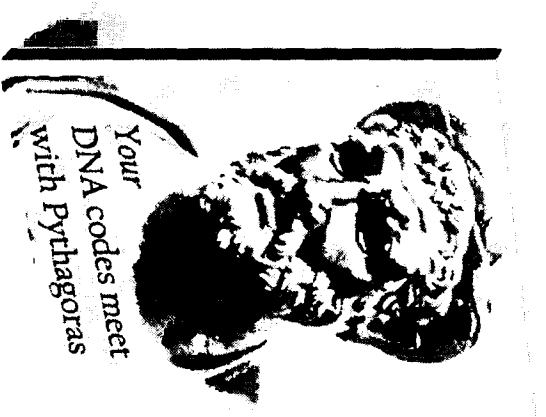


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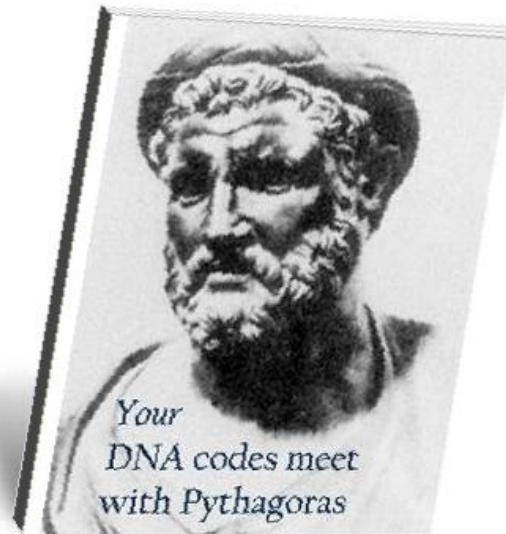


Your DNA Meet with Pythagoras

The science of unbeatable

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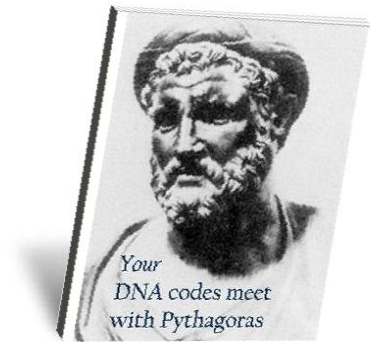
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Author's Preface



"Your DNA codes meet with Pythagoras" are a special project that arises with my curiosity in DNA genetic code. As I thought back in 2004 ... "if there is a periodic table for chemistry and later generation utilize the knowledge of periodic table to discover many more new elements, why not genetic codes? There must be something more than what we see in here..." as I turn in back and forth on the old textbook.

The day in the late summer 2004 was a little hot but my room were full of the enthusiasm. In my mind a voice seems to repeated encourage me "I want to know more ... there is something to discover ... there must be"

As I position RNA genetic chart from the old biology textbook, I start to draw all the associate molecules. (U, C, G, A base). At that time, I did not have much biology training except a molecular biology internship one summer before. Sadly, I hardly remember all the technique and the presentation I did for a room of professors and students - not to sound to be ungrateful - one thing I had an impression on was... knowing DNA has a replication process that can repair itself by Mis Match Repair.

With limited knowledge, I can only start from scratch ... starting drawing like a kingdom garden kid would do. The simplest math I can ever apply is to count the atoms one by one in my naked eyes on the papers. One piece after another, surprisingly and for my faint of my heart, I felt my heart race to 120mile per hour after I finish what I intend to do.

I thought I must draw the wrong structure of U, C, G, A bases... I look back and forth on my high school biology textbook. I look at on the internet repeatedly to ensure I have not gone out of my mind...

"That is not possible" I cried loudly in my room.

My hands were shaking and is that possible DNA and RNA has such inter-connection?

Ever Since... more seemingly impossible has brought me to some lights of understandings.. I am still excited now after 4 years of getting old, but whether the world or others can embrace these obscure concepts or not, I dare not bet on it.

Genetic Code (RNA) – RNA is consist of 4 bases. The symbol are, U, C, A, and G

Uracil in RNA is like Thymine in DNA. While DNA is a double strand, RNA is a single strip that codes for DNA during transcription. Some says RNA is the origins of life, let's look at RNA's genetic chart on the left.

