Stanford



Noah Rosenberg

Stanford Professor of Population Genetics and Society

Biology

Bio

ACADEMIC APPOINTMENTS

- Professor, Biology
- Member, Bio-X
- Member, Institute for Computational and Mathematical Engineering (ICME)

HONORS AND AWARDS

- Career Award in the Biomedical Sciences, Burroughs Wellcome Fund (2004)
- Sloan Fellow in Computational and Evolutionary Molecular Biology, Alfred P. Sloan Foundation (2006)
- Dean's Basic Science Research Award, University of Michigan Medical School (2010)
- Stanford Professorship in Population Genetics & Society, Stanford University School of Humanitites & Sciences (2014)
- Elected Fellow, American Association for the Advancement of Science (2018)
- George C. Williams Prize, International Society for Evolution, Medicine, & Public Health (2020)
- James V. Burgess Methods Article-of-the-Year Award, Health Services Research (2021)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Associate Editor, PLoS Computational Biology (2025 - present)
- Founding Editor-in-Chief, Population Biology Modeling & Theory (2025 - present)
- Associate Editor, Evolution, Medicine, and Public Health (2014 - present)
- Editor-in-Chief, Theoretical Population Biology (2013 - 2024)
- Associate Editor, Molecular Biology and Evolution (2011 - 2014)
- Associate Editor, Human Biology (2010 - 2024)
- Associate Editor, Genetics (2010 - 2018)
- Associate Editor, BMC Bioinformatics (2010 - 2014)
- Associate Editor, Theoretical Population Biology (2009 - 2012)
- Associate Editor, American Journal of Human Genetics (2008 - 2010)

PROGRAM AFFILIATIONS

- Center for Comparative Studies in Race and Ethnicity (CCSRE)

PROFESSIONAL EDUCATION

- BA, Rice University , Mathematics (1997)
- MS, Stanford University , Mathematics (1999)
- PhD, Stanford University , Biology (2001)
- Postdoc, University of Southern California , Molecular/Computational Biology (2005)

LINKS

- Rosenberg Lab website: https://web.stanford.edu/group/rosenberglab

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Research in the lab addresses problems in evolutionary biology and genetics through mathematical modeling, computer simulations, development of statistical methods, and inference from population-genetic data. Our current work covers topics such as combinatorics of evolutionary trees, inference of human evolutionary history, the role of population genetics in the search for disease-susceptibility genes, the relationship of gene trees and species trees, and mathematical properties of statistics used for analyzing genetic variability.

Teaching

COURSES

2026-27

- Biology PhD Lab Rotation: BIO 299 (Aut, Win, Spr)
- Fibonacci's Rabbits and Darwin's Elephants: BIO 22N (Win)

2025-26

- Fibonacci's Rabbits and Darwin's Elephants: Integer Sequences for Evolutionary Biology: BIO 22N (Win)
- Peregrinations With Trees: BIO 20N (Aut)

2024-25

- Mathematical Population Biology: BIO 187, BIO 287, CME 187 (Win)
- Seminar on Statistical Methods in Ecology and Evolution: BIO 192, BIO 387 (Win)

2023-24

- Advanced Topics in Mathematical Evolutionary Biology: BIO 287A (Aut)
- Seminar in Computational, Evolutionary, and Human Genomics: BIO 388 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Tami Gjorgjieva, Julie Zhu

Postdoctoral Faculty Sponsor

Kennedy Agwamba, Lily Tamir

Doctoral Dissertation Advisor (AC)

Daniel Bauman, Egor Lappo, Chloe Shiff

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (PhD Program)

