A. Background

The development of genetics was discussed widely not only in various magazine and scientific books but also in various mass media types. Genetics has many contributions in solving various health problems such as cancer until the possibility to create “a new brave world”, tube baby with restrained genetic constitution or even until regards human species evolution in the future.

Because of its huge potential impact, everyone absolutely needs to have basic science of its knowledge. Only by this way, the meaning and benefits of genetics can be absorbed maximally and man’s role as part of environment in this threatened planet can be understood. Civil people have to know the basic theory of genetics. Before we step further, let’s know the definition of genetics.¹

Genetics is known as inheritance science. It comes from Genos (Latin) means tribe or derivation.² In this knowledge, studied how genetic endowment (heredity) was inherited to posterity and also variation that may arise in it. So, genetics explain various human problematic such as man healthy, physical and mental defect, character inherits, until engineers it.

In the history of its development, genetics has been existing

² Dr. Wildan Yatim, Genetika, (Bandung: Tarsito, 1996), p.1
before 19th century; it’s called by pre-Mendel era. Babylonian, 6000 years ago has been arranged the ancestry of their horses in order to make its heritage better. Many years before centuries, China has known the selection to rice in order to look for superior characters on that plant. In America and Europe also did selection and cross fertilization toward wheat and corn that its origin is weeded. But all those things cannot be identified yet as inherit characters on creation.

Then, since Gregor Mendel’s (1822 - 1884) discovery, genetics developed as one part of science in Biological study. Mendel successfully observed a genetic endowment (character) from generation to next generation, and to make mathematics count toward that genetic character. Since that time, many discoveries found and genetics developed quickly.3

Every human being brings gen from its ancestral in his cell of sex. The genetic factors that inherited into the next generation are; physical characteristics -i.e. skin color, shape of body, etc.-, characters and behaviors, and diseases. All of those characters started since human in fetus.

In the context of religion, a concept of genetics include in God destiny (taqdir). It has been determined since human in fetus. Although it’s something ghair but our prophet also has a horizon about genetic.

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3 Dr. Wildan Yatim, Genetika....., p.1-16
Mohammed is the last prophet and messenger. His prophetic becomes the completing of apostolate before him. His risālah absolutely has to be kept and maintained because of its function as the guidance for all human problems including aqīdah’s, ibādah, akhlaq, and muʿāmalah problems.

One of the biggest secret in Qurʾān and hadīth is prophet sign about nature, its component and phenomenon published in a thousand more Qurʾānic verses and prophet traditions. All of that cosmologic signs often used as an argument on God’s power that so creative in creating universe and as a proof on Mohammed prophetic.

In order to understand cosmologic verses, firstly, we have to understand it in Arabic frame accurately, from its word (lafadz), language styles and asbāb an nuzūl’s perspectives. As like as Qurʾān, to understand cosmologic sign in hadīth, that hadīth has to be understood by the text using Arabic and its asbāb al wurūd. ¹

There are two trends used by scholar in understanding the

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¹ Etymologically, asbāb is the plural word of sabab which means rope. Sabīb also means another liaison. Terminologically, sabab means a method to get to the law without giving effect to the law.

Al wurūd etymologically means al-manāhil (drinking places) or al-mā’u turadh alaihi (water that flow from its original place). So, asbāb al wurūd can be defined by the causes or the background of a Hadith arising.

According to As-Suyuti, asbīb al wurūd is something that becomes a way or method to determine the purposes of a hadith is general or special, muthlaq or muqayyad and the presence or absence of naskh in a Hadith. http://d-scene.blogspot.com/2011/05/pemahaman-kontekstual-terhadap-hadits.html on 18/05/2011.

² Dr. Zaghlul An Najjar, Pembuktian sains dalam Assunnah, (Jakarta: Amzah, 2007), p.9
meaning of hadīth deeply, restriction of traditionalist and modernist scriptualism. First group (restriction of traditionalist) limiting on the tradition that they get from classic scholar without seeing on the social reality. And the others, modernist scriptualism not only limiting on that tradition but also compared it with the contexts and social reality. Both also called textual/literal and contextual understanding.⁶

There are also many sciences and knowledge used to give the proof toward ayat kauniyah. As like as Qur’an, there are many hadīth studies linked with modern sciences. Such as Ibn Al Qayyim, Ibn Khaldun and also Yusuf al Qardhawi that studied hadīth with science approach. For example hadīth related to healthy, economic, and environment. He tried to apply hadīth in this era.

