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Science and Scholars in the Golden Age of Gdansk (16th–18th CC)

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Abstract: At the dawn of the modern age, Gdansk was one of the biggest cities in Middle – Eastern Europe. However, the scientific and intellectual tissue of the city had unfortunately been considerably poor, when confronted with such broad possibilities. A serious impulse for the development of science in Gdansk was brought by the Reformation in the third decade of the 16th century. When Gdansk was given a denominational privilege (1557), pastors and religious activists holding the titles of doctors of theology appeared among the local evangelical clergy. The most crucial impulse for the development of science in Gdansk was the establishment of a secondary school in 1558, at first a regular humanistic scholar particulare, and transformed into an academic gymnasium aspiring to semi particulare – higher school in 1580. A creating of own secondary school allowed the city to maintain a considerably high level of education. At the same time, it included its intellectual elites into the European exchange of ideas and knowledge. Gdansk had always been a step ahead of the rest of Poland in terms of acquiring scientific novelties. The town's intellectual potential was strengthened by having its own City Library (at the gymnasium), and later also many private collections. Numerous printing offices worked on behalf of authors and scientists. Gdansk truly was the capital of the printed book in this part of Europe.

Theology and philosophy had long been one of the most important faculties in the gymnasium in Gdansk. One of the most famous Gdansk's scholars was Bartholomaeus Keckermann who lived and worked at the turn of 16th and 17th CC. The Academic Gymnasium also became a place where certain scientific disciplines we tend to call modern were conducted. Philological sciences, including linguistics, were highly ranked there, and then history and historiography. Pure sciences also flourished in Gdansk in those days: astronomy, mathematics, medicine. There was also a scientific life outside of the gymnasium, which with each generation meant more and more for the intellectual entourage of Gdansk. Still, the highest renown from among the "non – academic" scholars in the second half of the 17th century was held by an astronomer Jan Heweliusz and a botanist Jakub Breyne.

The strong scientific entourage of the gymnasium, which at least until the 1780s preserved high standards of teaching, and the presence of a numerous group of "non – academic" scholars working in Gdansk by their own means, led to establishing in the 18th century new scientific centres, and above all, the first scientific societies in Poland. We can say, that scholars of the latter period were given the prestigious role of performers and propagators of the western European knowledge and trends in Poland, yet they would rarely enrich science and knowledge on the global forum.

Citation: Kościelak S, Science and Scholars in the golden age of Gdansk (16th – 18th CC). Eur J Transl Clin Med. 2018;1 (Suppl.3):1.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):2.

Medicine in Gdansk – Historical overview made by a writer

Pawel Huelle

Gdansk, Poland

Abstract: A short but multithreaded story about the meanders of medicine in 18th century Gdansk entwined with life of Joanna Schopenhauer (1766 – 1833). She was a bright observer and very unusual woman with unusual life, mother of the famous philosopher Artur Schopenhauer. The motifs about the city of Gdansk – enlighted, inspiring and multicultural will be also discussed. The late night conversations about the city, its citizens and their lives conducted with Gunther Grass will also be an interesting addition. Private collection of old photos will be also shown as an inspiration for creating stories about the city and its inhabitants.

Citation: Huelle P, Medicine in Gdansk – Historical overview made by a writer. Eur J Transl Clin Med. 2018;1(Suppl.3):2.

Museum of Medical University of Gdansk, Poland – some remarks on tradition and heritage preservation

Marek Bukowski

Museum of Medical University of Gdansk, Poland

Abstract: University museums play a specific role in the structure of a university. Their main task is to preserve, collect and present tradition and heritage of the university. The rapid development of science, observed in last decades, forced university museums to pay special attention to a newest academic heritage. In practice in means necessity of protection the devices or other artefacts even from the second decades of 21st century. It's important to point out that mentions before, rapid changes in science, makes the past unclear and almost incomprehensible especially for the youngest generations of students and researchers. Thus university museum can serve as an important feedback for researchers or for university society [incl. authorities]: as a source of data, objects and artefacts, and as an intellectual resource of historical reflections. In this paper we will present and discuss the main aspects of activity and mission of university museum, especially the Museum of Medical University of Gdansk.

Citation: Bukowski M, Museum of Medical University of Gdansk, Poland – some remarks on tradition and heritage preservation. Eur J Transl Clin Med. 2018;1(Suppl.3):3.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):4.

Christoph Gottwald (1636 – 1700), the physician of Danzig, as an anatomist

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Abstract: Christoph Gottwald (1636 – 1700), a medical doctor and a doctor of philosophy, a famous collector and an engraver, was one of the most prominent naturalists living in Danzig in the 17th century. His numerous professional activities included human and animal dissections. In my paper, I will focus on his student life in Leiden when he became a close collaborator of Franz de le Boë (Franciscus Sylvius) and his anatomical practice in Danzig from 1664 to 1699. Among others, I will analyse his anatomical charts and copperplates depicting his private dissection room and scientific tools he was using. Lastly, I will discuss the project of a critical edition of Ch. Gottwald's surviving works.

Citation: Pękacka – Falkowska K, Christoph Gottwald (1636 – 1700), the physician of Danzig, as an anatomist.
Eur J Transl Clin Med. 2018;1(Suppl.3):4.

Case study: 19th century injuries and medical treatment at Wisloujscie Fortress. Archaeological and historical perspectives

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Abstract: The presented research results are a contribution to the wider considerations regarding the medical treatment of the inhabitants of Gdansk, combining archaeological and historical data. The source basis of the presented narrative is a small group of packaging for medicines acquired during archaeological research of the Wisłoujście Fortress. Excavation research methodology allows for the interpretation of the discovered finds in the context of precise geographical space and individual users. Presented medical containers were dated at the end of the 19th century. Archaeological findings were the prerequisites for an attempt to identify potential users of medicaments, indications of their ailments and treatments used in this period.

Citation: Dąbal J, Kubus R, Szczepanowska K, Case study: 19th century injuries and medical treatment at Wisloujscie Fortess. Archaeological and historial perspectives. Eur J Transl Clin Med. 2018;1(Suppl.3):5.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):6.

Famous books in the history of pathology

Jan G van den Tweel

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Abstract: Although there are many books dealing with diseases from the Greek, Roman and Islamic periods in our history, books dealng with pathologic descriptions were not published until early 16th century.
Five authors and their books are standing out:
1. Antonio Benivieni (1443 – 1502), who described accurately the diseases of his patients and performed autopsies with permission of the families. After his death in 1502 the descriptions were discovered by his brother who had them published as De Abditis Nonnullis ac Mirandis Morborum et Sanationum Causis (About the hidden but miraculous causes of diseases and cures).
2. Theophilus Bonetus (1628 – 1689), published in 1670 in his book Sepulchretum (Funeral site) detailed pathological and clinical descriptions of nearly 3000 autopsies from the 16th and 17th century. Arranged in “Observationes” de capite ad calcem (460 references !). But there is no correlation of morbid findings and symptoms.
3. Giovanni Baptista Morgagni (1682 – 1772) published in 1761 his masterwork De sedibus et causis morborum per anatomen ingignatais (About the seats and causes of diseases, by anatomical investigation). In 70 letters to a unknown friend he described 640 autopsies on of all kind of people, from thieves to cardinals. All with clinical pathological correlations.
4. Marie F. X. Bichat (1771 – 1802) In his book Traite des Membranes he states that “all animals are an assemblage of different organs. These are in turn made up of many textures of many kind. Just as chemistry has its simple bodies, so anatomy has its simple tissues which make up organs”, so discovering the 21 tissue types of the human body.
5. Rudolf Virchow (1821 – 1902), describes in his book “Cellularpathologie” (1861) that all cells originate from other cells.

Citation: Van den Tweel J G, Famous books in the history of pathology. Eur J Transl Clin Med. 2018;1(Suppl.3):6.

Autopsy in History of Art

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Abstract: For the human the Death is a terminal moment and always was. Always it was a taboo and still is. In the past, especially during the Middle Ages, touching the corpse was touching the Death. And touching the Death was dealing with the devil. And this was punished by death. In the early modern period this situation had been changed, the autopsy was allowed and started to be so famous that ended up as a painting' topic. It was not just the interest of human body, it was absorption in looking for human soul, searching for inner man. In opposition to the Old Masters contemporary art quite often shows the Fall of the man. There is no autopsy as an Art topic any more, the Art is no showing searching for the soul, the Art is showing a Death as an end of humanity.

