

Zakład Biologii Ewolucyjnej Człowieka

Instytut Antropologii
Wydział Biologii UAM

Zakład Biologii Ewolucyjnej Człowieka

Instytut Antropologii



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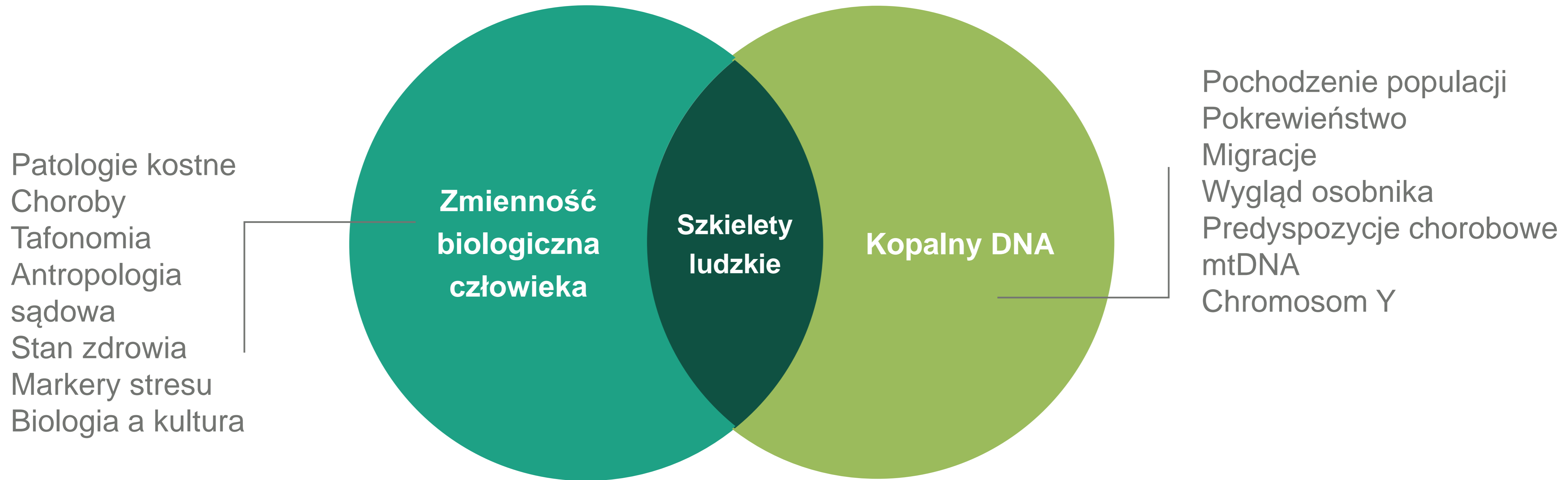
Mgr Kinga Bukowska

Mgr Maciej Chyleński

“Nothing in Biology Makes Sense Except in the Light of Evolution” – T. Dobzhansky

Nasze badania

Zakład Biologii Ewolucyjnej Człowieka



Nasze laboratoria i pracownie

Zakład Biologii Ewolucyjnej Człowieka



Laboratorium kopalnego DNA



Laboratorium Osteologiczne



Pracownia skanowania 3D

Projekty badawcze

Zakład Biologii Ewolucyjnej Człowieka



NARODOWE CENTRUM NAUKI



Scytowie z rejonu Morza Czarnego: czy cechy biologiczne stepowych wojowników wskazują na występowanie zjawiska rekrutowania do armii? (NCN Miniatura)



Spółeczność, tożsamość, rytuał. Interdyscyplinarny wzorzec postępowania badawczego w studiach nad cmentarzyskami ciałopalnymi ludności kultury łużyckiej (NCN Opus)



Rekonstrukcja kulturowego i biologicznego wymiaru tożsamości wojownika w społecznościach kultury ceramiki sznurowej z Wyżyny Małopolskiej (NCN Preludium)



Migracje i pokrewieństwo w Europie Środkowo-Wschodniej w pierwszej połowie II tys. przed Chr. (NCN Opus)



Rozkwit czy upadek? Społeczeństwa Kujaw od późnego neolitu do środkowej epoki brązu w świetle analiz archeologicznych i specjalistycznych (NCN Sonata)



