

EUROPEAN ASSOCIATION OF PROFESSORS EMERITI

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THE PRESIDENT'S ADDRESS

Our Association's Goals and how to achieve them



Dear Friends and Colleagues,

Our Association was founded in October of 2016.

The purposes of our Association are summarized in Article 3 of our By-laws:

- a) The creation and/or preservation of ties among academics and Professors Emeriti all over Europe.
- b) The collaboration of European Professors emeriti in conducting research projects or in producing and publishing meritorious scientific work.
- c) The submission of proposals to the relevant European authorities with respect to the study of issues related to graduate and post graduate education or offering courses to the general public with a view to contributing to restructuring curricula or other sections of learning, where such needs exist.
- d) The exchange of knowledge and ideas stemming from various scientific fields, visual and performing arts.
- e) The active cooperation among European scientists across various academic fields via the organization of meetings, colloquia or conferences of interdisciplinary and intra-cultural interests and the creation of a "Think Tank".
- f) The moral, scientific, legal counseling and material support to colleagues and their families and also to every needy individual.

However, many approaches can be described as regards their implementation. In my view, a crucial element is growth. If our numbers are small, no impact can be effected. Thus, we should in every way try to increase our numbers. Our current number of 212 is getting close to this objective; however we still need to increase our numbers. An encouraging message is coming from the Committee of National Representative of Italy which since founded a few months ago has succeeded in enlisting many prominent colleagues.

A second approach is to collaborate with as many societies having goals paralled to our own as possible. Thus, in our upcoming Congress, some important scientific bodies will be officially participating such as the National

Academy of Medicine of France and the Association of Professors Emeriti of British Columbia. Also the Presidents of the European Academy of Sciences and Arts, the Academy of Sciences of France, and of the Academy of Athens and representatives of the European Academies Science Advisory Council (E.A.S.A.C.) will be participating.

We hope that in the Congress, the various thematic subjects will give an impetus towards defining areas on which our efforts should concentrate. The main topics which at this time can be summarized as follows:

The dissemination of Knowledge and education, and ways to implement it.

The Capital of Age. Improving and achieving homogeneity in the status of Professors Emeriti.

The environment and ways to protect it.

In the General Assembly of May 30, 2019, these goals will also be discussed and a consensus will hopefully be reached.

Additionally, two invaluable aspects as to the future of Association must be stressed:

The friendly atmosphere. It is my firm belief that we are a Society of dignified friends.

The democratic spirit. Thus, representation of all countries and disciples is essential. Additionally, regular rotation of posts is important, to keep more Colleagues interested.

These are, in my new, the aspects, which our- still young- Association should address.

Very Sincerely Yours,

Dennis V. Cokkinos

President

Dept of Medicine (Cardiology), University of Athens Biomedical Research Foundation, Academy of Athens



MIROSLAV MYDLÍK

<u>In Memoriam</u>



MD. DSc. Emeritus Professor (1932-2018)

Miroslav Mydlík, MD, DSc was born on 21 July 1932 in Košice where he died on September 6, 2018. In 1943 he started high school at the Gymnasium in Prešov and completed his study at the 1st State Gymnasium in Košice in 1951.

In the years 1951 — 1957 he was a medical student and he successfully graduated from the Faculty of Medicine, Charles University Prague, in 1957. After graduation he began working as a house physician at the Department for Infectious Diseases at the Faculty Hospital of Regional Institute of National Health (KUNZ) in Košice. From August 1st, 1959 until December 10th, 1959 he worked as a general practitioner in Biel. From December 11th, 1959 he was a house physician at the Internal Clinic of Faculty Hospital KUNZ in Košice.

He successfully passed the attestation of 1^{st} degree in internal medicine in 1961 and of 2^{nd} degree in internal medicine in 1964. From January 1^{st} , 1964

to July 1st, 1979 he worked as an assistant professor at the 1st Department of Internal Medicine, Medical Faculty of P.J. Šafárik University. In the years 1972—1975 he has been leading undergraduate students of Medical Faculty of P.J. Šafárik University. In 1971 he successfully defended his PhD thesis in clinical nephrology and in 1973 he passed a follow-up specialization in nephrology, being the first in Slovakia. From 1979 to April 1st, 1992 he worked as a registrar for nephrology and, at the same time, he was the Head of Dialysis Centre of the IVth Internal Clinic at the Faculty Hospital with Polyclinic, and later at the Faculty Hospital of L. Pasteur.

In 1984 - successfully he defended his academic title "Doctor of Medical Sciences" at the Medical Faculty of Charles University in Prague; in 1990 - he habilitated as Associate Professor of Internal Medicine and in 1992 - he was appointed by President Václav Havel full Professor of Internal Medicine.

In January 1966 Miroslav Mydlík was a founder of a dialysis centre at the 1st Internal Clinic and organized a splendid laboratory for nephrology initially at the 1st Internal Clinic and later at the 4th Internal Clinic. As chief for that laboratory the Faculty Hospital in 1969 enrolled for a life position Eng. Katka Derzsiova. She renovated the laboratory and introduced new techniques and equipment to study Metabolic changes in chronic renal failure and during dialysis, mainly metabolism of vitamins and hemoperfusion through active charcoal and other sorbents. This was an epochal change which reflected on the number and quality of the scientific production. This coincided with a creative and fertile period in the career of Professor Mydlik. It also happened that the Lady Engineer was turned into a brilliant investigator in the field of nephrology, uremia toxicity and dialysis, and hemoperfusion. Many new projects were started, various grants were obtained.