Citation: Nieczyporowski R, Autopsy in History of Art. Eur J Transl Clin Med. 2018;1(Suppl.3):7.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):8.

Egas Moniz – Genius or a mistake of Nobel Prize Committee?

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Abstract: António Caetano de Abreu Freire Egas Moniz (1874 – 1955) – a neurologist, politician, writer, composer and by far one of the most interesting but most controversial figures in the history of medicine as well. Without any doubt the discovery of angiography in 1927 remains his great achievement, on the other hand nevertheless, what earned him the Nobel Prize in 1949 was reinventing in 1935 one of psychiatry's most ill – famed procedures – the lobotomy. Egas Moniz reintroduced the method designed originally by Gottlieb Burckhardt in 1888, proving its high therapeutic effectiveness in treatment of several psychoses. Despite the lobotomy's initial high popularity, the introduction of neuroleptics led to considering it an unnecessarily invasive procedure with too many permanent side effects, resulting in suggestions of revoking Egas Moniz's Nobel Prize. The figure of this genius scientist and his achievements is still a source of controversy to this day.

Citation: Lass P, Egas Moniz – Genius or a mistake of Nobel Prize Committee? Eur J Transl Clin Med. 2018;1(Suppl.3):8.

The Incredible Story of GIST: How an obscure tumor turned out to be the „poster boy" for targeted therapy

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Abstract: In 2001, the New England Journal of Medicine published a report called, "Effect of the Tyrosine Kinase Inhibitor STI571 in a Patient with a Metastatic Gastrointestinal Stromal Tumor". The study revealed a favorable response to STI571 treatment and suggested that the inhibition of pathologically activated tyrosine kinase is an effective therapeutic strategy in advanced and disseminated sarcoma. This brief report marks a turning point in the oncological treatment of gastrointestinal stromal tumors (GIST). However, the GIST story starts a bit earlier. In 1998, a team of Japanese scientists identified KIT expression and gain–of–function KIT mutations in GISTs. This discovery revoked more than five decades of speculation about the origin of GIST. From then on, extensive studies on tumors previously known as leiomyosarcomas, leiomyoblastomas, leiomyomas, STUMPs, GANTs, and others (with confusing acronyms) have been utilized to characterize GIST clinicopathologic parameters. These efforts were paralleled by widespread implementation of a miracle drug, imatinib mesylate, a KIT tyrosine kinase inhibitor – commercially known as Gleevec – in the treatment of advanced, metastatic and highly malignant GISTs. After two decades of intensive efforts, the modern definition of GIST has come to be established. GIST classification is based on a spectrum of classic clinicopathologic and molecular genetic parameters, such as age, gender, location, KIT– and SDH–complex– expression, and KIT–, PDGFRA–, BRAF– and NF1–mutation status. The combination of these parameters allows for accurate diagnosis, prognostication and prediction of the response to tyrosine kinase inhibitor treatment.

Citation: Lasota J, The Incredible Story of GIST: How an obscure tumor turned out to be the „poster boy" for targeted therapy. Eur J Transl Clin Med. 2018;1(Suppl.3):9.

EUROPEAN JOURNAL OF TRANSLATIONAL AND CLINICAL MEDICINE 2018;1(Suppl.3):10.

Electron Microscopy in Poland

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Abstract: The golden era of electron microscopy already gone. Marcelin Berthelot in 1885 being fascinated by the power of light microscopy said: "world has no secrets". Couple decades later Erns Ruska and Max Knoll were able to present that in experimental studies using devices with cylinder cathode it is possible to get image of copper grid on fluorescent screen or photographic film. Then 1933 Ernst Ruska invented electron microscope with resolution better then light microscope. Then in 1939 Siemens factory in Berlin released first commercially available electron microscope of a high resolution, and in the following years this technology was used for studies in biology and medicine.

In Poland, first electron microscopy lab was founded by its first chair prof. dr. Janusz Groniowski in Department of Pathology in Poznań in 1953. In the following years, a great progress in EM use occurred. Between 1956 and 1958 Feliks Kaczmarek with Wiktor Djaczenko in Poznan, constructed prototype of ultramicrotome with thermal headway. In 1958 first Polish EM–based work presented during IV International Conference of Electron Microscopy in Berlin entitled „The ultrastructure of rat lung in the pre – and postnatal period" by prof. Groniowski. In 1959 during First Polish Conference of Anatomo – Pathology in Poznan there was first session on use of electron microscopy in biology and medicine. in 1961 Electron Microscopy Commission was created at Polish Academy of Science, with founders as: Prof. Janina Kowalczykowa, Prof. Janusz Groniowski (both from Pathology committee) and Prof. Zygmunt Grodzinski (Zoology committee). In the following years, members of the Commission were specialists in histology, embryology, cytology, pathology, oncology, veterinary, botany, paleontology, and agricultural sciences. The Presidents of the commission were professors: Janusz Gronowski (1960 – 1968), Andrzej Vorbrodt (1968 – 1975), Winceny Kilarski (1975 – 1984), Wenancjusz Domagała (1984 – 1987), Leszek Cieciura (1987 – 1996) and Wiesława Biczysko (1996 – 2006). As great activity during those years beside daily use of the technique there were organized more than 30 national scientific conferences and meetings.

Citation: Marszałek A, Electron Microscopy in Poland. Eur J Transl Clin Med. 2018;1(Suppl.3):10.

Founders of the Warsaw School of Pathological Anatomy

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Abstract: The history of pathological anatomy as a discipline of science is not long. Its beginnings date back to the second half of the 17th century while the first chairs which began university teaching were established in the second half of the 19th century. The Warsaw Chair was created in 1857 while the first lecture at this chair was delivered by its founder and head for 35 years Professor Wlodzimierz Brodowski. In spite of history – related turbulences the Warsaw Chair of Pathological Anatomy became a leading scientific center earning with time the honourable name of the Warsaw School.

Worth mentioning among the successors of Brodowski is his beloved student Edward Przewoski, an outstanding histologist, efficient pathologist with enormous diagnostic experience. The Chair was headed by Zdzisław Dmochowski, author of the first Polish Anatomo – pathological diagnostics enriched with his own illustrations. Jozef Hornowski, an extraordinary man whose reconstruction of the Chair at the revived Warsaw University was interrupted by a lethal disease.

And finally, the creator of the Warsaw School – Ludwik Paszkiewicz, who was the most Warsaw–related professor of Warsaw medicine, he was born, completed studies, worked as a voluntary and treated patients in Warsaw. He was head of the Chair of Pathological Academy for 38 years.

In an interview for Służba Zdrowia, he said: [...] there has been nothing extraordinary in my life. I have tried to encourage students to gain and develop knowledge; I have tried to imbue them principles which I received from the teachers which I admired. I have succeeded in it a little.

A little – included, among others: 8 professor titles, 15 habilitations – 11 of them conferred to Chair workers, 16 PhDs, dozens of specializations, over 360 publications by assistants. A little included also the publication of a monumental textbook entitled General and Specific Pathological Anatomy as well as a unique atlas publication The Technique of Post Mortem Examination.

A little included also the opening in 1959 of a histochemical lab – the first in Poland and the third in Europe. And also the Polish Society of Anatomopathologists and its body Polish Pathology as well as a museum housing over 6 000 exhibits – opened to the general public in the year 1930/1931 as having the largest anatomopathological collection in Poland.

Citation: Skrzypek E, Skrzypek M, Founders of the Warsaw School of Pathological Anatomy. Eur J Transl Clin Med. 2018;1(Suppl.3):11.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):12.

The brain of Marshal J. Pilsudski – part 2

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Abstract: The presentation is focused on the formal aspect of the monography Mózg Piłsudskiego cz. 1 = Le cerveau du Pilsudski published in 1938 in Vilnius. Next to the description of the book and information about the edition some data about the author, prof. Maksymilian Rose, and his collaborators are added.

Citation: Siek B, The brain of Marshal J. Pilsudski – part 2. Eur J Transl Clin Med. 2018;1(Suppl.3):12.