Publications

PUBLICATIONS

- **Expected value of the Sackin index under biased speciation models.** *Journal of mathematical biology*
  Bauman, D. J., Rosenberg, N. A.
  2026; 93 (5)
- **Enumerative combinatorics of unlabeled and labeled time-consistent galled trees** *THEORETICAL COMPUTER SCIENCE*
  Agranat-Tamir, L., Fuchs, M., Gittenberger, B., Rosenberg, N. A.
  2026; 1082
- **Combinatorial comparison of general galled trees, time-consistent galled trees, and simplex time-consistent galled trees** *ADVANCES IN APPLIED MATHEMATICS*
  Agranat-Tamir, L., Fuchs, M., Gittenberger, B., Rosenberg, N. A., V. Seetharaman, K.
  2026; 180
- **Labeled histories and maximally probable labeled topologies with multifurcation** *DISCRETE APPLIED MATHEMATICS*
  Dickey, E. H., Rosenberg, N. A.
  2026; 391: 192-203
- **Clumppling 2.0: A Clustering Alignment Program for Population Structure Analyses.** *Human population genetics and genomics*
  Liu, X., Rosenberg, N. A., Ramachandran, S.
  2026; 6 (2)
- **Enumeration of rooted binary perfect phylogenies.** *Discrete applied mathematics (Amsterdam, Netherlands : 1988)*
  Shiff, C. E., Rosenberg, N. A.
  2026; 380: 538-561
- **Enumeration of rooted binary perfect phylogenies** *DISCRETE APPLIED MATHEMATICS*
  Shiff, C. E., Rosenberg, N. A.
  2026; 380: 538-561
- **An nth-Cousin Mating Model and the n-Anacci Numbers** *FIBONACCI QUARTERLY*
  Mora, E., Rosenberg, N. A.
  2026
- **Reflections on the Human Genome Diversity Project: a conversation with Marcus W. Feldman, Henry T. Greely, and Mary-Claire King.** *Genetics*
  Ramachandran, S., Rosenberg, N. A.
  2026
- **Shared Ancestors and the Birthday Problem** *AMERICAN STATISTICIAN*
  Agranat-Tamir, L., Agwamba, K. D., Mooney, J. A., Rosenberg, N. A.
  2026
- **Integer Sequences for Diversity Statistics** *JOURNAL OF INTEGER SEQUENCES*
  Moon, B. K., Rosenberg, N. A.
  2026; 29 (1)
- **Tree Height and the Asymptotic Mean of the Colijn-Plazzotta Rank of Unlabeled Binary Rooted Trees.** *Bulletin of mathematical biology*
  Devroye, L., Doboli, M. R., Rosenberg, N. A., Wagner, S.
  2025; 87 (12): 172
- **Toward minimal SNP sets for record-matching with CODIS STR profiles.** *European journal of human genetics : EJHG*
  Gjorgjieva, T., Rosenberg, N. A.

2025

- **Coalescent theory of the ψ directionality index.** *G3 (Bethesda, Md.)*
  Lappo, E., Rosenberg, N. A.
  2025
- **Coalescent theory of the ψ directionality index.** *bioRxiv : the preprint server for biology*
  Lappo, E., Rosenberg, N. A.
  2025
- **Using mathematical constraints to explain narrow ranges for allele-sharing dissimilarities.** *Theoretical population biology*
  Liu, X., Ahsan, Z., Rosenberg, N. A.
  2025
- **Quantifying compositional variability in microbial communities with FAVA.** *Proceedings of the National Academy of Sciences of the United States of America*
  Morrison, M. L., Xue, K. S., Rosenberg, N. A.
  2025; 122 (11): e2413211122
- **Labelled histories with multifurcation and simultaneity.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
  Dickey, E. H., Rosenberg, N. A.
  2025; 380 (1919): 20230307
- **"A mathematical theory of evolution": phylogenetic models dating back 100 years.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
  Rosenberg, N. A., Stadler, T., Steel, M.
  2025; 380 (1919): 20230297
- **Using mathematical constraints to explain narrow ranges for allele-sharing dissimilarities.** *bioRxiv : the preprint server for biology*
  Liu, X., Ahsan, Z., Rosenberg, N. A.
  2024
- **Unraveling the genomic diversity and admixture history of captive tigers in the United States.** *Proceedings of the National Academy of Sciences of the United States of America*
  Armstrong, E. E., Mooney, J. A., Solari, K. A., Kim, B. Y., Barsh, G. S., Grant, V. B., Greenbaum, G., Kaelin, C. B., Panchenko, K., Pickrell, J. K., Rosenberg, N., Ryder, O. A., Yokoyama, et al
  2024; 121 (39): e2402924121
- **Quantifying compositional variability in microbial communities with FAVA.** *bioRxiv : the preprint server for biology*
  Morrison, M. L., Xue, K. S., Rosenberg, N. A.
  2024
- **Enumeration of Rooted Binary Unlabeled Galled Trees.** *Bulletin of mathematical biology*
  Agranat-Tamir, L., Mathur, S., Rosenberg, N. A.
  2024; 86 (5): 45
- **Mathematical constraints on a family of biodiversity measures via connections with Rényi entropy.** *Bio Systems*
  Gress, T. D., Rosenberg, N. A.
  2024: 105153
- **Solving the Arizona search problem by imputation.** *iScience*
  Lappo, E., Rosenberg, N. A.
  2024; 27 (2): 108831
- **Bijections between the multifurcating unlabeled rooted trees and the positive integers** *ADVANCES IN APPLIED MATHEMATICS*
  Maranca, A., Rosenberg, N. A.
  2024; 153
- **A lattice structure for ancestral configurations arising from the relationship between gene trees and species trees.** *Discrete applied mathematics (Amsterdam, Netherlands : 1988)*
  Lappo, E., Rosenberg, N. A.

