

**DNA's role in helping law court and judgment**Mahshid Mahtabi (M.A)<sup>1</sup>, Ghobad Naderi (M.A)<sup>2</sup>, Seyed Saeid Heidari Taib<sup>3</sup><sup>1</sup>. Department of law, Payame noor University, Iran  
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Judge Justice

**Abstract:** The purpose of this research is the role of DNA technology is helping to judge the methodology used for data collection was performed using a library Vazrvsh Mnzvrgrdavry field data file is used Abzarshmarsh This information is necessary to investigate the reliability of the data and analyze the major results of the study indicate shalt Aztzyh lining properly collect biological samples increases utilization Khvahdshdvmzyan request DNA testing DNA tests on criminal cases increased Also among the mass of biological samples Mvjvddrshnh blood Vbyshtyraft is easily visible.

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**Key words:** Biotech - DNA typing - Biology Lab - Scientific Discovery crime

**1. Introduction**

Today, many countries are Afradastfadh identity Very Dnyaazfnvn molecular mass Darkish Grddvatlaat individuals are Gene Bank Survey identity that helps., As we know, an increase in crime feel safe remove from society so that it would cause public panic Vasteras people will. (Pride Zmyr Rahim, 1385, 64) This factor can be strengthened to feel the need of dealing with criminals in the police force police identity Shvdtvshkhys topographic collect the aim of understanding the identification of offenders through the preservation of scientific the criminal to collect finger proper collection and documentation of evidence left at the crime scene, especially of a biological laboratory methods for the analysis of DNA obtained based mass Azshnh the Criminal Police Activities range utilizes the most modern equipment, such as biotech facilities Vamrvzastfadh Azmarkrhay STR DNA technology has expanded well PCR lab on a criminal Trashed emerging scientific discovery Jrmdbvn final objectives remain the slightest ambiguity. Course despite the fact that Zhvrfnavryhay Nyztvjh modern molecular techniques before 1980 is still a crime has been used in scientific discovery Abandoned post and providing research for a detective to help are taken. Example utilizes methods of serology to determine blood group system ABO despite definitive genotype Afradrmqays-h Nhaaztryq sequencing of genomic DNA or mitochondrial DNA laboratory Criminal continuing (Fkhrz 17 : 1384)

**Statement of the problem**

Changes in the genetic structure of the new world

Azakhtraat Vpdydh critical findings into products has brought criminal Lzalm as one Azpysrhfrthay science and biotechnology applications should be granted . during the late twentieth century, new scientific evidence such as DNA , genetic methods to police came to the puzzles solution that was years in obscurity Sazdvbh smoothly as another trump science in the service of the police in detecting crime Bashdvavra help This research Drnzrdardkarbrd Technology DNA molecule in scientific discovery Crime in to review this regard, a variety of bio-samples in the laboratory biology criminal DNA technology tested is the Venice of cases involving DNA testing to laboratories in the post keeping interest to be exploited scientifically useless. (Henry Lee, 1383, 52)

**The major research questions are****Question:**

Technology Drkshf the DNA molecule is used in courts of crimes?

Sub-question:

1 - race on request DNA testing in criminal cases is how?

2 - Is the blood than other available biological samples are found to be more crime scene?

3 - Status of DNA tests on different biological samples, especially bone biology lab, how?

The importance and necessity of research

Every day we Shahdpysrhfrt science disciplines and in many cases, these advances have opened new horizons ahead of experts in various fields of biotechnology Nyzazayn no exception. Achievements of the scientific discovery of the crime with the genetic

information and similar items, the creation of the Bank DNA technology compares the next provided., and therefore the need for increased use of new Drastay Science and Technology scientific discovery and increasing crime detection than traditional methods based on the new technology of the past is necessary and obligatory.

### Research objectives

Applied science and technology Azvjdzyst criminal Harlem century as one uses in other words, criminal science using molecular techniques such as DNA fingerprinting to detect genetic science has contributed crimes. With the main objective of conducting this research Mtsvrast such an approach include:

1 - The role of DNA molecular technologies helping to court

2 - Azamar exploit criminal cases involving DNA testing

In this research we have tried to develop scientific discovery crimes Tabarvykrd able to provide more statistics on this basis in order to achieve the objectives Baydbrnamh Khvdrabr planning effort to explore the scientific basis of crime to design.

### Research hypotheses

Temporary speculative hypothesis being true Baydmvrd Yanadrst shall be tested. Drhrpzhvsh Pzhvshgrbaydyk Yachndfrzyh possible scientific questions raised Knndrpaskh Ranzrbgyrdabtvdand Khvdrahdayt study investigated the hypothesis that part of the problem I Rsdbartndaz

1 - I ask Rsdmyzan on DNA testing in criminal cases has increased.

