Breifne Clans Y-DNA Project Report 5

15 Aug 2009

Table of Contents

| List of Participants and Subgroup Assignments p. 1 |
|--|
| Introduction p. 6 |
| Irish R1b-M222 Section p. 18 |
| Group A: Mixed Breifne Surnames p. 20 |
| A1: Donohoe-McTiernan Cluster p. 2 ⁻ A2: O'Reilly-McGovern Cluster p. 36 |
| Irish R1b 'Other' Section p. 57 |
| Group B: Other Breifne Subroups p. 57 |
| B1: Pure Donohoe Cluster p. 57 B2: O'Rourke Clusters p. 64 |
| Group D: Desmond Subgroups p. 80 |
| D1: Brady Subgroup p. 80 |
| Group O: Oriel Subgroups p. 91 |
| O1: Mixed Oriel Surnamesp. 91 P1: Other Oriel Subgroupsp. 132 |
| Mixed Haplogroups Section p. 185 |
| Group X: Unassigned Participants p. 185 |
| X1: R1b Gaelic-Irish-Origin (RGIO) Lineages |

| Group Y: Control Group p. 19 | 94 |
|--|----------------|
| Y1: R1b Non-Gaelic-Irish-Origin (RxGIO) Lineages |)4)9 3 |
| Summary p. 20 | 8 |
| References | 10 |

Table 1 List of Participants and Subgroup Assignments

Following is a table (Table 1) showing which of the sections each participant falls into. The O-type, Mac-type and Fitz-type prefixes have been ignored in the alphabetizing. Only those who tested to at least the 37-marker level are included, because of the risk of misleading results from comparisons at lower levels, except for some McTiernans. The McTiernans who tested at the 25-marker level but no higher are included because there is a large enough number of them to contribute to clarifying the patterns of the initial portions of the McTiernan profiles; they will be found only in the following table (Table 1) and in the designated two sections, where they will not appear in the charts showing the various strength of links

| Kit | | Name | Section (Origin) | Subgroup |
|--------|---------|--------------------------------------|-------------------|----------|
| 6292 | A-B | В., А. | Irish R1b-M222 | A1 |
| 78819 | C-B | Boylan, Ciaran | Irish R1b Other | B2, X1 |
| 65227 | JFB | Boylan, John Francis | Irish R1b Other | 01 |
| 46952 | MWB | Boylen, Michael William | Irish R1b Other | 01 |
| 33734 | B-B | Brady, B. | Irish R1b Other | P1 |
| 43749 | EJCB | Brady, Dr. Edward Joseph <u>Colm</u> | Irish R1b Other | D1 |
| 63879 | J-B | Brady, J. A. | Irish R1b Other | D1 |
| 111786 | JJB | Brady, James Joseph | Irish R1b Other | P1 |
| 64487 | JPB | Brady, John Peter | Irish R1b Other | D1 |
| 64488 | PEB | Brady, Canon Patrick Edward | Irish R1b Other | D1 |
| 40355 | PJB | Brady, Patrick James | Irish R1b Other | D1 |
| 89273 | TJB-B | Breen-Browne, Trevor James | Irish R1b Other | X1 |
| 89279 | JCB | Brooks, Jeffery Clay | Non-Irish Non-R1b | Y2 |
| 148651 | BJMcC | McCabe, Bernard Joseph | Irish R1b Other | X1 |
| 127552 | JWMcC | McCabe, James Wesley | Irish R1b Other | X1 |
| 13875 | MAC | Cain, Marshall Allen | Irish R1b Other | X1 |
| | | Carnahan <i>aka</i> Hill: see Hill | | |
| 32061 | A-C | Carroll, desc. Alexander | Irish R1b Other | 01 |
| 73518 | ACMdVdC | Causans, Count Aymar de Vincens de | Non-Irish R1b | Y1 |
| 103604 | WGC | Clancey, William George | Irish R1b-M222 | A1 |
| 100486 | JMC | Clancy, Joseph W. | Irish R1b-M222 | A1 |
| 97669 | L-C | Clancy, Lynn | Irish R1b Other | X1 |
| 104283 | PAC | Clancy, Paul Augustine | Irish R1b-M222 | A1 |
| 104281 | WJC | Clancy, William Joseph | Irish R1b-M222 | A1 |
| 117758 | JJC2 | Clark, James J. | Irish R1b-M222 | 01 |
| 82606 | OIC | Clark, Obed Ithel, Jr. | Non-Irish R1b | Y1 |
| 117759 | TRC | Clark, Thomas R., II | Irish R1b-M222 | 01 |
| 123611 | EPC | Clarke, Edward Patrick | Irish R1b Other | 01 |
| 90912 | M-C | Clarke, Michael | Irish R1b-M222 | A2 |
| 130308 | PJC2 | Clarke, Patrick Joseph | Irish R1b Other | 01 |
| 114467 | AJC | Connor, Antony Joseph | Irish R1b-M222 | A1 |
| 65969 | RTOC | O'Connor, Roland Thomas | Irish R1b-M222 | A1 |
| 64493 | KDO'C | O'Conor, Dr. Kieran Denis | Irish R1b-M222 | A1 |
| 16646 | PMC | Conroy, Paul Michael | Irish R1b-M222 | A2 |