Compare this chart with the right one. UUU on the first square is coming from the left, middle and right column and "Phenylalanine" is a protein which is made in this code (compare in the chart on the right)

	U	C	A	G	
U	UUU	UCU	UAU	UGU	U
U	UUC	UCC	UAC	UGC	C
U	UUA	UCA	UAA	UGA	A
U	UUG	UCG	UAC	UGG	G
C	CUU	CCU	CAU	CGU	U
C	CUC	CCC	CAC	CGC	C
C	CUA	CCA	CAA	CGA	A
C	CCG	CCG	CAG	CGG	G
A	AUU	ACU	AAU	AGU	U
A	AUC	ACC	AAC	AGC	C
A	AUA	ACA	AAA	AGA	A
A	AUG	ACD	AAG	AGG	G
G	GUU	GCU	GAU	GGU	U
G	GUC	GCC	GAC	GGC	C
G	GUA	GCA	GAA	GGA	A
G	GUG	GCG	GAG	GGG	G

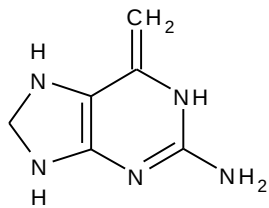
Look at Serine in orange color, they seems to be apart and codes in these sequences, perhaps there is another way to arrange all the codes besides current system.

Genetics codes are universal - some creation may vary how it is codes. For example: Leucine is coded more on UUA than CCG in some species than the others.

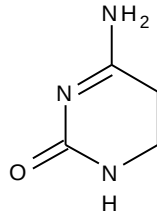
Phenylalanine	Serine	Tyrosine	Cysteine
Phenylalanine	Serine	Tyrosine	Cysteine
Leucine	Serine	Stop	Stop
Leucine	Serine	Stop	Tryptophan
Leucine	Proline	Histidine	Arginine
Leucine	Proline	Histidine	Arginine
Leucine	Proline	Glutamine	Arginine
Leucine	Proline	Glutamine	Arginine
Isoleucine	Threonine	Asparagine	Serine
Isoleucine	Threonine	Asparagine	Serine
Isoleucine	Threonine	Lysine	Arginine
Methionine	Threonine	Lysine	Arginine
Valine	Alanine	Aspartic Acid	Glycine
Valine	Alanine	Aspartic Acid	Glycine
Valine	Alanine	Glutamic acid	Glycine
Valine	Alanine	Glutamic acid	Glycine

RNA and DNA Structure are shown below based on the structure below. (Sugar base and Phosphor are not include.) – These are the structures we will be counting in their individual atoms and they are separated.

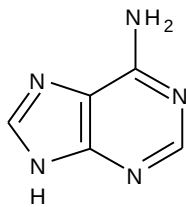
RNA



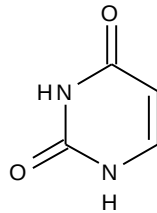
Guanine



Cytosine



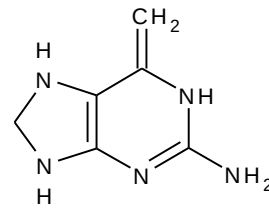
Adenine



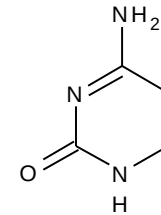
Uracil

	G	A	C	U
H	5	5	5	4
C	5	5	4	4
N	5	5	3	2
O	1	0	1	2
total	16	15	13	12

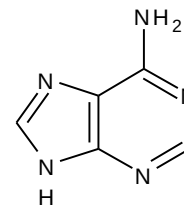
DNA



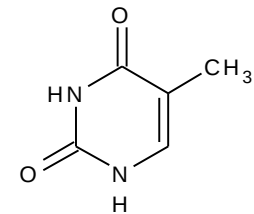
Guanine



Cytosine



Adenine



Thymine

	G	A	C	T
H	5	5	5	6
C	5	5	4	5
N	5	5	3	2
O	1	0	1	2
total	16	15	13	15

Have you notice something? Why RNA has 16,15, 13 and 12 whereas DNA did not have such “coincident” ?

