CASE NO. CRIM 24552 1 SUPREME COURT OF THE STATE OF CALIFORNIA 2 3 THE PEOPLE OF THE STATE ) 4 OF CALIFORNIA, 5 PLAINTIFF, SUPERIOR COURT 6 NO. CR-72787 -VS-MOTIONS 7 KEVIN COOPER, 8 DEFENDANT. 9 APPEAL FROM THE SUPERIOR COURT OF SAN DIEGO COUNTY 10 HONORABLE RICHARD C. GARNER, JUDGE PRESIDING 11 12 REPORTERS' TRANSCRIPT ON APPEAL 13 14 **APPEARANCES:** FOR PLAINTIFF-RESPONDENT: HON. JOHN D. VAN DE KAMP 15 ATTORNEY GENERAL DEPARTMENT OF JUSTICE 16 110 WEST "A" STREET SUITE 600 17 SAN DIEGO, CA 92101 18 IN PROPRIA PERSONA FOR DEFENDANT-APPELLANT: 19 20 21 REPORTED BY: LEONARD D. GUNN C.S.R. NO. 1109 22 AND JUDITH L. MORRIS 23 C.S.R. NO. 2400 OFFICIAL REPORTERS 24 25

VOLUME

PAGES 1625 THROUGH 1670

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1	SUPERIOR COURT OF THE STATE OF CALIFORNIA	
2	FOR THE COUNTY OF SAN BERNARDINO	
3		
4	THE PEOPLE OF THE STATE OF CALIFORNIA,	
5	Plaintiff,	
6	vs.	NO. OCR-9319 CR-72787
7	KEVIN COOPER,	VOLUME 20
8	Defendant.	Pgs. 1625 thru 1670, inc.
9		
10		
11	REPORTERS' DAILY TRANSCRIPT	
12	BEFORE HONORABLE RICHARD C. GARNER, JUDGE	
13	DEPARTMENT 10 - SAN BERNARDINO, CALIFORNIA	
14	Thursday, Ma	ly 3, 1984
15	APPEARANCES:	:
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19		Deputy District Attorney
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21	]	By: DAVID NEGUS Deputy Public Defender
22		LEONARD D. GUNN
23	Keported 211	official Reporter
24		UDITH L. MORRIS
~~		
25		official Reporter
26		

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SAN BERNARDINO, CALIFORNIA, THURSDAY, MAY 3, 1984; 9:30 A.M.

DEPARTMENT NO. 10 HON. RICHARD C. GARNER, JUDGE

APPEARANCES:

The Defendant with his Counsel, DAVID

NEGUS, Deputy Public Defender of San

Bernardino County; DENNIS KOTTMEIER,

District Attorney of San Bernardino

County, and JOHN P. KOCHIS, Deputy

District Attorney of San Bernardino

County, representing the People of

the State of California.

(Leonard D. Gunn, C.S.R., Official Reporter, C-1109,

Judith L. Morris, C.S.R., Official Reporter, C-2400.)

THE COURT: Good morning. People versus Kevin Cooper.

Both counsel are present, Mr. Kochis and Mr. Negus, and Mr. Cooper.

Mr. Kochis, you were going to have another witness for us today.

MR. KOCHIS: Yes, your Honor. We would call at this time Dr. Robert Sparkes.

ROBERT S. SPARKES, called as a witness by and on behalf of the People, was duly sworn, examined and testified as follows:

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THE CLERK: You do solemnly swear that the testimony you are about to give in the matter now pending before this Court shall be the truth, the whole truth and nothing but the truth, so help you God?

THE WITNESS: I do.

THE CLERK: Be seated, please.

State your full name and spell the last name, please.

THE WITNESS: Robert S. Sparkes, S-p-a-r-k-e-s.

MR. KOCHIS: May I proceed, your Honor?

THE COURT: Yes, sir.

## DIRECT EXAMINATION

## BY MR. KOCHIS:

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- Q Doctor, what is your current occupation or profession?
- 15 A I'm a professor at U.C.L.A.
  - O In which department?
  - A I'm in the department -- several departments. My primary department is in internal medicine. .
    - Q Are you licensed to practice medicine in the state of California?
  - A Yes, I am.
- 22 Q How long have you been so licensed?
- A I think it has been about 1963. I would have to check
  my records to be sure of that. It has been several
  years.
- 26 Q I take it to become a doctor, you, at one time, attended

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and graduated from college?
1
        That's correct.
2
        What was your major in college?
3
    Α
        Biology.
        When did you graduate from medical school?
        1956.
    Α
        After you graduated from medical school, did you perform
7
        an internship?
8
        I did.
    A
9
        In which particular field in the field of medicine?
10
        At that time, it was general internal medicine.
11
        And did you likewise do a residency?
        Yes. I had two years of residency training in internal
13
        medicine.
        After you completed that, did you receive a fellowship?
15
        I took two years of fellowship training in medical
16
        genetics.
17
        And since that time, is it fair to say that you have
18
        been employed continuously in the field of medicine?
19
        Yes. Primarily in medical genetics.
20
        Approximately how long have you been teaching or involved
21
        in the teaching process at the medical school at
22
        U.C.L.A?
23
        I started at U.C.L.A. in 1964 and initiated my teaching
24
        responsibilities at that time, and these have continued.
25
        Have you written any articles which have been accepted
26
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for publication in the field of genetics?
1
        Yes, I have:
2
        Directing your attention to an exhibit which has been
3
        marked for identification as Exhibit K-12, does that
        appear to be a Xerox copy of your current curriculum
5
        vitae?
6
        Yes, it does.
7
        Within that document, have you reflected a number of
8
        the articles you have written in the field of genetics
9
        which have been accepted for publication?
10
        Yes.
    Α
11
        And in terms of published articles, have you been
12
        published in the neighborhood of 239 times?
13
        That's correct.
        Have you likewise authored chapters in books and books
15
        themselves?
16
        Yes, I have.
    Α
17
        Are those books and titles reflected in your vitae as
18
        well?
19
        Yes, they are.
20
        Now, is serology a topic that's related to the practice
21
        of medicine?
22
        Yes, it is.
23
    Α
        And in your particular field in the field of genetics,
24
        do you use any of the body fluids in your study of
25
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genetics?

