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Publication List

NON-PEER-REVIEWED ARTICLES, PREPRINTS, AND OTHER MEDIA (6)

Rodriguez-Gijon A, Pacheco-Valenciana A, Milke F, Dharamshi JE, Hampel JJ, ..., **Rodriguez-R LM**, Garcia SL (2025). The ecological success of freshwater microorganisms is mediated by streamlining and biotic interactions. *bioRxiv*. DOI: 10.1101/2025.03.24.644981.

Rodriguez-R LM (2022). Register list proposing *Elulimicrobium humile* sp. nov. gen. nov. and their lineage. *The SeqCode Registry* r:abw4_f8a. DOI: 10.57973/seqcode.r:abw4_f8a.

Rodriguez-R LM (2022). *Macondimonas diazotrophica* sp. nov. gen. nov. *The SeqCode Registry* r:6ns_rdob. DOI: 10.57973/seqcode.r:6ns_rdob.

Rodriguez-R LM (2021). Behind the paper: Generalists thrive after a catastrophe. *Nature Portfolio Microbiology Community*. <https://microbiologycommunity.nature.com/posts/generalists-thrive-after-a-catastrophe>.

Rodriguez-R LM, Konstantinidis KT (2016). The enveomics collection: A toolbox for specialized analyses of microbial genomes and metagenomes. *PeerJ Preprints* 4:e1900v1. DOI: 10.7287/peerj.preprints.1900v1.

Rodriguez-R LM, Konstantinidis KT (2014). Bypassing cultivation to identify bacterial species. *Microbe* 9(3), 111-118.

NON-PEER-REVIEWED CONFERENCE PAPERS (5)

Heritier-Robbins P, Karthikeyan S, **Rodriguez-R LM**, Kim M, Hatt J, Overholt W, Kostka JE, Huettel MH, Konstantinidis K (2020). Oil Disturbance Selects for Generalists, not Specialists, in a Beach Sand Microbial Community. Ocean Sciences Meeting 2020.

Karthikeyan S, **Rodriguez-R LM**, Heritier-Robbins P, Huettel MH, Kostka JE, Konstantinidis K (2020). The Crude-Oil Microbiome Webserver: An interactive, searchable (meta-) genome repository that expands the catalogued diversity of crude-oil-associated microbes. Ocean Sciences Meeting 2020.

Poulin L, Grygiel P, Magne M, Gagnevin L, Vernière C, **Rodriguez-R LM**, Forero Serna N, Zhao S, Rafii M, Verdier V, Koebnik R (2014). A VNTR tool for diagnostic and epidemiological surveillance of the plant pathogen *Xanthomonas oryzae* and its application to the newly reported Malagasy BLS epidemics. Session 5-Dynamique, épidémiologie et génétique des populations bactériennes.

Jeong K, Munoz Bodnar A, Poulin L, Arias Rojas N, **Rodriguez-R LM**, Gagnevin L, Pruvost O, Koebnik R (2013). CRISPR systems in plant pathogens: A new tool for epidemiological surveillance. APS-MSA Joint Meeting. DOI: 10.1094/PHYTO-103-6-S2.1.

Gutierrez S, **Rodriguez LM**, Pardo C, Pinzon D, Morales N, Restrepo S, Bernal A (2008). Identification of effector genes in *Xanthomonas axonopodis* pv. *manihotis* using bioinformatics and a forward genetics screen. 2008 APS Centennial Meeting, Phytopathology, 98(6), S64-S64. DOI: 10.1094/PHYTO.2008.98.6.S9.

PEER-REVIEWED BOOK CHAPTERS (4)

Rodriguez-R LM, Rossello-Mora R, Konstantinidis KT (2021). Chapter 13: Identification and Classification of Prokaryotes Using Whole Genome Sequences. In Stackebrandt E, Bridge P, Smith D (Eds.), *Reconciling microbial systematics*. CABI. DOI: 10.1079/9781789244984.0217.