2024; 343: 65-81

- **Counting the genetic ancestors from source populations in members of an admixed population.** *Genetics*
  Agranat-Tamir, L., Mooney, J. A., Rosenberg, N. A.
  2024
- **The distributions under two species-tree models of the total number of ancestral configurations for matching gene trees and species trees** *ADVANCES IN APPLIED MATHEMATICS*
  Disanto, F., Fuchs, M., Huang, C., Paningbatan, A. R., Rosenberg, N. A.
  2024; 152
- **Periodic Behavior of the Minimal Colijn-Plazzotta Rank for Trees with a Fixed Number of Leaves**
  Doboli, M. R., Hwang, H., Rosenberg, N. A.
  edited by Mailler, C., Wild, S.
  SCHLOSS DAGSTUHL, LEIBNIZ CENTER INFORMATICS.2024
- **Asymptotic Enumeration of Rooted Binary Unlabeled Galled Trees with a Fixed Number of Galls**
  Agranat-Tamir, L., Fuchs, M., Gittenberger, B., Rosenberg, N. A.
  edited by Mailler, C., Wild, S.
  SCHLOSS DAGSTUHL, LEIBNIZ CENTER INFORMATICS.2024
- **Tree Balance Indices: A Comprehensive Survey (Book Review)** *SIAM REVIEW*
  Book Review Authored by: Rosenberg, N. A.
  2024; 66 (2)
- **Clumppling: cluster matching and permutation program with integer linear programming.** *Bioinformatics (Oxford, England)*
  Liu, X., Kopelman, N. M., Rosenberg, N. A.
  2023
- **Cultural transmission of move choice in chess.** *Proceedings. Biological sciences*
  Lappo, E., Rosenberg, N. A., Feldman, M. W.
  2023; 290 (2011): 20231634
- **Modeling the effects of consanguinity on autosomal and X-chromosomal runs of homozygosity and identity-by-descent sharing.** *G3 (Bethesda, Md.)*
  Cotter, D. J., Severson, A. L., Kang, J. T., Godrej, H. N., Carmi, S., Rosenberg, N. A.
  2023
- **A Dirichlet model of alignment cost in mixed-membership unsupervised clustering.** *Journal of computational and graphical statistics : a joint publication of American Statistical Association, Institute of Mathematical Statistics, Interface Foundation of North America*
  Liu, X., Kopelman, N. M., Rosenberg, N. A.
  2023; 32 (3): 1145-1159
- **Mathematical bounds on Shannon entropy given the abundance of the ith most abundant taxon.** *Journal of mathematical biology*
  Morrison, M. L., Rosenberg, N. A.
  2023; 87 (5): 76
- **Prolonged delays in human microbiota transmission after a controlled antibiotic perturbation.** *bioRxiv : the preprint server for biology*
  Xue, K. S., Walton, S. J., Goldman, D. A., Morrison, M. L., Verster, A. J., Parrott, A. B., Yu, F. B., Neff, N. F., Rosenberg, N. A., Ross, B. D., Petrov, D. A., Huang, K. C., Good, et al
  2023
- **The 2024 Feldman Prize.** *Theoretical population biology*
  Rosenberg, N. A.
  2023
- **Record-matching of STR profiles with fragmentary genomic SNP data.** *European journal of human genetics : EJHG*
  Kim, J., Rosenberg, N. A.
  2023
- **On the number of genealogical ancestors tracing to the source groups of an admixed population.** *Genetics*

