```
transaction hash 0xab588a1c2f7a96faea679daa84e2bac4a2f50d160032c080df7a8454cac94398
                0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
from
                 GenomicsDataManagement.RegisterLimitedAccessOracle(address) 0xf8e81D47203A594245E36C48e151709F0C19fBe8 🗓
to
decoded input
                        "address _LimitedAccessOracle": "0x617F2E2fD72FD9D5503197092aC168c91465E7f2"
                 } 0
0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
from
                GenomicsDataManagement.RegisterSequencingCenter(address) 0xf8e81D47203A594245E36C48e151709F0C19f8e8
to
decoded input
                        "address _sequencingCenter": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2"
                 } (
transaction hash 0x32c354b65df9f8f069af9ba8346ca566c00341a65598c1e9249deb0e6b4b1af3 🗓
               0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
                 GenomicsDataManagement.RegisterSequencingCenter(address) 0xf8e81D47203A594245E36C48e151709F0C19fBe8
decoded input
                        "address _sequencingCenter": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2"
                 } 0
```

```
0x623a32b5be49a70149add9ddec57685a8b37bb13ff50b08c30870c05ae0fcdc1
transaction hash
                 0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
from
                 RawGenomicDataNFTs.mint(string) 0xd9145CCE52D386f254917e481eB44e9943F39138
decoded input
                       "string _tokenURI": "QmRbumpGR97XncVYQcftLR2XrNrNvfYXsaNcbsSJi8b9wK"
               } 0
decoded output
                      "0": "uint256: 1"
                } ()
               "from": "0xd9145CCE52D386f254917e481eB44e9943F39138".
logs
                "topic": "0xddf252ad1be2c89b69c2b068fc378daa952ba7f163c4a11628f55a4df523b3ef",
                "event": "Transfer",
                "args": {
                       "1": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                       "2": "1",
                       "to": "0x4820993Bc481177ec7E8f571ceCaE8A9e22C02db",
                       "tokenId": "1"
0x4820993Bc481177ec7E8f571ceCaE8A9e22C02db
from
              RawGenomicDataNFTs.approve(address,uint256) 0xd9145CCE52D386f254917e481eB44e9943F39138
to
              "from": "0xd9145CCE52D386f254917e481e844e9943F39138",
logs
               "topic": "0x8c5be1e5ebec7d5bd14f71427d1e84f3dd0314c0f7b2291e5b200ac8c7c3b925",
               "event": "Approval",
              "args": {
                     "0": "0x48209938c481177ec7E8f571ceCaE8A9e22C02db",
                     "1": "0xf8e81D47203A594245E36C48e151709F0C19f8e8",
                    "2": "1",
"owner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                     "approved": "0xf8e81D47203A594245E36C48e151709F0C19f8e8",
                     "tokenId": "1"
              }
```

```
0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
                  GenomicsDataManagement.listRawGenomicNFT(uint256) 0xf8e81D47203A594245E36C48e151709F0C19fBe8
to
logs
                  "from": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                   "topic": "0xddf252ad1be2c89b69c2b068fc378daa952ba7f163c4a11628f55a4df523b3ef",
                   "event": "Transfer",
                   "args": {
                           "0": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                           "1": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
                           "2": "1",
                           "from": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                           "to": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
                           "tokenId": "1"
                   "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
                   "topic": "0x084ba02ae319a73276745c627e6f05e977e7969378f4b399c1c2da6c09586481",
                   "event": "ListedRawGenomicNFT",
                   "args": {
                           "0": "1",
                           "1": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                           "2": "1",
                           "3": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                           "RawNFTId": "1",
                           "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                           "tokenId": "1",
                           "dataOwner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db"
 val
                  3000000000000000000000 wei
