Edmund Rice (1638) Association Newsletter

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President's Column

Dear Cousins,

In addition to the excitement that Y chromosome and mtDNA (mitochondrial DNA) genetics bring to genealogy, it also brings vindication to Dr. George Redmonds' 10-year research on surnames. Long ago, Dr. Redmonds proposed that at least certain surnames in England are concentrated in relatively small community origins even though alternative spellings and aliases have masked or even changed many surnames. Based on his extensive research on Yorkshire surnames, Dr. Redmonds, therefore, was not surprised that the results of Dr. Bryan Sykes' genetic research showed the surname Sykes concentrated in certain geographic areas. In fact, Dr. Sykes, who is a professor of human genetics at Oxford University, used the results of Redmonds' work as well as voter registration records to pinpoint the area with the most Sykes.

The Sykes team has developed a computer program that maps the locations of any British surname in the United Kingdom and set up a company called Oxford Ancestors to supply the genealogical community with genetic testing. Based on our ancestry, I have submitted three surnames for testing: Rice, Frost, and Strutt. We know that in the 15 th, 16 th, and 17th centuries people with the latter two names lived in Suffolk and at least some of our ancestors were concentrated in the small villages of Glemsford and Stanstead. It will be interesting and possibly helpful to see the results of the mapping.

We often read that the name Rice is of Welsh origin ("The name of Rice is of Welsh origin and in Wales was written and spoken with the prefix, Ap. –ApRice- but not so in England nor in this country", Preface to Ward, 1857). Perhaps the Oxford Ancestors computer program will tell us something about our origins. When I was in

Suffolk last year I thought about looking in all the town phone directories for Rice names but dismissed the idea because I had not yet read Dr Redmonds' book (Redmonds, George, Surnames and Genealogy (Boston, New England Historic Genealogical Society, 1997).

I find the current genealogical scene exciting and I hope you do too. We are going to have time at our 2000 Rice Reunion on Saturday morning, 23 September for informal discussions on the impact of genetics on our society. Our speaker after lunch will be Dr. Tom Roderick who specializes in mtDNA and umbilical lineages, but also is very knowledgeable about all aspects of genetics and genealogy. In preparation, we can research our own umbilical lineages for him. Dr. Roderick wants to have as much documentation as possible, so try to include birth and marriage records. He also would like to know male parents even though umbilical lineages are mother to mother lines. I have prepared my own umbilical line through my mother back to Sudbury through the Bent family who also emigrated from England to Sudbury in 1638.

On Friday afternoon, 22 September, reunion attendees will have a chance to visit the Town of Marlborough cemeteries that have many Rice graves with remarkably preserved gravestones from the early 1700's including Peter Rice whose house we will also visit.

Hope to see many of you there.

Sincerely, Robert V. Rice, President

Editor's Column:

Edmund Rice (1638) Association Newsletter

Send articles, corrections, member news, items of interest, obituaries, queries...to:

Keith Capen Allen 8911 S. Florence Pl. Tulsa, OK 74137-3333 E-mail: <u>editor@edmund-rice.org</u>

I misquoted Bob Rice.

I edited Bob's last President's Column (Winter 2000) with more enthusiasm than care. In the third paragraph I wrote, "In a highly publicized case, ancestors of Sally Heming *proved* [italics added] their descent from Thomas Jefferson ... " and Bob had written, "Some use has been made for genealogy such as the highly publicized Thomas Jefferson descendants' case" Apparently, the research so far only implicates "*some male Jefferson* ", not Thomas Jefferson specifically.

This points out why, although I always check against original documents after editing/rewriting, I rely on all of you to help catch any typos, omissions, garbled syntax and just plain inaccuracies. It's all too easy to 'see' what I meant to say!

I'm not misquoting this.

Here is a recent case of riveting human drama and historical significance where DNA tests did prove descent. Perhaps you read about it.

Comparing the DNA from the long-preserved heart of a dead 10 year old boy to the DNA from hair cut from Marie Antoinette, Queen of France (1755-93), DNA from her sisters and two living members of the Bourbon family, scientists proved that the little boy who died of tuberculosis on June 8, 1795 after three years imprisonment was indeed, Louis XVII (1785-95), son of Louis XVI and Marie Antoinette and heir to the French throne. (Chonghaile, Clar Ni, "DNA tests ID remains of Louis XVII", Tulsa World, April 20, 2000)

For more than 200 years, there had been many conflicting rumors about the fate of the poor little boy. These have finally been laid to rest and the story set straight, thanks to the capabilities of DNA analysis.