| 75557 | JJC | Coogan, James Joseph | Irish R1b-M222 | A2 |
|--------|--------|---|--------------------|----------|
| 43739 | PJC1 | Corrigan, Canon Patrick Joseph | Irish R1b Other | P1 |
| N32460 | REC | Coyne, Robert Edward | Irish R1b-M222 | A1 |
| | | McCreary <i>aka</i> Earle: see Earle | | |
| 65836 | J-C | Cullivan, John | Irish R1b-M222 | A2 |
| 89281 | T-C | Cullivan, Terry | Irish R1b-M222 | A1, X1 |
| 91871 | X-C | Curis, Xavier | Non-Irish R1b | Y1 |
| N3035 | JTC | Curry, James Timothy | Irish R1b-M222 | A1 |
| 73430 | KWC | Curry, Kenneth Wayne | Irish R1b Other | X1 |
| 146277 | LWPD | Darcy, Lawrence William Patrick | Irish R1b Other | P1 |
| 118870 | RED2 | Darcy, Robert Emmett | Irish R1b Other | P1 |
| 11741 | TWD | Dibblee, Thomas Wilson, Jr. | Non-Irish R1b | Y1 |
| 13882 | T-D | Donaho, Tuck | Irish R1b-M222 | A1 |
| 82395 | BED | Donahue, Bernard Edward, Jr. | Irish R1b-M222 | A1 |
| 56053 | JFD | Donahue, James Francis, III | Irish R1b Other | B1 |
| 19591 | JMD3 | Donahue, Joseph Michael | Irish R1b-M222 | A1 |
| 42569 | JPD3 | Donahue, Joseph Patrick | Irish R1b-M222 | A1 |
| 82388 | KCD | Donahue, Kevin Charles | Irish R1b-M222 | A1 |
| 79625 | M-D2 | Donahue, Michael nmn | Irish R1b-M222 | A1 |
| 61435 | RED | Donahue, Robert Edmund | Irish R1b Other | D1 |
| 32877 | SCD | Donahue, Sean Carlson | Irish R1b-M222 | A1 |
| 19590 | TRD | Donahue, Thomas Reilly, Jr. | Irish R1b-M222 | A1 |
| 151669 | DLD | Donihue, David Lee | Irish R1b-M222 | X1 |
| 64404 | RCMcDG | MacDonnell, Count Randal Christopher, | Non-Irish Non-R1b | Y2 |
| 04494 | | MacDonnell of the Glens | | |
| 22522 | BAO'D | O'Donoghue, Brendan Anthony | Irish R1b Other | X1 |
| 43737 | CJAO'D | O'Donoghue, Charles James Alphonsus | Irish R1b Other | B1 |
| 121176 | GPO'D | O'Donoghue, Geoffrey Paul, The O'Donoghue | Irish R1b Other | D1 |
| 121170 | | of the Glens | | |
| 35979 | GLD | Donoghue, George Lanno | Irish R1b Other | D1 |
| 26177 | JLO'D | O'Donoghue, John LiPomi | Irish R1b Other | B1 |
| 103142 | NAGO'D | O'Donoghue, Nicholas Alexander Gordon | Irish R1b Other | P1 |
| 43754 | BMD | Donohoe, Bernard Michael ("Brian") | Irish R1b Other | P1 |
| 43747 | BGD | Donohoe, Brian Gerard | Irish R1b Other | B1 |
| 14007 | BTD | Donohoe, Brian Thomas | Irish R1b Other | B1 |
| 73523 | DPD | Donohoe, Damien Peter | Irish R1b Other | B1 |
| 43752 | EJD | Donohoe, Edward Joseph ("Eamonn") | Irish R1b Other | P1 |
| 82458 | EVD | Donohoe, Eugene Valentine | Irish R1b Other | B1 |
| 38187 | HJD | Donohoe, Hugh Joseph, Jr. | Irish R1b Other | P1 |
| 14009 | JHD | Dononoe, James Hugn | Irish R1b Other | B1 |
| 43/42 | JMD1 | Dononoe, James Martin | Irish R1b Other | P1 |
| 35470 | | Dononoe, James Mei | Irish R1b Other | PT |
| N528/2 | JWD | Dononoe, James Willard | Irish R10-M222 | AT |
| 43/45 | JRD | Dononoe, John Brendan | Insh R ID Other | BI |
| 22934 | JJDJ | Donohoe, John Joseph Donohoe, John Potrick | Insti R ID Other | |
| 210/0 | | Donohoe, John Patrick | Insti R ID Other | |
| 43730 | | Donohoo, Josoph Augusting, V | Insti R ID Otter | |
| 10051 | JADI | Donohoo Loopard Charles | IIISH R ID-MZZZ | |
| 27690 | | Donohoo, Martin, James Michael | Instruction Durier | |
| J/00U | | Donohoe, Michael Josoph | Institution Uner | FI R1 |
| 14012 | | Donohoe, Michael amp | Irish R1b Other | D1 |
| 43748 | MRD | Donohoe Michael Robert | Irish R1h Other | R1 |
| 34621 | | Donohoe Patrick Joseph III | Irish R1h Other | B1 |
| 437/1 | P ID2 | Donohoe Patrick Joseph | Irish R1h Other | P1 |
| 43753 | P.ID4 | Donohoe Patrick Joseph | Irish R1h Other | P1 |
| -0100 | 1007 | | | 1.1 |