Limb Body Wall Complex – in the past and now – comparison of descriptions

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Abstract: Limb Body Wall Complex (LBWC) is a very rare fetal malformation of unknown origins. It is lethal birth defect and there are only anecdotal stories of survivors. The prevalence of LBWC is estimated approximately for 0.32 in 100,000 births (ca 1 every 300.000 births). It covers several defects and traditionally the diagnosis is based on criteria put by Van Allen et al. To diagnose this complex the pathologist and or obstetrician has to note the presence of two out of three of the following anomalies:

• Exencephaly or encephalocele with facial clefts and/or
• Thoraco- and or abdominoschisis and/or
• Limb defects

In 1613 Joachim Olhafius (1579 – 1639) examined a neonate, born in Pruszcz (Gdansk area) with noted multiple and rare malformations. The autopsy report was published in print by Andreas Huenefeld's office shortly afterwards, unfortunately with only one engraving depicting deformed neonate. The author sent a copy to Caspar Bauhin, who inserted it into his manual describing different malformations *De hermaphroditorum monstrosorumquae partuum natura ex theologorum, jureconsultorum, medicorum et rabbinorum sententia: libri duo* (typis Hieronymi Galleri, Aere Johann – Theodori de Bry, Oppenheim 1614).

The description of the neonate was very detailed and after thorough translation from 17th century Latin, we were able to name this as probably first described and published case of the LBW Complex.

We compared the report with two cases autopsied in 2010 and 2011, almost 400 years after public autopsy performed by Olhafius in Gdansk. The contemporary autopsy reports are very similar to the old one, and photo documentation is comparable in terms of the depiction of some anomalies with 17th century engraving.

Citation: Gulczyński J, Paluchowski P, Czarnota K, Limb Body Wall Complex – in the past and now – comparison of descriptions. Eur J Transl Clin Med. 2018;1(Supl.3):13.

EUROPEAN JOURNAL OF TRANSLATIONAL AND CLINICAL MEDICINE 2018;1(Suppl.3):14.

Pathology during the blockade of Leningrad (1941 – 1944)

Vsevolod A. Zinserling

National Medical Center named after V.A. Almazov, Saint – Petersburg University, Russia

Abstract: Frontline pathological laboratory (head V. D. Zinserling) regularly organized the meetings of military pathologists with participation of civil as well. Pathologists participated at all medical conferences. In collaboration with clinicians was studied nutritional depletion with its somatic and infectious complications.

The possibility of qualified investigation of pneumonias including detailed macroscopical, cytological, histological and bacteriological studies on autopsy material was demonstrated even in conditions of blockade, were elucidated microscopical variants of lesions in pneumococcal pneumonias and criteria of evaluation of process activity.

During the first autopsies deceased from starvation with diarrhea (in November 1941) pathologists of the city recognized dysentery. At the same time clinicians noted the hospital acquired “hungry diarrhea”. Much later (in May 1942) the dysenteric origin was proved by bacteriologists. “Blockade dysentery” was characterized by prolonged course with transformation of acute forms of inflammation in chronic ones with periodical exacerbation.

Severe course of tuberculosis allowed speaking about “blockade” form of the disease. Very typical were lymph node and pleura lesions noted more than in 50% cases, frequent hematogenic septicemia with large necrotic foci. Structural changes frequently not corresponded to existing classifications. We note clear similarities with lesions observed nowadays in combination with HIV infection.

Outstanding pathologist V.G. Garshin contributed in the theory of oncogenesis. During the blockade he worked as pathologist, discovered special “Blockade form of arterial hypertension”. In the conditions of starvation the morphological hallmarks of atherosclerosis and its complications in deceased of different age we practically absent.

Several other questions arose at that time as well. Why the course of many infectious diseases was atypical without toxic forms? Why some microorganisms showed increase (pneumococci, corynebacteria) and others decrease (staphylococci, streptococci). Nowadays we have no exact explanations and further studies are necessary.

Citation: Zinserling V. A, Pathology during the blockade of Leningrad (1941–1944). Eur J Transl Clin Med. 2018;1(Suppl.3):14.

Pompa funebris. Bringing the remains of famous Poles to Poland between two World Wars

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Abstract: Polish history has been like a roller-coaster – full of ups and downs, wars, breakthrough events and inspiring people. In 1795 the third and the last of the three 18th – century partitions of Poland ended the existence of the country for 123 years. The fall of the Poland, as well as subsequent, unsuccessful attempts to regain independence, became the reason for the emigration of many eminent Poles. They did not have a chance to rest in their native land. Many of them died in emigration and their remains after years has been brought to Poland. The aim of this paper is to analyze primarily three special burials in interwar period: bringing to Poland remains of one of the greatest polish romantic poets – Juliusz Slowacki, novelist and Nobel Prize laureate Henryk Sienkiewicz and Polish engineer and general, an Ottoman pasha, a national hero of Poland and Hungary, a figure intertwined with other European patriotic movements – Josef Bem. All those burials were accompanied by extensive funeral ceremonies, often bringing together hundreds of thousands of participants. Therefrom in the title of the paper appeared a reference to the funebris pump – a grand and expensive funeral ceremony for the Polish nobility popular especially in the era of the Baroque.

Bringing the remains of famous Poles in the interwar period became an element of the construction of the national myth and the sense of national unity. The Reborn Poland needed that kind of gestures of universal solidarity, combining the past with the present, to build and strengthen the nation's identity. It should be noted that the intensity of this type of events increases after the May coup, a military overthrow of the civilian government in 1926, takeover of the authority by Józef Piłsudski and at the beginning of drifted polish system toward authoritarianism. In this way, bringing the remains of famous Poles became an ideological and propaganda element used by the new authorities.

Citation: Pawłowska – Kubik A, Pompa funebris. Bringing the remains of famous Poles to Poland between two World Wars. Eur J Transl Clin Med. 2018;1(Suppl.3):15.

EUROPEAN JOURNAL OF TRANSLATIONAL AND CLINICAL MEDICINE 2018;1(Suppl.3):16.

Pathological changes of skeletal material based on the example of the research on ossuaries

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Abstract: Skeletal material discovered during archaeological excavation is the basis for studying historic populations, i. e. for determining their biological structures and heath profiles. The studies include paleodemographic, morphological and health analyses. The physical and biological condition of past populations is defined on the basis of the analysis of pathological changes of the skeletal material.

Two types of changes of the bones can be identified. The first – so called stress markers, i. e. morphological reactions of the bones – include changes of the shapes and sizes of morphological structures and the intensification of osteoporotic processes (caused by harmful conditions of living).

The second type includes pathological lesions caused by rheumatologic or neoplastic diseases, infections, metabolic or hormonal disorders, traumas, or work overload (reflect body's reactions to genetic and environmental conditions).

A variety of pathological changes has been observed during anthropological and paleopathological studies of ossuaries conducted by the Archaeological Museum in Gdansk under the project co–financed by the Ministry of Culture and National Heritage.

The anthropological research were carried out by an international team of researchers. Numerous pathological changes were found. In some cases X–ray and CT examinations were performed at the Medical University of Gdansk.

The following groups of pathological changes have been found:

– Signs of inflammatory reactions in periosteum (*periostitis*) and purulent bone infections (*ostitis, osteomyelitis*)
– Inflammations of the bones (maybe connected with specific infections)
– Degenerative changes in joints
– Osseous system traumas
– Developmental disorders

In conclusion, frequencies of pathological changes have been calculated against the number of objects available for analysis – preserved bones and/or their identified fragments. The diachronic analysis of the frequency of selected pathological lesions and stress markers has shown that the frequency of most analyzed characteristics increases in the skeletal material: from the oldest ossuary (no. 3009) dated at the 15th – 16th century to two younger ones (nos. 2046 and 2006) dated at the 18th century. Generally, the pathological lesions identified on the bones of past Gdansk inhabitants do not differ in their quality from the lesions most frequently identified in other skeletal samples. Thus, the range of diseases may be expected to be relatively similar and to include almost all categories of diseases that leave changes in the skeletal system. It is worth emphasizing that in the material from Gdansk ossuaries the researchers have also found numerous signs of diseases that are relatively rarely described by paleopathologists, e. g. tuberculosis and syphilis, metabolic diseases, and rare developmental anomalies.