-Keith Capen Allen

Reunion Schedule & Reservations

Friday, September 22nd & Saturday 23rd Radisson Inn, Marlboro, Massachusetts Exit 24B of I495 at US20 Lodging:

We have reserved a block of 5 rooms for those cousins who need to stay overnight at the Radisson at the special rate of \$99/room/night. You must make reservations with the Radisson at 1-800-333-3333 before September 1st and mention the Edmund Rice Association.

The Super-8 Motel in Marlboro (Exit 25B) has an AAA listing for \$64 pp less the senior discount. Reserve through its toll free number 1-800-8000.

Schedule

Friday, 22nd

1:00 Rice Graves in Marlboro

Meet for brief history of Marlboro cemeteries and directions. We will car pool to two cemeteries. These cemeteries have many Rice gravestones clearly legible even from the early 1700's because they are made of slate. We will concentrate on the grandchildren of Edmund Rice and the first Rices born in Massachusetts, including Peter Rice.

4:00 Visit Peter Rice house

The Marlboro Historical Society is located here. Again we will meet at the Radisson Inn to go the short distance.

5:30 Dutch treat supper

Radisson Inn dining room

7:00 Board of Directors Meeting

Saturday, 23rd

9:00 Coffee, doughnuts, pastry, juice will be available in our private room at the Radisson for cousins to talk, view the Rice database on computers and buy Rice books. Later in the morning we will have discussions about Genetics and Genealogy.

12:00 Luncheon buffet by reservation

1:00 Genetics and Genealogy, speaker Dr. Tom Roderick

2:00 Edmund Rice Association Annual Business Meeting

3:00 Rice Archives in Sudbury Library and/or Edmund Rice monument

Guided trip. Edmund's monument is in the Wayland cemetery and his house site just off Old Connecticut Path.

Reservations:

Lunch 12 noon, Saturday, September 23

Number	Entrée	Cost
	Chicken Fish	

Activities (Provide Number)

Friday afternoon, Trip to Marlboro cemeteries, no cost			
Friday afternoon, Visit to Peter Rice house, no cost			
Friday, 5pm, Dutch treat supper, pay at table			
Saturday, Trip to Edmund's monument, no cost			
Saturday, Trip to Rice archives in Sudbury Library, no cost			
Name			
Address			

Send form and check payable to Edmund Rice (1638) Association by September 15th to: Ms. Hope Pobst, Box 46, Barre, MA 01005-0045

Needed: Recording Secretary

We need your help!!

Our excellent Recording Secretary, Wendy Wesen, has given her notice. Sadly, she will not be able to serve after the 2000 Annual Reunion. We need nominations to fill her position by the next Board of Directors Meeting at 7pm on Friday, September 22nd in preparation for the Annual Meeting at 2pm on Saturday, September 23rd.

According to our bylaws, the Board of Directors acts as the Nominating Committee and nominations may be made also from the floor at the annual meeting before the membership in attendance votes.

For more information, please contact Bob Rice, 30 Burnham Dr., Falmouth MA 02540-2308; president@edmund-rice.org

Mitochondrial DNA

What is it?

Each of our cells typically has a nucleus with a double membrane and cytoplasm contained in a plasma membrane. Outside the nucleus, but within the outer membrane, are organelles called mitochondria. These organelles are packed with enzymes that govern our aerobic respiration, that give our muscle cells, for instance, the ability to use oxygen efficiently. Mitochondria also contain their own DNA.

Who inherits it?

Mitochondria are inherited almost solely from our mothers. (1) Our mothers pass on their mitochondria to both sons and daughters but sons but cannot pass it on to their children. The reason for this is that when a sperm enters an ovum it does not bring its mitochondria with it. Applying this knowledge, geneticists have been able to trace all human origins to Africa some 200,000 years ago.

Why is mtDNA helpful?

Our maternal, or umbilical lines can now be traced through mitochondrial DNA or mtDNA. Genetic research in mtDNA and the biological fact of how it is passed along has given genealogy a very powerful tool even though these maternal studies are still much more difficult than the usual surname driven genealogy since we live in a culture in which surnames reign. Dr. Tom Roderick has been collecting umbilical lineages for some time now and will be able to tell Rice Reunion 2000 attendees some of his results. It might be helpful for ERA members to try to trace their own umbilical lines.

In summary:

Modern genetics contributions to genealogy:

. DNA analysis of Y chromosomes tells us about male inheritance.

. DNA analysis of mitochondrial DNA (mtDNA) tells us about female inheritance.

. DNA analysis for genealogical use does not currently involve most of the nuclear DNA that is the main focus of the multimillion-dollar Human Genome Project. It is conceivable, however, that in the future, if some specific marker for an unusual disease or trait is found among certain families that nuclear DNA analysis will become useful to mainstream genealogy.

- Robert V. Rice, Ph.D. (Biochemistry)

(1) Statistically, a small amount of male mitochondrial DNA does get through; however it is not enough to invalidate the population conclusions.

For further reading:

National Research Council, Committee on DNA Technology in Forensic Science, DNA Technology in Forensic Science, Washington, D.C., National Academy Press, 1992
Ridley, Matt, Genome, New York, Harper Collins, 1999
Strachan, Tom and Andrew P. Read, Human Molecular Genetics, New York, Wiley, 1999
Sykes, Brian, ed., The Human Inheritance, Oxford, Oxford University Press, 1999

Let's Celebrate Dennis!

A major milestone! Dennis Rice has completed the Herculean task of entering all of Ward's The Rice Family into

the database. It took four years of hard work, time and dedication to accomplish this milestone. We owe Dennis a warm and sincere thank you for this very important contribution to the Edmund Rice Association

Gary Harold Rice

RR1 Stn Main Carleton Place, ON, K7C 3P1, Canada E-mail: <u>gehr@comnet.ca</u>

Lineage:

1. Edmund Rice (ca. 1594-1663) = Thomasine Frost (1599-1654)

- 2. Thomas Rice (1626-81) = Mary King (1630-1714/15)
- 3. Gershom Rice (1667-1768) = Elizabeth Haynes (1672-1752)
- 4. Abishai Rice (1701-) = Frances Rice (1702-)
- 5. Asa Rice (1731/2-1806) = Esther Gould (1773-1821)
- 6. Asa Noble Rice (1795-ca.1880) = Sally Mellendy (1798-)
- 7. Isaac Smith Rice (1825-1904) = Jessie Nesbitt (1829-1905)
- 8. Isaac Henry Rice (1858-1917) = Irena Surtees (1865-1954)
- 9. Ray Asa Rice (1899-1978) = Edla Inez Nomeland (1908-1944)

10. Gary Harold Rice (1936-)

Comments:

Gary has recently written and published a very moving book about his first cousin, Wendell James Clark, also a direct descendant of Edmund Rice, who died in action on D-Day, June 6, 1944. (See p. 9 for details)

8. Isaac Henry Rice = Irena Surtees

- 9. Irena May Rice (1892-1988) = Thomas Clifford Clark (1892-1956)
- 10. Wendell James Clark (1915-1944)

Umbilical Lineage of Robert Vernon Rice

Robert V. Rice, born 13 Aug 1924 at Barre, MA1, married Betty Jane Marts 13 July 1945 at Phoenix, AZ, son of Laurence2 V. and Edith Middlemiss Rice, b. 13 Oct 1896 at Lisbon, NY3 m. LaurenceV. Rice (a direct descendant of Edmund Rice, a first settler of Sudbury, MA) 17 Jan 1923 at Worcester, MA4 dau of John R. and Clara Farrar Middlemiss, b 13 Oct 1875 at. Lisbon, NY5, m. J.R. Middlemiss 30 Oct 1895 at Lisbon, NY6, dau of Robert and Zeruah Baldwin Farrar, b. 6 Feb 1851 at Oswegatchie, NY7, m. R. Farrar at Lisbo, NY8, dau of John and Almira Stoddard Baldwin, b. 5 Oct 1822 at Morristown, St. Lawrence Co., NY9, m. J. Baldwin 16 Dec 1841 in NY10 11, dau. of John and Susan Rockwood Stoddard, b. 1781 at Brookfield, MA11 12, m. J. Rockwood 24 Aug 1800 at Sturbridge, MA13, dau. of Simeon and Damaris Old Rockwood, b. 14 Feb 1754 at Brookfield, MA14, m. S. Rockwood, 11 Jul 1771 at Brookfield, MA15, dau. of William and Damaras Gilbert Old , b. 20 Mar 1718 at Brookfield, MA16, m. W. Old 18 Feb 1738 at Brookfield, MA17, dau of Samuel and Lydia Barne Gilbert, b. 9 Oct 1691 at Brookfield, MA18, m. S. Gilbert ca. 1710 at Brookfield, MA,19 dau. of Thomas and Mary Howe Barne, b. 2 Mar 1665 at Sudbury, MA20, m. T. Barne 14 Apr 1685 at Marlboro, MA21, dau. of Samuel and Martha Bent Howe, b. ca 1643 at Sudbury, MA22, m. S. Howe 5 Jun 1663 at