| 142568 | PAD | Donohoe, Paul Andrew | Irish R1b-M222 | A1 |
|--------|--------|--|-------------------|----|
| 19050 | RDD | Donohoe, Richard Dibblee | Irish R1b-M222 | A1 |
| 22521 | RPD | Donohoe, Robert Paul | Irish R1b-M222 | A1 |
| 43738 | SFD | Donohoe, Sean Francis | Irish R1b Other | B1 |
| 16340 | WJD | Donohoe, William John, Jr. | Irish R1b-M222 | A1 |
| 14010 | BJD | Donohue, Bernard Joseph ("Brian") | Irish R1b Other | D1 |
| 26540 | ECD | Donohue, Elmer Charles ("Ed") | Irish R1b Other | B1 |
| 11877 | JAD2 | Donohue, James Aloysius | Irish R1b-M222 | A1 |
| 130859 | J-D | Donohue, John | Irish R1b Other | D1 |
| 20744 | MHD | Donohue, Michael Hills | Irish R1b M222 | A1 |
| 28514 | PJD1 | Donohue, Paul James | Irish R1b Other | B1 |
| 23491 | RJD | Donohue, Raymond Joseph | Irish R1b Other | B1 |
| 19592 | TED | Donohue, Rev. Thomas Edward | Irish R1b-M222 | A1 |
| 84595 | W-D | Donohue, William | Irish R1b-M222 | A2 |
| 9469 | RWD | Dorsey, Robert William | Irish R1b-M222 | A1 |
| | | Egan <i>aka</i> Gibbs-Egan: <i>s</i> ee Gibbs-Egan | | |
| 60163 | DMcCE | Earle aka McCreary, David McCreary | Irish R1b Other | X1 |
| 77544 | RSF | Farr, Ronald Strickland | Non-Irish R1b | Y1 |
| 70784 | DMF | Faughnan, Donald Michael | Irish R1b-M222 | X1 |
| 25839 | JPF | Faughnan, Joseph Patrick | Irish R1b-M222 | A2 |
| 25638 | MFF | Faughnan, Michael Francis, Jr. | Irish R1b-M222 | A2 |
| 14141 | V-F | Faughnan, Victor | Irish R1b-M222 | A2 |
| 58452 | JDF2 | Flood, James Davis | Non-Irish R1b | Y1 |
| 42035 | KPF | Flood, Kevin Patrick | Irish R1b Other | X1 |
| 138545 | S-F | Flood, Stephen nmn | Irish Non-R1b | X2 |
| N20731 | JJF | Flynn, John Joseph | Irish R1b-M222 | A2 |
| N16797 | MSF | Flynn, Mark S. | Irish R1b Other | X1 |
| 138193 | M-F | Flynn, Michael | Irish R1b Other | X1 |
| 38409 | SEMcG | McG., S. E. | Irish R1b-M222 | A2 |
| 47681 | ESG | Gaffney, Eugene Spencer | Irish R1b Other | X1 |
| 135258 | ASG | Gagarin, Prince Anatoly Stanislavovich | Non-Irish Non-R1b | Y3 |
| 47176 | APG | Gagarin, Prince Andrei Petrovich | Non-Irish Non-R1b | Y3 |
| 00070 | AJFG | FitzGerald: The Knight of Kerry, Sir Adrian | Non-Irish R1b | Y1 |
| 09270 | | James FitzGerald, Baronet | | |
| 93621 | WJG-E | Gibbs-Egan <i>aka</i> Egan, William Joseph | Irish R1b-M222 | A1 |
| 35946 | JJG | Golden, James Joseph | Irish R1b-M222 | A1 |
| N18546 | TJG | Golden, Thomas Joseph, III | Irish R1b-M222 | A1 |
| 43750 | F-McG | McGoldrick, Francis nmn | Irish R1b-M222 | A1 |
| 40445 | BMMcG | McGovern, Bernard Maurice | Irish R1b-M222 | A2 |
| 37762 | BDMcG | McGovern, Bruce Duane | Irish R1b-M222 | A2 |
| 125340 | CJMcG | McGovern, Charles Joseph | Irish R1b-M222 | A2 |
| 25890 | CGMcG | McGovern, Clovis Gene | Irish R1b-M222 | A2 |
| 22897 | DSMcG | McGovern, Donald Scott | Irish R1b-M222 | A2 |
| 34985 | EOMcG | McGovern, Edward Owen | Irish R1b-M222 | A2 |
| 35254 | JLMcG | McGovern, Joseph Ligouri | Irish R1b-M222 | A2 |
| 64486 | MJMcG | McGovern, Michael Joseph | Irish R1b-M222 | A2 |
| 43968 | PJMcG2 | McGovern, Peter James | Irish R1b-M222 | A2 |
| 39335 | PJMcG1 | McGovern, Phillip James | Irish R1b-M222 | A2 |
| 30369 | RAMcG | McGovern, Rory Alan | Irish R1b-M222 | A2 |
| N8216 | TFMcG | McGovern, Thomas Francis | Irish R1b-M222 | A2 |
| 39925 | TJMcG | McGovern, Thomas Joseph | Irish R1b-M222 | X1 |
| 117924 | WRMcG | McGovern, William Robbins | Irish R1b-M222 | A2 |
| 132666 | S-McG | McGrath, Seán | Irish R1b Other | D1 |
| | | Guihan <i>aka</i> Wynne: see Wynne | | |
| 36359 | AGMcG | Maguire, Arlan George | Irish R1b Other | P1 |
| N30642 | BJMcG | Maguire, Brian James, Sr. | Irish R1b Other | P1 |

| 36996 | CLMcG | McGuire, Chanse Lang | Irish R1b Other | P1 |
|--------|--------|---|--------------------|----------|
| 36994 | RDMcG1 | McGuire, Richard Duane | Irish R1b Other | P1 |
| 19836 | RDMcG2 | McGuire, Robert Duane | Irish R1b Other | X1 |
| 37023 | WFMcG | McGuire, William Francis | Irish R1b Other | P1 |
| 145411 | WKMcG | McGuire, William Kedrick | Irish R1b Other | P1 |
| 115223 | PJG | Gurry, Peter James | Irish R1b Other | P1 |
| 50423 | WAMcG | McGwier, Willoughby Augusta | Irish R1b Other | X1 |
| 23449 | TEH | Hamilton, Thomas E. | Irish R1b Other | P1 |
| 94897 | KJH | Hill <i>aka</i> Carnahan, Kenneth James | Irish R1b-M222 | A1 |
| 105076 | D-J | Jakubczak, Donald | Non-Irish Non-R1b | Y2 |
| 132895 | AGK | Khovanskii, Prince Askold Georgievich | Non-Irish Non-R1b | Y3 |
| 43751 | A-T | Kiernan, Andrew nmn | Irish R1b Other | X1 |
| 64485 | B-T | Kiernan, Brendan | Irish R1b-M222 | A2 |
| 43740 | FJMcT | MacKiernan, Most Rev. Francis Joseph, late Bishop of Kilmore | Irish R1b-M222 | A2 |
| 64491 | KJMcT | McKiernan, Kevin Joseph | Irish R1b-M222 | A2 |
| 121175 | O-L | Lancellotti, Prince Ottavio | Non-Irish R1b | Y1 |
| 121174 | LJAL | Lubomirski, Prince Ladislas Jean Adam | Non-Irish Non-R1b | Y3 |
| 34129 | JLM | Manross, John Lawrence | Irish R1b-M222 | A1 |
| 10332 | MMMcMB | McManus Broman, Morgan Mats Erik | Irish R1b Other | P1 |
| | | Massimo-Lancellotti: see Lancellotti | | |
| 141078 | IDM | Meecham, lan David | Non-Irish Non-R1b | Y2 |
| 68867 | GJM | Morrow, Gordon Jack | Non-Irish Non-R1b | Y2 |
| 95398 | JCM | Morrow, James C. | Non-Irish Non-R1b | Y2 |
| N25846 | AGMcM | McMullin, Albert Guy | Irish R1b-M222 | A1 |
| 91873 | TTJM | Murphy, Thomas T.J. | Irish R1b Other | X1 |
| 19593 | MLM | Murray, Michael Leo | Non-Irish Non-R1b | Y2 |
| 19594 | GAN | Newhall, George Aylmer, III | Non-Irish Non-R1b | Y2 |
| 43755 | TJP | Parrott, Timothy John | Non-Irish R1b | Y1 |
| 148373 | M-R | Radziwill, Prince M. | Non-Irish Non-R1b | Y3 |
| 121180 | COO'R | O'Reilly, Ciarán Óg | Irish R1b Other | 01 |
| 64489 | HJO'R | O'Reilly, Hugh James | Irish R1b-M222 | A2 |
| N8271 | JFO'R1 | O'Reilly, John Francis | Irish R1b-M222 | A2 |
| 52528 | JLR | Reilly, John Lawrence | Irish R1b-M222 | A2 |
| 64492 | MJR | Reilly, Michael Joseph | Irish R1b-M222 | A2 |
| 43746 | NAR | Reilly, Noel Anthony | Irish R1b-M222 | A2 |
| 125067 | RJR | Reilly, Richard John | Irish R1b-M222 | A2 |
| 36683 | RWO'R | O'Reilly, Robert William | Irish R1b Other | D1 |
| 94845 | LAR | Reily, Lawrence Allan | Irish R1b Other | X1 |
| 57753 | GWR | Reynolds, Gary William | Irish R1b Other | B2 |
| 81672 | GNR | Reynolds, Glenn Newton | Irish R1b Other | X1 |
| 67988 | JWR | Reynolds, James William | Irish R1b Other | B2 |
| 39183 | JJR | Reynolds, John Joseph | Irish R1b Other | B2 |
| 111592 | RMR | Reynolds, Robert Morris | Irish R1b Other | B2 |
| N2316 | SHPR | Reynolds, Steven Huntley Patrick | Irish R1b Other | B2 |
| 63332 | VCR | Reynolds, Victor Corey | Irish R1b Other | B2 |
| 12835 | WAMCR | McReynolds, William Andrew | Irish Non-R1b | X2 |
| 146333 | GDR | Riley, Gregory Dale | Irish R1D-M222 | A2 |
| 134331 | | Riley, John Wesley | NON-IRISH NON-K1D | Y2 |
| 15605 | NZK | Riley, Norman Zealous | ITISN R1D-IVI222 | X1 |
| 14/343 | KKK | Riley, RICK ROY | ITISTI KIID-IVI222 | X1 D0 |
| 133193 | | Roark, Kyan Patrick | ITISTI KID Uther | B2 |
| 0/051 | | Roark, William Roger | | B2 |
| 0021U | | NORK, NODERT TERRY | | R2 R2 |
| 1211/9 | | O Rourke, Francis Joseph | IIISH KID UTIEF | X1 D0 |
| 1211/3 | G-U K | o Rourke, Count George | msn kid Utner | В2 |

