

These tables are the in-house checklists used for the UW Model Repository at [www.physiome.org](http://www.physiome.org)

	STANDARDS 3: The CODE: formatting, annotating	Auth	2nd	Note
Group 1.	1. Basic requirements			
	Code clearly written			
	ALL terms expressed using standard nomenclature			
	Ontology used, and if so consistent?			
	Sections demarcated (Parameters, variables, Cs, BCs, Equations)			
	Modular arrangements of code			
	Comments on every line?			
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	Algorithms explained and referenced if needed			
	Short and long descriptions precise and concise			
	References listed			
	Authors, revisors, date and sign contributions			
	References for all parameter values			
	Descriptions and references for subsidiary models			
	Models and graphs all run			
Group 2.	2. Conservation, Balances, that are appropriate to the model			
	Unitary Balance: (units on all variables and parameters)			
	Mass balance: (list constituents whose conservation is checked)			
	Charge balance: (ion currents, membrane potential)			
	Osmotic balance: (volume, total activities, fluxes)			
	Thermodynamic Balance (Haldane constraints on reactions, etc)			
Group 3.	3. Verification: math of model and solution methods are sound			
	Verification checklist complete?			
	Limitation spelled out? Solvers OK?			
	Range of Independence of step size in space or time			
Group 4:	4. Summary of Validation: model is physiologically realistic			
	Data provided, and fitted by model			
	Initial and boundary conditions in accord with physiology			
	Parameters justified (sources provided) and evaluated			
	Model is predictive, shown to fit other data not used as basis			
Group 5:	5. Provision of Source Code and Forum for critiques			
	Website source from which to download model code and data			
	Website or email to accept queries			
	Website for public commentary and responses			
	References to subsequent publications or alternative models			
Group 6.	6. Provenance: Antecedents, derivations and dependencies			
	Peer-reviewed publication (pdf copy)			
	Lineage of the model (list of antecedent models)			
	List higher level models using of which this is a component			
	Shortcomings			
	Future Needs			
		Rev by JBB 15.07.28		