Citation: Pudło A, Pathological changes of skeletal material based on the example of the research on ossuaries. Eur J Transl Clin Med. 2018;1(Suppl.3):16.

The history of prion diseases

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Abstract: The prion diseases or transmissible spongiform encephalopaties are a group of neurodegenerative disorders which affect humans and several animal species caused by the mutant protein PrPsc that propagates by changing the conformation of its physiological counterpart PrPc. This group is represented by Creutzfeldt – Jakob disease (CJD), Gerstmann – Straussler – Scheinker syndrome, kuru and fatal familial insomnia in men, as well as scrapie in sheep and „mad cow disease" (BSE) as the most common animal examples. The written history of prions started in 1732 with the first description of scrapie. The first case study of CJD came from 1920, since kuru which was described in 1957. In 1959 pathogenetical similarity among mentioned above three diseases was found, while in 1967 Griffith theorized mechanism of pathogenic protein agent, and finally 1982 Prusiner formulated „prion hypothesis". The discovery of prions in yeasts in 1994 was the next step in understanding of prion diseases. In 1996 a variant CJD linking BSE and human disorder was described.
Several ways of prion transmission were identified, including iatrogenic infections, enteral mode – eating beef with BSE(v–CJD) or cannibalism in case of kuru, finally many animal experimental models. Nowadays the prion paradigm is being expanded to other protein misfolding diseases, called prionoids. Nevertheless it seems that also the historic source analytics and paleogenetics could provide an additional evolutionary perspective to these diseases.

Citation: Iżycka – Świeszewska E, The history of prion diseases. Eur J Transl Clin Med. 2018;1(Suppl.3):17.

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Polish Association of Neuropathologists 1963 – 2018

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Abstract: The reconstruction of neuropathological laboratories after World War II was begun by professor Adam Opalski – a student of professor Kazimierz Orzechowski, who in 1928 year founded the first Laboratory of Neuropathology at the Neurological Clinic in Warsaw. Opalski became the head of the Department of the Histopathology of the Nervous System and next, the manager of the Department of Neuropathology, established by the Polish Academy of Science in 1954. He described pathological form of astroglia named Opalski cells.

Polish Association of Neuropathologists was founded in 1963 year in Warsaw by professor Ewa Osetowska and a group of scientists in clinical neurology, neurosurgery and experimental neuropathology. E. Osetowska was a teacher of internationally esteemed Polish neuropathologists: M. J. Mossakowski, H. Wisniewski, Maria Dambska, and J. Kulczycki. In 1963 the journal Polish Neuropathology (since 1994 – Folia Neuropathologica) was established as the official journal of the Polish Association of Neuropathologists, and later also of M. Mossakowski Medical Research Centre Polish Academy of Science. The first editor of Polish Neuropathology was neurosurgeon, professor Adam Kunicki. In 1973, neuropathology was established as a new clinical specialization in Poland with the formal organized training system being supervised by a National Consultant and the Expert Committee.

Polish Association of Neuropathologists is a non – profit organization with a primary goal of promotion and advancement of knowledge and research in the field of diseases of the nervous system. Over the next years, its presidents were recognized scientists as prof A. Gluszcz, M.J. Mossakowski, M. Wender, M. Dambska, J. Kaluza, J. Dymecki, H. Jedrzejowska, J. Albrecht, B. Sikorska, and J. Szymas just to name a few.

The organization interacts with other national and international bodies to exchange the information and ideas to advance the science and practice in neuropathology. In 1974 year, the society joined the International Society of Neuropathology (ISN) and since 1994 with few years break we act as a member of the European Confederation of Neuropathological Societies (EURO – CNS).

Citation: Wierzba – Bobrowicz T, Iżycka – Świeszewska E, Polish Association of Neuropathologists 1963 – 2018. Eur J Transl Clin Med. 2018;1(Suppl.3):18.

The history of the classification of Central Nervous System tumors

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Abstract: In the beginning of last century the classification of Central Nervous System (CNS) tumors started its evolution. In 1926 Percival Bailey and Harvey Cushing laid the grounds for modern – day neurooncology in their trailblazing publication based on correlation between tumor's microscopic structure and clinical course. They yielded the foundations for further studies on the relation between histogenesis and outcome of brain tumors reaching the final in early 70's when the World Health Organization (WHO) CNS Collaborating Center was instituted. Since then five editions of the WHO classification of CNS tumor were formulated. The concept of now widely used four grading scheme according to tumor morphology and postoperative survival time was firstly introduced by Zulch and described in first edition of WHO brain tumors classification. The second edition published a decade later reflected to an enormous progress in immunohistochemical studies. It introduced several new entities and revised WHO grading. In the third edition from 2000, genetic profiling was incorporated as additional description of tumors. It also covered broad characterization in the field of epidemiology, clinical appearance, imaging as well as prognostic and predictive factors. Fourth edition mirrored advancements in the understanding of brain tumors in terms of classification and grading. The updated fourth edition of WHO classification published in 2016 made a shift from histologically – based to morphologically and molecularly – integrated diagnosis. For the first time molecular markers are used along with histological features to define tumor type. It is mostly applicable to gliomas and embryonal tumors. All changes correspond with more precise prediction of prognosis and administration of suitable therapeutic strategy. Besides, there are still many controversies and next revised classification is expected to be established in a few years.

Citation: Sejda A, Grajkowska W, Iżycka – Świeszewska E, The history of the classification of Central Nervous System tumors. Eur J Transl Clin Med. 2018;1(Suppl.3):19.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):20.

The history of the operative microscope

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Abstract: The microscope in the operating room is considered as a one of the most important tools. The aim of this work is to show evolution from magnifying glass from ancient times to modern computer-assisted microscope widely used in ophthalmology, neurosurgery, plastic surgery and neurosurgery. The presentation shows technical progress of microscopes and its use in operative specialites. This works presents the most influential people in the development of operative microscopy. The presentation reviews how operative microscopes and way of use them evolved since first use in the operation room in 1921.

Citation: Liczbik O, Wiśniewski J, Kloc W, The history of the operative microscope. Eur J Transl Clin Med. 2018;1(Suppl.3):20.

History of Pathology in pathologic times. Some reflections on history of pathology from Krakow perspective

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Abstract: History of pathology as medical and academic discipline in Krakow (and in fact in the whole Poland) cannot be appropriately described without many remarks on difficult history of the place, land, country, politics, and people. It is impossible even to sketch it in a systematic way within the limited time frame of some minutes. The solution which seems to be reasonable is to provide, apart from some rudiments of facts, a few examples of stories of especially significant persons working in this field of medicine in Krakow. Even these "stories" are not true biographical notes but rather sort of short mentions.

In Krakow systematic autopsy examination, as it is proved by written reports from years 1822 – 1823, was introduced by Josef Brodowicz – than head of the Clinic of Internal Medicine. The first Chair of Anatomic Pathology in Jagiellonian University was established in 1851 after the University had received appropriate consent from the Ministry of Enlightenment of Austro – Hungarian Government. Why Austro – Hungarian? Because at that time it was the Imperial Government in Vienna which exercised authority over this part of Poland, where Krakow is placed and which is traditionally named Galicia. Professor Josef Dietl was appointed as the first incumbent of the Chair of Anatomic Pathology. Josef Dietl undoubtedly belongs to the most eminent persons in history of Krakow, especially since he was very much respected Mayor of Krakow and received a well – deserved gratitude of its citizens for his multiple achievements in modernization of the infrastructure and other enterprises.

