	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Analysis of the potential for catalysis of chemical reactions and its implication on network structure and function																								
1.1 design and production of sample hand-held models (1000 euro)																								
1.2 Theoretical framework for classical systems																								
1.3 crowd-source platform development (20,000 euro)																								
1.6 deployment of crowd-source platform and collection of leading designs (20,000 euro)																								
1.7 production of leading crowd-sourced designs (5000 euro)																								
1.4 Theoretical framework for molecular systems																								
1.5 analysis of metabolic networks in light of predictions																								
2. Analysis of affinity versus selectivity challenge of enzymes and implications on metabolic network function																								
2.1 application of similarity metrics to metabolites																								
2.2 identification of enzymes and reactions subject to selectivity challenges based on existing data leading to milestone 3 (below)																								
2.3 analysis of existing data/external collaboration to collect new data																								
2.4 Independent collection of novel data on promiscuous activities of relevant enzymes (20,000 euro)																								
2.5 theoretical analysis of selectivity from thermodynamic considerations																								
2.6 Chemoinformatic analysis of metabolic networks																								
2.7 Analysis of design principles in metabolic networks to overcome selectivity challenges																								
3. Assessment if and what experimental methods are needed to quantify selectivity tradeoffs					2.2																			
4. dissemination and exploitation			1.1	1.2				2.3		1.4	2.4		1.4			1.5			1.5				1.6	2.5
5. communication			1.1							1.3												1.6		1.7
color code	ongoing work			Completion – paper submission			Conference presentation			Completion – non-academic communication			Completion – milestone			Completion – deadline			Popular blogs/other media publication			Task intended for PhD student	