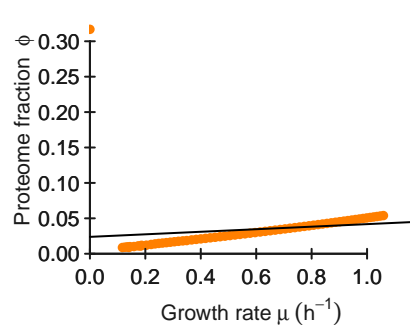
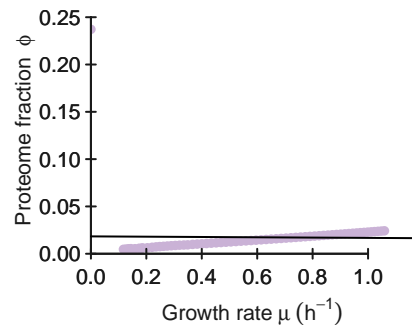
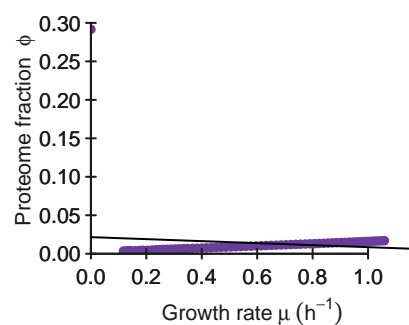
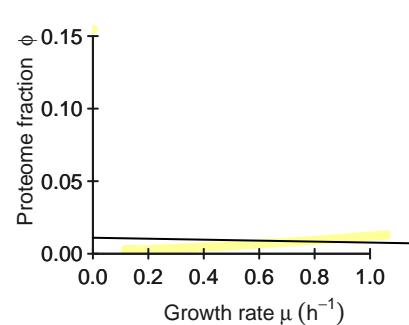
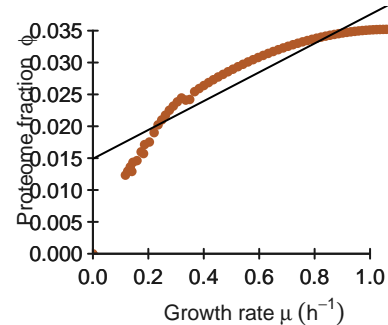
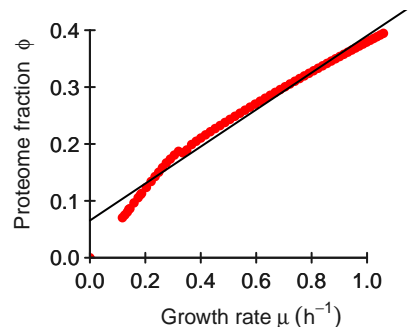
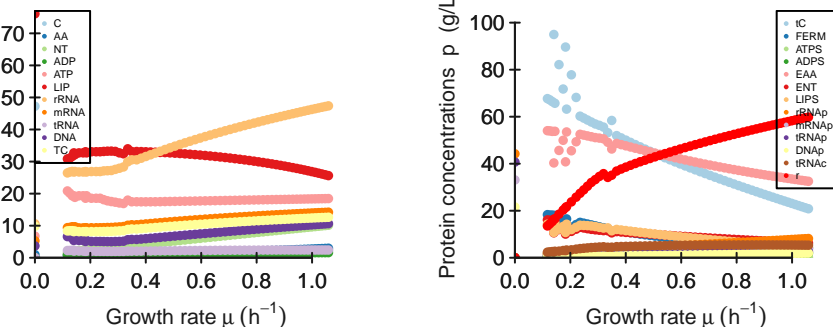
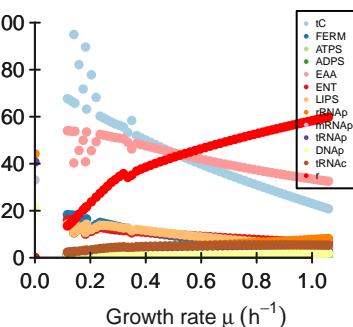
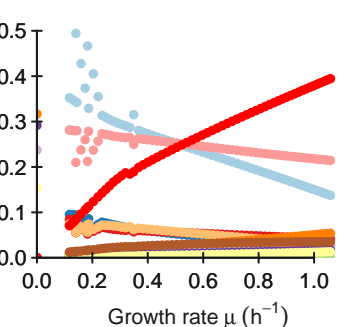
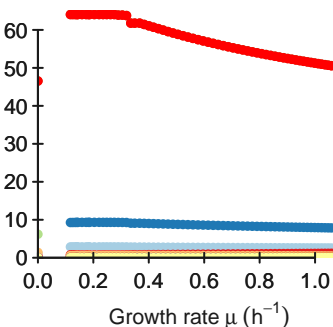