Mooney, J. A., Agranat-Tamir, L., Pritchard, J. K., Rosenberg, N. A.
2023; 224 (3)

- **A genetic and linguistic analysis of the admixture histories of the islands of Cabo Verde.** *eLife*
  Laurent, R., Szpiech, Z. A., da Costa, S. S., Thouzeau, V., Fortes-Lima, C. A., Dessarps-Freichey, F., Lémée, L., Utgé, J., Rosenberg, N. A., Baptista, M., Verdu, P.
  2023; 12

- **A rarefaction approach for measuring population differences in rare and common variation.** *Genetics*
  Cotter, D. J., Hofgard, E. F., Novembre, J., Szpiech, Z. A., Rosenberg, N. A.
  2023

- **All galls are divided into three or more parts: recursive enumeration of labeled histories for galled trees.** *Algorithms for molecular biology : AMB*
  Mathur, S., Rosenberg, N. A.
  2023; 18 (1): 1

- **When is the allele-sharing dissimilarity between two populations exceeded by the allele-sharing dissimilarity of a population with itself?** *Statistical applications in genetics and molecular biology*
  Liu, X., Ahsan, Z., Martheswaran, T. K., Rosenberg, N. A.
  2023; 22 (1)

- **THE DISTRIBUTIONS UNDER TWO SPECIES-TREE MODELS OF THE NUMBER OF ROOT ANCESTRAL CONFIGURATIONS FOR MATCHING GENE TREES AND SPECIES TREES** *ANNALS OF APPLIED PROBABILITY*
  Disanto, F., Fuchs, M., Paningbatan, A. R., Rosenberg, N. A.
  2022; 32 (6): 4426-4458

- **A Dirichlet Model of Alignment Cost in Mixed-Membership Unsupervised Clustering** *JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS*
  Liu, X., Kopelman, N. M., Rosenberg, N. A.
  2022

- **Limiting distribution of X-chromosomal coalescence times under first-cousin consanguineous mating.** *Theoretical population biology*
  Cotter, D. J., Severson, A. L., Carmi, S., Rosenberg, N. A.
  2022

- **Approximations to the expectations and variances of ratios of tree properties under the coalescent.** *G3 (Bethesda, Md.)*
  Lappo, E., Rosenberg, N. A.
  2022

- **Mathematical constraints on FST: multiallelic markers in arbitrarily many populations.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
  Alcala, N., Rosenberg, N. A.
  2022; 377 (1852): 20200414

- **Celebrating 50 years since Lewontin's apportionment of human diversity.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
  Edge, M. D., Ramachandran, S., Rosenberg, N. A.
  2022; 377 (1852): 20200405

- **FSTruct: an FST -based tool for measuring ancestry variation in inference of population structure.** *Molecular ecology resources*
  Morrison, M. L., Alcala, N., Rosenberg, N. A.
  2022

- **Enumeration of binary trees compatible with a perfect phylogeny.** *Journal of mathematical biology*
  Palacios, J. A., Bhaskar, A., Disanto, F., Rosenberg, N. A.
  2022; 84 (6): 54

- **The Probability of Joint Monophyly of Samples of Gene Lineages for All Species in an Arbitrary Species Tree.** *Journal of computational biology : a journal of computational molecular cell biology*
  Mehta, R. S., Steel, M., Rosenberg, N. A.

