

Resource Summary Report

Generated by PRECISE-TBI on Sep 8, 2026

Center for Integrative Biomedical Computing

RRID:SCR_001961

Type: Tool

Proper Citation

Center for Integrative Biomedical Computing (RRID:SCR_001961)

Resource Information

URL: <http://www.sci.utah.edu/cibc/>

Proper Citation: Center for Integrative Biomedical Computing (RRID:SCR_001961)

Description: Biomedical technology research center that produces open-source software tools for biomedical image-based modeling, biomedical simulation and estimation, and the visualization of biomedical data. The Center works closely with software users and collaborators in a range of scientific domains to produce user-optimized tools and provides advice, technical support, workshops, and education to enhance user success. Biological projects and collaborations drive their development efforts, all with a single unifying vision: to develop the role of image-based modeling and analysis in biomedical science and clinical practice. The CIBC has a strong, ongoing emphasis on software simulation of bioelectric fields, with clinically oriented collaborations in cardiac defibrillation and the diagnosis/treatment of epilepsy. In addition, the CIBC has expanded in recent years to include applications of statistical shape analysis and three-dimensional visualization to mouse genetics and neuroimaging and applications of image and geometry processing to cell biology.

Abbreviations: CIBC

Synonyms: NIH/NIGMS Center for Integrative Biomedical Computing

Resource Type: biomedical technology research center, training resource

Keywords: cardiac defibrillation, epilepsy, software, biomedical, image, modeling, simulation, estimation, visualization, computing, informatics, computing and informatics technology center

Funding: NIGMS P41GM103545

Resource Name: Center for Integrative Biomedical Computing

Resource ID: SCR_001961

Alternate IDs: nif-0000-10535

Record Creation Time: 20220129T080210+0000

Record Last Update: 20260905T133322+0000

Ratings and Alerts

No rating or validation information has been found for Center for Integrative Biomedical Computing.

No alerts have been found for Center for Integrative Biomedical Computing.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Tanner LCR, et al. (2026) Uncertainty quantification via polynomial chaos expansion of myocardial fibre orientation and cardiac activation patterns. The Journal of physiology, 604(13), 5440.

Bear LR, et al. (2023) Investigation into the importance of using natural PVCs and pathological models for potential-based ECGI validation. Frontiers in physiology, 14, 1198002.

Zenger B, et al. (2023) Tipping the scales of understanding: An engineering approach to design and implement whole-body cardiac electrophysiology experimental models. Frontiers in physiology, 14, 1100471.

MacLeod RS, et al. (2009) Subject-specific, multiscale simulation of electrophysiology: a software pipeline for image-based models and application examples. Philosophical transactions. Series A, Mathematical, physical, and engineering sciences, 367(1896), 2293.