you're excused. You may step down from the witness stand.
(Witness excused.)
THE COURT: The People may call the next witness.

MR. ALEXIS: Mary Shenouda.
MARY SHENOUDA, a witness called on behalf of the People, after having been first duly sworn by the Clerk of the Court, was examined and testified as follows:

Tha Crenk: Try to silde up to the
microphone.
State your name, please.
THE WITNESS: Mary Shenouda, S-H-E-N-O-U-D-A.

THE COURT: You may examine the witness, Mr.
Alexis.
MR. ALEXIS: Thank you.
DIRECT-EXAMINATION
BY MR. ALEXIS:
Q Good morning. Good afternoon, rather.
A Good afternoon.
Q Where do you work?
A Office of the Chief Medical Examiner.
Q What do you do at the Office of the Chief Medical

Examiner?
A I am a forensic analyst.
Q What do you do as a forensic analyst in the Office of the Chief Medical Examiner?

A I try to identify any body fluids in the physical evidence, and analyze evidence in the homicide cases.

Q Now, I'd like to ask you about case, lab number FB951349. Are you familiar with that lab number?

A Yes, sir.
O Ant who peragmod we Leses with ragpect to rotat Lab nuinuer?

A I did.
Q Now, I'm gonna ask you about those tests, but before I do I'd like to ask you a few questions about yourself.

Can you describe where you went to school and what you studied in school?

A I have Bachelor Degree in pharmacy and chemistry from University of Cairo, Egypt. And I am the director and supervisor of the forensic biology lab in the Medical Examiner's Office.

Q And how long have you worked for the Medical Examiner's Office?

A Eleven years.

Q And can you tell us some of the things that you've done in the Medical Examiner's Office over the 11 years that you've worked there?

A Excuse me?

Q What have you done for those 11 years in the M.E.'s Office?

A I working doing forensic analyses.

Q Have you ever testified in a court before?
A Yes, sir.

0 Have You ever been mantfied as an expert whon
you Lestified in court?

A Yes, sir.

Q What courts have you testified?

A The five part. Brooklyn, Queen, Manhattan, Bronx, Staten Island, and Connecticut.

Q What have you been qualified to testify to?

A Forensic expert.
MR. AIEXIS: I'd like to move that Miss Shenouda be qualified as an expert in forensic biology and forensic analysis.

THE COURT: Any objection?

MR. CHAIKIN: No, your Honor.

MR. BIRKETT: No, your Honor.

MR. GREEN: No, your Honor.

MR. ARONOWSKY: No.
MR. COHEN: No.
THE COURT: I rule this witness is in an expert in forensic analyses... and what was the other?

MR. ALEXIS: Forensic biology.
THE COURT: So she'll be permitted to answer questions in this field.

You may proceed.
you did?
A In general?
Q Yes.
A I first of all, I tried to examine, I received too many vouchers. And I tried to examine each voucher separately. And I open each voucher and I examine each item separately.

Q Now, first let's talk about voucher GG189186. Did you examine any items under this voucher number?

A Yes, sir.
Q Now, I'd like to show you what we'll deem People's 17 for identification, and I'd like to ask you whether or not you recognize People's 17?

Ma' am, you could just open that bag.

THE COURT: The officer's getting the scissors.

Q I'm sorry, I didn't realize the officer was getting the scissors.

A First of all this bag, I seal. it by myself. There's my reference, and I put this tag by myself. And this label too, with the case number.

MR. ARONOWSKY: I'm sorry, I didn't hear that.

Whermpen whe mponter wead back ub anet
answer.)
A Here in this bag, when I started to examine it I put the case number, my initial, the date when $I$ examine it, and I wrote this bag number two. I give each bag number.

Q Let's check inside. And do you recognize all of these things as being your handwriting?

A Yes.
You wanted me to take item by item?
Q You don't have to; you could just look through the bag if you don't have to take them item by item.

Perhaps to be thorough we will do item by item.
A This is a boot. I have one pair of boots. I put this tag in it with my initial, the case number, the date
when I examine it and I give each boot number. I give each number; this one $I$ have $6 B$ and this one $I$ put $6 A$. This means item number 6 from this voucher.

THE COURT: The question is, what is this that you are looking at? What are these items?

Q Are these clothes that you performed tests on? Did you perform tests on the items that are in this bag?

A Yes.
Q And you recognize these clothes as being the जhehes wht you pet Eome? tome an?

A res.
Q Who are these clothes attributed to?
MR. ARONOWSKY: Objection.
THE COURT: Where did these clothes come from? Where did you get them from?

THE WITNESS: I got them from the police officer. In our lab.

MR. ALEXIS: I offer them as People's 17.
MR. ARONOWSKY: Could I have some questions on voir dire?

THE COURT: Certainly.
VOIR DIRE EXAMINATION
BY MR. ARONOWSKY:
Q You received these clothes from where?

A The police officer who bring for us these items.
Q Do you know the name of that police officer?
A Maybe. One minute.
I can't read the name.

MR. ARONOWSKY: I'm sorry, I didn't hear.
(Whereupon the reporter read back the last answer.)

THE COURT: Why don't you have a seat, ma'am?

Please excuse us.
I'll see counsel at sidebar.
(Discussion held off the record.)
THE COURT: All right. Again, I thank you for your patience.

If you have any other questions you'd like to ask on voir dire, Mr. Aronowsky, you're free to do so.

MR. ARONOWSKY: I'm objecting to this.
THE COURT: I will overrule the objection. I'll allow this exhibit to be marked People's 17.

If I allow something into evidence, I'm merely ruling that you may decide what weight, if any, you want to give this evidence.