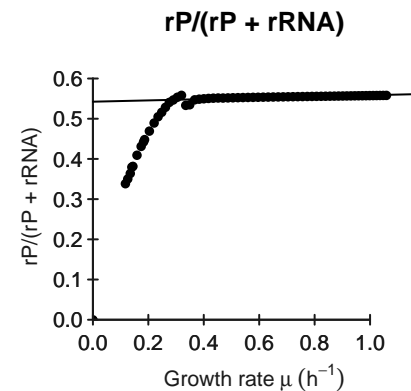
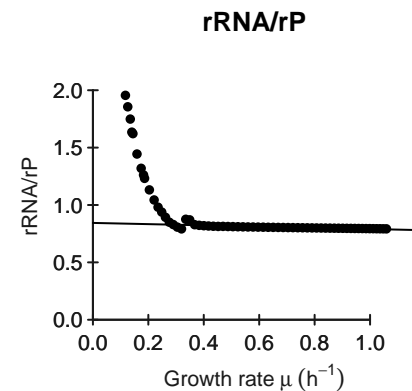
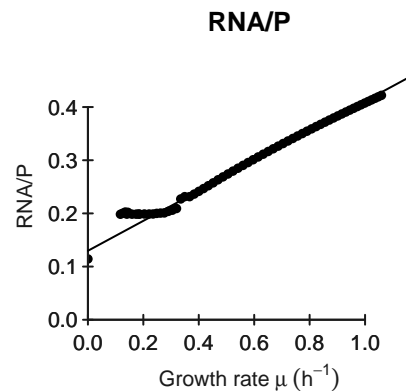
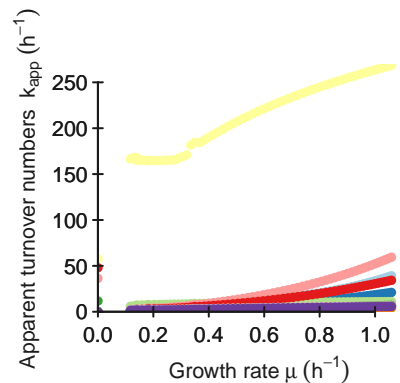
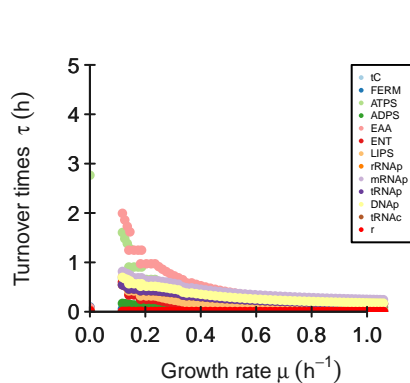
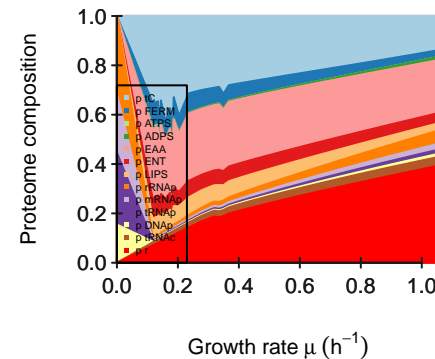
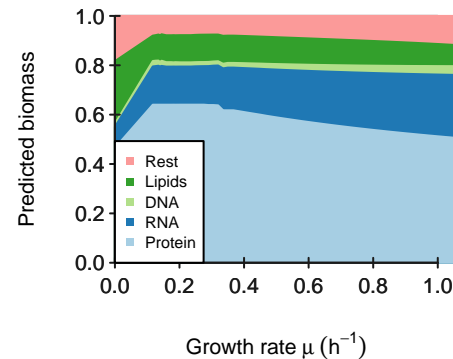
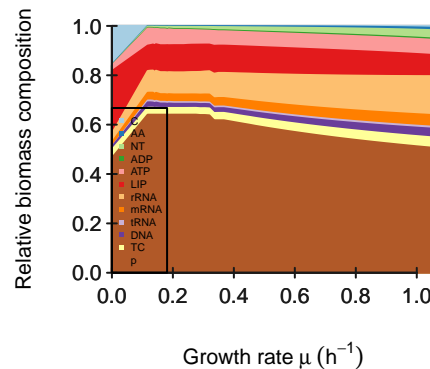
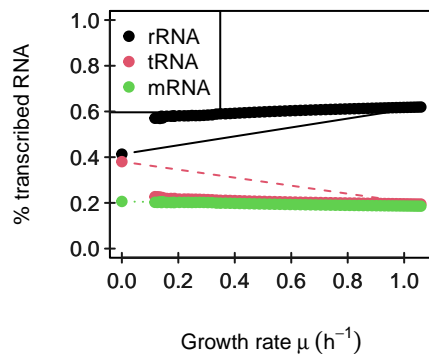
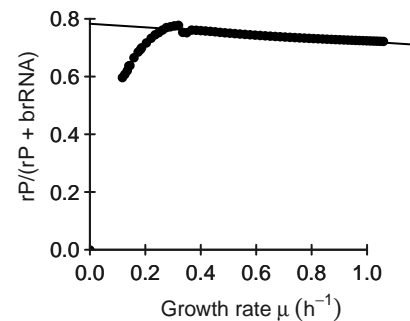


