

# Academic Responsibilities, Obligations, and Freedom: A Call for Review – In Memory of Professor Dr. Tomáš Hudlický

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## ABSTRACT

The advent and dominance of social media in our daily lives is not a matter of discussion, and very few minimalistic individuals have tried to decrease this technological dependency, which can become toxic and noxious for the development of an autonomous personality and free thinking. Academic faculties claim a depauperation in terms of their freedom but are also not free from duties, responsibilities, and obligations. Here, duties, responsibilities, obligations, and freedom are addressed in historical terms as the university as an institution developed over the centuries after its founding in the 11th century is currently under attack. We premonish that these concepts must still be reiterated and divulged to students and fellows in academia. Galilei's "*Eppur si muove*" ("and yet it moves") are the words pronounced by the Italian mathematician, physicist, and philosopher Galileo Galilei that should resonate in censorship bodies now and in the future.

## KEYWORDS

responsibilities; obligations; academic freedom boundaries

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## INTRODUCTION

Science should not be politicized, but social engagement is not an uncommon or a query behavior for scientists. An example would be Rudolf Virchow, who is the founder of cellular pathology (1–5). There is no doubt that education is a highly political topic and has been under attack and reshaping for centuries. Since we started teaching, political and religious governments have pressured education. The fight for freedom of expression is critical because individuals are killed, commit suicide, or are annihilated socially. The *trivium* (three-ways) school consisted of grammar, logic, and rhetoric, while Boethian memory's *quadrivium* (four-ways) entailed arithmetic, astronomy, geometry, and music. The *trivium* and *quadrivium* schools have been critical for the progress and knowledge of the Medieval Age. Academic mobbing can be deleterious for the person involved and the whole faculty. Individuals can become ostracized and suffer from imposter syndrome (6). They can experience depression, their environment can become toxic, and many individuals can leave academia for a good reason and save their lives. Tomáš Hudlický was among the most brilliant chemistry professors worldwide (Figure 1). Professor Hudlický was almost literally burned at the stake and died suddenly on May 10th, 2022, while visiting his native Czech Republic. He was 72 years old and accomplished enormous steps in his life, receiving numerous research grants, bringing extramural funding to his Canadian university, and publishing several articles with students and fellows who visited him and his laboratory from all over the world. The piece of controversy was an invited paper on *Angewandte Chemie*, in which the professor of chemistry indicated that it was deplorable having the current recruitment not linked only marginally to credit but to race, social level, or other determinants substantially foreigners to a modern meritocratic society (7). He was also critical that students and fellows were no longer like in the past, diligently accomplishing the duties of the principal investigator.



**Fig. 1** Photograph of Professor Dr. Tomáš Hudlický. Source: Page URL: [https://commons.wikimedia.org/wiki/File:Tomas\\_Hudlicky.JPG](https://commons.wikimedia.org/wiki/File:Tomas_Hudlicky.JPG) and File URL: [https://upload.wikimedia.org/wikipedia/commons/4/45/Tomas\\_Hudlicky.JPG](https://upload.wikimedia.org/wikipedia/commons/4/45/Tomas_Hudlicky.JPG)

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The *Angewandte Chemie* article received fiery criticisms, and the journal had to withdraw the paper shortly after publication. The journal lost the editors, and numerous editorial board members, some Nobel laureates, left their jobs. Hudlický's University, Brock University, in Ontario, pondered a line of actions. Furthermore, several of Canada's major research funding agencies expressed deplorable views on Hudlický's paper (8). The article, published online on June 4th, 2020, was subsequently retracted. Undoubtedly, numerous scientists and non-scientists felt the paper was outrageous. However, the report raises controversy that needs to be discussed further and not suppressed or censored literally. Here is the point of censorship: Hudlický's opinion paper was retracted, the author vilified, the reviewers, editorial board members, and the editors sacked, and the whole academic community was substantially shaken. The mobbing of Professor Hudlický, a leading teacher and fulgurating light in organic chemistry, was an abuse. Such behavior remains deleterious and detrimental to Brock University and the University, as a whole. Although Professor Hudlický aimed to fight back, and some colleagues came together to his defense, the Brock administrators did not proceed to fire Hudlický because he died during his defamatory campaign. The point is not the article in question that we may not agree with despite some relevant aspects. We should have considered *Angewandte Chemie's* article an opinion paper, and, as such, it should not have been retracted. Instead of rejecting or censoring such documents, the constructive approach would have been to have an open forum where scientists and non-scientists could replicate Hudlický's invited paper. The submission to the "master" is also probably a not fortunate expression of Hudlický's paper. The retractors probably misunderstood his consideration of faithful, diligent, and scrupulous teaching his fellows and students. Numerous excellent scientists came out of his laboratory, and apparently, no one committed suicide or claimed sexual or physical abuse in Hudlický's laboratory to the best of my knowledge.

