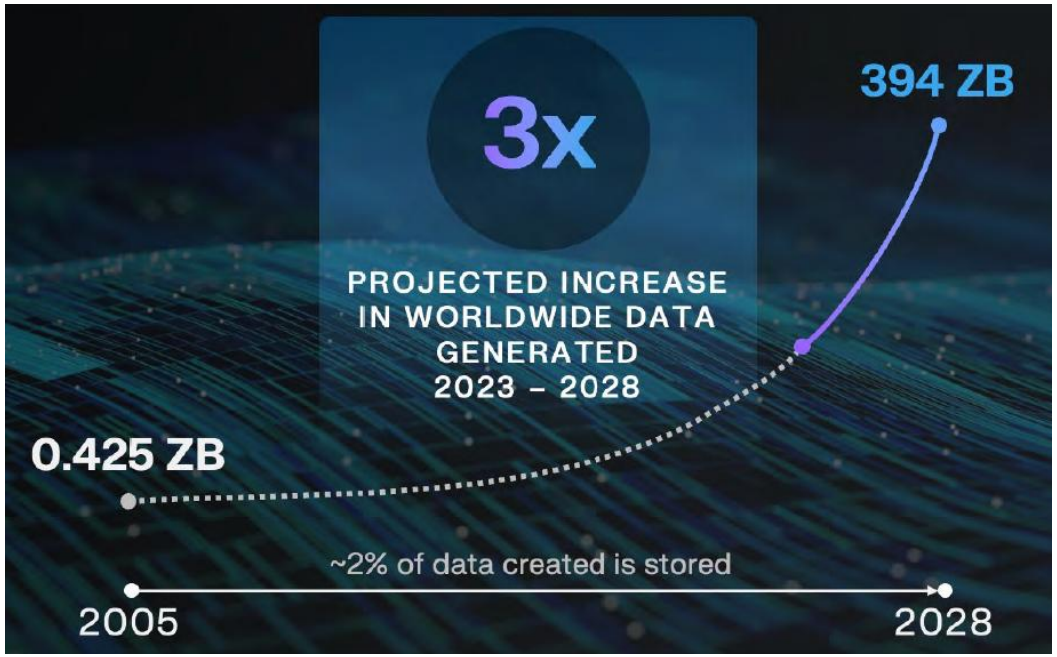
SNIA®

DNA Data Storage Alliance
2025 Review and 2026 Plans

Presented by Dave Landsman, Chair
Email: ddsa-chair@snia.org

Why are SNIA and DNA Data Storage Alliance a great fit?

- "Save/Discard Dilemma"
  - Increasingly expensive, impractical to save all we want with existing storage technology
  - AI/ML adding to quantity of data to be saved and creating higher opportunity cost of throwing it away
- It's not purely about the zettabytes
  - Digital archivists want to save culture, history, law, etc. forever; longevity can be a value unrelated to quantity
- We need archival storage media with lower TCO
  - Orders of magnitude more dense
  - Durable for decades at room temp
  - Zero power at rest
  - No technology migration required



Source: Worldwide IDC Global DataSphere Forecast, 2024-2028, doc #US52076424, May 2024

DNA data storage is a compelling potential storage solution and SNIA is all about storage

DNA DATA STORAGE ALLIANCE
A SNIA Community

Mission: Create an interoperable storage ecosystem based on DNA as a data storage and compute medium

What we do to achieve our mission

- Educate the market to create awareness and adoption of DNA data storage and compute
- Influence and drive R&D and funding
- Develop standards and specifications to encourage ecosystem evolution

Specs and White Papers

- An Introduction to DNA Data Storage (Jun-2021)
- Sector 0 and Sector 1 – DNA Rosetta Stone (Jun-2023)
- DNA Stability Evaluation Method v1.0 (Sep-2024)
- DNA Data Storage Codecs (Jun-2025)
- DNA Data Storage Technology Review (Jun-2025)
- Biosecurity Regulatory Policy Position (Oct-2025)

