

# Package: zAMPEXplorer (via r-universe)

November 23, 2024

**Type** Package

**Title** zAMPEXplorer: A Versatile Shiny App for Microbiota Profiling in Clinical Microbiology

**Version** 0.1.0

**Description** A Shiny web application offering a user-friendly, accessible, and reproducible platform for downstream analysis of 16S rRNA-based metagenomics data. Key features include quality control visualizations (e.g., rarefaction curves), community composition plots, and statistical analyses for alpha- and beta-diversity. For deeper insights, the app incorporates community typing using Dirichlet multinomial modeling (DMM) and dynamically integrates metadata for sample stratification. This enables users to test microbial associations with clinical or experimental variables using redundancy analysis (RDA).

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.3.2

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**biocViews** Microbiology, Metabarcoding, Visualization, StatisticalMethod

**Depends** R (>= 3.5.0)

**Imports** shiny, shinydashboard, shinyWidgets, shinyFiles, fs, DT, ape, writexl, UpSetR, phyloseq, microViz, ggvenn, microbiome, ggplot2, cowplot, circlize, reshape2, dplyr, tidyr, vegan, gridExtra, Maaslin2, eulerr, MicEco, plotly, reticulate, webshot2, ggplotify, ComplexUpset, htmlwidgets, colourpicker, RColorBrewer, VennDiagram, ComplexHeatmap, MicrobiotaProcess, DirichletMultinomial, InteractiveComplexHeatmap, TreeSummarizedExperiment

**Config/pak/sysreqs** chromium cmake libfontconfig1-dev libfreetype6-dev  
 libglpk-dev make libicu-dev libpng-dev libxml2-dev libssl-dev  
 perl python3 zlib1g-dev

**Repository** <https://metagenlab.r-universe.dev>

**RemoteUrl** <https://github.com/metagenlab/zAMPExplorer>

**RemoteRef** HEAD

**RemoteSha** 8097e6084ca4c7bf66da0b2e9857dd9c4c8fe0ba

## Contents

zAMPExplorer_app . . . . .	2
<b>Index</b>	<b>3</b>

---

zAMPExplorer_app	<i>Launch the Shiny App</i>
------------------	-----------------------------

---

### Description

This function launches the Shiny app.

### Usage

zAMPExplorer\_app()

# Index

zAMPExplorer\_app, [2](#)