2022

- **Extracting hierarchical features of cultural variation using network-based clustering** *EVOLUTIONARY HUMAN SCIENCES*
  Liu, X., Rosenberg, N. A., Greenbaum, G.
  2022; 4
- **Extracting hierarchical features of cultural variation using network-based clustering.** *Evolutionary human sciences*
  Liu, X., Rosenberg, N. A., Greenbaum, G.
  2022; 4
- **Ancient and modern genomics of the Ohlone Indigenous population of California.** *Proceedings of the National Academy of Sciences of the United States of America*
  Severson, A. L., Byrd, B. F., Mallott, E. K., Owings, A. C., DeGiorgio, M., de Flamingh, A., Nijmeh, C., Arellano, M. V., Leventhal, A., Rosenberg, N. A., Malhi, R. S.
  2022; 119 (13): e2111533119
- **Mathematical epidemiology for a later age.** *Theoretical population biology*
  Rosenberg, N. A., Boni, M. F.
  2022
- **The 2022 Feldman Prize.** *Theoretical population biology*
  Rosenberg, N. A.
  2021
- **A compendium of covariances and correlation coefficients of coalescent tree properties.** *Theoretical population biology*
  Alimpiev, E., Rosenberg, N. A.
  2021
- **Enumeration of coalescent histories for caterpillar species trees and p-pseudocaterpillar gene trees.** *Advances in applied mathematics*
  Alimpiev, E., Rosenberg, N. A.
  2021; 131
- **A simple derivation of the mean of the Sackin index of tree balance under the uniform model on rooted binary labeled trees.** *Mathematical biosciences*
  King, M. C., Rosenberg, N. A.
  2021: 108688
- **A Population-Genetic Perspective on the Similarities and Differences among Worldwide Human Populations.** *Human biology*
  Rosenberg, N. A.
  2021; 92 (3): 135-152
- **The effect of consanguinity on coalescence times on the X chromosome.** *Theoretical population biology*
  Cotter, D. J., Severson, A. L., Rosenberg, N. A.
  2021
- **On the Colijn-Plazzotta numbering scheme for unlabeled binary rooted trees.** *Discrete applied mathematics (Amsterdam, Netherlands : 1988)*
  Rosenberg, N. A.
  2021; 291: 88–98
- **Variance and limiting distribution of coalescence times in a diploid model of a consanguineous population.** *Theoretical population biology*
  Severson, A. L., Carmi, S., Rosenberg, N. A.
  2021
- **Designing gene drives to limit spillover to non-target populations.** *PLoS genetics*
  Greenbaum, G., Feldman, M. W., Rosenberg, N. A., Kim, J.
  2021; 17 (2): e1009278
- **Population models, mathematical epidemiology, and the COVID-19 pandemic.** *Theoretical population biology*
  Rosenberg, N.
  2021

- **Skin deep: The decoupling of genetic admixture levels from phenotypes that differed between source populations.** *American journal of physical anthropology*
  Kim, J. n., Edge, M. D., Goldberg, A. n., Rosenberg, N. A.
  2021
- **Genetic Adaptation in New York City Rats.** *Genome biology and evolution*
  Harpak, A., Garud, N., Rosenberg, N. A., Petrov, D. A., Combs, M., Pennings, P. S., Munshi-South, J.
  2020
- **Distance metrics for ranked evolutionary trees.** *Proceedings of the National Academy of Sciences of the United States of America*
  Kim, J., Rosenberg, N. A., Palacios, J. A.
  2020
- **On the heterozygosity of an admixed population.** *Journal of mathematical biology*
  Boca, S. M., Huang, L., Rosenberg, N. A.
  2020
- **Human-Genetic Ancestry Inference and False Positives in Forensic Familial Searching.** *G3 (Bethesda, Md.)*
  Fortier, A. L., Kim, J., Rosenberg, N. A.
  2020
- **Modelling anti-vaccine sentiment as a cultural pathogen.** *Evolutionary human sciences*
  Mehta, R. S., Rosenberg, N. A.
  2020; 2: e21
- **Roadblocked monotonic paths and the enumeration of coalescent histories for non-matching caterpillar gene trees and species trees** *ADVANCES IN APPLIED MATHEMATICS*
  Himwich, Z. M., Rosenberg, N. A.
  2020; 113
- **Roadblocked monotonic paths and the enumeration of coalescent histories for non-matching caterpillar gene trees and species trees.** *Advances in applied mathematics*
  Himwich, Z. M., Rosenberg, N. A.
  2020; 113
- **Measures of care fragmentation: Mathematical insights from population genetics.** *Health services research*
  Rosenberg, N. A., Zulman, D. M.
  2020
- **High-resolution inference of genetic relationships among Jewish populations.** *European journal of human genetics : EJHG*
  Kopelman, N. M., Stone, L. n., Hernandez, D. G., Gefel, D. n., Singleton, A. B., Heyer, E. n., Feldman, M. W., Hillel, J. n., Rosenberg, N. A.
  2020
- **Mathematical Properties of Linkage Disequilibrium Statistics Defined by Normalization of the Coefficient D = pAB - pApB.** *Human heredity*
  Kang, J. T., Rosenberg, N. A.
  2020: 1–17
- **Fifty years of Theoretical Population Biology.** *Theoretical population biology*
  Rosenberg, N. A.
  2020
- **Assortative mating by population of origin in a mechanistic model of admixture.** *Theoretical population biology*
  Goldberg, A. n., Rastogi, A. n., Rosenberg, N. A.
  2020
- **The 2020 Feldman Prize.** *Theoretical population biology*
  Rosenberg, N. A.
  2019
- **Network-based hierarchical population structure analysis for large genomic datasets.** *Genome research*