26

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Yes, we do.
            1
                   Would one of those body fluids that you use be blood?
1-5
           2
                   Yes.
           3
                   Within your community, is the concept of the ABO blood
                   group system accepted?
           5
                   Yes.
           6
                   And does that concept essentially hold that, putting
            7
                   aside some rare types, that all human beings have a
           8
                   particular ABO blood type in their system?
           9
                   Yes.
           10
                   Are there essentially four ABO blood types?
           11
                   Yes.
           12
                   Could you tell us what they are?
           13
                   A, B, AB and O.
           14
                   And is it recognized within your community that these
           15
                   ABO blood types are inherited genetically from our
           16
                   forefathers?
           17
                   Yes.
           18
                   Do they remain constant throughout the life of a
           19
                   particular person?
           20
                   Yes.
           21
                   Likewise, are there techniques that are accepted in
           22
                   your community as valid and reliable methods for testing
           23
                   a sample of whole blood to determine the ABO blood
           24
                   group type of that whole blood?
```

26

Yes.

Now that I have touched upon two particular terms,

Doctor, those terms being "reliability" and "validity",

do those terms have any meaning in the medical context?

A Yes.

- Q Is it possible for you to define for us laymen what the term "validity" means in the medical context?
- A Validity generally will mean that in terms of a concept or finding, that these have been checked very carefully by one's peers and have been found accepted.

An example, as part of the publication of such findings, there is a process that one goes through and then, with further experience, they are also evaluated and validated.

If they are not validated, of course, they are no longer accepted.

- Q Likewise, is it possible for you to give us a laymen's definition of the term of "reliability" as used in medical terms?
- A Reliability in terms of a test is that the test has been proven to be valid and reliable in the sense that it can be repeated and is widely accepted in the given community, medical community.
- Q To your knowledge, is the slide agglutination technique a technique that is an accepted and valid means of analyzing a sample of whole blood to determine a person's ABO blood group type?

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Yes.
        Are there other techniques that can be used?
2
        Yes, there are others such as two tests that can be
3
        used.
        In your duties at U.C.L.A. Medical School, do you oversee
    Q
5
        a laboratory?
6
    A
        Yes.
7
        Is that laboratory involved in blood group typings?
8
        Yes, it does do blood group typing.
9
        Is it involved in blood group typings for paternity
10
        as well as for genetic purposes?
11
              It involves both types of activities.
12
        Is your laboratory involved in paternity testing in
13
        cases in which a determination is later made as to who
14
        the father of a particular child may or may not be?
15
        Yes.
    Α
16
        In addition to the ABO blood group system, are there
17
        other genetic markers that exist in body fluids such as
18
        blood?
19
        Yes, there are.
20
        Are the red cell enzymes and the serum proteins examples
21
        of these types of genetic markers?
22
        Yes.
    Α
23
        Likewise, does your community accept the concept that
24
        these various serum proteins and red cell enzymes exist
25
```

in the blood of all human beings?

That's correct. And does your community also accept the fact that a 2 person's enzyme type or serum protein type is inherited 3 genetically from their parents? Yes. 5 And absent transfusions and bone marrow transplants, 6 does your community accept the fact that a person's 7 enzyme types and serum protein types should remain 8 constant throughout their life? Yes. Α 10 Are there methods that are accepted as valid and 11 reliable means to determine the various enzyme types 12 of a sample of whole blood, for example? 13 Yes, there are. 14 Α And is the electrophoretic method recognized as such a 15 method? 16 Yes. 17 A Do you use electrophoresis in your laboratory at the 18 medical school at U.C.L.A? 19 Yes, we do. 20 Ά And you do that, for example, to determine what the 21 particular EsD and PGM enzyme types are of a particular 22 sample of blood? 23 Yes.

What type of medium do you use in your laboratory when

you conduct your electrophoretic run?

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A The support medium that we use is called starch gel.

Q Is that the only gel that's used by serologists throughout the world to conduct an electrophoretic run of those types of enzymes?

- A No. There are other support mediums that other laboratories will use.
- Q Are you familiar with agarose gel?
- 8 A Yes.

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- Q Is agarose gel accepted within the community of serologists as a gel which is proper to use in an electrophoretic run to determine these various enzyme and protein types?
- 13 A Yes.
- 14 Q Are you familiar with the term "gradient acrylamide gel"?
- 15 A Yes.
- 16 Q To your knowledge, is it used by other laboratories as
  a medium in an electrophoretic run to determine the
  haptogloben type?
- 19 A Yes.
- 20 Q Is there a concept in the field of serology that's recognized called secretor versus nonsecretor?
- 22 A Yes.
- Q Eventually, what is involved with a person who happens to be a secretor?
- 25 A Secretor refers to the presence of antigens that are found, for example, on the red blood cells like ABO

and also can be found in a soluble form in fluids such as saliva.

- Q And semen?
- A And semen.
- Q And then would a nonsecretor typically be a person who does not secrete their antigens in their other body fluids such as saliva?
- g A Yes.