So, mark this People's 17.
A.N.
(Whereupon People's Exhibit 17 was received in evidence.)

Q Now, can you tell us what tests you performed on these items of clothing?

A First of all, you know, I look at each item separately and by visual eyes.

THE COURT: You have to speak in the mike.
A I look for each item separately by visual eyes. If I see any stain resembling the blood, I tried to

soiution, like water, and I swab this stain from, for example, from the shoes. I can't cut it, so I will swab and take some of the stain off, then I put this stain in this solution. If the color change from colors to pinkish in color, this mean blood was present in this item.

After that I want to know if this blood is human blood or not human blood. So we run another test, I make Agrose gel and I punch two hole in the agrose gel. I put in one of the hole extraction from the stain I have it from this item. In the other hole I have solution only, see if it's human blood present, and I run electrical current through.

A Sorry, you run current?
A Yeah, electrical current.
Q Let me just interrupt you, I'm sorry.

You said gel. What type of gel did you use?
A Agrose. If it was positive, I found in the half moon shape in between these two hole. This mean human blood.

Q And was human blood found on that item?
A Yes, sir.
Q Did you do any additional tests after you realized that human blood was found on that item?

A This depend in how much of the stain I have and
 stain, I go more further anaiysis and I go for something called genetic marker.

Genetic marker is inherited marker found in each one of us and we take it from our parent. So we use this test to differentiate between two source of blood. And this genetic marker include enzymes like $P G M$ and $A C P$ or $A B O$ from blood.

Q Did you do the genetic marker tests on these items?

A Yes, sir.
Q What were the results of the tests that you did?
A In the jeans pants from this item I found the stain is not consisting with the victim type. In the white Starter shirt I found.

Q White Starter shirt?
A Yes. I found stain number $4 \mathrm{~A}-1$ is consistent with the victim's type. And brown jacket is not consistent with the victim type.

Q Would it be fair to say this item has the blood from at least two people on it?

A Exactly.
Q Now, you said that --
A Or more.
a !"mot?

A Yes.
Q Now, you said that you were able to determine that there was blood on the starter shirt that was consistent with the victim. How did you know what the victim's genetic marker indicators were?

A We received blood from the autopsy, liquid blood in tube, and we make it stain in piece of paper and we keep it in our lab. When we we receive any physical evidence connecting with this victim, we cut pieces and we run it for genetic marker, and from that we know what type this victim is.

Q What were the results of the genetic marker tests that you ran on the blood that you got from the autopsy?

A PGM type $1+$, ACP type $B$.

Q What is PGM?
A This is enzyme, help to break the sugar in our blood from glucose 1 phosphate to glucose 6 phosphate.

Q What is ACP?
A This is another type of enzyme help to break the phosphate in our blood.

Q Now, how many groupings are there under PGM? How many different variations are there of PGM types?

A Ten types.
2 And ACP, how may variations of types are thes: of ACP?

A Six.
Q Six?
Now, other than what you've reported to us, did you find anything else on the item under voucher 189816?

A No, sir.
Q I'm sorry?
A No.
Q Let's go to voucher number 189822, which I believe is People's 14 in evidence.

THE COURT: Perhaps it would help if you'd enlighten the jurors as to what voucher number pertains to who?

Q We just talked about Christian Pacheco, yes?

A In 22.

MR. ARONOWSKY: I will stipulate to that.
THE COURT: So there's no confusion, there was testimony from the police officer that this was clothing that was vouchered from Mr. Pacheco.

Q Voucher 189822, from Hector Perez.
A Yes.

Q I believe that's People's..
THE COURT: 14.

21

MR. AnExis: DO we have vinut available,
please?
Q Do you recognize that?
A Yes, sir.
Q And is that another item that you vouchered with respect to this case? I mean not vouchered, I'm sorry; examined with respect to this case?

A Yes, sir.
Q Did you perform any tests on this item?
A Yes, sir.
Q And are the tests that you performed on this item the same as the tests that you just described to us for the clothes of Christian Pacheco?

A Yes, sir.

Q And what were the results of the tests you did on this item?

A I have one stain from this jeans pants consistent with the victim' type. And two stain is not consisting with the victim' type.

Q So would it be fair to say that there are blood from at least two people on this, on this item?

A Yes.
Q One consistent with the victim and one not?
$\therefore \quad$ Us.
$\otimes$ inanks.
Let's go to voucher number 189823. Hector Gonzalez. THE COURT: Number 15.

Q Do you recognize it?
A Yes.
Q Did you examine it?
A Yes.
Q Did you do the same tests on this item as you dic on the two items that you've just testified about?

A Yes.
Q What were the results of that?
A Mos.t of the stain in the jeans pants consistent with the victim' type.

Q Where on the pants were the stains?

A Excuse me?
Q Where on the pants were the stains?
A I have to pick the pants out.
Q Please do.
A I have here some stains here in the right side.
I have here some stain in the left side.
Q Now, ma'am, what do you do with the stains on an item once you find them?

A Excuse me?

A res.
Q Go ahead. I just wanted you to point out to the jury where you found the stains.

A I started from 1A until I finish whatever stain I will cut from items.

Q And did you do the same thing with the olothes that were vouchered under for Hector Perez and for Christian Pacheco?

A Yes:
THE COURT: Let's go over that finding again.

On those jeans, what was your finding regarding the blood stains matching, or consistent with the victim's pattern of

THE WITNESS: It's consistent with the victim.

THE COURT: All of them, some of them? THE WITNESS: Some of them.

Q How many were consistent with the victim?
A Five.
Q How many were not consistent with the victim?
A One.

