Resource Summary Report

Generated by <u>NIF</u> on May 11, 2025

BioCreative

RRID:SCR_006311 Type: Tool

Proper Citation

BioCreative (RRID:SCR_006311)

Resource Information

URL: http://biocreative.sourceforge.net/

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Description: Community-wide effort (Challenge) for evaluating text mining and information extraction systems applied to the biological domain. It is focused on the comparison of methods and the community assessment of scientific progress, rather than on the purely competitive aspects. There is a considerable difficulty in constructing suitable gold standard data for training and testing new information extraction systems which handle life science literature. Thus the data sets derived from the BioCreAtIvE challenge - because they have been examined by biological database curators and domain experts - serve as useful resources for the development of new applications as well as helping to improve existing ones. Two main issues are addressed at BioCreAtIvE, both concerned with the extraction of biologically relevant and useful information from the literature. The first one is concerned with the detection of biologically significant entities (names) such as gene and protein names and their association to existing database entries. The second one is concerned with the detection of entity-fact associations (e.g. protein - functional term associations).

Abbreviations: BioCreAtIvE

Synonyms: BioCreAtIvE challenge evaluation, Critical Assessment of Information Extraction systems in Biology, BioCreAtIvE - Critical Assessment for Information Extraction in Biology

Resource Type: data set, portal, data or information resource, topical portal, benchmark, challenge

Keywords: text mining, information extraction, literature, crowdsourcing, bioinformatics, natural language processing, challenge, benchmark, evaluation, gold standard, FASEB list

Funding:

Resource Name: BioCreative

Resource ID: SCR_006311

Alternate IDs: nlx_151992

Record Creation Time: 20220129T080235+0000

Record Last Update: 20250509T055755+0000

Ratings and Alerts

No rating or validation information has been found for BioCreative.

No alerts have been found for BioCreative.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 156 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Hala S, et al. (2024) The emergence of highly resistant and hypervirulent Klebsiella pneumoniae CC14 clone in a tertiary hospital over 8 years. Genome medicine, 16(1), 58.

Zheng D, et al. (2024) Biomedical named entity recognition based on multi-cross attention feature fusion. PloS one, 19(5), e0304329.

Aldahdooh J, et al. (2024) Mining drug-target interactions from biomedical literature using chemical and gene descriptions-based ensemble transformer model. Bioinformatics advances, 4(1), vbae106.

Caufield JH, et al. (2024) Structured Prompt Interrogation and Recursive Extraction of Semantics (SPIRES): a method for populating knowledge bases using zero-shot learning. Bioinformatics (Oxford, England), 40(3).

Ogrinc M, et al. (2024) Zero-shot evaluation of ChatGPT for food named-entity recognition and linking. Frontiers in nutrition, 11, 1429259.

Liu K, et al. (2024) Conductive and alignment-optimized porous fiber conduits with electrical

stimulation for peripheral nerve regeneration. Materials today. Bio, 26, 101064.

Groza T, et al. (2024) FastHPOCR: pragmatic, fast, and accurate concept recognition using the human phenotype ontology. Bioinformatics (Oxford, England), 40(7).

Jonker RAA, et al. (2024) Multi-head CRF classifier for biomedical multi-class named entity recognition on Spanish clinical notes. Database : the journal of biological databases and curation, 2024.

Vollmar M, et al. (2024) Dataset from a human-in-the-loop approach to identify functionally important protein residues from literature. Scientific data, 11(1), 1032.

Madan S, et al. (2024) Dataset of miRNA-disease relations extracted from textual data using transformer-based neural networks. Database : the journal of biological databases and curation, 2024.

Lai PT, et al. (2024) EnzChemRED, a rich enzyme chemistry relation extraction dataset. Scientific data, 11(1), 982.

Mehryary F, et al. (2024) STRING-ing together protein complexes: corpus and methods for extracting physical protein interactions from the biomedical literature. Bioinformatics (Oxford, England), 40(9).

Liu S, et al. (2024) Evaluating Medical Entity Recognition in Health Care: Entity Model Quantitative Study. JMIR medical informatics, 12, e59782.

Wang M, et al. (2024) Vocabulary Matters: An Annotation Pipeline and Four Deep Learning Algorithms for Enzyme Named Entity Recognition. Journal of proteome research, 23(6), 1915.

Keloth VK, et al. (2024) Advancing entity recognition in biomedicine via instruction tuning of large language models. Bioinformatics (Oxford, England), 40(4).

Rouhizadeh H, et al. (2024) A Dataset for Evaluating Contextualized Representation of Biomedical Concepts in Language Models. Scientific data, 11(1), 455.

Almeida T, et al. (2024) Towards discovery: an end-to-end system for uncovering novel biomedical relations. Database : the journal of biological databases and curation, 2024.

Miranda-Escalada A, et al. (2023) Overview of DrugProt task at BioCreative VII: data and methods for large-scale text mining and knowledge graph generation of heterogenous chemical-protein relations. Database : the journal of biological databases and curation, 2023.

Peng C, et al. (2023) A study of generative large language model for medical research and healthcare. NPJ digital medicine, 6(1), 210.

Zhao J, et al. (2023) OpticalBERT and OpticalTable-SQA: Text- and Table-Based Language Models for the Optical-Materials Domain. Journal of chemical information and modeling, 63(7), 1961.