five community-members participants at a time will attend the study in mock courtrooms at the college. Participants will complete a standardized voir dire questionnaire (prepared with aid from attorneys) that gathers demographic information (including the race of the juror to examine whether race moderates any influence of our cross-race manipulation). Participants will watch one version of the trial and complete the post-trial questionnaire.

**Hypotheses.** We will be testing the effects of our manipulations on juror use of eyewitness evidence
using the framework proposed by Cutler at al. (1989). The critical issue concerns evidence of enhanced sensitivity to variations in trial evidence (same vs. cross-race, high vs low levels of stress, feedback vs none, instruction bias vs no bias) as a result of instructions and/or expert testimony. Jurors may display some sensitivity to trial evidence variations in the absence of instructions/expert testimony (reflected, for example, in the sloped solid line in the figure from the PI's earlier study presented above). Enhanced sensitivity would be reflected in a more sharply sloped line (e.g. the dashed line in that figure) showing greater sensitivity to the evidence manipulations. As a practical matter, the sensitizing should appear as fewer convictions or reduced probative value (or related measures) in the conditions where witness performance is impaired. Sensitization effects will emerge as a statistical interaction between witnessing conditions and expert testimony. These interactions will show that jurors exposed to issue-specific instructions or expert testimony, for example, give less weight to poor witnessing conditions than jurors receiving neither instructions nor expert testimony. Thus, in the absence of instructions, jurors will display little or no sensitivity to the manipulations of the identification variables (that is, no or small main-effects for identification variables), we expect modest sensitivity will be produced by the court-generated standard instructions and the greatest (and comparable) sensitivity will be observed for the research-based enhanced instructions and for expert testimony. Analyses will parallel those in the PI's prior published research on expert testimony and witnessing condition.

**Timeline.** The proposed study will be conducted over the course of 24 months. Five months will be devoted to developing materials, including the filming and editing of various versions the mock trial and pilot-testing of materials. Thirteen months will be devoted to data collection and six months to the analysis of the data, including deliberations, and write-up.

**Broader Impact.** The implementation of issue-specific eyewitness jury instructions is clearly gaining popularity with the court systems; however, such instructions are relatively new and not all states have yet adopted the use of such instructions. Researchers have the opportunity to be on the forefront of legal policy by examining various forms of these instructions and can provide the courts with valuable information about whether issue-specific eyewitness instructions are effective and if so, the method and content of specific instructions that will be most effective in sensitizing jurors to eyewitness evidence. This research will also add to the body of psychological literature on safeguards against misidentifications. Proper methods of sensitizing jurors to eyewitness evidence have become all the more imperative in light of emerging statistics about the high percentage of eyewitness misidentifications contributing to wrongful convictions. The results from this research will also provide attorneys with valuable information when preparing requests for the administration of proper safeguards, such as the admittance of eyewitness expert testimony and/or issue-specific eyewitness jury instructions. The project will add to our research infrastructure through the training of PhD students (the PI's prior PhD students have won a total of 11 dissertation prizes for their research and many of his MA-level students have chosen to pursue PhDs). The PI is the recipient of APA's 2005 Raymond D. Fowler Award for outstanding contributions to the professional development of students. The PI has regularly shared his stimulus materials, measures and data sets with other researchers. We will disseminate the results from this research at annual psychology-law conferences, scientific journals geared toward psychology and law, and law reviews.

John Jay College is a senior college within the City University of New York (CUNY). Over sixty percent of the undergraduates are minority students. The College is a Minority and a Hispanic Serving Institution (HSI). The undergraduates originate primarily from lower income families living within the 5 boroughs of New York City, New Jersey, and lower New York State. The undergraduate major in Forensic Psychology annually awards the third-largest number of psychology bachelor degrees to Hispanic students--in the nation. There is a strong interest among undergraduate and masters students in the department in gaining experience in this area of research.