| 130290 | HTO'R | O'Rourke, Hugh Thomas | Irish R1b Other | B2 |
|--------|--------|-----------------------------------|-------------------|--------|
| 73522 | JFO'R2 | O'Rourke, James Francis | Irish R1b Other | B2 |
| N30440 | MDO'R | O'Rourke, Michael D. | Irish R1b Other | B2 |
| 90084 | M-O'R | O'Rourke, Michael | Irish R1b Other | B2 |
| 113220 | MPO'R | O'Rourke, Michael Patrick | Irish R1b Other | B2 |
| 113219 | PJO'R2 | O'Rourke, Patrick Joseph | Irish R1b-M222 | A2 |
| N36071 | PJO'R1 | O'Rourke, Peter Joseph | Irish R1b Other | B2 |
| 68210 | RTR | O'Rourke, Robert Terry | Irish R1b Other | B2 |
| 130289 | TOO'R | O'Rourke, Thomas Oliver | Irish R1b Other | B2 |
| 142140 | ESR | Rurikson, Erik Sven | Irish R1b-M222 | A1 |
| 133692 | N-R | Rzhevsky, Prince Nikolai | Non-Irish Non-R1b | Y3 |
| 127661 | RJMcS | McSharry, Roger John | Irish R1b-M222 | A1 |
| 91857 | H-O'S | O'Shea, Henry | Irish R1b Other | X1 |
| 121405 | BWS | Smith, Bradley Wayne | Non-Irish R1b | Y1 |
| 63408 | KES | Smith, Kenneth Edward | Non-Irish R1b | B2, Y1 |
| 32550 | M-S | Smith, M. | Irish R1b-M222 | A1 |
| 122652 | V-S | Smyth, Vincent | Irish R1b Other | 01 |
| 59601 | R-S | Spier, Rick | Non-Irish R1b | Y1 |
| 110642 | P-S | Szuyski, Prince Piotr Waclawowich | Non-Irish Non-R1b | Y3 |
| 1010 | JPMcT | McTernan, James Patrick | Irish R1b-M222 | A1 |
| 635 | J-McT1 | McTernan, John nmn | Irish R1b Other | B2 |
| 637 | JCMcT | McTernan, John C. (25) | Irish R1b-M222 | A1 |
| 673 | M-McT1 | McTernan, Mark (25) | Irish R1b Other | B2 |
| 640 | T-McT | McTernan, Tom (25) | Irish R1b Other | B2 |
| 17363 | TMMcT | McTernan, Thomas Michael (25) | Irish R1b Other | B2 |
| 638 | C-McT1 | McTiernan, Charles (25) | Irish R1b-M222 | A1 |
| 52762 | DJT | Tiernan, David John Brendan | Irish R1b Other | X1 |
| 5450 | D-McT | McTiernan, Douglas (25) | Irish R1b Other | B2 |
| 8723 | E-McT | McTiernan, Ed (25) | Irish R1b-M222 | A2 |
| 137246 | EVT | Tiernan, Edward Vincent | Irish R1b-M222 | X1 |
| 9498 | G-McT3 | McTiernan, Gene (25) | Irish R1b Other | B2 |
| 8724 | G-McT2 | McTiernan, Gus (25) | Irish R1b-M222 | A1 |
| 646 | J-McT2 | McTiernan, Jim (25) | Irish R1b Other | B2 |
| 9497 | J-McT4 | McTiernan, Jim (25) | Irish R1b-M222 | A1 |
| 31885 | JWMcT | McTiernan, John W. | Irish R1b-M222 | A1 |
| 1028 | J-McT3 | McTiernan, Joseph (25) | Irish R1b-M222 | A1 |
| 21151 | LVMcT | McTiernan, Leo Vincent | Irish R1b-M222 | A1 |
| 3713 | M-McT3 | McTiernan, Martin (25) | Irish R1b Other | B2 |
| 121178 | MJMcT | McTiernan, Martin Joseph | Irish R1b Other | B2 |
| 3436 | M-McT2 | McTiernan, Michael (25) | Irish R1b Other | B2 |
| 674 | MPMcT | McTiernan, Michael Patrick | Irish R1b Other | B2 |
| 121177 | PAMcT | McTiernan, Patrick Anthony | Irish R1b Other | X1 |
| 636 | P-McT | McTiernan, Phelim | Irish R1b-M222 | A1 |
| 1029 | R-McI | MacTiernan, Rory (25) | Irish R1b Other | B2 |
| 639 | S-McT1 | McLiernan, Scott (25) | Irish R1b Other | B2 |
| 5451 | S-McT2 | Mac liernan, Scott (25) | Irish R1b-M222 | A1 |
| 151643 | JJI | Lierney, Joseph J. | Irish R1b Other | X1 |
| 89275 | | Tristan, Count Jacques de | Non-Irish R1b | Y1 |
| 31886 | C-MC12 | MCI urnan, Chris Lee (25) | Irish R1b Other | B2 |
| N2648 | M-W | Wynne <i>aka</i> Guihan, Michael | Irish R1b Other | X1 |

