

# The Phylogenetic Position of the Mitochondrion



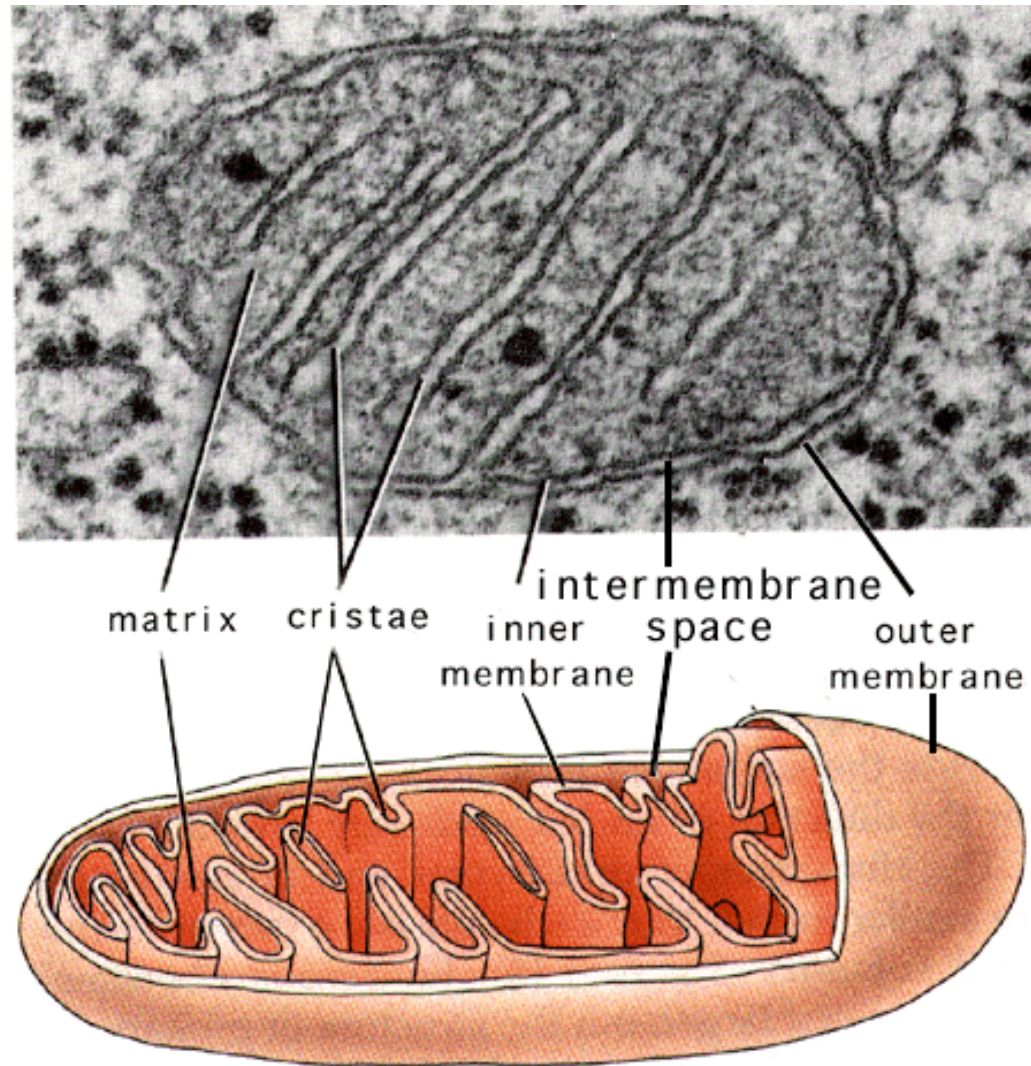
James McInerney, David Fitzpatrick and  
Chris Creevey.