But not all professors of anatomic pathology in Krakow entertain a respect and esteem as Josef Dietl did. His successors: Vaclav Treitz, Richard Heschl, (who are noted in history of medicine because of accordingly: „ligament of Treitz" and transverse temporal gyrus or „Heschl's gyrus") are not remembered well in Krakow. Both Treitz and Heschl had lectures only in German and probably never spoke Polish and rather were more interested to make their career elsewhere. To other important names bound to pathologic anatomy in Jagiellonian University belong: Alfred Biesiadecki (like Heschl, pupil of Karl von Rokitansky), Konrad Glinski (known for "Syndrome of Glinski – Simmonds") and Tadeusz Browicz (known for "Browicz – Kupfer cells"). The latter succeeded in 1895 in accomplishing the movement of Pathologic Anatomy to the new building, where it acts to this day. In case of three other merited and memorable persons like Stanisław Ciechanowski, Kazimierz Sciesinski and Janina Kowalczykowa, history entered their lives in a harsh way and showed its most cruel face. Stanisław Ciechanowski, who in 1919 took over the Chair of Pathologic Anatomy from Tadeusz Browicz, at the beginning of the occupation of Poland by Germany in 1939 was arrested with many others professors of Jagiellonian University and though he later was released from imprisonment he never came back to work. Also Janina Kowalczykowa was arrested and sent to KL Auschwitz (prisoner No 312212). In 1943 she was released form the concentration camp but she was not allowed to get back to work until 1945, when she became Chair of Pathomorphology. Still much poorer destiny awaited another prominent lecturer in Department of Pathology, Kazimierz Sciesinski, who before the WWII was regarded as future successor of professor Ciechanowski. He was murdered together with many thousands of officers of Polish army (He was conscripted just before WWII) in Katyń by functionaries of the infamous Soviet NKVD (a sort of political secret police). Pathology of history and history of pathology entangled.

Citation: Adamek D, History of Pathology in pathologic times. Some reflections on history of pathology from Krakow perspective. Eur J Transl Clin Med. 2018;1(Suppl.3):21.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):22.

Life of neoplasms stopped in time – professor Groniowski's collection of pictures from the end of the 19th century

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Abstract: We are presenting few pictures from the end of the 19th century that belong to professor Groniowski's collection. Archive pictures were taken since 1867 in various photo studios located in Warsaw. They present patients with advanced tumors of soft tissues, bones and skin. Some of the pictures are supplemented with notes concerning the year they were taken in and clinical treatment of the illness. Artistry of the works lays in the discrete catch of people's suffering along with pathological, historical and clinical aspect. Professor Groniowski (1917 – 1980) was a remarkable Polish pathologist, whose main research interests were focused on the pulmonary pathology at the development age and electron microscopy. He also contributed to creating the Polish Society of Pathology and the European Society of Pathology and later was an active member of the board. He was interested in history and was fascinated by old prints. Professor Groniowski collected incredibly valuable collection of rare medical documents. Part of this collection was passed by a family member on to one of the authors (A. N–G) 28 years after the professor's death.

Citation: Chmielik E, Nasierowska – Guttmejer A, Life of neoplasms stopped in time – professor Groniowski`s collection of pictures from the end of the 19th century. Eur J Transl Clin Med. 2018;1(Suppl.3):22.

Efim S. London (1868–1939) – Coryphaeus of Immunology and Pathology, Alumnus of Warsaw University

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Abstract: An outstanding pathophysiologist, biochemist and immunologist Efim Semyonovich London was born 28 December 1868 – to Litvak Jewish family in the town of Kalvaria, Lithuania, Russian Empire. During 1888–94 he was a medical student at Emperor's Warsaw University, a pupil of renown Russian pathologist Prof. Sergei M. Lukyanov (1855–1935), awarded silver and gold medals for course and graduation papers, and inherited from his first teacher deep interest to Pathology of metabolism. After graduation for a short time (1894) E.S. London worked as a rural Zemstvo physician in a village at Mariampole volost, Lithuania. In 1895 he was sent for postgraduate staging to Ilya I. Mechnikov's lab at Pasteur Institute, Paris, where he took from his second teacher I. I. Mechnikov (1845 – 1916) deep interest to recently born science of Immunology and Immunopathology. That period inspired him on pioneering works in Neuroimmunology and animal models of autoimmune diseases. In 1895 he was invited by S.M. Lukyanov to the capital of Russia as deputy – chief of General Pathology Dept at Emperor's Institute of Experimental Medicine (IEM), where he worked by his last day. In 1900 he defended doctoral thesis, "*On the doctrine of haemolysins*", where he described not only autoantibodies to red blood cells, but also antihaemolysins or the first anti – idiotypic antibodies ever recognized. As a Head of Pathology lab, IEM (since 1903), he contributed greatly to the doctrine of physiologic (natural) autoimmunity, discovered natural anti – sperm autoantibodies in healthy individuals and suggested first autoimmune model of infertility and immunological contraception method. He was a world pioneer in the field of Radiobiology with first studies of X–ray effects on living tissues (1897), first experimental proving of radiation – induced cell death (1902), first experimental model of radiation sickness (1903), first radioautograph on frog with inhaled radon and very principle of histoautoradiography (1904), first experimental cancer therapy by radiation (with Semyon V. Goldberg, 1902–3), discovery of greatest radiosensitivity of gonads, bone marrow and lymphoid tissue and relative radioresistance of brain. He described radiation caused and stress – related immunodefiency long before appearance of the very stress concept and immunodeficiency term. First ever published monograph in Radiobiology was authored by E.S. London (1911). In 1914 – 17 he served in Russian Army, being responsible for bacteriological and anti–tetanus service. After revolution of 1917 he supported Soviet power, and since 1918 – to his last day he worked as a Head of Pathology Department, IEM. In 1928 he founded and until last day headed the Department of Biochemistry (the first ever in our country) at Leningrad State University. He also established Pathophysiology Dept at the Leningrad Paediatric Medical Institute (1932), that time single graduate school of Paediatric Medicine in the world. It was him who discovered the priority of glucose in brain energy supply and determined the daily energy requirements of the brain. A skilful experimental surgeon, he invented a method of venous blood and bioptates' repeated sampling via supravital silver kanules-fistules of original construction – from large veins (angiostomy – 1919), brain sinuses (sinusostomy – 1936) and inner organs (organostomy – 1916, 1923, 1935). This lead him to several priority discoveries, like: 1st proving that short peptides can be absorbed in intestines (1909), 1st model of duodenal insufficiency; 1st data on hormonal nature of specific dynamic action of food on basic metabolic rate (1936). During two London's long academic trips to USA together with a friend of his youth, Russo – American biochemist Phoebus Aaron Theodore Levene, 1869 – 1940, experimenting by London's organostomy method they discovered in 1928–29 deoxyribose as a constituent of DNA, offered 1st model of DNA structure, and term "nucleotide. Organo/sinuso/angiostomy method by London brought him 2 nominations for Nobel Prize (1939) and the priority conclusion of that year from Nobel foundation expert U. von Euler as "nominant #1". The decision was never realized because of London's death from cancer on 31 March 1939. In Saint Petersburg one still can find 2 monuments erected and a memorial board dedicated to this great alumnus of Warsaw University.

Citation: Churilov L. P, Efim S. London (1868 – 1939) – Coryphaeus of Immunology and Pathology, Alumnus of Warsaw University. Eur J Transl Clin Med. 2018;1(Suppl.3):23.

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A historical approach to atypical melanocytic lesions

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Abstract: Spitz nevus was first described in 1948 by Sophie Spitz, who termed it juvenile melanoma based on its striking cytological resemblance to melanoma. It was described as a lesion with large epithelioid and spindle cells, mostly occurring in children. Several changes in terminology have since occurred with increased knowledge and experience. However, the distinction between Spitz lesions and melanomas remains a substantial problem. Classic examples of Spitz nevi can be easily distinguished histopathologically from melanoma, whereas lesions with unusual or atypical features still pose diagnostic difficulties. Spitz/spitzoid cells are characterized by large size, irregular morphology and the presence of macronucleoli, usually not seen in nevomelanocytes of the common nevi. On the other hand, a small subset of melanomas have some histologic features that resemble Spitz nevi, but show sufficient criteria for malignancy and therefore are best classified as spitzoid melanomas. Over time, the concept of “borderline lesion” has gained fortune, even if it express a sort of diagnostic uncertainty. The evolution of diagnostic models on this topic has involved many Authors in the last 50 years, but some difficulties still persists. Molecular analysis of lesions has become increasingly popular as an adjunct to histology and immunohistochemistry in defining the biologic behavior of an individual lesion. However, the availability of different technologies for ancillary studies have been substantially not diriment, particularly in specific “difficult” cases. In the current communication, we attempt to review the evolution of knowledge and thinking about Spitzoid lesions over the past century and in recent years, and to offer a “philosophically” practical approach to the difficult Spitzoid tumors.

Citation: Canzonieri V, Manchi M, A historical approach to atypical melanocytic lesions. Eur J Transl Clin Med. 2018;1(Suppl.3):24.