In the years after World War II, culture was also steered in a specific direction. Communists reigned the Czech Republic from 1948 through 1989. After 1948, Marxism and social realism were imposed in social life and science. Several purges occurred in these terrible years in many countries of East Europe. They deprived Czech people of freedom and the possibility to create art or scientific works, which were considered contrary to the Government and Communist Party. Some affected individuals escape to Europe or North America, abandoning their homeland entirely (9–12). The victims of the political terror during the Soviet period need to be remembered, as we remember the Jewish who died under the Nazi and Soviet regimens (13). I think that Professor Hudlický, who survived the Communism Dictatorship of his native country, was considering that the current social media prevalence in the lives of students and fellows was overwhelming. Social media had reduced the time his students and fellows spent in the laboratory, classes, or libraries learning new techniques and disciplines. The premature departure of this academic beacon in chemistry should let us reflect on how we want to deal with similar events in the future. We need to

stand up, reply, and ask for clarification and not impose retraction like the Office of the Forbidden Books (*Index librorum prohibitorum*) that acted in the past. People should raise words and not voices, study books, and update their confidence in the Wisdom of their Fathers. We live in very challenging times, with artificial intelligence potentially overcoming human intelligence on the horizon. It should be clear that no agent can destroy us unless we allow such destruction on ourselves. The academic environment is challenging, but moral obligations are an essential part of the educational contract for both the university as an institution and the appointed or tenured faculty. The following paragraphs will summarize and delineate responsibilities, obligations, and freedom in academia.

## DIVERSITY IS CRUCIAL

My lab co-workers and I are open to different ideas and cultures and value diverse perspectives. We are connected to our patients, students, fellows, communities, regulators, and each other, caring about individuals and their progress. We are steady, standing firm for what is right and delivering on commitments. These values are critical to fulfilling our purpose to help research and medical progress flourish, and economies prosper. Multiculturalism and its influence on sciences and medicine are essential for the success of science and medicine (14). Diversity is key in aiming for a laboratory to be recognized as an excellent, efficient, and effective place, building trusting and lasting relationships with our stakeholders to generate value in research and society and deliver long-term shareholder returns. We are committed to conducting our medical work and study in a way that provides value to our patients and customers, strengthens our communities, and helps ensure a properly functioning system. The principal investigator should employ students and fellows from different nationalities, providing them with income and opportunities for professional development and personal growth. We need to value diversity in all its forms as essential to who we are in our society. It is important to discover our ability to fulfill our purpose. Our code of conduct should emphasize the importance of acting toward all people with compassion, dignity, fairness, and respect. We must remember to build our cultural competency every day. It should remain a priority for any organization. Substantially, we must treat all employees, students, fellows, residents, and applicants without illegitimate consideration or discernment as to age, ethnicity, race, creed, color, religion, sex, sexual orientation, gender expression or identity, disability, marital status, genetic bias, or citizen status in all decisions. The Golden Rule of treating others the same way we want to be treated is still valid today and in scientific laboratories.