0 Let' 3 go to Hecton berez. Fow many of ine
stains on Hector Perez's clothes were consibtent with the victim?

A What voucher number?
Q I'm sorry, 189822?
A One consistent with the victim.
Q How many not consistent with the victim?
A Two.
Q Let's go off to, I'm sorry, Christian
Pacheco. Voucher number 189816.

A Yes.
Q How many stains were consistent with the victim?

A One.
Q How many stains were not consistent with the
victim?
A Three.
Q Now let's go to voucher number G189821, the items vouchered from Billy Gerena. We don't have that out here. Did you perform any tests on that?

A Yes.
Q Any blood on that found that was consistent with the victim?

A No.
0 Iot: ge to rowbor number 180925 , the
clothes for Suriel Esteban. I believe that's People's 16. I'd like you to take a look at these, ma'am.

A Do you want me to take the items out?
Q No, just tell me if you recognize them?
A Yes, this is the jeans pants. I cut stains, I put the date, the case number, my initial.

THE COURT: Tell us what you're findings were with regard to the clothing and this voucher.

A In shoes number 1B I have stain consistent with the victim. In the black jeans, two stain is not consistent with the victim. In the black leather jacket most of the stains, when I examine it, $3 B$ and $3 C$ and $3 F$ is not consistent with the victim.
Shenouda - Direct

Q Would it be fair to say that with respect to Mr. Esteban's clothing there's one stain that's consistent with the victim, and other stains which are not?

MR. BIRKETT: Objection.
THE COURT: Overruled.
A Yes.
MR. ALEXIS: No ocher questions.
THE COURT: Then let's take a break.
Don' blsemos the casa. Sentur fos a Couple of minutes, clear your heads. Do some cart wheels, whatever you wanted to do.
(Whereupon the jury exited.)
(Whereupon a recess was taken.)
(Whereupon Scott Harris relieved Alvin Nerlino as the Official Court Reporter.)

## Proceedings

(The defendants entered courtroom. )
THE COURT: Let's go on the record.
Before we resume with the testimony of this witness, $I$ received information that the second alternate juror has a funeral that she wants to go to tomorrow morning. I asked the court officer to inquire.

Apparently, it's her uncle who passed away. She would like to go to both the funeral and to the montery atemond wo beth her family.

She indicated to the officer she would be willing, if $I$ wanted her, to just go to the funeral and come to the court afterwards and not go to the cemetery. And she said that she thought she could be here between 11 and 11:30 in the morning, if that's what we wanted.

She did tell the officer she would prefer if she could go to the cemetery, as well.

MS. RODRIGUEZ: My only problem, our last witness is Dr. Seijo. I have to get her done by the morning.

THE COURT: We all are aware that we are trying to move this along to finish the witness that we have. I think the sticking point is, she's

## Proceedings

the second alternate. All the other jurors involved in this case are still intact. Anything can happen. We do not like to give up jurors unnecessarily.

Under the circumstances, what I would propose is to bring the jury tomorrow, the jurors to come in at 10 o'clock tomorrow morning. Let this juror go to her funeral, then see if we have everyone here. If there's no problems tomorrow, then we'll Aschame that atemate jumot bmomow. That way. we finish the prosecution's case with the jury. And we still have two alternates, which is normally what we have on a case.

MR. BIRKETT: Which one is alternate number 2?

THE COURT: The last one.
MS. RODRIGUEZ: Is that Cammarari?
MR. ALEXIS: The school teacher.
THE COHEN: The Court can reserve decision on this until tomorrow morning.

THE COURT: What I am saying is, if everything runs smoothly, in other words, everyone shows up tomorrow who is supposed to show up, then at that point I will discharge her and we go forward with

## Proceedings

the trial so that we know at that point there's no problem tomorrow. And the odds that we'll get to the second alternate become very remote.

If there is a problem in the morning where someone doesn't show up or some problem in the case, she'll be directed to call in. And we will tell her when to come in. We don't want to do anything without her.

Anyone have a problem about that?
MR Menm: Yo.
THE COURT: No problem. D.A. doesn't have any problem.

MR. BIRKETT: Your Honor, I have no problem with that. Let's see how we are in the morning.

THE COURT: I'll tell the jurors to come in and then tell her to come in after the funeral is over. Let her take care of her personal business.

My other thought is, obviously, after going to a funeral for your uncle with your family, I don't know what frame of mind she's going to be in as far as the case is concerned.

It's asking a lot of a human being to go to a funeral for a relative and come to court and concentrate on a case.

Sheunouda/Cross/Chaikin
Let's bring the jury out and go forward.
Ready for the jury.
COURT OFFICER: Jury entering.
(The jury entered the courtroom.)
COURT CLERK: Both sides waive reading of the roll call?

MR. ALEXIS: Yes.
MR. CHAIKIN: Yes.
MR. COHEN: Yes.
MR, Bratcroky: 7as.
MR. GREEN: Yes.
MR. BIRKETT: Yes.
THE COURT: Mr. Chaikin, you may cross-examine.

MR. CHAIKIN: Thank you, your Honor.
CROSS-EXAMINATION
BY MR. CHAIKIN:
Q. Miss Shenouda, would you tell the jury, professionally speaking now, what the word consistent means?
A. Could come from this person.
Q. Could come from this person.
A. Exactly.
Q. And, correct me if $I$ am mistaken, that that assumes that it also could not come from this person. It might not

## Sheunouda/Cross/Chaikin

come from this person; isn't that correct?
A. Could be.
Q. Could be that it doesn't come from this person. Could be that it does come from this person. Is that correct?
A. Exactly.
Q. Would you tell me, with respect to the possibilities, does the word consistent, as you have used it during the direct examination by the prosecutor, mean more bbety hen mot?

