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^{OA}Open Access paper



Cover The unprecedented rate of data produced by high-throughput sequencing technology presents new challenges for data management and protection. In this issue, a new solution named SECGRAM is proposed for the secure storage and selective retrieval of compressed aligned genomic data. The illustration depicts a pipeline where genome data owners can compress and then encrypt their data, and securely store them on a cloud server. Afterward, the system users, if authorized by the data owners, can perform efficient selective retrieval on any region of the encrypted data and obtain the corresponding sequence alignments. (Cover illustration © Sophia Genetics 2016. [For details, see Huang et al., pp. 1687–1696.]