In the years 1970–1990 he enhanced and shifted the centre to a qualitatively higher level at the 1st and later at the 4th Internal Clinic of Faculty Hospital of L. Pasteur. In 1963 he performed the first percutaneous renal biopsy and in 1977 he carried out the first hemoperfusion through active charcoal in the patient suffering from paraquat poisoning that was the first in the former Czechoslovakia. Moreover he gradually introduced all the extracorporeal elimination methods and CAPD which are still used in the dialysis centres.

Contributions to clinical science

The list of Mydlik publication includes over 450 scientific publications, including original articles in national and international journals, editorials, and chapters in books. Main topics were Metabolic changes in chronic renal failure, Metabolic disorders of some vitamins in chronic renal failure, Renal replacement therapy, Uremic toxins, Hemoperfusion in acute poisoning in vivo and in vitro. He was a presenter (over 785 presentations) in domestic and international congresses in Europe, USA, South America, Asia. He also organized many nephrological congresses and symposiums in Czechoslovakia, Slovakia, most of them with international participation (1970–2012).

Prof. Mydlík was initiator of awarding the honorary title of Doctor Honoris Causa of P.J. Šafárik University in Košice. In the years 1993-2006 the title was awarded to various outstanding scientists including 7 professors of nephrology (Shaul Massry, Joel Kopple, Horst Klinkmann, Franczisek Kokot, Natale G De Santo, Guido Bellinghieri and Vittorio Bonomini).

Clinical activity

Professor M. Mydlík, as the former Head of Dialysis unit (1966–1992), of the IV^{th} Internal Clinic (1992 — 1997) and the Nephrological Clinic (1997–2003) of the Medical School of P.J. Šafarik University and University Hospital of L. Pasteur in Košice, made significant clinical experiences with 1.300 patients, who underwent renal biopsy, with 1.500 patients undergoing renal replacement

therapy and with 380 patients with acute poisonings.

Positions covered

Professor Mydlik was Head of the Subchair of Nephrology and Dialysis of Postgraduate School of Medicine in Bratislava (1991–2003); President of the Medical Association in Košice (1990–2002); Prorector of the P.J. Šafárik University in Košice (1994–1997); Main specialist for nephrology of the Ministry of Health, Slovak Republic (1994–2007); Member of the board of Slovak Nephrological Society (1969–2007); Member of the Council (2011–2016) of International Association for the History of Nephrology.

The last years

After retirement he continued to work (up to December 2017) one day a week for an internal-nephrological outpatient ambulance at the IVth Internal Clinic, University Hospital of L. Pasteur and at the Institute of Experimental Medicine, Medical School of P.J. Šafárik University. He also continued to give lectures for Slovak and foreign university medical students.

In September 2016 Professor Mydlik was instrumental for the foundation of the European Association of Professors Emeriti (EAPE) in Athens, where he gave an enthusiastic talk and was elected in the Council at Large of the newly founded association. However in December 2017 he declined the possibility of re-election.

The last international talk was given at Wloclawek in Poland, at the 2017 Congress of the International Association for the History of Nephrology (IAHN). The last talks in Slovakia were given in November 2017. At the Meeting on Preventive medicine he spoke about Renal Disease and Aging, whereas at the Franz Kafka Medical and Literary Memorial in Kežmarok, in occasion of the release of the book of Miroslav Mydlik and Katka Derzsiova entitled Lung Tuberculosis of Franz Kafka. The influence of Disease on His Literary Work. For that book events were planned at the P.J. Śafárik University in Kosice and at the Franz Kafka Center in Prague. But they could not take place. Professor Mydlik was diagnosed myastenia gravis and underwent successful treatment at the hospital of his university. He recovered but in January 2018 for a spine problem surgery was needed him. There were various complications. Health suddenly deteriorated and he needed long lasting hospitalisation at the Geriatric Center of the St. Lukas. However his spirit was strong and was still developing new plans.

We do know that on September 5 he received the complimentary copy (posted by Janusz Ostrowkski) of the issue of Giornale Italiano di Nefrologia entitled History and Historiography of Nephrology. Dr.Katka Derzsiova — (councillor of IAHN) — informed me over the phone that he was very pleased of the outcome of their contributions on the origins of nephrology in Czech Republic and in Slovakia.

On September 6 he died. His funeral took place on the subsequent days, people of the university, University Hospital and patients participated in the event. There were many outstanding talks from prominent speakers. He was buried at the Rozalia Cemetery in Košice.

A tentative list of honors

He received many honors a selected group of them are listed herein: The Purkyně Medal of Czechoslovak Medical Society (1979); The International Distinguished Medal of the National Kidney Foundation (USA), (1994); The Medal of the University of Messina, Italy (2000); The Medal "Sigillo Magno" of the University of Bologna (2002); The Medal "Golden Kidney" of the Slovak Nephrological Society (2002); Professor Emeritus" of P.J. Šafárik University, Košice (2004); The Medal of Campania Sicily Branch of the Italian Society Branch of Nephrology, the South Italian Nephrological Society (2002); T R Niederland Price of Slovak Medical Society, Bratislava (2009); Gold Medal of P.J. Šafárik

University, Košice (2009); "The Lifelong Contribution Award for Medical and Biological Sciences" awarded by the Board of the Literary Fund of the Slovak Republic (2014); On December 8th, 2015 he was introduced into the "Hall of Glory of Slovak Medicine" in Bratislava.