However, the politicization of diversity has been deleterious recently, like the politicization of public health during the COVID-19 pandemic (15–20) and the controversial and underrecognized mRNA Vaccination-related myocarditis (21, 22). Diversity, Equity, and Inclusion (DEI) committees break down barriers put in place to protect students and professors from ideological interference in

their learning and research, as recently highlighted (23). Still, some groups are more privileged than others. By abolishing academic freedom and enforcing ideological unity among the faculty across North America, DEI supporters have established themselves as preeminent ideologues on campuses today. The ideology of DEI has exploded in North American (United States and Canada) higher education, and probably for a decade now. Emerging from the humanities and social sciences, DEI became a powerful movement aimed to eradicate any form of dissent and heterodoxy. DEI became a highly influential factor in many decisions in the natural sciences. There is a strong belief that the university's original mission as an elite institution seeking truth and being shielded from censorship shifted toward advancing political narratives and ideologies far beyond the respect of any human person. A recent study by the National Association of Scholars (NAS), titled "Ideological Reinforcement", seems to emphasize this loss of autonomy of academic institutions (24). It provides a detailed quantitative analysis of DEI's progress in the currently most special educational qualification, which is the acronym "STEM" (science, technology, engineering, and mathematics) fields, and probably STEM, including medicine as the second "M". There is no doubt that reform of some patriarchy, vilipend and nihilistic approaches were necessary. Still, DEI enforcement and DEI ideology are promulgating tales and stories that can be self-destructive, mainly because dialogue is either procrastinated or censored. The abolition of academic freedom is enforced ideologically, reminding us of the Nazi Kristallnacht and German evolution during the Nazi terror to Synagogues and libraries, of the Mao Zedong's cultural revolution, Pol Pot's Cambodian revolution, and McCarthy's movement of the United States. We know in the phase of totalitarian and pre-totalitarian regimes, cities and geographical landmarks are renamed, statues and monuments are literally torn down, books and libraries are burned to the ground, and millions of people either accepted brainwashing or are jailed or murdered (11, 25, 26). In this era, as Krylov suggests, "Social Justice" is a specific ideology substantially different from social justice without upper-case (27). Undoubtedly, several famous scientists had perspectives or engaged in unacceptable behaviors by today's standards. But who are we to re-write textbooks, rename equations, and purge our literature of the criteria that we consider the "self-anointed bearers" of the new "Truth"? (28–30).

The documents used for the report on "Ideological Intensification" are appalling, and considering how the "Critical Race Theory" is obfuscating and brainwashing the minds of our youth should raise the alarm for both scientists and educators (31). They reveal DEI ideologues' dramatic takeover of the natural sciences over the last two decades. This report comprises over 30 gigabytes of data in over 280,000 files available to scientists and policymakers focusing on American colleges and universities. The study observed that college and university websites, including DEI and STEM terms, were 26 times more common in 2021 than they were in 2010. National Science Foundation (NSF) funding for so-called "antiracist" themes tripled from 2020 to 2021. Similar trends are visible in the scientific and technological literature. The investigation notes

that the now diffusely recognized “Black Lives Matter” movement likely triggered much of this increment. This aspect is evidenced by the rapid spike in incidence and gun violence in the mid and late summer of 2020. The sources provided by “Ideological Intensification” include over 30 detailed graphs, an animated map, and extensive data mining tools. They allow other researchers to continue exploring DEI’s rapid growth in the natural sciences. The “Ideological Intensification” study found that DEI ideology has disseminated to almost every façade of the scientific enterprise. The DEI assault on the natural sciences is a disturbing trend. It is as such not just for those genuinely interested in science professionals but also for the quality of research that relies upon it. If public trust in all institutions was in decline, DEI ideologues might advance the final debacle of the once glorious institution of Western universities.

## DUTIES, RESPONSIBILITIES, AND OBLIGATIONS

In our modern world, duties and responsibilities are often misunderstood. Duty arises from the Latin word “*debere*”, and responsibility originates from the Latin word “*responsus*”, which is linked to broad sponsor. Duties and responsibilities are often exchangeable in our everyday language but differ. Duty is associated with *due*. It arises from Middle English (in the specific sense of ‘payable’). *Due* is related to the Old French *deu* ‘owed’, which is based on the Latin word “*debitus*” (‘owed’), from *debere* ‘owe’. Responsibility lies in the quality or state of an individual being responsible, i.e., able to demonstrate moral, legal, or, in a broader sense, mental accountability. The word responsibility is traced back to the 17th and 18th centuries and linked to the obsolete French word “responsible”, which arises from the Latin “*responsabilis*” and from the Latin verb “*respondere*”, which means respond or answer. The term “*respondere*” is an association of *re-* “back” and *spondere* “to pledge”.