transaction hash 0x1eb62c8e81c0daccc000abbaa3b3555e55fecd20c86fdb7855ecfec340cd5f96
from
                0x78731D3Ca6b7E34aC0F824c42a7cC18A495cabaB
to
                GenomicsDataManagement.PayForRawNFTSequencing(uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19f8e8
                "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
logs
                "topic": "0xef7e984504fc9ed8fd4f0a33a12facc46ee6941e54ff571f511961232f627733",
                "event": "RawNFTSequencingPayment",
                "args": {
                       "RawNFTId": "1",
                       "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                        "tokenId": "1",
                       "dataOwner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                       "buyer": "0x78731D3Ca6b7E34aC0F824c42a7cC18A495cabaB",
                       "requestnumber": "1",
                       "sequencingStartTime": "1681659424",
                        "sequencingDeadline": "1681745824",
                        "sequencingmethod": "1",
                        "sequencingcost": "100000000000000000000"
                }
```

```
transaction hash 0x3444e95ddf78accf8369576e88ca36c84ala6c6ec1c46f0815cfff1c6f799387
from
                  0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2
to
                  GenomicsDataManagement.storeSequencingSignatures(string,bytes,uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19f8e8
                 "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
logs
                  "topic": "0x3cf0ee4fa25d1ed2e0bf373cb1f0234cc05c90ac192f1ea9a59fd7b7e9396591",
                  "event": "SequencingSignatureStorage",
                  "args": {
                         "verifiedAddress": "0x4820993Bc481177ec7E8f571ceCaE8A9e22C02db",
                         "dataOwner": "0x4820993Bc481177ec7E8f571ceCaE8A9e22C02db",
                         "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                         "tokenId": "1",
                         "message": "I confirm receiving the sequenced genomic data of NFT with ID 1",
                         "signature":
  "0xd3533d55fa124363ef25a29aa1b01c3ab36bb4695e5d5d0d25a267ce91b0b97a6192d5fe51fbb42eafd993a0da4d93057c47a60d65294763a628c31f658c2e041
                 }
                       0xb87153cec55767bdc3b2151cac249213dea9955d64df4f06865725008b337995
     transaction hash
                         0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2
     from
                         GenomicsDataManagement.ConfirmRawNFTSequencing(uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19f8e8
     to
                         "from": "0xf8e81D47203A594245E36C48e151709F0C19f8e8",
     logs
                         "topic": "0x8c8626238afe6d750fb36f832c9bb5559137f08d3a22161e6ba4af16a493c15a",
                         "event": "RawNFTisSequenced",
                         "args": {
                        "RawNFTId": "1",
                         "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                         "tokenId": "1",
                         "dataOwner": "0x48209938c481177ec7E8f571ceCaE8A9e22C02db",
                         "buyer": "0x78731D3Ca6b7E34aC0F824c42a7cC18A495cabaB",
                         "sequencingCenter": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2",
                        "sig":
"0xd3533d55fa124363ef25a29a1b01c3ab36bb4695e5d5d0d25a267ce91b0b97a6192d5fe51fbb42eafd993a0da4d93057c47a60d65294763a628c31f658c2e041
transaction hash 0x415bbbe49b83ca16bb7ea431ed767a8826baa0737b7dbfdeb7eb99711b621b9b
From
                  0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2
to
                  GenomicsDataManagement.CommitToRawNFTSequencingRequest(uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19f8e8
                  "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
logs
                  "topic": "0xc72616cae34f80b20485ae2bdc4775bf59ad0ec42eef1ca07478a2dfda85439a",
                  "event": "SequencingCenterCommitted",
                  "args": {
                          "0": "1",
                          "1": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                          "2": "1",
                          "3": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                          "4": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2",
                          "RawNFTId": "1".
