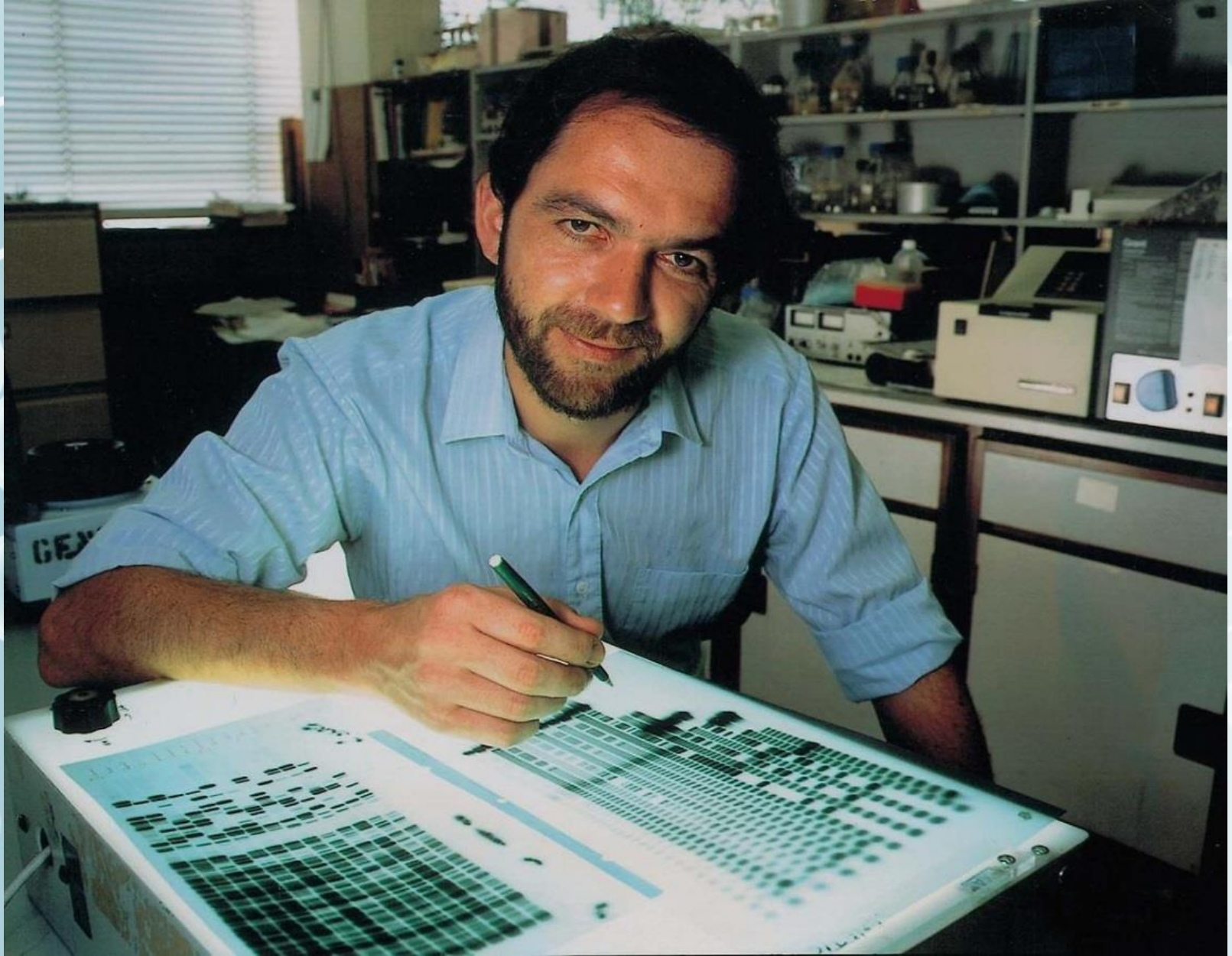


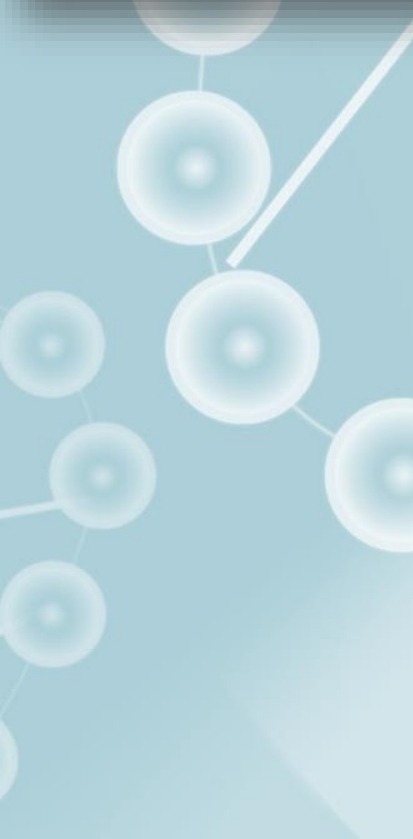
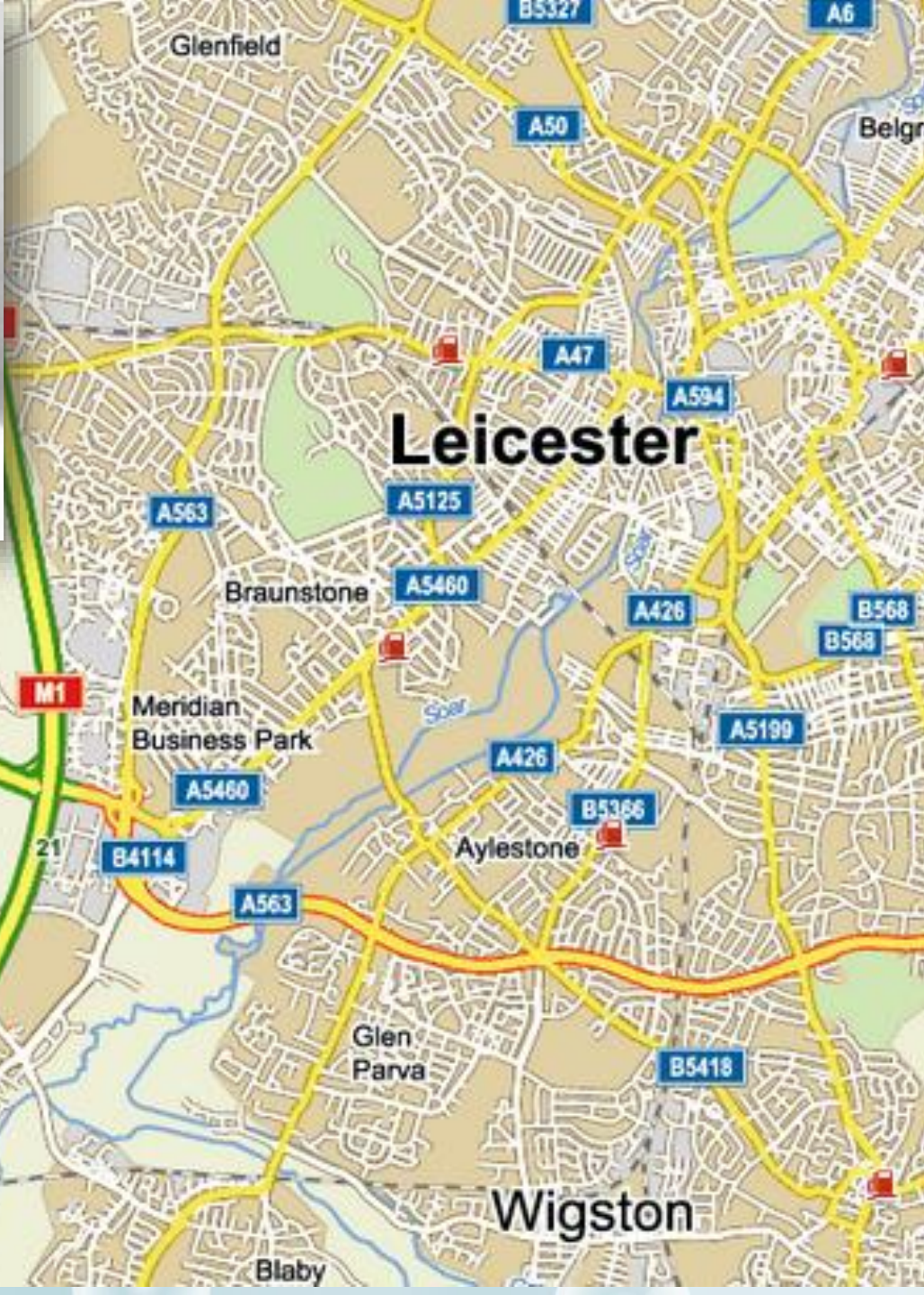