Rodriguez-R LM, Harvey W, Rossello-Mora R, Tiedje JM, Cole JR, Konstantinidis KT (2020). Classifying Prokaryotic Genomes Using the Microbial Genomes Atlas (MiGA) Webserver. In *Bergey's Manual of Systematics of Archaea and Bacteria*. Wiley. DOI: 10.1002/9781118960608.bm00042.

Luo C*, **Rodriguez-R LM***, Konstantinidis KT (2013). Chapter 23: A User's Guide to Quantitative and Comparative Analysis of Metagenomic Datasets. In *Methods in enzymology*, 531, 525-547. DOI: 10.1016/B978-0-12-407863-5.00023-X. * Equal contribution (first co-authorship).

Kostka JE, Overholt WA, **Rodriguez-R LM**, Huettel M, Konstantinidis KT (2020). Toward a predictive understanding of the benthic microbial community response to oiling on the northern Gulf of Mexico coast. In *Scenarios and Responses to Future Deep Oil Spills* (pp. 182–202). Springer, Cham. DOI: 10.1007/978-3-030-12963-7.

PEER-REVIEWED ARTICLES (77)

* Denotes equal contribution (first co-authorship).

2025

- Ernster NM, **Rodriguez-R LM**. A practical guide on environmental genomics for prokaryotic systematics. *Systematic and Applied Microbiology* 48(5): 126643. DOI: 10.1016/j.syapm.2025.126643.
- Gerhard K*, Ruiz-Perez CA*, **Rodriguez-R LM***, Jain C, Tiedje JM, Cole JR, Konstantinidis KT. FastAAI: efficient estimation of genome average amino acid identity and phylum-level relationships using tetramers of universal proteins. *Nucleic Acids Research* 53, gkaf348. DOI: 10.1093/nar/gkaf348.
- Simon SA, Aschmann V, Behrendt A, ..., **Rodriguez-R LM**, ..., Probst AJ. Earth's most needed uncultivated aquatic prokaryotes. *Water Research* 273, 122928. DOI: 10.1016/j.watres.2024.122928.
- Mandolini E, Probst M, Telagathoti A, Frey B, **Rodriguez-R LM**, Fornasier F, Pare N, Illmer P, Peintner U. Determinism and stochasticity drive microbial community assembly and microbial interactions in calcareous glacier forefields. *Applied and Environmental Microbiology* 91(6). DOI: 10.1128/aem.00302-25.
- Bustos-Caparrós E, Viver T, Gago JF, ..., **Rodriguez-R LM**, ..., Rossello-Mora R. Global dominance of *Haloquadratum walsbyi* by a single highly clonal genomovar with distinct gene content and viral cohorts from close relatives. *The ISME J*, wrf165. DOI: 10.1093/ismejo/wrf165.
- Zohar M, Shaheen N, Goyal SM, Mor SK, **Rodriguez-R LM**, Imran M. Probiotic potential of yeast, mold, and intermediate morphotypes of *Geotrichum candidum* in modulating gut microbiota and body physiology in mice. *Probiotics and Antimicrobial Proteins*. DOI: 10.1007/s12602-025-10497-3.
- Zhao J, Brandt G, Gronniger JL, Wang Z, Li J, Hunt DE, Rodriguez-R LM, Hatt JK, Konstantinidis KT. Quantifying the contribution of the rare biosphere to natural disturbances. *The ISME Journal* 19(1), wrf129. DOI: 10.1093/ismejo/wrf129.
- Zhao J, Pachiadaki M, Conrad RE, Jannet JK, Bristow LA, **Rodriguez-R LM**, Rossello-Mora R, Stewart FJ, Konstantinidis KT. Promiscuous and genome-wide recombination underlies the sequence-discrete species of the SAR11 lineage in the deep ocean. Promiscuous and genome-wide recombination underlies the sequence-discrete species of the SAR11 lineage in the deep ocean. *The ISME Journal*, wrf072. DOI: 10.1093/ismejo/wrf072.