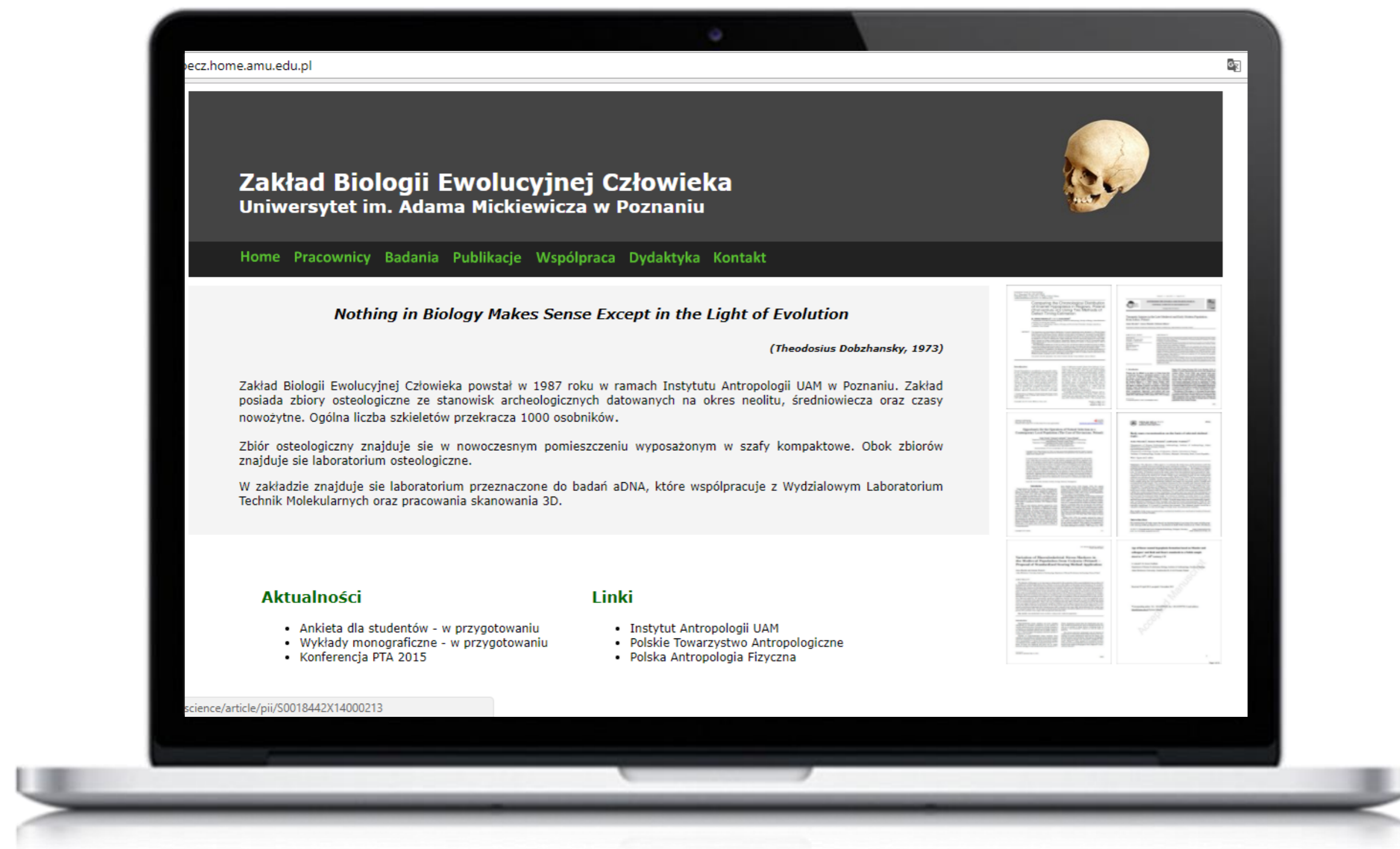
Dynastia i społeczeństwo państwa Piastów w świetle zintegrowanych badań historycznych, antropologicznych i genomicznych (NCN Symfonia)