He was Honorary Member of the Polish Society of Nephrology (1994), Honorary Member of Slovak and Czech Medical Society (1997) and Honorary Member of the Slovak and Czech Society of Nephrology (1997, 2002).

A talented physician with many cultural interests

He was interested in world literature, theatre, classical music, history of Egypt, Greece and Italy and history of medicine. He founded the Franz Kafka Monument in Tatranské Matliare (High Tatras) in 2001, and was the organizer of 8 International medical and literary symposiums dedicated to Franz Kafka in the years 2001–2014. In association with J. Vajó he was the editor of a significant book History of the University Hospital of Louis Pasteur in Košice. Edit. P. J. Šafárik University, in Košice 2013 (469 pages). He was also a co-author of the first Slovak monograph in nephrology: Dzúrik R., Šašinka M., Mydlík M., Kovács L., et al. Nephrology. Bratislava, Herba comp. Ltd. 2004 (877 pages).

Three days in Wloclavek in May 2017

From Professor Janusz Ostrowski, President of IAHN, I have learned the following. "In the last months of his life I have had the great adventure to connect Professor Miroslav Mydlik — through Eng. Katka Derzsiova — to some of his friends and members of the International Association for the History of Nephrology. These months were characterized by the diagnosis of the spine problem and its surgical treatment, which had to follow by the hip replacement. Surgical treatment for hip replacement, was not performed for various serious complications resistant to rehabilitation. These were the many months of hospitalization in the department of geriatrics. Months of severe sufferance. His body was weak, his spirit strong and I was pleased to learn that he was happy of the outcome of his contributions to history of nephrology in the proceedings of the 2017 IAHN Congress which I had mailed to him. Indeed in the short days we were in Wloclavek he told me about his astonishment for (i) the exhibit of Davenia's work; (ii) the Gothic Cathedral and (iii) its resounding vault; (iv) the

authors selected for the concert and (v) the superb performance of the orchestra; (vi) the tomb of the blessed Jerzy Popiełuszko; and (vii) the rooms dedicated to Resistance to Nazi occupation in the Museum of the Diocese. These interests are indicative of the man he was and of the ideas that drove him".

The Medal of the council of the Faculty of Medicine of UPJŠ



On September 26, 2018, at the Meeting of the Scientific Council of the Faculty of Medicine of UPJŠ on the occasion of the 70th anniversary of its foundation, Professor Miroslav Mydlik Mirko was awarded a medal in memoriam. The celebration took place in the House of Arts, in the concert hall of the Košice Philharmonic Orchestra. The medal was received by Eng. Katka Derzsiova.

Farewel

Miro will survive in the heart of Katka, his true close friend for many years who was with him during the whole illness.

"Ave atque vale / Hail and farewell" (Gaius Valerius Catullus, Carmina, CI).

References

Derzsiová K, Spustová V. Profesor MUDr. Miroslav Mydlík, DrSc., sedemdesiatpäťročný./ Professor Miroslav Mydlík, MD, DSc. seventy-five-year-old. Vnitř Lék., 2007; 53 (7-8): 866-868.

Mydlík M, Derzsiová K. 50-ročná publikačná činnosť v časopise Vnitřní Lékařství./ 50-year publishing activity in the journal Vnitřní Lékařství. Vnitř Lék 2012; 58: 76-79.

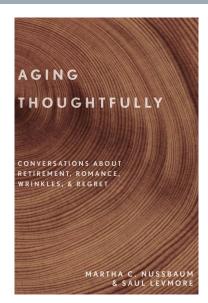
Spustová V. Prof. MUDr. Miroslav Mydlík, DrSc. – Editoriál./ Professor Miroslav Mydlík, MD, DSc. – Editorial. Lek Obz 2017; 66 (6): 199.

Derzsiová K, Spustová V. Významné životné jubileum profesora MUDr. Miroslava Mydlíka, DrSc./ Important life jubilee of Professor Miroslav Mydlík, MD, DSc. Vnitř Lék 2012; 58(7 a 8): 8-11.

Natale G De Santo, MD, Emeritus Università della Campania Luigi Vanvitelli, Naples, Italy



EAPE's MINIREVIEWS of BOOKS on AGING



Aging Thoughtfully:
Conversations about Retirement, Wrinkles, Romance, and Regret
Martha C. Nussbaum, Saul Levmore, Oxford University Press, New York, 2017.

On the authors

A book written from the creative woman philosopher and goddess in global justice and by a lawyer – economist – both professors at the at the University of Chicago. Martha Nussbaum, is appointed in the Department of Philosophy and the Law School and Saul Levmore is the former Dean of the University of Chicago Law School. In 2009 he stepped down as Dean and returned to the faculty and full-time teaching that he found much more rewarding than the glory of a Dean.

The first co-author, Professor Nussbaum, is now 71 years old and she can still teach thanks to the removal in USA of compulsory retirement. Her interests are centered around political philosophy, ethics, feminism, liberal theory. She received honorary degrees from fifty-six colleges from all over the world having authored a long list of well received books. One can now find reasons to laugh for the fact that she was denied a tenure from Harvard University, when she applied for at the Department of Classics.