MR. ALEXIS: Objection.
THE COURT: Overruled. You may answer.
A. I can't understand the question.
Q. Does the word consistent, at any time as you used the -- you agree with me, you used the word consistent during your direct examination. You said that certain of the blood samples that you examined were consistent with the sample provided from the deceased; is that correct?
A. Exactly. Yes.
Q. You used the word consistent. Would you tell me if, as you used that word, it meant more likely than not from the deceased?
A. No. I can't say more likely it's not from the deceased. But this is the only blood I have to compare with

## Sheunouda/Cross/Chaikin

the stain what $I$ have. So, I said could be came from the victim or could not come from the victim, of the same person have the same type of the person.
Q. But that's what you meant when you said consistent; is that correct?
A. Exactly. Yes.
Q. Let me speak to you for a moment about the samples under the voucher that ended in the numbers 822 and relating to Hector Perez.

Spew flrally when mard to thume ramplos
it's true, is it not, that you described for the jury a moment ago two general classifications of tests that you did, one for glucose or for blood factors. One for like PGM and one for typing $A B O$; is that correct?
A. We didn't do ABO on the dry blood stain in our lab.
Q. You didn't do it in your lab?
A. No.
Q. But you reported those results; is that correct?
A. No, I didn't say anything about ABO. I said about the enzyme first for glucose. I didn't say anything about ABO. I said about PGM and ACP. Both of them is enzyme.
Q. I may be misunderstanding you.
A. Yes.

## Sheunouda/Cross/Chaikin

Q. Did you not say on direct, or tell me if this is the case, is it not the case that the deceased in this case had B-type blood?
A. For ACP. Not ABO type. ACP type is B. And PGM type is 1 plus. It's completely two different things.
Q. Okay. Now, with respect to the voucher encling in 822, Mr. Perez' clothing, what item of clothing did you examine under that voucher?
A. We receive only one item. Blue jeans, pants.

MR. Chamern may me mes that onntra m
that in evidence?
MR. ALEXIS: Yes, it is.
MR. CHAIKIN: I believe it's 14.
THE COURT: What is it you want?
MR. CHAIKIN: The pants.
THE COURT: Of Mr. Perez?
MR. CHAIKIN: Yes.
THE COURT: 14 in evidence.
MR. CHAIKIN: I would like to see them.
COURT OFFICER: (Handed.)
Q. Is this what you examined under 822?
A. I received this pants. First of all, this pocket from the left leg is missing. Whatever, I sign here. And I put initial for the stain. This is the stain I got.

## Sheunouda/Cross/Chaikin

Whatever is missing from the pant, this is the way I receive it.
Q. Let me just be very clear about this. This is for the record. There is an area of the pants where these pants end, as I'm showing them to you, on the left leg.
A. Yes.
Q. Right? This is how you got them, without any of the pants below them?
A. Yes.
0. An mon man amples tri you pet bran these pants?
A. How many stains you mean?
Q. Yes.
A. I can count it here. Ten stains. And some of the stains I have control area. This mean no blood in this area was found.
Q. They were just stains, dirt, whatever?
A. Yes. But each stain $I$ have to have control area, you know, like unstained area.
Q. Right. Correct me if I am mistaken. Does that mean that of those stains that you did not find -- control A you said?
A. Control area.
Q. Control area.
A. Yes.

## Sheunouda/Cross/Chaikin

Q. Okay. Does that mean that you can make no determination about those areas?
A. No. I make determinations. If the stain is enough to type it for genetic marker, I have the conclusion here. If the stain is not enough for genetic marker, only item of mine, if it's human blood present or not human blood present.
Q. Showing you the pants again, did you have enough of a sample, enough of a stain to get what you needed to report resule?
A. Three stains.
Q. Of those stains, the one to the right, that is only one of them you reported as could be the same type as the deceased; is that correct?
A. Exactly.
Q. I'll give this to you via the court officer. COURT OFFICER: (Handed.)
Q. Would you take a look at those and point out, if you would, for the jury, which stain it is that could be?
A. Stain number 1B-1.
Q. Was that stain -- would you hold that up? That's in the back of the pants?
A. No. This is the front.
Q. I am sorry. It's in the front of the pants on the

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right leg.
A. Yes.
Q. When you cut out the stain, did you cut out only the area with the stain on it?
A. Yes.
Q. You can put those down. Did you receive for testing a blood sample of any sort from that that originated, to your information, from Hector Perez?
A. No.
Q. Sor that is th the to my hat whhot kmowing what

Mr. Perez is, without any analysis on Mr. Perez' blood, in fact, the blood stain $1 B-1$ was it?
A. $1 \mathrm{~B}-1$.
Q. That could have been from Mr. Perez; is that correct?
A. That's why we use consistent with the victim type. This is the only type we receive to compare the unknown stain with the physical evidence.
Q. You just don't know, is it true, whether or not it might also be consistent with Mr. Perez' blood? Is that true?
A. Could be.
Q. Are you familiar with the figures that would indicate the percentages of the population represented by

## Sheunouda/Cross/Chaikin

the types of blood as determined in your tests?
A. Yes, sir.
Q. Okay. With respect to the -- withdrawn. I want to ask you one more thing before that.

