Facts & Genes from Family Tree DNA
================================
March 28, 2005 Volume 4, Issue 2

In This Issue
=============
Editor's Corner
In the News: Family Tree DNA Announcements Genetic Genealogy:
Certificate of Results Understanding your Results: Y DNA and Surnames
Educational Resources: Upcoming Events Understanding Your Results:
mtDNA Recruiting Participants: Effective Recruiting For Group
Administrators: Action Items Case Studies in Genetic Genealogy In the
Next Issue

===
To make sure that you receive all of our newsletters, please add
editor@FamilyTreeDNA.com to your address book.
===

Editor's Corner
==============

Welcome to this issue of Facts & Genes, the only publication devoted to
Genetic Genealogy.
Facts & Genes provides a variety of information about utilizing Genetic
Genealogy testing for your genealogy and keeps you informed about the
latest advancements in the field.

Regardless of your background, everyone can learn about Genetic
Genealogy and be able to use this new tool. A science background is
not required. Facts & Genes covers information for everyone,
regardless of your level of experience with Genetic Genealogy, whether
you are just beginning to learn about this new tool for genealogy
research or you have been managing a Surname Project for some time. If
you are just starting to learn about Genetic Genealogy, you will
probably encounter articles that are difficult to understand. As with
learning any new subject matter, it will take a little time. You can
save these articles for the future, or download them later from our web
site, where all issues of the newsletter are available.

It is normal to be confused or overwhelmed at the beginning. Once you
have a DNA test result, Genetic Genealogy becomes much easier to
understand. Reading some past issues of the Family Tree DNA newsletter
will also help. You can also search past issues for specific topics.
For example, if you want to understand or learn more about Haplogroups,
click on the link below to go to past issues of the newsletter, search
on Haplogroup, and then read the articles from the oldest (at the
bottom) to the newest:

http://www.familytreeDNA.com/facts_genes.asp?act=past

If you aren't sure what test to order, consult the last issue of the
newsletter for a guide to selecting a test:

Genetic Genealogy: Getting Started
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=4.1

If you are thinking of starting a Surname Project, now is the time to get started. Our educational resources, combined with our email and telephone consultation, help you each step of the way. Feeling confused or overwhelmed will quickly pass, and be replaced with the excitement of new discoveries.

Anyone with experience with family history research can start a Surname Project. We supply the tools and guidance so your Surname Project is successful.

There are just two steps to take to become a Group Administrator of a Surname Project:

1. Find out if a Surname Project exists for your surname. Click on the link below to search our database of Surname Projects:

http://www.familytreeDNA.com/surname.asp

2. If a Surname Project has not been established for your surname, then use the email contact below to establish a Surname Project or to discuss establishing a Surname Project:
bcg@familytreeDNA.com for Bennett Greenspan

Send your comments, suggestions, tips, and feedback to:
editor@FamilyTreeDNA.com. We hope you enjoy this issue.
Dexter

==================***** Important Links *****====================

Tell a Friend
=============
If you have fellow genealogists, friends, family members, or participants in a Surname Project who you think would enjoy receiving our monthly newsletter, send them the link below to register for a free subscription:

http://www.familytreeDNA.com/fgregister.asp

Past Issues
===========
If you missed any of the past issues, they can be found online at FamilyTreeDNA.com. Click on the link below for the past issues of Facts & Genes:

http://www.familytreeDNA.com/facts_genes.asp?act=past

===

In the News: Family Tree DNA Announcements
==

Family Tree DNA is pleased to announce milestones achieved and several enhancements.

The following milestones have been achieved:

Family Tree DNA now has over 30,000 records in our database of Y-DNA results. We also have over 1,500 Surname Projects, which include over 9,000 surnames.

The following enhancements have been implemented:

1. Contributions "in memory of" or "in honor of" a specific person

Contributions can now be made to the General Fund of a Surname Project "in memory of" or "in honor of" a specific person. On the page where you can make a donation, you can enter a person's name.