Table 1

List of Participants Included in This Report and the Sections and Subgroups in Which They Appear

Introduction

The participants in the Breifne Clans Y-DN Project (BCP) continue to fall mainly into two large subgroups. Within the general R1b haplogroup (which includes most of the participants), the main division to be seen in the BCP is still between R1b1b2-a1b5b (old R1b1c7) and not-R1b1b2-a1b5b. This is because none of the other subclades of R1b1b2-a1b, i.e., those that have been defined so far by specific mutations, have appeared among those participants in the BCP belonging to male lineages of Breifne origin. Several so-far unidentified subclades would seem exist, judging by the disparity of haplotypes represented within this subgroup. R1b1b2-a1b5b is defined by the mutation called M222. As further investigation is under way which will discover additional mutations and change the name of R1b1b2-a1b5b again and possible several times in the future, and as the mutation which defines it will not change, R1b1b2-a1b5b will be called R1b-M222 in this report. Some further mutations have been identified which may prove useful in dividing up the mass of undifferentiated R1b1b2 (R1b-M269*) as more data begins to accumulate. U106* and P312* define two major subgroups of M269* (R1b1b2-a1a* and R1b1b2-a1b* respectively), and U152 and L21 could serve to split off two large subgroups of R1b-312*, with R1b-M222 in the L21 subgroup.

To make it easier to navigate through this report, it is divided into six parts, somewhat modified from the six divisions in the previous report. The first is this Introduction. The second is the Irish R1b-M222 Section, the third is the Irish R1b Other Section, the fourth is the Mixed Haplogroups Section, the fifth is the Summary and the sixth is References. Preceding this Introduction is a listing of those 230 participants who have received their results from testing at the 37-marker or higher level (plus 18 additional McTiernans who tested only to the 25-marker level) and the sections in which they can be found and the subgroups to which they have been assigned. This guide is provided so that the parts of the report of perhaps less interest may be skipped.

For general information on the Breifne Clans Y-DNA Project (BCP) with Family Tree DNA (FTDNA) go to the BCP section of the FTDNA website: <u>http://www.familytreedna.com/group-join.aspx?Group=Breifne</u>.

For more specific information go to the FTDNA BCP website: <u>http://www.familytreedna.com/public/BreifneClans/default.aspx</u>.

As the FTDNA BCP website does not yet have the capability of importing some of the illustrations and formatting, two other websites will present the reports with the illustrations and intended formatting:

http://donohoeclan.org and http://www.odonoghue.co.uk/

These last two websites are subscription websites, but you may read the BCP reports for free on both. On the Donohoe Clan Society website homepage,

click on "About" and scroll to the bottom of the "History" page, where you can read any of the reports. On the O'Donoghue Society website, click on "Y-DNA Project" in the list on the left of the homepage, scroll to the bottom of the Y-DNA Project page and click on the dated "Results", scroll down the Y-DNA Results page to just beyond the middle to "Spreadsheet C" and click on "here" to download a PDF of the latest report.

If this report seems too lengthy or technical, you may want to go directly to the summary at the end.

| | | Participants | | | | # Markers | | | СТ | ST | % | Т | <mark>%</mark> | GT | <mark>%</mark> |
|--|--|----------------------------------|--------------------|--|------------------|------------------|------------------|------------------|------------------|-------|----------|-----|----------------|-----|----------------|
| Status | Origin | Haplogroup | Subclade | | 12 | 25 | 37 | 67 | | | | | | | |
| Active Active | Irish Irish | R1b R1b | M222 Other | | 11 11 | 8 16 | 50 76 | 33 39 | 102 142 | 0.4.4 | 42 58 | | 41 57 | | 36 51 |
| Active Total | Irish | Non-R1b | | | 3 | 0 | 1 | 1 | 5 | 244 | | 249 | 2 | | 2 |
| Active Active Subtotal | Non-Irish Non-Irish | R1b R1b | M222 Other | | 0 1 | 0 1 | 0 6 | 0 5 | 0 13 | 13 | 0 100 | | 0 42 | | 0 5 |
| Active Total | Non-Irish | Non-R1b | | | 2 | 0 | 11 | 5 | 18 | 10 | | 31 | 58 | | 6 |
| Grand | Total | | | | | | | | | | | | | 280 | |
| Active Pending Total | No Kit Not | Results Returned | Yet Yet | | 0 1 | 0 0 | 0 15 | 0 2 | 0 18 | 18 | | | | | |
| Removed Removed Removed Removed | Irish Irish Irish Irish | R1b R1b Non-R1b Unknown | M222 Other | | 0 1 0 1 | 0 0 0 1 | 0 5 0 0 | 1 1 0 0 | 1 7 0 2 | | | | | | |
| Removed Removed Removed Removed | Non-Irish Non-Irish Non-Irish Non-Irish | R1b R1b Non-R1b Unknown | M222 Other | | 0 2 3 0 | 0 1 0 0 | 0 2 2 0 | 0 1 0 1 | 0 6 5 1 | | | | | | |
| Removed Total | Unknown | R1b | Other | | 0 | 0 | 0 | 1 | 1 | 23 | | | | | |
| Removed Removed Total Grand | Kit Before Total | Never Results | Returned Posted | | 4 1 | 0 0 | 1 0 | 0 0 | 5 1 | 6 | | | | | |
| Active Removed Pending Total | Mitochon. Mitochon. Mitochon. | Kit Not Yet | Returned | | | | | | 6 6 1 | 13 | | | | | |

Table 2 Group Counts

As of the end of March, the BCP had 226 participants, up from 189 a year previously. By the beginning of June results were in for 286 individuals, of whom 227 have received Y-DNA test results at the 37-marker or 67-marker levels. An

overall breakdown of all the kits and the groups represented, labeled "Group Counts", is given in Table 2 above.

