AA coded by 2 or more diff polymers.

	sRNA	mRNA Poly	change
Arg	U	AG CG	A ↕ C
Leu		UG UC UA (UU)	G ↕ C ↕ A
Glu-NH₂	C	AG AC	G ↕ C
Asp-NH₂	AnG	UA CA	U ↕ C
Gly		UG CG (?) AG (?)	U ↕ C ↕ A
Proline	~~AnG~~ UnC	C ~~UC~~ UC AC GC ?	C ↕ U ↕ A
Ø		U UC (?)	U ↕ C
Threonine	U — A U — C	AC GC (?)	A ↕ G
Isoleu		UA	

C U AC

GAA
~~AAG~~

~~GGC~~
~~CGC~~

CCU
GGA
GAA
GGC
GGU
GUA
GAA
GCA
AGA
UGA
CGA

UGA
GUA

sRNA
CCU

AUG
UAC
UUC ?
UCC

AUC
UAG
UUG
UCG
UAU
UAC

UUC
AAC AAG

~~AAC~~
UUG
UUU
UUC
AAU
UUA
UUU
UUC
GUG

AAC
UUG
UUU
UUC
UUU

AUG
~~AUG~~
AUC

If A is present

A UU
UAA CAA
UAC ~~UCA~~
UCA ~~UAC~~

same

if G is present.
~~This does not seem to be the case.~~

GUU
UAA CAA
CCA
CAC

AUU

~~UUC~~
GUG
CCC
CUC
CAC
CGC

GUG

ACA
UGU
UUU
UCU

ACA

UGC ?
ACG ✓
ACC ✓
ACU
ACA ✓

AUG
CCG ✓
GCG
UCG

~~other~~
UGC
~~UGU~~
conflict

AUU
UUA ✓ UAA ✓
UCA UAC
UAG ✓
UCA
UCA

CAU

(?) Add sort point C
Start coding

AAU

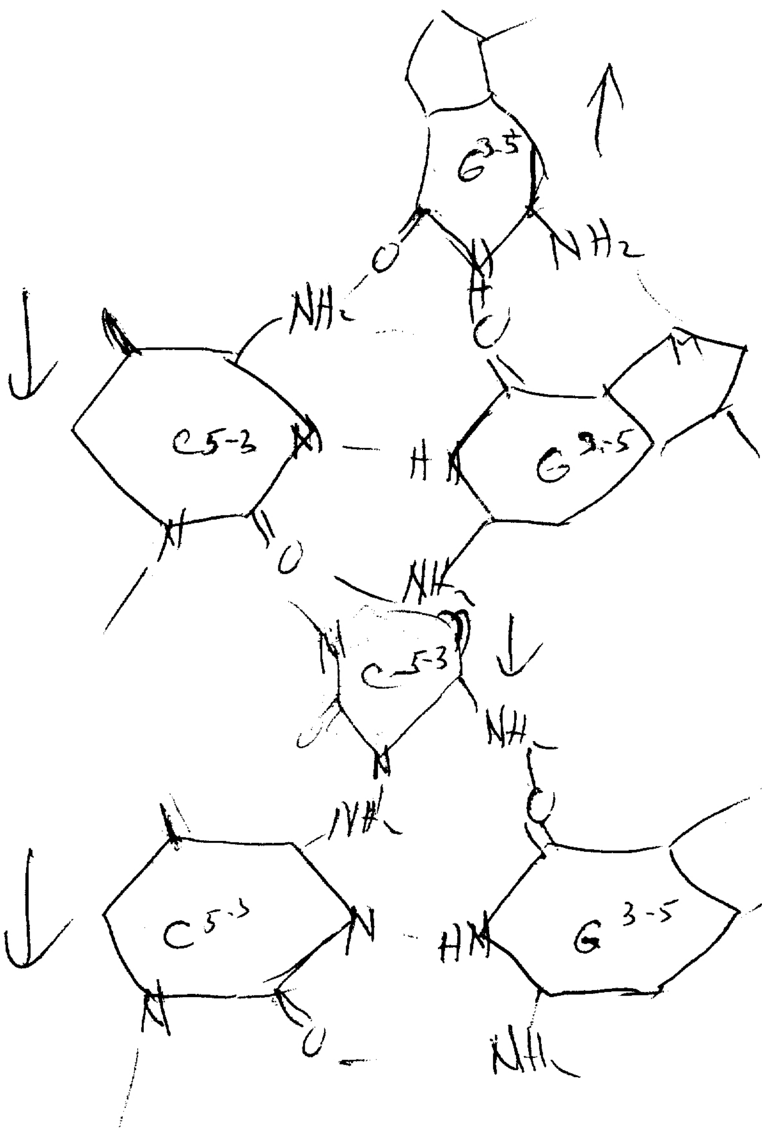
Rank of change

U – G rarely
U – C often
C – U often
A – C rare
C – A rare

Arg	CCU	CUU	AAC	ACC	A
AAG	GGA	GAA	UUG	UGG	
~~AGG~~ CCG	UGA	UAA	UUU	UUG	
ACG	GUA	GCU		UGU	
	GGC	GAC			

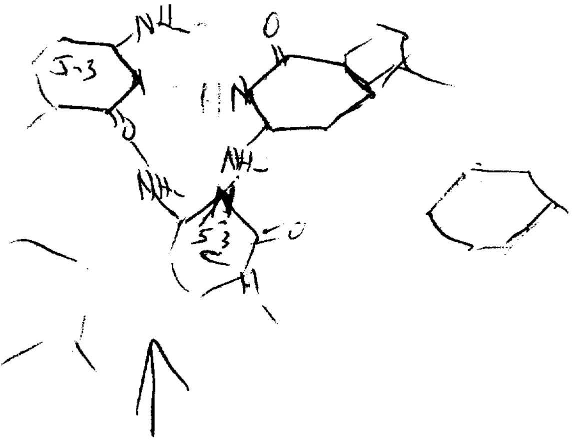
Single Codons	AAU	AUA
Tyrosine	UAA	UAU
	AAC ~~[illegible]~~	AAC
Valine	UUG	UAG(?
Hist	CCA	~~[illegible]~~ CUA ?
	A UC	
Met	UAG ?	
Asp	UAG ?	
Glu	AAG ?	
	ACC	
Trypt	UGG	