Surname Projects have a General Fund, which is a terrific tool for others to contribute to the cost of testing, so that the Surname Project can sponsor all or a portion of the cost of a DNA test for those who can not afford to participate. Anyone can contribute to the General Fund, which is administered by the Group Administrator. The funds are contributed directly to Family Tree DNA. Upon receipt, these funds are posted to the Surname Projects General Fund.

The Group Administrator has a selection on their Group Administrator Page called General Fund. Clicking on this selection will show all the transactions for the General Fund for the Surname Project. The transactions shown will be funds received by Family Tree DNA for the Surname Project General Fund and fund expenditures. Family Tree DNA accepts funds by check, credit card or PayPal. (Checks must be in US Dollars only. PayPal transactions must be to info@familytreeDNA.com, and specify XYZ Surname General Fund.)

The General Fund provides an opportunity for Group Administrators to raise sponsorship funds in any currency by the sponsors using the credit card payment feature to handle the currency conversion. In addition, sponsors may feel more comfortable making their sponsorship contribution directly to Family Tree DNA. This feature could increase the sponsorship funds raised.

Group Administrators can also put a link on their web site for Donations to the General Fund, if their web site is built by the Web Builder Tool. To display the General Fund link on your web site, go to the Web Builder Tool. On your Group Administrator Page, click "Family Project Website Setup". Check the box towards the bottom of your Web Builder Page, labeled "Display General Fund Donation Link?"

To make a contribution to the General Fund of any Surname Project, click on the link below:

http://www.familytreeDNA.com/contribution.html

2. Family Forum

Group Administrators can now host a Family Forum at Family Tree DNA. To set up a forum, contact Max Blankfeld at Max@familytreeDNA.com. You

will need to inform him in this email whether you want to be notified
by e-mail when new messages are posted to the forum.

When your Family Forum is setup, a new line will show up in your Group
Administrator's Project Profile page. (To get to the Project Profile
Page, click on Project Profile Page on your Group Administrator Page.)

A link to the Family Forum will also appear on the Personal Page for
all members of your Surname Project.

On your Project Profile page, when the Family Forum appears, there will
be an option to set the Forum as Private or Public.

If you select Public, a link to the Forum will appear on your web site,
if the web site was created by our Web Builder Tool. If you select
Private, this link does not appear.

Members who have registered at Family Tree DNA's General Forum, can use
the same ID and password for the Family Forum. Those who are not
registered will need to register to post messages to the Family Forum.

Genetic Genealogy: Certificate of Results
===

Testing at Family Tree DNA includes a certificate which shows your
results. A certificate is provided for every DNA test, except for
upgrades.

The certificate provided is the documentation of the DNA result, and is
suitable for framing.

The chart below shows whether you receive a certificate:

Test   Certificate

12 Marker Y DNA Test   Yes
25 Marker Y DNA Test   Yes
37 Marker Y DNA Test   Yes

25 Marker Y DNA Upgrade   Not included-optional
37 Marker Y DNA Upgrade   Not included-optional

Haplogroup Test   Yes

mtDNA Test   Yes
mtDNA Plus Test   Yes
mtDNA H subclade Test   Yes

mtDNA Plus Upgrade   Not included-optional

Additional certificates and certificates for Upgrades can be ordered
for a small charge. To order a certificate, click on "Order
Certificates" on your Personal Page.

If you order a 12 Marker test, and later upgrade to a 25 Marker test,
you only get a certificate for the initial 12 Marker test. To get a
certificate for the 25 Marker test, simply click on "order
certificates". The same applies if you order an mtDNA test, and later
upgrade to mtDNA Plus. You only received a certificate for the mtDNA
test, and you can order your certificate for the mtDNA Plus test.

You may also want to order certificates and give them to members of
your family, where the DNA results of the person tested applies to the
family members. For example, your father tested, and perhaps you would
like certificates for your siblings, since your father's results apply
to these persons also.

All the tests at Family Tree DNA include a certificate, except the Y
DNA upgrade and mtDNA Plus upgrade.

The easiest way to learn about Genetic Genealogy is to take a DNA test.
You can get started today. For a guide to select a test, consult the
following article:

Genetic Genealogy: Getting Started
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=4.1

Understanding your Results: Y DNA and Surnames
==

For a long time, people were just known by their first name.

Surnames then began to be adopted in different countries at different
times. As society became more complex, a system was needed to
distinguish one person reliably and unambiguously from the next person.

A surname is defined as a hereditary name borne by members of a single
family and handed down from father to son. Thus, surnames contrast with
given names, which identify individuals within the same family. It is
characteristic of surnames that all members of a particular family
normally have the same surname.

In 1200 A.D., the world population is estimated to have been between
360 million and 450 million persons, depending on the estimate used.
[Source: http://www.census.gov/ipc/www/worldhis.html]

This estimate is close to the time frame when surnames began to be
adopted.

On the whole, the richer and more powerful classes tended to acquire
surnames earlier than the working classes and the poor, while surnames
were quicker to catch on in urban areas than in more sparsely populated
rural areas.

Occasionally, events impacted surnames. For example, in 1465
legislation was passed that impacted Gaelic surnames in several

counties of Ireland, most notably Dublin. According to John D'Alton's "History of Co. Dublin", the following was enacted in 1465:

"That every Irishman, dwelling betwixt or amongst Englishmen, in this county, as well as those of Meath, Uriell (Louth) and Kildare, shall go like to one Englishman in apparel and in shaving of his beard above the mouth and shall within one year sworn the liege man of the King and shall take to him an English surname of one town, as Sutton, Chester, Trim, Scrine, Cork, Kinsale; or colour, as white, black, brown; or art or science, as smith or carpenter; or office, as cook, butler, etc. and that he and his issue shall use this name under pain of forfeiting his goods yearly."

Surnames were adopted in different areas at different times. In many parts of central and western Europe, hereditary surnames began to become fixed from the 12th century forward. The bulk of European surnames in countries such as England or France were formed in the 13th and 14th centuries. In some places, the process started earlier, and in some places the process continued into the 19th century. Overall, the norm is that in the 11th century people did not have surnames, and by the 15th century they did.

The process of adopting a surname was spread over time, and these surnames continued to evolve until the 1900's when spelling was standardized.

Surname variants occurred during the evolution of the surname. There was no guide to the spellings of names, and those who recorded events, such as the clergy and registrars, attempted to reproduce phonetically the sounds they heard. The great majority of the population were illiterate and had no notion that any one spelling of their name was more 'correct' than any other.

Prior to the time surnames were adopted, men with the same values for their Y DNA were spread out over a geographic area due to migrations. In addition, invasions and wars often significantly dispersed populations with the same Y DNA. Once people began to adopt surnames, these widely dispersed men with the same Y-DNA took different surnames.

As the database of Y DNA results at Family Tree DNA grows, everyone will eventually have Y DNA matches with other surnames. The primary reason for these matches is that multiple men with the same Y DNA result adopted different surnames during the time period when surnames were adopted. These men could have been in the same village, or in the same county, or perhaps migration had taken them to different countries.

In addition, two men with different surnames may have matching Y DNA due to convergence. Mutations are estimated to occur about once every N generations per Marker. There are mutations in the Y-DNA, and when after several mutations we see a match or a close match, it is called convergence. The larger the population with the same Y DNA, the more opportunity there is for convergence to occur. Since Haplogroup R1b is the largest population group in Europe, matches with other surnames are very common. These matches are due to the large population of this Haplogroup that existed when surnames were adopted. Many different surnames were adopted, and convergence has occurred over time.

If we go back far enough in time, we are all related. The surname is used to establish a boundary for determining whether two people are related. If you match some one with a different surname, you are most likely related prior to the adoption of surnames.

In some cases, you could be related after the adoption of surnames, due to one of the following events occurring:

1. informal adoption
2. extra marital event of either infidelity or illegitimacy 3. adoption of a new surname, such as by preference or for inheritance

Even though these events have occurred in the past, they were not the norm.

Pursuing a match with another surname should not be considered until both participants upgrade to 37 Markers to determine if the match still holds.

At this point, if the match still holds at 37 markers, a decision can be made as to whether to pursue the match with another surname. To avoid wasting time, there should be some evidence that one of the events above occurred. In making this decision, the place to start is to evaluate the evidence. Were the ancestors in the same location, at the same time? Was there a marriage by a widow who had children? Is there any evidence to support a match with another surname?

In most cases, there isn't any evidence to support pursuing the match.

A Surname Project is a very valuable tool for family history research. The surname establishes the time period for determining if two people are related. Surname Projects can provide tremendous benefit for those who are researching their family history. DNA testing has a wide range of applications, from additional information to use in conjunction with the paper records for interpretation, to clues to find the ancestral homeland.

In addition, as a long term goal, a Surname Project can determine the number of points of origin of the surname. The Surname Project could also combine DNA results with the techniques used to research surnames, and identify the ancestral location or area where the surname was adopted.

As you research your family tree, eventually you have to stop, because the written records end, or are sporadic. This could be the result of the destruction of records, such as due to a court house fire. Or, this could be the result of reaching the time period prior to a the majority of written records. For example, the time period before the adoption of Parish registers. Often your family tree will stop before the start of Parish registers, because there is insufficient documentation to make a connection.

When your family tree ends, there is still a long period of time between then and the adoption of surnames. For example, if your tree ends in the late 1700's due to insufficient documentation, there is

still 400 to 500 years between then and the adoption of surnames, depending on your ancestral country.

DNA testing can fill this 500 year gap. Imagine a situation years from now, where every family tree with your surname has tested. The data would then be available to determine whether your surname had a single or multiple points of origin. Combining this information with surname mapping, frequency distribution studies, and research in Medieval records would most likely enable the Surname Project to identify a geographic area as the ancestral homeland.

Our surname is a very important part of us, and DNA testing tells us about this surname. For example, did one man take on the surname, and all the descendents today are related, except for descendents of an informal adoption, and descendents of an illegitimate birth?

With DNA testing, we might also discover previously unknown variants. This could be very helpful for research, especially when records can't be found, and later it is discovered that the records are actually there, but recorded with a previously unknown variant.

Surname dictionaries have been published and identify the origin for many surnames. The authors of these books used the tools available at the time. Never before have these experts or authors had the powerful tool of DNA testing available.   There are many discoveries to be made with DNA testing. Most likely, DNA testing will prove that some long held beliefs about the origins of various surnames are incorrect.

By participating in a Y DNA Project, or sponsoring a participant if you are female, you are making a significant contribution to the knowledge about your surname. Even when your tree ends, you can still discover information about your origin.

For more information, see the following articles:

Interpreting Results: Why is the Surname relevant?
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=2.8

Understanding Your Results: Matching Other Surnames
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=2.11

Educational Resources: Upcoming Events
====================================

If you would like to learn more about Genetic Genealogy, we invite you to attend any of the events listed below. Please see the relevant web sites for registration information.

Apr 1, 2005

New England Regional Genealogical Conference
Portland, Maine
http://www.nergc.org/
Presentation by Bennett Greenspan: "Uncovering your Roots with DNA"

Understanding Your Results: mtDNA
==================================

Occasionally, the mtDNA Haplogroup can not be predicted from the mtDNA
result. When this occurs, on your mtDNA Results Page, a dash (-) will
appear where the Haplogroup should appear. Tests are then run, called
RFLP tests, to determine the Haplogroup. (RFLP stands for restriction
fragment length polymorphism.) When the results are back for this test,
the Haplogroup will appear on your mtDNA Results page.

The mtDNA test is available in 2 versions. These tests are called:

mtDNA
mtDNA Plus

The test called mtDNA provides a result for the region of mtDNA called
HVR1. The test called mtDNA Plus tests two regions of mtDNA, the
regions called HVR1 and HVR2.

If you want to find mtDNA matches in a genealogical time frame, select
the mtDNA Plus test.

If you have taken the mtDNA test, and want to reduce the time frame for
the common ancestor for your matches, you can upgrade your test to the
mtDNA Plus test. Upgrading to the mtDNA Plus test is also recommended
for all results who match the reference standard, called CRS, or
Cambridge Reference Standard.

To upgrade your mtDNA test, on your Personal Page, click on Order
Tests.

Haplogroup H comprises about 40% of the mtDNA in Europe. If your mtDNA
Haplogroup is H, an additional test, the Haplogroup H sub-clade test,
is available, which will tell you more information.   To learn about
what you can discover with the Haplogroup H sub-clade test, do the
following. On your mtDNA Results Page, click on the link "Click Here
if you are Haplogroup H", which is right below the link "Understanding
Your Results". This link will tell you what you can discover with the
Haplogroup H subclade test. To order the Haplogroup H subclade test,
click on the link "click here to order" to the right of your mtDNA
results, on your mtDNA Results Page.

Anyone with an understanding of family history research can utilize DNA
testing. It isn't necessary to have a scientific background. The few
scientific terms you will encounter will be explained.

You can discover information about your direct maternal line with an
mtDNA test. This would be your mother, her mother, and so forth back
in time. Both men and women inherit mtDNA. Only women pass on mtDNA.

To order a mtDNA test, you can order as part of a Surname Project, or
as an individual. To order as an individual, click on the link below:

http://www.familytreeDNA.com/products.html

For more information, see the articles below:

Understanding Your Results: mtDNA Matches
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=3.2

Understanding Your Results: mtDNA Haplogroups
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=3.1

Recruiting Participants: Effective Recruiting
==

Do you have only a few participants in your Surname Project, and wonder
how other Surname Projects have recruited over 50 participants, or even
over 100, or over 200?

There are several factors to consider to evaluate the effectiveness of
your recruiting techniques.

The first factor is the length of time that your Surname Project has
been in existence. The longer your Surname Project has been in
existence, the more opportunity there has been to recruit participants.
In addition, the longer the time frame, the more recruiting activities
that have been performed.

Another factor to consider, which probably has the most significant
impact, is the population of the surname. For example, most large
Surname Projects have a high frequency surname.

To illustrate how the population of a surname impacts the number of
participants, let's look at a high frequency surname, as compared to a
low frequency surname. For our example high frequency surname, the
population in the US of people with the surname is slightly over
200,000 people. There are also thousands more in other countries.

The low frequency surname has a population in the US and the UK
combined, of only 7,000 people.

When you compare the 200 participants out of over 200,000 persons, to
15 participants out of a population of 7,000 for your surname, you have
achieved a higher market penetration in the lower frequency surname
project. Your recruiting has brought in a higher percentage of the
surname population as participants.

If we calculate the effectiveness rate by dividing the number of
participants by the population of the surname, we can see the
difference between the two projects:

0.2 percent of the population of your surname have participated in your
Surname Project
0.1 percent of the high frequency surname have participated.

If you just look at the surface, 15 participants compared to over 100
participants can be discouraging. If you look beyond the surface, your
Surname Project is successful. With more time and more recruiting
efforts, you can achieve more success.

Low frequency surnames have a hidden advantage. Low frequency surnames
typically have fewer family trees or Lines than a high frequency
surname. This makes managing the Surname Project easier. High
frequency surnames will have a large number of family trees, and will
typically also have multiple points of origin, perhaps in multiple
countries. A high frequency surname will have a wide diversity of DNA
results, representing multiple points of origin and multiple family
trees. These factors can make it more difficult to manage a Surname
Project for a high frequency surname.

Low frequency surnames have another advantage. Typically the majority
of the population of a low frequency surname is found in specific
geographic areas, instead of spread out all over. In this situation,
you can target your recruiting efforts. The geographic areas might
have family history societies, where you can list your surname
interests. Or mailing lists might exist for the geographic area. This
targeted marketing approach often provides the opportunity to reach a
higher percentage of those with your surname.

To see the success you have achieved, you must look beyond the surface
of just a count of participants, and consider the frequency of your
surname.

For Group Administrators: Action Items
=======================================

Action Items are suggested tasks for the Group Administrator to
continually enhance their recruiting efforts. In the last issue of
Facts & Genes, we started the year with a review of the Project Profile
and reviewing the surname variants.

For this month, consider a review and update of your web site. A web
site is a very important component of a Surname Project, both to
recruit participants and to keep participants informed of the progress
and results of the project.

If you don't have a web site for your Surname Project, you can easily
create a web site with our Web Builder Tool, plus Family Tree DNA
provides the hosting for the web site at no charge.

Family Tree DNA provides a Web Builder Tool that Group Administrators
can use to easily create a web site in less than 30 minutes, with no
special knowledge required. In addition, the Web Builder Tool
automatically incorporates in your web site the results for your
participants.

If you already have a web site, you can switch to Family Tree DNA, or
have a second site hosted at Family Tree DNA. A major benefit of a web
site hosted at Family Tree DNA is that the participants' results are
automatically updated when new results are posted to your Surname
Project. This will save you a significant amount of time. The second
benefit is the easy-to-use Web Builder Tool, which allows you to fill
in templates and check boxes to build and update your site.

An effective web site does not need graphics or fancy colors. To be an effective recruiting tool, a web site must:

be visually appealing
be easy to understand
develop interest in the Surname Project
provide information about the project
establish credibility
build trust
state the Surname Project goals and results
state the benefits of participation
motivate to participate
provide an email address or link to contact the Group Administrator
Request action

As a Group Administrator, you have developed knowledge about Genetic Genealogy and added new words to your vocabulary. Try to avoid using the terms on the web site.

The goal is to recruit participants. Think about what the participant needs to know to participate. Do they need to know the definitions for haplotype, allele, haplogroup, and how to interpret multi-copy markers to participate? No.

Only tell the potential participant what they need to know to participate. What they need to know are the objectives, benefits, and results. These items can easily be presented without a single technical term.

For additional information to develop an effective web site, and for directions for the Web Builder Tool, see the following articles:

Recruiting Participants: The Web Site
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=3.5

Managing a Surname Project: The Web Site
http://www.familytreeDNA.com/facts_genes.asp?act=show&nk=2.2

Case Studies in Genetic Genealogy
=================================

In each issue of the Newsletter, we present a situation which you may encounter as you utilize Genetic Genealogy testing for your family history research, followed by our recommendation.

Case Study
==========

In our Surname Project we just received the 37 Marker upgrade results for three participants. These three participants are a 37/37 match. These men are descendants of three separate individuals that were thought to be brothers back in the mid 1700's but there was no proof of their relationship.

Is this 37/37 match evidence enough to say they were probably brothers?

Recommendation
==============

Genetic Genealogy is combined with family history research. The
results from DNA tests alone can not determine a relationship.

A 37/37 match could occur when the participants are related hundreds of
years ago. For example, the common ancestor of the participants could
have occurred in the 1600's, and in the 1700's three men with the same
surname just happened to end up living in the same area.

Unfortunately, the 37/37 match does not say that the three ancestors
were brothers. The result does say that they had a common ancestor at
some time in the past. Genealogy evidence is required to make the
determination that the three men were brothers.

In the Next Issue
=================
We hope you have enjoyed this issue of Facts & Genes. Please feel free
to contact the editor with your comments, feedback, questions to be
addressed, as well as suggestions for future articles. If you are a
Group Administrator and can help others with tips or suggestions,
please contact: editor@FamilyTreeDNA.com

===================***** Important Links *****====================

Printing Problems
=================
Any issue of the newsletter can be printed or downloaded from our site.
If your email program causes you problems when you try to print the
current issue of the newsletter, try the issue at our web site. The
issue at our web site will usually print on the minimum amount of paper
without any problems. Click on the link below to print or download the
current issue of the newsletter:

http://www.familytreeDNA.com/facts_genes.asp

Change your Email Address
=========================
To change your Email address, go to the link below.

http://www.familytreeDNA.com/fgregister.asp?act=update
===

===
REPRINT POLICY:
We encourage the circulation of "Facts & Genes" by newsletters and
lists providing that you credit the author, include our copyright
information (Copyright 2005, Family Tree DNA), and cite "Facts & Genes"
(http://www.familytreeDNA.com/facts_genes.asp) as the source.

Use this link to be removed from the subscriber list.

http://www.familytreedna.com/fgRegister.asp?act=remove&id=245