

Supplementary Note 4: The acronyms used throughout the STREAMS guidelines. The acronyms, their spelled-out definitions, and the links to additional information or relevant publications are provided.

STREAMS acronyms	Definition	Additional information
AI	Artificial Intelligence	
APHIS	Animal and Plant Health Inspection Service	https://www.aphis.usda.gov
ASV	Amplicon Sequence Variant	
CARE principles	Collective benefit, Authority to control, Responsibility, Ethics ¹	https://www.gida-global.org/care
CAWG	Chemical Analysis Working Group ²	
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	https://www.fws.gov/international-affairs/cites
CRedit Role	Contributor Role Taxonomy	https://credit.niso.org
DDA	Data Dependent Acquisition	
DIA	Data Independent Acquisition	
DNA	Deoxyribonucleic Acid	
DOI	Digital Object Identifier	https://www.doi.org/the-identifier/what-is-a-doi/
EMBL-EBI	European Molecular Biology Laboratory (EMBL) European Bioinformatics Institute (EBI)	https://www.ebi.ac.uk
ENVO	The Environment Ontology ³	https://sites.google.com/site/environmentontology/
FAIR	Findable, Accessible, Interoperable, Reusable ⁴	
GSC	Genomic Standards Consortium ⁵	http://www.gensc.org/
IACUC	Institutional Animal Care & Use Committee	https://olaw.nih.gov/resources/tutorial/iacuc.htm
ICTV	International Committee on Taxonomy of Viruses	https://ictv.global
INSDC	International Nucleotide Sequence Database Collaboration	https://www.insdc.org
ISO	International Organization for Standardization	https://www.iso.org/standards.html
ITS	Internal Transcribed Spacer	
LC-MS	Liquid chromatography mass spectrometry	
LLM	Large Language Model	
MAG	Metagenome Assembled Genome	
MIMAG	Minimum information about a metagenome-assembled genome ⁶	
MixS	Minimum Information about any (x) Sequence ⁷	https://genomicsstandardsconsortium.github.io/mixs/
MS	Mass Spectrometry	
MSI	Metabolomics Standards Initiative ⁸	
NCBI	National Center for Biotechnology Information	https://www.ncbi.nlm.nih.gov
OBO Foundry	Open Biological and Biomedical Ontology Foundry	http://obofoundry.org
OTU	Operational Taxonomic Unit	
PCR	Polymerase Chain Reaction	
polyA	Polyadenylation	
PRIDE	PRoteomics IDentifications database	https://www.ebi.ac.uk/pride/
RNA	Ribonucleic acid	
RO Crate	Research Object Crate	https://www.researchobject.org/ro-crate/
rRNA	Ribosomal Ribonucleic Acid	
SIP	Stable Isotope Probing	
SRA	Sequence Read Archive	https://www.ncbi.nlm.nih.gov/sra
STORMS	Strengthening The Organization and Reporting of Microbiome Studies ⁹	
STREAMS	Standards for Technical Reporting in Environmental and host-Associated Microbiome Studies	https://streamsmicrobiome.org
STREGA	STrengthening the REporting of Genetic Association ¹⁰	
STROBE	Strengthening the Reporting of Observational Studies in Epidemiology ¹¹	
USDA	United States Department of Agriculture	https://www.usda.gov

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