With respect to $1 \mathrm{~B}-1$--
A. Stain number 1B-1.
Q. Yes.
A. Yes.
Q. Just with respect to that. Can you tell me or as respect to $1 \mathrm{~B}-1$ under voucher 822?
A. PGM type, inconclusive result. I'm not successful to get the PGM type. But I have the other enzyme type. ACP is consistent with the victim type, which is $B$ type.
Q. And that second figure, the ACP enzyme, with respect to any of these results, is that in any way related to the blood type of a person, as we commonly know it? Is it in any way related to it?
A. I cannot understand the question.
Q. That figure, when you come up with, say, AB --
A. Yes.
Q. Under the ACP type, is that in any way related to what lay people generally think of as blood typing? ABO?
A. It's different than ABO.

## Sheunouda/Cross/Chaikin

Q. I'm asking if it's in any way related to ABO.
A. We did not do ABO.

THE COURT: It's not related then to blood type?

THE WITNESS: Yes. We did not do any test with respect to ABO in our lab.
Q. To your knowledge, no blood typing, the ABO typing, was done on the materials that you received here.
A. Yes.
Q. Can you tell me the percentage of the population and tell me the figure that we are talking about, the population of the world, the United States, whatever, that would be consistent with the results, which, as I understand it, are only the ACP results which come up as BI for $1 \mathrm{~B}-1$ ?
A. You need only the percentage of the population for ACP type B.
Q. That would be consistent?
A. Yes. 54 percent.
Q. 54 percent of the population of the world?
A. No. For New York City. We have data base in our lab. We do it. And according to no race, you know, and we figure out how much as percentage for the group of this type and how much the percentage for the group of this type.
Q. Which group are we talking about for which the

## Sheunouda/Cross/Chaikin

percentage is 54 percent?
A. ACP type B.
Q. 54 percent of what?
A. New York City.
Q. Of New York City?
A. Exactly.
Q. Are you familiar with the population of New York

City?
A. No.

Me. Acexp: mbjection.
THE COURT: Sustained.
MR. CHAIKIN: May I just have one moment?
THE COURT: Certainly.
(A pause in the proceedings.)
MR. CHAIKIN: I have no more questions. Thank you very much.

THE COURT: Mr. Birkett.
MR. BIRKETT: Yes, your Honor. Very briefly.
CROSS-EXAMINATION
BY MR. BIRKETT:
Q. With respect to voucher number 189825 , can you put those items in front of you, please?

MR. BIRKETT: If they can be handed to the witness, please.

THE COURT: That's People's 16.
Q. It's relating to Suriel Esteban. COURT OFFICER: (Handed.)

THE COURT: You want her to take out the clothes? Is that it?

MR. BIRKETT: Please.
THE COURT: Okay. She's got the bag.
Q. We'll start with a pair of black jeans. Can you show the jury, please, where you took the two stains that those stains is consistent with the blood of the victim in this case? Correct?
A. One minute. I will refer to my notes.
Q. Of course.
(A pause in the proceedings.)
A. From the jeans?
Q. From the jeans.

THE COURT: While she's doing that, she indicated stains on the front part of the jeans.
A. No. I find two stains from the jeans. Both the stains is not consistent with the victim type.
Q. Right. Can you take out the jacket now, please? The black leather jacket. If you can show the jury where you took the stains from the jacket, please.

## Shenouda/Cross/Birkett

A. (Indicating.)
Q. Is it fair to say that on all the items of clothing, at least with respect to this voucher, there's a label with your initials and other information on it next to each of the stains you tested?
A. Yes.
Q. Thank you. As to the stains on that black leather jacket, is it correct none of those is consistent with the blood of the victim in this case?
A. res.
Q. Now, lastly, I believe you tested stains from shoes; is that correct?
A. Yes.

MR. BIRKETT: Can those be handed to the witness, please?

COURT OFPICER: (Handed.)
Q. Which shoe has stain 1A?
A. Shoes number 1A.

THE COURT: That's the left boot.
Q. As to that stain, that also is not consistent with the victim's blood, correct?
A. Yes.
Q. Therefore, only the stain from the other shoe is consistent with the victim's blood in this case, correct?
A. Yes.
Q. That's the only stain of all of those we just looked at that's consistent with the victim's blood.
A. Yes.

MR. BIRKETT: Can I have just a second? THE COURT: You have to ask for a minute. MR. BIRKETT: May I have a minute? THE COURT: Yes. (A pause in the proceedings.)
 Thank you.

THE COURT: Mr. Green.
CROSS-EXAMINATION
BY MR. GREEN:
Q. When you say not consistent, it means you have come to a scientific conclusion that the blood is definitely not from the victim; is that correct?
A. Yes.
Q. And with regard to Billy Gerena, voucher ending in 821, you have reached that determination, is that correct, that the blood did not come from the victim?
A. Yes. Only $I$ find one stain. Stain number 11.
Q. That is the only thing that was there?
A. Yes. Not there. This is only stain I typed for

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genetic marker.
THE COURT: That's it?
MR. GREEN: T'hat's it, your Honor.
THE COURT: Mr. Cohen.
MR. COHEN: Thank you, your Honor.
CROSS-EXAMINATION
BY MR. COHEN:
Q. Good afternoon.
A. Good afternoon, sir.
as t umarst ma it, you wallatra that yon hame
performed a PGM analysis and an ACP analysis on various stains; isn't that right?
A. Yes.
Q. As a result of the analysis you performed, you were able to conclude only whether or not blood samples were consistent or inconsistent with each other; is that correct?
A. Yes.
Q. You can't say to a scientific certainty whether or not a blood sample came from a particular source; is that correct?
A. Either I said consistent with the victim or not consistent with the victim. This is the only sentence I used.
Q. You indicated, I think twice on your direct

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examination, that whether the blood is consistent with the victim means that the blood could have come from two or more people; is that correct?
A. If it's not consistent with the victim?
Q. If it is consistent with the victim.
A. No. If it's consistent wi.th the victim, this means have the victim type. If not consistent with the victim, this mean have different type than the victim.
Q. Exactly. Now, are there other tests that could be
 to a scientific certainty whether or not a particular sample came from the victim?
A. Can you repeat again, please, the question?