2024

- Rodriguez-R LM**, Conrad RE, Viver T, Feistel DJ, Lindner BG, Venter SN, Orellana LH, Amann R, Rossello-Mora R, Konstantinidis KT. An ANI gap within bacterial species that advances the definitions of intra-species units. *mBio* 15(1). DOI: 10.1128/mbio.02696-23.
- Conrad RE, Brink CE, Viver T, **Rodriguez-R LM**, Aldegue-Riquelme B, Hatt JK, Venter SN, Rossello-Mora R, Amann R, Konstantinidis KT. Microbial species and intraspecies units exist and are maintained by ecological cohesiveness coupled to high homologous recombination. *Nature Communications* 15(1), 9906. DOI: 10.1038/s41467-024-53787-0.
- Venter SN, **Rodriguez-R LM**, Chuvochina M, Palmer M, Hugenholtz P, Steenkamp ET. Options and considerations for validation of prokaryotic names under the SeqCode. *Systematic and Applied Microbiology* 47(6), 126554. DOI: 10.1016/j.syapm.2024.126554.
- Zhao J, Both JP, **Rodriguez-R**, Konstantinidis. GSearch: Ultra-Fast and scalable genome search by combining K-mer hashing with hierarchical navigable small world graphs. *Nucleic Acids Research* 52(16), e74. DOI: 10.1093/nar/gkae609.
- Sutcliffe I, **Rodriguez-R LM**, Venter SN, Whitman WB. Quis custodiet ipsos custodes? A call for community participation in the governance of the SeqCode. *Systematic and Applied Microbiology* 47(2-3), 126498. DOI: 10.1016/j.syapm.2024.126498.
- Whitman WB, Chuvochina M, Hedlund BP, Konstantinidis KT, Palmer M, **Rodriguez-R LM**, Suttcliffe I, Wang F. Why and how to use the SeqCode. *mLife* 3(1), 1-13. DOI: 10.1002/mlf2.12092.

Díaz-García L, Chuvochina M, Feuerriegel G, Bunk B, Spröer C, Streit WR, **Rodríguez-R LM**, Overmann J, Jiménez DJ. Andean soil-derived lignocellulolytic bacterial consortium as a source of novel taxa and putative plastic-active enzymes. *Systematic and Applied Microbiology* 47(1), 126485. DOI: 10.1016/j.syapm.2023.126485.

Viver T, Conrad RE, **Rodríguez-R LM**, Ramírez AS, Venter SN, *et al.* Towards estimating the number of strains that make up a natural bacterial population. *Nature Communications* 15, 544. DOI: 10.1038/s41467-023-44622-z.

Lindner BG, Gerhardt K, Feistel DJ, **Rodríguez-R LM**, Hatt JK, Konstantinidis KT. A user's guide to the bioinformatic analysis of shotgun metagenomic sequence data for bacterial pathogen detection. *International Journal of Food Microbiology* 410, 110488. DOI: 10.1016/j.ijfoodmicro.2023.110488.

2023

Perez-Quintero AL*, **Rodríguez-R LM***, Cuesta-Morondo S, Hakalová E, Betancurt-Anzola D, *et al.* Comparative genomics identifies conserved and variable TAL effectors in African strains of the cotton pathogen *Xanthomonas citri* pv. *malvacearum*. *Phytopathology* 113(8). DOI: 10.1094/PHYTO-12-22-0477-SC.

Embacher J, Zeilinger S, Kirchmair M, **Rodríguez-R LM**, Neuhauser S. Wood decay fungi and their bacterial interaction partners in the built environment-A systematic review on fungal bacteria interactions in dead wood and timber. *Fungal Biology Reviews* 45, 100305. DOI: 10.1016/j.fbr.2022.100305.

2022

Gerhardt K*, Ruiz-Perez CA*, **Rodríguez-R LM***, Conrad RE, Konstantinidis KT. RecruitPlotEasy: An advanced read recruitment plot tool for assessing metagenomic population abundance and genetic diversity. *Frontiers in Bioinformatics* 1, 826701. DOI: 10.3389/fbinf.2021.826701.