Double Codons			Change ψU
Threonine	CCA	CAA	C↔A
			ψU
Asp-NH₂	AAC	AAU	C – U
			ψU
Leu	UUC	UCC	C – U
			ψU
Ser	CUU	CCU	C – U
Cyst?			
			ψU
Lysine	AAU	AAA	A – U
			ψU
Proline	CCC	CUC CAC CGC(?	C – U C – A (C – G ?)
			ψU
Arg	AAG	CCG ACG	C – A
& Glu-NH₂	AAC	AAG(?	C – G(?

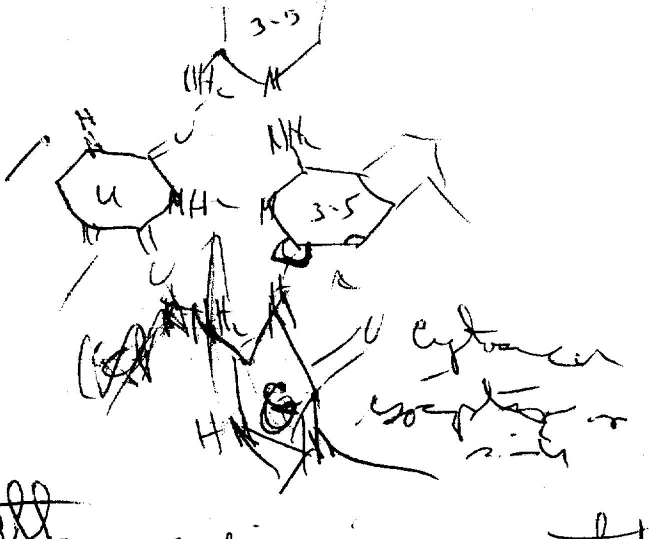


Read up & down the DNA groove with RNA polymerase. ~~Strands of DNA do not have to separate.~~

↑ ~~Would expect to get triple-stranded intermediate~~



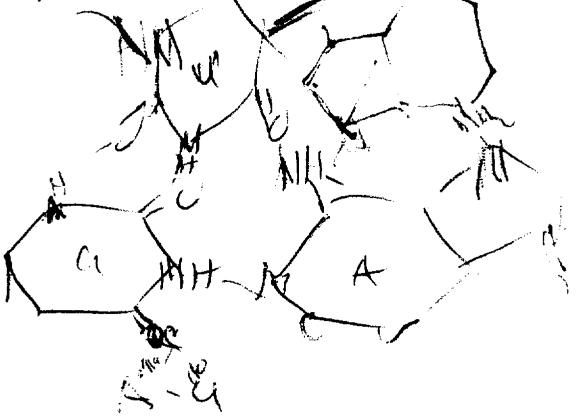
If you could suppose double ‖ RNA on columns, Could read double strand 2 ways

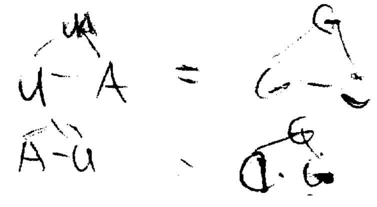


cytosine

[illegible] or

2-G





Bottom reading is prevented

Permutations for sRNA

3 purines 3 pyrimidines

AAA	GGG	UUU	CCC
UUU	CCC	AAA	GGG
		AAU	GGU
		AAC	GGC
		AUA	GUG
		ACA	GCG
		UAA	UGG
		CAA	CGG

3 purines, mixed [illegible]

AAG	AGG
UUC	UCC

If AA $\overset{U}{C}$ + GG $\overset{U}{C}$, 12 [illegible] 12 [illegible] ~~[illegible]~~ [illegible] ~~[illegible] 12 triplets~~ 24 [illegible] ~~[illegible]~~

2 purines, 1 pyrimidine 24 triplets. 12 [illegible]

③ AA $\overset{U}{C}$		③ AG $\overset{U}{C}$		③ GA $\overset{U}{C}$	② GG $\overset{U}{C}$	
UUA or UUG		UCA or UCG			CCA or CCG	
UUU	UUU	UCU	UCU		CCU	CCU
UUC ~~[illegible]~~	UUC	UCC	UCC	either these [illegible] [illegible]	CCC	CCC

1 purine, 2 pyrimidines [illegible]. 24 Triplets Much ambiguity 24×5=120 triplets [illegible] [illegible]

③ AUC	③ GUC	AUU	ACC	GUU	GCC
UAC	CAG	UAA	UGG	CAA	CGG
UUG	CUG	UUA	UUG	CUU	CUG
UCG	CCG	UCA	UCG	CCA	CCG
UAU	CAU	UAU	UGU	CAU	CGU
UAC	CAC	UAC	UGC	CAC	CGU
③ ACA	③ GCU				
UGA	CGA				
UUA	CUA				
UCA	CCA				
UGU	CGU				
UGC	CGC				

[illegible]

~~either these [illegible]~~