Saul Levmore, relatively young, born in 1953, is a human-oriented law professor. Two of his research projects focused on social policy issues and needed legal reforms: the judicial behavior of the Federal Courts' Judges or the future of the children in foster care. Yet his writings cross many fields.

He has written about torts, corporations, copyright, non-profit organizations, comparative law, public choice, corporate tax, commercial law, insurance, and contracts.

The most recent book of both distinguished aforementioned professors on Aging Thoughtfully consists of eight conversations/paired essay on aging. The book adopts the method Marcus Tullius Cicero used in writing (44 BC) De senectute/On Aging dedicated to his friend Atticus. Therein Cato the Elder, a venerable old man, discusses with Caius Laelius Sapiens and Publius Cornelius Scipio about pleasant and unpleasant aspects of aging. The book explores retirement policy, inheritance decisions, cosmetic surgery, post-middle age romance, planned communities, charitable giving, friendship, and inequality.

Ending of compulsory retirement and ending of discrimination. Certain chapters are written by Nussbaum and other by Levmore, and sometimes these chapters are supporting opposite views.

Nussbuam welcomes the ending of compulsory retirement as an ending of discrimination, as an attempt to base e institutions on "justice". She points out that all forms of domination seem natural to those who exercise them including racial discrimination, discrimination of women and of those with disabilities, discriminations on ground of sexual orientations.

Levmore, while is not satisfied with the norms of the ban on retirement he is asking: "must we retire?" "It is unlikely that I will be as good at my job at age seventy-five as I was at age fifty-five, and yet my employer might be stuck with me. An employer cannot require an employee to retire, even at a respectable age such as sixty-eight; mandating a retirement age as a condition of employment will be regarded as engaging in age discrimination, even if the employee was hired at a young age and even if the employer applies the policy evenhandedly to all workers as they reach the stated age". "The exceptions -including pilots, law enforcement officers, state court judges, law firm and investment bank partners (because they are not employees), and Catholic bishops- are few. Although a great majority of workers do retire by age sixtyeight, the fact that they need not do so surely causes employers to hesitate to hire middle-aged and older workers because they fear that these employees will not retire, if and when their productivity begins to drop. Moreover, in many jobs, compensation rises with seniority even if productivity falls. Not only am I likely to be less useful to my employer at seventy-five than I was at fifty-five, but also my compensation at the older age will greatly exceed what I earned at fifty-five. Employers correctly fear that, if they decrease or even flatten the salaries of aging employees, they will trigger age discrimination suits. Of course, some workers are fantastic at their jobs well past any age we could specify. There are eighty-five-year-olds who are extraordinary managers, and requiring them to retire would impose serious private and social costs. Some law firms, for example, go to great lengths to keep these few marvels on the job. "But there is probably some cause-and-effect relationship between the end of compulsory retirement and the bringing on of more part-time workers. In universities the substitution is dramatic. University expansion has come through hiring adjuncts rather than full-time faculty; the adjunct faculty scramble for positions and pay, while full-time, tenured professors, now enriched by the option of staying on as long as they please with almost zero risk of removal for cause, comprise less than half the teaching force and a yet smaller fraction of new appointments."

Ban on retirement is a sort of a rescue from a horrible fate. Nussbaum is very happy with the end of the ban on retirement. "Like all American academics of my generation, I have been rescued from a horrible fate by the sheer accident of time. At sixty-nine, I am still happily teaching and writing, with no plan for retiring because the United States has done away with compulsory retirement. Luckily for me, too, the law changed long enough ago that I never even had to

anticipate compulsory retirement or to think of myself as a person who would be on the shelf at sixty-five, whether I liked it or not.

It's no accident, then, that it seems weird and horrible to me to see members of my age cohort in philosophy turned out to pasture, just because they happen to be employed in Europe or Asia, even though they are a few years younger than I am. Some have been dismissed not only from department and office but also from university housing, forced therefore to relocate, sometimes to distant isolating suburbs, too far away to interact regularly with scholarly pals or graduate students, or for any of them to see much of their former colleagues. A caveat: I'm talking mainly about work that the worker experiences as meaningful, not about mind-numbingly repetitive white-collar work, and certainly not about hard physical labor. For those careers, retirement is already a popular choice in the United States, and, under the right circumstances, compulsory might do just fine".

Nussbaum is also expanding her thoughts on the situation of early retirement of the past. She criticizes the fact "before the end of compulsory retirement in US universities, judgments about who should retire were made in accordance with all sorts of irrelevant factors, such as fads and social prejudices. In the Harvard of my graduate school days, when the university was permitted to decree that some retired at sixty-five, some at sixty-eight, and some at seventy, choices were conspicuously not made in accordance with academic productivity or beneficial contributions to the academic community. They were more often made in keeping with fads, alumni connections, and even baneful prejudices such as class and I am sadly convinced) anti-Semitism. They were not based on gender simply because there were no tenured women.) In short, unequal treatment, problematic in general, is especially problematic when it gives incentives to institutions to distort the academic enterprise in ways that track existing hierarchies that are peripheral to the academic mission". For Martha Nussbaum "The emeritus status might conceivably be redesigned to be less stigmatizing, as when, in our law school, retired professors keep an office, are welcome at workshops and roundtable lunches, and teach if they want to. But nobody has thought this through in a convincing way across the wide span of the professions".