2025 Events

40+ members; about 50/50 academic/industry

Board

ATLAS DATA STORAGE, BIOMEMORY, Western Digital., GENOMIKA, Entegris, imagene, AVANEIDI

General Membership

MISL University of WA, TWIST BIOSCIENCE, Lenovo, Microsoft, TU/e Eindhoven University of Technology, cacheDNA, SUPERMICRO, SAMSUNG, IMEC, Los Alamos National Laboratory, IBM, ISM Technion, KIOXIA, SEAGATE, DELL Technologies, genomill, iol University of New Hampshire InterOperability Laboratory, Université Côte d'Azur, The University of Arizona College of Medicine Phoenix Center for Applied NanoBioscience & Medicine, Monash University, UT Dallas, DIGITAL BEDROCK Keeping Your Digital Assets Safe and Evergreen, Philipps Universität Marburg, IRIDIA, ipt Instituto de Pesquisas Tecnológicas, ICOS Newcastle University, BioSistemika, Reichman University, 010S, cinémathèque suisse, J. Heyrovský Institute of Physical Chemistry, Leibniz Universität Hannover, ktu prof. kazimieras barsauskas ultrasound research institute, SANDISK, Hes·so, HUAWEI

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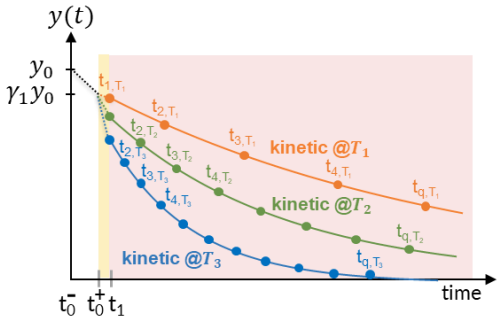
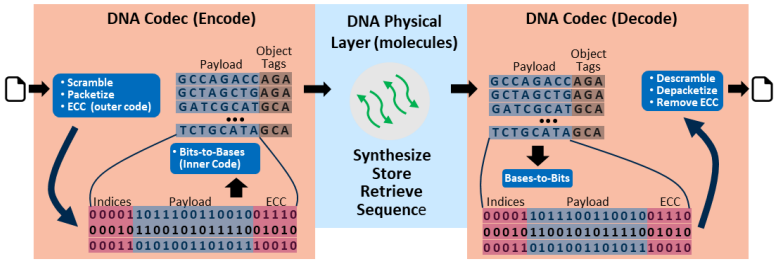
2026

Data Retention



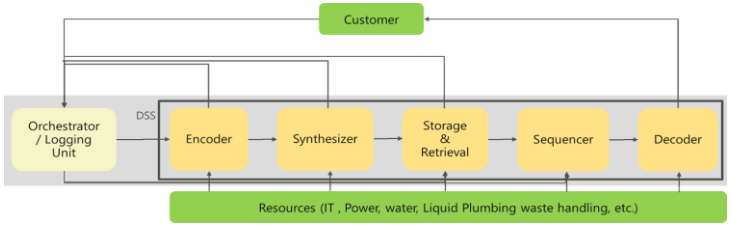
- Update on DNA Data Stability Method (verifying hermetically sealed DCSs)

Codecs



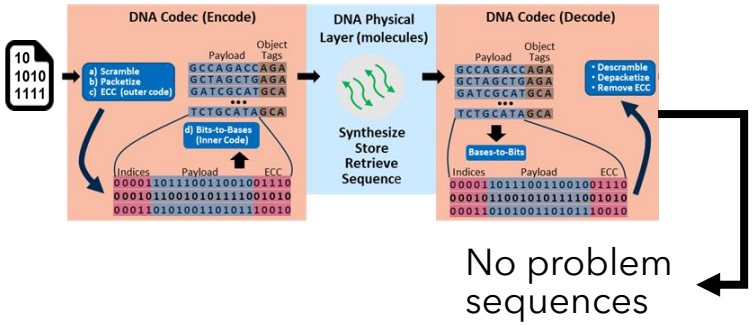
- TBD (e.g., write verification, Rosetta 2.0)