**Prior NSF Support:** The PI has recently concluded work on several grants—three PhD students on these projects are now in academic and research positions:

0921633--Factors influencing plea bargaining decisions by prosecutors and defense
In study 1 256 practicing attorneys (half defense and half prosecutors) and 128 undergraduate student mock jurors evaluated an eyewitness identification case file (attorneys) or trial scenario (jurors) in which cross v. Same race, duration of exposure, stress, witness confidence, lineup instruction bias, lineup fairness, sequential v. simultaneous and presence of a non-identifying co-witness were manipulated. Participants were mostly insensitive to the manipulations. Defense attorneys reported they would be less likely to advise their client to accept a plea bargain if the lineup was biased, rated the police procedures as more suggestive if the lineup was biased and rated the likelihood that the defendant is guilty as lower if a co-witness failed to identify the defendant from the lineup. Jurors’ verdicts were sensitive to eyewitness confidence and they were more likely to find the eyewitness identification believable if the lineup was presented in sequential format. In study 2 256 practicing attorneys evaluated a case crossing good v. poor eyewitness identification conditions*, witness confidence, the presence of other evidence*, crime seriousness, prior offenses*, media coverage*, defendant claim of innocence’ and defendant desire to take a plea*. Prosecutor judgments were influenced by variables denoted with *.

0819543--Understanding the Impact on Juries of Defense Responses to Victim Impact Statements. Study 1 revealed that the mere presence of an execution impact evidence (EIE) is beneficial for a defendant confronting a death penalty and leads to more favorable impressions on the part of the jury. An emotional statement was somewhat more influential than a statement delivered with flat affect. Study 2 (doctoral dissertation by Jennifer Tallon) revealed that jurors experiencing hostility were more punitive, displayed an anti-defendant bias, and were insensitive to variations in trial evidence. Sadness decreased punitiveness and increased pro-defendant attitudes. Appearing remorseful increased the efficacy of a full apology (sympathy plus responsibility) and excuse, but was detrimental when coupled only with responsibility or sympathy. In study 3 a remorseful excuse resulted in greater life without parole sentences whereas a remorseful apology saw an increase in the number of death sentences. The presence of a Sad EIE made the defendant appear to have more social value than traditional mitigating character evidence.

0617152--Field and Lab Studies of the Effects of Pretrial Publicity on Jurors’ Trial Judgments (encompassing 0819392 Doctoral Dissertation Research: Effects of Pre-and Post Venire Publicity on Juror Decision Making). Results from Story Model in Civil Case. Data collection for the civil case using a student sample: analyses examining story model indicate that initiating events, goals, and actions were significant predictors of individual juror verdicts providing evidence for the mechanisms of influence of pretrial publicity (PTP) on juror verdict decision making.

Results from Field Experiment (Prize-winning dissertation by Tarika Daftary-Kapur). The study was conducted using a high profile case, the Sean Bell shooting case. Shadow jurors were employed in the venue where the case was being tried (New York) and an alternate location (Boston). We examined the influence of naturally occurring PTP on the jurors in New York, as well as the effects of artificially manipulated PTP on jurors in Boston. Participants (who received summaries of the trial evidence while the trial was under way) were significantly influenced by the slant of the PTP they were exposed to--participants in the pro-defense condition were more likely to render not guilty verdicts as compared to those in the pro-prosecution condition, and this effect lasted throughout the trial. PTP exposure significantly distorted participants' perceptions of witnesses at all points in the trial. Those exposed to greater quantities of PTP were more biased. Medium of PTP and post-venire publicity exposure had no significant effects. There were no significant differences in the effect of exposure slant between the naturally exposed and experimentally exposed samples (providing support for the external validity of laboratory studies of PTP effects). Exposure to PTP biased jurors over an extended period of time (8 weeks of trial in the Bell case which was conducted 22 months after Mr. Bell's shooting). This study, to our knowledge, is the only one to date that has introduced such a large gap between PTP exposure and verdict decisions. This has important implications with respect to PTP effects and for the voir dire process in jury selection. Data from a second field experiment are in hand.
References


*Commonwealth v. Walker* (under review at Pennsylvania Supreme Court-2011)


People v. Harris, 47 Cal.3d 1047 (1989).


State v. Lawson, (S059234) (A132640) (appeal from 239 Or App 363, 244 P3d 860 (2010)).

State v. Ledbetter, 275 Conn. 534 (2005).


United States v. Amaral, 488 F.2d 1148 (9th Cir. 1973).