An interesting, sarcastic, view is expressed with respect to aging women as movie stars.

Nowadays aging women appear frequently in movies. No longer as mother nor as grandmother but "having sexual relations and falling in love". "They are extremely attractive to men of roughly their own age or too much younger men. They are almost interested in sex, not just in companionship or sentiment and the men respond to their aliveness". "It is very important that all these women are successful working women and they are happily involved in and at the top of their profession". Nussbaum argues that these couples are usually regular couples. A romance started and ended the previous love. Nussbaum would now welcome movies based on real life.

Closing this brief book presentation one could mention that "Aging Thoughtfully" is a book of great intelligence, based on facts, which should inspire legislators and should find a place in the book- shelves of the libraries of any emeritus/retired professor and especially in those organized by fans of EAPE.

Natale G De Santo,

President Elect, Dept of Nephrology, Second University of Naples

Calliope Spinellis-Nomikou,

Professor Emeritus, Law, University of Athens



LEARNING FOR THE FUTURE:

From hand to Mind and Back Again



The relationship between the conceptual world of academic education, untouched by realities of the practical world, and the practice-oriented world of vocational and professional education with its roots in actual work, is a classic theme both in sociology of knowledge and educational theory.

The trajectories of educational systems up to the present have produced hegemonic dichotomies where both academic and vocational education separate knowledge from experience, theory from practice, thought from action. The remoteness of the academic world from the world of work demands new solutions. The traditional contradictions between the work of the hand and the work of the mind, between intellectual and manual labour both in general and inside different professions, face new challenges today.

The technological revolution based on ICT is restructuring production at an accelerating speed and is constantly changing labour processes both on the intellectual and manual labour market. This creates new needs for skills in all trades and professions. Old trades vanish, and new trades develop. These developments also lay the groundwork for challenging traditional practices in teaching and learning in educational institutions.

Liv Mjelde
Professor Emeritus
The Senior Centre
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Research from both neuroscience and social sciences has begun to enter critical debates and pose new questions. The division of knowledge acquisition between hand, mind and heart as a social construction is now being questioned again in the sociology of knowledge and educational theories. Schools of psychology rooted in cognitive science alone are challenged.

Learning theories based on master/apprentice traditions pose fundamental questions to this socially imposed separation from our own humanity as it is practiced in our educational systems today. Learning by doing, cooperating with others in workshop situations, is a central, but often forgotten, feature of education that must be addressed. Experience and craft maturity are important factors in learning and imparting learning (teaching and mentoring) whether you are a welder, a surgeon or a kindergarten teacher. An education system incorporating hand, heart and mind, the emergence of conceptualization and the learner's practical exercise of her or his craft, is necessary for a better education for all.



ETHICAL ISSUES RAISED BY THE NEW METHODS OF GENOME EDITING

APPLIED TO THE HUMAN GERMINAL GENOME



The new methods of germinal genome editing may be applied either to embryos at an early stage of development or to masculine and feminine gametes.

1. Corrections of mutations or introduction of protective genes in human embryos

It has been possible for more than 30 years to modify the germinal genome of animals in experimental studies. Transgenic mice are created by introducing into the genome of embryos at the zygotic stage a foreign DNA segment instead of the natural DNA in order to study the resulting phenotype modifications. The technique is long and the result obtained after successive crossings. It is therefore technically inapplicable to humans. A new technique has in 2012 revolutionized the process by simplifying and shortening it. Known as its acronym. CRISPR-Cas9, it involves associating a guide RNA with an endonuclease that cuts the DNA at the chosen location and thus eliminates or replaces a segment of DNA. The technique has been assumed to be reasonably specific and successfully utilized in animals both in somatic and germinal gene therapy. The question immediately arose of its possible application in humans to correct mutations or induce mutations with a possible beneficial result. If utilized in somatic gene therapy, it will facilitate the treatment and does not raise any ethical problem. If applied to the germinal genome, it comes up against the generally accepted opinion that "no transformation can be made to the genetic characters in order to modify the offspring of the person" as specified by the law in France or the Oviedo Convention (1997) that France has endorsed. There was a great emotion in scientific and ethical communities in April 2015 when a team of Chinese researchers reported using CRISPR-Cas9 to correct a mutation in the β -globin gene responsible for thalassemia in human embryos. The experiment was performed on triploid (having a chromosome number

Treasurer
President of the Association Robert Debré for medical research
Member, National Academy of Medicine, France

Raymond Ardaillou

that is 3 times the basic or haploid number) embryos unable to give birth to a child but a red line seemed to have been crossed paving the way for germline gene therapy. This event led many scientific institutions and organizations to reopen the debate. In France, the National Academy of Medicine published a report in April 2016 signed by Pierre Jouannet whose conclusions can be summarized as follows: "the ethical questions raised by these technologies will require multidisciplinary discussions within the wider debate on all assisted reproductive technology procedures that may affect the genome of the unborn child, and, possibly, of subsequent generations. However, research, including that on germline cells and human embryos should be carried out provided that it is scientifically and medically justified." Many institutions including the Neville Council in the UK and the National Academy of Sciences, Engineering and Medicine in the USA have also examined this issue and formulated almost identical recommendations. They underlined the need not to prohibit research but concluded that any clinical intervention of germinal gene therapy was unthinkable in the current stage of knowledge. However, since 2015 several studies have gone past this recommendation. One was performed with triploid embryos to introduce an allele protective of VIH infection and another with diploid embryos obtained by fertilization in vitro with the spermatozoa of men carrying mutations of glucose 6 phosphodeshydrogenase or β-globin. The results were not convincing and mosaics (two or more populations of cells with different genotypes in one embryo) were frequently obtained. In the second study an embryo was specifically created for research, which is forbidden in France where only experiments on embryos in excess after in vitro fertilization that are not intended for a parental project are allowed to be utilized. Other studies devoted to the early development of embryos were also carried out, for example a fundamental research that showed the role played by OCT4, a