- 9 Q Are you familiar with the term "the Lewis blood group 10 system"?
- 11 A Yes.
- 12 Q And within your field, is it recognized that there is
  13 a relationship between a certain Lewis blood group type
  14 and whether or not that person will secrete their ABO
  15 antigens in their body fluids?
- 16 A Yes, there is.
- 17 Q Are there likewise tests that are recognized in your
  18 community as valid and reliable means of testing a
  19 sample of whole blood to determine a person's Lewis
  20 blood group type?
- 21 A Yes.
- Q Does your laboratory also conduct electrophoretic
  analysis of whole blood to determine the EAP, ADA and AK
  enzyme types?
- 25 A Yes.
- 26 Q Do you also conduct electrophoretic analysis of whole

blood samples to determine the serum protein and 1 transferrin and G6 serum protein types? 2 Yes. 3 How long has your laboratory been using electrophoresis as a method of analyzing samples of whole blood to 5 determine the various enzyme types? I believe we initiated our studies in about 1968. 7 So approximately over 15 years? Yes. And you have been involved in the laboratory since that 10 time? 11 Yes. Α 12 And in your experience in overseeing the laboratory, in 13 your opinion is electrophoresis, in particular the use 14 of a starch gel medium, a valid and reliable technique 15 to use on whole blood to determine the enzyme types of 16 that whole blood? 17 18 Yes. Likewise, do you have any experience in the use of the 19 electrophoretic technique on a drop of blood which dries, 20 which is typically referred to as a bloodstain, to 21 determine the enzyme types and serum protein types? 22 We have had only limited experience in the somewhat 23 distant past with that. Currently, almost all our

work is with fresh blood samples.

The experience in the distant past was approximately

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in 1974 with Aerospace Industries and Bechtel? 1 Yes, it was primarily with Aerospace. We were not 2 interacting with Bechtel at the time. 3 At approximately that time, were you contacted by Aerospace to give them some assistance in setting up a 5 bloodstain analysis system? That's correct. A 7 Did you in fact help them set up their electrophoretic 8 techniques to analyze blood stains? Yes. 10 Α Do you recall what type of medium you were using at that 11 time that you set Aerospace up to use? 12 By that I mean the type of gel. 13 Yes. The starch gel support medium. 14 Is that the system that you set them up with? 15 Q Initially, yes. 16 Now, within your community, have there been studies 17 done to determine the frequency with which a particular 18 ABO blood group type exists in a given population? 19 Yes. 20 Likewise, have there been studies done to determine 21 the frequency with which a particular enzyme type, for 22 example, PGM<sub>1</sub> 2-1, exists in a given population? 23 Yes. 24 Α In the course of your field, are records regularly kept 25

of those studies?

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Yes, they are, and many of these have been published. Likewise, is there a procedure that is often used to determine the frequency with which a particular genetic profile may exist in a given population? A Yes. (No omissions) 

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- Q Are there any of the enzyme types, the ones that we've discussed this morning, including for example the haptoglobin, are they in any way related or determined by a person's ABO blood group type?
- A They appear to be independent.
- 6 Q Is there any literature that indicates AK may be an exception to that?
  - A Not in a general population sense, though within a family it's possible that certain types of ABO and AK may go together. But in unrelated individuals they are quite independent of the other.
  - Q Is one of the methods that is used to determine the frequency with which a particular genetic profile exists in a given population simply to take the frequency of occurrence of each of the gene types -- excuse me, each of the enzyme and serum protein types, and multiply them together to get a frequency for the entire genetic profile occurring?
  - A Yes. This is a technique that we are not personally involved with because of the nature of our own work, but it's my understanding that there are mathematical formulas that can accomplish that.
  - Returning for a moment to bloodstains and the use of electrophoresis to determine enzyme and serum protein types of a bloodstain, once the bloodstain is put in a solution and placed on the gel medium on the plate, is

the electrophoretic technique essentially the same to analyze a bloodstain as it is a sample of whole blood? 2 That is my understanding, and based upon the work with 3 Aerospace, yes. Thank you. I have no further questions, 5 MR. KOCHIS: 6 Your Honor. Mr. Negus. THE COURT: 7 8 CROSS-EXAMINATION 9 BY MR. NEGUS: 10 Is salivary amylase likewise a polymorphic enzyme? 11 Yes, it is. 12 Can the various phenotypes of salivary enzyme -- of the, 13 excuse me -- can the various phenotypes of salivary 14 amylase be distinguished electrophoretically? 15 Our own experience has been in the study of blood samples 16 Α looking at that particular enzyme, and with that 17 technique, yes. 18 And is that a reliable method of distinguishing 19 Q 20 phenotypes? 21 Yes, it is. Α Have you done any work with the typing of salivary 22 Q amylase in saliva? 23

26

We have not.

Yes.

Are you aware of others who have?

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Α

Q In the scientific community is electrophoresis accepted as a reliable means of typing the different phenotypes of salivary amylase from saliva?

- A That I cannot comment. I don't know, since we are ourselves don't work with saliva, so all I have is essentially hearsay information.
- 7 Q What do you hear in your scientific community?
- 8 A That it is accepted.
  - Q The connection you mentioned between AK and ABO, that connection is called a linkage?
  - A That is correct.
- 12 Q And what is a linkage?
  - A It gets fairly technical, but let me try to simplify it for you. All the genes that we have are located on what we call chromosomes, and chromosomes can be distinguished. In normal humans there are 46 chromosomes.

When we talk about linkage, we're talking about two genes that are close together on the same chromosome. So linkage refers to -- such as in the AK and the ABO indicates that these two genes are relatively close to each other on the same chromosome.

O So that there exists a probability that when you get one of your -- for example, your mother's two alleles of AK, you'll be getting the -- ABO, you'll be getting the AK allele which exists on the same side of the chromosome because of their proximity?

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That's correct, yes.
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- That fact, however, does it have any effect upon the independence of AK and ABO in the entire world population?
- It's my understanding it does not.
- And why is that?
  - Because these traits are separate genetic traits, and they can separate through a process called crossing over. And if one looks at unrelated individuals, there should not be any particular relation between what we call the specific allelic types on the same chromosome.

MR. NEGUS: Nothing further.

MR. KOCHIS: No redirect.

THE COURT: Doctor, thank you very much.

THE WITNESS: Thank you.

THE COURT: You are excused.

Mr. Kochis, any further witnesses?

MR. KOCHIS: No, Your Honor. I would move into evidence at this time the remaining exhibit, which I believe has been marked for this hearing as K-12. And with that, we have no further evidence to present and we would rest.

