Supporting Information for "On Choosing the

Optimal Rigid Receptor for Docking and Scoring in

the CSAR 2013/2014 Experiment"

Matthew P. Baumgartner and Carlos J. Camacho*

Department of Computational and Systems Biology, University of Pittsburgh, Pittsburgh, PA

*ccamacho@pitt.edu.

Table S1

List of features considered for training the SVM-Score ranking method for CSAR 2013 Phase 2. The bolded terms were used in the final model.

Source	Term
	Vina Score
	Custom Score
	Total SASA
	Hydrophobic SASA
Unweighted Vina	gauss(o=0,_w=0.5,_c=8)
Scoring Terms	gauss(o=3,_w=2,_c=8)
	repulsion(o=0,_c=8)
	hydrophobic(g=0.5,_b=1.5,_c=8)
	non_dir_h_bond(g=-0.7,_b=0,_c=8)
Unweighted Custom	vdw(i=4,_j=8,_s=0,_^=100,_c=8)
Scoring Terms	non_dir_h_bond(g=-0.7,_b=0,_c=8)
	ad4_solvation(d-sigma=3.6,_s/q=0.01097,_c=8)





Figure S1

The RMSD of the decoy poses from CSAR 2013 Phase 2 plotted against their normalized scores using the six methods used. The red circle indicates the near-native pose and the blue line indicates the best-fit curve and the R^2 is shown in each of the plots.

Figure S2

The Custom scoring function provides poor affinity predictions. (left) Pre-generated conformers are aligned to a co-crystallized ligand and energy minimized with the Custom scoring functions, or (right) compounds are docked with the Custom scoring function. The blue line shows the linear fit and the R^2 value is shown in each subplot.