While duty has an intrinsic expectation of the individual to perform a specific action in general or in a determined situation, responsibility arises from a broader and more complex level, incorporating ethical and moral values into the legal ones. Duties are often obligations that are enshrined in law. They impose penalties or liabilities for non-compliance. Responsibility may be associated with penalties or liabilities, but they may be related to an ethical or moral sphere. In duty, the action we are obliged to perform as citizens of a determined country is inherent. In the United States and Canada, our duties involve obeying the laws, paying taxes, appearing in court, and defending the country. Failure to meet these duties is associated with a fine or prison. Duties are necessary for a society to work, function, and keep the country safe. In responsibility, there is more voluntary component or basis. It is in our best interest and for the fulfillment of an individual to carry on their responsibilities. Some responsibilities may include being informed, participating in government, voting in district, provincial, or federal elections, and respecting diversity, the environment, and the rights of other individuals. In a society, compromise and civil dialogue are critical. Participation in government allows communities

to organize to improve the community, and serving in their communities is an individual responsibility.

In academia, responsibility encompasses all traditional areas of faculty evaluation. It must involve faculty participation in ways that support the institution’s missions, preserve its functions, and strengthen the role of fair and shared governance. Each staff member should portend a responsibility to students and fellows. It enshrines the inherent “universal” basis for working in an academic department. A faculty is responsible for teaching, interacting civilly, and arguing correctly with students and fellows. Teachers are responsible for interacting with other colleagues politely and civilly and entertaining a continuing professional development program. Some activities may include participation in peer observations, expert meetings to explore current research, and participation in learning activities. Chairs and deans should ensure that tasks are distributed fairly among departments and that faculty members are supported in all ways to permit a free exchange of ideas, broad participation, and balanced work expectations. Some responsibilities may include job duties, which should be documented through annual reviews or evaluations and considered employment expectations. Job duties may include clinical activities and research with peers or other universities. Some responsibilities are duties or obligations because they have compliance with academic policies. They may include privacy and confidentiality of student information, intellectual property, and respect of copyright laws, handling of human subjects and experimental animals in research, scheduling of final exams, attending classes at assigned times, submitting grades by due dates, and active participation in the collection of assessment data related to teaching and work assignments. Students’ obligations should include planning, attending classes in person, getting hints for examination, clarifying instructions, seeking assistance from teachers and peers properly, familiarizing themselves with library services, focusing on their assignments, among others. without cheating and sitting apart from friends during exams, know wisely the words or ideas used in the projects.

## FREEDOM

The original Latin word *Universitas* usually refers to several individuals associated with a company, society, or community (32). Thus, with the advent of urban life and medieval guilds, the generic term *Universitas* implies “an association of pupils and teachers of collective legal rights, usually guaranteed by a charter issued by a prince, priest, or town in which they reside.” Like other guilds, they self-regulate and determine the eligibility of their members (33). In modern usage, the term “university” may address the fundamental meaning of a teaching institution targeting primarily non-vocational subjects and generally authorized to award degrees, with an early emphasis on its corporate organization considered historically applicable to a medieval university. The original Latin word refers to the academic educational institutions of Western and Central Europe, where this form of legal organization prevailed and spread throughout the world.