THE COURT: On this issue?

MR. KOCHIS: On this issue.

THE COURT: Mr. Negus?

MR. NEGUS: I have no evidence on this issue other than that which has already been presented.

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 THE COURT: Counsel, I have not received prior to argument any Points and Authorities. Have you prepared any?

MR. NEGUS: My office now has a system in the West End where you have to take turns, and you have to put your name in to get things typed. My written document that I wish to submit to the Court is being typed at the present time, and it will be ready no later than noon.

MR. KOCHIS: Your Honor, I'm going to be relying in terms of a legal argument essentially on the California Supreme Court case of <a href="People vs. Kelly">People vs. Kelly</a>, which I believe the Court has --

THE COURT: I've read it.

MR. KOCHIS: -- and the rules that are established in that case. It's my understanding -- and Mr. Negus can correct me if I'm wrong -- that he's not going to be submitting Points and Authorities in opposition to this particular concept. He's going to have a list for the Court of findings of fact and conclusions of law which he wishes this Court to make. My understanding is it may be lengthy. It may be five to ten typewritten pages.

I'm not sure that the Court is required to make any such findings on a <a href="Kelly-Frye">Kelly-Frye</a> hearing in a case such as this. And I'm not sure what I'm going to be doing this afternoon when I get Mr. Negus's list, if I'm going to be prepared to proceed. I hope to read it and argue against it, or if there are any areas I can agree on, but it doesn't

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appear that he's going to be submitting Points and Authorities in opposition to at least the testimony of the witnesses, other than Mr. Gregonis, who have testified. And I don't think at this point he's contesting any longer the acceptance in the scientific community of the use of electrophoresis to determine enzyme and serum protein types.

MR. NEGUS: I think the factual issues which exist in the case and which the Court's going to have to rule on is what are the techniques that are in fact reliable and what are the ones that aren't. Some of the techniques that Mr. Gregonis articulated may be reliable. I believe a couple of them are not, according to the testimony of Mr. Wraxall and Dr. Sensabaugh. And some of them are reliable only if certain conditions are met. So my findings are really just with respect to requested findings about what's reliable and what's not based upon the evidence.

As the testimony was that each and every one of the tests that is done has a separate indicia of reliability as does each and every marker -- that is, some markers are reliable, some aren't; some markers are reliable in some circumstances, some aren't -- I felt that it was more helpful in presenting my argument to have it all written than to try and do it orally.

THE COURT: So what you'd like at this point would be to break it to some point this afternoon to give you a chance to get those Points and Authorities in?

MR. NEGUS: Right.

THE COURT: And for Mr. Kochis and I to review them.

MR. NEGUS: Right. I have a couple of matters that don't relate to the <u>Kelly-Frye</u> motion, which won't take very long, but which I nonetheless would like to bring to the Court's attention before we leave.

THE COURT: Why don't we take that. Then we'll break until, say, two o'clock and resume. That will give us both a chance to study it.

MR. NEGUS: As soon as the typist is finished with them, I'll bring them over to both of you.

THE COURT: What new matters would you like to take up?

MR. NEGUS: Neither of these are of great weight in terms of the outcome of the case, but one of them matters a lot to Mr. Cooper. I mentioned earlier to the Court that Mr. Cooper, when he was arrested in Los Angeles, that his glasses were not taken and preserved at that point in time. Mr. Forbush has arranged for an optometrist who would be willing to go out to the jail to examine Mr. Cooper and to provide him with a prescription for the glasses and to have those glasses prepared. Mr. Cooper has friends who are willing to pay for that, so it's not going to cost the county.

So what I'm requesting is an order to the sheriff to allow a Dr. Bernard Rubin, who has done this work before, he apparently did it for Mr. Diaz --

THE COURT: Did you prepare an order?

MR. NEGUS: The order is being typed. It's in the same priority. But I do have an order that's being prepared. Just in case the sheriff has any problems with that, I'd like to just let them know that I'm bringing that up again.

MR. KOCHIS: Your Honor, I think we would like a short period of time to check Mr. Rubin out. As the Court recalls, the last time we had the order signed for the person who was going to cut Mr. Cooper's hair, there were some problems with his background in terms of being a guest himself at the county jail at one time.

THE COURT: Give Detective Arthur any detailed information you have about the doctor and let's take it up then at two o'clock.

MR. NEGUS: Fine. The other thing I'd like to request, Your Honor, is this: I have a handwritten list of photograph numbers that I am requesting that the Court purchase from the sheriff's department for use in the <u>Hitch</u> motion. Apparently Mr. Kochis and I both have copies that we use all the time of various photographs of the crime scene. During the Preliminary Hearing we were in a situation of refreshing witnesses' recollection and that sort of thing by showing our copies of the photographs to various witnesses. That doesn't leave a very clear record, because there's nothing left in the Court's file --

THE COURT: Haven't we got exhibits marked individually

- residence

MR. NEGUS: These photographs, I believe -- these photographs were never introduced into evidence at the Preliminary Hearing. That's the problem we had with them. We were just showing them each other's books, referring to them by number, but not introducing them into evidence, because we didn't have extra copies.

My understanding is that the sheriff's office wants the Court to pay for them rather than the sheriff's office. So I believe that there's a lot of them, and all I'm asking for is three-by-five photographs. But nobody else is willing to provide the photographs, so I request the Court to do it.

THE COURT: Do you see a similar need, Mr. Kochis?

MR. KCCHIS: I think the record's unclear as to what took place at the prelim in some aspects, because Mr. Negus would show a witness a photograph and that photograph was never marked and entered into evidence.

The problem the sheriff's office is having is they made a copy for their master file, they made a copy for Mr. Negus, they made a copy for my office. And they feel that they're being put to some steps that they're ordinarily not required to do, and it seems like every time they turn around they're required to make an entire new set. They're concerned about the effort they're having to spend on this case making four or five copies.