# První forenzní DNA analýza



**Sir Alec Jeffreys**



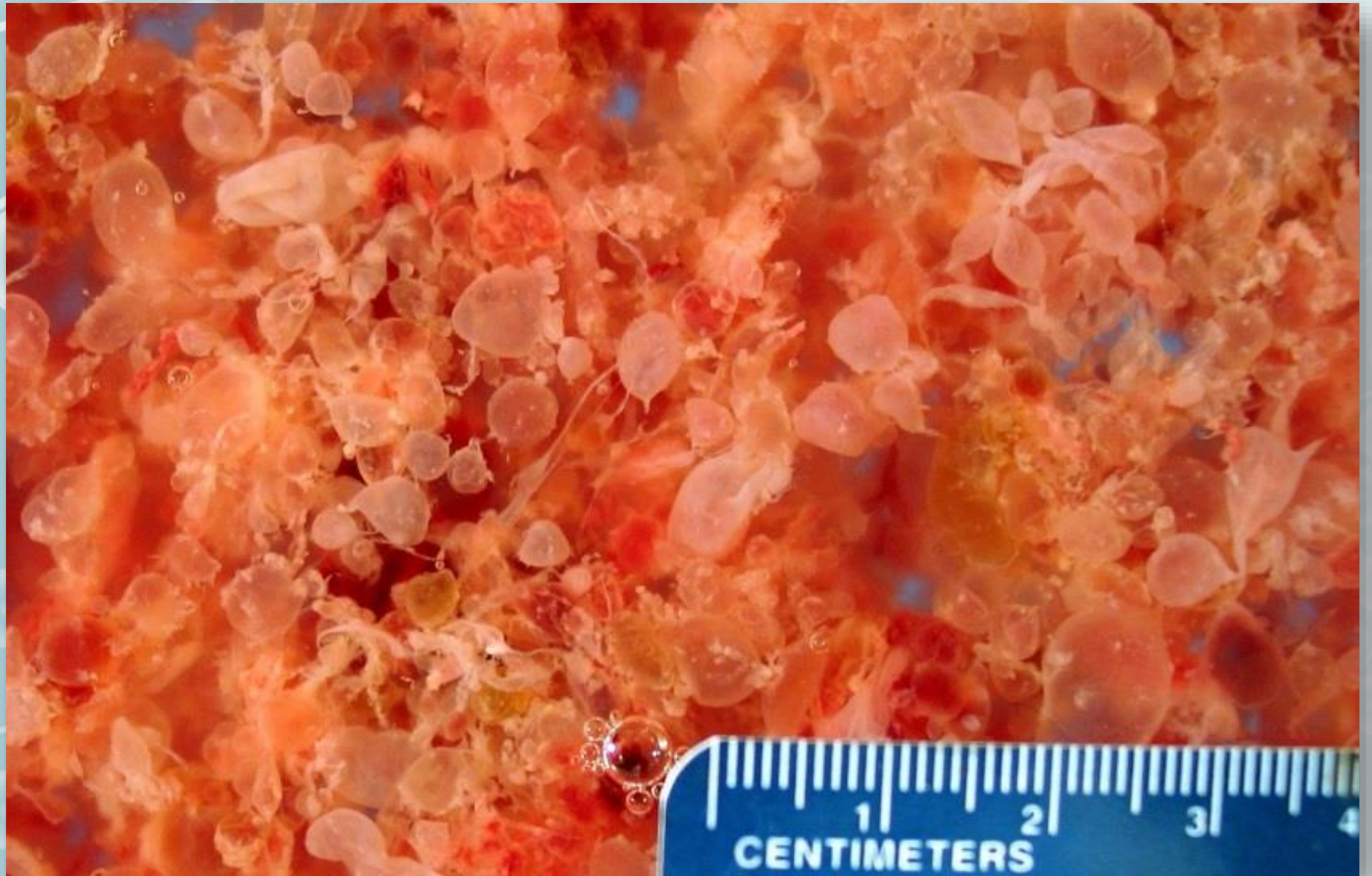


gettyimages  
Mirrorpix



The background features a light blue gradient with a network of white nodes and connecting lines. The nodes are semi-transparent circles of varying sizes, and the lines are thin and white, creating a complex web-like structure. The overall aesthetic is clean and modern, typical of a digital or scientific presentation.

# **Případ chybějícího dítěte**







# Carská rodina

# Maria Alexandra Fjodorovna



Olga

Mikuláš II.

Anastasia

Tatiana

Alexej



**Ipaťjevův dům, Jekatěrinburg**  
**carská rodina 30.4.-16.7.1918**

- ❖ car Mikuláš II.
- ❖ carevna Alexandra
- ❖ Olga
- ❖ Tatiana
- ❖ Maria
- ❖ Anastasia
- ❖ carevič Alexej
- ❖ lékař Jevgenij Botkin
- ❖ komorná Anna Demidova
- ❖ komorník Alexej Trupp
- ❖ kuchař Ivan Charitonov



noc  
16.-17.7.1918





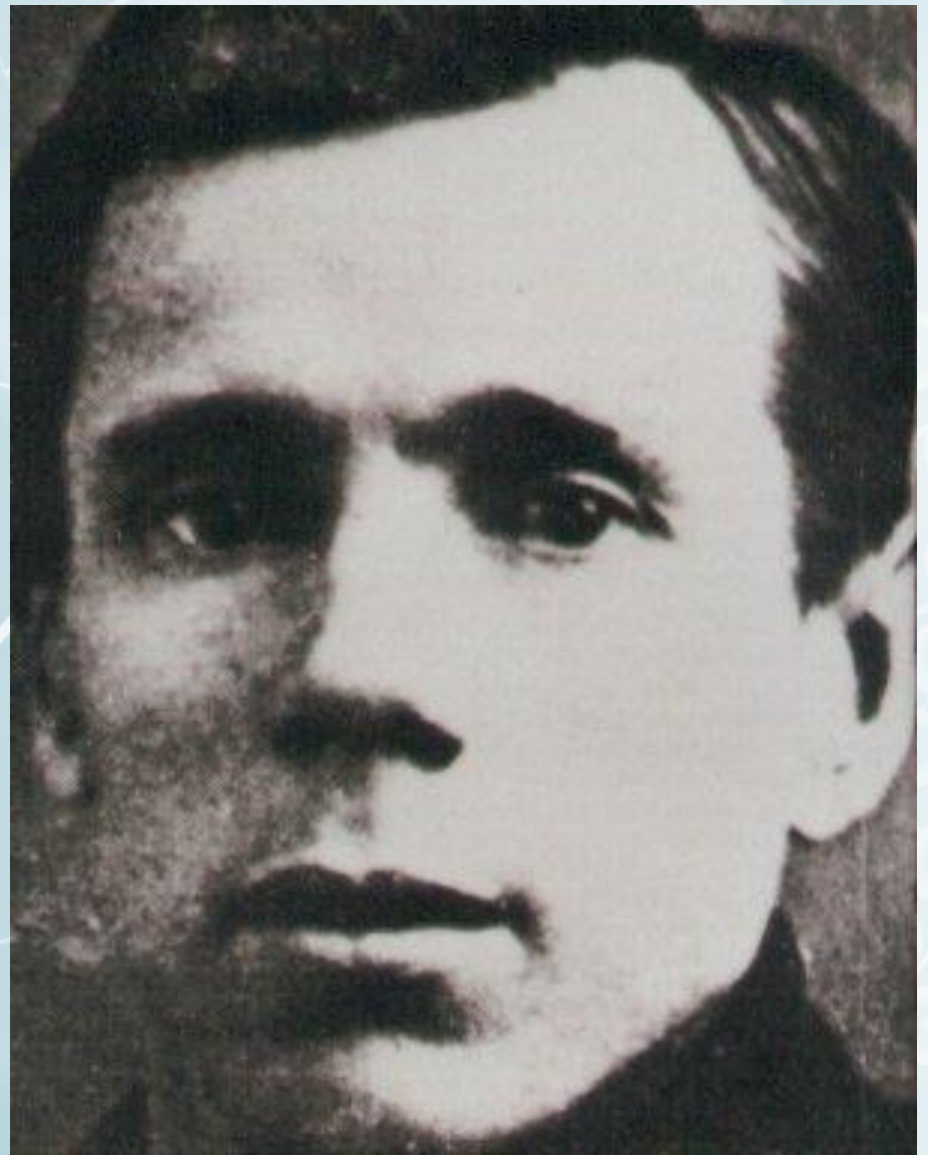
Остатки найденных в камне вещей, принадлежавших  
ВЕЛИКОМУ КНЯЗЮ в г.Вяткирмбурге, в доме  
Ипатьева. / Из реликвий сохранившихся у ген.-  
лейтенанта М.К.Дитерихса /

Остаток зубной сетки, домино, кусочек чашки,  
шпильки, булавка, кусочек металлического сплава,  
серебряная брошка от туфельки с алмазиками,  
сапожный гвоздь, серебряная иконка "Образ Божьей  
Матери Козельцанской", кусочек сожженной материи.





*Anna Anderson*  
*(Franziska Schanzkowska)*



*Vasilij Filatov*



**Alexander Avdonin**  
1979 objevil s přítelem Ryabovem hrob č. 1





**lebky vyzdvižené Avdoninem a Ryabovem**



**odkrytí hrobu v r. 1991**



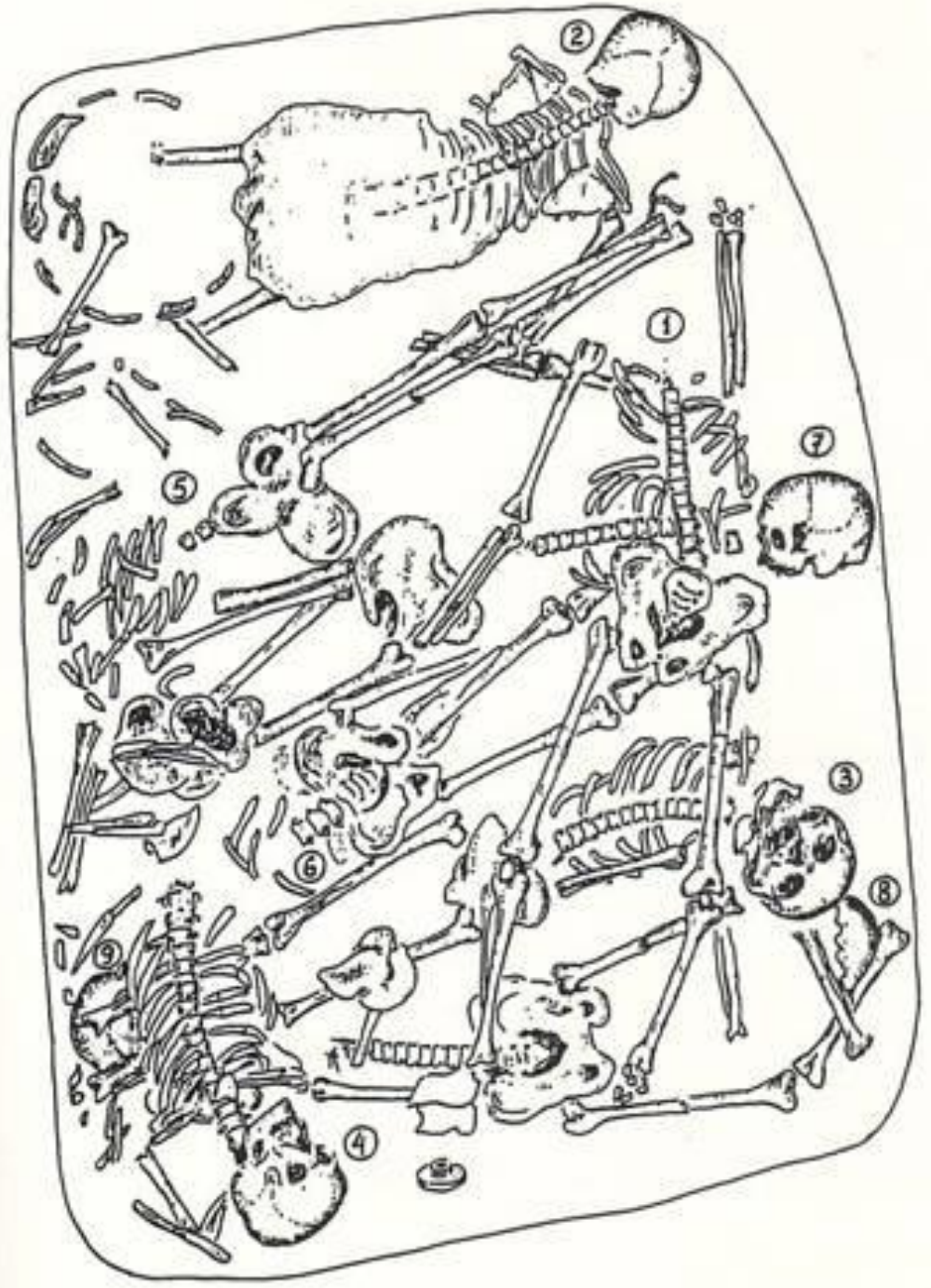
**vyzvednutí kosterních nálezů - r. 1991**