Zhang SY*, Suttner B*, **Rodríguez-R LM***, Orellana LH, Conrad RE, *et al.* ROcker models for reliable detection and typing of short-read sequences carrying β -lactamase genes. *mSystems* 7(3). DOI: 10.1128/msystems.01281-21.

Hedlund BP, Chuvochina M, Hugenholtz P, ..., **Rodríguez-R LM**, Rossello-Mora R, Suttcliffe IC, Venter SN, Whitman WB. SeqCode: a nomenclatural code for prokaryotes described from sequence data. *Nature Microbiology* 7, 1702-1708. DOI: 10.1038/s41564-022-01214-9.

Whitman WB, Chuvochina M, Hedlund BP, ..., **Rodríguez-R LM**, Rossello-Mora R, Suttcliffe I, Venter SN. Development of the SeqCode: a proposed nomenclatural code for uncultivated prokaryotes with DNA sequences as type. *Systematic and Applied Microbiology* 45(5), 126405. DOI: 10.1016/j.syapm.2022.126305.

Pallen MJ, **Rodríguez-R LM**, Alikhan NF. Naming the unnamed: over 65,000 Candidatus names for unnamed Archaea and Bacteria in the Genome Taxonomy Database. *International Journal of Systematic and Evolutionary Microbiology* 72(9). DOI: 10.1099/ijsem.0.005482.

Kim M, **Rodríguez-R LM**, Hatt JK, Kayali O, Nalá R, *et al.* Higher pathogen load in children from Mozambique vs USA revealed by comparative fecal microbiome profiling. *ISME Communications* 2, 74. DOI: 10.1038/s43705-022-00154-z.

Díaz Rodríguez CA, Díaz-García L, Bunk B, Spröer C, Herrera K, Taraona NA, **Rodríguez-R LM**, Overmann J, Jiménez DJ. Novel bacterial taxa in a minimal lignocellulolytic consortium and their potential for lignin and plastics transformation. *ISME Communications* 2, 89. DOI: 10.1038/s43705-022-00176-7.

Lindner BG, Suttner B, Zhu KJ, Conrad RE, **Rodríguez-R LM**, Hatt JK, Brown J, Konstantinidis KT. Toward shotgun metagenomic approaches for microbial source tracking sewage spills based on laboratory mesocosms. *Water Research* 210, 117993. DOI: 10.1016/j.watres.2021.117993.

2021

Heritier-Robbins P, Karthikeyan S, Hatt JK, Kim M, Huettel M, Kostka JE, Konstantinidis KT, **Rodríguez-R LM**. Beach sand oil spills select for generalist microbial populations. *The ISME Journal* 15, 3418-3422. DOI: 10.1038/s41396-021-01017-6.

Rodríguez-R LM, Jain C, Conrad RE, Aluru S, Konstantinidis KT. Reply to: "Re-evaluating the evidence for a universal genetic boundary among microbial species". *Nature Communications* 12, 4060. DOI: 10.1038/s41467-021-24129-1.

Meziti A*, **Rodríguez-R LM***, Hatt JK, Peña-Gonzalez A, Levy K, Konstantinidis KT. The reliability of metagenome-assembled genomes (MAGs) in representing natural populations: insights from

comparing MAGs against isolate genomes derived from the same fecal sample. *Applied and Environmental Microbiology* 87(6). DOI: 10.1128/AEM.02593-20.

Montenegro Benavides NA, Alvarez A, Arrieta-Ortiz ML, **Rodriguez-R LM**, Botero D, Tabima JF, Castiblanco L, Trujillo C, Restrepo S, Bernal A. The Type VI secretion system of *Xanthomonas phaseoli* pv. *manihotis* is involved in virulence and in vitro motility. *BMC Microbiology* 21(14). DOI: 10.1186/s12866-020-02066-1.

