

National Clearinghouse Lecture Series

National Clearinghouse for Science, Technology and the Law at Stetson University  
College of Law

PRESENTS: Dr. Maria A. Corazon De Ungria and Chris Asplen

*The Impact of DNA Evidence In Addressing Human Rights Issues in the Philippines and Other Uses of DNA Worldwide*

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TIME: Commencing at 12:00 p.m.

PLACE: Stetson University, College of Law, The Great Hall

Welcome, I am Carol Henderson, director of the National Clearinghouse for Science, Technology and the Law. Thank you, Dorothy and welcome on behalf of the National Clearinghouse for Science, Technology and the Law. We are a program of the Justice Department, the National Institute of Justice Office of Justice Programs. It's my great pleasure to introduce our two speakers today. This is our first of a series of lectures for this year in 2006. We had a 2004 and 2005 lecture series as well.

Dr. Maria Corazon De Ungria is the head of the DNA Analysis Laboratory, Natural Sciences Research Institute at the University of the Philippines. In 2005, their project on DNA, which was funded under the Human Rights and Democracy in Asia Budget of the European Commission, was selected as a best practice. In 2003, Dr. De Ungria was selected by the National Academy of Science and Technology as one of the outstanding young scientists.

Also speaking today is Chris Asplen, who's with the firm Smith, Alling, Lane. He was an assistant United States attorney in Washington, D.C., and also the executive director of the U.S. Attorney General's National Commission on the Future of DNA and served under both Attorney General Reno and Ashcroft.

Both of our speakers have lectured worldwide. In fact, in August of last year, I had the pleasure of serving with both of them on a panel on wrongful convictions worldwide. That took place in Hong Kong at the International Association of Forensic Sciences meeting. I think you will be moved by this compelling case that you're going to hear about today. And they will present the impact of DNA evidence in addressing human rights issues in the Philippines and other uses of DNA worldwide.

Please welcome both of our speakers.

(Applause.)

MS. DE UNGRIA: All right. First of all, I'd like to thank the university for inviting us here to speak with you today. Today the title of my talk is Post-Affirmation DNA Tests in the Philippines: A Case Study. I report here work that was conducted by the DNA Analysis Laboratory of the University of the Philippines in collaboration with lawyers from the Free

Legal Assistance Group. This is a group of lawyers that provides legal assistance pro bono to indigent cases and researchers for Asplen.

Now, death penalty in the Philippines has special significance because of two reasons. First, it is the first Asian country to totally abolish the death penalty and later on reimpose it in 1994 through Republic Act 7659, an act to impose the death penalty on certain heinous crimes.

The second reason is it has the most number of cases worldwide wherein death penalty may be meted out. These can be mandatory cases which are offenses for which the law provides no other penalty and leaves no discretion for the judge. So once the case is there and it has been defined, the judge has to give the death penalty. The judge cannot choose from a range of penalties. Examples of these crimes are kidnap for ransom, rape with aggravating circumstances, et cetera.

The second type of death penalty cases are those which are death eligible. These are offenses for which a range of penalties is prescribed by law with death as the maximum penalty and where the imposition of death would depend upon the existence of aggravating circumstances alleged in the information and proven during trial. This could be parasite, kidnapping, drug-related offenses.

In short, the death penalty in the Philippines can be meted out in a total of 52 different cases. However, many human rights groups -- human rights groups raise legitimate concerns in the implementation of the death penalty in the Philippines. A major issue is the quality of crime scene investigation conducted in some areas. This is a photo of a crime scene that was taken out from one of the Philippine dailies last year. This man was shot dead by an unidentified gunman.

What can we observe? First of all, we have the area cordoned to prevent people from stepping on the crime scene. But as we realize -- and it's very evident in this photo -- the tape was made too close to the body, and people outside the tape could easily contaminate the scene. We see here a policeman in uniform, not with a scene of the crime investigation outfit, a few meters from the body already investigating the crime scene.

However, who is this guy in denim pants a lot closer to the body than the investigator and who is the photographer who took the photograph for the daily? These are people who have contaminated the crime scene and could possibly have already affected the crime scene investigation. Another major issue is the reliance on eyewitness testimony. Most cases in the Philippines are tried based on testimonial evidence. In fact, in all death penalty cases we studied in the course of our research, the convictions relied heavily and at times solely on testimonial evidence. These are capital cases. In *People of the Philippines versus Mateo*, a case involving the rape of a young girl, the reliance of the court on testimonial evidence is stated, and I quote, More often than not, the court has deemed it sufficient to convict an accused for rape solely on the basis of the testimony of the victim; the heavy reliance normally given by the court in the narration of the victim finds justification on the fact that generally she would be the sole witness of the incident and the shy and demure character of the typical Filipina, that's a Filipino girl, would preclude her from fabricating that crime. If you go to the Philippines, you would realize that this is not the case in modern Philippine society.

Notably, the U.S. Innocence Project reports that eyewitness errors is the major cause of wrongful convictions based on analysis of exoneration cases. In fact, in a paper published in Science of August last year, Sachs and Collier reported a 71 percent error rate due to eyewitness errors in 86 DNA exoneration cases they studied. How then do these two factors, first the quality of crime scene investigation and reliance on eyewitness testimony, affect the litigation of potentially death penalty cases in the Philippines?