Let’s look again...

RNA Chart is summarized in the chart below. G has 5 hydrogen, 5 carbon, 5 nitrogen and 1 oxygen.

	G	A	T	C	U
H	5	5	6	5	4
C	5	5	5	4	4
N	5	5	2	3	2
O	1	0	2	1	2

While RNA and DNA seems to be different, plot them in matrix and we can get -10 or 10 depends on how you position these molecules. Is there any meaning in linear algebra when the answer is not 1 or 0?

$$\begin{vmatrix} 5 & 5 & 5 & 4 \\ 5 & 5 & 4 & 4 \\ 5 & 5 & 3 & 2 \\ 1 & 0 & 1 & 2 \end{vmatrix} = -10 = \begin{vmatrix} 5 & 5 & 5 & 6 \\ 5 & 5 & 4 & 5 \\ 5 & 5 & 3 & 2 \\ 1 & 0 & 1 & 2 \end{vmatrix}$$

We are using number of atoms in RNA and DNA to look in all direction what is related to each. The result from linear algebra may indicate the 3 D structure of RNA or DNA in translation and transcription. The question may rise : why DNA and RNA has the opposite sign in particular sequence while in the other way has the same sign = 10?

If now you change G,A,C,U in the other way, even random, you would be able to see the opposite sign. Wherever you position A from RNA, A in DNA is position the same. For example, now if I put number in matrix according to “C,U, G,A “for RNA, I would do “C,T,G,A” for DNA.

Besides the 10 or -10 interesting... if we plot the number back into RNA codes chart we see in the second page, we can do addition now to use color to group the same series number ...

Again ...

			U	C	A	G	
	U = 12	U	UUU	UCU	UAU	UGU	U
	C = 13	U	UUC	UCC	UAC	UGC	C
		U	UUA	UCA	UAA	UGA	A
		U	UUG	UCG	UAC	UGG	G
A = 15	G = 16	C	CUU	CCU	CAU	CGU	U
		C	CUC	CCC	CAC	CGC	C
		C	CUA	CCA	CAA	CGA	A
		C	CCG	CCG	CAG	CGG	G
	A	AUU	ACU	AAU	AGU	U	
	A	AUC	ACC	AAC	AGC	C	
	A	AUA	ACA	AAA	AGA	A	
	A	AUG	ACD	AAG	AGG	G	
UUU = 12, 12, 12	12+12+12=36	G	GUU	GCU	GAU	GGU	U
		G	GUC	GCC	GAC	GGC	C
		G	GUA	GCA	GAA	GGA	A
		G	GUG	GCG	GAG	GGG	G

	12 U	13 C	15 A	16 G	
U 12	UUU	UCU	UAU	UGU	U
	UUC	UCC	UAC	UGC	C
	UUA	UCA	UAA	UGA	A
	UUG	UCG	UAC	UGG	G
C 13	CUU	CCU	CAU	CGU	U
	CUC	CCC	CAC	CGC	C
	CUA	CCA	CAA	CGA	A
	CCG	CCG	CAG	CGG	G
A 15	AUU	ACU	AAU	AGU	U
	AUC	ACC	AAC	AGC	C
	AUA	ACA	AAA	AGA	A
	AUG	ACD	AAG	AGG	G
G 16	GUU	GCU	GAU	GGU	U
	GUC	GCC	GAC	GGC	C
	GUA	GCA	GAA	GGA	A
	GUG	GCG	GAG	GGG	G

Once we put the number in graph on the left, we will be able to sequence the codes in a more nature way.

Now you may come to the questions why are they doing these?
Or why I have such creativity to believe this mathematical game is worth playing?

Perhaps it is my eagerness to believe that nothing is coincidence, I decide to give it shot whether it may seem not fit into logical explanation “how the creation is evolved by numbers.” While bear with me in your patience time, please do continue reading.

The result now is shown below.

