



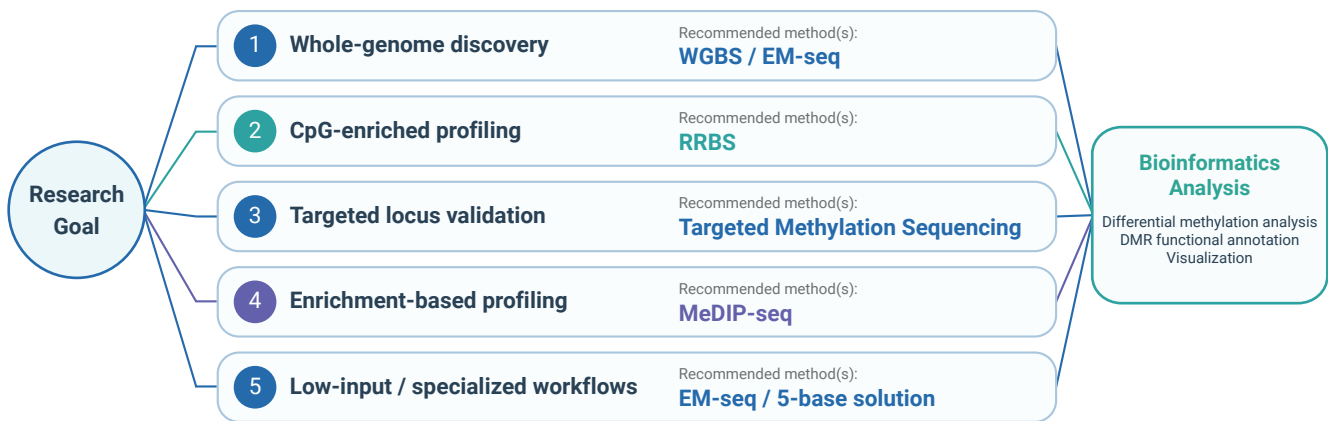
# DNA Methylation Sequencing Solution

From whole-genome methylome discovery to targeted validation, CD Genomics provides flexible DNA methylation sequencing solutions with method selection support, sequencing, and integrated bioinformatics analysis.

## Why Choose CD Genomics

- Strategy-first methylation solutions, extending beyond sequencing execution
- Broad DNA methylation capabilities across discovery, validation, enrichment, and low-input studies
- Method selection guided by sample constraints, coverage targets, resolution, and budget
- Integrated experimental and bioinformatics support from planning to DMR interpretation
- Actionable reports with methylation results, annotation, visualization, and next-step recommendations

## DNA Methylation Method Selection Workflow



## Research Applications

- Epigenetic inheritance and multi-generational phenotype studies
- Developmental regulation and tissue-specific methylome profiling
- Environmental exposure, stress response, and phenotype-associated methylation changes
- Promoter, enhancer, CpG island, and candidate locus follow-up analysis

## Sample-Aware Study Design

- Study design tailored to DNA quality, input amount, sample type, and research scope
- Compatible with high-quality gDNA, limited-input DNA, and selected cfDNA-oriented workflows
- Coverage planning aligned with resolution needs, genome size, and comparison design
- Sequencing scope aligned with budget, timeline, and downstream analysis goals

## Integrated Analysis Output

- Methylation calling and differential methylation analysis
- DMR annotation and functional interpretation
- Data visualization for epigenomic profiling and downstream analysis
- Standardized deliverables for research reporting, project discussion, and follow-up studies

## Method Portfolio

Method	Best Fit	Key Strength
WGBS	Whole-genome 5mC discovery	Base-resolution methylome coverage
EM-seq	Low-input / challenging DNA	Gentler enzymatic conversion
RRBS	CpG-rich regions	Cost-efficient profiling
Targeted Methylation	Selected regions	High-depth validation
MeDIP-seq	Enrichment-based profiling	Broad methylated DNA enrichment
5-base Solution	Variant-aware studies	Methylation + variation readout