Dr. Yusuf Qardhawi is an Islamic scholar who has moderate thinking toward hadīth. He tried to interpret hadīth contextually. He divided the study of hadīth into three kinds; the study about the juridical (tasyrī’) aspect in hadīth, hadīth as the source of knowledge, and hadīth as the source of civilization.⁷ Even he is not specially study between hadīth as source of knowledge and Islamic people culture comparability, but its study constitute that, hadīth besides tasyrī’ factor it is also knowledge and civilization source for

⁶Syuhudi Ismail, Hadits Nabi yang Tekstual dan Kontekstual: Telaah ma’ani hadits yang universal, temporal, dan lokal, (Jakarta: Bulan Bintang, 2004)
⁷Dr. Yusuf Al Qardawi, Assunnah Sebagai sumber IPTEK dan Peradaban,( Jakarta Timur: Pustaka Al Kautsar), p. 3
nowadays and future. He also explain about the correlation between experimental science and the guidance of *hadith* in this problem.

Discussing about *hadith* and science, it’s as same as talking about *Qur’ān* and science. Both are the basic of religion. If in *Qur’ān* it is popular with *tafsīr ‘ilmī*⁸, it’s also in *hadith*. *Hadith* as the second basic of Islam mentioned all aspect of life. Although its authenticity still debatable, but its existence can’t be separated from religion aspect.

There are three trends used in understanding *hadith* with sciences:

1. Conservative group, refusing sciences used to know the authenticity of *hadith*. According to them, the authenticity of *hadith* only can known by the science of *hadith* (`ulūm al hadīth) dan it didn’t contradicted with its `ulūm.

2. Extremist group, receiving sciences to understanding *hadith* based on sciences. اشتم اعلم بامر دنياكم (all of you know about your world matter)⁹, they said that this *hadith* that talking about dunyawiyyah must be tested by sciences.

3. Moderat people, they said that sciences can be used to know the authecity of *hadith* if it sciences has been agreed by

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⁸ *Tafsīr Ilmy* (scientific interpretation) is an interpretation that more influenced by recent scientific discoveries. See, Muhammad Nor Ichwan, *Tafsir Ilmyy: Memahami Al Qur’ān Melalui Pendekatan Sains Modern*, (Jogja: Penerbit Menara Kudus, 2004), p.125-128

scientists and didn’t changing through all the time.¹⁰

From those trends, writer more tends on moderate people because in order to understand hadith, it has to observe from many aspect. But, if the science cannot prove or contradict with hadith, hadith must be won from science. Beside, science is relative and always develops with new discoveries, so science cannot be the absolute method in understanding the meaning of hadith.

There are also three basic problems that will always be the object of hadith study and discourse continuously: first, the problem of existence and authority of hadith, second, the problem of authenticity and validity of hadith in Islam, third, the problem of method and approach used in understanding hadith textually or contextually.¹¹ One of method that often used in understanding hadith is thematic method -collecting hadith in certain theme-.

Islam is a perfect teaching. Al-Qur’an and hadith as the main guidance manage all life aspect of Muslim, including the heredity of parent’s characters toward their child. Islam also teaches us to choose good couple from good family, because beside of environment, man characters also determined by

¹¹ The first problem (the problem of existence and authority of Hadith) was product inkār as sunnah in one side, and nashir as sunnah in other side. Second problem (the problem of authenticity and validity of Hadith in Islam) appearing critique of sanad study (an naqd al Kharijiyy: extern critique) and critique of matan study (an naqd ad Dakhil: kritik intern) Dr. Moh. Ishom Yoesqi,, dkk, Eksistensi Hadits dan Wacana Tafsir Tematik, (Yogyakarta: CV Grafika Indah, 2777) p.120
genetic. Allah also prohibits man to do inbreeding (marriage with close family) because genetics declares that inbreeding have big possibility caused abnormality or mental deviation.\(^\text{12}\)