UUU	UCU	UAU	UGU		36	37	39	40		36	37	39	40	
UUC	UCC	UAC	UGC		37	38	40	41		37	38	40	41	
UUA	UCA	UAA	UGA		39	40	42	43		39	40	42	43	
UUG	UCG	UAC	UGG		40	41	43	44		40	41	43	44	
					37	38	40	41		37	38	40	41	
CUU	CCU	CAU	CGU		38	39	41	42		38	39	41	42	
CUC	CCC	CAC	CGC		40	41	43	44		40	41	43	44	
CUA	CCA	CAA	CGA		41	42	44	45		41	42	44	45	
CCG	CCG	CAG	CGG		39	40	42	43		39	40	42	43	
					40	41	43	44		40	41	43	44	
AUU	ACU	AAU	AGU		42	43	45	46		42	43	45	46	
AUC	ACC	AAC	AGC		43	44	46	47		43	44	46	47	
AUA	ACA	AAA	AGA		40	41	43	44		40	41	43	44	
AUG	ACD	AAG	AGG		41	42	44	45		41	42	44	45	
					43	44	46	47		43	44	46	47	
GUU	GCU	GAU	GGU		44	45	47	48		44	45	47	48	
GUC	GCC	GAC	GGC											
GUA	GCA	GAA	GGA											
GUG	GCG	GAG	GGG											

Conclusion: The findings of these codes can initiate an argument that all creation are coming from one, yet each retain an individuality. While many supports evolutionary biology or the other there is one Creator, these two premise are both truth.

How can we refine these?

Taking one piece of genetic codes ... and if there is a correlation between ancestor traits for example: wave hairs, compare two individual in the same vertical blood line, narrow down to certain Chromosome to the specific genes (locus position) ... start from the closest family and deduct the results.

You ask me... even we know all that, how can we change the illness?

Nowadays we already modified many our genomes and if we understand these sequence is not ought to be man-change by our limited resource mechanically, it may impose much greater harm than doing good. I used to work in a chromosome lab to see which chromosome after proper banding has gone wrong with other pair. While looking at baby cell and patient bone marrow cell under the microscopic telescope, I found out that the amniotic fluid cell always has nice round shape with a nucleus in the middle while the patient's bone marrow cell has turn into sharp, narrow with almost evil eyes, in my interpretation, sort of shape. That often gives me nervousness and uneasy while looking into them. Imagine... if a person has billion cells in his body and each has stretched their limit or damage them to these extents, the illness is inevitable.

The root cause may beyond our understanding but perhaps the more we discover the rules of the genetics, we would understand why it causes and why certain things just "happened".

Part II – the number of science and Genetic Code

We are going into another concept of RNA codes. According to Pythagoras, he believe that the universe is made of the numbers and today we can see many theories has developed based on the pure mathematics such as string theory.

While String Theory is in a grand scale for us to look at the universe in various dimensions, needless to say, RNA and DNA are parts of universe and we could not possible exclude these important figure out of any science theory today we have discover, such in physics –“any force will give an opposite force of equal magnitude”

In the same thinking, we can apply to the same rules – the rule of numbers.

By using the same strategy from Pythagoras, we will substitute the number on the alphabet that is named after DNA and RNA.

We can argue what if the DNA is not named such and such time... but again “any force will give an opposite force of equal magnitude”, we shall just take a look what is out there.

Let’s look the 4 bases again.

U – Uracil

C- Cytosine

A – Adenine

G – Guanine

Based on the science of number (by Pythagoras) – each alphabet stands for a number

