

KromaTiD

Direct, Definitive Genomics

Authors

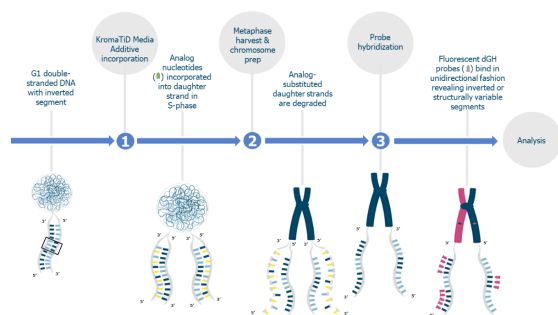
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Erin Cross, VP Research

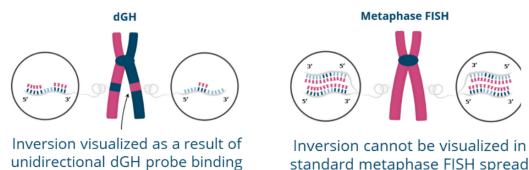
Christopher Tompkins, CTO

What is dGH?

directional **d**irectional **G**enomic **H**ybridization



Beyond Metaphase FISH!



Learn More
Here!



Acknowledgements

KromaTiD gratefully acknowledges Michael Cornforth UTMB, Steven Kunkel UTMB for providing the cell line. NIH NHGRI for generously supporting the development of dGH SCREEN™

Characterizing Genotoxic Variants Both **Big** and **Small**

Whole Genome?
Think **dGH SCREEN**

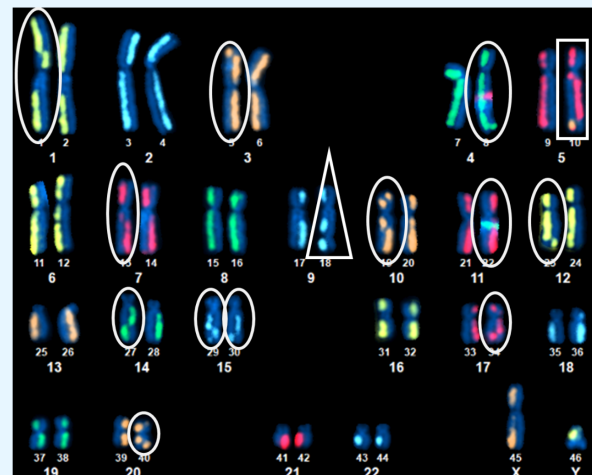
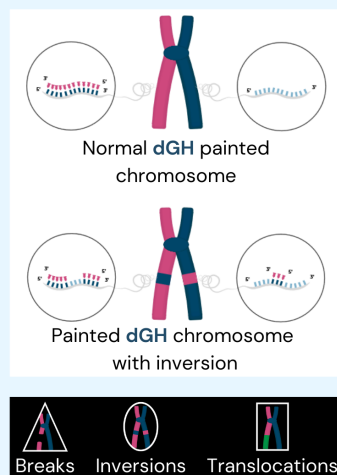


Figure 1: Multiple large variants in a dGH SCREEN Karyogram

Small Target?
Think **dGH In-Site**

Labeling Random and
Targeted Insertions

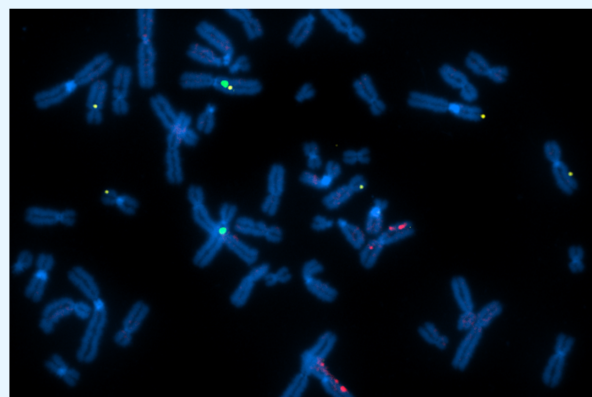
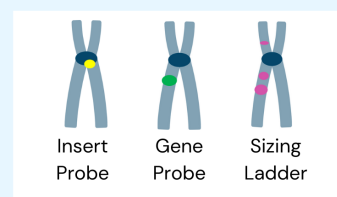


Figure 2: Random insertions of a 10 Kb dGH In-Site insert probe

Quantifying rare
genotoxic variants?

Think **dGH AI**

Detecting rare variants at
0.1% prevalence

With 2,000 metaphase cells

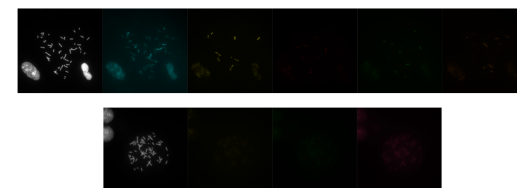


Figure 3: Raw 5- and 3-color dGH metaphase spreads

With 92,000 chromosome tiles

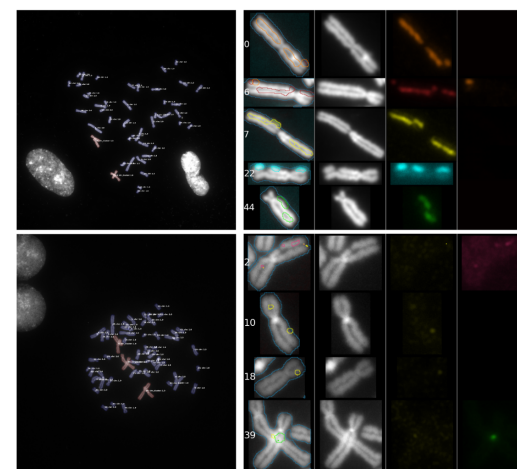


Figure 4: Spreads segmented into chromosome tiles

With >3.5 million datapoints

- Chromosome morphology
- Spot/Signal statistics
- Custom ML/AI models