In the Islamic context, there are many hadith\(^\text{13}\) that explain many genetic theories, from the beginning of human life to the last human life. For example, hadith narrated by Bukhari about the fetus development:

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\text{Hadith ahsanin bni thabuq hadith ahsanin abu al-akhwas un al-ahmash 'un ellahi wa qab qal ellahi hadith rasul allah صلى الله عليه وسلم و هو الصادق المصدوق قال إن أخذكم يجمع خلقه في بطن أمه البعين نذوراً ثم يكون عقلة مثل ذلك ثم تكون متفسحة مثل ذلك ثم يتعث الله ملشكاً تؤمر بأن تلبن كيداب و يقال له أنشع عقلة و ورقة وأخلة و شفقة أو سعيد ثم يتعث فيها الروح فإن الرجل منكم ليبلغ خلال حين ما يكون بنته وبين الحجته إلا ذراع فليس عليك كتابة فيبلغ من أجل الثور و يتعث حين ما يكون بنته وبين الثور إلا ذراع فليس عليك الكتابة فيبلغ من أجل الحجته (صحيح البخاري)}\(^\text{14}\)

Narrated from Hasan bun Rabi', narrated from Abu Al Akhwash, from Al A'masy, from Zaid bin Wahb,

\[^{12}\text{http://eprints.ums.ac.id/1452/1/2._AMBARWATI.pdf accessed on 16/05/2011}\]

\[^{13}\text{As we know that hadith is historical record and also the second source of Islamic teaching after al-Quran. Its existence in Islamic teaching is very urgent. Its role becomes more important when al-Quran did not give a certain decision, so hadith can be a basic law in religion decision. Besides, hadith is applied and actualized in daily life. Therefore, hadith has important role in Islam.}\]

Abdullah said: "Allah's Apostle, the truthful and truly-inspired, said, "Each one of you collected in the womb of his mother for forty days, and then turns into a clot for an equal period (of forty days) and turns into a piece of flesh for a similar period (of forty days) and then Allah sends an angel and orders him to write four things, i.e., his provision, his age, and whether he will be of the wretched or the blessed (in the Hereafter). Then the soul is breathed into him. And by Allah, a person among you (or a man) may do deeds of the people of the Fire till there is only a cubit or an arm-breadth distance between him and the Fire, but then that writing (which Allah has ordered the angel to write) precedes, and he does the deeds of the people of Paradise and enters it; and a man may do the deeds of the people of Paradise till there is only a cubit or two between him and Paradise, and then that writing precedes and he does the deeds of the people of the Fire and enters it.

From that hadith known that prophet has horizon about genetics, especially embryology. Prophet revealed the characters of fetus. Meanwhile, another hadith explain about the influence heredity toward man character and behavior.

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15 Shahih Bukhari, no. 4983, see CD ROOM Al Maktubah Al Syamilah, Global Islamic Software, 1997, vol.16, p.359
“Narrated from Yahya bin Quza’ah from Malik bin Abi Syihab, from Sa’id bi Musayyab, from Abi Hurairah, A man came to the Prophet (peace and blessings be upon him) and said, ‘0 Allah’s Messenger, a black child has been born for me. The Prophet asked, “Do you have any camels?” The man said, “Yes” The Prophet asked, “What color are they?” The man replied, “Red”, The Prophet asked, “Is there a grey one among them?” The man replied, “Yes”, The Prophet asked, “Whence come that?” The man said, “May be it (color) was pulled out by a hidden trait of heredity.” The Prophet said, ”’May be your son’s (color) was also pulled out by a trait of heredity.” (Narrated from Al-Bukhari; At-Talak ‘divorce’ book)


Those hadith defined that genetic factor influenced skin color. Physical characters not only endowed from parents but also from ancestral.