THE COURT: Is there another test that could be done to narrow down even further whether or not the blood matched the victim's blood?
A. Always we use consistent with or not consistent with in our lab.
Q. That's what your lab does; is that right?
A. Yes.
Q. Are you familiar with DNA analysis?
A. Yes.

MR. ALEXIS: Objection.
A. I heard about. I am not expert in DNA analysis

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testifying.
THE COURT: The objection is overruled. You are familiar with it? THE WITNESS: Yes.

THE COURT: Do you do it in your laboratory? THE WITNESS: Yes.

THE COURT: Go ahead. Next question.
Q. Did you do it in this case?
A. If requested.
never asked that you perform DNA analysis on these items?
MR. ALEXIS: Objection.
THE COURT: Overruled. You may answer.
A. No. According to my knowledge here for this case, they not request to do DNA.
Q. What is involved with DNA analysis that you are aware of?
A. Excuse me?
Q. What is involved with DNA? First, what is DNA?
A. Deoxyribonucleic acid. But I am not expert to testify anymore further for DNA. I didn't do any analysis for DNA. Just this my knowledge.
Q. You have, however, been qualified as an expert to testify in this case on the issue of blood analysis.

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A. Yes, for serologist.
Q. Are you familiar, are you aware that DNA analysis --

MR. ALEXIS: Your Honor, I am going to object to the rest of the questions regarding DNA. The witness has just said she can't answer those questions.

THE COURT: Well, she certainly is not qualified as an expert when it comes to DNA. I don't know what the question is.

But to the extent you are asking her what is involved with DNA testing, I think she's not really the right person to ask such a question.
question, with the court's permission.
THE COURT: As I said, I'm giving you leeway on this, but not in terms that would require expertise in DNA. She's already disclaimed any expert knowledge in that field.
Q. Would it be fair to say that a DNA analysis, if it was performed in this case, could have either resulted in the conclusion that the stains that were tested was blood that came definitely from the deceased?
A. I said I'm not expert for DNA. I don't know how to

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answer this question.
Q. When you analyzed the samples in this case, you couldn't determine the manner in which the blood came to be on those particular items that you examined; is that right? MR. ALEXIS: Objection.

THE COURT: Overruled. You may answer.
You do not know how the blood got there?
A. I can't understand what you want.
Q. You do not know how the blood got on the particular Homb hat you onmmined is hat bither
A. No.
Q. You do not know when the blood got on the particular items that you examined; is that right?
A. No.
Q. You do not know who put the blood on the particular items that you examined; is that right?
A. Yes.
Q. So, you can't say, as you sit here today, whether or not it was more likely than not that the blood samples that tested consistent came from the victim, can you?

MR. ALEXIS: Objection.
THE COURT: Sustained as to the form of the question.

Your testimony is, is it possible it came from

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 the victim? You can't rule it out? THE WITNESS: That's right. THE COURT: You can't say i.t's more likely than not, right? THE WITNESS: Yes.Q. Does that mean that it's equally as possible that those blood samples came from a source other than the victim?

MR. ALEXIS: Objection.
The Cunt: r'il suatain the obpetion.
MR. COHEN: I have no further questions. Thank you.

THE COURT: Mr. Aronowsky?
CROSS-EXAMINATION
BY MR. ARONOWSKY:
Q. Referring to the very first voucher that you dealt with ending in 816, you found one stain, which you have labeled consistent, correct?
A. Yes.
Q. Or could have.
A. Yes.
Q. That's the stain labeled 4A-1, correct?
A. Yes.
Q. That was found on what type of clothing?
A. White Starter shirt.
Q. And with respect to that one stain, what test comes first: PGM first or ACP test?
A. I can't understand.
Q. Which test do you do on a particular stain first, the PGM or the ACP?
A. No. I run both tests in the same time because two different plate running two different machine.
Q. With respect to that particular stain, you received to the PGM, correct?
A. For white Starter shirt.
Q. Right.
A. Yes. Inconclusive result for PGM .
Q. Inconclusive for the PGM. And you had what you consider positive results on the ACP.
A. Yes.
Q. Now, if my memory is correct -- this is Mr. Chaikin. If you do not know that, that's Mr. Chaikin.

When Mr. Chaikin questioned you about this particular area, I think it was your answer that put him within a group, that there was a 54 percent chance of being within that blood category within that enzyme?
A. For ACP type B, yes.

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Q. With regard to voucher 189816, you had one test which you said could be consistent, correct?
A. Yes, one stain.
Q. Which we just talked about. How many other stains did you deal with with regard to that particular voucher? THE COURT: That is the clothing from Mr. Pacheco? MR. ARONOWSKY: Right. 189816 .
A. I had jeans pants.
a. an pon give me a total muber? How many stabs total?
A. For the whole voucher, sir?
Q. For all of 189816 .
A. Fifteen stains.
Q. You have stains which you have categorized in varjous groups. You have the stains which are listed under a group, could have originated, correct?
A. Could come from the victim.
Q. With regard to this particular voucher, you have one stain in that column, correct?
A. Yes.
Q. Then you have a grouping which could have originated from foreign source number 1, correct?
A. Yes.