BIографical Sketch

STEVEN PENROD

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John Jay College of Criminal Justice webpage: http://tinyurl.com/spenrod
New York, NY 10019-1199 Office: 212-237-8877

EDUCATION
PhD - Harvard University, 1979 Dissertation advisor: Reid Hastie
J.D. - Harvard Law School, 1974 3rd Year Paper Advisor: Charles Fried

ACADEMIC/PROFESSIONAL APPOINTMENTS (highlights)
2001- Distinguished Professor of Psychology, John Jay College of Criminal Justice, CUNY
1999-2000 - Gallup Professor, University of Nebraska
1995-2001 - Director of Law and Psychology Program, University of Nebraska
1995-2001 - Professor of Psychology & Professor of Law, University of Nebraska
1991-1995 - Director, Conflict and Change Center, University of Minnesota
1988-1996 - Professor of Law, University of Minnesota
1988 - Professor of Psychology, University of Wisconsin
1985-1988 - Associate Professor of Psychology, University of Wisconsin
1985 - Visiting Professor of Law, Indiana University
1983 - Visiting Professor of Law, University of Wisconsin
1979-1985 - Assistant Professor of Psychology, University of Wisconsin
1975-1979 - Research/Teaching Asst--Psychology, Harvard University
1971-1973 - Legal Officer in Naval Judge Advocate General Corps

MOST RELEVANT PUBLICATIONS (available at http://tinyurl.com/spenrod pwd=rdp)

RELATED PUBLICATIONS
SYNERGISTIC ACTIVITIES
1. The PI is on eight editorial boards, is Past-President of the American Psychology-Law Society, and has been action editor for *Psychology, Public Policy and Law* and *Psychology, Crime and Law*.

2. The PI's research and expert testimony played a significant role in the New Jersey *Henderson* hearings and is widely cited in the *Henderson* decision.

3. The PI's prior NSF-supported research features prominently in a series of a half-dozen recent continuing education presentations on eyewitness research for the courts of New York state.

4. The PI's prior NSF-supported research contributed to the development of amicus briefs in *Perry, Walker, Lawson, Kumho* and other cases.


COLLABORATORS AND CO-EDITORS
John Jay College: James Doyle, Jennifer Dysart, Michelle Galietta, Rafaele Dumas, Margaret Kovera, Jennifer Dysart.

Other Institutions: Wendy Alberts (Leiden), Brian Bornstein (U of NE), Ken Deffenbacher (U of NE-Omaha), Lisa Chrzanowski, Maithilee Pathak-Sharma, Kelly Smith, & Christina Studebaker (private practice), Larry Heuer & A. Katan (Barnard), Clive Hollin (Leicester), Brad McAuliff (CA St-Northridge), Kiernan McGorty (U of NE), Kevin O'Neil (FL Gulf Coast), Jen Robbennolt (U of IL-law), Nancy Steblay (Augsburg), Dennis Stolle (attorney), Peter Van Koppen (NISCALE), Jennifer Groscup (Claremont), Kaoru Kurosawa (Toyo U), Lori Van Wallendael (UNC-C), Jennifer Devenport (W-Wash), Brian Cutler (Ontario Tech), Gary Wells (Iowa St), Amina Memon (U of London), James Doyle (attorney-Boston), Barry Rosenfeld (Fordham)

GRADUATE ADVISORS AND POSTDOCTORAL SPONSORS
Dissertation Committee: Reid Hastie (Chicago), Thomas Pettigrew (UC-Santa Cruz), Charles Judd (Colorado), and Charles Nesson (Harvard Law)

THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR

### SUMMARY PROPOSAL BUDGET

**ORGANIZATION**

CUNY John Jay College of Criminal Justice

**PROPOSAL NO.**

**AWARD NO.**

**PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR**

Steven D Penrod

**DURATION (months)**

Proposed

**DATE CHECKED**

**FOR NSF USE ONLY**

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**SUMMARY**

**PROPOSAL BUDGET**

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**Date of Rate Sheet Initials - ORG**

**ORG. REP. NAME**

*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET*

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### A. SENIOR PERSONNEL: PI/PD, Co-PI/s, Faculty and Other Senior Associates

- **Number in brackets**

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- **Total Senior Personnel (1 - 6)**