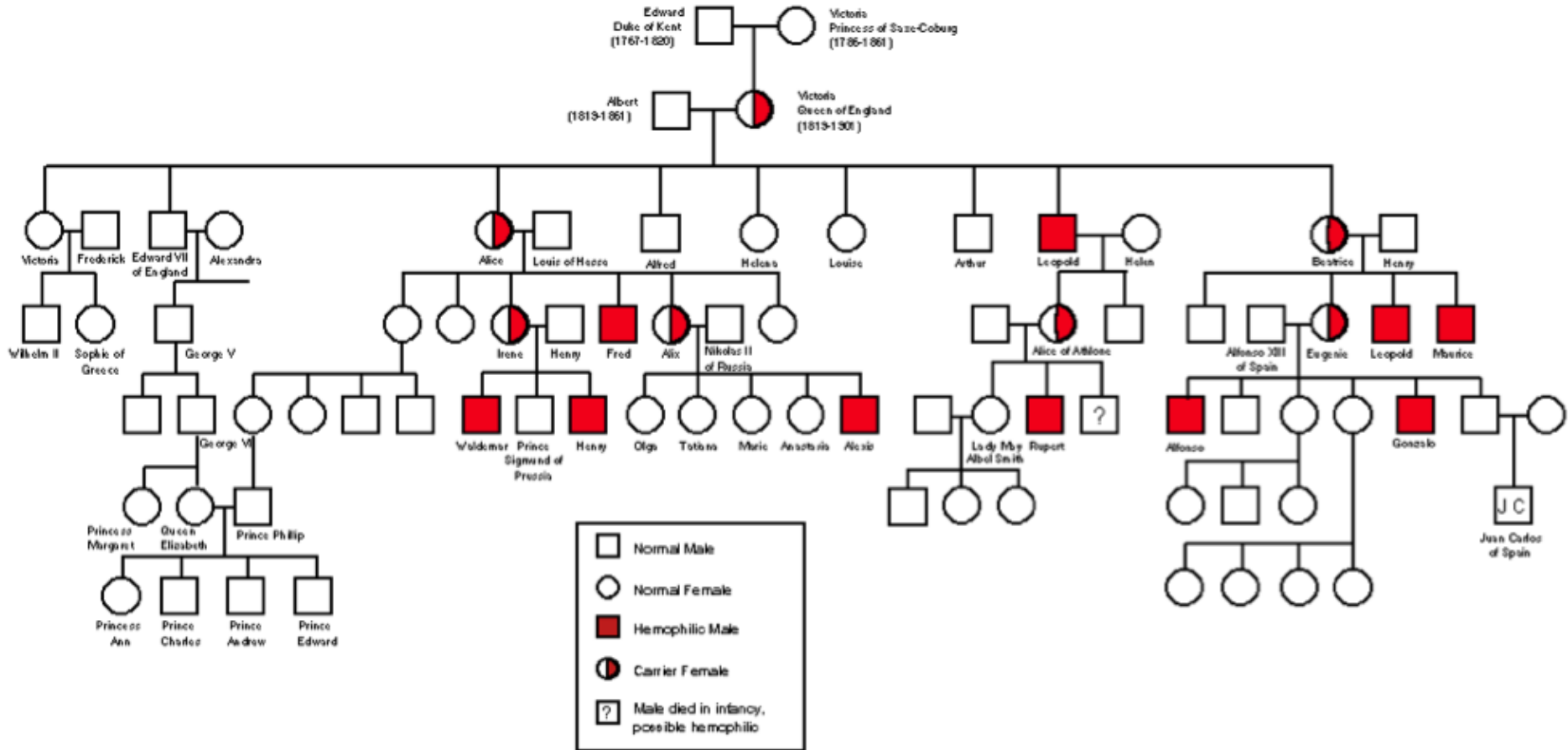


170683271

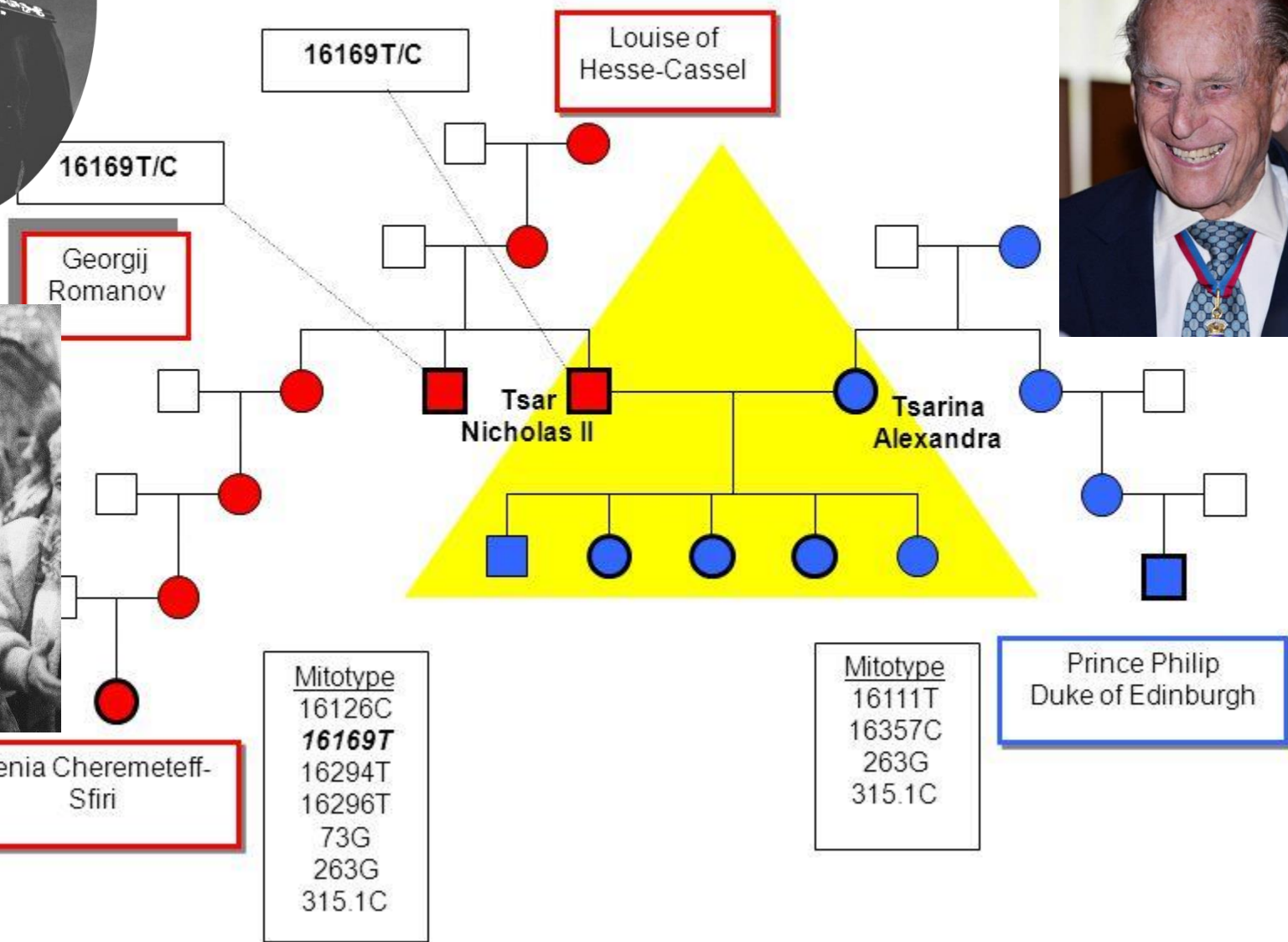
gettyimages®  
SVF2

- 1. ?
- 2. ?
- 3. ?
- 4. ?
- 5. ?
- 6. ?
- 7. ?
- 8. ?
- 9. ?





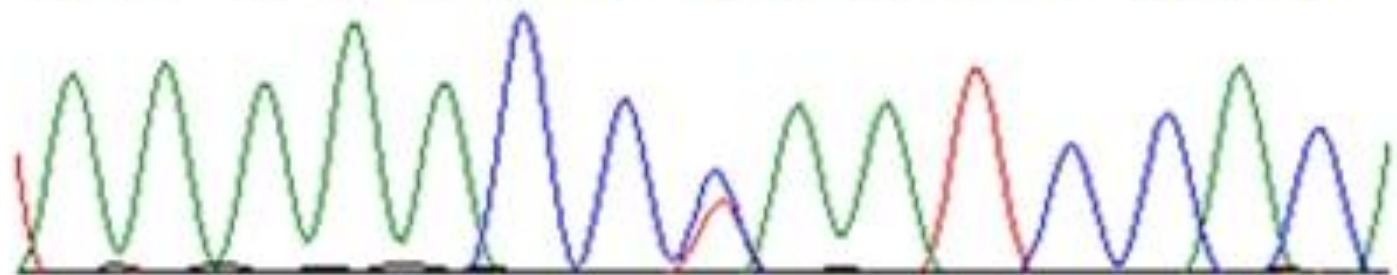
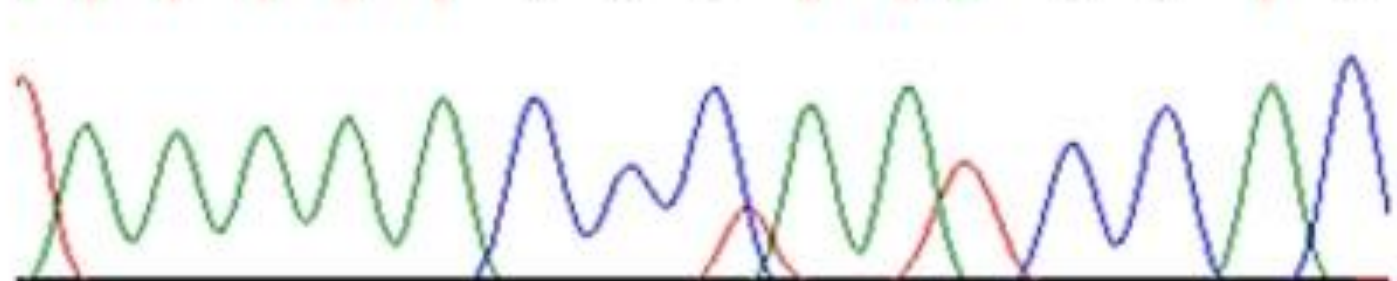
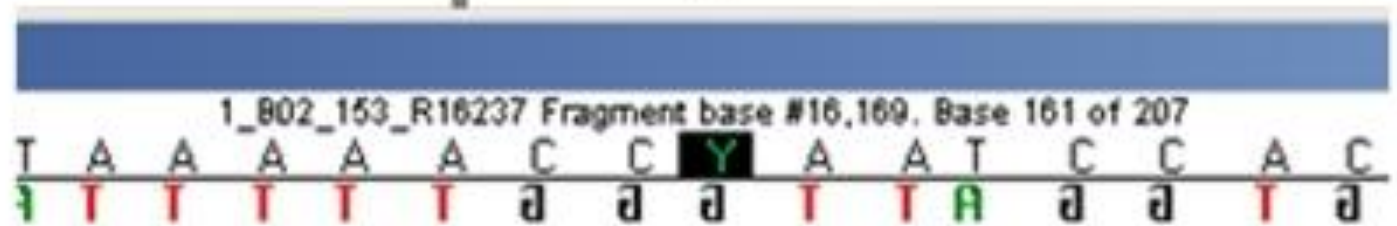
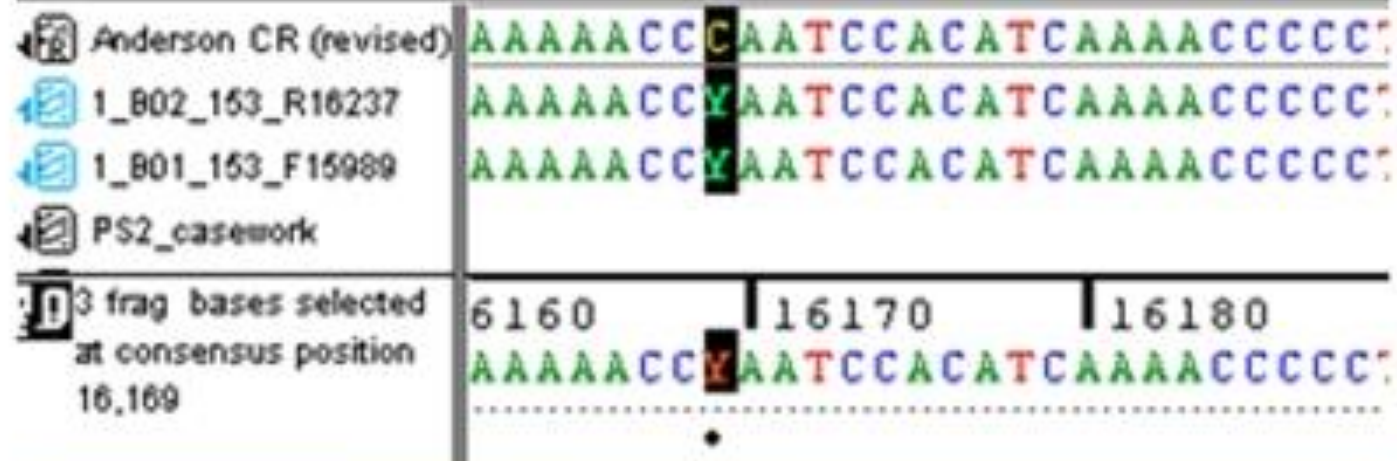
# Lineage of Romanov Family