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Q. With respect to this particular voucher, am I accurate when I say there are one, two, three, four, five, six, seven, eight, nine, ten, eleven stains that could have originated from foreign source number 1 ?
A. One minute.
(A pause in the proceedings.)
A. Exactly. Yes.
Q. You also have a grouping called foreign source number 3; is that correct?
A. res.
Q. And there are stains within this particular voucher that also could possibly have come from foreign source number 3 , correct?
A. Yes.
Q. If my counting is correct, that's one, two, three, four, five, sjx, seven, eight, nine additional stains that might be from foreign source number 3?
A. Yes.
Q. And then you have another grouping where you say something, nothing can be said of the origin of the following blood stains. And you have two additional stains listed at 189816; is that correct?
A. Yes.
Q. What does the term foreign source mean?

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A. This mean it not consistent with the victim. I have different type than the victim types.
Q. When you say foreign source number 1, foreign source number 2, foreign source number 3, within that particular group there's a certain consistency, correct?
A. Consistency with what?
Q. With each other.
A. No. If I put it in three different groups, this means three different type.

You have the following stains, could have originated from foreign source number 1, is how one paragraph starts, correct?
A. Yes.
Q. Then there is a grouping of stains relating to almost all. the vouchers, correct?
A. Yes.
Q. Everything within that particular group you believe is consistent with a particular source, which is not the victim, correct?
A. Yes, except one stain. Except the stain number 4, Al, from the white Starter shirt. It's consistent with the victim.
Q. I'm talking now about - do you have the document?

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A. Yes.
Q. The type document which I think is signed by you?
A. Yes.
Q. I'm looking at what $I$ believe is page 3 of the document. And it reads, the --

THE COURT: Let's not go into reading a document that is not in evidence.

MR. ARONOWSKY: Because she said there's one stain that's consistent. And that was not ropponsive wo he quastons

THE COURT: What is the question? Ask the question.
Q. The paragraph starts, the following stains could have originated from foreign source number 1. And then you have an entire column of --

THE COURT: Again, I'm going to stop you. I don't want to go over what is in this document here. It's not in evidence.

What is your question? Ask the question without referring to the document.
Q. Everything that is within that bracket that you called foreign source number 1 relates to a particular source which is not the victim, correct?
A. Yes.
A. Yes.
Q. The type document which I think is signed by you?
A. Yes.
Q. I'm looking at what $I$ believe is page 3 of the document. And it reads, the --

THE COURT: Let's not go into reading a document that is not in evidence.

MR. ARONOWSKY: Because she said there's one stain that's consistent. And that was not


THE COURT: What is the question? Ask the question.
Q. The paragraph starts, the following stains could have originated from foreign source number 1. And then you have an entire column of --
rHE COURT: Again, I'm going to stop you. I don't want to go over what is in this document here. It's not in evidence.

What is your question? Ask the question without referring to the document.
Q. Everything that is within that bracket that you called foreign source number 1 relates to a particular source which is not the victim, correct?
A. Yes.

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Q. Then you have another foreign source. When you say number 2, it's not the victim. It's not source number 1 and it's source number 2?
A. Yes.
Q. Or 3, wherever we are up to.
A. Yes.
Q. Then you have an additional, correct?
A. Yes.
Q. What do you mean when you say nothing can be said about the oxigin of the foldowing blood sians? whe coes that phrase mean?
A. This mean $I$ can't give any conclusion. Either came from the victim or came from the other three different sources I have.
Q. How many possible sources were you advised of with respect to this analysis as you conducted it?
A. Can you repeat it again, please?
Q. Were you given any information prior to your doing this analysis with respect to the underlying event?
A. Either consistent with the victim or not consistent with the victim. This is the knowledge I have.
Q. Were you told prior to your analysis or during your doing the analysis that there were a multitude or more than one people who might have been bleeding pursuant to this

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particular occurrence?
MR. ALEXIS: Objection.
THE COURT: Sustained.
Q. Were you given any information at all that Christian Pacheco was injured and bleeding as a result of this particular occurrence? And Christian Pacheco is the individual who would correspond to $189816 ?$

MR. ALEXIS: Objection.
THE COURT: Sustained.
a. i mold ask you, you have the matnome for a
voucher 189816 there, correct?
A. Yes.
Q. The actual property, correct?
A. Yes.
Q. Not the writeups. The property itself.
A. Yes.

MR. ARONOWSKY: With the Court's permission, if the witness could open that particular bag one more time.

THE COURT: All right.
Q. I believe there is a coat within that bag, correct?
A. It's a brown leather jacket.
Q. Yes. Could you please take the coat out of the bag? Now, in terms of your analysis of that particular

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coat, you found various stains on that coat, correct?
A. Yes. It's not consistent with the victim.
Q. And none of the stains were consistent with the victim, correct?
A. Yes.
Q. Part of your analysis of the coat was to analyze the physical condition of the coat, correct?
A. Excuse me?
Q. You noted the physical condition of the coat 1fobla, combere?
A. What you mean by physical condition? The way I receive it?
Q. When you received the coat, you made notes and made an examination physically of the coat itself, correct?
A. Yes.
Q. Did you make any notes or did you notice with respect to the back of the coat any damage to the coat?
A. I see here some cut here in the back. I wrote it in my notes. I can't remember. If you want me to go to --
Q. On the reverse side of Christian Pacheco's coat, did you note during your examination a hole that could have been caused by a sharp object?
A. Yes. I wrote in my description for the coat this
Q. So, your answer is, to my understanding, on the reverse side of Christian --
A. I said could be.
Q. Could be you found a hole. And you explained it could have been caused by a sharp object, correct?
A. Yes.
Q. You can put that away. Thank you very much. THE COURT: You may sit down.