Professor Andrew Obrzut – The organizer and the first head of the Pathological Anatomy Department (1896 – 1910) of the Medical Faculty of Lviv University of Yan Kazimizh

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Abstract: Andrew Obrzut was a professor of medicine in Prague and Lviv, a student of the founder of the Czechoslovak school of pathologists Yaroslav Hlava. He was born 2.02.1854 in the town of Siolkov, Gribovsky district (Powiat grybowski) in the family of the peasant Joseph. He graduated from the New Sonch's Gymnasium (Nowy Sącz, Poland). In 1875 – 1881 he studied at the Medical Faculty of Jagiellonian University and received a diploma of the doctor of medicine.

In 1883–1887 Andrew Obrzut worked as an assistant professor Yaroslav Hlava (Jaroslav Hlava, 7.05.1855 – 31.10.1924) at the department of pathological anatomy at the Charl's University in Prague and in 1887 defended the dissertation for the scientific degree of the doctor of medicine on the topic "About blood's participation in the onset of the inflammatory process."

In 1891 – 1896 Andrew Obrzut was a professor at the department of pathological anatomy at the University in Prague. He had published with his teacher Yaroslav Hlava a two – volume textbook on pathological anatomy „Patologicka anatomie a bakteriologie" (Praha 1894, 2nd edition 1902, 799 pages). In 1896, he accepted the proposal of Yaroslav Hlava to organize a department of pathological anatomy at the Lviv University named after Yan Kazimizh.

On December 9, 1896, the first lecture „On the Importance of Pathological Anatomy for Medical Education" was read to the students of the 3rd year of study of the Faculty of Medicine of Lviv University in the lecture hall by the doctor of medicine, Professor Andrew Obrzut. He was the organizer and participant of V and VI congresses of doctors in Poland and he had presented the results of his new pathological studies of kidney diseases („Nowe dane o histologii amyloidu degeneracji") (New data on the histology of amyloid degeneration), that raised a discussion among a wide audience of Polish physicians and naturalists.

Citation: Zerbino D, Volos L, Ivashchenko V, Professor Andrew Obrzut – The organizer and the first head of the Pathological Anatomy Department (1896 – 1910) of the Medical Faculty of Lvov University of Yan Kazimizh. Eur J Transl Clin Med. 2018;1(Suppl.3):25.

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Impact of Johann Adam Kulmus on Japanese medicine

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Abstract: Johann Adam Kulmus (1689 – 1745) was an anatomist from Gdansk. As head of the anatomy department of Atheneum Gedanesne in the years 1725 – 1745, he performed numerous autopsies, some of which have been very precisely documented and illustrated by Kulmus himself. An example of this is the public autopsy of conjoined twins performed by him in 1724 A.D, considered one of the oldest manuscripts in this field. Johann Adam Kulmus is also the author of *Tabulae Anatomicae* – a richly illustrated anatomy handbook, dedicated to surgery apprentices. published in total 23 times translated to 5 languages. Its Dutch edition *Ontleedkundige Tafelen* had a very significant impact on Japanese medicine in the Edo period (1603 – 1868), directly influencing Sugita Genpaku to publish its Japanese translation – *Kaitai Shinsho* – considered the single most important book in the history of Japanese medicine. *Kaitai Shinsho* permanently changed the basis of Japanese anatomy and surgery, confronting many misconceptions originating from Chinese medicine, as well as introducing a wealth of formerly unavailable knowledge about the human body.

Citation: Goertz S, Gulczyński J, Szarszewski A, Impact of Johann Adam Kulmus on Japanese medicine. Eur J Transl Clin Med. 2018;1(Suppl.3):26.

Molecular ABC – the first step in genetic researches

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Abstract: DNA isolation is a very important step in genetic testing. The quality of product determines further results of the examination. The quality and quantity of isolated material depends on the variety of factors. There is no reliable data containing recommendations for isolation methods subjecting to the tissue type and/or condition (degradation, age, etc.). Comparing the DNA isolation of 'fresh' and preserved samples may shed a new light on the current pathology. This research is a review of different ways in DNA preparation and invokes some common problems with a proper DNA obtaining.

Citation: Janiszewska E, Pluta D, Molecular ABC – the first step in genetic researches. Eur J Transl Clin Med. 2018;1(Suppl.3):27.

EUROPEAN JOURNAL OF TRANSLATIONAL AND CLINICAL MEDICINE 2018;1(Suppl.3):28.

Theatrum Anatomicum – Museum of Anatomy Collegium Medicum Jagiellonian University in Krakow

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Abstract: Chairs of Anatomy in the 19th century founded museums for teaching purposes, and the anatomical specimens were kept in the museum.

We owe the creation of the Museum of Anatomy to Ludwik Teichman who was the Polish anatomy professor and manager of the Chair of Anatomy in the years 1868 – 1894. He also improved the techniques of anatomical investigation, macerating human and animal skulls and injecting human and animal blood vessels with a substance of his own creation.

The Museum is situated at Kopernik's Street No 12. It was designed by Professor Ludwik Teichmann and architect Tadeusz Stryjenski. Construction works began in 1869 and were completed in 1872. The building has an amphitheatrical lecture room for 200 students.

The first anatomical preparations went to Krakow long before the exhibition was organized. There were brought from Vienna in 1803 in the total number of 13. In the following years, the collection expanded. In 1809 the collection had 66 specimens. In 1816 there were 141, including anatomopathological preparations (for example gallstones and urinary stones). In 1835 there were 227 and in 1869 there were 1068. At present, it has 2077 exhibits. The museum collection includes: specimens of human and animal bones (separate bones, skeletons, skulls of different races); wet specimens, preserved in formaline such as head and neck organs, chest viscera, abdominal cavity and pelvis, and additional embryological models; specimens Teichmann prepared himself - blood and lymphatic vessels of specific parts of the body, the limbs, corpus, head and the neck. There are also the internal organs of both: humans and animals; original mummies and specimens of brains preserved by using Teichmann's methods. The Museum of Anatomy Collegium Medicum is still used for teaching purposes.

Citation: Szlufik W, Theatrum Anatomicum – Museum of Anatomy Collegium Medicum Jagiellonian University in Krakow. Eur J Transl Clin Med. 2018;1(Suppl.3):28.

Medical Museums on the example of the Museum of Forensic Medicine Department in Wroclaw Medical University

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Abstract: A lot of people don't know about natural or medical museums, which are concerns on human, his body and history – and they stop in popular exhbitions eg. with plasticized bodies (presented in the shopping centers). Unfortunately, exhibitions in professional museums, often at University, are open only for students to learn, because they are better than sketches and drawings in books. These expositions are the effect of multiannual collecting skulls and skeletons (physiological and pathological). Along the science development, people have created also wet exhibits – preserved human tissues and organs. A big collection of these type of pendants is located in the Forensic Medicine Museum on the Forensic Medicine Department at Wroclaw Medical University. The unit was created probably in 1887, as part of the Leopold University. Later it changed name to Institut fűr gerichtliche Medizin und Naturwissenschaftliche Kryminalistik – and the most exhibits come from 1908 – 1945. Today's Museum of Forensic Medicine located on the first floor of the Forensic Medicine Institute and is a small room that cannot perform the typical museum function. Among the large collection of exhibits, gathered on a relatively small area, there are eg. weapon, old sectional tools, hangman loops and bones discoveries from the World War II made during the exhumation.

Citation: Pluta D, Janiszewska E, Medical Museums on the example of the Museum of Forensic Medicine Department in Wroclaw Medical University. Eur J Transl Clin Med. 2018;1(Suppl.3):29.

EUROPEAN JOURNAL OF TRANSLATIONAL
AND CLINICAL MEDICINE 2018;1(Suppl.3):30.

Understanding and representation of the anatomy of the human gravid uterus in two and three dimensions

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Abstract: Wax is a material capable of allowing the creation of extremely realistic and long-lasting models, so for a significant period anatomical models in coloured wax gained ascendancy as a valid alternative to dissected human remains. One of the most interesting chapters in the history of ceroplastics was, perhaps, the development of obstetrical teaching models. The 18th century witnessed the rise of medical intervention and a more ‚scientific' approach to obstetrics, midwifery and childbirth. New scientific treatises in this field were illustrated with images on paper, designed both for the understanding of pregnancy and childbirth by medical men, accoucheurs and midwives. Anatomical illustrations on paper also inspired or influenced a number of the finest surviving wax anatomical models in the great European collections of anatomical ceroplastics. The series of obstetrical waxes kept in the Faculty of Medicine of the University Complutense in Madrid for example takes inspiration from William Smellie's treatise of midwifery 1754 – 1791 and William Hunter's Anatomy of the Human Gravid Uterus 1774 – 1783.

