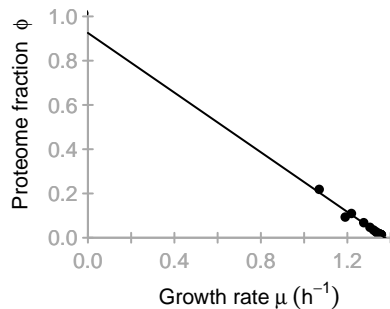
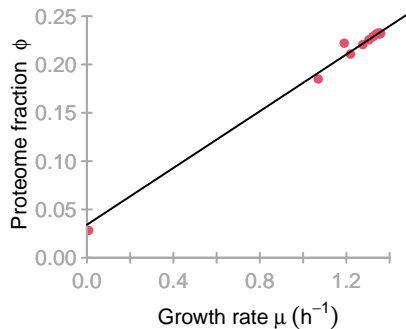


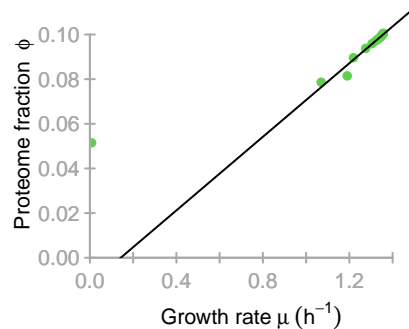
**Cin**



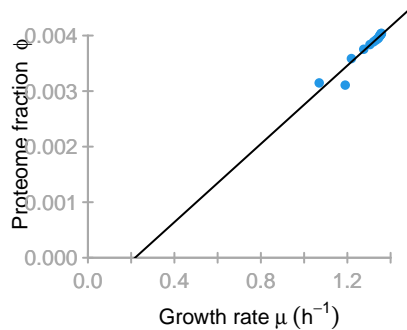
**EAA**



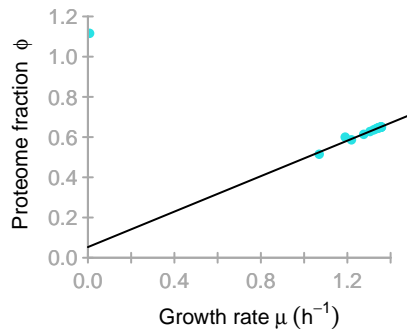
**ENT**



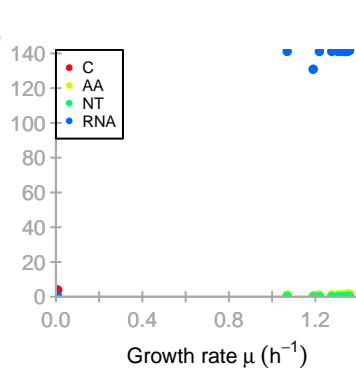
**RNAp**



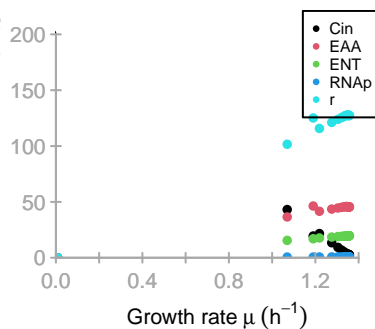
**r**



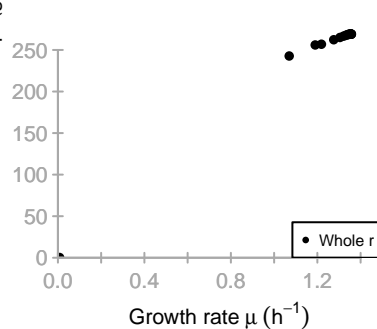
Metabolite concentrations  $c^m$  (g/L)



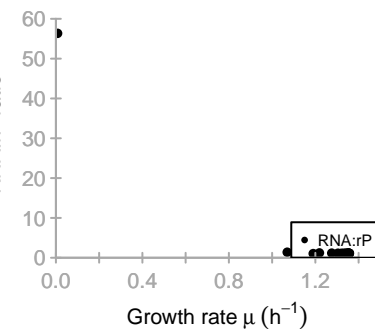
Protein concentrations  $p$  (g/L)