Więcej informacji o nas na naszej stronie internetowej

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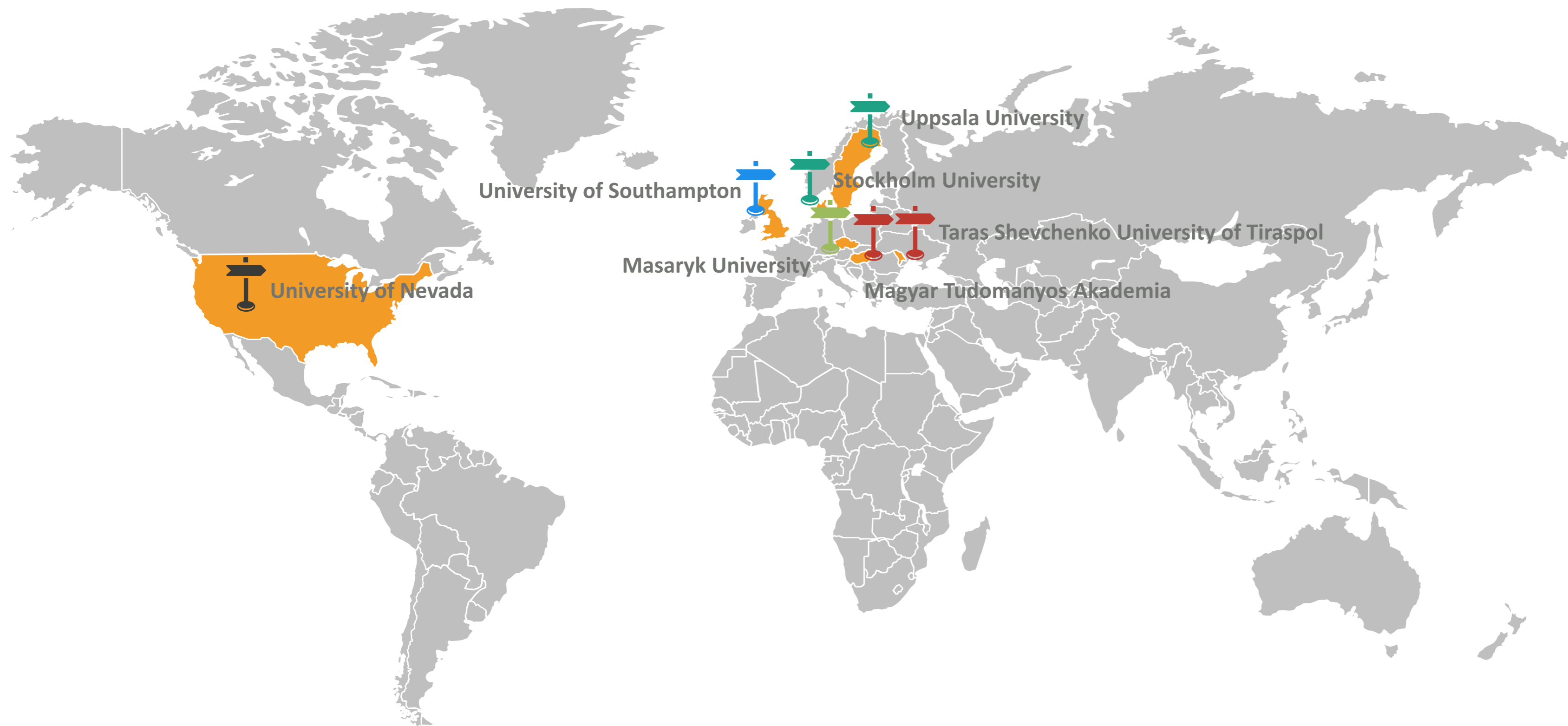
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Jesteśmy też na

The Facebook logo, consisting of the word "facebook" in white lowercase letters on a dark blue rectangular background.The ResearchGate logo, featuring the word "ResearchGate" in white text on a teal rectangular background.The Academia.edu logo, which includes a white icon of an open book and the text "Academia.edu" in white, with the tagline "follow research" in smaller white text below it, all on a dark blue background.

Nasi współpracownicy

Zakład Biologii Ewolucyjnej Człowieka




- aDNA lab
- Anthropological lab
- Archaeological lab
- Statistics lab
- Stable isotope lab

Wybrane najnowsze publikacje

Zakład Biologii Ewolucyjnej Człowieka

RESEARCH ARTICLE Open Access



Late Danubian mitochondrial genomes shed light into the Neolithisation of Central Europe in the 5th millennium BC

Maciej Chyleński^{2*}, Anna Juras¹, Edvard Ehler^{1,5}, Helena Malmström³, Janusz Piontek¹, Mattias Jakobsson³, Arkadiusz Marciniak² and Mirosława Dabert⁴