                          "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                          "tokenId": "1",
                          "dataOwner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                           "CommittedsequencingCenter": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2"
```

```
transaction hash 0x0cc1a84e73527e96528d77004808bc487e27de9b8b31ae8f4702b4f3e6308aee []
      from
                        0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
                        GenomicsDataManagement.storeInitialFullAccessSignatures(string,bytes,uint256,address,uint256)
                        0xf8e81D47203A594245E36C48e151709F0C19fBe8
                       "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
       logs
                       "topic": "0x5ada70824188b3b01067afef6d497c144f85c443d1e39f3b00fd5da0269d5688",
                       "event": "InitialFullAccessSignatureStorage",
                       "args": {
                       "verifiedAddress": "0x78731D3Ca6b7E34aC0F824c42a7cC18A495cabaB",
                       "dataBuyer": "0x78731D3Ca6b7E34aC0F824c42a7cC18A495cabaB",
                       "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                       "tokenId": "1",
                       "message": "I confirm receiving the sequenced data from the owner for NFT ID 1",
                       "signature":
 "0xa26f3ff338590f321b2a764cc9fac0c4e650ce63ac6ad8d266fb57ead92d3151454c05c266258b46ffbf5b583d40174a8a26db571367bb17fadaedb8002320f41
transaction hash 0x2cb67ec277401083ff604160c042364f6cf063e24097be1cb57de14321bf0d21
                 0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
from
                 GenomicsDataManagement.InitialFullAccessProof(uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19f8e8
to
                 "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
logs
                 "topic": "0xfba2ef46e7f95dffb72090103cc925aae942b6a093fa065349d5a971a5d18447",
                 "event": "InitialFullAccessGranted",
                 "args": {
                          "RawNFTId": "1",
                         "nft": "0xd9145CCE52D386f254917e481eB44e9943F39138",
                         "tokenId": "1",
                          "dataOwner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                          "dataBuyer": "0x78731D3Ca6b7E34aC0F824c42a7cC18A495cabaB"
```

```
transaction hash 0x655eabf17c12b06c3603a870eeb3db0ead91c9d3b5b4348a2af2ae41bbb12b15
from
                     0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
to
                     SequencedGenomicDataNFTs.mint(string,uint256) 0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8
                     "from": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
logs
                     "topic": "0xddf252ad1be2c89b69c2b068fc378daa952ba7f163c4a11628f55a4df523b3ef",
                     "event": "Transfer",
                     "args": {
                            "1": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                            "to": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                            "tokenId": "1"
                     }
0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
from
                     RawGenomicDataNFTs.approve(address,uint256) 0xd9145CCE52D386f254917e481eB44e9943F39138
to
                     "from": "0xd9145CCE52D386f254917e481eB44e9943F39138",
logs
                     "topic": "0x8c5be1e5ebec7d5bd14f71427d1e84f3dd0314c0f7b2291e5b200ac8c7c3b925",
                     "event": "Approval",
                     "args": {
                              "0": "0x4820993Bc481177ec7E8f571ceCaE8A9e22C02db",
                              "1": "0xf8e81D47203A594245E36C48e151709F0C19f8e8",
                              "2": "1",
                              "owner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                              "approved": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
                              "tokenId": "1"
                     }
transaction hash 0x181e979b23ef076c0f10a193d833e89ff30029e827555a0be5c5a6338f6e9f41 🔮
from
               0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
to
               GenomicsDataManagement.listSequencedGenomicNFT(uint256,uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19f8e8 🗓
               "from": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
logs
               "topic": "0xddf252ad1be2c89b69c2b068fc378daa952ba7f163c4a11628f55a4df523b3ef", "event": "Transfer",