transcription factor, in the formation of the blastocyst. This type of study ending by the destruction of the embryo is allowed in many countries including France after authorization of the Biomedicine Agency.

Another theoretical utilization of embryos would be to create chimera for organ transplantation. The technique successfully utilized in animals would consist in preventing the development of an organ, for example pancreas, in a pork embryo, then in transferring in this embryo human embryonic stem cells and finally implanting this chimera in a sow uterus. The off spring would be a piglet with a human pancreas that could be used as a graft in patients. This type of study based on the creation of human-animal chimera is forbidden by all international conventions and in all the countries that adopted a bioethics law.

2. Interventions on masculine or feminine gametes

Another approach would be to intervene on germ cells before fertilization. It is conceivable only with masculine gametes since, in women, an easy access to oogonies (precursors of oocytes) is not possible. It is not the same for the male germ line, since spermatogonia strains can be taken from adult testes. The cells are treated in vitro by CRISPR-Cas9 and then cultured to proliferate and form cell colonies that can be utilized to initiate spermatogenesis and produce spermatozoa carriers of the gene modification that one wishes to transmit to the embryo. This procedure was successfully used in mice and is theoretically possible in humans. The targeted modification of genes in spermatogonia could avoid the transmission of a monogenic pathology when pre implantation screening is refused, but also be utilized to correct gene alterations responsible for masculine sterility. It has also been proposed to use induced pluripotent stem cells. In this technique cutaneous fibroblasts are reprogrammed in embryonic stem cells and then differentiated in post meiosis (haploid cells with half number of chromosomes) gametes. Very recently (July 2018) a publication by Kosick et al. showed that CRISPR-Cas9 technique, in spite of the progress done for avoiding off targets, may lead to large deletion and complex rearrangements casting doubt on its specificity. This study was realized on immortalized human cell lines. Therefore, it would be necessary to thoroughly examine the genome of the cells before any application in man.

Another issue must be considered. It is the modification of the maternal mitochondrial DNA. This DNA is present in oocytes and transmitted to the children by their mothers. Mutations of the mitochondrial DNA lead to severe diseases, for example, the Leigh syndrome which affects the central nervous system. Genome correction was realized to treat this disease by enucleation of the mother oocyte and transfer of the nucleus in the oocyte of a donor which had been beforehand enucleated. The corrected oocyte is fertilized by the father sperm and the embryo implanted in the mother uterus. The technique was successful as shown by the birth of an intact child with three parents (two mothers and one father). In fact, nobody knows the possible influence on the future generations and mosaics cannot be excluded.

3. Ethics questions raised still in discussion:

An approximate list of the issues to be considered may be drawn. They can be formulated as follows:

Can utilization for fundamental research of human embryos in excess without parental project be allowed or must we respect any form of human life from the monozygotic stage? Many countries including France adopt the first option.

Can research projects be carried out freely or after a public agency authorization? Many countries including France demand such authorization.

Must creation of embryos for research be allowed? No in many countries

Is it acceptable to modify the germinal genome of embryos to correct a mutation or is it better to utilize pre implantation screening and eliminate the embryos carrying the mutation? Safe techniques for the first option are not yet available, but in the future, it is likely germinal genome editing will be allowed in a limited number of cases of severe diseases and after authorization of a public agency. Meanwhile, the second option is recommended in many countries.

Is it acceptable to improve the genome by introducing a protective gene and, more generally, to create embryos with a pre designed phenotype? No in all countries and forever, let us hope.

Can one be afraid of unforeseen consequences of germinal genome editing on the future generations? The hindsight for answering is still lacking but the "precautionary principle" encourages us to limit its use to the most serious cases.

In France, a new bioethics law is in preparation and its terms are widely discussed. One can foresee that no consensus will be obtained and that the parliament will proceed cautiously in the redaction of the new bill since it will be a difficult task to find a right equilibrium between several aims: 1- to improve our knowledge of the conception and development of the human embryo; 2- to keep the future possibility to correct monogenic severe mutations; 3- to forbid evolution towards a non-mastered transhumanism aiming to create the "perfect child". Moreover, there is a general consensus to think that humans cannot be reduced to their genome and that many outside influences including epigenetics (heritable changes in gene expression that do not involve changes in the underlying DNA sequence) shape our personality.

References

Doudna JA., Charpentier E. (2014). Genome editing. The new frontier of genome engineering with CRISPR-Cas9. Science, 346, 1258096.

Jordan B. (2015). Thérapie génique germinale, le retour? Med Sci (Paris), 31, 690-693.