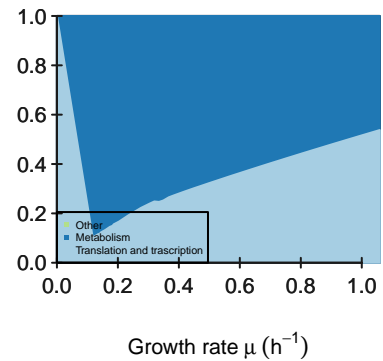
**rRNAp****mRNAp****tRNAp****DNAp****tRNAc****r**Metabolite concentrations  $c^m$  (g/L)Protein concentrations  $p$  (g/L)Proteome fractions  $\phi$ Flux fractions  $f$ 



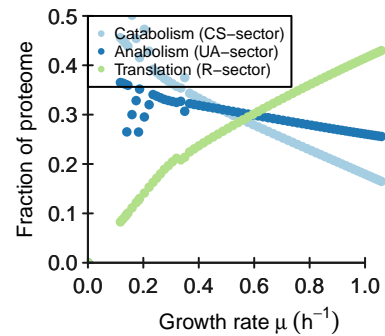
### Protein mass fraction in ribosome



Proteome sectors



### Proteome sectors



**M**

[illegible]

**K**

[illegible]

**KA**[illegible]

# kcat

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]	[,9]	[,10]	[,11]	[,12]	[,13]
kcatf	700	2000	70	14	12	220	73	15	10	15	16	15000	900
kcatb	70	200	7	1	1	22	7	0	0	0	0	0	0



## Keq

[1,]	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]	[,9]	[,10]	[,11]	[,12]	[,13]
	100	250	150	14	60	11.111111111111111	52.1428571428571	Inf	Inf	Inf	Inf	Inf	Inf

### minimal phi constraint

[illegible]

### minimal f constraint

[illegible]