THE COURT: I can't conceive of doing a similar thing

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at the time of trial. Every tangible document shown to a witness is going to be marked for identification.

MR. NEGUS: I agree. That's why I wanted to have copies we can have marked. I can't continue --

MR. KOCHIS: Your Honor, there's no problem with that, but that enhances the nature of the problem. They likewise have prepared for us a series of photographs that are going to be used during the trial. Those photographs don't all cover the areas that Mr. Negus is interested in having covered on the Hitch issue, because the issues are much different.

THE COURT: Does the list that you have then prepared take into consideration the list that they have already prepared copies of?

MR. NEGUS: My understanding was that they don't wish to use any of the photographs that they're going to use at the trial for the Hitch motion. Therefore, I went through my notebooks and picked out the photographs that I believe -- there's a lot of them, but I believe that they'll all probably be reasonably likely to have to be referred to during the course of the Hitch motion. And the sheriff charges an exorbitant sum for each of their little three-by-I'm perfectly willing to take their negatives and go down and have them done for one-eighth the price, but that may cause them other problems.

THE COURT: It appears it will be necessarily for us

to have the additional prints. My pocket is a little deeper than the sheriff's pocket. It comes out of the same fund.

But I suppose for budgetary reasons -- is that your position,

Detective Arthur?

DETECTIVE ARTHUR: Yes.

THE COURT: Will you give us a cut rate? I'll order the sheriff's department to produce the exhibits indicated by Mr. Negus, and you can charge it to the Court.

MR. NEGUS: I believe I gave a copy to Mr. Kochis.
MR. KOCHIS: He has.

MR. NEGUS: I believe I did, and I can find a copy for Detective Arthur. That's I believe all of the matters I had at the present time.

THE COURT: Let's adjourn, then, until the hour of 2 p.m. this afternoon. As soon as your papers are received, would the clerk put it back on my desk.

If the students would like to chat informally with the Court back in chambers, the bailiff will show you down around through the corridor, and I'll be happy to see you informally back in chambers, if you wish.

Court will be in adjournment.

(Whereupon a recess was taken from 10:57 a.m. until 2 p.m of the same day.)

SAN BERNARDINO, CALIFORNIA, THURSDAY, MAY 3, 1984; 2:00 P.M.

DEPARTMENT NO. 10 HON. RICHARD C. GARNER, JUDGE

(APPEARANCES AS HERETOFORE NOTED)

THE COURT: All right. We are once again assembled. Since I saw you last, Mr. Negus, I have received your document entitled, "Defendant's Proposed Findings
Regarding Reliability of Serological Evidence".

I'm not sure which is the best way to proceed. I would think that you would go first, Mr. Negus.

Is that all right, Mr. Kochis, if he wishes to be heard on the motion?

MR. KOCHIS: Do I?

THE COURT: If Mr. Negus goes first.

MR. KOCHIS: I have no objection to him starting.

THE COURT: Would you care to be heard, sir?

MR. NEGUS: Yes. What I have done with the proposed findings regarding the reliability of serological evidence, your Honor, is essentially summarize the testimony of the various prosecution witnesses with respect to the different techniques that we have been using.

I think it's pretty clear from Mr. Gregonis' testimony, from all the people's testimony, that each individual test has to rise and fall on its own merits. You can't put them all together in a bunch.

Mr. Gregonis testified to that effect on page 1105,

and through the literature it's clear that when each additional test for each additional marker comes up, it's retested. Some may be reliable and some may not. Some may be accepted and some may be rejected.

That poses the problem of how does one look at these.

And in particular there are no cases, as I have indicated

before, on it, on the admissibility in California courts of
any of these various markers.

In some situations, the Court has just looked to the literature to determine whether or not they are reliable.

In this particular case, we haven't been presented with very much of the literature, and, as the District Attorneys Association has argued in the past, they argued essentially the same thing I'm arguing at a case called.

People v. Brown, which was argued in the Supreme Court at the beginning of last month, that a Court can't really look to just the literature in the abstract to determine the reliability of these particular techniques because it's too technical and you need the experts to tell you which techniques are reliable and which ones aren't.

And I think that that's basically the kind of testimony that we had in this particular case.

There are three different classifications that I would like to make of the various tests. I would submit that with respect to one test, that is the test for transferrin, that although there was no evidence presented

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that if certain precautions were followed, it's not

As <u>People v. Kelly</u> said, California adopts a very conservative approach to scientific evidence. You have got to show both that something is reliable and something is accepted in the scientific community, which are not necessarily exactly the same.

In the <u>Kelly</u> case, the prosecution was arguing for a test which had been adopted in various federal jurisdictions that all you have to do is prove reliability.

But that general test was not accepted by Kelly-Frye, and the reason was they pointed out that scientific evidence can almost take on an aura of mystic infallibility, so that in California we want to wait a bit, make sure, not introduce that kind of overwhelmingly powerful evidence until it has had a chance to stand the test of time.

The testimony about transferrin was that the basic techniques have never been -- that were used for bloodstains -- have not been in fact published anywhere in an actual published form. They have been presented in papers to some groups of criminalists.

Of the prosecution witnesses outside the field of forensic science, Dr. Sparkes does transferrin using a different technique. Dr. Morris didn't do transferrin

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Of the people that testified within, Mr. Wraxall, the developer of the technique, thought it was reliable. So did Dr. Sensabaugh.

But they both conceded that it was basically a new technique which hadn't gained general -- I'll take it back. They conceded it was a new technique, and Dr. Sensabaugh even conceded that in a chapter he wrote as recently as three years ago which the prosecution introduced as Exhibit K-10-B. He had mitted that from those lists of markers that had gained general acceptance.

So if it has gained general acceptance, it's only in the last few years, and I would submit that it hasn't been published. And it was testified that it was not widely used.

Even if there is evidence, it's pareliable. hasn't gained general acceptance yet.