1 2 3 4 5 6 7 8 9

a b c d e f g h i

j k l m n o p q r

s t u v w x y z

If we added it up for 4 bases

Uracil = $3+9+1+3+9+3 = 28 = 10 = 1$

Cytosine = $3+7+2+6+1+9+5+5 = 38 = 11 = 2$

Adenine = $1+4+5+5+9+5+5 = 34 = 7$

Guanine = $7+3+1+5+9+5+5 = 35 = 8$

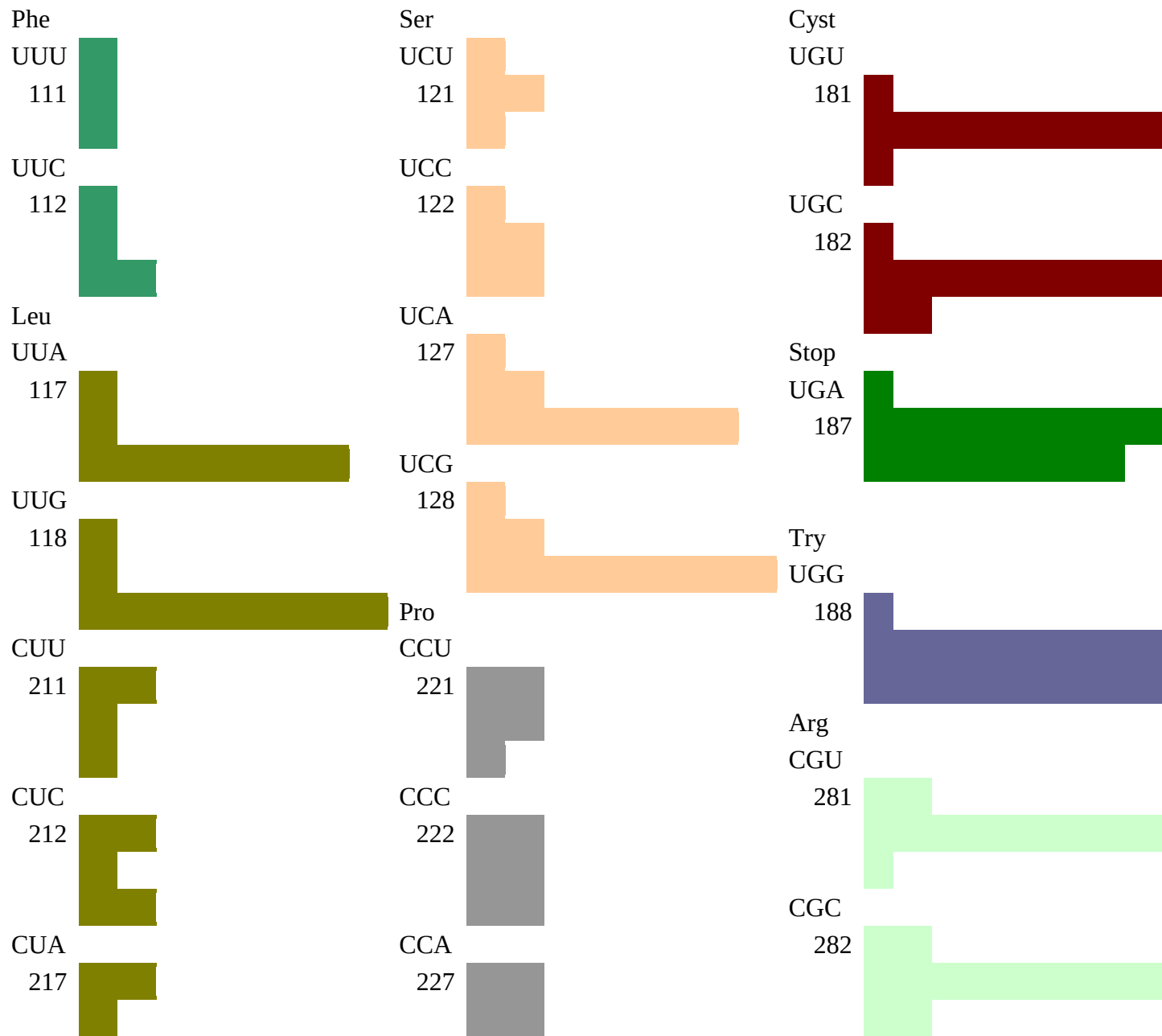
Are the coincidence or not?