Citation: Ballestriero R, Understanding and representation of the anatomy of the human gravid uterus in two and three dimensions. Eur J Transl Clin Med. 2018;1(Suppl.3):30.

The study of old Pathology Museum specimens: A conservative approach

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Abstract: The collection of ,'Royal Institute of Pathology'' of Turin dates back to the end of the XIX and beginning of XX century. The 300 specimens are highly informative of the natural history of some infectious diseases in the pre-antibiotic era as well as of malignant neoplasms. The wet specimens are preserved in their original jars with their authentic labels reporting date, register number and diagnosis. Due to the historical value of these specimens, a conservative approach is highly recommended while performing scientific research using modern techniques. Core needle biopsy was the procedure of choice to revise or implement the histopathological diagnosis without damaging specimens. Special attention was dedicated to preservation of the original specimen conditions, including the original preservation fluid. Damaged jars were replaced preserving the specimen in Kaiserling II solution, or alternatively under vacuum in a plastic bag containing a minimal amount of fluid. This latter approach allowed to ban the use of formaldehyde (now classified as cancerogenic), and also to provide easily manageable old samples for scientific and educational purposes. In conclusion, such a conservative approach allowed to obtain adequate material for further analysis and to implement the nosological classification, without further damaging the specimens.

Citation: Ferrari L, Metovic J, Busolatti G, Papotti M, The study of old Pathology Museum specimens: A conservative approach. Eur J Transl Clin Med. 2018;1(Suppl.3):31.

EUROPEAN JOURNAL OF TRANSLATIONAL AND CLINICAL MEDICINE 2018;1(Suppl.3):32.

Unforgettable pathologists

Rosa Henriques de Gouveia

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Centro Hospitalar Lisboa Ocidental, Lisboa, Portugal

Abstract: Francisco Henriques de Gouveia and Anton E. Becker are unforgettable Pathologists. Why? Who are they?
Francisco Henriques de Gouveia:
– Born March 31, 1935 in Madeira Island (Portugal)
– University of Coimbra, Medical School (FMUC) 1956 – 1962
– Double Residency at Coimbra's University Hospital
– Anatomo – Pathology 1964 – 1966
– Clinical Pathology 1967 – 1969
– Invited Anatomo – Pathology Teaching (FMUC's Assistant) 1965 – 1970
– Founding-father of the 1st Anatomo – Pathology Department at Madeira's Hospital 1970
– Head of the 1st Anatomo – Pathology Department at Madeira's Hospitals (old & new) 1970 – 2003
– Retired from the Hospital 2003
– Founded (with his wife) a Private Clinical & Anatomo-Pathology Laboratory 1970 –…
– Member of various scientific Societies
– Organization of national and international congresses and meetings
– Participation and presentation scientific work
– Author or co – author of over 50 articles
– Concomitantly is an active Lepidoptera collector.
Anton E. Becker:
– Born January 18, 1939 in Curacao – West Indies (Holland)
– University of Amsterdam, Medical School 1956 – 1966
– PhD (as a student) 1966
– Registered as Pathologist 1969
– Trained as a Cardiovascular Pathologist on a governmental stipendium in USA with Dr. Jesse Edwards 1969 – 1970
– Appointed Associate Professor of Pathology 1973
– Appointed Full Professor of Pathology 1980
– Orientation of Master and PhD thesis
– Joint projects with his wife (also a Pathologist)
– Dean of the Medical Faculty – University of Amsterdam, twice 1979 – 1983 & 1986 – 1989
– One of the Founding-fathers of the "Association for European Cardiovascular Pathology (AECVP)" and its 1st President.
– Retired at the age of 65 in 2004
– Member and Fellow of various scientific Societies
– Organization of national and international congresses and meetings
– Participation and presentation scientific work
– Author or co – author of over 600 peer – reviewed articles and numerous chapters in books.
– Presently, an active collector of Asian Art
Several publications on specific Netsuke items
A book on Netsuke published in 2012
A book on the 20th century Japanese Bronze Flower Vases (in preparation).
The author intend to pay homage to two professionals that changed Pathology in their times and places!

Citation: Henriques de Gouveia R, Unforgettable pathologists. Eur J Transl Clin Med. 2018;1(Suppl.3):32.

Astley Cooper and Herald Bleeding

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Abstract: *Astley Paston Cooper* was born in August 23, 1768 at Brooke (Norfolk – England). At the age of sixteen, he moved to London, where he studied anatomy at St. Thomas' Hospital. In 1800, he was appointed Surgeon to Guy's Hospital. In 1801, he received the *Copley Medal* and became fellow of the "Royal Society of London". In 1820, he operated King George IV, after which received a baronetcy and was appointed surgeon to kings George IV, William IV and Queen Victoria. He was president, vice–president and member of multiple Societies. Great anatomist, surgeon and teacher, made original discoveries and published a number of works [namely "*Lectures on Surgery*" (1824–1827)]. He died in London, in February 12, 1841; being known as "*The Prince of Surgery*".

The authors intend to highlight the contribution of Sir *Astley P. Cooper* to science and medicine, resorting to a case of *Primary AortoDuodenal Fistula* (PADF), term coined by him in 1829, which led to "*Herald Bleeding*" – gastrointestinal bleeding that halts temporarily and then progresses to massive and life–threatening bleeding - and sudden death.

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Who is John Clarke?

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Abstract: *John Clarke* was born in Wellingborough (Northamptonshire – England) in 1758/1760(?). In 1772, he moves to London with the family. In 1779, he becomes a member of *Company of Surgeons*, beginning his medical studies. In 1785, he changed to the *College of Physicians*, in order to get the licence in Midwifery, which he got in 1787. He worked and gave courses on "*Midwifery and the Diseases of Women and Children*" at St. Bartholomew's Hospital and at home. Author of multiple presentations and publications, he was among the founding – fathers of "The Medical and Chirurgical Society of London" (now "The Royal Society of Medicine"). He died in 1851 from gastric cancer, being buried in Staffordshire.
The authors intend to draw attention to *John Clarke's* contribution towards women's and mother/child's health in the XVIII–XIXth centuries, by presenting an in utero death due to Chorangioma placentae, entity described by him in 1798 ("*Tumor Found in the Substance of the Human Placenta*". *Philosophical Transactions of the Royal Society of London,* vol. 88: pp. 361 – 368).

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In the Memory of our Teacher – Prof. Jolanta Borowska – Lehman (1928 – 2017)

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Abstract: Jolanta Borowska – Lehman was born in 1928 in a family with strong patriotic traditions. Between 1946 and 1952 she studied at the Medical Faculty of Gdansk Medical Academy and received the diploma number 432. Her whole life was tied to her Alma Mater. Her work at started as a volunteer at the Department of Anatomy managed by prof. Michal Reicher in 1948. Later she became an assistant in the Department of Pathological Anatomy directed by prof. Wilhelm Czarnocki and immediately began her scientific work.

Being already a certified pathologist in 1975 she passed the exam in neuropathology as one of the first doctors in Poland. She was interested in anatomy, pathology, and neuropathology. In 1965 she got PhD in medicine based on her dissertation titled „Hydranencephaly and hydrocephalus internus from the perspective of comparative pathomorphologic research".

In 1981 Professor Lehman received habilitation based on dissertation „Certain aspects of cellular reactivity in intracranial neoplasms". The treatise was based on innovative original immunological research. She became a docent in 1983 and an associate professor in 1991. She retired at 70 years of age, in September 1998.

Professor Jolanta Borowska – Lehman was a dedicated and respected teacher, requiring both knowledge and logical thinking. During her long 50 years of work, she conducted a vast range of didactic work including lectures, practical histopathology classes, autopsy classes, and many exams. For many years she was a vice – head of Department of Pathomorphology and she also established a Neuropathology Subunit.