| Total Senior Personnel | 7,778 |

**B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)**

1. **POST DOCTORAL SCHOLARS**

| Post Doctoral Scholars | 0.00 | 0.00 | 0.00 | 0 |

2. **OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)**

| Other Professionals | 0.00 | 0.00 | 0.00 | 0 |

3. **GRADUATE STUDENTS**

| Graduate Students | 0.00 | 0.00 | 0.00 | 0 |

4. **UNDERGRADUATE STUDENTS**

| Undergraduate Students | 0.00 | 0.00 | 0.00 | 0 |

5. **SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)**

| Secretarial - Clerical | 0.00 | 0.00 | 0.00 | 0 |

6. **OTHER**

| Other | 0.00 | 0.00 | 0.00 | 0 |

**Total Salaries and Wages (A + B)**

| Total Salaries and Wages | 42,378 |

**C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)**

| Fringe Benefits | 6,535 |

**Total Salaries, Wages and Fringe Benefits (A + B + C)**

| Total Salaries, Wages and Fringe Benefits | 48,913 |

**D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)**

| Equipment | 0 |

**Total Equipment**

| Total Equipment | 0 |

**E. TRAVEL**

1. **DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)**

| Domestic Travel | 600 |

2. **FOREIGN**

| Foreign Travel | 0 |

**F. PARTICIPANT SUPPORT COSTS**

1. **STIPENDS**

| Stipend | 0 |

2. **TRAVEL**

| Travel | 0 |

3. **SUBSISTENCE**

| Subsistence | 0 |

4. **OTHER**

| Other | 0 |

**Total Number of Participants**

| Total Number of Participants | 400 |

**Total Participant Costs**

| Total Participant Costs | 0 |

**G. OTHER DIRECT COSTS**

1. **MATERIALS AND SUPPLIES**

| Materials and Supplies | 2,998 |

2. **PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION**

| Publication Costs | 0 |

3. **CONSULTANT SERVICES**

| Consultant Services | 1,700 |

4. **COMPUTER SERVICES**

| Computer Services | 0 |

5. **SUBAWARDS**

| Subawards | 0 |

6. **OTHER**

| Other | 11,150 |

**Total Other Direct Costs**

| Total Other Direct Costs | 15,848 |

**H. TOTAL DIRECT COSTS (A THROUGH G)**

| Total Direct Costs | 65,361 |

**I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)**

- **Personnel and Fringe (Rate: 69.5000, Base: 48913)**

| Personnel and Fringe (F&A) | 33,995 |

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| Total Indirect Costs (F&A) | 33,995 |

**J. TOTAL DIRECT AND INDIRECT COSTS (H + I)**

| Total Direct and Indirect Costs | 99,356 |

**K. RESIDUAL FUNDS**

| Residual Funds | 0 |

**L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)**

| Amount of Request | 99,356 |

**M. COST SHARING PROPOSED LEVEL $**

| Cost Sharing Proposed Level | 0 |

**AGREED LEVEL IF DIFFERENT $**

| Agreed Level | 0 |

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**PI/PD NAME**

Steven D Penrod

**FOR NSF USE ONLY**

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Date Checked | Date Of Rate Sheet | Initials - ORG
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<th>A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)</th>
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<tr>
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<td>4. COMPUTER SERVICES</td>
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<tr>
<td>5. SUBAWARDS</td>
</tr>
<tr>
<td>6. OTHER</td>
</tr>
<tr>
<td>TOTAL OTHER DIRECT COSTS</td>
</tr>
<tr>
<td>H. TOTAL DIRECT COSTS (A THROUGH G)</td>
</tr>
<tr>
<td>I. INDIRECT COSTS (F&amp;A)(SPECIFY RATE AND BASE)</td>
</tr>
<tr>
<td>personnel and fringe (Rate: 69.5000, Base: 48913)</td>
</tr>
<tr>
<td>TOTAL INDIRECT COSTS (F&amp;A)</td>
</tr>
<tr>
<td>J. TOTAL DIRECT AND INDIRECT COSTS (H + I)</td>
</tr>
<tr>
<td>K. RESIDUAL FUNDS</td>
</tr>
<tr>
<td>L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)</td>
</tr>
<tr>
<td>M. COST SHARING PROPOSED LEVEL $</td>
</tr>
<tr>
<td>AGREED LEVEL IF DIFFERENT $</td>
</tr>
</tbody>
</table>
### CUNY John Jay College of Criminal Justice

#### Steven D Penrod - Professor

<table>
<thead>
<tr>
<th>A. SENIOR PERSONNEL: PI/PD, Co-PI’s, Faculty and Other Senior Associates</th>
<th>CAL</th>
<th>ACAD</th>
<th>SUMR</th>
<th>Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven D Penrod - Professor</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>15,556</td>
</tr>
<tr>
<td>2.</td>
<td></td>
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<td>3.</td>
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<tr>
<td>5.</td>
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</tr>
<tr>
<td>6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>7. ( 1 ) TOTAL SENIOR PERSONNEL (1 - 6)</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>15,556</td>
</tr>
</tbody>
</table>

