

RESPIROLOGY Author 'Contributor Roles Taxonomy': [CRediT](#)

#	Role	Definition
1	Conceptualization	Ideas; formulation or evolution of overarching research goals and aims.
2	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.
3	Formal analysis	Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesize study data.
4	Funding acquisition	Acquisition of the financial support for the project leading to this publication.
5	Investigation	Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.
6	Methodology	Development or design of methodology; creation of models.
7	Project administration	Management and coordination responsibility for the research activity planning and execution.
8	Resources	Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.
9	Software	Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.
10	Supervision	Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.
11	Validation	Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs.
12	Visualization	Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.
13	Writing – original draft	Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation).
14	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.

The roles given in the above taxonomy include, but are not limited to, traditional authorship roles. The roles are not intended to define what constitutes authorship, but instead mean to capture all the work that allows scholarly publications to be produced. Recommendations for applying the CRediT taxonomy are:

- Multiple roles possible** - Individual contributors can be assigned multiple roles, and a given role can be assigned to multiple contributors;
- Degree of contribution optional** - Where multiple individuals serve in the same role, the degree of contribution can optionally be specified as '**lead**', '**equal**', or '**supporting**';
- Shared responsibility** - Corresponding authors should assume responsibility for role assignment, and all contributors should be given the opportunity to review and confirm assigned roles.
- Not all categories are relevant to each type of research.** Only select those contribution roles that are applicable to your study. For example:

Author contributions: Conceptualization: J.F., S.M., R.B, M.W. Data curation: S.M., J.F., J.S., J.P.B. Formal analysis: M.W., J.F., S.M., R.B. Funding acquisition: J.F., S.M., R.B. Investigation: S.M., J.S., J.P.B., J.F. Methodology: J.F., S.M., R.B., M.W. Project administration: S.M., J.F. Writing—original draft: S.M., J.F. Writing—review and editing: J.F., S.M., R.B., J.S., M.W., J.P.B.

The presentation of the 14 roles has been adapted from the [Consortia Advancing Standards in Research Administration \(CASRAI\)](#) website.