Suttner B, Kim M, Johnston ER, Orellana LH, Ruiz-Perez CA, **Rodriguez-R LM**, Hatt JK, Brown J, Santo Domingo JW, Konstantinidis KT. Transcriptomic and rRNA:rDNA signatures of environmental versus enteric *Enterococcus faecalis* isolates under oligotrophic freshwater conditions. *Microbiology Spectrum* 9(2): e00817-21. DOI: 10.1128/Spectrum.00817-21.

2020

Rodriguez-R LM, Tsementzi D, Luo C, Konstantinidis KT. Iterative subtractive binning of freshwater chronoserries metagenomes identifies over 400 novel species and their ecologic preferences. *Environmental Microbiology* 22(8), 3394-3412. DOI: 10.1111/1462-2920.15112.

Karthikeyan S, **Rodriguez-R LM**, Heritier-Robbins P, Hatt JK, Huettel M, Kostka JE, Konstantinidis KT. Genome repository of oil systems: An interactive and searchable database that expands the catalogued diversity of crude oil-associated microbes. *Environmental Microbiology* 22(6), 2094-2106. DOI: 10.1111/1462-2920.14966.

Dam P, **Rodriguez-R LM**, Luo C, Hatt J, Tsementzi D, Konstantinidis KT, Voit EO. Model-based comparisons of the Abundance Dynamics of Bacterial communities in two Lakes. *Scientific Reports* 10(1), 1-12. DOI: 10.1038/s41598-020-58769-y.

Campanaro S, Treu L, **Rodriguez-R LM**, Kovalovszki A, Ziels RM, et al. New insights from the biogas microbiome by comprehensive genome-resolved metagenomics of nearly 1600 species originating from multiple anaerobic digesters. *Biotechnology for Biofuels* 13(1), 1-18. DOI: 10.1186/s13068-020-01679-y.

Suttner B, Johnston ER, Orellana LH, **Rodriguez-R LM**, Hatt JK, Carychao D, Carter MQ, Cooley MB, Konstantinidis KT. Metagenomics as a public health risk assessment tool in a study of natural creek sediments influenced by agricultural and livestock runoff: Potential and limitations. *Applied and Environmental Microbiology* 86(6). DOI: 10.1128/AEM.02525-19.

2019

Karthikeyan S, **Rodriguez-R LM**, Heritier-Robbins P, Kim M, Overholt WA, et al. "Candidatus Macondimonas diazotrophica", a novel gammaproteobacterial genus dominating crude-oil-contaminated coastal sediments. *The ISME Journal* 13(8), 2129-2134. DOI: 10.1038/s41396-019-0400-5.

Tsementzi D, **Rodriguez-R LM**, Ruiz-Perez CA, Meziti A, Hatt JK, Konstantinidis KT. Ecogenomic characterization of widespread, closely-related SAR11 clades of the freshwater genus "Candidatus Fonsibacter" and proposal of "Ca. Fonsibacter lacus" sp. nov. *Systematic and Applied Microbiology* 42(4), 495-505. DOI: 10.1016/j.syapm.2019.03.007.

Meziti A, Tsementzi D, **Rodriguez-R LM**, Hatt JK, Karayanni H, Kormas KA, Konstantinidis KT. Quantifying the changes in genetic diversity within sequence-discrete bacterial populations across a spatial and temporal riverine gradient. *The ISME Journal* 13(3), 767-779. DOI: 10.1038/s41396-018-0307-6.

Jeong K, Muñoz-Bodnar A, Rojas NA, Poulin L, **Rodriguez-R LM**, Gagnevin L, Vernière C, Pruvost O, Koebnik R. CRISPR elements provide a new framework for the genealogy of the citrus canker pathogen *Xanthomonas citri* pv. *citri*. *BMC Genomics* 20(1), 917. DOI: 10.1186/s12864-019-6267-z.