c DNA Typing

John M. Bu

A.







**atentát 1891, Japonsko**  
**košile uložena v Ermitáži**

AC\_000021

C A T A A A A A C C C A A T C C A C A T

18189 C/T

\*

Archival  
Nicholas II  
bloodstain

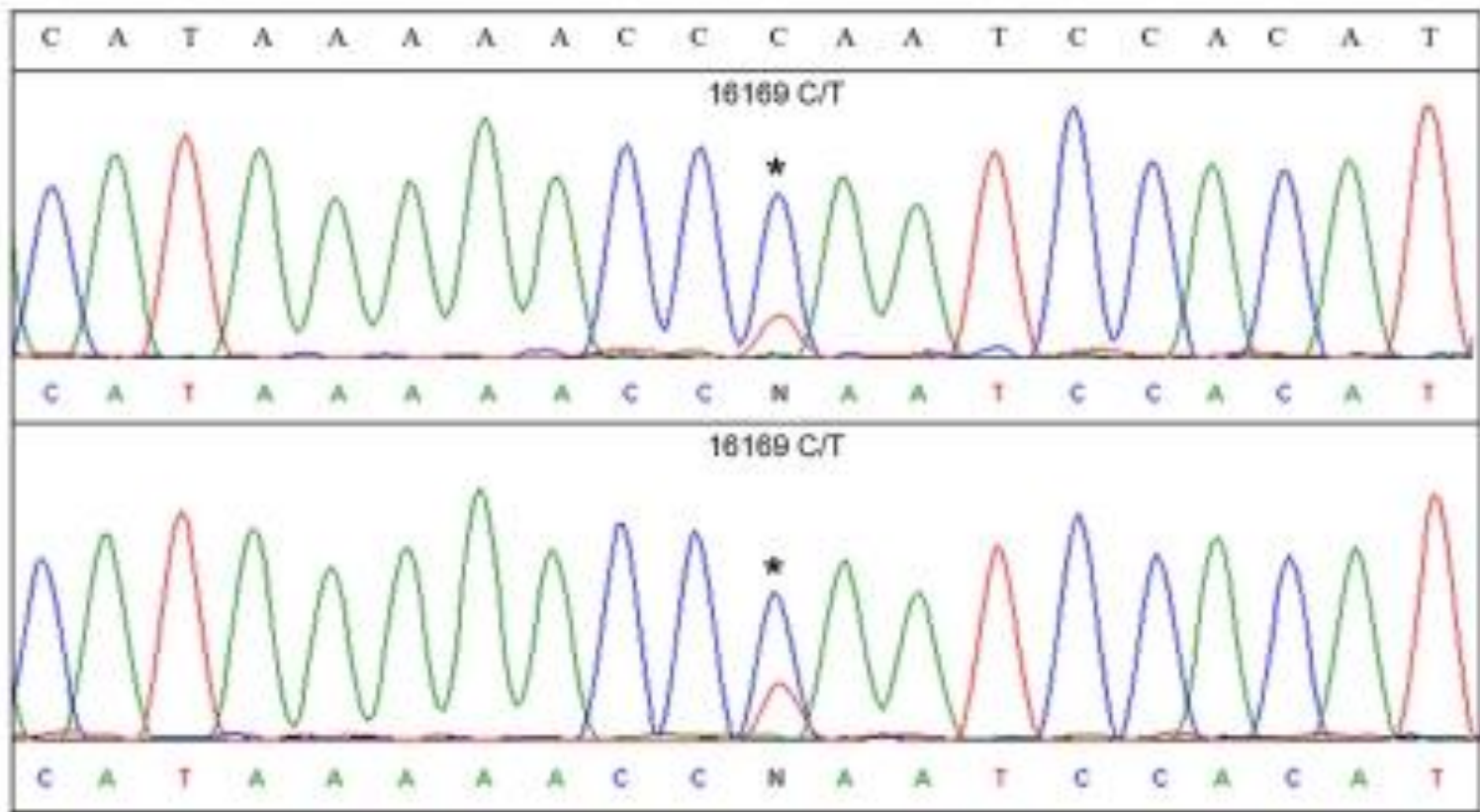
C A T A A A A A C C N A A T C C A C A T

18189 C/T

\*

N 4-46  
bone

C A T A A A A A C C N A A T C C A C A T



car Mikuláš II.