#### B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)

| 1. ( 0 ) POST DOCTORAL SCHOLARS | 0.00 | 0.00 | 0.00 | 0 |
| 2. ( 0 ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) | 0.00 | 0.00 | 0.00 | 0 |
| 3. ( 4 ) GRADUATE STUDENTS | | | | 64,000 |
| 4. ( 2 ) UNDERGRADUATE STUDENTS | | | | 5,200 |
| 5. ( 0 ) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) | | | | 0 |
| 6. ( 0 ) OTHER | | | | 0 |
| TOTAL SALARIES AND WAGES (A + B) | | | | 84,756 |

#### C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)

| 1. STIPENDS | $ | 0 |
| 2. TRAVEL | | 0 |
| 3. SUBSISTENCE | | 0 |
| 4. OTHER | | 0 |
| TOTAL NUMBER OF PARTICIPANTS | ( 800 ) | | |
| TOTAL PARTICIPANT COSTS | | | 0 |

#### D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)

| TOTAL EQUIPMENT | 0 |
| F. PARTICIPANT SUPPORT COSTS |
| 1. STIPENDS | $ | 0 |
| 2. TRAVEL | | 0 |
| 3. SUBSISTENCE | | 0 |
| 4. OTHER | | 0 |
| TOTAL NUMBER OF PARTICIPANTS | ( 800 ) | | |
| TOTAL PARTICIPANT COSTS | | | 0 |

#### G. OTHER DIRECT COSTS

| 1. MATERIALS AND SUPPLIES | 3,246 |
| 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION | 0 |
| 3. CONSULTANT SERVICES | 1,700 |
| 4. COMPUTER SERVICES | 0 |
| 5. SUBAWARDS | 0 |
| 6. OTHER | 22,300 |
| TOTAL OTHER DIRECT COSTS | | 27,246 |

#### H. TOTAL DIRECT COSTS (A THROUGH G)

| 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) | 126,272 |

#### I. INDIRECT COSTS (F&A)

| TOTAL INDIRECT COSTS (F&A) | 67,990 |

#### J. TOTAL DIRECT AND INDIRECT COSTS (H + I)

| 194,262 |

#### K. RESIDUAL FUNDS

| 0 |

#### L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)

| 194,262 |

#### M. COST SHARING PROPOSED LEVEL $ 0 AGREED LEVEL IF DIFFERENT $

## FOR NSF USE ONLY

<table>
<thead>
<tr>
<th>PI/PD NAME</th>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven D Penrod</td>
<td></td>
</tr>
</tbody>
</table>

## INDIRECT COST RATE VERIFICATION

<table>
<thead>
<tr>
<th>ORG. REP. NAME*</th>
<th>Date Checked</th>
<th>Date Of Rate Sheet</th>
<th>Initials - ORG</th>
</tr>
</thead>
</table>

*C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET
Budget Justification

**Personnel:**

1) Senior personnel: The PI has half month of budgeted summer salary

2) Graduate and undergraduate students: Under the supervision of the senior personnel, two part-time doctoral level graduate students will assist in conducting the research for 19 hours/week
   One undergraduate will work 5 hours/week for $10/hour

3) Fringe benefits on personnel: The fringe benefit rates on personnel costs for the foreseeable future at CUNY are as follows. The fringe benefit rates on summer salary for faculty are 28.9% and on part-time students is 9.5%. The fringe per year for the undergraduate student is also 9.5%

All travel will be to academic conferences (such as the American Psychology-Law Society) to disseminate the results of the proposed research.

**Other Direct Costs:**

**Materials & Supplies:**

1) 1 Computer and Monitor – for video editing (PI will also use equipment currently available at John Jay) e.g. i7-based Acer Veriton X4618G-U17260W Compact Desktop – Black ($770 at Amazon) and HD monitor-$170

2) Software – data-analytic and video-editing software are available to the PI

3) Video cameras -- Two high definition SD-card based digital video cameras for recording trial and jury deliberations (which we will endeavor to run in pairs) -- an example of this equipment is Samsung HMX-H100 HD Flash Memory Camcorder ($420 at Amazon)

3) Video Projector for showing participants the trial – with usb-flash/SD drive capability e.g. Epson EX3210 SVGA 3LCD-- $470 at Amazon

4) 2 Terabyte Hard Drive for storage of raw footage ($200): A drive will be required to store the raw footage for the mock trial videos and deliberations for later analysis

5) SD cards ($300): SD cards will be used to record the original trail materials and the final versions of the video trials for viewing by the participants. We estimate the need for 20 16-GB SD disks to encompass trial conditions. They are approximately $15 each in bulk.