2018

Rodriguez-R LM, Castro JC, Kyrpides NC, Cole JR, Tiedje JM, Konstantinidis KT. How much do rRNA gene surveys underestimate extant bacterial diversity? *Applied and Environmental Microbiology* 84(6). DOI: 10.1128/AEM.00014-18.

Rodriguez-R LM, Gunturu S, Harvey WT, Rosselló-Mora R, Tiedje JM, Cole JR, Konstantinidis KT. The Microbial Genomes Atlas (MiGA) webserver: Taxonomic and gene diversity analysis of Archaea and Bacteria at the whole genome level. *Nucleic Acids Research* 46(W1), W282-W288. DOI: 10.1093/nar/gky467.

Rodriguez-R LM*, Gunturu S*, Tiedje JM, Cole JR, Konstantinidis KT. Nonpareil 3: Fast estimation of metagenomic coverage and sequence diversity. *mSystems* 3(3). DOI: 10.1128/mSystems.00039-18.

- Jain C, **Rodriguez-R LM**, Phillippy AM, Konstantinidis KT, Aluru S. High throughput ANI analysis of 90K prokaryotic genomes reveals clear species boundaries. *Nature Communications* 9(1), 1–8. DOI: 10.1038/s41467-018-07641-9.
- Castro JC, **Rodriguez-R LM**, Harvey WT, Weigand MR, Hatt JK, Carter MQ, Konstantinidis KT. imGLAD: accurate detection and quantification of target organisms in metagenomes. *PeerJ* 6, e5882. DOI: 10.7717/peerj.5882.
- Pena-Gonzalez A, **Rodriguez-R LM**, Marston CK, Gee JE, Gulvik CA, Kolton CB, Saile E, Frace M, Hoffmaster AR, Konstantinidis KT. Genomic characterization and copy number variation of *Bacillus anthracis* plasmids pXO1 and pXO2 in a historical collection of 412 strains. *mSystems* 3(4). DOI: 10.1128/mSystems.00065-18.
- Gargis A, McLaughlin H, Conley A, ..., **Rodriguez-R L**, Hoffmaster AR, Weigel LM, Sue D. Analysis of whole-genome sequences for the prediction of penicillin resistance and β -lactamase activity in *Bacillus anthracis*. *mSystems* 3(6), e00154-18. DOI: 10.1128/mSystems.00154-18.

2017

- Orellana LH, **Rodriguez-R LM**, Konstantinidis KT. ROcker: Accurate detection and quantification of target genes in short-read metagenomic data sets by modeling sliding-window bitscores. *Nucleic Acids Research* 45(3), e14–e14. DOI: 10.1093/nar/gkw900.
- Wang Y, Hatt JK, Tsementzi D, **Rodriguez-R LM**, Ruiz-Pérez CA, *et al.* Quantifying the importance of the rare biosphere for microbial community response to organic pollutants in a freshwater ecosystem. *Applied and Environmental Microbiology* 83(8), e03321-16. DOI: 10.1128/AEM.03321-16.
- Pena-Gonzalez A, Marston CK, **Rodriguez-R LM**, Kolton CB, Garcia-Diaz J, Theppote A, Frace M, Konstantinidis KT, Hoffmaster AR. Draft genome sequence of *Bacillus cereus* LA2007, a human-pathogenic isolate harboring anthrax-like plasmids. *Genome Announcements* 5(16), e00181-17. DOI: 10.1128/genomeA.00181-17.

2016

- Soto-Giron MJ, **Rodriguez-R LM**, Luo C, Elk M, Ryu H, Hoelle J, Santo Domingo JW, Konstantinidis KT. Biofilms on hospital shower hoses: Characterization and implications for nosocomial infections. *Applied and Environmental Microbiology* 82(9), 2872–2883. DOI: 10.1128/AEM.03529-15.
- Johnston ER, **Rodriguez-R LM**, Luo C, Yuan MM, Wu L, *et al.* Metagenomics reveals pervasive bacterial populations and reduced community diversity across the Alaska tundra ecosystem. *Frontiers in Microbiology* 7, 579. DOI: 10.3389/fmicb.2016.00579.
- Tsementzi D, Wu J, Deutsch S, Nath S, **Rodriguez-R LM**, *et al.* SAR11 bacteria linked to ocean anoxia and nitrogen loss. *Nature* 536(7615), 179–183. DOI: 10.1038/nature19068.

