

## DNA Conformation as a Report for the Environment

This invention relates to synapsable nucleic acids, methods of binding nucleic acids into synapses and the products so formed. The technology relates to a nucleic acid complex having double-stranded sections with a specific domain, which is capable of interacting with other similar domains such that two nucleic acid complexes with these domains have the ability to bind together to form DNA superstructures. The invention also relates to a method of forming a nucleic acid superstructure using the engineered nucleic acid complexes.

### Applications

- Any high-sensitivity detection system used in biomedicine, including immunoassays.
- Design and development of new assays for drug discovery.
- Identification of new approaches to disease therapy, as well as new paradigms for detection of tumors
- or virus-specific proteins, nucleic acids, and metabolites.

### Advantages

In addition to facilitating reduced X-ray doses to the patient, the amplified pixel architectures can also enable advanced X-ray imaging applications that require multiple exposures to the patient to achieve better contrast and higher image quality.

### Stage of Development

Extensive research is presently being conducted, exploring different aspects of this technology for various applications in research and drug discovery.

### Inventors

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### Intellectual Property Status

Platform technology available for collaboration and exclusive or non-exclusive licensing.

### Partnering Opportunity

Available for collaboration and exclusive or non-exclusive licensing.

### Contacts

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