

## 2 CRediT Taxonomy

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### 2.1 Contributor Roles

Conceptualization

Data curation

Formal analysis

Funding acquisition

Investigation

Methodology

Project administration

Resources

Software

Supervision

Validation

Visualization

Writing – original draft

Writing – review & editing

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### 2.2 Contributor Roles Defined

**Conceptualization** – Ideas; formulation or evolution of overarching research goals and aims.

**Data curation** – Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later re-use.

**Formal analysis** – Application of statistical, mathematical, computational, or other formal techniques to analyze or synthesize study data.

**Funding acquisition** - Acquisition of the financial support for the project leading to this publication.

**Investigation** – Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.

**Methodology** – Development or design of methodology; creation of models.

**Project administration** – Management and coordination responsibility for the research activity planning and execution.

**Resources** – Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.

**Software** – Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.

**Supervision** – Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.

**Validation** – Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs.

**Visualization** – Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.

**Writing – original draft** – Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation).

**Writing – review & editing** – Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages.