DNA Banking

Wisconsin State Laboratory of Hygiene (WSLH)

What is DNA Banking:

DNA banking allows for the long term storage of an individual's genetic material (DNA). DNA can be banked at any time over the course of a person's life. Families primarily use DNA banking services for safeguarding samples and to ensure its availability for future testing. This service is wholly voluntary.

Please note WSHL DNA banking procedures do not meet legal chain of custody standards.

How to Bank DNA:

DNA can be obtained from multiple different sample types including peripheral blood (preferred), prenatal tissues (chorionic villi and amniotic fluid), skin and other tissues. In order to bank DNA with WSLH you will need to submit the following:

DNA Banking Policy and Deposit Form: DNA banking forms can be found on our website at www.slh.wisc.edu/clinical/cytogenetics/dna-banking/

Patient sample: see below for accepted specimen types

Payment: payment of the fee associated with our DNA Banking services should be in the form of a personal check or money order made out to 'UW Cytogenetics'

What specimens can be submitted for DNA Banking:

Blood: 2 mL (minimum) – 6 mL (preferred) peripheral blood collected in sterile EDTA (purple top) vacuum type tube. Specimens collected in sodium heparin are acceptable; all other collection tubes are not preferable, but extraction will be attempted. Cord blood is acceptable, however risk of maternal cell contamination (MCC) must be considered.
Cultured cells: Two T-25 flasks of cultured cells (80% confluent) from tissues, chorionic villi, amniocytes or products of conception
Prenatal tissue: 10 mg chorionic villi, 10-30 mL amniotic fluid
Fresh/frozen tissue: sample size of at least 0.3 cm cubed, 1-2 mm for skin punch biopsy
Buccal/saliva: accepted, but not preferred. May result in low purity DNA

Questions about additional specimen types can be discussed by calling the laboratory at 608-262-0402
The lab is not responsible for arranging for the collection of the specimen; however, the laboratory does offer specimen shipper kits for ease of transport. Shipper kits may be requested by emailing cytogenetics@slh.wisc.edu

How to access your banked DNA:

Banked DNA may be accessed at any time by the appropriate "owner" of the sample. The "owner' of the DNA is the person whose sample is banked or an authorized persons designated at the time of sample collection. The Wisconsin State Laboratory will send a portion of the banked DNA to any clinical genetic testing laboratory within the continental USA at no charge. Please contact the lab directly if you would like a DNA aliquot sent to a clinical lab outside of the US or to a research laboratory.

To request a portion of your banked DNA be released to an appropriate third party you must submit the following:

DNA Banking Specimen Release Form: DNA banking forms can be found on our website at www.slh.wisc.edu/clinical/cytogenetics/dna-banking/

To transfer the "ownership" of a banked DNA sample you must submit the following:

DNA Banking Transfer of Ownership Form: DNA banking forms can be found on our website at www.slh.wisc.edu/clinical/cytogenetics/dna-banking/

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FAQs

What types of DNA Banking are available through WSLH?

WSLH offers both long-term and short term DNA banking.

Our traditional banking option (SLH test code 862) allows for the long term storage of a DNA sample. This services charges a onetime fee and the extracted DNA is stored indefinitely. Forms for this service can be found on our DNA Banking webpage: www.slh.wisc.edu/clinical/cytogenetics/dna-banking/

Our short term DNA banking option (SLH test code 868) is a clinical service that allows a clinician to submit a sample immediately, without family consent, for safeguarding. This service charges a onetime fee and the extracted DNA is stored for up to one year. Forms for this service can be found on our website.

If the sample is from a postmortem or peri-mortem case originating in Wisconsin, this short term service is provided free of charge. Forms for this postmortem safeguarding service can be found on our Post Mortem Genetic Testing webpage: www.slh.wisc.edu/clinical/cytogenetics/dna-banking/post-mortem-genetic-testing/

Please note that the banking service offered by WSLH is not considered a biorepository and does not meet legal chain of custody standards.

How do I get my sample to the laboratory?

WSLH does offer specimen shipping kits. Kits can be requested by emailing the lab at cytogenetics@slh.wisc.edu. Please include the name and address of where you would like the kit to be sent and what type of sample collection kit you would prefer (blood, buccal, saliva, dried blood spot card).

Samples should be mailed to:
UW Cytogenetic and Molecular Genetic Services Laboratory
465 Henry Mall, Room 419
Madison, WI 53706

Do I need a doctor to order DNA Banking?

A medical provider (ex. doctor, nurse, genetic counselor) must be listed on the sample deposit form. The lab will send a report to the listed provider stating the quantity of DNA that was successfully extracted. Patients or family members are welcome to call the laboratory at 608-262-0402 to discuss DNA Banking.

How much does DNA Banking cost?

There is a onetime fee associated with DNA banking. Please call the laboratory at 608-262-0402 for the most up-to-date pricing. The service fee is also listed on our Policy and Deposit form. Forms for this service can be found on our DNA Banking webpage: www.slh.wisc.edu/clinical/cytogenetics/dna-banking/.
Payment of the service fee should be in the form of a personal check or money order made out to 'UW Cytogenetics'.

Could the DNA extraction fail?

Yes. Depending on the quality of the sample submitted for DNA banking, there is a chance the DNA extraction process will not yield any usable DNA. In these instances, the submitter will be notified immediately and requested to provide an additional specimen at no additional charge. No refunds will be given if an additional sample is unavailable, or also fails to provide any usable DNA.