If you rule against me on that, the second group of tests, the ones which basically Mr. Gregonis testified to, was -- In this particular hearing, he described, you know, what types of tests he did work on as to determining a nonsecretor status.

He indicated that he used the absorption inhibition test, and that test alone, to determine nonsecretor status.

Both Mr. Wraxall and Dr. Sensabaugh said that that doesn't prove what Mr. Gregonis claimed it did.

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So with respect to that issue, that is, can you prove nonsecretor status using the absorption inhibition test, both of the prosecution experts said you can

Now, they said you can prove secretor status using it, but as Dr. Sensabaugh explained and Mr. Wraxall indicated, that's not the same thing.

So basically, Mr. Gregonis' proposed method has not gained general acceptance, and, in fact, it was explicitly rejected by the two prosecution witnesses who testified on the subject.

So with respect to nonsecretor status, I would say Mr. Gregonis is flat-out wrong. The techniques that he's suggested don't show what he thought they did.

With respect to the other techniques that are involved, and that is which are involved in the bulk of what I did as far as outline as far as the proposed findings of fact are concerned, the prosecution under Kelly and under Shirley has the burden of proving general acceptance.

As the District Attorneys Association in the past has argued, what technique you are talking about, again, determines whether or not it's reliable. So that in trying to get a handle on what is reliable and what is not, what technique we are talking about, it looks like you have to be fairly clear in what your definitions are.

There are some parts of it which may just go to weight rather than to admissibility. For example, you will





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note that there was a lot of testimony about not using the cooling system properly, not using proper staining techniques, a bunch of things, bunch of technical procedures which, if you mess them up, you can get unreliable results.

But I did not include those techniques in my proposed findings of fact because the way the testimony came out, it appeared that failure to do that would come up in the next part of the motion that we get to, if we get that far.

The third prong, as it were, of the Kelly-Frye standard, were reliable tests performed in a satisfactory manner in this particular case.

The evidence that we have had thus far did not get to that particular issue, and I would concede that those particular standards are not part of the definition of what makes a reliable test, that goes to weight rather than admissibility.

But with respect to those things which I did put into the proposed findings, I would submit that they are part of the definition of what constitutes a reliably run method.

There are some of the things that have to do with the controls that you use, and it's clear from the testimony that if you don't use proper controls, you don't know whether your results are accurate or not.

So basically, the prosecution didn't do a heck of a

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lot in trying to find what the tests are.

Exhibit K-1, I would submit, defines -- that I had Mr. Gregonis prepare -- defines the test that we are talking about to a limited degree, and all of the witnesses commented upon Exhibit K-1 in the course of their testimony afterwards.

So we know at least that's the test they are talking about.

who had experience in the forensic context, they both indicated that in order for those tests to be reliable, part of that test was to use noncontrolled and, in certain cases, negative controls as proper standards.

So I think that the first part of that which applies to all the different tests is shown by the evidence to be part of the test. If you don't have that, you don't have a test finding that's reliable.

Similarly, when you get down to the enzymes, the rules that they indicated have to be followed in order for the interpretation to be reliable, if your test is involved in a technique which doesn't follow those results, then you are not using the technique that they said was reliable.

Those rules are part of the definition of the technique, and in order for the prosecution to fulfill and carry their burden of proof of showing them reliable, those sort of essential conditions to reliability which the

experts testified to, and if you omit those from your definition of your technique, you are not dealing with the same technique that they testified about.

Finally, the definition I have included under the minimum standards that are required for the operator could be argued, and I expect Mr. Kochis will try to argue that that goes to Mr. Gregonis' qualifications as an expert.

(No omissions)

activation analysis.

But I would submit that -- which we'll take up in a month or so. But I would submit that they are in fact an essential part of the reliability of the technique, because if you recall the testimony of Dr. Sensabaugh, he indicated that the different methodologies require a different level of scientific sophistication in order to carry them out. That is to say, you can't have a person who is barely

Similarly, there's a minimum standard that the techniques require just in order to make them work right in serology. And what I spelled out in the finding of facts is what Dr. Sensabaugh testified to was that minimum level.

qualified to run gas chromatographs running a neutron

On a couple of issues, Dr. Sensabaugh and Mr.

Wraxall varied slightly in their testimony. The one that
comes to mind is Dr. Sensabaugh indicated that three
different standards were required for the acid phosphatase
to be run reliably. Mr. Wraxall was willing to get by with
two. In the findings of fact I included Dr. Sensabaugh's
description rather than Mr. Wraxall's. The reason for that
is again, we're dealing with a conservative standard, and a
standard that the courts have deliberately designed to be
conservative. So that if the Prosecution's experts don't
agree, I would submit that it's the more rigorous standard
which both Mr. Wraxall and Dr. Sensabaugh can agree on,
and that's the one that the evidence in this particular case

shows to be accepted in the scientific community.

In ruling on this motion, the Court is basically just going on the eleven or whatever it was exhibits and the testimony of the five witnesses that were presented. Based on that record, I would submit that the findings which I have submitted to the Court are justified.

THE COURT: All right. Thank you.

Mr. Kochis.

MR. KOCHIS: Your Honor, first of all Mr. Negus cites no case as authority to this Court for the proposition that this Court is required to make specific findings of fact and conclusions of law. I think the Kelly case, specifically at Page 30, sets out what is required. It's simply required that the proponent of the evidence, in this case the Prosecution, make a preliminary showing of a general acceptance of the new technique within the scientific community.

We have to show essentially three things: The reliability of the method must be established, and Kelly says we must establish that through expert testimony; second, the witness who furnishes an opinion must be qualified as an expert to give an opinion on the subject; and third, we must demonstrate that the correct scientific procedures were employed in this particular case.

I don't think Mr. Negus has argued on or is in a position to argue that the five witnesses who testified in this hearing were not experts. If you look at the vitaes of

Mr. Sparks, Dr. Sensabaugh, the testimony of Dr. Morris, Mr. Wraxall, and Mr. Gregonis, they're all experts within the definition of the Evidence Code who were qualified to give an opinion.