Jouannet P. (2016) Genetic modifications of human germinal cells and embryos. in line in: http://www.academie-medecine.fr/wp-content/uploads/2016/05/report-genome-editing-ANM-2.pdf

Jouannet P. (2017). CRISPR-Cas9, cellules germinales et embryon humain. Biologie Aujourd'hui, 211,207-213.

Kosicki M, Tomberg K., Bradley A.(2018) Repair of double-strand breaks induced by CRISPR-Cas9 leads to large deletion and complex rearragements. Nature biotechnology published on line 16 july 2018, doi:10.1038/nbt.4192.

Lander ES. (2015). Brave new genome. N Engl J Med, 373, 5-8.

National Academies of Sciences, Engineering, and Medicine. (2017). Human Genome Editing: Science, Ethics, and Governance. Washington, DC, The National Academies Press. DOI: 10.17226/24623.

Plaza Reyes A., Lanner F. (2017). Towards a CRISPR view of early human development: applications, limitations and ethical concerns of genome editing in human embryos. Development, 144, 1-3.

Tang L., Zeng Y., Du H., Gong M., Peng J., Zhang B., Lei M., Zhao F., Wang W., Li X., Liu J. (2017). CRISPR/Cas9-mediated gene editing in human zygotes using Cas9 protein. Mol Genet Genomics, 292, 525-533.

Zhang J, Liu H, Luo S, Lu Z, Chávez-Badiola A, Liu Z, Yang M, Merhi Z, Silber SJ, Munné S, Konstantinidis M, Wells D, Tang JJ, Huang T.(2017) Corrigendum to Live birth derived from oocyte spindle transfer to prevent mitochondrial disease. Reproductive BioMedicine Online 34 (2017) 361-368].



MINI INTERVIEWS ON PROFESSOR EMERITI

TALK with REMO BODEI excerpts

Natale G De Santo

President Elect, Dept of Nephrology, Second University of Naples



Remo Bodei, Born in Cagliari, Sardinia, Italy in 1938 is Philosopher and Professor of Philosophy at the University of Pisa, Scuola Normale Superiore in Pisa, and of at the university of California, Los Angeles. In the latter institution, where he has been Distinguished Professor in Residence for over 20 years, he was celebrated with a special scientific event (*Geometries*

of Experience: A Tribute to Remo Bodei) in December 2017. He has been Visting Professor at the University of Cambridge, Toronto, Mexico City, Ottawa, Bochum, New York and for more than 30 years he has delivered seminars on philosophy of our times at the Italian Institute for Philosophical Studies in Naples. He departed from German Classical Philosophy and went on with more than 200 papers on utopian thinkers. He has been defined by Richard Rortry "the least peninsular among Italian philosophers", that is to say that Bodei is a philosopher of the world.



REMO BODEI

Life ends, aging a disaster (Kafka, Philip Roth). Being an emeritus professor is out of fashion?

Not at all, old age, in the absence of serious pathologies, is a wonderful age, because one has the ease of making the most of the experience gathered over the years, carefully filtered and matured. Aristotle said that the fullness of intellectual life is attained at age of 49, but this depends on the different professions: mathematicians are very creative in their youth, but philosophers, painters and exponents of other disciplines are capable of producing discoveries and even masterpieces until the very old age (see, for instance, Plato, Kant, Tiziano, Rita Levi-Montalcini).

For Guimerà novices produce innovation but novices and seasoned investigators together may produce epochal ideas.

Of course, this meeting between different generations is an ideal to be pursued, because this would avoid the split expressed by the French proverb (*Si jeunesse savait, si veilless pouvait*), between, on the one hand, the lack of experience but the energy of the young and, on the other, the wisdom but the decline of the physical forces of the old. There would be a happy exchange between knowledge and power.

Marie de Hennezel a clinical psychologist ("Une vie pour se mettre au mond", Carnets nord, 2010, Paris, written in collaboration with Betrand Vergely) thinks that aging is the occasion to complete the program for life. Can we consider teaching and research vocations

for life thus be nurtured till the end of life?

Teaching and research keep intelligence alive and give meaning also to past life. We must not stop repaying society for what it has given us.

De Hennezel supports the Idea that the "interior man grows with aging (St. Paul, "Letter to Ephesians"). Does that mean aging for university professors is a rebirth? Thus Aging is an occasion to meet our own shadow which covers all negative aspects, but also obscures all our potential. Aging for academicians might be like a wakening to a new life that is to be beyond the time, as Karlfried Durckheim (1896-1988) put it.

To say that old age constitutes a rebirth is perhaps excessive (there are very few exceptional cases). For sure, it generally leads to clarify with ideas and intuitions that fermented in the soul and had not found the necessary leisure to express themselves.

In "Generazioni, età della vita, età delle cose", Laterza, Roma, 2014 you quote Aristotles' "Rethorica" where is evident that fullness is present in maturity not in youthness not in aging. Is it valid for emeriti?

For Aristotle, as for Dante, we reach the peak of our existence, the half of life, at the age of 35, then the physical forces decrease. But the medical and hygienic conditions, etc. of his time were not ours. Today we can reach, as emeriti and or not, a relatively old age without ailments.

In the former book you also discuss Machiavelli's "Discourses upon the first decade of T. Livius", here it emerges that either in difficult times or in times of great changes the impetus of younger people may best adapt to the spirit and needs of the times. Nowadays are professors emeriti supermen?