Abstract

Background: Recent aDNA studies are progressively focusing on various Neolithic and Hunter - Gatherer (HG) populations, providing arguments in favor of major migrations accompanying European Neolithisation. The major focus was so far on the Linear Pottery Culture (LBK), which introduced the Neolithic way of life in Central Europe in the second half of 6th millennium BC. It is widely agreed that people of this culture were genetically different from local HGs and no genetic exchange is seen between the two groups. From the other hand some degree of resurgence of HGs genetic component is seen in late Neolithic groups belonging to the complex of the Funnel Beaker Cultures (TRB). Less attention is brought to various middle Neolithic cultures belonging to Late Danubian sequence which chronologically fall in between those two abovementioned groups. We suspected that genetic influx from HG to farming communities might have happened in Late Danubian cultures since archaeologists see extensive contacts between those two communities.

Results: Here we address this issue by presenting 5 complete mitochondrial genomes of various late Danubian individuals from modern-day Poland and combining it with available published data. Our data show that Late Danubian cultures are maternally closely related to Funnel Beaker groups instead of culturally similar LBK.

Conclusions: We assume that it is an effect of the presence of individuals belonging to U5 haplogroup both in Late Danubian and the TRB. The U5 haplogroup is thought to be ancestral for HGs of Europe and the Funnel

BMC Evolutionary Biology

Chyleński et al. 2017

SCIENTIFIC REPORTS

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Diverse origin of mitochondrial lineages in Iron Age Black Sea Scythians

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Scythians were nomadic and semi-nomadic people that ruled the Eurasian steppe during much of the first millennium BCE. While having been extensively studied by archaeology, very little is known about their genetic identity. To fill this gap, we analyzed ancient mitochondrial DNA (mtDNA) from Scythians of the North Pontic Region (NPR) and successfully retrieved 19 whole mtDNA genomes. We have identified three potential mtDNA lineage ancestries of the NPR Scythians tracing back to hunter-gatherer and nomadic populations of east and west Eurasia as well as the Neolithic farming expansion into Europe. One third of all mt lineages in our dataset belonged to subdivisions of mt haplogroup U5. A comparison of NPR Scythian mtDNA lineages with other contemporaneous Scythian groups, the Saka and the Pazyryks, reveals a common mtDNA package comprised of haplogroups H/H5, U5a, A, D/D4, and F1/F2. Of these, west Eurasian lineages show a downward cline in the west-east direction while east Eurasian haplogroups display the opposite trajectory. An overall similarity in mtDNA lineages of the NPR Scythians was found with the late Bronze Age Srubnaya population of the Northern Black Sea

Scientific Reports

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Skeletal Evidence for Otitis Media in Mediaeval and Post-Mediaeval Children from Poland, Central Europe

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ABSTRACT In palaeopathological research, otitis media (OM) is a rarely reported disease, although it is one of the most common diseases of childhood, with potentially severe consequences resulting in physical and social impairment, or even death. The episodes of OM are often preceded by upper respiratory tract infections, though the aetiology of OM is multifactorial, with significant role of environmental factors. In archaeological skeletons, middle ear inflammation is identified as erosive lesions and new bone formation of auditory ossicles. The aim of this study was to examine the skeletal signs of OM in children from a mediaeval early urban site (Cedynia) and a post-mediaeval rural site (Slaboszewo) located on the territory of Poland. Among the entire sample (N = 435), ear bones were present in 99 skeletons. The total of 168 ossicles were examined. The general frequency of individuals with eroded ossicles was 47.5% (53.4% in Cedynia and 39.0% in Slaboszewo). In the total sample, 33.9% of ear bones showed pathological changes, with the incudes being most frequently affected. The frequency of altered ossicles was significantly higher in the early urban site than in the rural settlement (42.2% vs 25.9%, respectively; Fisher exact test, $p = 0.0339$). The children aged 0–3 years old tend to have a higher frequency of altered ear bones than the children aged 4–11 years old. The majority of the mastoid processes of the subadults with ear bone erosion show abnormal pneumatization pattern. The results indicate that the environmental and socio-cultural conditions in the stronghold likely made their inhabitants more prone to upper respiratory tract infections than the inhabitants of the village. A variety of factors may be responsible for this pattern, such as exposure to dust, environmental pollution, indoor pollution, wood smoke, occupation, population density, sanitation and quality of housing. Copyright © 2016 John Wiley & Sons, Ltd.