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18 It’s also narrated in Shahih Muslim (18/1500), Sunan Abi Dawud (2260), Sunan An Nasa’i (2434), Sunan at Tirmidzi (2094), Sunan Ibnu Majah (2003), Sunan Al Baihaqi (16918), and musnad Imam Ahmad (6892).
Two conclusions can be drawn from those hadīth. First, the Prophet indicated that the laws of heredity are similar between man and animals. Second, a characteristic which becomes hidden (recessive) for several generations may appear again in the future. This would be in complete agreement with the present knowledge of the laws of heredity.

An idiom (child characters inherited from parent’s characters) also found in hadīth:

For this phenomenon, the researcher tries to search more about the matter that collaboration between interpretation of hadīth and sciences, which focusing on the Biology under the title “Scientific Indications of Genetic Theory in Hadīth (A Thematic Study)”. I hope that it can inspire deep meaning towards never ending scientific miracle of hadīth.

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B. Research Question

Regarding the study, problems that may come around are:

1. Is there any scientific indication of genetic theory in hadith?
2. What is the scientific indication of genetic theory in hadith and its correlation with modern science of genetics (Biology)?

C. Aim and Significance of Research

The aims of this research are:

1. To know whether there is the scientific indications of genetic theory in hadith
2. To know the correlation between the concept of genetics in hadith and modern science of genetics (Biology)

While the Significant of research are:

- This research is expected to give a practical value in thinking based on prophet tradition (hadith) totally and comprehensively for the researcher especially and for all human being generally.
- This research is also expected to give contribution in developing study about hadith and also enrich new discourse in religiousness especially Islam, understanding hadith with modern science.

D. Prior Research

There are many books that tell about genetics and its theory,
such as:

A book of Harun Yahya under the title “DNA secret”.\textsuperscript{18} In his opus, he talked more about the secret of DNA as a data bank that brings the characteristic of heredity. In this book he revealed some fact about the creation with Qur’ānic verses that shows God authority.

*Human Genetics* written by Ricki Lewis.\textsuperscript{19} This book taught us about genetic principles. It explains all about the basic of genetic from its definition, history, development, and all concepts of genetics according to biology sciences. It also gives some application of genetics in human life.

*The Genetics God, Evolution and Belief in Human Affairs*\textsuperscript{20} written by John C. Avise and translated in Indonesian under the title *The Genetic Gods (Tuhan-Tuhan Genetis): Kuasa Gen atas Takdir Manusia*. This book revealed many scientific discoveries in genetic science and the influence of gen toward human life. He also explained many genetic discoveries including its challenges that presented toward religion, philosophy, and human morality. How human being with their technology tried to change their genetic in order to make their life better. It also makes many scientists didn’t believe on God and more glorified on modern science.

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\textsuperscript{18} Harun Yahya, *DNA secret, diterjemahkan Rahasia DNA: Kebenaran Yang Diungkap Proyek Genom Manusia*, 2003, Jakarta: Dzikra
\textsuperscript{20} John C. Avise, *The Genetics God, Evolution and Belief in Human Affairs*, (Harvard University Press, 2007)
Rahasia dan Hikmah Pewarisan Sifat (Ilmu Genetika dalam Al Qur'ān)\textsuperscript{21} written by Prof. Dr. Ir. Ronny Rachman, M.Rur.Sc. and Prof. Dr. Ir. Kudang Boro Seminar, M.Sc., This book explains about the theories of genetic such as theory of Mendel, theory of evolution, theory of selection, theory of Darwin, genetic engineering theory, etc. related to its basic of science in Qur'ān. This book also give proof from genetic perspective toward Qur'ānic verses such as prohibition in incest (married with close family), prohibition in eating pork, etc. so, genetic used to found the wisdom behind the Qur'ānic verses.

Al I'jāz al Ilmi fi As Sunnah An Nabawiyyah written by Dr. Zaghlul An Najjar, and translated in Indonesian under the tittle Pembuktian Sains dalam As Sunnah\textsuperscript{22}. The book describes many hadith related to modern science and one of them is about the influence of ancestral genes, combined with modern genetics.

Beside some books, there are also some academic writing as paper and also thesis. It is “Tes DNA (Deoxirybo Nucleic Acid) Sebagai Alat Bakti Hubungan Nasab Dalam Perspektif Hukum Islam”\textsuperscript{23}. This research intents to describe and look for the answer to happening phenomenon gets over the year, it is DNA test. This research used fiqh approach.