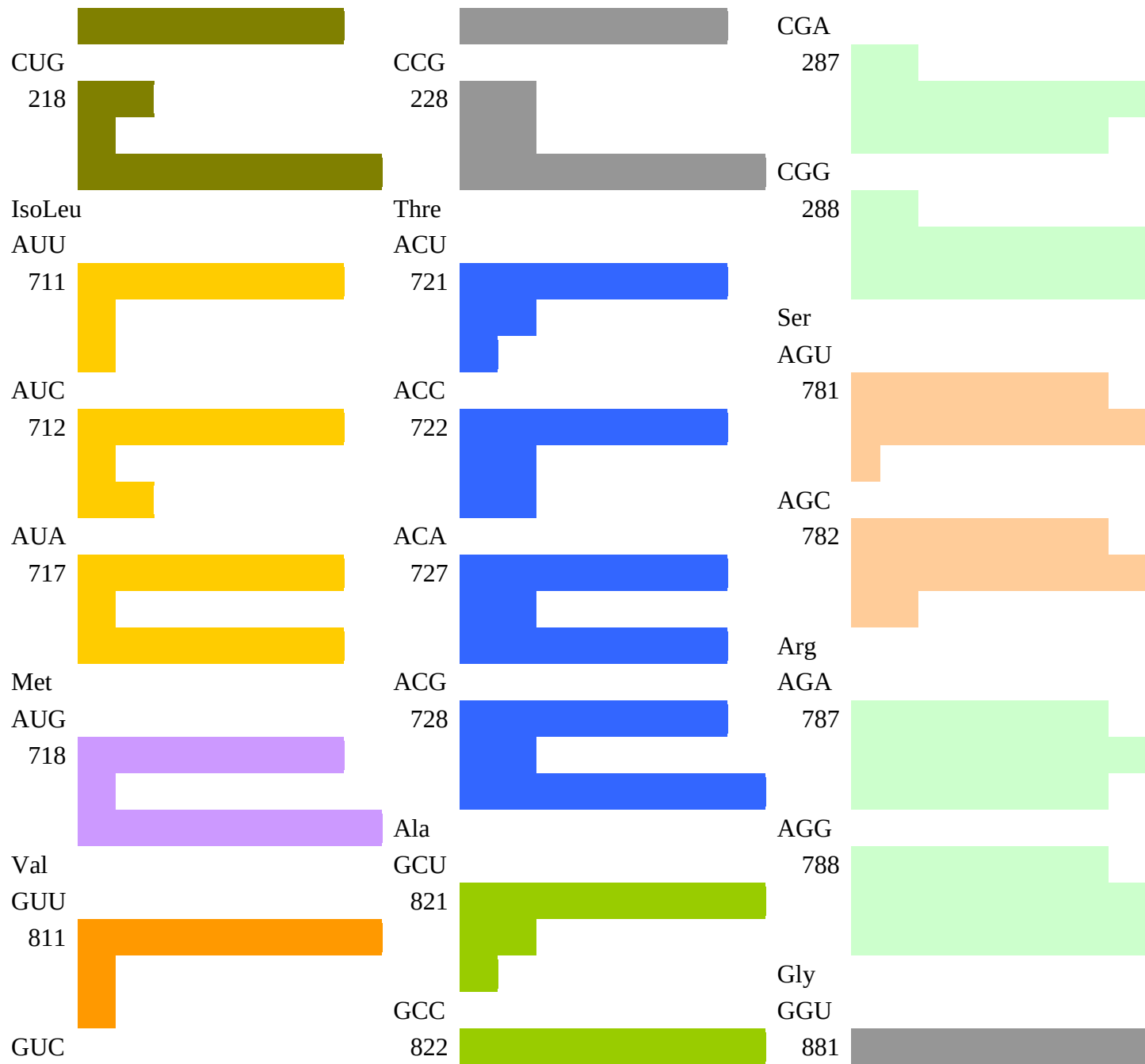
U	C	A	G
1	2	7	8

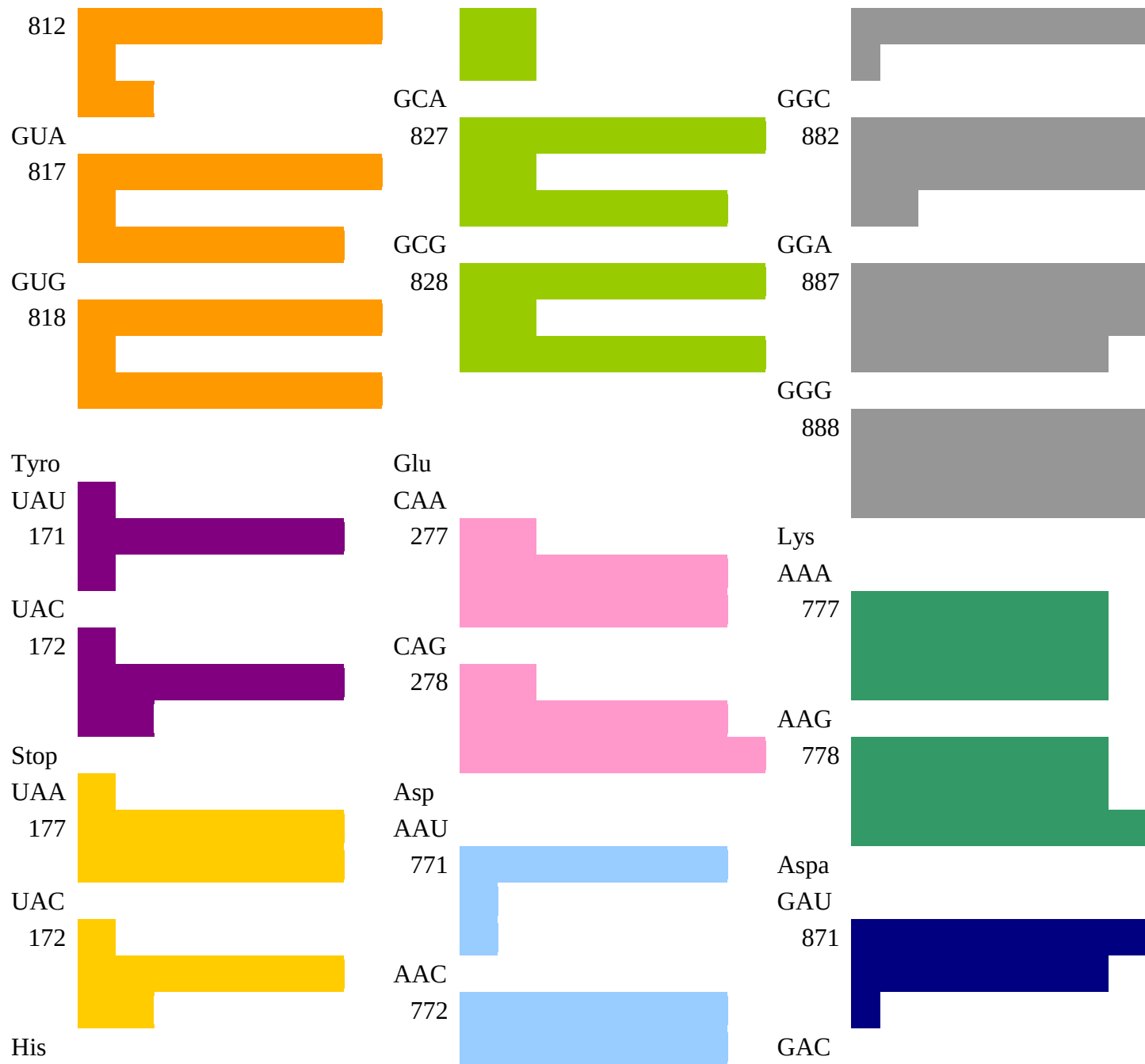
Use these number, enter them in the excel and comply them. Each square represent one. Ex: if it is 4, we draw 4 squares.

For example: UUU = 111, so in the excel, we leave 3 blank. One each and there are 3 in a row. The best way to use this graph is print out the next page and turn 90 degree counterclockwise

Looks like a linguistic language ...









You may wonder what is this graph to do with RNA?

Imagine a strip of DNA codes are graphing based on these, would this not like a language like today we see today in the computer? In computer, we used to have 0 and 1 to present certain character.. perhaps 001, 00111 and etc. they are fundamental to process bit and bites information.

Conclusion:

The DNA pieces exon that so called the junk DNA, may be parts of information that we missing out. While they may contain greater information, the origin of the particular specie comes from is no doubts recorded within itself.

In all, there are common ground in science whether old age or new age science. It depends on us how to cross different fields to connect it all. It may take years or ages for us to understand these connections. Most importantly, they are for us to grow and to know that the best interest of this knowledge can only be used when the greater humanity has no more selfishness or self-interests.