2015 and Before (23)

- Rodriguez-R LM**, Overholt WA, Hagan C, Huettel M, Kostka JE, Konstantinidis KT (2015). Microbial community successional patterns in beach sands impacted by the Deepwater Horizon oil spill. *The ISME Journal* 9(9), 1928–1940. DOI: 10.1038/ismej.2015.5.
- Poulin L, Grygiel P, Magne M, Gagnevin L, **Rodriguez-R LM**, *et al.* (2015). New multilocus variable-number tandem-repeat analysis tool for surveillance and local epidemiology of bacterial leaf blight and bacterial leaf streak of rice caused by *Xanthomonas oryzae*. *Applied and Environmental Microbiology* 81(2), 688–698. DOI: 10.1128/AEM.02768-14.
- Rodriguez-R LM**, Konstantinidis KT (2014). Estimating coverage in metagenomic data sets and why it matters. *The ISME Journal* 8(11), 2349–2351. DOI: 10.1038/ismej.2014.76.
- Orellana L, **Rodriguez-R L**, Higgins S, Chee-Sanford J, Sanford R, Ritalahti K, Löffler F, Konstantinidis K (2014). Detecting nitrous oxide reductase (*nosZ*) genes in soil metagenomes: Method development and implications for the nitrogen cycle. *mBio* 10(5), 01193–14. DOI: 10.1128/mBio.01193-14.
- Luo C, **Rodriguez-R LM**, Konstantinidis KT (2014). MyTaxa: An advanced taxonomic classifier for genomic and metagenomic sequences. *Nucleic Acids Research* 42(8), e73–e73. DOI: 10.1093/nar/gku169.
- Poretsky R, **Rodriguez-R LM**, Luo C, Tsementzi D, Konstantinidis KT (2014). Strengths and limitations of 16S rRNA gene amplicon sequencing in revealing temporal microbial community dynamics. *PLoS One* 9(4), e93827. DOI: 10.1371/journal.pone.0093827.