               "1" "0x4620933648117/EC/261371ECB630922ECGLD",
"1" "0x4686810472034594245E36C48e15170976C1976e8",
"2": "1",
"from": "0x48209938c481177ec7E8f571ceCa8E8A9e22C02db",
"to": "0x468610472034594245E36C48e15170976C1976e8",
               "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
                "topic": "0x05ca591d6a2d3d04ed4fcc8e965ff5ce50742f1796349de539580444edea4ac0",
                "event": "ListedSequencedGenomicNFT",
                "args": {
                     "SeqNFTId": "1",
                     "nft2": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
                     "tokenId": "1",
"dataOwner": "0x4820993Bc481177ec7E8f571ceCaE8A9e22C02db",
                     "fullaccessprice": "10",
"limitedaccessprice": "1"
```

```
transaction hash 0x853f4da484673033eb2de4f4e83aca099e95230dcb8e118e56aa3f3a00d97954 🗓
                 0x17F6AD8Ef982297579C203069C1DbfFE4348c372
from
                 GenomicsDataManagement.requestFullAccess(uint256) 0xf8e81D47203A594245E36C48e151709F0C19fBe8
to
logs
                 "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
                 "topic": "0xbe2f15f6f51ffcbee0cf7adefe80700997093a1bc12a3ab27a814dd8549e7dfa",
                 "event": "FullAccessRequested",
                        "1": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
                        "2": "1",
                         "3": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                         "4": "0x17F6AD8Ef982297579C203069C1DbfFE4348c372",
                         "SeqNFTId": "1",
                         "nft": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
                         "tokenId": "1",
                         "dataOwner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                         "fullaccessbuyer": "0x17F6AD8Ef982297579C203069C1DbfFE4348c372"
transaction hash 0x2dcae65c7b849b8a6d25d91d8952b3bc7b6fd20f1c7cba7448ad08028cdcbc74 🗓
from
            0x17F6AD8Ef982297579C203069C1DbfFE4348c372
            to
             "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
logs
            "topic": "0x010b4e1a90ced298e7309fa08dd0078c3955d9abbeb77817e9b7e91ab87b8a51", "event": "FullAccessSignatureStorage",
             "args": {
                   "verifiedAddress": "0x17F6AD8Ef982297579C203069C1DbfFE4348c372",
                   "dataBuyer": "0x17F6AD8Ef982297579C203069C1DbfFE4348c372",
                   "nft": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
                   "tokenId": "1",
                   "0x846f65dc3cc971e09b210bf020b27c93f0f332ee8403e2c945ecc1a6cf5a12614481ebdbab182a1bb8ffb6873c79ff1002d5cf99bb2e018f79af635d684ed3171
            }
0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db
to
               GenomicsDataManagement.ProofofFullAccess(uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19fBe8
                                       "from": "0xf8e81D47203A594245E36C48e151709F0C19fBe8",
logs
                                       "topic": "0xc4f156304a2d6bbd9996c436f71e900eeb7fb4bff01425d20e820c42860d6d8e",
                                       "event": "FullAccessGranted",
                                       "args": {
                                              "SeqNFTId": "1",
                                              "nft": "0xd8b934580fcE35a11B58C6D73aDeE468a2833fa8",
                                              "tokenId": "1",
                                              "dataOwner": "0x4B20993Bc481177ec7E8f571ceCaE8A9e22C02db",
                                              "dataBuyer": "0x17F6AD8Ef982297579C203069C1DbfFE4348c372"
```

```
transaction hash  0x828a12b5ffe3cf1bcaf38af0023b295c61cd3007b94c378337f064f86b44501b
from
                  0x5c6B0f7Bf3E7ce046039Bd8FABdfD3f9F5021678
                  GenomicsDataManagement.requestLimitedAccess(uint256,uint256) 0xf8e81D47203A594245E36C48e151709F0C19fBe8
decoded input
                  {
                          "uint256 _SeqNFTId": "1",
                          "uint256 _numberofoperations": "5"
                  } ()
0x617F2E2fD72FD9D5503197092aC168c91465E7f2
                GenomicsDataManagement.UpdateBuyerLimitedAccessOperations(uint256,uint256,address) 0xf8e81D47203A594245E36C48e151709F0C19fBe8
to
decoded input
                {
                       "uint256 _SeqNFTId": "1",
"uint256 _numberofexecutedoperations": "2",
"address _dataBuyer": "0x5c6B0f7Bf3E7ce046039Bd8FABdfD3f9F5021678"
```