2 - I Rsdkhvn than biological Dygrnmvnh Mvjvddrshnh is Byshtyayft crime.

3 - I Mvjvddrazmayshgah Rsdvsh of common DNA identification of bone Najadrmvrdnmvnh Myznyst success.

### Background research

Limited research in many scientific fields Darkish Vmlkrdmvsran DNA technology crimes that took place inside Drat specialized magazines have been referred to the police intelligence about criminal Marprvndh Vnyzamar the tests conducted DNA testing on biological specimens criminal Najatakvn not done comprehensive research 's.

What is biotechnology?

National Committee Raayngvnh Technology has defined Kshvrzyst biotech biotech is different Azkarbrdlvm Yaghyrmstqym Azmvjvdat direct use of living natural Nhadrashkal part of the body Vyafravrth Yatghyryayfth. Dygrzyst The technology consists of many technologies which organisms are Vyaajzay

Nhabhrh.

This defines a wide range of different fields of Science and Technology is Radrbmy. Gains Grayest technology in recent decades into the future as one of the most important technologies introduced Mvlddrhal. In general, biotechnology is one Azmhvrhay Azkshvrhaqlmdadshdh Vdrtzym Rahkarhavbrnamh many of the basic national attention has been paid to it.

### Science and Biotech related criminal

Biotechnology applications are so vast that almost all aspects of life Tasyrqrardadh Vkhvahddad Bshrratht. Discovering Hazrshahdkarbrdzyst technology to produce growth hormone, insulin antibodies, enzymes, amino acids Mvadzaydtvlydkvdhay Recovery Havbmaryhahfz biological pest control environmental pollution, etc. We can My Adakrdkh biotechnology to the shape of a huge revolution in all living beings is the twenty-first century technology has led to extensive Karbrdzyst Rare 21st century intellectuals have called biotechnology. (Pride Zmyr Rahim, 1385, 55)

Moreover, as an applied science and technology takes advantage Criminal Sciences Azvjdzyst Vbabh applying modern scientific methods Nzyrangsh DNA and analysis of genetic data, scientific writing paper helps crime scene to scientific discovery. Tech DNA checks that the guilty one Azmqvlh Aknvnv biotech is Rabrangykhth runs through a lot of discussion. Drqrvn Nbvdamkan identify criminal past because many crimes were not followed. Azangshth the writing of the DNA information Ayjadbank born Vjvdgzashth arena.

### The application of genetic fingerprinting

For years, the fingerprint database as a system adopted by the court to serve researchers in the field located Havmvsrjht promote criminal investigations. Amaamrvz-h wide Bapyshrfth other fields such as DNA have been provided. Drjrm that DNA information in determining the identity of any suspect Vjvnddashth Bash bank Sarbyvlvzhyky remains a crime scene is important.

The research Tvandmamvran Raazjnsyt Nzhadrng eyes Dygrazatlaat Resources to inform a person. Technologies immigration Mzkvrdrakhtlaf Afradgmshdh Ajsadgmnam identifies criminals Vmhajman used.

DNA Khvdadrnmvnh dried for long lasting solidarity can my maintain records is not the result Rakmk. (Bennett Vhs 0.1385, p 326)

Many of these methods are identified Azmjrmn such Qltlan Varian Back just a biological sample Hams Belay a drop of blood is left in place. Asrlngshth DNA obtained DNA samples discovered at the site Baarsangshth Afradrmzan with Athamyamjrmn Sabah Compare Vfrdmjrm will be identified.

Nyazbvdtashadhan witness positively identified

the suspect Azmvardjnay many Yadraghlb Mvardkhvdqrbanyan for help. Reviewed DNA evidence proving observational always Shhdvqabl not sure. Event Vanalyzshyh DNA collection, transportation maintenance system has the ability to remove the wrongs Tdadksyry judgment. Importance when it is harder to control is Vjvdndashth DNA in all situations is almost impossible Haarzshmdast Shvdbdvn real crime that DNA evidence from the crime scene, leaving the body fluids like Mvslvl skin. NT Nalyzdy converting biological evidence of Ankarnapzyrtryn Yatbrh Abzarmthm out the suspects. These methods from the judicial system would eliminate some of the ambiguities Experienced lawyers representing clients in criminal court sentences Khvdrabrasas DNA testing evidence to challenge evidence containing DNA to the infected Kshndbray example as a reason to exonerate his client to work towards living. In the direction of The main problem with like all collected by the evidence acceptable Research of DNA DNA is the courts that Athadksany Harem sample processing and maintenance are DNA probes Chndmkany laboratory samples of suspected cases with the evidence produced on a film together Myknndsp DNA samples t really Yabndkh bands Mdrkba the leading suspect in the case Which will Azbandhay. These methods prove Vnyzshnasay Pdrvfrzndy Karbrddard alleged rape.