Bioinformatics lab,

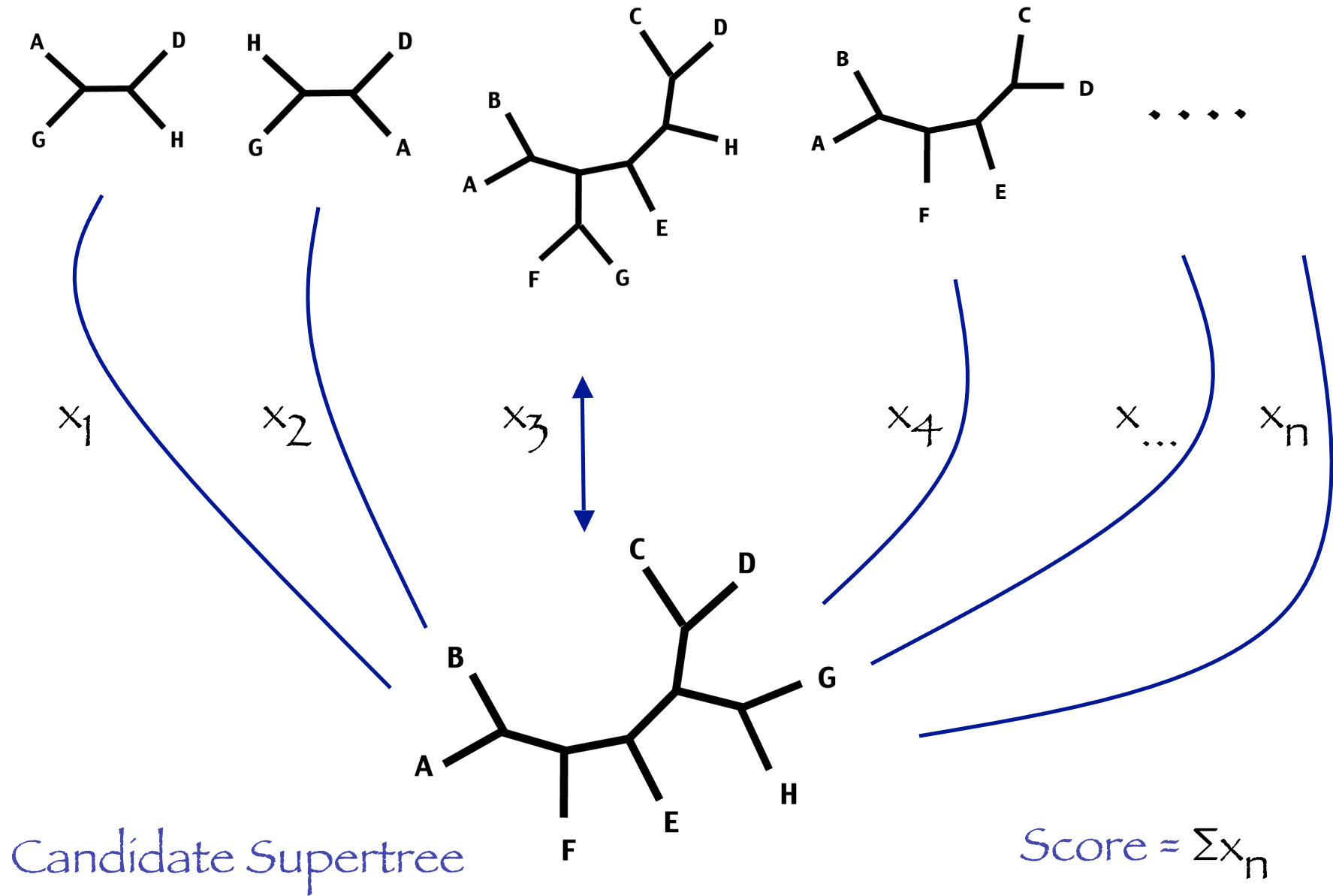
National University of Ireland Maynooth.