6) Photocopies: Photocopies of dependent measures will be required. The materials will be approximately 20 pages long, and there will be 620 participants for a total of $360 in photocopying costs (20 pages x 360 x .04 = $496).

Participants: We will need to compensate community member participants all studies for their participation time (up to 3 hours including deliberation). The average cost will be $40 for each community member participant (520 x $40 = $20,800). For 100 pretest participants at 1 hour= $1500

Actors: $1700 is budgeted for actors for the videotaped trial

**Indirect Costs:**

At an indirect cost rate of 69.5% as negotiated by CUNY and as applied to the total personnel and fringe benefit cost.
### Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

<table>
<thead>
<tr>
<th>Investigator: Steven Penrod</th>
<th>Other agencies (including NSF) to which this proposal has been/will be submitted.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support: □ Current □ Pending □ Submission Planned in Near Future □ *Transfer of Support</td>
<td></td>
</tr>
<tr>
<td>Project/Proposal Title: Issue-specific jury instructions in eyewitness cases: Are they more effective than traditional safeguards?</td>
<td></td>
</tr>
</tbody>
</table>

Source of Support: NSF  
Total Award Amount: $ 120,998  
Total Award Period Covered: 07/15/12 - 07/14/15  
Location of Project: John Jay College of Criminal Justice  
Person-Months Per Year Committed to the Project: Cal: 0.00  
Acad: 0.00  
Sumr: 0.50

| Support: □ Current □ Pending □ Submission Planned in Near Future □ *Transfer of Support |
| Project/Proposal Title: |

Source of Support:  
Total Award Amount: $  
Total Award Period Covered:  
Location of Project:  
Person-Months Per Year Committed to the Project: Cal:  
Acad:  
Sumr:  

| Support: □ Current □ Pending □ Submission Planned in Near Future □ *Transfer of Support |
| Project/Proposal Title: |

Source of Support:  
Total Award Amount: $  
Total Award Period Covered:  
Location of Project:  
Person-Months Per Year Committed to the Project: Cal:  
Acad:  
Sumr:  

| Support: □ Current □ Pending □ Submission Planned in Near Future □ *Transfer of Support |
| Project/Proposal Title: |

Source of Support:  
Total Award Amount: $  
Total Award Period Covered:  
Location of Project:  
Person-Months Per Year Committed to the Project: Cal:  
Acad:  
Sumr:  

| Support: □ Current □ Pending □ Submission Planned in Near Future □ *Transfer of Support |
| Project/Proposal Title: |

Source of Support:  
Total Award Amount: $  
Total Award Period Covered:  
Location of Project:  
Person-Months Per Year Committed to the Project: Cal:  
Acad:  
Sumr:  

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.*
FACILITIES, EQUIPMENT & OTHER RESOURCES

FACILITIES: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. USE additional pages as necessary.

Laboratory: Sufficient laboratory facilities are available to the PI at John Jay.

Clinical:

Animal:

Computer: One computer is available to the PI for this project--a second, more capable (for video-editing) computer will be purchased. Both will be used for coding of jury deliberations.

Office: Office space will be provided for the PI at John Jay.

Other:

MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of each.

Video editing via computer (see above), videocameras budgeted for recording deliberations, flash-memory based projector for showing trial is budgeted--all will be housed at John Jay.

OTHER RESOURCES: Provide any information describing the other resources available for the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.
Supplement 1: Data Management Plan

In the proposed program of research, anonymity and confidentiality will be assured. Data will be stored in a locked filing cabinet in our research laboratory to which only members of the research team will have access. All data will be stored by participant number and no personally identifying information will be maintained with the data files. In addition, all data will be stored digitally on the computer in our research laboratory that is available only to the research staff. Data will be coded and entered into SPSS data files using a common file format, with a good description of the variables. In addition, for 10-years following the publication of these findings, the data set will be made available for archiving as a public use data set with the National Archive of Criminal Justice Data at the University of Michigan, using their specifications indicated at icpsr.umich.edu. This information regarding the site of the data will be indicated in all publications that result from this research. Finally, to foster accountability and replication of research findings, the stimuli used in this research will be available upon request to the Principal Investigator. This too will be indicated in all publications that result from this research.