Adaptation patterns of DNA using short Aztkrarrydyf Dvvyzhgy has anyone been to Hrmakrbrsy. Analysis and Vaynkh Hrmakrbrmskhks Grvyzhgy Yavyzhgy degree of freedom Bavyzhgy DNA samples taken from suspects to comply Dardyakhryratyyn. (Vydn Vhyks 1998)

### 1 - DNA fingerprinting in the world

DNA technology since 1985 for the first Bardrkshvranlstan Bimetal the markers vntr method per the United Mrykarvndtkamly molecular techniques quickly gathered Vbyvlvzhyst molecular Tvanstndlavh Brmarkrhay vent markers size of Kvchktmsl star Radrtshkhys identity to use. Akhyrakshvrhay enhanced with Aztjhyzaty like dank markers Baakhtlaf a Nvklvtydradrlvm criminal applied to have The first DNA database Mrykatasys Shdmrbvt about old people who have been convicted of sexual assault., After a short time of exposure to the information Ayjadbank Sayrtjavz·hay Nzyrql Vjraym brutal crimes against children greatly extended by the probability Tkraranha Frddashtn DNA evidence Bartlett a clear cause to convict the accused Tranhakhvahdshd Trashed normal execution of the laws. As predicted President Dfrfdral Mrykadramvrjnay the next 10 years for all Bz·hkaranbank information DNA Ayjadkhvahdshd data collection Vayjadbank information in DNA in addition to the United States Mrykadrtday countries

condemned another purpose. Countries such as Austria, Canada, England, France, Germany Hlndvastralyanyzchnyn banks information for the program has been adopted in England in 1994 to allow police Dhda Haraaz·hryk Azafradmznvn for any Tjavzqabl track to collect samples.

### 2 - DNA fingerprinting in Iran

In 1374 the Criminal Investigation Laboratory Bakhrydtjhyzat technological DNA Vksb preliminary training students benefiting from this new technology discovered Raaghaznmvd crime.

Since 1376 Nyzpaskh criminal cases since education graduate through foreign experts began Shdvtaknvn to hundreds of cases related to murder, rape robbery, change Nvzaddrzayshgah kidnapped baby Ajsadmjhvl Alvin kinship ties and case files relating to the children of illegal Yatyyn Abbott through the technical knowledge to answer Hodder has been discovered that the majority of respondents have influence on the identity, diagnosis crime. (1382:16 Fkhrz) Laboratory CID police comparative molecular per Azmarkrhay genetic star diagnosis identity criminals Vajsadmjhvl Alvin diagnosis Abbott use and Tvrmtvst 120 samples of biological Rabarvsh molecular studies and judicial Vantzamy answered. Vary to Nvdrrsdmvardntayj tests Hadrkshf the criminal influence on that., One Aztjhyzat Methods criminal biology laboratory is used, the application is stored Tksyrjaygahy Azzhnmv Brabrbrnamh.

### Aztjhyzat Nalyzrast Dygrzhntyk method of application is Drmvardzyl

- A - Testing the Pdrvfrzndy
- B - compared to 96 samples simultaneously
- C - perform all the steps Tvratvmatyk

Biology laboratory to check for criminal identification system Nearby Jdydygyry Combined DNA Index System is used to Positive effects Vmfydrvsh molecular Vmarkrhay genetic nodules decoding Azprvndh criminal manner of approach judicial authorities into the technology has improved so that Tdadnmvnh submissions growth of 25 percent laboratory CID police to provide these Nyazaznrfzay lab equipment modernization and employees of technical New biotech graduate to the first year of the launch of this technology is about 35 Drsdrshdmvdh (Fkhrz 1385).

However, our forensic laboratories identity Ghyrazmrkztshkhys Mndhstnd Nyzazayn of IT professionals, experts hope to Frakhrmv each file that is Maharaja Mvjvdbhrh facilities Bgyrndvbtvanndrkshf criminology successful identification of the perpetrator's identity.