To answer this question, let us briefly look at the judicial process in the Philippines. Cases are tried by a lower court judge. If the judge imposes the death penalty, the case is automatically reviewed by the Supreme Court, composed of 15 justices. We don't have a jury system, we only have justices -- judges are justices. However, the Supreme Court as a general rule only reviews cases based on questions of law. They are an appellate court. Since it is not a trial court, questions of fact which may require further presentation of evidence are remanded to the lower court for further trial. If no further trial is needed, the Supreme Court may affirm a conviction and uphold a sentence. Alternatively, a conviction may be upheld, but the sentence is modified based on its appreciation of the facts already presented.

In cases where the elements of a crime are not present in a case already decided by the lower court, the Supreme Court may dismiss the case and acquit the defendant. Once a case is reviewed and a conviction is affirmed by the Supreme Court, then no further review, such as a post-affirmation review, can take place. Notably, this judicial process was modified in July of 2004. In the decision of the People of the Philippines versus Mateo, the Supreme Court created another level of review by requiring all capital cases from the lower courts to be elevated for review by the Court of Appeals where matters of law as well as the facts of the case may still be reviewed.

In this landmark decision, the Supreme Court states while the fundamental law requires a mandatory review by the Supreme Court of cases where the penalty imposes reclusion perpetua, life imprisonment, or death, nowhere, however, is it prescribed an immediate review. If only under inspection before the penalty of death, reclusion perpetua or life imprisonment is imposed, the court now deems it wise and compelling to provide in these cases a review by the Court of Appeals before the case is elevated to the Supreme Court.

Where life and liberty are at stake, all possible avenues to determine his guilt or innocence must be accorded and accused, and no care in the evaluation of the facts can be overdone. And then afterwards, after the Court of Appeals, the cases, after it has been reviewed, will proceed to the Supreme Court as -- for its final disposition.

Now one may ask what is the reason for the introduction of the intermediate level of review. Why did the Supreme Court of the Philippines deem it necessary to introduce another level of review for capital cases in the Philippines? And this slide could possibly explain the reason.

This slide shows the outcome of 907 death penalty cases after automatic review by the Supreme Court tried up until 2004. Out of 907, 250 cases, the death penalty was affirmed. In 26 instances, the case was dismissed because the accused died while waiting for the final decision. In 555 cases, sentence was modified to reclusion perpetua

or some indeterminate sentence. In 31 cases, these were remanded to the trial court for presentation of more evidence. And in 65 cases, the defendant was acquitted.

Now, what does this tell us? It tells us that in 651 cases at least, the death penalty should not have been given by the lower court judge. Hence, an error rate of 71.7 percent or more than two-third of all death penalty cases in the Philippines should not have been death penalty cases in the first place. This data highlights the need to institutionalize the use and appreciation of physical evidence by the lower courts to decrease the number of wrongful convictions.

Because of this situation, scientists and students at the UP DNA Analysis Laboratory of the University of the Philippines wanted to -- we're scientists, we're not lawyers. But we wanted to do something about the problem. How can technical expertise and scientific training in DNA analysis contribute to such a big problem of wrongful conviction? If any of cases after these have undergone automatic review by the Supreme Court.

So it seems that if you have 71.7 percent error rate of trial court, is there a possibility that there is also an error rate after Supreme Court review? That was our question. Knowing that, a) DNA subjective physical evidence that has been used in exoneration of over 170 cases in the U.S. and, b) DNA is the most powerful tool for human identification because it uses a quantitative approach based on population genetics and empirical testing, is it possible to conduct DNA tests on both affirmed cases in the Philippines, particularly, those who are already awaiting execution? Since this needed funds, my team came up with a proposal that we submitted to the European Commission. Fortunately, the proposal was successful.

We submitted a project to the European Commission entitled Human Rights and Democracy in Asia: Research, Training, and Extension Services on Forensic DNA Analysis in the Philippines. This was granted funds from the Human Rights and Democracy budget line of the commission and was given funding for three years. You can see here that this actually is a photo of the National Penitentiary with a mixture of Filipino and European delegates. We took them to the National Penitentiary to show them the significance of what we were trying to do.

The project has three main objectives. First, to perform research to increase the standards of DNA testing. This involves a validation of procedures in handling evidence as well as an expansion of a reference to the Philippine population database. Second, reorganize training for the different takers of the technology, the analysts, the lawyers, the judges. We had to teach the judges and the lawyers the significance as well as the limitation of the technology. Third, we conducted -- we wanted to conduct DNA tests for capital cases. These are actual cases after the Supreme Court had actually reviewed them. And it is this third goal which really challenged our team in looking for solutions for a seemingly unsolvable problem. Remember, we did not have a law and we did not have any judicial guidelines for post-affirmation DNA testing, and so this took a lot of our time in that particular project. And this is what I'm going to talk to you about.

