

Table 5: S_{min} values for all DomFun methods and all combinations of evaluation scenarios and ontologies, compared to the highest equivalent value from CAFA 3 and the baseline methods. Type 1: no knowledge, type 2: limited knowledge. Mode 1: Full, mode 2: partial. FF: FunFams, SF: superfamilies. Jac: Jaccard, Sim: Simpson, PCC: Pearson correlation coefficient, HyI: hypergeometric. Sto: Stouffer, Fis: Fisher.

Ontology	Type	Mode	FF- HyI- Fis		FF- Sim- Sto		SF- HyI- Fis		SF- PCC- Sto		SF- Jac- Sto		SF- Sim- Sto		Top CAFA3	BLASTnaïve
			FF- HyI- Fis	FF- PCC- Sto	FF- Jac- Sto	FF- Sim- Sto	SF- HyI- Fis	SF- PCC- Sto	SF- Jac- Sto	SF- Sim- Sto						
GOMF	1	1	6.453	6.503	6.631	6.185	50.62	10.006	7.895	7.192	6.262	7.227	6.775			
GOMF	1	2	7.231	5.992	6.105	5.39	70.813	12.927	9.592	7.384	4.302	7.191	6.775			
GOMF	2	1	5.41	5.346	5.469	4.965	40.488	8.596	7.146	5.923	4.894	5.482	5.626			
GOMF	2	2	6.9	4.947	5.055	4.326	54.822	10.829	8.683	5.864	4.894	5.445	5.626			
GOBP	1	1	24.242	16.097	16.141	16.01	217.25377.798	52.58	156.66914.784	16.908	15.893					
GOBP	1	2	44.593	15.557	15.368	16.827	333.899118.69579.226	240.4889.43	16.857	15.893						
GOBP	2	1	19.594	10.841	10.928	10.574	342.937109.20769.301	269.1128.92	10.224	9.714						
GOBP	2	2	32.71	10.613	10.746	10.76	417.685132.89584.191	327.7295.731	10.225	9.714						
GOCC	1	1	5.91	5.88	6.066	5.566	40.632	11.753	9.515	19.722	5.121	6.349	5.456			
GOCC	1	2	6.252	5.275	5.564	4.665	59.348	16.173	12.554	28.244	2.672	6.328	5.456			
GOCC	2	1	6.721	5.936	5.992	5.585	47.43	12.61	10.195	24.806	5.039	6.119	5.621			
GOCC	2	2	9.51	5.942	5.972	5.358	65.712	16.771	13.203	34.076	1.362	6.051	5.621			