\textsuperscript{21} Dr. Noor Rahman Roni, dkk, Rahasia dan Hikmah Pewarisan Sifat (Ilmu Genetika dalam Al Qur'ān), 2010, Bandung: IPB Press
\textsuperscript{22} An Najjar, Dr. Zaghlul, Pembuktian Sains dalam Sunnah, 2007, Jakarta: Amzah.
Scientific Interpretation Of Surah Al Insān: 2 About Sex Determination On Fetus written by Dzikrullah Zulkarnain also explain about genetics especially about the sex determination according to Qur‘ān.

Seeing from the prior research above, the researcher come to the conclusion that there is no a study about genetic based on hadith perspective comprehensively, starting from study of sanad, matan, historical background till the understanding hadith with modern sciences. Therefore, in this case the researcher still needs to pursue the previous research.

E. Research Method
   a. Type of Research

Type of research that used by the researcher in this research is qualitative research, and it can be grouped in observational bibliographical (library research). And the method

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25 Etymologically, the word sanad means something that we make as basis. Thus, the sanad means the lineage of rawi that quote hadith from the first source. See, Drs. Munzier Suparta, M.A., *Ilmu Hadits*, (Jakarta: PT Raja Grafindo Persada, 1993), p.45-46
26 Etymologically, the word Matan means the rising ground. Terminologically, this term is a sentence that being the end of sanad. Or in other redaction, lafadh Hadith which is contains a specific meaning. So the meaning of sanad is the materials or lafadh of hadith. See, Drs. Munzier Suparta, M.A., *Ilmu Hadits*, (Jakarta: PT Raja Grafindo Persada, 1993), p.46-47.
used in this research is thematic method\textsuperscript{27}—collecting some hadith that have correlation toward the theory of genetic and analyzing it.

Hasan Asy`ari Ulamai in his book Metode Tematik Memahami Hadith Nabi SAW also explains systematic step in understanding hadith thematically, its TKS, T \{Tentukan (certaining) dan Telusuri (investigating)\}, K \{Kumpulkan (collecting) dan Kritisilah (criticizing)\}, and S \{Susun (arranging) dan Simpulkanlah (concluding)\}.\textsuperscript{28}

This thematic study will be easily understood if we use another science approach; therefore the understanding of hadith is not limited in prophet era but also for the problem nowadays and future.

To know the validity and authenticity of hadith, researcher will use some method compiled by muhaddistūn, such as the continuity of sanad\textsuperscript{29}, all narrator must be `adil\textsuperscript{30} and dlabit\textsuperscript{31}, and most dodge from syuzūt\textsuperscript{32} and illat\textsuperscript{33}.

\textsuperscript{27} It is necessary when there many hadith that look like in contradiction. If we understand partially, it will cause disparity even religion separation. One of the ways to solve it is by using thematic method comprehensively on the certain theme. See Hasan Asy'ari Ulamai, metode tematik memahami hadis nabi, PUSLIT IAIN Walisongo Semarang, 2009, P. 5

\textsuperscript{28} Ulama`i, Dr. Hasan Asy`ari, Metode Tematik Memahami Hadits Nabi SAW, 2009, Semarang: PUSLIT IAIN Walisongo, p.68

\textsuperscript{29} Regarding the concept of interconnectedness of this sanad, Al-Bukhari said that a sanad is considered to be continued if it meets the following criteria: first, al Liqā’, means the existence of a direct linkage between one narrator with next narrator, proved by the existence of an meeting action between the students who heard directly from his teacher. Second, al mu‘āsyarah, occurs same life time between teachers and students. While Muslims, with the more flexible concept of interconnectedness requires sanad only on the aspect of al mu‘āsyarah.
So the method that used by researcher is thematic method by collecting hadith about genetics, classifying, and analyzing it.

Another aspect of sanad interconnectedness, is about the symbols and methods of narration \(\text{shigat al tahanmut} \, \text{wa al ada} \) (activities of receive and impart some Hadiths). See, Kamaruddin Amin, *Menguji Kembali Keakuratan Metode Kritik Hadith*……, p.19-23.