So we had to have a strategy -- we had several strategies, but this is the main strategy that worked. First of all, we went to death row. There's actually a little hut outside death row. We asked permission of the death row individuals and other defendant -- accused that were involved in capital cases to come and have a chat with us. We carefully explained to these individuals what we were trying to do. We told them that we have a

limited number of cases that we could do and that if they are guilty or if they actually did the crime -- they performed the crime, then do not go for the interview because DNA's objective. If you had -- if you did it, it will come out as well. Interested individuals were then asked for an interview wherein we would try to get as much information, both oral and documentary, about the case and persons who could assist us; for example, names of their lawyers, names of the police investigator, the health units, the province they were from, et cetera, et cetera.

Then based on the information gathered, we would then check if biological sample was collected and the possible location of the sample. Unfortunately, in the Philippines, there is no national repository for evidence, and procedures for the collection, storage, and documentation of the change of custody of evidence varied from one jurisdiction to another. Hence, I had to seek the assistance of many law students to locate samples by contacting the lower courts, the police, and actually provincial offices. They would either call them or send them mail to request for any information about the particular case we were following up.

This is a room which contains some of the records of a city jail. I have included this photo to illustrate the situation of prison records in the Philippines and to give you an idea of the difficulties encountered in trying to locate some case records. Once samples were located, we investigated ways to access the evidence in the absence of any judicial guideline for the conduct of post-affirmation DNA tests. There is nothing in the Philippines to compel a victim to provide DNA sample once the Supreme Court has already reviewed the case. That is a big problem.

From 2001 to 2004, we interviewed over 114 inmates. Remember, we were there in the National Penitentiary. I had over 900 to about 1,000 individuals listening to me, but only 114 inmates were interviewed no questions asked. In 94 cases, no biological sample was found. In nine cases, we were able to locate some biological samples. However, we also found 11 cases involving criminal paternity. Now, what is criminal paternity? Criminal paternity is rape that led to the birth of a child.

All right. The reason for the lack of sample in 94 cases were two things, two reasons. One, that no sample was collected during criminal investigation. That is a major problem. And, second, sample was collected, but no sample was stored properly. Notably, we found two instances wherein the health officers informed us that they washed the slides after microscopic examination. Because there was limited budget in that health unit, that wanted to reuse the slides. This would cost less than a dollar for you guys. In my mind, these two health units would have huge problems in terms of contamination of this case and of other cases.

Because of the absence of a proper chain of evidence of samples located in nine cases and the likelihood of contamination of these samples due to inappropriate storage for several years, our team concentrated on the 11 criminal paternity cases we found. Based on the victims' testimony, which served as primary evidence, we thought that maybe we could get samples from the victims' child to try to conduct DNA-based paternity testing. That's pretty straightforward. It would be very simple.

Although the conception of a child is clearly not an element of rape, the relevancy of a victim's condition of pregnancy is dependent upon whether, as a piece of evidence, the parent's lack of paternity can exonerate him, so we had to look at the case records and

find out if the victim -- if the decision of the regional trial court judge actually included as a piece of evidence the birth of a child.

With the funding provided by the European Commission, we were able to test six out of the eleven criminal paternity cases that we found because the remaining five -- in the remaining five cases, the children had already been given up for adoption, and we could not locate those children.

Now, let us take one of these criminal paternity cases as an example, *People of the Philippines versus Reynaldo De Villa*. The accused was charged with raping his 13-year-old niece in 1994. The primary evidence presented by the prosecution was the victim's testimony wherein she identified accused as the man who raped her as well as being the father of her child. Her pregnant state was corroborated by the medical examination result and the subsequent birth. The accused, on the other hand, presented the defense of alibi, he was not there.

Furthermore, he said he was too old to do that type of thing -- that type of activity so he couldn't have done it. However, even as petitioner, De Villa, denied this, the trial court and the Supreme Court, after reviewing the case, accepted the testimony of the victim as truth and rendered judgment on February 1, 2001. The Supreme Court directed the petitioner, De Villa, to provide support for the child. This is upon review. So the regional trial court gave this man the death penalty at the lower courts.

Upon automatic review, the Supreme Court upheld that conviction, he's guilty. The Supreme Court ordered the payment for child support; however, the Supreme Court changed the penalty to reclusion perpetua because the alleged information of relationship was not included in the information. From February to November 2001, the defense lawyer tried all legal remedies to convince the court of the importance of determining the paternity of the child; however, all appeals to reopen the case were denied in finality on the 20th of November 2001.

In the absence of -- again, in the absence of a court order, nothing will compel the victim to provide any sample from herself and from the child for us to be able to conduct post-affirmation DNA testing. Our team faced another dilemma. We could not perform the DNA tests without the biological sample from the child and from the mother. And without this new evidence, we could not reopen the case. In other words, it's final. I started thinking about all different solutions to the problem. We approached different human rights agencies for advice and assistance; however, no one could provide us with a solution. In the end, we came up with the idea that the family of the accused must facilitate the collection of the sample. We really had no other solution at the time, particularly since, remember, the victim is a niece of the accused. And we found out that the grandson of the accused actually goes to the same school as the victim's child. They are in the same class.