Key words: auditory ossicles; ear bones; Middle Ages; middle ear inflammation; palaeopathology; respiratory

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Osteoarchaeology

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Wybrane najnowsze publikacje

Zakład Biologii Ewolucyjnej Człowieka

Body size of young adult Polish college-age women born before, during, and after WWII

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Abstract

Objectives: The aim of this study was to compare the young adult body size of Polish female university students born before, during, and after WWII.

Methods: Age, height, and weight of 492 students measured between 1956 and 1972 were accessed from the Department of Anthropology archives (Adam Mickiewicz University, Poznań). The sample was divided into three birth year cohorts relative to WWII: before ($n = 120$), during ($n = 196$), and after ($n = 176$). Birth years spanned 1935 through 1952. BMI was calculated. Body size among birth cohorts was compared with age of the student and education level of the father as covariates (ANCOVA).

Results: The birth cohorts differed significantly in height ($P < .01$), but not in weight and BMI. Women born during WWII were shorter than women born before and after the war; heights of latter cohorts did not differ. The trend for weight was similar, but differences were not significant. Birth cohorts did not differ in BMI.

Conclusions: Young adult heights of women born during WWII were shorter than the heights of women born before and immediately after the war, although differences were relatively small.

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Original Research Paper

Investigating kinship of Neolithic post-LBK human remains from Krusza Zamkowa, Poland using ancient DNA

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ABSTRACT

We applied an interdisciplinary approach to investigate kinship patterns and funerary practices during the middle Neolithic. Genetic studies, radiocarbon dating, and taphonomic analyses were used to examine two grave clusters from Krusza Zamkowa, Poland. To reconstruct kinship and determine biological sex, we extracted DNA from bones and teeth, analyzed mitochondrial genomes and nuclear SNPs using the HID-Ion AmpliSeq™ identity panel generated on Illumina and Ion Torrent platforms, respectively. We further dated the material (AMS ¹⁴C) and to exclude aquatic radiocarbon reservoir effects, measures of carbon and nitrogen stable isotopes for diet reconstruction were used. We found

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Research

Łukasik et al. 2017

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TEMATYKA PRAC

- Czy radiografia i tomografia komputerowa wizualizacji kanałów korzeniowych zębów spowoduje uszczegółowienie badań kości z grobów ciała palnych? (praca licencjacka)

Opracowanie ma powstać na podstawie analizy literatury przedmiotu. Ma zawierać przegląd badań, opisy metod i zaprezentować poglądy badaczy stosujących te metody badawcze.

- Czy budowa ciała miała związek z długością trwania życia osobnika w średniowiecznych populacjach z Europy Środkowej? (praca magisterska)

Praca powstanie w oparciu o analizę statystyczną baz danych dotyczących pomiarów osteometrycznych szkieletów oraz danych dotyczących oceny wieku w chwili śmierci osobnika oraz analizę literatury epidemiologicznej, antropologicznej i medycznej niezbędną do zbudowania modelu analitycznego i modeli wyjaśniających. Temat mogą realizować dwie osoby.

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TEMATYKA PRAC

- Wpływ postępu cywilizacyjnego i zmian demograficznych na cechy biologiczne człowieka
- Linie Harrisa jako miernik stresu fizjologicznego
- Wpływ czynników genetycznych i środowiskowych na zachorowania na immunogenne odmiany nowotworów
- Regionalne zróżnicowanie sposobności do działania selekcji naturalnej

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TEMATYKA PRAC

- Zmiany patologiczne kości ludzkich
- Zastosowanie metod makroskopowych wykorzystywanych w antropologii sądowej do analizy ludzkich szczątków kostnych
- Szkieletowe wyznaczniki wprowadzania do diety dziecka pokarmów stałych
- Wzrastanie i rozwój dzieci i młodzieży w populacjach współczesnych i dawnych

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TEMATYKA PRAC

- Zróżnicowanie mitochondrialnego DNA i chromosomu Y w populacjach pradziejowych
- Analiza cech fenotypowych i predyspozycji chorobowych warunkowanych polimorfizmami pojedynczych nukleotydów
- Wykorzystanie metod wzbogacania w mitochondrialny i jądrowy DNA w badaniach kopalnego DNA
- Rekonstrukcja pokrewieństwa biologicznego w dawnych populacjach ludzkich

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TEMATYKA PRAC

- Biologia stepowych wojowników
- Tempo wzrastania a status społeczno-ekonomiczny młodzieży w populacjach współczesnych i dawnych

Zapraszamy