carevna Alexandra

carevič Alexej

Olga

Maria

Anastasia

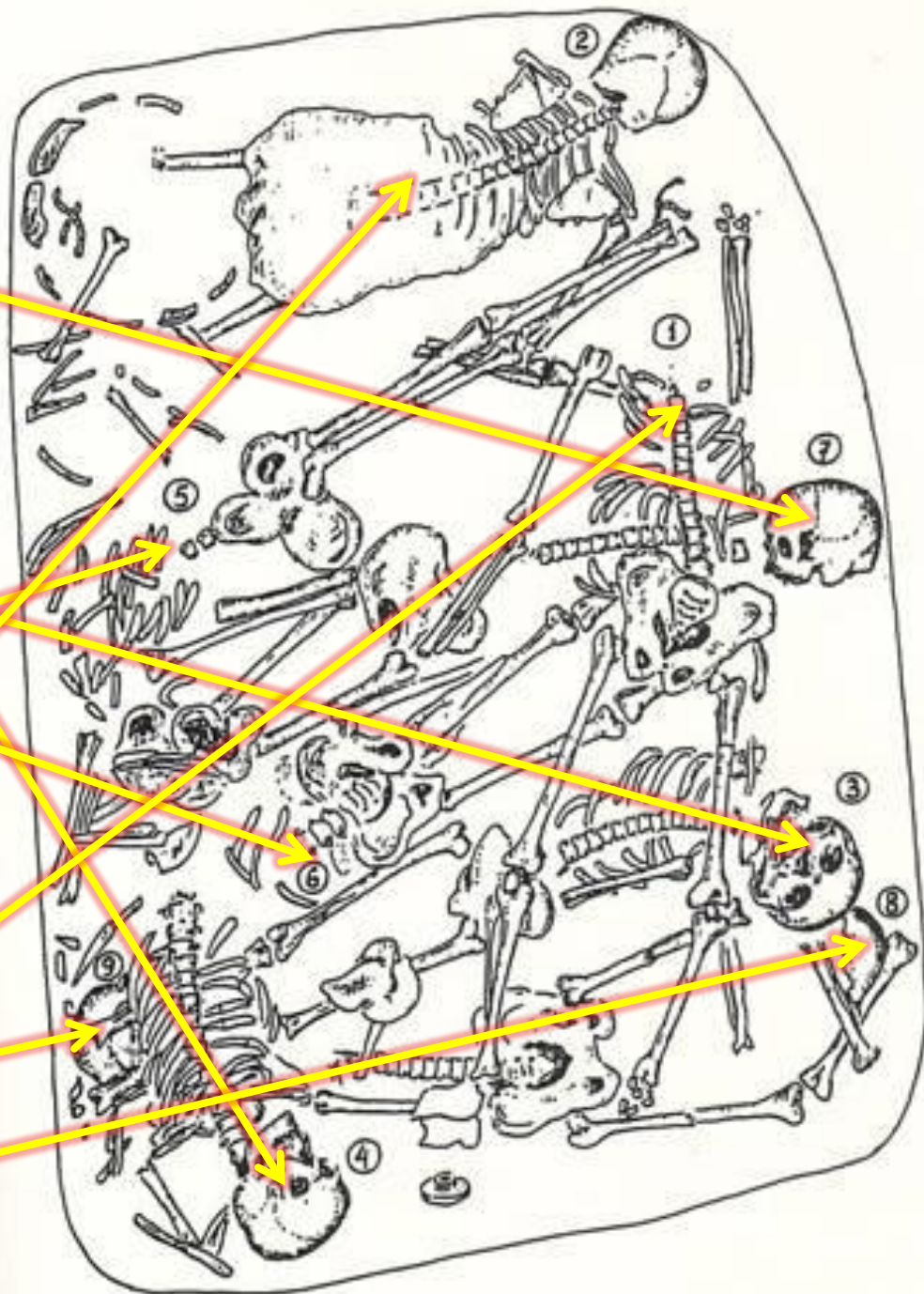
Tatiana

lékař Jevgenij Botkin

komorná Anna Demidova

komorník Alexej Trupp

kuchař Ivan Charitonov





**Tsar Nicholas II**



**Empress  
Alexandra  
Feodorovna**



**Dr. Eugene  
Botkin**



**Olga  
Nikolaevna**



**Tatiana  
Nikolaevna**



**Anastasia  
Nikolaevna**

**Maria**

**Alexandra Fjodorovna**



**Olga**

**Mikuláš II.**

**Anastasia**

**Tatiana**

**Alexej**



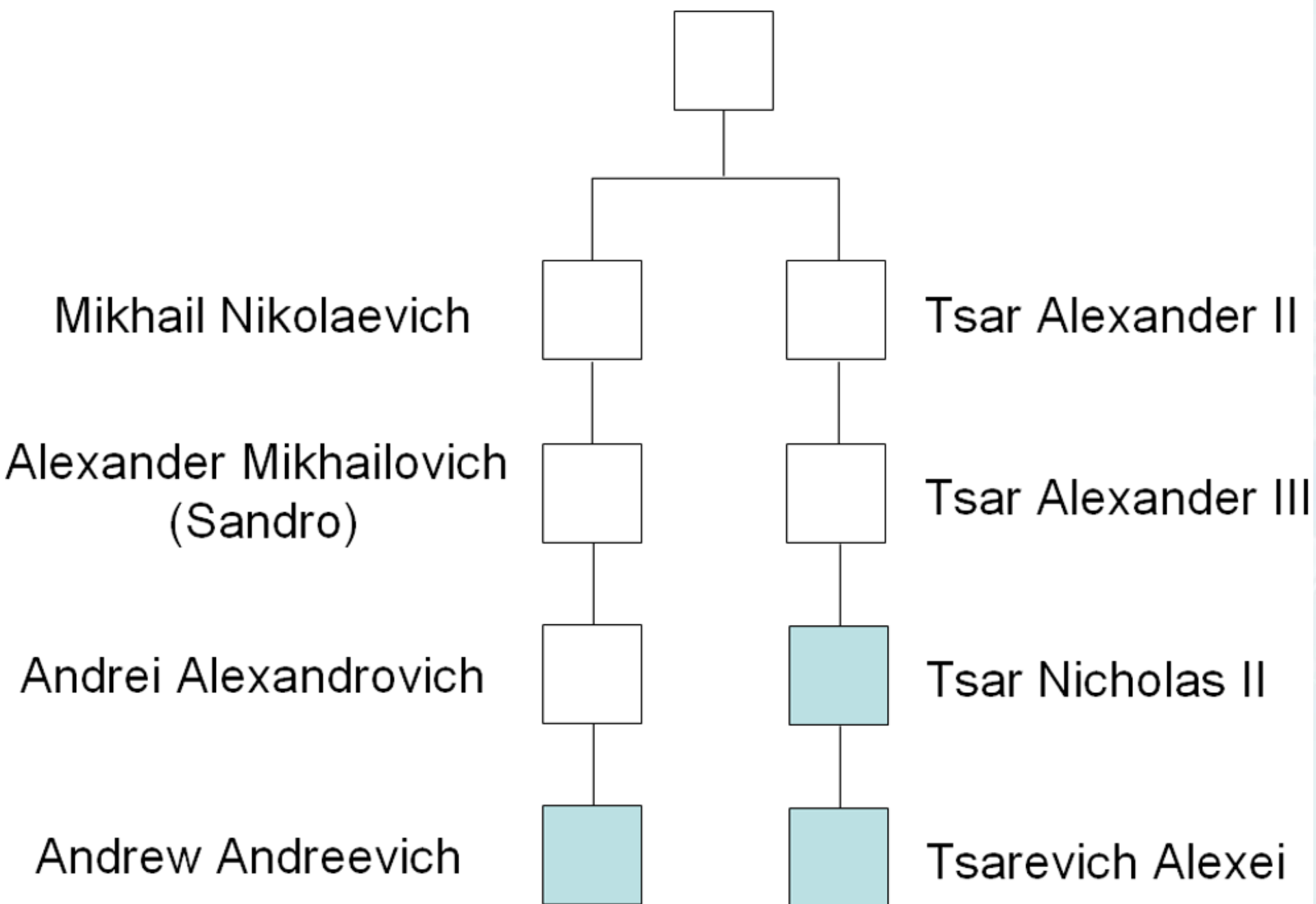
„místo 2007“



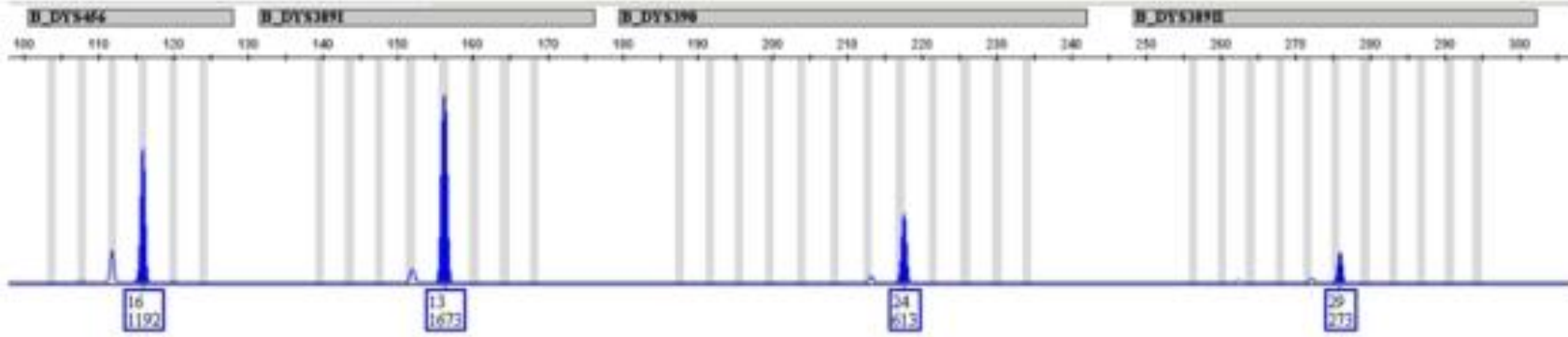
**„místo 2007“ – kosterní ostatky a artefakty**