Sudbury or Marlboro, MA23, dau. of John and Martha (-----) Bent, b. in England24.

Sources

1 Robert V. Rice, 30 Burnham Dr., Falmouth, MA 02540, birth certificate

2 Birth certificate

3 Middlemiss Family Bible, in possession of Carol Rice Goldsmith, Union St., Barre MA and 1900 US Census, Lisbon, NY

- 4 Barre, MA, Marriage certificate
- 5 R.V. Rice, personal knowledge, loc.cit.
- 6 Marriage Certificate #0552, State of NY, Albany Archives.
- 7 Photo back in Edith Middlemiss's handwriting

8 Ibid.

- 9 Middlemiss Family Bible, loc.cit.
- 10 Stoddard Notebook at Lewis Co. Historical Society, Lyons Falls, NY, NB 4, p. 12.
- 11 Baldwin, C. C., Baldwin Genealogy, Boston, New England Historical Genealogical Society, 1880, p. 4
- 12 Rockwood, Vivian, Rockwood Genealogy, 1902 Kenwood Dr, Johnson City, TN, 37604
- 13 US Census 1790, Brookfield, MA
- 14 Vital Records, Sturbridge, MA, pp. 260, 272
- 15 Vital Records, Brookfield, MA, p. 165
- 16 Vital Records, Brookfield, MA, p. 401
- 17 Vital Records, Brookfield, MA, p. 101
- 18 Vital Records, Brookfield, MA, p. 517
- 19 Brainerd, Homer, Gilbert Family, New Haven, Private, 1953, p. 116
- 20 Ibid., p. 116.
- 21 Vital Records, Sudbury, MA, p. 64
- 22 Ibid., p. 74
- 23 Bent, Allen, Bent Family, Private, 1900, pp. 13, 17
- 24 Ibid., pp. 13, 17
- 25 Ibid., p. 11

Margaret Rice Recovering

Margaret Rice, Past ERA President, Director Emerita, author of one of the association books and Honorary Life Member, successfully underwent major surgery on July 11 in Boston and is recovering nicely.

We add our best wishes to those of Margaret's many friends among her Rice cousins for her continued full and speedy recovery.

Historian's Report

Our database continues to grow. This is a much slower task than I ever anticipated, expecting it would take about 5 years. Well, I am now at the five-year mark and feel that it will take another 10 years to enter the data just from our existing books. I hope I am able to complete it sooner, but it will require a great deal of time.

At this time I have over 33,600 names in the database and have completed entering all names from the Ward book.

George King and John Chandler have been very busy proofing my work, catching small errors here and there, and also doing detailed research of the Vital Records to support the data. George now has over 5000 individuals who will require updating in our database because of information he found in various Massachusetts town records. He needs to be commended for this excellent research.

Bill Drury has recently made a computer image copy of the Genealogical Register, as we are getting short of copies. After we run out of the books, we will be able to refer to the CD for information. Excellent work, Bill.

I am looking forward to receiving work from all of our cousins. I most appreciate it when it's in TMG format, but am able to convert into TMG from most other programs.

Now back to data entry.....

Dennis Rice Historian

News flash: Dennis tells me he is now on page 75 in the Supplement to the Rice Family (1967) with over 34,000 names entered. Wow!

Reviews of two books by Rice cousins....

Paratrooper: The Story of the 1st Canadian Parachute Battalion's First Regimental Sergeant Major by Col. Gary H. Rice (Ret.)

"The 1st Canadian Parachute Battalion was Canada's first paratroop unit, remaining on the nation's wartime order of battle for a scant 1187 days. Colonel Rice's concise and unpretentious biography of its first Regimental Sergeant Major, Wendell James (Knobby) Clark, creates a vivid portrait of the life of the unit's top non commissioned officer, as he awaits his first combat jump, and his death in action on D-Day, June 6, 1944. It is also a reassuring story of a young Canadian paratrooper's unsung courage and sacrifice that drives home the full tragedy of war on his family in Canada. Those interested in soldiering, and how this professional soldier (who was born and raised in the city of Ottawa) contributed to the growth and ultimate battlefield successes of one of Canada's most courageous wartime battalions, will enjoy the book. The text includes several wartime photos of RSM Clark, five maps of his battalion's drop zone, references and an index."

"The author, Colonel Gary H. Rice (Ret.) is a 37-year veteran of The Canadian Army Regular Force and The Canadian Armed Forces Land Element. He comes from a North American family with a long military tradition in both Canada and the United States. His carefully researched story of RSM Wendell James Clark's life accurately describes the events that shaped it, and the important role he played in preparing the men of the 1st Canadian Parachute Battalion for battle."

For more information, contact Gary Rice at: GEHR Publishing

RR1 Stn Main Carleton Place, ON. K7C 3P1 Canada E-mail (gehr@comnet.ca)

- From press releases and reviews supplied by the author

Grains of Rice; A Rice Family Chronicle from 1847 to 1947 compiled by Peggy Rice Grosser

When Peggy and her family moved from Minnesota to Texas in 1947 they took along several wooden boxes full of assorted letters, old papers and deeds belonging to her grandfather, Freeman Orestus Rice, who emigrated from Vermont to Northfield, Minnesota in the mid-nineteenth century. Peggy has compiled the letters into this book that she calls a biography and a history.

"The book has been very well received. The University of Vermont requested the original papers be placed in their Bailey/Howe Repository, Library Special Collection, which Grosser has done. "Your work represents what a family history can, and should be; not a mere recitation of names and dates, but a narrative history brought alive through the voices of their written words," said the collection's reference specialist."

For more information contact: Peggy R. Grosser 1004 Hillcrest Ave. Kerrville TX 8028-3330

- Arnold, Bonnie, "Local author publishes Rice family chronicle", The Mountain Sun, May 3, 2000, p. 1B

Genes and Genealogy

"The complete set of instructions for making an organism is called its genome. It contains the master blueprint for all cellular structures and activities for the lifetime of the cell or organism. Found in the nucleus of every person's many trillions of cells, the human genome consists of tightly coiled threads of deoxyribonucleic acid (DNA) and associated protein molecules, organized into structures called chromosomes.... Each DNA molecule contains many genes – the basic physical and functional units of heredity.... All genes are arranged linearly along 24 distinct chromosomes.... The human genome is estimated to comprise approximately 80,000 -100,000 genes." (1)

A recent paper (Sykes, Bryan and Catherine Irven, "Surnames and Human Genetics," American Journal of Human Genetics, 66:1417-1419, 2000) has stirred up excitement in the genealogical world because the authors demonstrate that molecular genetics is now capable of contributing to genealogy in very powerful ways. Professor Sykes of Oxford University had previously demonstrated this when he traced prehistoric cave men in England to present day inhabitants. (See ERA Newsletter, Winter 2000, p.3)

Genes carry our hereditary material as we all know but in order to understand how genetics, or the study of genes, can be helpful to genealogists we may need to understand certain concepts of molecular biology.

Genetics 101

Our bodies are composed of cells that have a nucleus and other organelles such as mitochondria. The nucleus in

the human cell has 46 chromosomes that are usually visualized as 22 sets of paired chromosomes plus two sex chromosomes. The makeup of the other two chromosomes depends on whether the individual is female or male. Females have two X chromosomes and males have one X and one Y. Our sex cells have only one set of chromosomes.

Chromosomes are composed of DNA (deoxyribonucleic acid) and proteins. In the chromosomes are genes. A gene is a unit of heredity, a sequence of nucleotides in a DNA molecule that performs a specific function, such as coding for a protein.

Genes are arranged in a double helix of base pairs. You may have seen animations of such helixes on television programs. During cell division, the DNA strands separate, are copied, and a double helix identical to the original goes to each half of the divided cell. Thus, the genetic material is preserved.

During cell division other organelles divide and in the mitochondria its DNA is also copied but kept separate from the nuclear DNA. The overall process is an amazing event which is choreographed by many proteins and energy sources and which is still not fully understood.

Cell division continues throughout our life and is the way we grow, old cells are cast off and are replaced with new ones. The replication is usually perfect but now and then there are changes called mutations. These are caused by a variety of things such as other chemicals, radiation, or ultra- violet light.

Mutations alter the sequence of the base pairs and thus change the genes. Most mutations are lethal and the cell dies but sometimes no apparent harm is done so the mutated base pair is replicated and passed on to offspring. Some mutations cause diseases while over millions of years other mutated base pairs accumulate in the cell and become nonsense sequences or junk DNA. It is these nonsense sequences of base pairs that have proven valuable for genealogy. Now that the whole sequence of the human genome is known, research will intensify for cures to genetic diseases caused by mutations in the nuclear DNA but at present, genealogists are mostly concerned with tags or identifiable differences in an individual's DNA that shows his or her connection to a presumed ancestor. And it turns out the junk DNA fits the bill for this purpose.

DNA usually is a very large molecule and difficult to handle in the laboratory. It took about 24 years after Watson and Crick published their work on the double helix (Nature, 1953) before methods were developed to handle DNA so that base pairs could be sequenced. This research resulted in a second Nobel Prize for Fred Sanger who earlier received one for sequencing proteins. All this work is done by biochemical techniques that involve many kinds of enzymes to cut up the large DNA molecule into smaller pieces that can be handled in the laboratory. The analysis is now completely automated. A sample of DNA is put into a machine, reagents added, and the results obtained on a computer screen. I am told that some labs have hundreds of such machines to work on the complete sequencing of the human genome.

Chromosomes, unlike the DNA they contain, can be seen under an ordinary light microscope. They have long been classified according to their size into twenty-two pairs plus two sex chromosomes. A female has two X chromosomes and a male has one X and one Y chromosome, so male direct descendants have their patriarch's Y chromosome and females do not. Males who descend through a daughter may have acquired all the other nuclear chromosomes but not the Y. While most of the inherited traits from the major chromosomes may produce certain characteristics such as hair and eye color, they are just as likely to arise from the mother as the father. Thus, the Y chromosome remains the same, except for an occasional chance mutation, over hundreds of years.

Therefore, if we can find a male direct descendant of Henry Rice, the supposed brother of Edmund, this person and Edmund should have the same Y chromosome. There are many direct descendants of Edmund Rice, of course, with whom to compare.

Genetics 102

Comparing direct descendants of Edmund Rice and one of Henry Rice won't be made from photographs of the chromosome, but from the sequences attributable to the Y chromosome constituents. These constituents are obtained from certain regions of the sequences called microsatellites, so-named because they can be separated in density gradients as minor bands. Much of the human DNA is not involved in coding for proteins. It is not clear why this DNA exists but as you can imagine it has been studied extensively in an attempt to find out its purpose. As a result, much is known about its frequency and size. A large amount is found as repeated base pairs that can be represented as an example, as ATTCCATTGCATATCATTT, where each letter represents one base pair containing a specific base. These are not genes. They do not code for proteins but they appear regularly and are very useful for genealogists.

In theory, DNA can be obtained from any cell type except red blood cells that in mammals have no nucleus. Actually, white blood cells or leucocytes are a good source of DNA, however, drawing blood is cumbersome and dangerous. Another good source of cells for DNA is the epithelial cells lining the cheeks of the mouth. A simple swab of these buccal cells is all Dr. Sykes needed for his Y chromosome studies.

We now may want to understand some of the techniques biochemists have developed to analyze DNA. One important one is the polymerase chain reaction (PCR). The polymerase enzyme catalyzes the polymerization of nucleotides so that very large numbers are copied and thus provide large enough amounts to work with. It has been demonstrated that the DNA from a single cell can be faithfully amplified. As I mentioned above, DNA is usually too large to work with so it must be cut up. This is done either by sonic energy or enzymes. A large number of endonuclease enzymes are available to cut up DNA at various specific locations.

Another characteristic of DNA is that its two strands can be separated by heat. Upon cooling, DNA strands reassemble by reforming the hydrogen bonds broken by heat. Each base pairs off with its complement so that if known sequences are added to the solution they will pair with their complements. The known sequences can be located by tagging them either radioactively or by fluorescent dyes. In fact, four different dyes that fluoresce at four known wavelengths allow the simultaneous detection and plotting which when coupled with computers provided part of the success of the Human Genome Project.

Solutions of various lengths of DNA are separated on electrophoresis gels giving a series of bands according to their molecular weight. For genealogical purposes, it is the variable number of tandem repeats (VNTPs) or microsatellites that provide genetic markers and are useful in identifying families. Typically, the geneticist will use four such tandem repeats to identify or mark a chromosome. This means that certain groups such as ATT or CGA or GAT will always appear under the protocol and be differentiated from other groups. They are haplotypes and they mark recognizable chromosomal segments that can be tracked through pedigrees and through populations. Before molecular genetics was developed genetic markers were restricted to such things as ABO blood types. These were not specific enough to 'fingerprint'.

Dr. Bryan Sykes demonstrated that the haplotype designated 15-23-11-14 was held by 44% of the Sykes males and by none of the two control groups. In further analysis of the haplotype results, he concluded that there has been relatively little divergence on the chromosome for the past 700 years. His controls were 139 English males

from all over the country and 21 unrelated male neighbors of the 48 Sykes males from the three counties known to have high incidence of Sykes surnames in England.

- Robert V. Rice, PhD, Biochemistry

(1) Dept. of Energy, Office of Biological and Environmental Research, Human Genome Program, "The science behind the Human Genome Project; Understanding the basics and how the HGP is implemented", July 24, 2000 (www.ornl.gov/hgmis)

Searchable Transcript of the 1881 Census for Great Britain

This article is not only for readers who have ancestors who lived in Great Britain in 1881. If you read with interest my article in the last issue of our newsletter about the US and Canada census, we urge you to read on. You will learn more about how to use census information to find civil and church records of births and marriages. Our technique is guaranteed to get you back one more generation in your family quest.

Last year the LDS Church issued a computer-searchable transcript of the 1881 census for Great Britain. If you or a friend has ancestors who lived in Great Britain in the later half of the 19th century, this transcript can provide a wealth of new information and help. Of course you must know enough information to distinguish your family from others with similar names. Three or four given names, a couple of birth years, and an approximate location will likely distinguish your family from others.

Here's what you will learn when you find your family in the 1881 census:

- ... ages and places of birth of all members of the family
- ... from the age of the eldest child, the probable year of marriage of the head of household and spouse
- ... lots of other interesting information about your family.

What you should do next:

... armed with a probably year and place of birth you can now search for a civil record of birth or marriage. Civil registration of births, marriages, and deaths began in England and Wales in 1837. In Scotland, civil registration began in 1855.

... armed with the probable year and place of birth you should also search parish registers for records of baptism and marriage. Parish registers for the Church of England and Church of Scotland are quite complete for the 19th century. Parish registers for other faiths may or may not be available.

If you find a record of birth, marriage, or baptism of the 1881 head of household and spouse, you will learn the names of his or her parents and, perhaps, the parents' ages. So you will have added another generation to your family tree from the early 19th century. If you are very lucky you might even find the parents' marriage in the local parish register.

Where can I find this good help?

... most LDS Family History Centers have the 1881 Great Britain census on CD-ROM as well as a computer to search it using the information that you already know about your family.

... indexes to births, marriages, and deaths for England and Wales are available on microfilm beginning with the year 1837. For Scotland the indexes begin with the year 1855. Each index is by quarter year (three month interval)

and gives only the name of the individual, the local record office where the record was filed, and an index number to the record. The index does help to search for a birth or marriage record but does not provide any genealogical information. (Certified copies of birth, marriage, and death certificates from the General Records Office are expensive so be sure that you have the correct person before you request a copy from the GRO!) Microfilm copies of the birth, marriage, and death indexes can be ordered at your LDS family History Center and are be available from the larger public archives in Canada and the USA.

... microfilm copies of parish registers may be ordered at your local LDS Family History Center.

... if your ancestors lived in Scotland, be sure to ask for help at your local LDS Family History Center. The LDS Church has done extensive indexing of Scottish parish registers before the year 1855. It is likely that these indexes will be available locally on microfiche.

... if you are fortunate, you may find someone on the Internet who will look up names in local parish registers. Begin with http://worldgenweb.org and follow the links to England, Scotland, or Wales, then the link to your county.

If you have read this far but don't have British ancestors from the late 19th century, it does not take much imagination to apply these steps to the US or Canada census records for the late 19th century.

- George W. King

DNA According to Dave Barry

"Recently, an organization called "The Human Genome project" ... announced that it had deciphered the human genetic code.... But what does it mean to you, the non-scientist who still secretly believes that radio works by magic?... What we do know is that scientists ... discovered that every living organism except Jesse Helms contains genes, which are tiny things that scientists call "the blueprints of life" because they are found inside tiny filing cabinets in tiny architect's offices ... Inside these genes are molecules made out of a substance called "DNA". From the start, scientists suspected that "DNA" was actually an acronym that stood for longer words, but they couldn't figure out what, because it was in some kind of genetic code ... And that is where the "Human Genome Project" came into the picture. For decades, researchers with a powerful magnifying glass and a background in crossword puzzles worked on decoding a DNA molecule. It was not easy.... But finally they finished their historic task and were able to announce to the world the message contained in the human genetic code. (It begins: "To Whom It May concern.")"

(Barry, Dave, "Genes cleaned and starched, while you wait", Tulsa World, July 23, 2000, p. D2)

On the lighter side \sim

Proud Heritage

The Smiths were proud of their family tradition. Their ancestors had come to America on the Mayflower. They had included Senators and Wall Street Wizards.

They decided to compile a family history, a legacy for their children and grandchildren. They hired a fine author.

Only one problem arose. . . how to handle the fact that great-uncle George was executed in the electric chair.

The author said that he could handle the story tactfully. When the book appeared it said that "Great-uncle George had occupied a chair of applied electronics at an important government institution, was attached to his position by the strongest ties and his death came as a great shock".

(Kerr Trails, Vol. XIV No. 2, Apr May Jun 2000, p. 10)

-Sent by Peggy Grosser

The British Family Tree

According to The Family Tree, an English publication, four different races make up the British people – The Scots, who keep the Sabbath and everything else they can lay their hands on; the Welsh, who pray on their knees and on their neighbors; the Irish, who don't know what the devil they want, but are willing to die for it; and the English, who consider themselves a race of self-made men, thereby relieving the Almighty of a dread responsibility.

- "The Compact", Massachusetts Society of Mayflower Descendants, vol. 17, no. 2, Fall 1996

What is a Grandmother?

"A grandmother is a lady who has no children of her own so she likes other people's little girls and boys. They are old and should not run or play hard. Usually they are fat but not too fat to tie children's shoes. They have funny glasses and funny underwear and can take their teeth and gums out. They do not need to be smart only answer questions like, "Why do dogs hate cats" and "Why God is not married". Everyone should have one, especially if they don't have a TV."

- The winning competition entry by an eight year old boy in a Church of Scotland Sunday School magazine around 1960. (RootsWeb Review, Missing Links, vol. 5, no. 24, 14 June 2000)

Past Presidents of the Association, 1954 to Present

1954-1955: Charles W. Rice

1956-1957: Edgar W. Rice (1915-1978)

1958-1959: Stanley I. Rice (1898-1985)

1960: Donald Whittemore (1894-1988)

1961-1963: Frederick R. Rice (1895-1973)

1964-1965: William H. Hoefler (1893-197?)

1966-1967: Ray Lowther Ellis (1901-1982)

1976-1978: Henry E. Rice, Jr. (1907-1984)

1978-1980: C. Whiting Rice, Jr.

1980-1982: William H. Drury

1982-1983: Patricia MacFarland

1983-1985: Janice Parmenter

1985-1987: Margaret S. Rice

1987-1990: Alex W. Snow (1923-1997)

1969: Jeneve R. Melvin

1969-1973: Col. Allen Foster Rice (1904-1984)

1973-1974: Margaret E. Allen

1974-1975: Charles W. Rice

1975-1976: Seaver M. Rice (1892-1988)

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1990-1993: John S. Bates

- 1993-1994: Alex W. Snow (1923-1997)
- 1994-1997: Frederick H. Rice
- 1997- Robert V. Rice