Greenbaum, G., Rubin, A., Templeton, A. R., Rosenberg, N. A.
2019

- **Disease transmission and introgression can explain the long-lasting contact zone of modern humans and Neanderthals.** *Nature communications*
  Greenbaum, G., Getz, W. M., Rosenberg, N. A., Feldman, M. W., Hovers, E., Kolodny, O.
  2019; 10 (1): 5003
- **The probability of reciprocal monophyly of gene lineages in three and four species**
  Mehta, R. S., Rosenberg, N. A.
  ACADEMIC PRESS INC ELSEVIER SCIENCE.2019: 133–47
- **Some topics in theoretical population genetics: Editorial commentaries on a selection of Marc Feldman's TPB papers**
  Altenberg, L., Creanza, N., Fogarty, L., Hadany, L., Kolodny, O., Laland, K. N., Lehmann, L., Otto, S. P., Rosenberg, N. A., Van Cleve, J., Wakeley, J.
  ACADEMIC PRESS INC ELSEVIER SCIENCE.2019: 4–8
- **The Relationship Between Haplotype-Based FST and Haplotype Length.** *Genetics*
  Mehta, R. S., Feder, A. F., Boca, S. M., Rosenberg, N. A.
  2019; 213 (1): 281-295
- **The Relationship Between Haplotype-Based FST and Haplotype Length.** *Genetics*
  Mehta, R. S., Feder, A. F., Boca, S. M., Rosenberg, N. A.
  2019; 213 (1): 281-295
- **The Relationship Between Haplotype-Based FST and Haplotype Length.** *Genetics*
  Mehta, R. S., Feder, A. F., Boca, S. M., Rosenberg, N. A.
  2019
- **Analysis of author gender in TPB, 1991-2018** *THEORETICAL POPULATION BIOLOGY*
  Severson, A. L., Uricchio, L. H., Arbisser, I. M., Glassberg, E. C., Rosenberg, N. A.
  2019; 127: 1–6
- **Use of stochastic patch occupancy models in the California red-legged frog for Bayesian inference regarding past events and future persistence** *CONSERVATION BIOLOGY*
  Alcala, N., Launer, A. E., Westphal, M. F., Seymour, R., Cole, E. M., Rosenberg, N. A.
  2019; 33 (3): 685–96
- **FST and the triangle inequality for biallelic markers.** *Theoretical population biology*
  Arbisser, I. M., Rosenberg, N. A.
  2019
- **The Effect of Consanguinity on Between-Individual Identity-by-Descent Sharing** *GENETICS*
  Severson, A. L., Carmi, S., Rosenberg, N. A.
  2019; 212 (1): 305–16
- **Analysis of author gender in TPB, 1991-2018.** *Theoretical population biology*
  Severson, A. L., Uricchio, L. H., Arbisser, I. M., Glassberg, E. C., Rosenberg, N. A.
  2019
- **The Effect of Consanguinity on Between-Individual Identity-By-Descent Sharing.** *Genetics*
  Severson, A. L., Carmi, S., Rosenberg, N. A.
  2019
- **Probabilities of unranked and ranked anomaly zones under birth-death models.** *Molecular biology and evolution*
  Kim, A. n., Rosenberg, N. A., Degnan, J. H.
  2019
- **Enumeration of lonely pairs of gene trees and species trees by means of antipodal cherries** *ADVANCES IN APPLIED MATHEMATICS*
  Rosenberg, N. A.
  2019; 102: 1–17