For the kits that have been returned, a breakdown of the surnames and number of representatives, labeled "Surname Counts", is shown in Table 3. The column for "Breifne Lineages" shows the number of lineages for that surname where a member of the lineage can trace his ancestry back to a location in what was once the kingdom of Breifne (the present counties of Cavan and Leitrim and parts of adjoining counties).

| Surname | # | Parts. | Parts. | # | Lins. | Lins. | Breifne | Breifne |
|--------------|----------|--------|--------|--------|--------|-------|---------|----------|
| | Partici- | At ≥37 | At 67 | Linea- | At ≥37 | At 67 | Lins. | Lins. At |
| | pants | | | ges | | | | ≥37 |
| A.B. | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Boylan | 4 | 3 | 1 | 4 | 3 | 1 | 2 | 2 |
| Brady | 7 | 7 | 4 | 7 | 7 | 4 | 3 | 3 |
| Breen-Browne | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Brooks | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| McCabe | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 |
| Cain | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Carroll | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Causans | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Clancy | 7 | 5 | 0 | 7 | 5 | 0 | 5 | 4 |
| Clark | 7 | 6 | 5 | 6 | 5 | 4 | 0 | 0 |
| O'Conor | 3 | 3 | 2 | 3 | 3 | 2 | 0 | 0 |
| Conrov | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Coogan | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Corrigan | 1 | 1 | Ō | 1 | 1 | Ō | 1 | 1 |
| Covne | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Crowell | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Cullivan | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 |
| Curis | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| McCurnin | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Curry | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 |
| Darcy | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 1 |
| Dibblee | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| MacDonnell | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| O'Donnell | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Donohoe | 56 | 55 | 22 | 49 | 48 | 19 | 26 | 25 |
| Earle aka | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| McCrearv | | | - | | | - | - | - |
| Farr | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Farrelly | 1 | Ó | Ō | 1 | 0 | Ō | 0 | 0 |
| Faughnan | 4 | 4 | 1 | 4 | 4 | 1 | 4 | 4 |
| Flood | 5 | 3 | 2 | 5 | 3 | 2 | 0 | 0 |
| Flynn | 4 | 3 | 0 | 4 | 3 | 0 | 0 | 0 |
| Gaffnev | 2 | 1 | 0 | 2 | 1 | 0 | 1 | 1 |
| Gagarin | 2 | 2 | 0 | 2 | 2 | 0 | 0 | 0 |
| Gallaugher | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| FitzGerald | 1 | 1 | Ō | 1 | 1 | Ō | Ō | Ō |
| Gibbs-Egan | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Golden | 3 | 2 | 1 | 3 | 2 | 1 | Õ | Õ |
| McGoldrick | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| McGovern | 17 | 15 | 3 | 16 | 14 | 2 | 9 | 7 |

| McGrath McGuire Gurry Hamilton Hill aka Carnaban | 1 10 2 1 1 | 1 8 2 1 1 | 0 1 2 0 0 | 1 10 2 1 1 | 1 8 2 1 1 | 0 1 2 0 0 | 0 1 0 0 0 | 0 1 0 0 0 |
|---|--|---|--|--|---|--|---|---|
| Carnahan Jakubczak Khovanskii Lancellotti Lubomirski Manross McManus MacMaster Meecham Meehan Moriarty Morrow McMullin Murphy Murray Newhall Parrott Radziwill O'Reilly Reynolds O'Rourke Rurikson Rzhevsky McSharry O'Shea | 1 1 1 1 1 1 2 2 2 1 1 2 1 1 1 1 8 5 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 2 2 2 1 1 2 1 1 1 1 8 15 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| Smith Spier Szuyski McTiernan & McKiernan Tierney Tristan Tully Wynne aka Guihan | 5 1 31 5 1 1 1 | 4 1 10 4 1 1 0 1 | 2 0 1 5 0 0 0 0 0 | 5 1 29 5 1 1 1 | 4 1 8 4 1 1 0 | 2 0 1 4 0 0 0 0 0 | 1 0 22 4 0 0 0 1 | 1 0 5 3 0 0 1 |
| Totals: 78 | 280 | 227 | 85 | 269 | 217 | 79 | 97 | 74 |
| Mar 08: 52 | 203 | 150 | 34 | 195 | 140 | 29 | 78 | 59 |
| Mar 07: 41 | 171 | 120 | 25 | 161 | 110 | 21 | 73 | 54 |
| Mar 06: 30 | 98 | 75 | 0 | 90 | 68 | 0 | 44 | 41 |

Table 3 Surname Counts

The comparisons made in this report were confined to the 227 participants mentioned above who have received results for testing at least to the 37-marker level, because there is too much of a risk of misleading conclusions, such as false positives, from the testing at lower levels. An exception was made for a large number (18) of McTiernans who tested only to the 25-marker level, whose results are displayed to help establish initial sections of haplotype patterns.

The Y-DNA test results are *haplotypes*, which are Y-DNA profiles made up of a string of numbers, or values, which represent the number of repeats of short pieces of DNA. These short pieces of DNA are usually sequences that are half a dozen or fewer base-pairs long, and the repeats are usually right next to one another. The various places where these repeats occur are called DYS or STR markers. DYS stands for DNA Y-chromosome Segment. STR is an acronym for Short Tandem Repeat. The two terms are two names for the same type of DNA pieces.

Haplogroups, which are more ancient changes in DNA, generally each include plural haplotypes, as haplotypes change (mutate randomly) more quickly than haplogroups, so that the number of haplotypes tends to increase within a haplogroup with the number of generations as mutations accumulate. Haplogroup designations given by FTDNA in red are estimates by FTDNA based on haplotypes; haplogroups shown in green are the results of actual SNP Y-DNA tests (SNP = single nucleotide polymorphism; pronounced "snip"). A SNP is where a change (mutation) has occurred in just a single base-pair, so that a test can show positive for the change (mutated, or 'derived state') or negative (unchanged, or 'ancestral state'). Haplotypes are characterized by changes in the number of repetitions of short strings of base-pairs, but haplogroups are based on actual changes in base-pairs.