Modern universities are often viewed as formal institutions that originated in medieval Christian traditions (34, 35). For centuries, higher education in Europe took place in cathedrals or monastic schools (*Scholae monasticae*), where monks and nuns taught; evidence of immediate predecessors to these later universities dates in many areas to the 6th century CE (35, 36). In Europe, young people enter universities after completing studies in three subjects (grammar, rhetoric, and preparatory arts in dialectics or logic) and four subjects (arithmetic, geometry, music, and astronomy). The aegis of the Roman Catholic Church was vital for the universities' development. The Church's aegis was crucial in instilling and imparting a reinvigorated effort to education after the five centuries following the fall of the Roman Empire in 476 CE and following the apocalyptic views and eschatological theories of the year 1000 that lasted for several years. The Latin Church initially developed the universities by papal bulls as "*Studia Generalia*", despite this name anchors complexities and ambiguities (37, 38). Subsequently, monarchs, such as Friedrich II and Charles, were behind the development of these institutions (the University of Naples linked to Friedrich II or Federico II, and the Charles University in Prague, which is one of the oldest universities in the world, founded in 1348 by Holy Roman Emperor Charles IV). However, municipal administrations were also triggering the universities, particularly in Germany, such as Köln Universität (University of Cologne) and Erfurt Universität (University of Erfurt). Occasionally, universities developed from cathedral schools, such as the University of Paris (39). In his Papal Decree of 1079, Gregory VII confirmed that cathedral schools are regulated establishments and transform themselves into universities (40). Although the University of Bologna, in Italy, was accredited as the first official university in 1088 as a law school teaching, the Al-Azhar University, in Cairo, Egypt, and the University of Al Quaraouiyine, in Fez, Morocco, have been debated as the first universal institutions in 970 CE and 859 CE, respectively. However, both African institutions were initially devoted to studying the Islamic religion. Thus, they may be considered like the Latin "Cathedral Schools". In 1088, or probably at the end of 1087, the Italian Law Scholar, *Irnerius* (1050–1125), and founder of the School of Glossators, taught the *Corpus Juris Civilis*, the Roman civil law code of the Byzantine Emperor, Justinian I among the liberal arts at the University of Bologna. The designation of Bologna's special claim as the first university lies in the description of *Alma Mater Studiorum*, which relied on its autonomy and independence from a king or direct religious authority (41–43). We want to stress that an important consideration when defining a university as an institution is not only the time when it is founded, but the concept of "academic freedom". Despite controversies, disputes, and bans, freedom in academia was initially present only in Bologna. The first written evidence of this comes from the early days of the University of Bologna, which adopted an academic constitution, the *Constitutio Habita*, in 1155 and edited in 1158 (41, 44). It guaranteed and still protects freedom and unimpeded transit for the benefit of traveling scholars in education. However, academic freedom was always

challenged, and the heliocentrism debate is probably one of the most famous contentious topics to recall.

## HELIOCENTRISM DEBATE

If spherical properties have not been argued lengthily since the 4th century BCE, the Earth's daily and annual rotation around the Sun was never collectively accepted until the Copernican Revolution (45). Aristarchus of Samos (c. 310 – c. 230 BCE), an early astronomer, is probably recognized as the first scientist to suggest a heliocentric model in the 3rd century (45). Still, some heliocentric aspects were laid out in the works of Kerala astronomers of Indian origin and Islamic roots (46, 47). In any case, the detailed astronomical work of Aristarchus of Samos, in which he proposed his heliocentric system, has not survived. Nevertheless, we know of it now from a brief passage in Archimedes' work (45, 48–50). Ptolemy's geocentric system was a sophisticated mathematical model. In his *Almagest*, an astronomical manual written about 150 CE, Ptolemy (*Claudius Ptolemaeus* of Alexandria) asserts, emphasizes, and strengths that there is no real way to discern exactly which system is true. Nevertheless, Ptolemy's system was highly criticized in medieval astronomy, but only in the late medieval period did the arguments and criticisms gain strength and favor, leading to the Copernican heliocentrism being subsequently developed in the astronomy of Renaissance (51). The Copernican and Galilei model is probably one of the most famous examples of academic censorship. Galilei's "*Eppur si muove*" ("and yet it moves") are the words pronounced by the Italian mathematician, physicist, and philosopher Galileo Galilei that should resonate in censorship bodies now and in the future. The monk and philosopher Giordano Bruno (*Iordanus Brunus Nolanus*, 1548–1600) was an Italian alchemist, astronomer, and cosmological theorist. He is probably the only known person to conscientiously defend Copernicus's heliocentrism in his time (52). Numerous physicians who expressed concerns about vaccines to everybody, even infants and toddlers, have been silenced, ridiculed, or ignored during the recent COVID-19 pandemic. It has been ascertained that the introduction of original well-being-promoting policies has been accompanied by persistent mental health issues (53–55). The tyranny of consensus thinking and scientific elitism must end for the benefit of our future generations (56, 57). The currently judged detrimental policies of the COVID-19 pandemic in the 21st century, particularly for schoolchildren and businesses, have a psychological and economic impact that will probably persist for decades. The Galilean "and yet it moves" are words that the scientist pronounced during the transfer from house arrest under the watch of the Catholic Archbishop Monsignor Ascanio Piccolomini to another location in Arcetri, in the neighborhood of his beautiful Florence (58, 59). We should remember Galilei's words in recalling the voices of dissent against COVID-19 public health policies divulged by international scientists and politicians with potential conflicts of interest, with numerous papers published blatantly disclosing these conflicts. These voices were annihilated, and the lives of several physicians have been and