As a teacher she preferred temperance and matter – of – factness in her work relations. She showed acumen and valued intelligence over mindless memorizing. At the same time, Prof. Borowska – Lehman was a friend to her students, always understanding towards banal mistakes of youth as well as unexpected life circumstances. Professor Borowska – Lehman was an active scientist, often in spite of obstacles. She worked with many scientists from Medical University of Gdansk and Warsaw. She was an active member of Polish Society of Neuropathologists. She organized didactic and scientific meetings and gave over 90 lectures during many scientific meetings and conferences in Poland or abroad.

Between 1959 and 2003. Professor Borowska – Lehman was either an author or co–author of 63 full–text publications, mainly in neuropathology and neurooncology. Her neuropathological publications concentrated on morphological changes, patho – clinical and pathoradiological correlations, developing neuropathology, immunology, and genetics of CNS as well as toxic changes.

Professor Lehman encouraged young researchers by giving helpful suggestions, however, she also gave a lot of freedom in it. She taught proper rules of scientific cooperation and good conduct during research. She was a warm, kind and sincere person and at the same time – principled in personal, professional or academic matters. For years she took meticulous notes of on – going work events – a peculiar diary, with commentary and small drawings.

Professor Lehman paid special attention to proper etiquette, dress – code and being respectful towards colleges, convinced that these are the characteristics of well – educated, intelligent person.

Professor Jolanta Borowska – Lehman had left considerable heritage for her successors. Having the opportunity to be taught by her, collaborate with her was a great chance of all of us.

Citation: Iżycka – Świeszewska E, Gulczyński J, Rzepko R, In the Memory of our Teacher – Prof. Jolanta Borowska – Lehman (1928–2017). Eur J Transl Clin Med. 2018;1(Suppl.3):35.

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Henryk Wiśniewski, Polish – American neuropathologist

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Abstract: Prof. Henryk Wiśniewski was born in Luszkowko, Poland, on 27 February 1931. He graduated from Gdansk Medical School in Poland in 1955. In 1958 he moved to Warsaw and worked in Neuropathology Department of Polish Academy of Science. He completed a Ph. D. in 1960 and post – doctoral degree in 1965. He finished two internships: at University of Toronto (prof. Jan Olszewski) and at Institute of Neurological Disease and Blindness NIH in Bethesda. He came to United States in 1966. From 1974 to 1976 he was a director of MRC Demyelinating Diseases Unit in Newcastle upon Tyne, England. In 1976 he was a director of NYS Institute for Basic Research in Developmental Disabilities Staten Island, New York. He focused his research mainly on demyelinating diseases, blood – brain barrier and dementia, especially Alzheimer's disease. Especially worth mentioning is his research concerning brain edema pathogenesis (cytotoxic and vascular mechanism), disintegration of myelin, amyloid or identifying connection between Alzheimer's disease and chromosome 21. His contributions to contemporary knowledge of central nervous system conditions, including degenerative diseases, is illustrated in more than 650 publications. His name is listed among the „Neuropathologists of the 20th Century" by H. Zimmermann, in Marquis „Who's Who in America" and „American Men and Women in Science".

Citation: Sieracka J, Sieracki P, Henryk Wiśniewski, Polish – American neuropathologist. Eur J Transl Clin Med. 2018;1(Suppl.3):36.

The history of oral and maxillofacial surgery in Gdansk

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Abstract: The development of oral and maxillofacial surgery in Gdansk was gradual. In December 1945 MD Walenty Maniszewski and DDS Maria Milodrowska created Przychodnia Dentystyczna Szpitala Miejskiego (the Dental Clinic of Municipal Hospital).

MD Irena Semadeni – Konopacka organised a 6–bed Oddział Chirurgii Stomatologicznej (the Oral Surgery Ward), exisiting 1945-1946.

In December 1946, Katedra i Klinika Chirurgii Stomatologicznej (the Academic Department and Clinic of Oral Surgery) was created. The head of the department was prof. Alfred Meissner (until November 1947) and later DDS Irena Semadeni – Konopacka (from 1948 also with the title MD, acting head November 1947 – October 1950).

In 1947, the Faculty of Stomatology was created and later on, in 1950, it was renamed to the Subfaculty of Stomatology. Katedra i Zakład Chirurgii Stomatologicznej (the Department of Oral Surgery) was brought to life (the head of it being prof. Mieczysław Jarosz until 1969).

In 1953 20 – bed Oddział Chirurgii Stomatologicznej II Kliniki Chirurgicznej (the Oral Surgery Ward of the II Surgical Clinic) was adjoined to Katedra i Zakład Chirurgii Stomatologicznej (the Department of Oral Surgery).

Between 1969 and 1998 the Head of the Department was Habilitated Doctor Tadeusz Korzon (since 1975 an Associated Professor, since 1990 a Full Professor). In 1969 the activity of the Department was expanded. Oncological and reconstructive surgery were introduced, as well as transplantology and implantology. In 1970 Katedra i Klinika Chirurgii Stomatologicznej (the Department of Oral Surgery) was renamed to Klinika Chirurgii Szczękowo – Twarzowej (the Maxillofacial Surgery Clinic), and operated as a unit of the Institute of Stomatology for the period of 21 years, until 1992. After that, the Clinic operated as Katedra i Klinika Chirurgii Szczękowo – Twarzowej (the Department of Maxillofacial Surgery).

The successor of Professor Tadeusz Korzon was Associated Professor Józef Zienkiewicz (the Head until 2007). During years 2007-2014 the head of the department was Professor Adam Włodarkiewicz. Between 2014 and 2017 the Acting Head was Habilitated Doctor Barbara Drogoszewska. After that period, the department was divided into two separate units: Klinika Chirurgii Szczękowo – Twarzowej (the Department of Maxillofacial Surgery) with Habilitated Doctor Barbara Drogoszewska as the acting head and Zakład Chirurgii Stomatologicznej (the Oral Surgery Department) with Associated Professor Anna Starzyńska as the head.

Citation: Starzyńska A, Adamska P, Ragin K, The history of oral and maxillofacial surgery in Gdansk. Eur J Transl Clin Med. 2018;1(Suppl.3):37.

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Prof. Nikanor Chrząszczewski. At the origins of general pathology

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Abstract: Nikanor Chrzaszczeski, a scientist, doctor and academic teacher of Polish descent, had a significant impact on the early development of histology, pathophysiology and general pathology. He spend a large portion of his career at Imperial University of St. Vladimir in Kiev, where he worked as Professor of General Pathology and Dean of the Faculty of Medicine. He was born on 26th July 1836 in Pierm in the Russian Empire. He graduated at University of Kazan in 1859 and received his medical doctor title for the paper entitled „On the structure of adrenals", which unambiguously indicated their endocrine role. Subsequently, he continued his scientific career in Western Europe laboratories with professors Kelliker, Bamberger, Muller and others, where he learns the methodology of histology and physiology of that time. In 1864 he started working at University of Charkov as the doctor of hygiene and lectured on general pathology, embryology and anatomy. In the meantime, he published the results of his studies documenting the presence of the epithelium lining in alveoli and endothelium in capillaries. A part of his studies were dedicated to kidney histology as well as the function of kidneys and liver, using his own method of physiological injections (a modification of the commonly used classical method of the Viennese school). Some of his studies are also focused on the structure of hepatic lobules and portal circulation, while his later publications concerned the aspects of anatomy and physiology of the autonomic nervous system.

In 1869 Professor Chrzaszczewski was invited to take over the Chair of General Pathology in Kiev, where he takes part in its organisation from the basis, while simultaneously working as the Dean of the Faculty of Medicine. Teaching was one of his primary concerns and, thanks to his outstanding speechcraft, he was highly esteemed by his students. What is more, since 1869 he has been the president of Kiev Doctors' Association for several terms and led to the opening of the free ambulatory for the poor. From 1889 almost to his death (in 1906) Nikanor Chrzaszczewski also has taken part in sanitation and hygiene education with his open popular science lectures on these topics. During his teaching and scientific efforts he authored and co-authored more than 50 publications and supervised about 20 followers, some of whom became professors.

Citation: Żawrocki A, Chojnacka M, Prof. Nikanor Chrząszczewski. At the origins of general pathology. Eur J Transl Clin Med. 2018;1(Suppl.3):38.