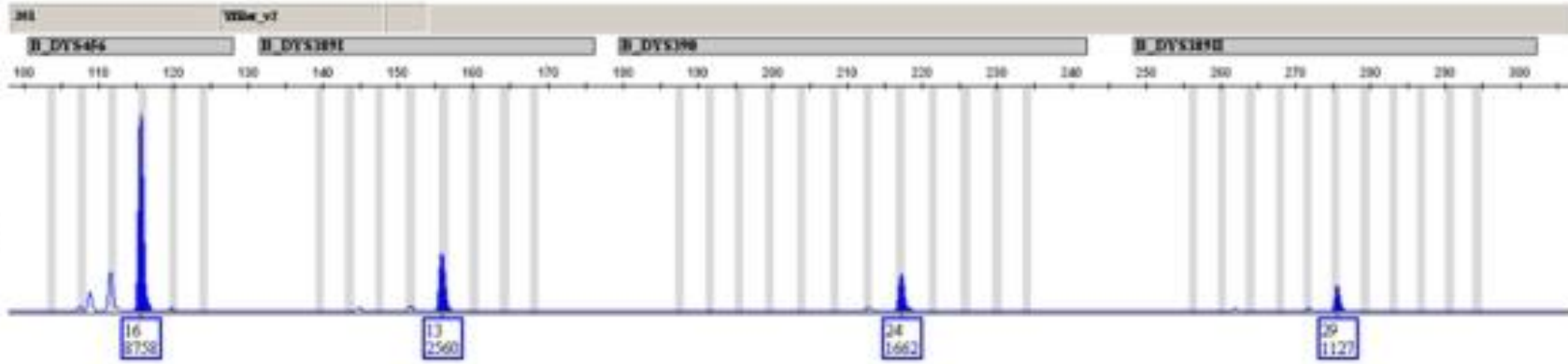
# Tsar Nicholas I



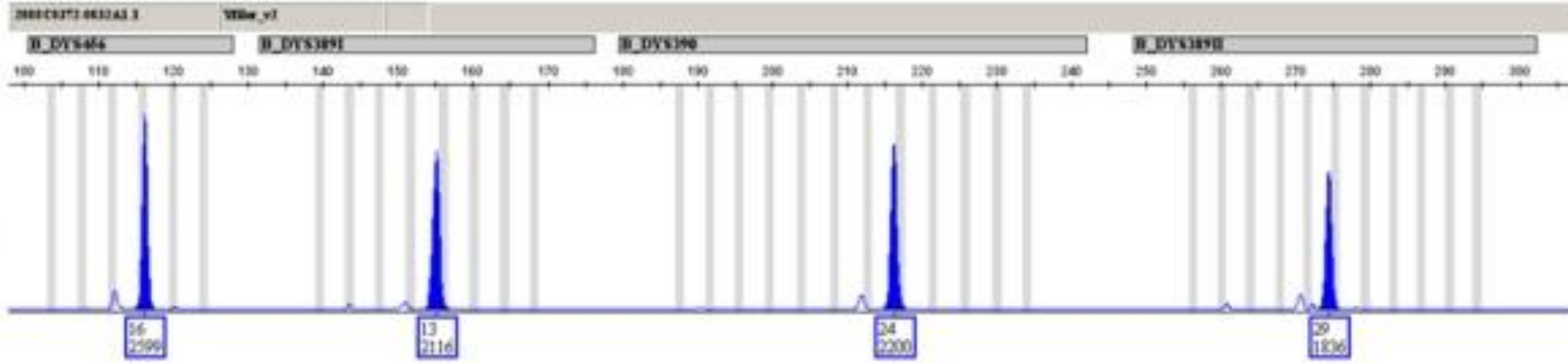
Alexei



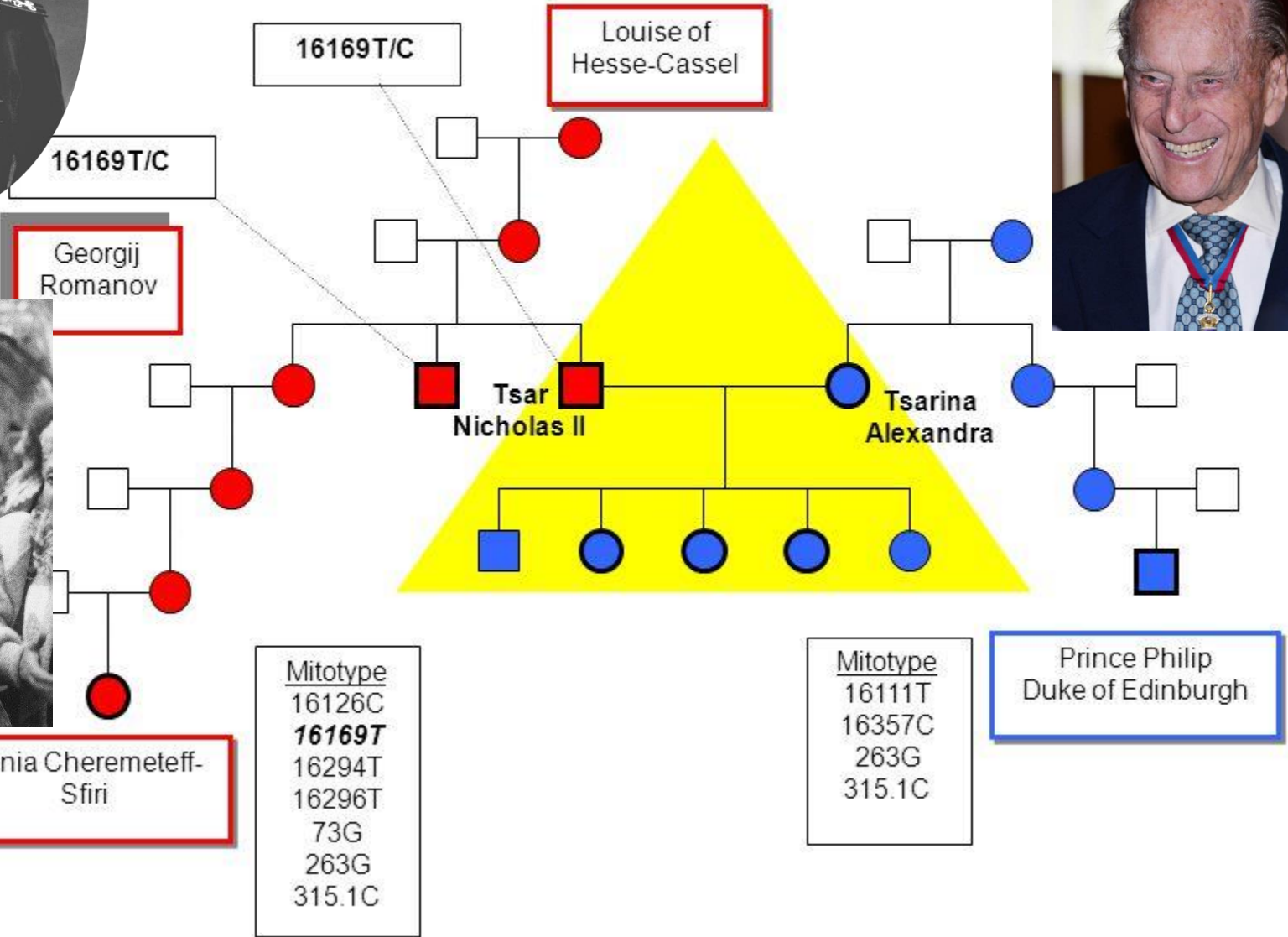
Tsar  
Nicholas II



Andrew  
Romanov



# Lineage of Romanov Family



c DNA Typing

John M. Bu



Color by Klimbim

29 июля 2007 года  
в этом месте обречена жизнь  
Цесаревича Алексея и  
великой княжны Марии