So we explained the possible solution to the accused's son and told him to find alternative ways or innovative ways to actually find a solution to get the child's sample. With the cooperation of the whole family, the son of the accused instructed his 10-year-old nephew, who goes to the same school as the victim's child, and provided him with a sterile container. During playtime one day, the boy challenged the victim's child to a spitting competition. Eventually the boy got the child to spit into a container provided by the uncle. The boy then went home and gave the container to his uncle. The uncle then

collected saliva from three nephews, including this boy, and another niece. He labeled the containers in an alphabetical code A to E. He then took the five samples to the UP DNA Analysis Laboratory.

The son submitted five containers containing saliva on the 23rd of June 2003. He did not disclose the identity of the source of the samples. This is to prevent bias, if any, during the conduct of the test. We, in the DNA analysis lab, also wanted to protect ourselves because this is not a usual solution to these types of cases.

We also entered the National Penitentiary to collect a reference sample from the accused, who was more than willing to provide a reference biological sample. A Jesuit priest facilitated the entry of my blood extraction kit. You can see the man there covered -- with his face covered and a crucifix on his shirt. That is a Jesuit priest. I needed a lancet and some cotton to be able to collect a blood sample from the accused. We wanted blood because in our hands, blood is the best. We could have taken saliva, but we want -- we didn't want to take the chance, so we wanted to collect blood. And we spoke to the Jesuit priest and asked him to take the blade through.

One thing about visiting the National Penitentiary, they actually search you. They do a body search, so I was absolutely certain that I was going to get searched. But the priest was never searched, so he took the blood extraction kit inside, and I told him I'll meet him in the prison on the other side. And so that is what happened, and I was able to collect blood sample from the accused.

All samples from the child and accused were processed using standard validated procedures. The results of the DNA paternity tests are as follows: Of the five children that were tested, we found three males and two females. There's a sex determining marker, and we tested for that so we knew how many males and how many females. We were interested with the female children because, remember, the victim's child is female. So we really looked at the two female samples and examined 16 different DNA markers. We found five excluding markers in one child, A, and four excluding markers in child B. This is more than sufficient to exclude the accused from being the father of the child, either child. The accused's lawyer then filed a motion for habeas corpus and a motion for a new trial on the 11th of July 2003, which included the DNA test results. He wrote, DNA analysis and paternity shows conclusively that petitioner, De Villa, is not the father of the child; his conviction for rape based on the fact that the child was sired as a result of alleged rape cannot stand and must be set aside.

However, on the 17th of November 2004, the Supreme Court en banc -- means the whole Supreme Court -- issued its decision on the petition filed, denying with finality the petition for habeas corpus and the motion for a new trial for lack of merit. In its decision, the Supreme Court stated, a new trial can be allowed only if the evidence was discovered after the trial even with the exercise of reasonable diligence; the Supreme Court is of the opinion that DNA paternity testing should have been conducted at the regional trial court level. However, in my mind, this does not seem possible since we only started conducting DNA tests in 1999. Remember, this case was being tried in 1994.

The Supreme Court further states that the fact of rape is a question entirely separate and distinct from the identity of the child's father. While this is true in most cases, let us examine the specifics of the case. Some lawyers would argue that the request for

paternity in this particular case is completely consistent with the defense presented at trial and the result of non-paternity is completely exonerative.

The appellant has always alleged that he was incapable of sexual intercourse, as supported by his wife's testimony. It also presented evidence that the child could not have been born when it was if the victim was correct or truthful about the date of conception. Furthermore, there were no allegations of multiple perpetrators or of promiscuous behavior by the 13-year-old victim. As a matter of fact, remember that upon review the Supreme Court even ordered the accused to provide child support.

Importantly, it seems as though the court-based its decision -- if you -- if someone reads a transcript of stenographic note, it seems that the court based its decision wholly on the birth of the child. The issue of late registration, et cetera, et cetera in this particular case, if a paternity test were to prove that the appellant is not, in fact, the father of the child, the result should be considered exonerative.

The Supreme Court left the De Villa family with a single option, to seek the release of the accused appellant through presidential clemency, highlighting the advanced age and the failed health of the accused. Remember, in the Philippines, we do not have any law on post-affirmation DNA -- actually, we do not have any DNA law, first off. Also, in the judicial arena, we have exhausted all appeals. Were denied with finality, and so the only branch of government would be the executive.

On the 24th of February 2005, finally, Mr. Reynaldo De Villa was released after 10 years of incarceration because of executive clemency. On the 10th of March 2005, Mr. De Villa visited the UP DNA laboratory to meet the lab staff, representatives from the European Commission that funded the test, and Mr. Christopher Asplen to personally thank those who have assisted him.

Upon arriving at the laboratory, Mr. De Villa immediately expressed his appreciation for all the support that his family and those who did not know him have given him. He took my hand and said in the native vernacular, "Thank you for believing in me when many others have give up." For the staff of the UP DNA lab, the knowledge that we have helped to free a person who was wrongfully convicted against all odds reinforced our conviction of the importance of DNA technology in assisting the pursuit of justice. Mr. De Villa is now residing in his home with his wife, children, and grandchildren.

