biosoc.org

BioSoc Society hopes to empower all community members to be makers and creators rather than passive recipients. Everyone is encouraged to contribute, no matter what skill level. We support 40 applications in the synthetic biology community and many on our Github. Contributions require testing, bug reports, user documentation, and code examples.

BioSoc Software

- SBOLDesigner
- Sources

SBOL Designer

SBOLDesigner is a simple, biologist-friendly CAD software tool for creating and manipulating the sequences of genetic constructs using the Synthetic Biology Open Language (SBOL) 2.2 data model.

- Project Website
- Demo

Key Features

SBOLDesigner is a user-friendly computer-aided design (CAD) software tool specifically designed for biologists. It allows users to create and manipulate genetic construct sequences using the Synthetic Biology Open Language (SBOL) 2.2 data model. With SBOLDesigner, researchers can efficiently design and analyze genetic constructs for synthetic biology projects.

1. **Biologist-Friendly Interface:** SBOLDesigner is designed with biologists in mind. Its user-friendly interface makes it accessible to researchers who may not have extensive computational or programming experience.
2. **SBOL 2.2 Support:** The software adheres to the Synthetic Biology Open Language (SBOL) 2.2 data model. This standard allows users to represent genetic constructs, parts, and sequences in a consistent and interoperable format.
3. **Construct Design and Manipulation:** SBOLDesigner enables users to create, edit, and manipulate genetic constructs. You can assemble DNA parts, specify their sequences, and organize them into functional units.
4. **Visual Representation:** The tool provides visual representations of genetic constructs, making it easier to understand and communicate complex designs. Graphical views help users visualize the arrangement of parts and their interactions.
5. **Annotations and Metadata:** SBOLDesigner allows users to annotate constructs with additional information, such as functional descriptions, provenance, and experimental data. Metadata enhances the documentation and traceability of designs.
6. **Export Options:** You can export your designs in SBOL format for sharing with other tools or collaborators. This interoperability ensures seamless integration with other software in the synthetic biology workflow.

Sources

- SBOLDesigner DEMO on youtube
- SBOLDesigner Description by Myers Research Group

Sources

- Nonasoftware
- download biosoc-software.pdf

- Modular Documentation made possible by the FlatEdit project.