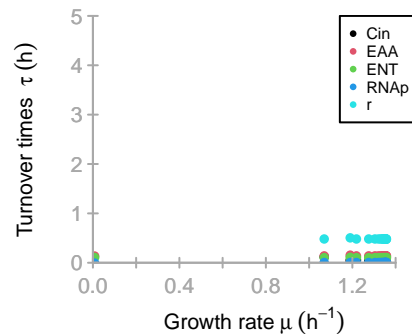
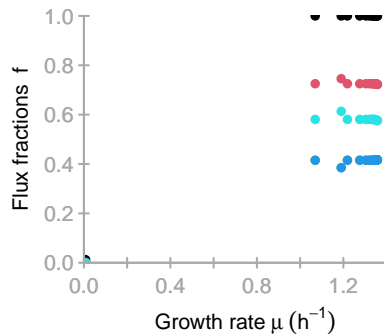
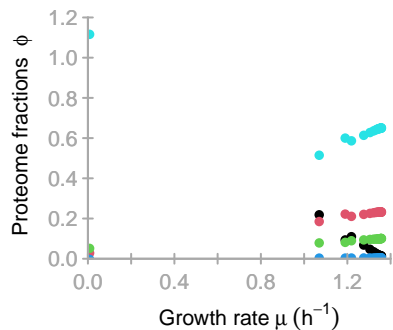
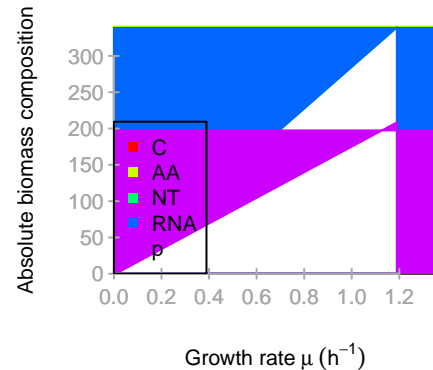
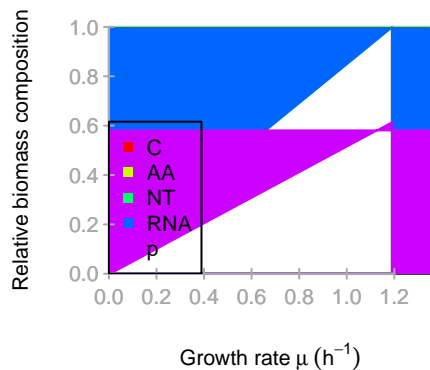
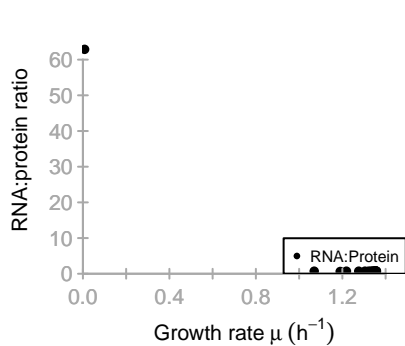


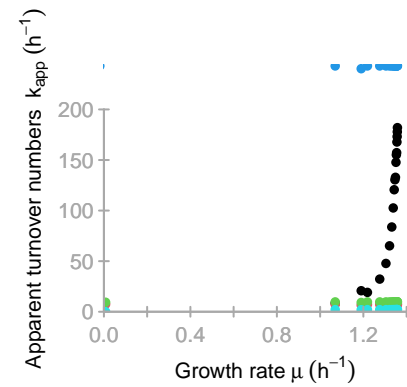
Ribosome concentrations  $p$  (g/L)



RNA:rP ratio







**M**

	Cin	EAA	ENT	RNAp	r
C	1	-1	-0.66	0	0
AA	0	1	-0.34	0	-1
NT	0	0	1	-1	0
RNA	0	0	0	1	0
p	0	0	0	0	1

**K**

	<b>Cin</b>	<b>EAA</b>	<b>ENT</b>	<b>RNAp</b>	<b>r</b>
<b>[1,]</b>	0.01	0	0	0	0
<b>[2,]</b>	0.1	0.001	0.001	0	0
<b>[3,]</b>	0	0.5	0.001	0	0.01
<b>[4,]</b>	0	0	0.5	0.01	0
<b>[5,]</b>	0	0	0	0	0
<b>[6,]</b>	0	0	0	0	0

KA

	Cin	EAA	ENT	RNAp	r
[1,]	0	0	0	0	0
[2,]	0	0	0	0	0
[3,]	0	0	0	0	0
[4,]	0	0	0	0	0
[5,]	0	0	0	0	100
[6,]	0	0	0	0	0

**kcat**

	<b>[,1]</b>	<b>[,2]</b>	<b>[,3]</b>	<b>[,4]</b>	<b>[,5]</b>
<b>kcatf</b>	200	7.3846	9.8004	260.2688	3.5828
<b>kcatb</b>	40	1.47692	1.96008	0	0



## Keq

	[1,]	[,1]	[,2]	[,3]	[,4]	[,5]
	[1,]	50	2500	2500000	Inf	Inf