**Tatiana ve  
šťastných časech...**



**Sněhová koule**

**a**

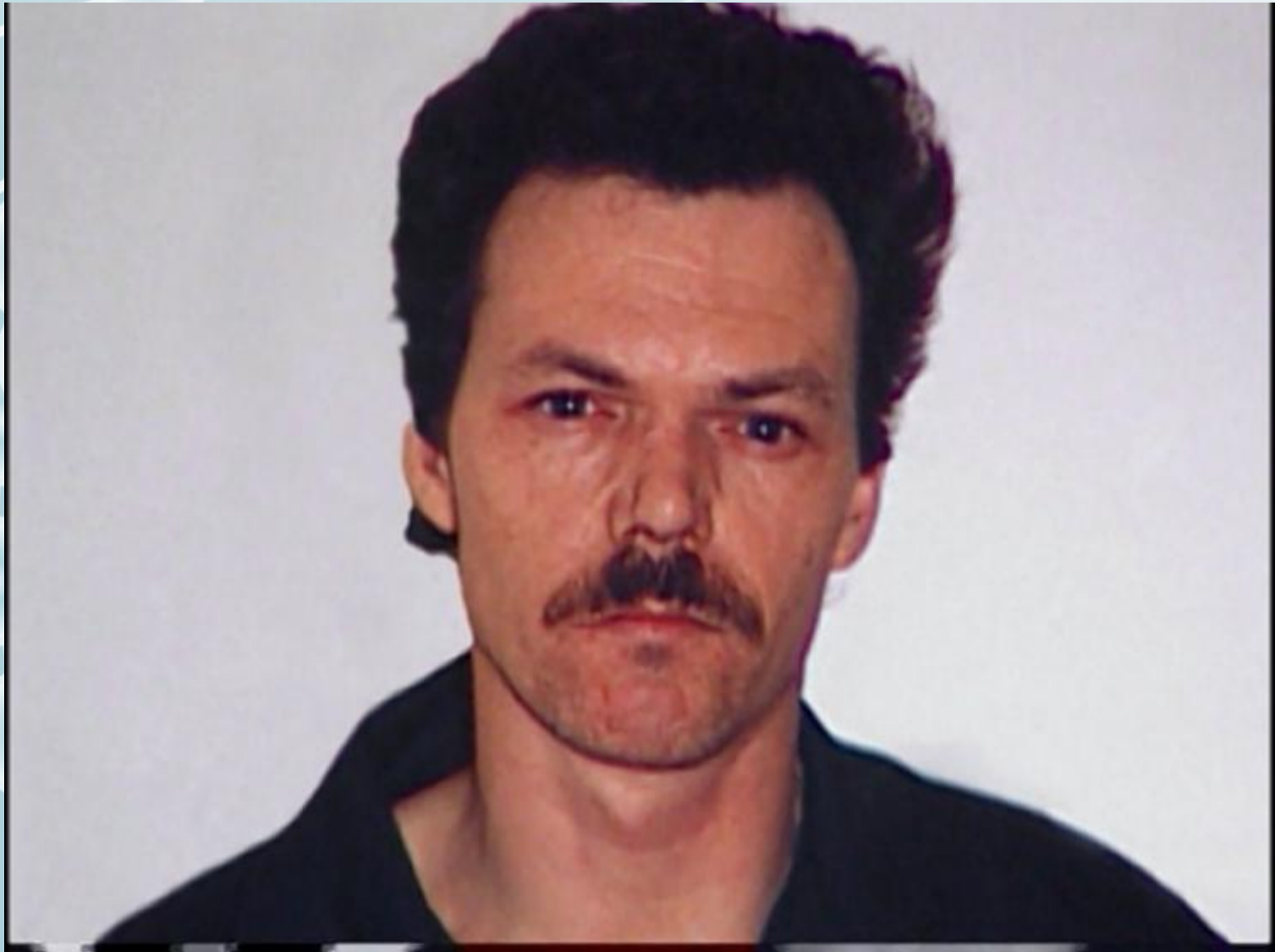
**Pod dubem, za dubem...**



**Shirley Duguay (32)**



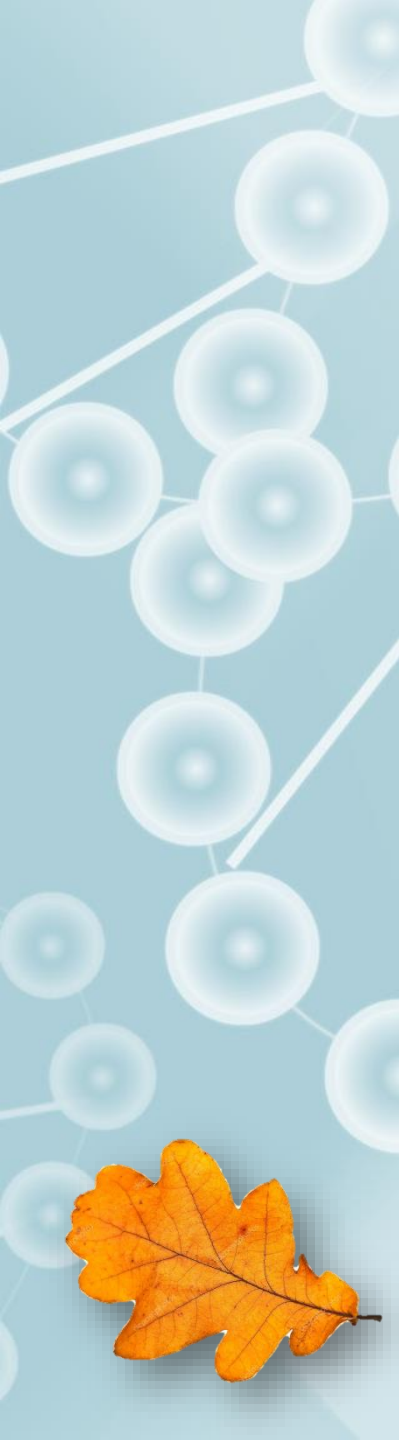




**Douglas Beamish**



kočička „Snowball“



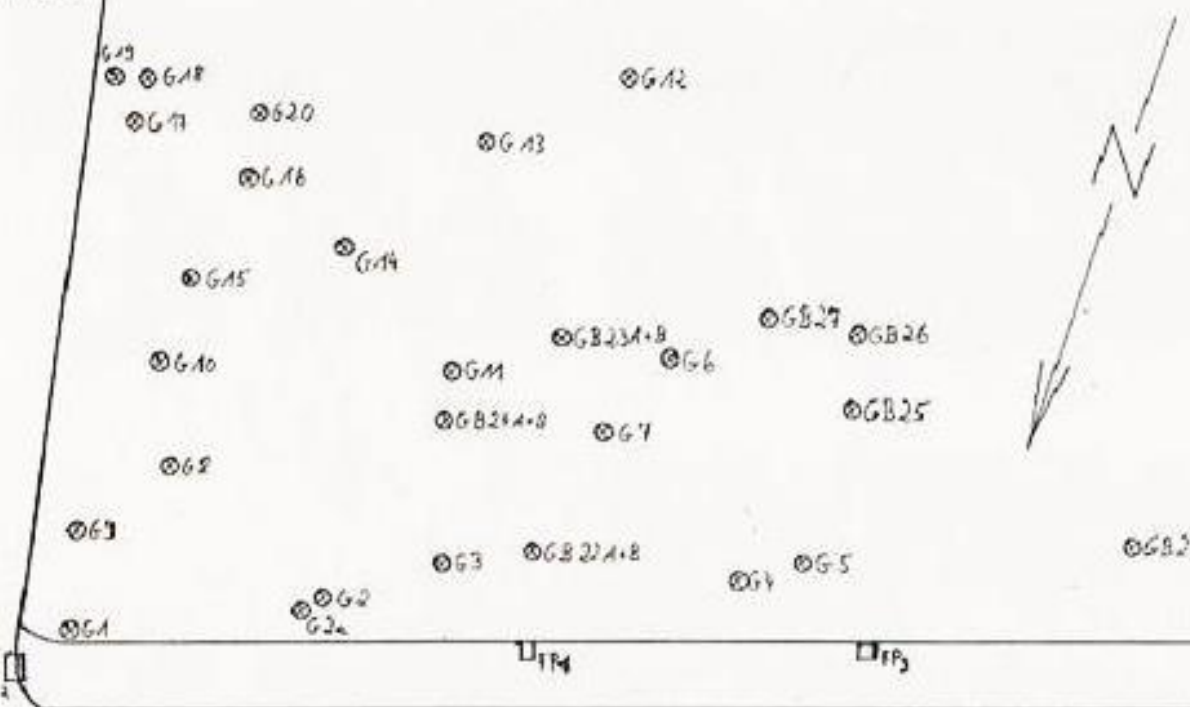
	Baun	STR1		STR2		STR3		STR4		STR5		STR6	
		AG 36	AG 35	AG 1/5	AG 1/5	AG 9	AG 9	AG104	AG104	MSQ13	MSQ13	MSQ4	MSQ4
comp	G08	206	222	164	176	190	198	162	184	215	221	215	230
comp	G09	206	218	170	178	196	202			221	227	211	215
comp	G10a	212	212	170	178	196	202	182	188	221	223	211	212
comp	G10b	212	212	170	178	196	202	182	188	221	223	211	212
comp	G11	208	212	170	172	206	206	160	182	215	223	211	217
comp	G12	212	230	170	176	192	192	182	190	215	223	207	217
comp	G13	220	220	170	176	202	206	178	190	215	223	209	218
comp	G14	212	212	170	172	190	206	164	182	197	221	217	218
comp	G15	206	208	158	178	194	206	180	182	221	223	211	218
comp	G16	208	208	158	178	194	206	180	182	221	223	211	218
comp	G17	218	220	158	176	194	202	182	210	189	221	211	217
comp	G18	218	218	170	180	190	200	182	198	223	229	207	212
comp	G19	208	212	170	170	198	202	182	200	197	197	215	218
comp	G20	212	218	178	178	192	200	174	198	215	223	218	218
comp	G21	214	220	160	176	200	202	208	210	189	215	211	218
comp	S01	214	230	170	176	192	200	162	198	221	221	218	220
comp	S03	216	216	170	172	192	192	190	190	215	223	218	218
comp	S04	208	220	158	170	202	206	160	206	197	221	207	209
comp	S05	206	218	160	176	192	202	164	182	223	223	207	209
comp	S06	208	230	160	172	194	204	160	212	215	221	209	218
comp	S07	220	220	172	176	198	206	160	180	221	225	211	220
comp	S08	216	216	158	170	198	208	178	182	215	221	218	230
comp	S09	206	212	172	176	190	192	160	212	197	215	209	218
comp	S10	<b>218</b>	<b>220</b>	<b>176</b>	<b>180</b>	<b>190</b>	<b>196</b>	<b>202</b>	<b>202</b>	<b>215</b>	<b>215</b>	<b>218</b>	<b>218</b>
comp	S11	212	214	170	176	190	198	170	182	215	215	211	218
comp	S12	214	220	172	174	192	196	180	190	191	215	212	215
comp	S13	208	230	176	178	194	196	204	204	215	221	209	218
comp	S14	206	218	176	176	202	206	182	210	215	223	211	218
comp	S15	208	220	176	178	190	204	160	184	221	223	218	218
comp	S16	206	212	170	172	190	192	174	180	189	215	218	218
comp	S17	218	220	170	172	192	196	164	178	223	223	207	207
comp	S18	212	220	176	176	198	202	178	190	197	225	212	218
comp	S19	206	206	158	176	192	196	186	212	197	223	211	217
comp	S20	212	218	176	176	190	208	168	180	223	229	217	217
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Nr.92

### Legende

- = Festpunkte
- ⊗ = Laterne



Grünstreifen

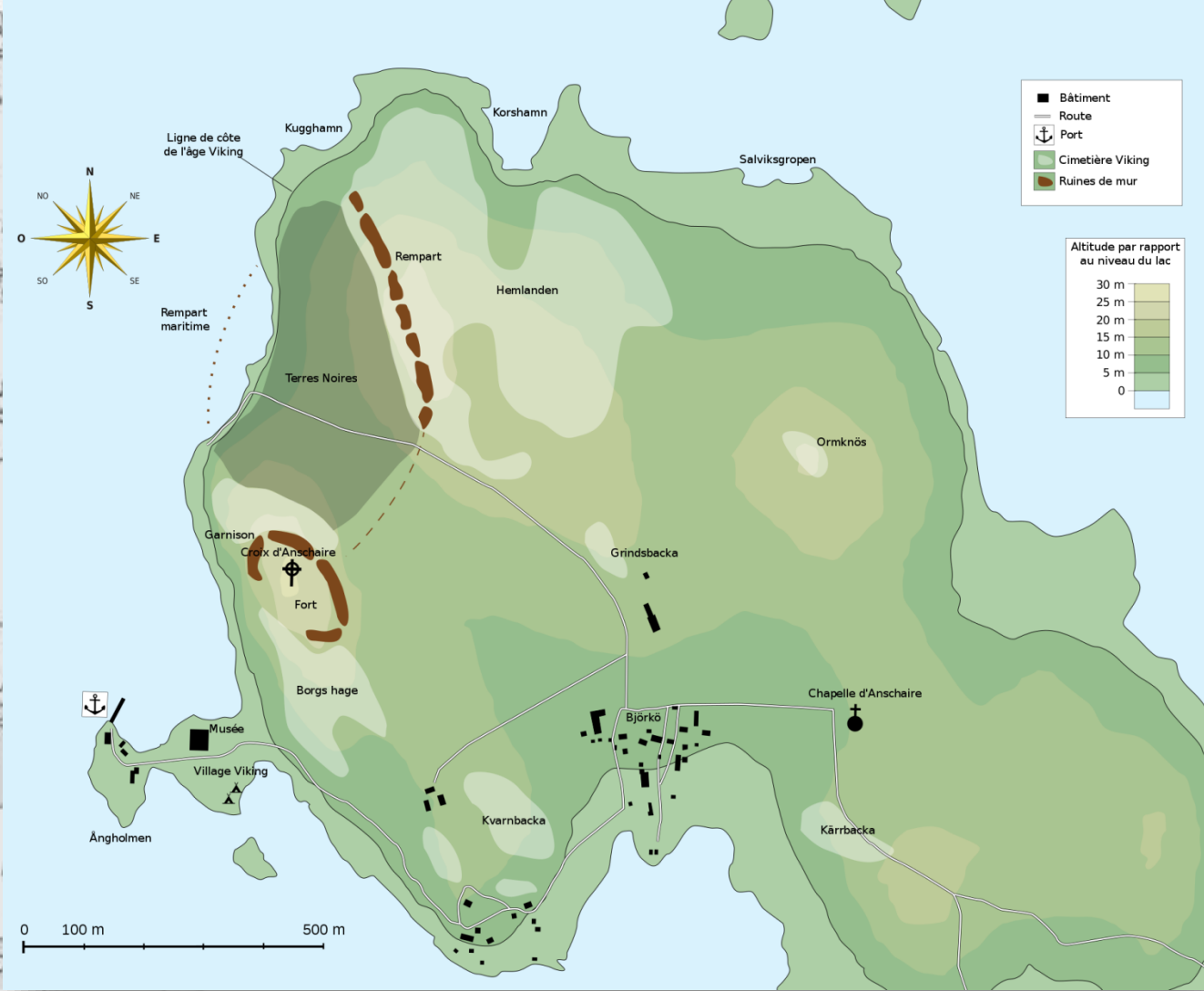


Radweg

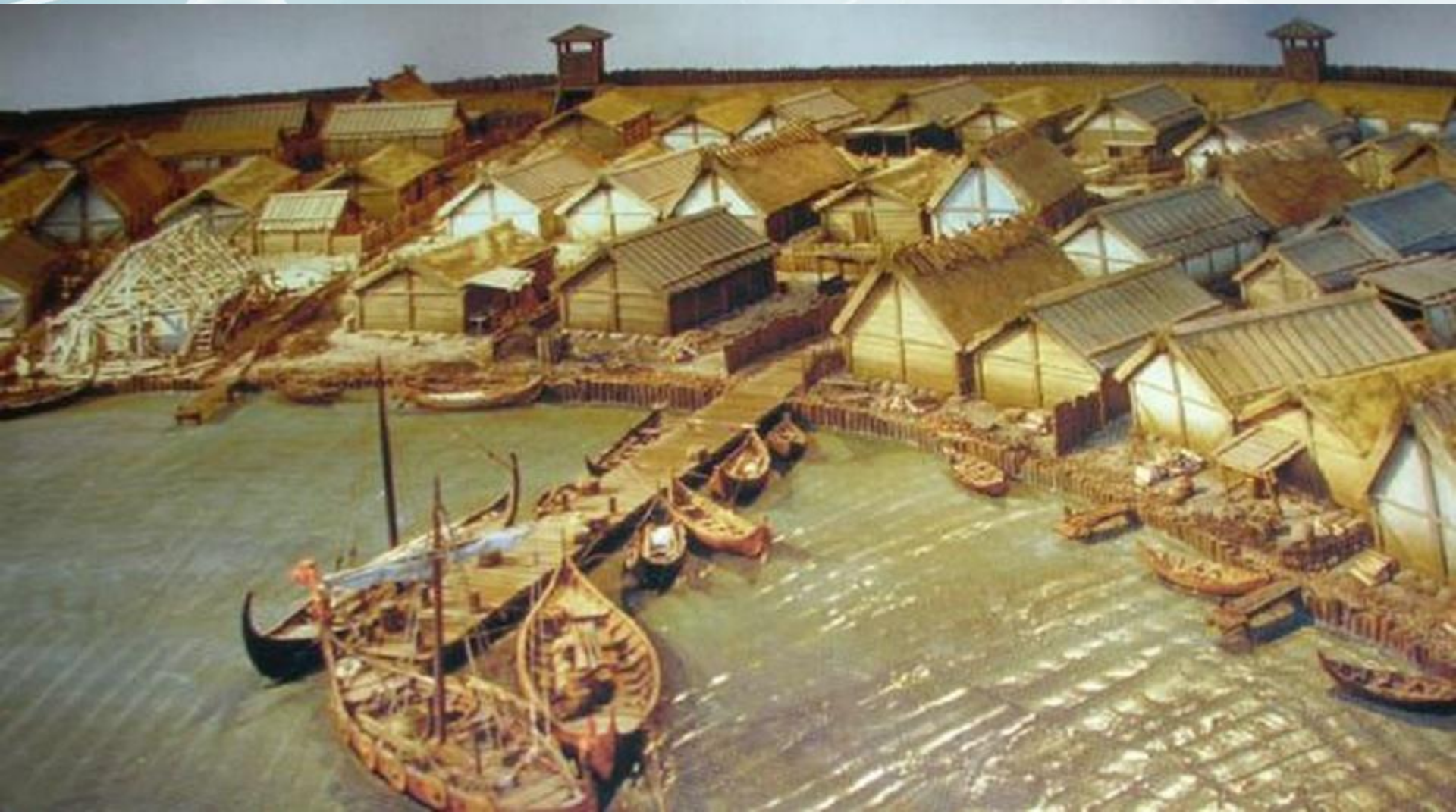




**Vikingský náčelník,  
tyniecká kráska  
a smrt Trójanky**












Birka, hrob Bj581





BRIEF COMMUNICATION

# A female Viking warrior confirmed by genomics

Charlotte Hedenstierna-Jonson , Anna Kjellström, Torun Zachrisson, Maja Krzewińska, Veronica Sobrado, Neil Price, Torsten Günther, Mattias Jakobsson, Anders Götherström, Jan Storå

First published: 8 September 2017 [Full publication history](#)

DOI: 10.1002/ajpa.23308 [View/save citation](#)

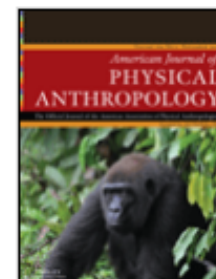
Cited by (CrossRef): 1 article  [Check for updates](#) |  [Citation tools](#) ▼

 score 2,604

[Funding Information](#)

Funding information Swedish Research Council (VR) & Riksbankens jubileumsfond (RJ).