No, they do not necessarily have to govern the States, what is the task of politics (Machiavelli thought of it), even though in his time there was a Pope, Julius II, who climbed the walls of Mirandola with a heavy armor when he was almost seventy years old.

Concerning aging Rita Levi Montalcini opposed to Norberto Bobbio and gave great examples of creative aging including Galileo and Picasso. How do you see it from Los Angeles, how do you see it from Pisa?

Norberto Bobbio, who was my friend in spite of the age gap, was creative in his old age both as a scholar of political philosophy with his books, and as a combative journalist against corruption and hidden powers in Italy from the Eighties of the last century to the early years of this one. I have seen this phenomenon of creativity in old age in the same way both in Los Angeles and in Pisa, although in California the youth culture is prevalent.

Why in USA professors emeriti are respected? Any relation with the idea that in USA merit shall prevail?

I believe that the emeriti are respected even in Italy, but in the United States they are more involved in the life of universities and they are allowed to retire much later (so to speak, retiring is considered against human rights).



NEWS ABOUT EAPE MEMBERS' PRESENTATIONS (up to October 1st, 2018)

WE WELCOME ALL EAPE MEMBERS to send their presentations and also send their invitations (only those invitations who have links to congresses on the web).



Natale G. De Santo was made elected of the **International Astronautical Academy** for his pioneer studies on renal function in space based on urine collected in four MIR mission and on experiment on Head-down tilt in young persons.



At the 4th Congress of the Mediterranean Kidney Society in Mostar (Bosnia and Herzegovina, April 20–22, 2018) Guido Bellinghieri and Natale G De Santo, founders of the society received the Presidential Honorary Plaque by Ayse Balat (president of the society). Prof. Vincenzo Savica was advanced President Elect (2021–2024).

Natale De Santo gave the State of the art lecture on *Cardiorenal medicine of Jean Fernel (1497–1558): The father of physiology and pathology.* Chairs were Guido Bellinghieri and Athanasios Diamandopoulos.

The session on history of nephrology was chaired by Natale G. De Santo and Vincenzo Savica who lectured on *History of the urine in the Mediterranean area*. Athanasios Diamandopoulos gave a talk on *Remedies for Kidney Disorders from the Monasteries of Holy Mountain, Athos, Greece* whereas Guido Bellinghieri spoke on *The history of diabetes: from the kidney to the pancreas*.



At the **55**th **ERA-EDTA Congress, Copenhagen, May 24-27 2018**, the major European congress on renal medicine, in the session oral presentations chaired by Athanasios Diamandopoulos and Vincenzo Savica, there were presentations by Natale G De Santo and Athanasios Diamandopoulos. Vincenzo Savica gave the invited short lecture on Nephrology.



At the **46th Congress of the International Society for the History of Medicine (ISHM) in Lisbon (September 3-7 2018)** Athanasios Diamandopoulos, Vice President of the Society, organized a plenary event on History of Nephrology which included his presentation on *Asparagus the diuretic, a renal ambassador from Grece to Iberia)*, and that Natale G De Santo (*Renal Medicine of Antonio Enivieni (1433–1502) the father of pathological anatomy)*.

FUTURE MEETINGS

EAPE: 1st INTERNATIONAL CONGRESS | The Capital of Knowledge

Under the Auspices of H.E. the President of the Hellenic Republic, Mr. Prokopios Pavlopoulos

Our Association is planning its first congress on 30–31 May, 1st June 2019. All our members are encouraged to participate and submit free communication. A tentative program is advanced so that you can make plans. Economical 4* hotels will be available. We hope to have our inangural opening in the historic Lyceum of Aristotle.

Registration fee is not required for EAPE members. Abstracts can be submitted until December 17,2018. They will be published in a Scopus journal. We look forward to your participation. For information, contact Mrs. Drosatou Georgia in: gdrosatou@gmail.com

PRELIMINARY PROGRAM

TITANIA HOTEL09.00-09.30Registration09.30-10.00Welcome Addresses-Salutations10.00-11.30Free Communications11.30-12.00Coffee Break12.00-14.00Free Communications18.00-20.00General Assembly20.30Welcome Reception

FRIDAY 31.05.2019

THURSDAY 30.05.2019

A. TITANIA HOTEL

09.00-10.30	The Capital of Age
10.30-11.00	Coffee break
11.00-12.30	The activities of Academies and Emeriti Associations
12.30-14.00	Lectures (French Academy of Sciences, French Academy of Medicine, European Academies Science Advisory Council, European Academy of Sciences and Arts)

B. AULA, UNIVERSITY OF ATHENS Symposium: "Back to Learning The role of Mentorship"

17.00-18.30	Free Communications
18.30-19.00	Invited Lecture

C. ARISTOTLE LYCEUM

19.30-20.15	Official Ceremony- Salutations
20 15-20 //5	Musical Program

D. BYZANTINE MUSEUM

21.00 Dinner

SATURDAY 01.06.2019

TITANIA HOTEL

ectures.
Cape

THEMATIC UNITS (to be further supplemented)

- The role of Professors Emeriti to Education and Science.
- Legal differences for Professors Emeriti in the different countries of Europe.
- Archaeometry meets Natural Sciences- Creation of a "Think Tank".
- Environmental protection-Art and Culture.
- Individual and public health.
- Contribution of Legal Science to contemporary Society.
- The Capital of Age Age of Creativity.

ACKNOWLEDGEMENTS

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