### **The relationship between the suspects Vqrbany using biological evidence containing DNA**

Byshtklydhay that led to the discovery of a crime is a crime scene biological evidence exists. Employee collects this type of injection molded Bashndkh Baydayn know what kind of biological evidence in a particular type of mass Azshnh Byshtyraft the documents Shvdvyachgvnh collecting this type of technology keep Knndtakshf processing identification of possible criminal charges Pzygrdd The main objective review of biological evidence to show criminal investigators solve the case Hamy Svdmndbray information is Important things Azmdark Drkshf biological science is a mass crime, the relationship between a person's Bashnh The relationship between a suspect and a victim of the most common types of relationships are most widely used biological Azmdark boat to help prove it Understanding of the various factors Mvsdrshnh identify the crime victim Sarbyvlvzhyky suspect most important aspects of reality Myzyk crime is discovered successfully. Biological evidence for a relationship between the victim has Afradmsl suspects. Ayjadartbat through Azmznvn by biological evidence on the victim is important, but finding the suspicious documents Mzkvrazqrbany Vbaahmyt Nyzmhtml the time interval provided in a reasonable identification by mass Azartkab Bashdbray example not identify Vmnhsrhb Frdsakhtn suspect on the victim's body by comparing DNA sequences Vyashnasayy Vmvy blood on the victim's clothing Vbdn suspects is usual in this type of relations Sometimes the biology of the documents exchanged small Nqdrandaz-h Darndkh Vyaalvdh shall often ignore them so as to avoid further Azalvdgy Yaazdst to this group of documents is important that all documents carefully and Tvrjdaganh Mzkvrba Mvrdrbsy Qrargyrndtaaztryq Bahsasyt testing methods to obtain the correct Balajvab., With the advancement of technology biological evidence used to justify their criminal Jdydkh Laboratory Mvmadrazmayshgah Nzyrkhn Vmvha saliva and semen ... Rummy can be used for direct connection to direct individuals to a crime scene. (Lee 0.1383).

### **Methods of research**

Type of research methodology and descriptive nature of this research Azhys Amaazhys practical purpose. Whose books have been different help

Method Vabzargrdavry information:

Asnadvprvndh Azdvrvsh of've Mvjvdastfadh

Methods of Data Analysis:

### **Average statistical methods were used to obtain data Vtjzyh**

Medium Tdadprvndh serology who Biology Laboratory criminal had been 791 cases Bvdprvndh

that exploit the 601 case. Greatest amount of samples sent to the laboratory biology related criminal cases biological blood is. Few signs that the skin Vmv bone is. Blood stains are one important Azmdark Vghyrqabl deny murder Vsrqt particularly those dealing with crime Drakrsrshnh Batjavzbh rape may be found Vshsth one Azhalat dry liquid. Baazmaysh blood can be obtained valuable information Drmvrhdvvt offenders. Therefore accurate testing and proper collection of charges bloodstains importance Zyadbrkhvrdarast Vyadygrmayat single drop of blood can be Frdramshkhs identity of the suspect and a crime scene has turned into a victim Although DNA Nalyzdy best known method is the most exciting criminal Serology is the most widespread. Agranalyz DNA Btvandmshkhs Yayk whether certain specific examples which are less accurate Darndastfadh Frdkhasy so we Chrabaydazygrvsh DNA testing is still relatively slow Vgran other tests that are less complexity Dqyqnd and mass Mytvannddrshnh Shvndnzrystm almost done abo Azkhvn sampling system is the most commonly used. (Plot .105:1386)

However, the blood test is a quick screen off sometime Vnshan Agrgrvh Frdmznvn blood and blood sampled Azshnh Nbashdanjam check the mass of each match will benefit Byshtdrayn Mvrdby According to the crime scene points Akhyrntyjh take blood enjoys greater importance. Lzabyshtryn amount of blood sample is sent.

### **Conclusion**

1 - Co biotechnology includes areas of science and molecular genetics Manndbyvlvzhy Vshymy that Draspyvndmyan the direction of a new method Vdqyq Fraynzzysty Bakarayy is very high.

Relevance to the scientific discovery of DNA technology in crime solving effects of nodules genetic Vmarkrhay Mfydvmsbt molecular methods have been so criminal Azprvndh Rvykrdmqamat that this technology has given rise to the judiciary so that biological Tdadnmvnh sent to the Criminal Biology Laboratory since 81 to 85 has increased.

2 - Also, this study found deferoxamine First Most typical of the scene of the crime remains in place, the first blood that reference Analysis abo identify blood group is the illusion Tvandjht DNA typing is used Qrargyrdbaayn difference Qadtabh cause damage to the cells can enter it will probably be releasing a small amount of it may be available. thing may be hair Dygraynkhs Vyasvl epithelial Yabh However, another reference to the crime scene were routinely found in DNA Mqdarnachyzdy problems remain. Lzabhrh making advanced techniques faster or anything Bsyarasasy is needed to avoid wasting time to obtain accurate results of applying Astnadvkarbrdy everywhere, not just in Tehran Mrkztshkhs identity

and co-development Karbrdsystm be Jdyddrbrnamh.  
 3 - Mvadbyvlvzhyk proper collection of DNA containing the remains of the crime scene DNA Bamyzan exploit technologies significantly more Dardvhrchh this Karbh Nhvshyh Gyrdpaskh do DNA tests Courts of Justice Atbarbyshtry whole.

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