Early View



[Browse Early View Articles](#)  
Online Version of Record  
published before inclusion  
in an issue

## Abstract

### Objectives

The objective of this study has been to confirm the sex and the affinity of an individual buried in a well-furnished warrior grave (Bj 581) in the Viking Age town of Birka, Sweden. Previously, based on the material and historical records, the male sex has been associated with the gender of the warrior and such was the case with Bj 581. An earlier osteological classification of the individual as female was considered controversial in a historical and archaeological context. A genomic confirmation of the biological sex of the individual was considered necessary to solve the issue.



O. + 13' N.



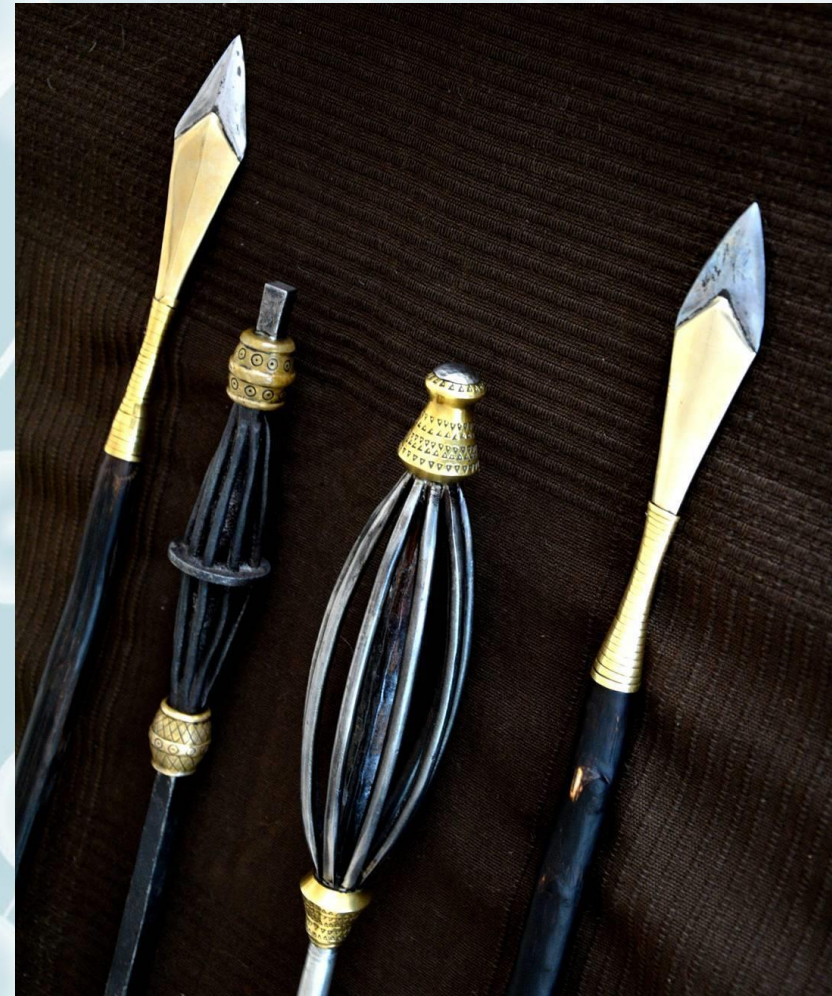


Birka, hrob Bj959



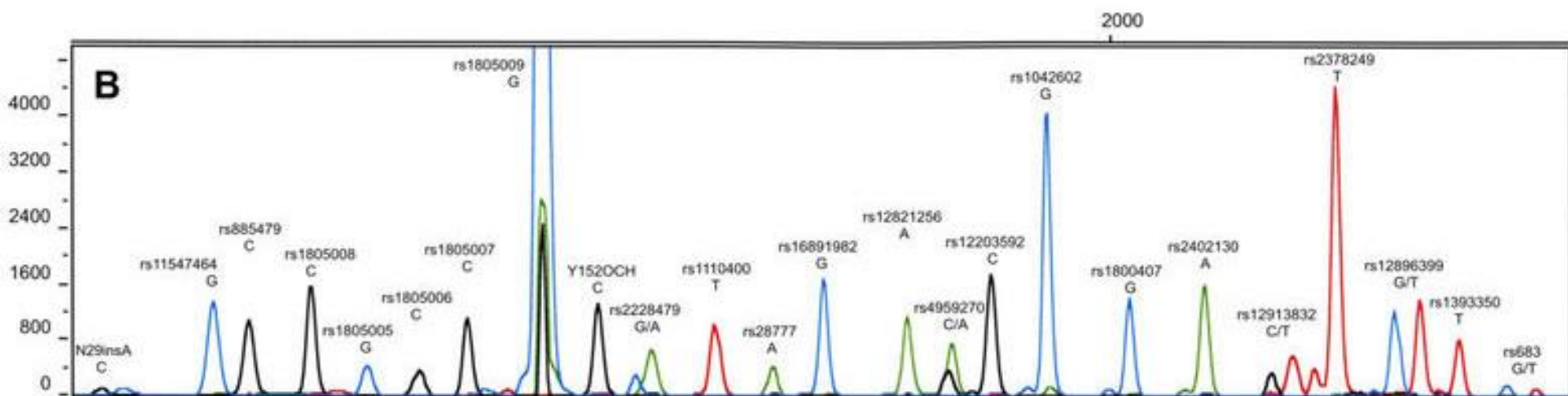


Dánsko,  
Trekroner-Grydehøj,  
hrob A505





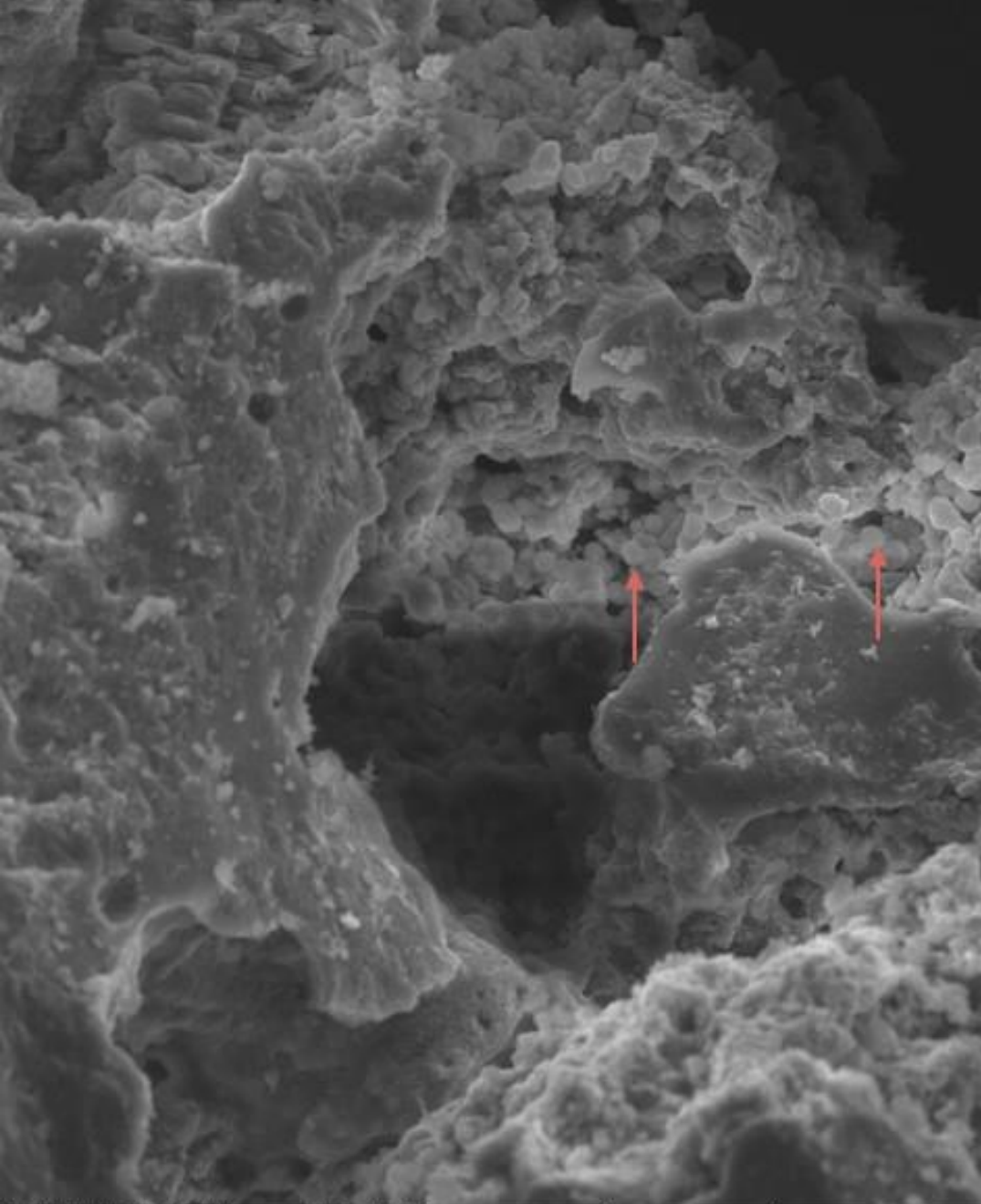
**benediktinský klášter Tyniec**







*Gardrenella vaginalis*  
*Staphylococcus saprophyticus*



SEM HV: 20.00 kV  
View field: 144.5  $\mu\text{m}$   
SEM MAG: 2.00 kx

WD: 15.28 mm

Det: SE

Date(m/d/y): 06/02/14



20  $\mu\text{m}$





**Děkuji za pozornost!**