WHE atmas3: mhatik you.
Q. Blood obviously comes from the body, correct? As an originating source, correct, blood would come from the body? Correct?
A. Yes.
Q. Like my blood would originate in my body, right?
A. Yes.
Q. And if I bled onto someone, my blood would be on that someone, correct?
A. Yes.
Q. If that someone who $I$ bled on, all right, touched a third person, would my blood change, go over to that third person?
A. If your blood touched?
Q. Make believe I cut my hand and it's making a mess.

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And for whatever reason, I touch Mr. Chaikin, or whatever, and Mr. Chaikin ends up with my blood on him. That will be my blood, correct?
A. Yes.
Q. If Mr. Chaikin then, for whatever reason, bumps into someone --

MR. ALEXIS: Your Honor, I object to this question.

THE COURT: I'll allow it. You may answer the guestion.

Can blood be transferred from one person to another and again to another person?

THE WITNESS: If they touch each other?
I'HE COURT: Yes.
THE WITNESS: If it's wet.
THE COURT: If it's wet and they touch each other?

THE WITNESS: Yes.*
MR. ARONOWSKY: Can I just have one second, please? A minute? A minute?

THE COURT: You got it.
(There was a pause in the proceedings.)
MR. ARONOWSKY: Nothing further.
THE COURT: Any redirect?

## Shenouda/Redirect/People/Alexis

MR. ALEXIS: Yes, your Honor. Very briefly.

## REDIRECT EXAMINATION

BY MR. ALEXIS:
Q. Would it be fair to say that in addition to blood that was consistent with the victim, you found blood from three other people, three other sources?
A. Yes.
Q. Now, I'd like to ask you very specifically about voucher number G189823. Those are the clothes belonging to Hector Gonales. I believe that's people's 15.

MR. COHEN: Objection. Beyond the scope.
THE COURT: I don't know what the question is. You are ahead of the game. He is just directing her to that clothing. Let me hear what the question is.
Q. I'd like to direct you to stain $1 J-1$ and $1 \mathrm{~K}-1$.
A. Yes.
Q. Were you able to make a PGM determination for that stain?

MR. COHEN: Objection.
THE COURT: Overruled. You may answer.
A. Yes.
Q. And were you able to make an ACP determination for that stain?
A. Yes.
Q. Let's go to stain -- for both of those stains I asked you about, stains $1 J-1$ and $1 \mathrm{~K}-1$.
A. Yes.
Q. Were both of those determinations consistent with Lenny Cruz?

MR. COHEN: Objection. Beyond the scope. THE COURT: Overruled. You may answer.
A. Yes.
O. Wfons , yo mad that if you ondy coubd detemmane
that one -- if ACP was consistent with Lenny Cruz, it's 54 percent. What is the percentage in PGM? What is the percentage if the PGM and ACP are consistent with Lenny Cruz?
A. 20 percent.
Q. 20 percent. Now I'd like to ask you about voucher G189825. That is the voucher for Suriel Esteban, People's 16. I'd like you to direct your attention to stain $1 B-2$.
A. Yes.
Q. Were you able to make a PGM determination for this stain?
A. Yes.
Q. $1 B-2$.
A. Yes.

## Shenouda/Recross/Chaikin

Q. Were you able to make an ACP determination for that stain?
A. Yes.
Q. Was that determination consiscent with the victim?
A. Yes.
Q. What is the percentage for that stain?
A. 20 percent.

MR. ALEXIS: No other questions.
THE COURT: Recross, Mr. Chaikin?
MR. Grarmin: tf I may, your hotor.
'PHE COURI: Certainiy.
RECROSS EXAMINATION
BY MR. CHAIKIN:
Q. At the beginning of that redirect, the prosecutor just asked you a question. I just want to be sure of the language here. He asked you if the three foreign sources, if that meant it was from three other people. Do you
remember that-question?
A. Yes.
Q. Do you know whether these sources came from items or people or floors or ceilings or walls?

MR. ALEXIS: Objection. I object.
Q. Or glasses or walls. Originally, of course, they Came from people, right?
A. Yes.
Q. Do you know whether those came off clothing or other items? You have no knowledge of that at all, do you?
A. No knowledge for what now?
Q. Knowledge of where the foreign sources came from, what type of items they came from?
A. No.

MR. CHAIKIN: Thank you.
THE COURT: Mr. Birkett?
RR BTHKET: Woblat.
THE COURT: Mr. Green?
MR. GREEN: No.
THE COURT: Mr. Cohen?
RECROSS EXAMINATION
BY MR. COHEN:
Q. Despite your response to the District Attorney's question just a moment ago, can you still say now that it's more likely than not that any of that blood came from the deceased?

## MR. ALEXIS: Objection.

A. In general or particular voucher or what?
Q. In general.

THE COURT: In other words, where it matches 20 percent of the population. Where you have tests

## Shenouda/Recross/Cohen

that lead to a result consistent with 20 percent, someone in the 20 percent category.
A. What is consistent with the victim, this is a 20 percent of the population. And conclusion, still it's same, is that it's possible the blood came from him, yes.
Q. You can't say nothing more that it's possible also the blood came from a foreign source; is that right?
A. Could be. It depends on the type to compare with.
Q. That's right. If you had fifteen people sitting 20 gemath what be thre propls would have thet bloul type or that match?
A. Could have been.

MR. COHEN: Thank you. No further questions.
THE COURI': Mr. Aronowsky?
MR. ARONOWSKY: Nothing further.
THE COURT: Thank you very much, Miss Shenouda. You are excused. You may step down. THE WITNESS: Thank you.

THE COURT: I think $I$ can say with a hundred percent we are finished for today. We are going to recess until tomorrow. I am going to ask you, the jury, to return tomorrow at 10 a.m. I understand one juror has a funeral to go to.

So, the court officer will give you