Etymologically the word ‘adil means the middle, straight, inclined to the truth. In the terminology of Hadith sciences, there are several definitions of the proposed by ‘ulama. Al-Hakim and al Naisaburi said that it was conceived as a Muslim, do not bid ‘ah and immorality that could undermine morality. Ibn Salah said that narrator called ‘adil if he is a Muslim, baligh, intelligent, nurturing morality (muru`ah) and do not fāsiq. Meanwhile, Ahmad M. Shakir added one more element that is credible news. See Kamaruddin Amin, *Menguji Kembali Keakuratan*……, p.24

In etymology, dhabit means to keep something. While terminologically, ulama’ hadith give the different definition. Al Sharkhasi said that dhabit means the level of intellectual capabilities and excellence in the admissions process and understand in depth the meaning of the contain, maintain and memorize as much as possible until the time of deployment of Hadith to the others. See, Umi Sumbulah, *Kritik Hadith Pendekatan Historis metodologis*, (Malang:UIN Malang Press,2008), p.64-65

About the term syadz on sanad, there are three opinions in the science of Hadith terminology such as:

First, the opinion of ash Syafii he said that the hadith called syadz if the hadith that narrated by a tsiqqah narrator contradicted to the hadith narrated by a number of which also tsiqqah.

Second, the opinion of al-Khalili, stated that syadz is if a hadith only has one lane, whether it is narrated by tsiqqah narrators or not, either contradictory or not.

Third, an Naisaburi’s opinion. hadith syadz is if its hadith narrated by a tsiqqah narrator and there are another tsiqqah narrators. According to Ismail Asy Syafii, the third opinion is more used by hadith scholars.

While syadz on Matan hadith is defined as a conflict or riwayat unconformity of a narrator with the stronger narrator in memorize and remembrance. Its unconformity is in the matan quoted, until resulting in the addition, subtraction, change of place (maqlūb) and various forms of weakness and other disabilities. See, Umi Sumbulah, *Kritik Hadith Pendekatan Historis Metodologis*……, p.70-71 and 103

Illat is a hidden causes which can damage the validity of hadith. In sanad aspects, Ibn Tamiya stated that hadith which contains illat is hadith which its sanad outwardly looks good, but after examined there are many Galt narrators (did many mistakes), isnād muaqāf (only up to the companions) or mursal (only history from shahabat), even there are the possibility of entry of another hadith in these Hadiths.

While the definition of illat on matan is a hidden reason contained in the hadith that made Matan looks authentic, either in the form of the entry of another Hadith but its often conflict with nash-nash that has stronger accuracy. See, Umi Sumbulah, *Kritik Hadith Pendekatan Historis Metodologis*……, p.73 and 108.
Meanwhile, the approach that is utilized is by scientific approach especially genetic in biology. Scientific approach used to know the correlation between the theory of genetic in biology and hadith.

b. Source and method of collecting Data

This research is a library research because the data which the researcher uses (either primary or secondary data) is a book. The data collected by researcher include: genetic concept in biology views and scientific indication of genetic theory in hadith.

i. Primary source

The primary data in this research will be taken from hadith book and its interpretation. it will be taken from kutub al Hadith especially kutub at tis’ah (Shahih Bukhari, Shahih Moslem, Sunan at Tirmidzi, Sunan An Nasa’i, Sunan Abi

34 Al Jami’ Al Msaad Al Shahih Al Makhtashar Min Umar Rasulillah Wa Sunanah Wa Ayyamih or more popular with Shahih al Bukhari is a book of Hadith collection of Imam Bukhari, contents of 8.122 Hadith. According to ulama’ jumhur hadits this opus is the most shahih book after Al Qur’an.


36 His name is Abu Isa Muhammad Ibn Isa Ibn Tsaruh Ibn Musa Ibn Dhahak Al Sulami Al Bughi Al Tirmidzi, he is the author of Al Jami’ Al Mukhtasar min Sunan ‘an Rasulillah or more popular with Sunan Al Tirmidzi.