So what are the lessons learned and what are we doing to address the problems we are encountering? The most significant lesson learned was the need for the implementation of proper collection and storage procedures of physical evidence in criminal investigations. The absence of biological specimen negates all possibilities of post-affirmation DNA tests.

The UP DNA lab, my lab, was able to find funding again from the World Bank this time to validate a system for the inclusion of DNA testing, including examination of children -- of child victims of sexual assault using our own rape investigation kit. Actually, this kit, we produce that in the lab because there is no commercial supplier in the Philippines, so my lab decided we'll address the problem, we'll try to make our own kit, and then try to get somebody else to start producing it commercially. And this is being conducted right at this moment. The second lesson learned is that the De Villa case underscores the urgent need to use more powerful tools, such as DNA evidence, in the prompt and fair

administration of justice. Mr. Rey De Villa was incarcerated for more than 10 years without bail starting from 1994 to his release in 2005. This is not unusual in the Philippines where an accused may be incarcerated in a city or provincial jail from four to seven years without a conviction.

Because of the lengthy trial, many of the jails in the Philippines are overcrowded. For instance, in this photo is shown a typical Sunday afternoon, not in a public market, not in this new world in Orlando, Florida, where I was yesterday, very nice, but this is actually the women's section of a city jail in Manila. And you can see Chris Asplen there covering his ears because of the noise of the crowd.

Another photo showing the Manila City Jail, which is one of the most overcrowded city jails in the Philippines. There are over 3,800 inmates, men and women, in this jail, which was built for 1,200 over 300 percent over occupancy. Inside the men's section, one can see the extent of the overcrowding of the prison. To increase amount of space for sleeping, the prisoners themselves built a second level -- you can see the second level there -- to accommodate more bodies. At night, people take turns sleeping in the cabin while others sleep on the floor and others sleep on the mezzanine.

And this is the best one of all. This is a photo taken from another jail, sometimes called swinging jails, where prisoners have addressed the issue of lack of space by tying blankets from the ceiling to increase surface area by which -- where they can sit, stand, or lie down.

Okay. Living conditions in jails such as this and the length of incarceration without a conviction are in themselves human rights issues, especially when the accused is eventually found not to be guilty of the crime that was charged. The exonerative value of DNA evidence is particularly relevant in countries such as the Philippines where the death penalty is implemented and where a mistake is irreversible. In some situations, individuals might need to explore alternative strategies and somewhat creative solutions to overcome obstacles. Our work on People of the Philippines versus Rey De Villa is one such example.

To end, I would like to acknowledge the European Commission, the Department of Science and Technology, the University of the Philippines for funding many aspects of our work, the Philippine Jesuit Prison Foundation, those are the priests that actually help us with the prisoners and facilitated the collection of samples from the inmates. And, also, I would like to thank the dedicated students who helped in accessing those files when we were looking for biological evidence in cases to study. But I would also like to especially acknowledge the hard work and dedication of the staff of the UP DNA Analysis Laboratory and, to some extent, Mr. Christopher Asplen in trying to initiate the use of post-affirmation DNA tests in the Philippines to reduce the number of wrongful convictions.

Thank you very much.

(Applause.)

MR. ASPLEN: I hate following that presentation. There's really not much more you can say after that. Anything after that is anticlimactic, to say the least, especially with the picture of us there at the karaoke bar after a couple of beers when we had kind of

completed our work there. But what I love is when you come into a place and what you're talking about is as relevant as the front page newspaper on any given day.

And I guess if there's a take-home message that I would like to give some of you -- for those of you who are students who are someday going to be out there working -- doing this kind of work -- and I hope you do this kind of work -- it's -- when you have those days where you feel like the system's against you and why can't this be different and why can't that be different, just think about what it's like to practice in the Philippines and think about how difficult it was and still is and the challenges that are faced in a system where, you know, x number of 36 people died before they even get to have their appeal heard.

I'm not a big one for the belief that a wrongful conviction is necessarily a human rights violation. I don't necessarily believe that to be true, particularly in the United States. It's wrong, it's a horrible thing, and we have an obligation to fix it, but I don't believe it to be a human rights violation per se. In the Philippines, it's a whole different story. If your case isn't even heard for six years, in the kind of conditions that you just saw, that's what brings this into the realm of human rights violations and why is this so important.

And on that point, I would just like to say that I think that you should be very proud to be part of the law school that you're here with and the work that they are doing in that regard. The Forensic Sciences Network that has been established through Professor Henderson's program is something that is benefitting the world in many different ways. The fact that there is that kind of resource out there available on the Internet is a great benefit to people like Cora, and there are people beginning -- as she tells her story, beginning to look at these kinds of issues in different places, such as India and in Brazil and a whole number of other places. So, again, you should be very proud, and I hope that you are all very participatory in that effort also.

What I want to do is I want to start off with giving you just a little bit of a perspective of the post-conviction DNA dynamic in the United States. Again, I think it will give you a little bit of understanding of what the situation was in the Philippines. But I also want you, for your own purposes, since you're going to school here, and you'll most likely be practicing here, what it's been like. Originally, the whole issue of post-conviction DNA testing started off with the Antiterrorism and Effective Death Penalty Act, which limited the appellate process.