- **ENUMERATION OF LONELY PAIRS OF GENE TREES AND SPECIES TREES BY MEANS OF ANTIPODAL CHERRIES.** *Advances in applied mathematics*
  Rosenberg, N. A.
  2019; 102: 1-17

- **Coalescent theory of migration network motifs.** *Molecular biology and evolution*
  Alcala, N. n., Goldberg, A. n., Ramakrishnan, U. n., Rosenberg, N. A.
  2019

- **Enumeration of compact coalescent histories for matching gene trees and species trees** *JOURNAL OF MATHEMATICAL BIOLOGY*
  Disanto, F., Rosenberg, N. A.
  2019; 78 (1-2): 155–88

- **Coalescent theory of migration network motifs.** *Molecular biology and evolution*
  Alcala, N. n., Goldberg, A. n., Ramakrishnan, U. n., Rosenberg, N. A.
  2019

- **Enumeration of compact coalescent histories for matching gene trees and species trees** *JOURNAL OF MATHEMATICAL BIOLOGY*
  Disanto, F., Rosenberg, N. A.
  2019; 78 (1-2): 155–88

- **G'ST , Jost's D, and FST are similarly constrained by allele frequencies: a mathematical, simulation, and empirical study.** *Molecular ecology*
  Alcala, N., Rosenberg, N. A.
  2018

- **Some topics in theoretical population genetics: Editorial commentaries on a selection of Marc Feldman's TPB papers.** *Theoretical population biology*
  Altenberg, L., Creanza, N., Fogarty, L., Hadany, L., Kolodny, O., Laland, K. N., Lehmann, L., Otto, S. P., Rosenberg, N. A., Van Cleve, J., Wakeley, J.
  2018

- **Statistical Detection of Relatives Typed with Disjoint Forensic and Biomedical Loci.** *Cell*
  Kim, J., Edge, M. D., Algee-Hewitt, B. F., Li, J. Z., Rosenberg, N. A.
  2018

- **Use of stochastic patch-occupancy models in the California red-legged frogfor Bayesian inference regardingpast events and future persistence.** *Conservation biology : the journal of the Society for Conservation Biology*
  Alcala, N., Launer, A. E., Westphal, M. F., Seymour, R., Cole, E. M., Rosenberg, N. A.
  2018

- **A genome scan for genes underlying adult body size differences between Central African hunter-gatherers and farmers** *HUMAN GENETICS*
  Pemberton, T. J., Verdu, P., Becker, N. S., Willer, C. J., Hewlett, B. S., Le Bomin, S., Froment, A., Rosenberg, N. A., Heyer, E.
  2018; 137 (6-7): 487–509

- **Mathematical and Simulation-Based Analysis of the Behavior of Admixed Taxa in the Neighbor-Joining Algorithm.** *Bulletin of mathematical biology*
  Kim, J., Disanto, F., Kopelman, N. M., Rosenberg, N. A.
  2018

- **The probability of reciprocal monophyly of gene lineages in three and four species.** *Theoretical population biology*
  Mehta, R. S., Rosenberg, N. A.
  2018

- **Matching CODIS genotypes to SNP genotypes using linkage disequilibrium**
  Edge, M. D., Algee-Hewitt, B. F. B., Kim, J., Pemberton, T., Li, J. Z., Rosenberg, N. A.
  WILEY.2018: 75–76

- **Bounding measures of genetic similarity and diversity using majorization.** *Journal of mathematical biology*
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