Interoperability



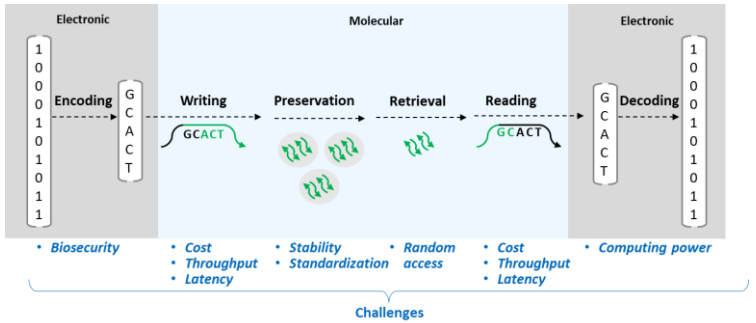
- Approve Swordfish template for DNA in the datacenter

Biosecurity



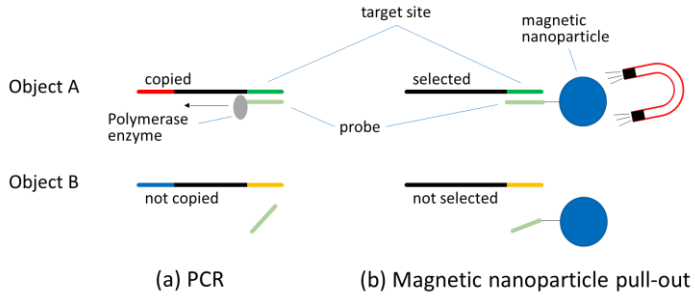
- Engage regulators (EC and US); US LoC has data on current SOC screening burden

Roadmaps



- Contributions to Springer DNA data storage text book & IEEE Mass Storage Roadmap

Random Access/Addressibility



- Publish paper (SNIA and in a journal)

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Storage and Computing with DNA 2026

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DigNA
European Innovation Council
EIC Pathfinder Challenge

- Rome, Italy
- University of Roma Tre (Aula Magna Rettorato Roma Tre)
- Wed-Friday, May 27-29
- Pre-registration open https://scdna26.day-one.biz/
- Call for presentations soon

SNIA

Community in 2026

- Expand collaboration, external to and within SNIA
  - Storage and Computing with DNA 2026 – Rome, May 27-29
    - In concert w/ DigNA (EU initiative on DNA data storage)
  - Publish swordfish schema
    - In concert with Swordfish TWG
  - Engage with community on archival storage initiative
    - Cerabyte has led BoFs at SDC, iPres, and others planned
    - Might be right year to launch Archival Storage initiative within SNIA
- Exploring other ways to help ecosystem and develop Alliance
  - Planning a member survey
- Organization
  - Dave Landsman retiring as of Jan-31-2026; Bill Martin will become WD rep on Alliance Community Board
  - Robertas Skliaustas (Genomika), Vincent Franceschini (Biomemory) take on Alliance Community co-chair roles

THANK YOU

Come join us:

URL: www.snia.org/groups
Email: ddsa-chair@snia.org
LinkedIn: @dna-data-storage-alliance

Organization	
Community Board	• Robertas Skliaustas (Genomika) - co-chair • Vincent Franceschini (Biomemory) - co-chair • Marthe Colotte (Imagene) • Roger Rudoff (Atlas Data Storage) • Julien Muzard (Entegris) • Alessia Marelli (Avaneidi) • Bill Martin (Western Digital)
TWG	• TWG: Robertas Skliaustas, Vincent Franceschini • Sub-group - Data Retention: Marthe Colotte • Subgroup - Codecs: Manish Gupta

SIGs	• Biosecurity: Dominique Loque
	• Roadmaps: Board (for now)
	• Random Access/Addressability
	  • Albert Keung
	  • Natalio Krasnogor