Rocky '06, Dec 2006. <http://bioinf.nuim.ie/>

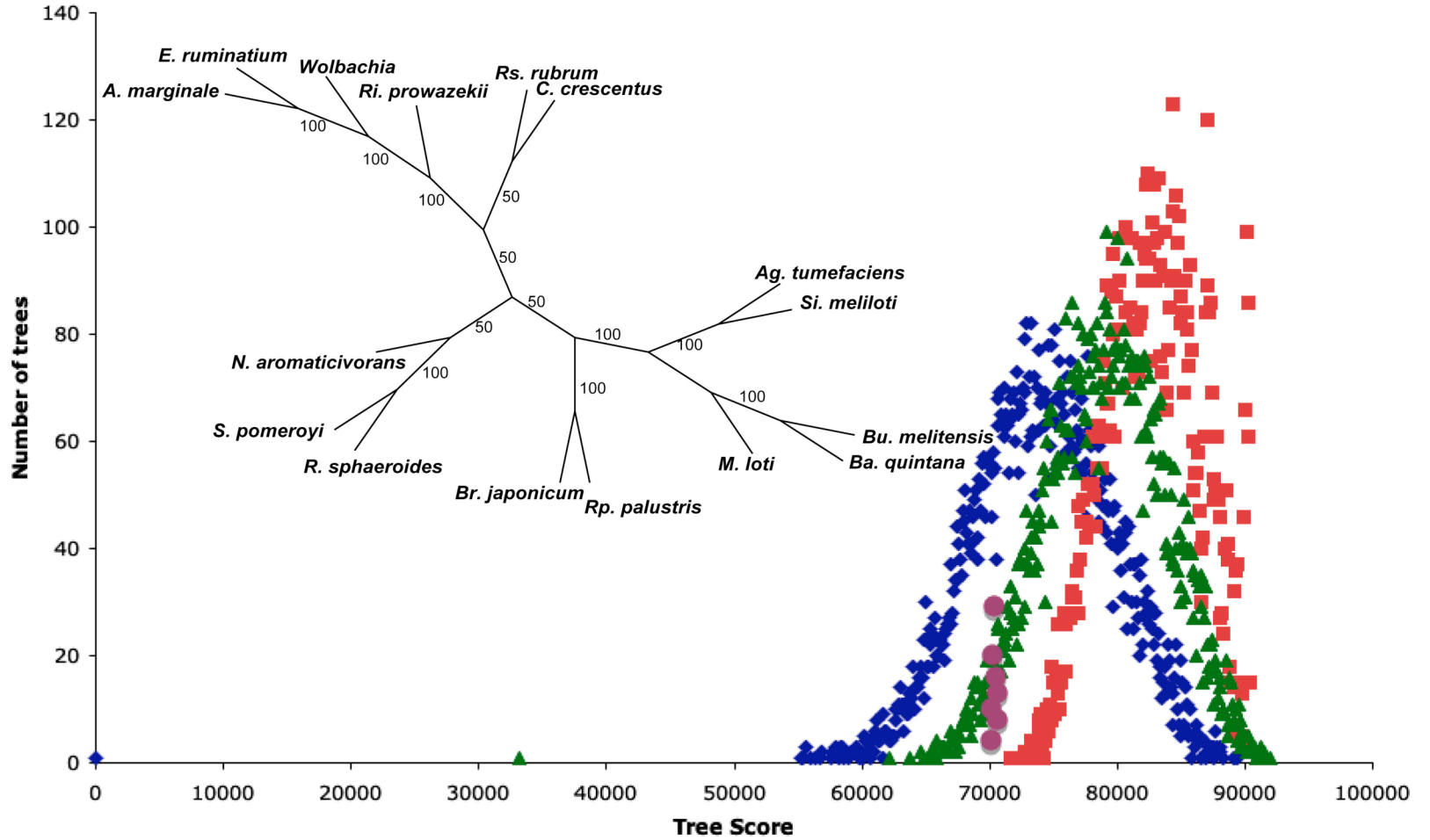
# Mitochondrion origins



# Input trees derived from orthologs



# Alpha-proteobacteria



gene	sister of mitochondria (LogDet)	BP	sister of mitochondria (ML)	BP	sister of mitochondria (Bayesian)	prob	sites
atp1	(ric,wol)	56	non-mono	-	(ric,wol)	1	533
atp6	(ric,wol)	44	(ric,wol)	100	(ric,wol)	1	321
cox1	(ric,wol)	55	(ric,wol)	100	(ric,wol)	1	704
cox2	(ric,wol)	57	ric*	49	ric*	0.87	460
cox3	(ric,wol)	50	(ric,wol)	100	non-mono	-	395
cob	(ric,wol)	93	ric	79	ric	0.97	494
nad2	(ric,wol)	93	ric	66	(ric,wol)	1	516
nad4	(ric,wol)	52	(ric,wol)	100	(ric,wol)	1	565
nad5	(ric,wol)	95	(ric,wol)	100	(ric,wol)	1	840
rpl2	(ric,wol)	86	ric*	89	ric	1	541
rpl5	(ric,wol)	51	(ric,wol)	98	(ric,wol)	1	236
rps14	(ric,wol)	55	(ric,wol)	100	(ric,wol)	1	122
yejU	(ric,wol)	97	ric	99	ric	1	327
rps11	(ric,wol)	85	non-mono	-	(ric,wol)	1	133
nad3	ric	33	ric	82	ric	0.94	187
rps2	ric	68	ric	100	ric	1	337
rps3	ric	27	ric	96	ric	0.76	477
rps8	ric	23	non-mono	-	wol	0.77	160
rps12	ric	60	ric	80	ric	0.79	148
rpl6	wol	59	wol	53	wol	1	205
rps1	wol	52	ric	74	ric	0.80	625
rps13	wol	62	wol	65	wol	0.75	135
rps19	wol	70	wol	61	wol	0.93	103
yejR	(ric,wol,neis)	17	non-mono	-	ric	1	859
nad41	(ric,wol,og)	34	ric	84	wol	0.92	111
nad1	rru	82	ric*	96	ric	1	398
rps4	og	54	ric	92	ric	0.93	255
nad9	neis	79	ric	78	(ric,wol)	1	604
rpl16	non-mono <sup>a</sup>	-	ric	30	non-mono <sup>b</sup>	-	146
rps7	non-mono	-	ric*	60	(ric,wol)	0.51	237

