

# Resource Summary Report

Generated by [Kravitz](#) on Sep 11, 2026

## PICRUSt

RRID:SCR\_016855

Type: Tool

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### Proper Citation

PICRUSt (RRID:SCR\_016855)

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### Resource Information

**URL:** <https://picrust.github.io/picrust/>

**Proper Citation:** PICRUSt (RRID:SCR\_016855)

**Description:** Software package to predict metagenome functional content from marker gene (e.g., 16S rRNA) surveys and full genomes. Used to predict which gene families are present and then combines gene families to estimate the composite metagenome.

**Abbreviations:** PICRUSt

**Synonyms:** Phylogenetic Investigation of Communities by Reconstruction of Unobserved States, PICRUSt

**Resource Type:** simulation software, software application, software resource

**Defining Citation:** [PMID:23975157](#)

**Keywords:** predict, metagenome, functional, content, DNA, sample, marker, gene, sequence, data, microbiome, 16S, RNA

**Funding:** ARO W911NF1110473;  
Canada Research Chairs program ;  
Canadian Institutes of Health Research ;  
Crohn's and Colitis Foundation of America ;  
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NHGRI U01 HG004866;  
NIDDK P01 DK078669;  
NSF CAREER DBI1053486;  
Sloan Foundation

**Availability:** Free, Available for download, Freely available

**Resource Name:** PICRUS<sub>t</sub>

**Resource ID:** SCR\_016855

**Alternate IDs:** SCR\_016856

**License:** GNU GPL v3

**Record Creation Time:** 20220129T080332+0000

**Record Last Update:** 20260905T132814+0000

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## Ratings and Alerts

No rating or validation information has been found for PICRUS<sub>t</sub>.

No alerts have been found for PICRUS<sub>t</sub>.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 45 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [Kravitz](#) .

Li Z, et al. (2026) The impact of polystyrene nanoplastics on the chicken gut and liver: Based on transcriptomics and microbiomics. Poultry science, 105(5), 106574.

Mulisa G, et al. (2026) Multi-cohort comparative analysis of salivary microbiotas reveals rural Ethiopians harbor a distinct composition correlated with lower esophageal cancer prevalence. mSystems, 11(6), e0023226.

Mioduchowska M, et al. (2026) "Let's Dry up and Survive Together": Is Anhydrobiosis in Two Paramacrobiotus Species (Tardigrada) Associated with a Specific Microbiome Community? International journal of molecular sciences, 27(12).

Huang Z, et al. (2025) Composition of the Gut Microbiome and Its Response to Rice Stripe Virus Infection in Laodelphax striatellus (Hemiptera: Delphacidae). Insects, 16(11).

Yang YT, et al. (2025) Optimization, application effects and improved microecology of a composite microbial agent containing oyster shells. Scientific reports, 15(1), 6922.

Dendooven L, et al. (2025) Young maize plants impact the bacterial community in Australian cotton-sown vertisol more than agricultural practices. Environmental microbiology reports, 17(3), e13322.

Pascual-García A, et al. (2025) Replicating community dynamics reveals how initial composition shapes the functional outcomes of bacterial communities. Nature

communications, 16(1), 3002.

Carrion JV, et al. (2025) Functional Specialisation and Diversity Shape the Rhizosphere Microbiota of Cacao and Coffee in the Amazonas Region, Peru. *Environmental microbiology reports*, 17(6), e70259.

Kim CW, et al. (2025) Gut dysbiosis from high-salt diet promotes glioma via propionate-mediated TGF- $\beta$  activation. *The Journal of experimental medicine*, 222(8).

Yan Y, et al. (2024) Gut microbiota-derived cholic acid mediates neonatal brain immaturity and white matter injury under chronic hypoxia. *iScience*, 27(5), 109633.

Zheng Y, et al. (2024) Structure and Function of Soil Bacterial Communities in the Different Wetland Types of the Liaohe Estuary Wetland. *Microorganisms*, 12(10).

Kumari A, et al. (2024) Substantially altered bacterial diversity associated with developmental stages of litchi stink bug, *Tessaratoma javanica* (Thunberg) (Hemiptera: Tessaratomidae). *Heliyon*, 10(11), e32384.

Ling Z, et al. (2024) Altered gut microbiota and systemic immunity in Chinese patients with schizophrenia comorbid with metabolic syndrome. *Journal of translational medicine*, 22(1), 729.

Qi D, et al. (2024) Unveiling the gut microbiota blueprint of schizophrenia: a multilevel omics approach. *Frontiers in psychiatry*, 15, 1452604.

Wang Y, et al. (2024) Perturbations in gut microbiota composition in schizophrenia. *PloS one*, 19(7), e0306582.

Zhen J, et al. (2024) Shaoyao Decoction reduced T lymphocyte activation by regulating of intestinal flora and 5-hydroxytryptamine metabolism in ulcerative colitis. *Chinese medicine*, 19(1), 87.

Lovecchio N, et al. (2024) Hydrocarbonoclastic Biofilm-Based Microbial Fuel Cells: Exploiting Biofilms at Water-Oil Interface for Renewable Energy and Wastewater Remediation. *Biosensors*, 14(10).

Sun C, et al. (2024) Harnessing biosynthesized selenium nanoparticles for recruitment of beneficial soil microbes to plant roots. *Cell host & microbe*, 32(12), 2148.

Deng F, et al. (2023) Gut microbe-derived milnacipran enhances tolerance to gut ischemia/reperfusion injury. *Cell reports. Medicine*, 4(3), 100979.

Zhou YJ, et al. (2023) Gut microbial profile of treatment-naive patients with primary biliary cholangitis. *Frontiers in immunology*, 14, 1126117.