37 Abu Abd Rahman Ahmad Ibn Syuaib Ibn Ali Ibn Sinan Ibn Bahr Al Khurasani An Nasa’i is the author of Sunan Al Kubra or Sunan An Nasa’i, beside his opus he also wrote many books, such as: Sunan Al Mujtaba’, Musnad ibi, Musnad Malik, Kitab Ad Dhaafa, dsb.
Dawud\textsuperscript{38}, Sunan Ibn Majah\textsuperscript{39}, Musnad Ahmad\textsuperscript{40}, Muwattho ibnu Malik’s\textsuperscript{41}, and Sunan ad Darimi) and another compilation hadith book.\textsuperscript{42}

Second, researcher also will use some genetic books such as Human Genetics written by Ricki Lewis and another books that talk about the concept of genetics in order to get new understanding in hadith.

\textbf{ii. Secondary source}

Meanwhile, the secondary data gathered from variety literature which works through about genetics. And also some discourse supporting genetics science such Journal, magazine, newspaper, and internet such as; \url{www.almaktabah.net}, \url{http://en.wikipedia.org}, and other information that contributed

\footnotesize{\textsuperscript{38} Imam Abu Dawud Sulaiman Ibn Al Asy`ats ibn Ishaq Al Sijistani, with his opus Sunan Abi Dawud is the popular muhaddith. Kitab sunan that has been arranged according to its theme such as thaharah, zakat, shalat, etc. Contains of 4800 aHadith.

\textsuperscript{39} Abu abdillah Ibn Yazid Ibn Majah with his popular opus Sunan Ibnu Majah is the best book in arranging the title and sub-title.

\textsuperscript{40} He is more popular as ahli fiqh than ahli hadits. Abu abdillah Ibn Muhammad Ibn Hanbal Al Marwazi is the author of Musnad Al Kabir. This Musnad arranging according to the name of shahabah, therefore it difficult to find out Hadith according to its theme.

\textsuperscript{41} Muwaththa Ibnu Malik, its author is Imam Abu Abdillah Malik Ibn Anas Ibn Abu Amir Ibn Amir Ibn Harits , he is a faqih, the leader of madzhab Malikyyah. Its book not only contains of Hadith but also the opinion of shahabat, and tabiin about islamic law.


\textsuperscript{42} Many books of Hadith that can be references in Hadith research, such as: kutub as sunan, kutub musnad, kutub al jam`i, kutub al Hadith fi al fiqh, kutub al Hadith fi at tafsir, etc.

to the topic. The researcher also never misses dictionary book that explains about certain hadith, such as Lisān al Arab, al Manawir, etc.

c. **Analysis**

The techniques of analyzing data that used are:

*First*, collecting a certain hadith about genetic and its theory in hadith book.

*Second*, classifying those hadith according to its quality with inserting syarah hadith and asbāb al wurūd if there are.

*Third*, reading those hadith with the scientific approach -to know scientific indication of genetic theory in hadith and its correlation with modern science of genetics (Biology)-.

F. **Writing Systematic**

Writing systematic of this research is below:

*Chapter I*, this chapter is a group of foreword of the research, consists of background, formulation of problem, significance of research, theoretical framework, methodology of research and writing systematic.

*Chapter II*, this chapter is the discussion around the basis research of theories. It’s containing of the explanation about genetics, from its definition, the aplication of genetics in human

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43 In the collecting data, this approach called with documentation method. See, Suharsimi Arikunto, *Prosedur Penelitian; Suatu Pendekatan Praktik* (Jakarta: Bina Aksara, 1987) P 188.
life, the development and concept of heredity, and also about behavioural genetics.

*Chapter III* is discussing about genetics in Islam especially in *hadīth* with inserting the quality. This chapter describes the redaction of *hadīth* followed by analysis of sanad and analysis of matan aspects in terms of linguistics and its relationship with Qur’an.

*Chapter IV* is elaborating more the concept of genetics in the *hadīth*, explaining comprehensively those *hadīth* using scientific approach, to know scientific indication of genetic theory in *hadīth* and its correlation with modern science of genetics (Biology).

*Chapter V* is the chapter consisting of conclusion and suggestion for the next research.