On Monday, April the 23rd, in Ontario, Mr. Negus articulated the burden that he was going to put the Court to, put the Prosecution to, and I believe it was on Page 1067. I had it set out, and I seem to have misplaced it.

It's on 1047, and it's Lines 11 through 25. He asked us to lay the <u>Kelly-Frye</u> foundation for electrophoresis as to the various serum proteins and enzymes which are depicted on K-1. He asked us to lay a <u>Kelly-Frye</u> foundation for Lewis typing of blood, for the test Mr. Gregonis performed, to determine whether or not someone is a secretor or a non-secretor when you analyze body fluids such as semen and saliva; also with respect to determining amylase in saliva stains.

Within that Mr. Negus made a request for a <u>Kelly-Frye</u> foundation for certain things, for example, isoelectric focusing with PGM subtypes. We did not introduce that type of evidence, because our expert did not perform those types of results, and I won't talk about those.

I don't think there's any quarrel within the

Preliminary Hearing foundation that's required by Kelly that
all the experts agree that not only in the community of

forensic scientists -- which Mr. Wraxall, Dr. Sensabaugh,

and Mr. Gregonis practiced in -- but in the field of medicine, the use of an electrophoretic technique is accepted in those communities as a valid and reliable means of typing whole blood to determine enzyme and serum protein types; bloodstains as well. They all agreed as to the techniques to type whole blood to determine ABO status, the slide agglutin technique, the absorption-elution and Lattes test on stains.

Mr. Gregonis testified about the Lattes test that he performed. He talked about the significance of someone being a particular Lewis type, and a microcapillary tube test that is performed to determine a particular Lewis type.

Mr. Wraxall testified that that's accepted in the community as a valid and reliable means of determining someone's Lewis type, as did Dr. Sensabaugh.

I disagree with Mr. Negus's interpretation of the evidence as to transferring and absorption-elution -- absorption-inhibition on the stains. Both Dr. Sensabaugh and Mr. Wraxall testified that transferrin is a serum protein that is tested on electrophoretic run using the same technique that has been developed to test the other enzyme types for years. We know that Dr. Sparks in the field of medicine has been using electrophoresis for over 15 years, and we know that Mr. Wraxall started working on electrophoresis in London sometime in the mid-60's, a period of 20 years.

They have testified that they have added transferrin

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to the group that can be reliably typed, and I believe
Mr. Wraxall testified that the work that Dr. Sensabaugh has
done, and his own work, indicates that transferrin can be
reliably typed using electrophoresis.

Likewise with the absorption-inhibition on Page 1286, Lines 21 through 26, the question was asked of Mr. Wraxall: And within your community of forensic serology is the absorption-inhibition test an acceptable means, a valid and reliable means, to determine -- to test the type of body fluids you just mentioned, saliva and semen, to determine if someone is a secretor or not? Answer: Yes, it is.

Mr. Gregonis testified in the same fashion. It's our position, Your Honor, that many of the factors Mr. Negus has set for the Court in this seven-page document are items that go to the weight a trier of fact, in this case a jury, should give to the testimony, not whether or not on a foundational ground it should be admissible.

The purpose of this hearing was simply to present evidence to the Court that these techniques have received acceptance in the scientific community, to allow us to call the experts to testify at the trial, to allow them to be subject to cross-examination, to allow Mr. Negus to call any witness, any expert witness he may have in opposition, and then allow the trier of fact, the jury, to make a determination as to what weight if any they're going to give this type of evidence.

required us to meet on April the 23rd we have met within the definition of Kelly-Frye by the five witnesses that we've called. I would also point out that if you take examples of what Mr. Negus would have the Court do, specifically his document, for example on Page 4 of the document, Lines 22 and 23, he would request the Court to make a finding that for each marker typing, calls should be made only if -- and then for an example turning to Page 5, Line 6 -- with the EsD, the bands are not diffused. And he cites as authority for that, or as a reference for that, Dr. Sensabaugh's testimony on Page 1527.

And the testimony consists of this: Question: And if they become diffused, then it's considered then not readable? Answer: If it's too diffuse, many analysts would not consider it readable.

There's nothing in that exchange that indicates that there's a rule that must be followed before you can make the call or that there are a group of analysts who agree that you can never make a call unless that rule is followed. It's a very vague statement, and Mr. Negus has pulled from that what he chooses the Court to adopt and submitted it in writing.

It's our position that the Court is not required to make that type of finding.

THE COURT: What type of order would you desire for

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me to make?

MR. KOCHIS: Your Honor, with respect to electrophoresis, to the use of the technique, the multisystem that appears on K-1, the use of electrophoresis to test PGM, EsD, ADA, EAP, AK, peptidase A, CA II, the use of the acrylamide gel, and electrophoresis to test for haptoglobin --

THE COURT: Excuse me, Mr. Kochis.

MR. KOCHIS: Yes.

THE COURT: Is there any opinion testimony from Mr. Gregonis which you would withdraw for purposes of lack of foundation that was brought out by the evidence?

MR. KOCHIS: No.

THE COURT: All right. Thank you.

Mr. Negus, do you wish to respond?

MR. NEGUS: With respect to the test for nonsecretor status, the question that Mr. Kochis asked Mr.
Wraxall was ambiguous, because the absorption-inhibition
test, according to his testimony, can be used to determine
secretor status. But in order to determine non-secretor
status, one has to do more for both semen and for saliva.

The same ambiguity existed in his questions with respect to Dr. Sensabaugh. They both explicity stated that in order to determine non-secretor status absorption-inhibition test alone is not reliable. Mr. Gregonis not only was mistaken as to the general sensitivity levels of amylase versus red cell antigens and saliva and testified to the

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contrary to testimony of Dr. Sensabaugh and Mr. Wraxall on that, but he also indicated that in his mind the absorption-inhibition method alone was enough to determine non-secretor status. He was wrong.