My background was purely as a prosecutor. I went in -- not into law school, I went into college knowing that I was going to be a prosecutor. I was a little uptight back then. Yes, it's true. But it's what I wanted to do, and I got there and I did it, and it was better than anything that I could have imagined. But I understood from that experience that the appellate process, there were certain abuses. And my stack of appellate cases on habeas was this big and my, you know, stack of trial cases was this big, and this one just kept going up and up and up and up. So there was a legitimate problem that had to be addressed, and it was through that particular act.

There was tremendous opposition by prosecutors, though, when we started looking at the application of DNA technology to post-conviction cases. That was for a couple of reasons. Number one, the legitimate history of abuses that was addressed by the Antiterrorism Act, very legitimate. But number two, it was a lack of understanding by prosecutors of what DNA really could and couldn't do. And quite frankly, it was an issue

that was characterized by guys like Barry Sheck that prosecutors only understood from the O.J. Simpson case, and needless to say, didn't like him. And so there was not this understanding that it's a complex dynamic. It's a dynamic that occurs kind of on a spectrum of cases in which DNA may be very, very, very helpful and, in fact, exonerative, but on the other end of the spectrum, there may be cases in which even if you do the testing, it's not going to help you at all. And prosecutors had a very hard time getting their head around that particular issue.

And then DOJ published Exonerated -- Convicted by Juries, Exonerated by Science, which was a Barry Sheck driven project where they looked at 24 DNA exonerations. And the Department of Justice in Washington began to kind of sit up and take notice, and particularly, Janet Reno created the National Commission on the Future of DNA Evidence, recognizing that if we have this problem in 24 cases that we've looked at, there is probably a whole lot more stuff that we're not doing that we should be. And as a result of that, she asked that the commission be created not only for the purposes of post-conviction, but that was really the genesis of it. And so we created recommendations, we created model legislation.

And then I think the most important thing that happened was prosecutors began to take some ownership of this particular issue. There was a guy named Woody Clark in San Diego who was on the commission and he's also on the working group for the president's DNA initiative, and what Woody did was he looked at -- I think it was about 600 cases. And there were certain criteria, but if there were people in prison convicted of certain offenses under certain circumstances, he would voluntarily go back, review those cases, and determine whether or not if DNA testing were done in a particular case, would it prove to be exonerative if it was an exclusion. A lot of those cases, you know, never came to fruition because they went to the prisoners themselves and said, listen, we're considering doing this, you know, would you like us to look at their case, and they went, don't think so, it's okay, it's okay, I'll just wait for the parole board to come up and consider my parole. Wise decision, wise decision.

Interestingly, though -- and I think that this was -- I think it was pretty bold for what Woody did, was they did not exclude people who either, a) confessed or, b) pled guilty. That was a recognition that people confess and plead guilty for reasons that have nothing do with their actual guilt or innocence but are, rather, just practical matters and that those decisions that are very important decisions are made on that. And the fact that the prosecutor had taken ownership was really, really important.

National DAs Association officially endorsed post-conviction testing after that, after originally officially objecting to it. We had a little blip in the screen with Attorney General Ashcroft where there had been a prosecutor-initiated DNA project that was revoked, but then a couple of years ago, President Bush initiated an \$800 million project, which will include some post-conviction testing. Most of that is going to go into database projects and learning to solve crime more effectively with DNA, but some of it is for post-conviction testing.

Why was this -- why did this post-conviction dynamic kind of come up when it did? Mostly it was technology. Number one, originally our FLP technology did not give us the discriminating power to go back and look at cases that are 10, 15, 20 years old. The technology just wasn't good enough. However, once PCR came about where we

could look at much smaller samples of evidence that were stored much longer than we could look at, even if they were somewhat degraded because our evidence storage practices were not very good and certainly didn't anticipate DNA testing, that began to help considerably. So now post-conviction DNA testing became relevant, and then we had greater DNA database utilization.

As we use more DNA databases, if we get it -- if we've gotten it wrong in the past, we have the wrong person in jail, we may have the right person in the database subsequently, so database has also made DNA -- post-conviction DNA testing make a lot more sense. And there are a number of people who are out on the street free men today because we searched the DNA database and found out the real killer or the real rapist was in the database, so it's a big issue.

It's a pretty common legal dynamic that you have the great value of finality in the criminal justice system. We have to know that things come to an end. Victims have to know things come to an end. Defendants have to know that there is a period at the end of the sentence, okay? However, we are also faced with this brand-new ability to potentially exonerate people; and therefore, in the overall concept of truth and justice and just the right thing to do, we need to find a way to do that. If we can do a better job at determining who's innocent or not, we have a responsibility to do so.

Here's how you evaluate one of these cases, and it's what I did in the case in the Philippines. It's what's the relevancy of a DNA result going to be. On one end of the spectrum, you've got an exclusion, and if that exclusion were to equal an exoneration, well, then as we say, it's a no-brainer and you do the DNA testing.

