

Rarely are models as fully and clearly defined as was accomplished by Hodgkin and Huxley (1952): every figure can be reproduced from their equations and parameters. Reasons for inadequacy in journal articles include the complexity of matching the written report to the computational code, the reluctance of journals to accept long detailed articles, and the additional labor required for putting code, manuals, descriptions, tutorials, test cases, solutions, etc, in good form, all of which are beyond the minimal effort required to produce the research result. There are also the issues of reluctance to reveal the details, like secret ingredients in a recipe, or to provide the latest and best science to one's competitors. While it is more difficult to present technically complicated models to a broad user community than it is to provide simplified conceptual models. It is more important to make the difficult ones available for workers to explore, understand and build upon. "On the shoulders of giants...". What's more, the funding agencies, scientific societies, and journal editors are beginning to require full disclosure: It won't be just "Publish or Perish" but "Disseminate usable products (models, techniques, data) or Perish! It is an obligation accompanying federal and foundation funding to make our world better.

3. Acknowledgements

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