Mr. Kochis used some sort of preliminary finding as if there were some lesser standard that he had to prove as it were in a Preliminary Hearing from Kelly, and he cited Page 30. I am unable to find that particular language that he's quoting in Kelly.

They talk about a two-stage process. The reliability of the method must be established and the witness furnishing such testimony must be qualified as an expert to give an opinion. Those are the two things that we are -- ah. Mr. Kochis points out -- let me just go on. Let me just finish up and I'll get back to what Mr. Kochis pointed out.

A two-stage process is what we've done so far. We did not get to this third additionally because if you'll note from the proposed motion order, we haven't reached that particular stage yet.

The preliminary showing that Mr. Kochis has required doesn't say anything about a lesser standard of proof. He's got to prove general acceptance of the new technique in the relevant scientific community. The problem in this particular case that you're dealing with is how precisely do you have to define the technique? Some of the cases have just gone into voice prints in general. But as <u>Huntington vs.</u>

Crowley, from which the language from Mr. Kochis makes clear not all blood tests are alike, and Huntington vs. Crowley specifically says that even though ABO maybe acceptable, other particular antigens may not have met that level of acceptability. And they reject it in Huntington vs. Crowley, the use of the antigen for just that reason. are reliable, some aren't. In terms of the defining the techniques, some techniques are reliable, some aren't. You need experts to tell you exactly what techniques are reliable.

Mr. Gregonis is not able to articulate that well what the standards are that you have to use, what the definition of the technique is. The experts that no more about it, Mr. Wraxall and Dr. Sensabaugh, did articulate what those standards are.

Again, in making those particular statements that I did, I have taken the most rigorous statements that they made. The reason for that is that when they say some analysts think you can get by with less, some analysts think you can get by with more, it stands to reason that the more rigorous is the one that's generally accepted in the scientific community, the less rigorous if some accept it and some don't is not generally accepted. And that seems to be just a very easy concept to understand.

If you're dealing with general acceptance, the most rigorous is reliable; the things where people disagree is not reliable. And if we were dealing with the Federal standards,

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Mr. Kochis may well have fulfilled his burdens. But California rejected those general standards. They took the test of general acceptance. General acceptance is what's most vigorously accepted by everybody, and that's what I've tried to define as precisely as I could in the findings.

I would also request that I don't believe that for the purposes of the <u>Hitch</u> motion that the precise techniques which would be required in order to make them accurate are particularly relevant, but there was also testimony that G6PD, haptoglobin, GLO, and PGM subtyping can be reliably done using certain techniques.

(No omissions.)

also to make findings along with it that under using some techniques those can be reliably done.

THE COURT: Give me about 10 or 15 minutes. I will call you back.

factor at the Hitch motion. And I would request the Court

That, I think, is going to be the only relevant

We will be in recess.

(Whereupon a brief recess was taken.)

THE COURT: All right. We are all assembled.

With respect to the requested findings, I decline to endorse an abstract judicial manual of approved serology techniques and a laundry list of do's and don'ts for criminalists.

Mr. Negus, with all respect, I find your proposed findings to be on precise evidentiary facts in minuteness of detail some arguable as opposed to ultimate facts. But it's sufficient that the findings are of ultimate facts.

I do find that all the contested serological techniques or methods employed here have reached the requisite degree of general acceptance in the pertinent scientific communities. And, further, that the reliability and validity of the testing methods, as the terms have been generally defined by the testimony, have been established, and that the prosecution has carried their burden in that regard.

Secondly, while it's not necessary to that finding,

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I do find that Dan Gregonis was and is qualified to render an expert opinion regarding the judgment of scholars and experts on the question of acceptance within the general scientific community, which opinion is buttressed, of course, by the other experts who have testified on this issue.

Your point referring to Mr. Kochis' remarks about the weight of the evidence I think would be better made to the ultimate trier of fact through cross-examination and direct examination and ultimate argument.

Mr. Kochis, do you, as a proponent of the evidence, desire more specific findings?

MR. KOCHIS: No.

THE COURT: Then I think that's as far as I need or should go in that regard.

I assume that you are both ready to resume next  $\ensuremath{\mathsf{Monday}}$  .

MR. KOCHIS: Your Honor, you are apparently going to be unavailable next Monday.

THE COURT: I keep forgetting my own vacation.

The following Monday.

MR. KOCHIS: May the 14th, we are.

THE COURT: The 14th of May. Then we will resume at 9:30 on that day.

MR. NEGUS: Before we go, the requested order for the eye examination for glasses.

MR. KOCHIS: Sergeant Arthur informed me that the

jail has no objection to the doctor whose name Mr. Negus mentioned this morning conducting the examination.

THE COURT: Then if I may see your order?

All right. I signed the order. Hopefully, that will accomplish the desired result.

Your proposed findings is ordered to be marked and filed and maintained in the file in the case.

Did you have something else?

MR. NEGUS: I just wanted to inform the Court that just so we don't have any problems, that I'm requesting — and I believe there is no opposition — that the testimony and exhibits that were taken on this motion be deemed to be part of the next motion we are going to hear, the Hitch motion, and also the motion which I'm going to request after that, that the prosecution be required to prove that Mr. Gregonis used the proper techniques in this particular case.

THE COURT: So stipulated?

MR. KOCHIS: Yes. I might add it's refreshing to find out we can use the testimony of this hearing and not have to call everybody back again.

THE COURT: I hope that's what he means.

MR. KOCHIS: That's what I mean, your Honor. And my position has been all along that the reason that you can't use the preliminary hearing is because there are issues of credibility and you can't do that on a transcript.

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Once you have heard it, I don't see any reason to reduplicate it over and over again. THE COURT: All right. The stipulation is accepted and approved. You may make reference to those transcripts

MR. NEGUS: Thank you.

THE COURT: May 14. Enjoy your break.

(Whereupon the proceedings taken and had

on this date were adjourned.)

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hereafter.