However, you've got those cases on the other end of the spectrum in which the exclusion wouldn't mean a thing, and let me give you two examples. On the end of the spectrum where an exclusion would equal an exoneration -- let's say you're looking at the rape of a four-year-old little girl and the evidence that you're looking at is DNA taken from a vaginal swab from sperm. If the guy that you have in jail doesn't match the DNA profile that is developed from that piece of evidence and there are no allegations of multiple perpetrators, okay, then you have an innocent person in jail, and you need to get him out.

But let's say you're looking at the other end of the spectrum in a case in which you're looking at the rape/homicide of a streetwalker-type prostitute where the evidence is from semen from an outer garment. The guy has already been convicted on other evidence. In that particular case, there are any number of reasons why that sperm would belong to somebody else, but the guy you have in jail was still the murderer. In that case, you don't even do the testing. You don't even do the testing. However, most of the cases that we're going to look at are these gray areas where reasonable minds will differ. Reasonable minds will differ.

And, in fact, when Dr. De Ungria first approached me about this particular project, she asked if she could send me a number of cases, which she did, which I reviewed all the transcripts. And there are a number of them that said they just don't fall into the particular category where I think, from a legal perspective, an exoneration would result from an exclusion.

The reason that the De Villa case was different, as Cora already pointed out, was the fact that the -- looking at the judge's decision, the judge's decision rested entirely on the birth of this child, the birth of this child. There was some inconsistencies on her testimony also, and there was this -- and as she mentioned, there is a presumption of the virtuousness of the Filipino lass, that she wouldn't lie about a thing like this.

Now, don't get me wrong. There are plenty of cases -- and in this particular case, the facts came out -- she did not allege the rape until after she began to show that she was pregnant. She began to show she's pregnant. Mom looks at her and says, Hey, what's going on here, and she says, Oh, well, I was raped. Please. There are plenty of instances where women, girls are genuinely raped and nobody finds out about it until she begins to show, okay, because there's a real fear factor there. And so that's -- I'm not denigrating that part of the dynamic, but it is a fact that you consider in everything else.

And, also, I think one point that Cora didn't point out was the fact that Mr. De Villa was 66 and couldn't function sexually was not just a function of his age, but rather, there was a medical condition that his wife testified to that -- wherein she said, no, we haven't had intercourse for years, okay? It just wasn't physically possible. So there are a whole lot of dynamics that went into this. And nothing else corroborating this girl's story other than what she had testified to. And, again, there were some inconsistencies there.

So this was the one case where you could genuinely look at and say, This is the big one, this is one that really makes a lot of sense to do the testing on. And that's when we began kind of helping out with the briefs. And the other reason that I went through the history in the United States was part of the brief that we wrote -- or that we helped write with the Philippines had to do with American jurisprudence because American jurisprudence does, in fact, weigh in the Philippines. It's a -- I don't know how much you know about the history of the Philippines, but we ran the joint for a long time before we left. So their legal system is based on our system, so there was a lot of reason to include the history and the dynamics of the post-conviction issue in the United States to say to the Philippine judicial authorities, Listen, this is okay, it's not a crazy idea, and it's happening in other places of the world.

Okay. For time purposes, I'm not going to go through all these categories. You can find these categories of analysis in the DOJ publication Post-Conviction DNA Testing Handling Requests. But since the title of the talk out on the little posters has to do with everything else that's going on in the world in DNA, I want to spend a few minutes to give you an idea of some other things that are happening, not just in the post-conviction dynamic, but to kind of get you excited about some other possibilities.

One of the big things that's going on is biogeographical diversity testing, both in the context of forensic crime fighting, but also in identifying -- in identification of bodies. There was a case where we identified a serial rapist in the United States, in Alabama. You may -- you probably heard about it. In that particular case, all of the eyewitness testimony from which the sketches came were of either a white or Hispanic individual. You look at that and say, That's a white guy that we're looking for. However, we weren't getting anywhere with it. They weren't doing anything. They had DNA from a number of different murdered bodies, but it wasn't matching in the database.

So they decided to do this biogeographical diversity test and determined that the guy was 75 percent Sub-Saharan African. The conclusion from that was that his skin was dark-complected, he was probably African-American. What that did was that then began to give the police the ability to bring into this universe of cases, not only ones in which women were murdered, but they broadened in the scope, Okay, where have witnesses said that they were attacked by an African-American male. They got some cases where they had some living witnesses that now were part of this universe that they didn't know before because they thought they were looking for a white person. Once they did that, they got better sketches. Once they got better sketches, they began to track down the guy, and lo and behold, was, in fact, an African-American guy responsible for seven or eight homicides that we know of, and I'm sure much more than that.

Identifying bodies -- United Kingdom has used biogeographical diversity testing to identify the body of a young boy who was found with -- just a torso of him found, and he was matched to a Caribbean island, I believe, either North African or Caribbean island.

Physical characteristic testing is also something that's being utilized a bit more. United Kingdom does it. They do red hair testing, for example. The Netherlands has actually legislated it, which is very interesting, because all the legislation pertaining to our DNA databases says very specifically we don't look for physical characteristics. It's kind of the way we sell it from a policy standpoint so that the people don't get worried that police are going to go around searching for predisposition to disease, you know, race, things like that. That's why we use non-coded sequences in the DNA database. Well, the Netherlands has said, You know what, we don't think that's a -- we think that there's a lot of crime-solving value to this, so they actually put in their legislation that you can test for physical characteristics, skin color, hair color, et cetera, et cetera. The U.S. is also doing research on particular physical characteristics.