As in the previous reports, when the Y-DNA profiles from the test results of the BCP participants are examined for evidence of patterns, a substantial number of the participants appear to fall into distinct groups or clusters. Some of these groups can be characterized by how well the haplotype patterns fit the pattern of the modal haplotypes of some haplogroups. At the top of charts below, above the results showing Y-DNA profiles of participants, are shown also the Super Western Atlantic Modal Haplotype (SWAMH)¹ which is the modal haplotype for the general overall R1b haplogroup, and a hypothesized extension of the Irish Modal Haplotype (IMH; also known as the Ui Neill modal haplotype²) which is called the Northwest Irish Modal Haplotype (NWIMH)³, and which is the modal haplotype for Haplogroup R1b-M222. The SWAMH profile is an extension of FTDNA's 12-marker Western Atlantic Modal Haplotype (WAMH).

Several other modal haplotypes for Irish subgroups of R1b are being developed, with current versions to be found on the web. Among these are the South Irish MH, identified in Feb 2006 by Ken Nordtvedt⁴ and given by Tim

Desmond on Ysearch⁵ as the Irish Type III MH, which is apparently concentrated in Cos. Clare, Tipperary and Limerick, and which was identified in Apr 2006 by Ken Nordtvedt⁶ and may be seen discussed on Dennis Wright's website;⁷ the Colla Uais/Dalriadic MH, which is thought by some to be the signature of the founder of the kingdom of Oriel (Airghialla) just to the northeast of Breifne, and which was first announced in Feb 2004 by the Clan Donald DNA Project;⁸ and the S28MH, the modal haplotype of R1b1b2-a1b4 (R1b-U152, old R1b1c10), first presented by John McEwan in 2005,⁹ a probable subgroup of which is discussed by Steven Colson.¹⁰ Additionally given for Subgroups Y2 and Y3 in this report is a modal haplotype for the R1a Somerled lineage, presented by Clan Donald.¹¹

A modal haplotype will often be quite close to an ancestral haplotype and may even match exactly, but the two haplotypes are not identical in meaning. A modal haplotype is constructed by first looking over the array of haplotypes representing the individual participants in the group being considered, and then taking the modal (i.e., the most common) value of each marker. An ancestral haplotype is constructed by looking at three different groups, each group representing the descendants of one separate son of the ancestor, finding a modal haplotype for each of the three groups, and then constructing the ancestral haplotype by comparing the three modal haplotypes and taking the modal value of each marker. Only two groups are necessary as long as the two modal haplotypes match exactly. Charles Kerchner has described this approach as the "Triangulation Method for Deducing the Ancestral Haplotype in Y-DNA Surname Projects."¹²

Two means of comparison were utilized in this project. One consisted of looking for similarities in the patterns of Y-DNA results profiles and the other involved calculating the number of generations within which the most recent common male-line ancestor (GMRCA) of a pair of participants would fall, given a certain level of probability.

For the first means of comparison, color-coded charts have been constructed to highlight patterns. In these comparison charts, where the values of markers for the modal haplotype of a cluster of interest differs from the SWAMH, the columns for these distinctive markers are colored a differentiating color where the values are distinctive, turquoise (light blue) where the values within those columns are the more common and widespread SWAMH values, and peach (light pinkish tan) wherever the values are different (aberrant or anomalous) from either of the above within those columns, and peach elsewhere where the values are different from the SWAMH. See Chart 1 below for the key to the complete color coding.

The second means of comparison was pursued as in the previous reports, with nine time intervals being used. In order to estimate the probability over the four different time intervals of two individuals having a common ancestor in the male line, pair-wise comparisons were made by applying Family Tree DNA's "Time Probability" (FTDNATiP[™]) calculator (for a description of this calculator see <u>http://www.familytreedna.com/trs_ftdnatip.html</u>). For this report the time intervals again have been given in terms of generations rather than in terms of years. Since mutations changing a Y-DNA profile show up as a sharp step in going from one generation to the next, and since the number of years in a generation is vague and variable, it is more accurate to estimate these probabilities in terms of generations. However, it is of course of interest to relate the results of these calculations to intervals in terms of years. In the past FTDNA has used an estimate of 25 years per generation (ypg); studies at Trinity College Dublin have used a more conservative estimate of 30 ypg. The average of 27.5 ypg will be used here.

Table 4 gives some estimates for the nine different time intervals used for the comparisons in this report. The A.D. dates are all approximate. In Report 3 the dates included a correction of 45 years as an estimate of the average age of the participants. Using the data from the 122 participants who have provided their years of birth, the average age of the participants in this project comes out to 59.345, so in this report a correction of 60 years is used.

| Generations | 25ypg | A.D. | 27.5 ypg | A.D. | 30 ypg | A.D. |
|-------------|-------|-------|----------|-------|--------|-------|
| ≤18 | 450 | ~1500 | 495 | ~1450 | 540 | ~1410 |
| ≤22 | 550 | ~1400 | 605 | ~1340 | 660 | ~1290 |
| ≤26 | 650 | ~1300 | 715 | ~1230 | 780 | ~1170 |
| ≤30 | 750 | ~1200 | 825 | ~1120 | 900 | ~1050 |
| ≤34 | 850 | ~1100 | 935 | ~1010 | 1020 | ~930 |
| ≤38 | 950 | ~1000 | 1045 | ~900 | 1140 | ~810 |
| ≤42 | 1050 | ~900 | 1155 | ~790 | 1260 | ~690 |
| ≤46 | 1150 | ~800 | 1265 | ~680 | 1380 | ~570 |
| ≤50 | 1250 | ~700 | 1375 | ~570 | 1500 | ~450 |

Table 4 Time Intervals

A.D. dates for an intermediate estimate of 27.5 ypg are given in bold above, since that will be the approximation used in this report. So, in approximate terms, the first three intervals would be from the present back to about 1230 A.D., the second three intervals would be from the present back to about 900 A.D., and the third three intervals would be from the present back to about 570 A.D. There would of course be implied further time intervals, that of the period

more than 50 generations ago, or back before about 570 A.D. These intervals are all corrected for the average age of the participants.

The earliest three time intervals (≤50 generations) go back to a period before the adoption of all but the very earliest surnames in the Breifne area while remaining in the historical era. The middle three intervals were chosen to go back to a period covering the birth of the eponymous ancestors of the great bulk of the families in the area. The most recent three intervals are well within the time frame in which these earlier surnames were being used in the area. As different surnames had different histories, this arrangement suits some better than others. For instance, it would not seem to suit the surname McGoldrick particularly well, since it falls into the last set of three time intervals, but the McGoldricks are traditionally a later subclan of the Clan Rourke, and are said to descend from Ualgharg Ua Ruairc (or O'Rourke), king of Breifne, who died in 1231.

As mentioned in previous reports, McEvoy and Bradley have formally demonstrated the correlation of Irish surnames in general with Y-DNA haplotypes in reflecting common male-line descent over the past 1,500 years.¹³ Table 3 below gives the origins of some of the surnames of Breifne, plus that of the O'Conors, overkings of Connacht (which included Breifne). Approximate (~) or known years of death (†) and approximate years of birth (*) are given for the eponyms, i.e., those ancestors whose forenames gave rise to the surnames.

| Eponym | Year † | Year * | Surname in Gaelic | Surname Anglicized |
|-------------|--------|--------|-------------------|--------------------|
| Conchobar | 971 | ~945 | Ua Conchobair | O'Conor |
| Ruarc | 898 | ~870 | Ua Ruairc | O'Rourke |
| Raghallach | 1014 | ~985 | Ua Raghallaich | O'Reilly |
| Bradach | ~1170 | ~1140 | Mac Bradaich | McBrady |
| Samhradhan | ~1150 | ~1120 | Mac Shamhradhain | McGovern |
| Tighernan | ~1100 | ~1070 | Mac Thighernain | McKiernan |
| Donnchadh | < 1010 | < 990 | Ua Donnchadha | O'Donohoe |
| Ualgharg | 1231 | ~1200 | Mac Ualghairg | McGoldrick |
| Raghnall | ~1105 | ~1075 | Mac Raghnaill | McReynolds |
| Cernachan | 929 | ~900 | Ua Chernachain | O'Kernaghan |
| Fland | 905 | ~875 | Ua Flaind | O'Flynn |
| Muircertach | 918 | ~890 | Ua Muirchertaich | O'Moriarty |
| Fachtnan | | | Ua Fachtnain | O'Faughnan |

Table 5 Origins of Some Breifne Surnames

The assumptions in this report of the number of generations with no common male-line ancestor are similar to the assumptions in Report 3, and the pairwise calculations are generally at the level of a 37-marker analysis, with some at the 67-marker level, as indicated. The FTDNATiP calculator, in the case of an exact match or assuming just one generation of no common ancestor, initially displays probabilities of a common male-line ancestor in several intervals in terms of generations, with the longest going back to 24 generations ago. To get the FTDNATiP calculator to display probabilities going back further requires an assumption of an increasing number of generations of no common male-line ancestor; to display as far back as 50 generations ago an assumption of no common male-line ancestor for 26 generations is necessary.

For each pairwise comparison, an assumption was made of the minimum number of generations with no common male-line ancestor necessary to reach a different (always greater) number of generations within which there would be a 99% probability of a common male-line ancestor. No more than 26 generations of no common male-line ancestor were assumed, however, which gave a display of the probabilities back as far as 50 generations ago. If the probability of a common male-line ancestor within 50 generations was less than 99.00%, the pair was not considered related for the purposes of this report.

Where the surname was the same (or variants of the same) but there was no known relationship, a minimum of four generations of no common male-line ancestor was assumed. If paper trails were available for both participants of no known relationship, then the number of generations back to the earliest known male-line ancestor of the participant with the lowest number of generations back to his earliest known male-line ancestor was used, if there were more than four generations. Where the surnames were different, and there was no evidence of a connection, a minimum of no common male-line ancestor for 26 generations (i.e. back about 715 plus 60 = 775 years, to about 1230 A.D.) was assumed.

. Where the surnames were different but there was evidence of a genealogical connection after the adoption of the first surname, calculations were done for the pair as though they were of the same surname. This was done even if a fully connected paper trail was lacking, which of course was the case for the McManus and the McDonaghy/Donohoe branches of the Maguires, as demonstrated in Report 2.

Where separate lines of descent can be differentiated within a surname by profile patterns, these differentiations can for the most part be confirmed by the above-described calculations, which also place any evident relationship of a pair being compared within a time frame.

Some publicly available haplotype sequences drawn from other FTDNA projects and from Ysearch have also been utilized in this report to determine or

clarify profile patterns. The sources for these sequences are indicated in the "Database" column.

In the color coding of the profile patterns according to the key given in Chart 1 just below, the raspberry/dark pink and lemon vellow colors point out consistently distinctive values for a marker that is not one of the markers with distinctive values deviating from the SWAMH of a compared modal haplotype, such as the NWIMH. Raspberry/dark pink is applied to the column for that marker only when there are at least four participants of no known relationship representing a single line and \geq 80% show the distinctive value for the marker, and only across additional lines within the same surname within the same cluster when the distinctive value for the marker is the modal value for all the lines. Lemon vellow is applied only when there are at least four participants of no known relationship representing a single line of each of at least two surnames within a cluster and ≥80% of these within each of at least two surnames show the distinctive value for the marker, and there is no evidence that one surname may be a subclan of the other surname. Lemon yellow is further applied to participants of additional surnames if they show the distinctive value for the marker and belong to the same cluster.

| | | Known relationship | | Marker Equals SWAMH Value As Opposed | |
|---------------------------------------|---|---------------------------|--|---|--|
| | | | | to Non-SWAMH Value | |
| 11 | | Haplotypes are identical | | Marker Equals NWIMH Value As Opposed | |
| | | at 37-Marker Level | | to SWAMH Value | |
| | | Link at 15-18 generations | | Marker Equals SIMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 19-22 generations | | Marker Equals ITIIIMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 23-26 generations | | Marker Equals CUDMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 27-30 generations | | Marker Equals S28MH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 31-34 generations | | Marker Equals LMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 35-38 generations | | Marker Equals ONMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 39-42 generations | | Marker Equals SLMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 43-46 generations | | Marker Equals FrMH Value As Opposed | |
| | | | | to SWAMH Value | |
| | | Link at 47-50 generations | | Non-SWAMH Marker Value Consistent Across | |
| | | | | \geq 80% of a Line and \geq 50% of Any Additional Lines | |
| | | Links Color Code | | Non-SWAMH Marker Value Consistent Across | |
| | | | | ≥80% of each of ≥2 Surnames | |
| | * | | | Anomalous Marker Value | |
| | | Red Asterisk | | | |
| Indicates that further subclades have | | | | Patterns Color Code | |
| been identified downstream | | | | | |
| | | | | | |

Chart 1 Key to Color Coding

The Y-DNA test results (for patterns) and the FTDNATiP calculation results (for links) for the members of groups were color coded according to the key in Chart 1 above.



Chart 2 Group A, 37-Marker Level *Entire R1b-M222 Group Generations to Include MRCA at 99% Probability*