

# Resource Summary Report

Generated by [nidm-terms](#) on Jul 28, 2026

## Gene Relationships Across Implicated Loci

RRID:SCR\_008537

Type: Tool

### Proper Citation

Gene Relationships Across Implicated Loci (RRID:SCR\_008537)

### Resource Information

**URL:** <http://www.broad.mit.edu/mpg/grail/>

**Proper Citation:** Gene Relationships Across Implicated Loci (RRID:SCR\_008537)

**Description:** A tool to examine relationships between genes in different disease associated loci. Given several genomic regions or SNPs associated with a particular phenotype or disease, GRAIL looks for similarities in the published scientific text among the associated genes. As input, users can upload either (1) SNPs that have emerged from a genome-wide association study or (2) genomic regions that have emerged from a linkage scan or are associated common or rare copy number variants. SNPs should be listed according to their rs#'s and must be listed in HapMap. Genomic Regions are specified by a user-defined identifier, the chromosome that it is located on, and the start and end base-pair positions for the region. Grail can take two sets of inputs - Query regions and Seed regions. Seed regions are definitely associated SNPs or genomic regions, and Query regions are those regions that the user is attempting to evaluate against them. In many applications the two sets are identical. Based on textual relationships between genes, GRAIL assigns a p-value to each region suggesting its degree of functional connectivity, and picks the best candidate gene. GRAIL is developed by Soumya Raychaudhuri in the labs of David Altshuler and Mark Daly at the Center for Human Genetic Research of Massachusetts General Hospital and Harvard Medical School, and the Broad Institute. GRAIL is described in manuscript, currently in preparation.

**Synonyms:** GRAIL

**Resource Type:** resource, service resource, data analysis service, analysis service resource, production service resource

**Defining Citation:** [PMID:19557189](#)

**Keywords:** software, text mining, genotype, phenotype, snp

**Funding:** NIAMS 1K08AR055688-01A1;  
NIAMS AR007530;  
NHGRI U01HG004171;  
NIDDK R01DK083759

**Resource Name:** Gene Relationships Across Implicated Loci

**Resource ID:** SCR\_008537

**Alternate IDs:** nif-0000-30627

**Record Creation Time:** 20220129T080248+0000

**Record Last Update:** 20260728T043306+0000

---

## Ratings and Alerts

No rating or validation information has been found for Gene Relationships Across Implicated Loci .

No alerts have been found for Gene Relationships Across Implicated Loci .

---

## Data and Source Information

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

---

## Usage and Citation Metrics

We found 67 mentions in open access literature.

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

Truong V, et al. (2025) Gabapentin to achieve HIV viral load suppression in people with risky drinking in Mbarara, Uganda: study protocol for a randomized, double-blinded, placebo-controlled trial (GRAIL). Research square.

Tor ÖB, et al. (2025) Effect of transcranial direct current stimulation over the primary motor cortex on short-term balance acquisition in healthy individuals. Journal of neuroengineering and rehabilitation, 22(1), 146.

Park RS, et al. (2025) Thermal asymmetry in the Moon's mantle inferred from monthly tidal response. Nature, 641(8065), 1188.

Schlegel M, et al. (2025) Age-specific effects of a sustained cognitive activity on perceived cognitive fatigue as well as single- and dual-task treadmill walking performance. GeroScience, 47(3), 3771.

Buckell J, et al. (2025) Preferences for multi-cancer tests (MCTs) in primary care: discrete choice experiments of general practitioners and the general public in England. British journal of cancer, 133(3), 394.

- Siedlecki P, et al. (2025) The effect of slow breathing on cardiovascular and electromyographic responses during standing perturbations in older adults. *European journal of ageing*, 22(1), 26.
- Biffi E, et al. (2025) The influence of experience and environments on usability and user experience in a wheelchair simulator. *Annals of medicine*, 57(1), 2537930.
- Nieuwelink M, et al. (2025) Walking adaptability training for individuals after stroke (ATTAINS): study protocol for a randomized, waiting-list controlled trial. *Trials*, 26(1), 595.
- Zwijgers E, et al. (2024) Efficacy of Walking Adaptability Training on Walking Capacity in Ambulatory People With Motor Incomplete Spinal Cord Injury: A Multicenter Pragmatic Randomized Controlled Trial. *Neurorehabilitation and neural repair*, 38(6), 413.
- Raghebi Z, et al. (2024) ActiveReach: an active learning framework for approximate reachability query answering in large-scale graphs. *Frontiers in big data*, 7, 1427104.
- Fukuchi A, et al. (2024) Room-Temperature Possible Current-Induced Transition in Ca<sub>2</sub>RuO<sub>4</sub> Thin Films Grown Through Intercalation-Like Cation Diffusion in the A<sub>2</sub>BO<sub>4</sub> Ruddlesden-Popper Structure. *Small methods*, 8(12), e2400264.
- Ensink CJ, et al. (2024) Assessment of Foot Strike Angle and Forward Propulsion with Wearable Sensors in People with Stroke. *Sensors (Basel, Switzerland)*, 24(2).
- Kim JW, et al. (2023) MELD-GRAIL-Na Is a Better Predictor of Mortality Than MELD in Korean Patients with Cirrhosis. *Medicina (Kaunas, Lithuania)*, 59(3).
- Siedlecki P, et al. (2023) Cardiovascular response to anticipatory and reactionary postural perturbations in young adults. *Experimental physiology*, 108(9), 1144.
- Aziz Z, et al. (2023) Cost-Effectiveness of Liquid Biopsy for Colorectal Cancer Screening in Patients Who Are Unscreened. *JAMA network open*, 6(11), e2343392.
- Guérin M, et al. (2023) Combining Intensive Rehabilitation With a Nonfunctional Isokinetic Strengthening Program in Adolescents With Cerebral Palsy: Protocol for a Randomized Controlled Trial. *JMIR research protocols*, 12, e43221.
- Ensink C, et al. (2023) Validation of an algorithm to assess regular and irregular gait using inertial sensors in healthy and stroke individuals. *PeerJ*, 11, e16641.
- Müller C, et al. (2023) Slipping while counting: gaze-gait interactions during perturbed walking under dual-task conditions. *Experimental brain research*, 241(3), 765.
- Reiser JE, et al. (2022) Did you even see that? visual sensory processing of single stimuli under different locomotor loads. *PloS one*, 17(5), e0267896.
- Ren X, et al. (2022) Lower extremity joint compensatory effects during the first recovery step following slipping and stumbling perturbations in young and older subjects. *BMC geriatrics*, 22(1), 656.