The other big issue internationally, faster, better, cheaper testing, chip technology. We're further behind than we thought we were. Three or four years ago, we thought it was coming around the corner, but it will eventually enable us to go to a crime scene very quickly. We'll have very small devices that can test DNA quickly.

The United Kingdom is actually mobilizing their DNA units. They now have a unit where they can drive to a crime scene, which will be very, very important in areas that have a lot of remote areas, very rural areas. I could see a lot of applications in some poorer countries where you don't have the ability to do anything other than drive for six hours and actually do the testing there. It's a much better option to do it. Long way away from a standard utilization of that, but we'll get there.

SNPs, single nucleotide polymorphisms, are different than what we use in the current database; however, they may enable us to do more in terms of looking at more degraded samples, be a little bit more discriminatory. What they will probably do ultimately is add some SNPs to the current CODIS 13. We won't see a whole shift to a new technology in the databases.

Database expansion -- U.S. federal law now allows for the uploading of arrestee profiles. This is really important from the U.S. perspective in their databasing. When the DNA Identification Act of 1994 was passed, there was a specific prohibition against arrestee testing. You could only include individuals in your database who had been previously

convicted of serious crimes, weren't allowed to use arrestees or suspects, contrary to the way that just about every other country in the world did it, particularly the U.K. Most other countries allow you to arrest a person, take a DNA sample, put it in a database and search it, just like what we do with fingerprints.

However, every state in the country had to abide by this, not being allowed to use arrestee samples, if they wanted to participate nationwide in the national database system. Now that the federal law has changed, you will begin to see many more states change their state law to enable arrestee testing. So now when we arrest somebody, we will now be able to take their DNA and profile that, put into the database, sometimes just for a one-time search, sometimes keep it in there. Five states right now that currently do that. Over the next three to five years, you will probably see 20, 25 states go down that road.

United Kingdom already databases all recordable offenses, and they do it forever. If you are arrested for anything other than a traffic ticket in the United Kingdom, they will take your DNA, they will put your profile in the database. And even if you are acquitted, if the government apologizes to you and sends you, you know, a gift certificate to the restaurant, they still keep your DNA in the database. That decision has been challenged all the way up to the European Commission on Human Rights, and they have won. Many countries in the process of the developing databases, China, India, Brazil. Many are bigger countries. Databasing is exploding all over the world.

The other issue, international conductivity. Interpol now has a database system where the United States can check with data from France and other countries. It's not that effective yet, but maybe someday. European Schengen Treaty Conductivity Scheme, there were a number of countries in Europe that decided they did not want to play with Interpol. Quite frankly, it was out of concern of -- very political. It was out of concern that the United States may in the future pressure Interpol to use that data in ways that -- right now that Europe doesn't agree with. So what they've done is they've created something called the Schengen III Treaty where individual countries, Austria, Germany, Spain, France, etcetera, will begin to search each others' databases with a search engine specifically designed to do that.

And I think one fact that really kind of explains the whole databasing dynamic internationally is no country has ever done anything other than expand its database. No country that has gotten into forensic DNA databases and has included certain offenses, certain schemes of putting people in the database -- no country has ever looked at that and said, You know what, we made a mistake, and we don't think we should do that much databasing.

They've only ever expanded it and just -- and I would say every country has expanded it after their initial foray into it. I think that's because, number one, it works; number two, generally speaking, the law enforcement communities are pretty careful about how they're using it.

And I'll finish with this. The bill -- and this is referring to a bill that is pending in India right now, and this was the basis of the introduction of the bill in the first place. The bill will allow us to store, retrieve, and use a DNA fingerprinting database of convicts and criminals; it is the need of the hour because the finality of court judgments pertaining to criminal cases is being questioned. They kind of bring it full circle. The technology of the

databasing brings us all the way around to the importance of the post-conviction analysis issue.

The bottom line is if we learn to use DNA more in solving the cases in the first place because we're doing more databases, because we know more about it because of programs like Professor Henderson's resource network -- if we do more on that end, we're going to do less post-conviction testing. We're going to get it wrong fewer times, and that's really what it's all about. We should be getting it right the first time, not fixing our mistakes later.

Let me just finish with this. As I said, when I -- before I went to college, I knew I was going to be a prosecutor. If you had suggested to me that somehow 15, 20 years later, I would be standing in a Filipino jail trying to get some guy out who said, Hey, I'm wrongfully convicted, I would have told you are out of your mind. But it's some of the most fulfilling work that I've ever done. And what I would suggest to you is this, that as you kind of look at your careers and you look at what you're going to do as attorneys when you get through this illustrious institution, keep your mind open to -- to paths that you never thought of before and things that -- you know, roads you might travel down that might not necessarily fit with the plan you have laid out, but may bring you to places that you never thought you'd be, but are more wonderful than you could have imagined.

So thank you for the opportunity to be here.