- Luo C, **Rodríguez-R LM**, Johnston ER, Wu L, Cheng L, *et al* (2014). Soil microbial community responses to a decade of warming as revealed by comparative metagenomics. *Applied and Environmental Microbiology* 80(5), 1777–1786. DOI: 10.1128/AEM.03712-13.
- Tsementzi D, Poretsky R, **Rodríguez-R LM**, Luo C, Konstantinidis KT (2014). Evaluation of metatranscriptomic protocols and application to the study of freshwater microbial communities. *Environmental Microbiology Reports* 6(6), 640–655. DOI: 10.1111/1758-2229.12180.
- Rodríguez-R LM**, Konstantinidis KT (2013). Nonpareil: A redundancy-based approach to assess the level of coverage in metagenomic datasets. *Bioinformatics* 30(5), 629–635. DOI: 10.1093/bioinformatics/btt584.
- DeLeon-Rodríguez N, Lathem TL, **Rodríguez-R LM**, Barazesh JM, Anderson BE, Beyersdorf AJ, Ziemba LD, Bergin M, Nenes A, Konstantinidis KT (2013). Microbiome of the upper troposphere: Species composition and prevalence, effects of tropical storms, and atmospheric implications. *Proceedings of the National Academy of Sciences* 110(7), 2575–2580. DOI: 10.1073/pnas.1212089110.
- Pérez-Quintero AL, **Rodríguez-R LM**, Dereeper A, López C, Koebnik R, Szurek B, Cunnac S (2013). An improved method for TAL effectors DNA-binding sites prediction reveals functional convergence in TAL repertoires of *Xanthomonas oryzae* strains. *PLoS ONE* 8(7), e68464. DOI: 10.1371/journal.pone.0068464.
- Arrieta-Ortiz ML, **Rodríguez-R LM**, Perez-Quintero AL, Poulin L, Díaz AC, *et al* (2013). Genomic survey of pathogenicity determinants and VNTR markers in the cassava bacterial pathogen *Xanthomonas axonopodis* pv. *manihotis* strain CIO151. *PLoS One* 8(11), e79704. DOI: 10.1371/journal.pone.0079704.
- Rodríguez-R LM**, Grajales A, Arrieta-Ortiz ML, Salazar C, Restrepo S, Bernal A (2012). Genomes-based phylogeny of the genus *Xanthomonas*. *BMC Microbiology* 12(1), 43. DOI: 10.1186/1471-2180-12-43.
- Zhao S, Poulin L, **Rodríguez-R LM**, Serna NF, Liu S-Y, *et al.* (2012). Development of a variable number of tandem repeats typing scheme for the bacterial rice pathogen *Xanthomonas oryzae* pv. *oryzicola*. *Phytopathology* 102(10), 948–956. DOI: 10.1094/PHYTO-04-12-0078-R.
- Cárdenas A, **Rodríguez-R L**, Pizarro V, Cadavid L, Arévalo-Ferro C (2012). Shifts in bacterial communities of two caribbean reef-building coral species affected by white plague disease. *The ISME Journal* 6, 502–512. DOI: 10.1038/ismej.2011.123.
- Pinzón A, **Rodríguez-R LM**, González A, Bernal A, Restrepo S (2011). Targeted metabolic reconstruction: A novel approach for the characterization of plant-pathogen interactions. *Briefings in Bioinformatics* 12(2), 151–162. DOI: 10.1093/bib/bbq009.
- Sierra R*, **Rodríguez-R LM***, Chaves D, Pinzon A, Grajales A, *et al.* (2010). Discovery of *Phytophthora infestans* genes expressed in *planta* through mining of cDNA libraries. *PLoS One* 5(3), e9847. DOI: 10.1371/journal.pone.0009847.
- Arrieta M, **Rodríguez L**, Koebnik R, Restrepo S, Bernal A (2010). A bioinformatic study of pathogenicity factors in *Xanthomonas axonopodis* pv. *manihotis*. *Phytopathology* 100(6), S8–S8.
- Méndez-Ortega MC, Restrepo S, **Rodríguez-R LM**, Pérez I, Mendoza JC, Martínez AP, Sierra R, Rey-Benito GJ (2010). An RNAi in silico approach to find an optimal shRNA cocktail against HIV-1. *Virology Journal* 7, 369. DOI: 10.1186/1743-422X-7-369.
- Gorrón E, Rodríguez F, Bernal D, **Rodríguez-Rojas LM**, Bernal A, Restrepo S, Tohme J (2010). A new method for designing degenerate primers and its use in the identification of sequences in *Brachiaria* showing similarity to apomixis-associated genes. *Bioinformatics* 26(16), 2053–4. DOI: 10.1093/bioinformatics/btq312.
- Buitrago F, Sierra R, Grajales A, **Rodríguez-R L**, Jiménez P, Bernal A, Restrepo S (2009). Comparative study of Chalcone synthase promoters across plant families. *Revista Colombiana de Biotecnología* 11(2). ISSN 0123-3475.
- Sierra R, Cardenas M, Grajales A, **Rodríguez L**, Bernal A, Restrepo S (2009). Using bioinformatics in the characterization of novel putative virulence determinants of *Phytophthora infestans* expressed in *planta*. *Phytopathology* 99(6), S120–S120.
- Restrepo S, Pinzón A, **Rodríguez-R LM**, Sierra R, Grajales A, *et al.* (2009). Computational biology in Colombia. *PLoS Computational Biology* 5(10), e1000535. DOI: 10.1371/journal.pcbi.1000535.