will stay upset for many years to come. The groundwork for academic freedom is consecrated in the foundation of European universities, which arose from the Scholastica and Dialectics of the Medieval Age. Such a foundation was not free from diatribes and scorns to avail or condemn colleagues' texts on political or religious grounds. Still, such heavy and prolonged discussions were the major steps of intellectual prolegomena. Papal bulls and royal charters often protected the universities. They progressively became legally self-governing institutions or corporations. In their body of legislation, there was the freedom to organize their faculties, hire or dismiss teachers who did not reach the desiderated level, control student admissions, and establish the stakes and standards for graduation. The university was, however, not free of some exertion of censorship on some members of their faculties, and such censorship was particularly evident exerted by the Roman Catholic Church and some offices aimed at controlling the publication of textbooks that would have been against dogmas or doctrines. In some areas, the Protestants also exerted such censorship. It seems that such censorship, successful or unsuccessful, was particularly evident and strong until the 18th century, even though the University of Leiden in the Netherlands (founded in 1575) provided great freedom from religious and political restraints for its teachers and students. Following the French Revolution and the riots of the early 19th century, such censorship did not end. Still, the culprit mostly changed in the way the governments of the states gained influence on the universities (60). However, some universities received major support in probably encouraging academic freedom. These universities set an example for subsequent emulation. The University of Göttingen in Germany became a beacon of academic freedom in the 18th century. With the founding of the University of Berlin in 1811, the basic principles of *Lehrfreiheit* ("freedom to teach") and *Lernfreiheit* ("freedom to learn") were firmly established. They became the model that inspired universities elsewhere throughout Europe and the Americas. On the other hand, we must emphasize that academic freedom is never unlimited, and caution needs to be exerted on minorities regarding respecting human persons and valuing everyone equally. Verbal or written communications supporting violence are not in the free speech frame. The general laws of society also include obscenity, pornography, and libel. Some material should not be exposed to underaged audiences more sensitive to decency violations. It also applies to academic discourse and publication, and some publications or shows should not be reserved for children (61). The more highly trained teachers are, the more freedom they are likely to be afforded. Thus, university professors tend to be less restricted than elementary school teachers. Similarly, students usually gain freedom as they move through the academic system. Academic freedom can obviously contract during a war, economic depression, or political instability (60).

## CONCLUSIONS

Social sensitivities to political interference are high in North America and elsewhere. A solid demand to return

to academic freedom was once intrinsic to the university as a universal institution. There is a dangerous pathway that humanity is embracing governed by conformism, limitation of individual freedom, and overreach of the government over personal liberties. Neoliberalism and neo-Marxism are blended into a new ideology that limits academic freedom, raising social conflicts with opportunism. There is a need for think tanks that promulgate and privilege reason, critical thinking, dialectics, Aristotelian debates, and human intelligence. Universities are not perfect. Still, their fundamental principles need to be cherished and not canceled. We must expose cultures able to subjugate and brainwash children and adolescent serasing the roots of the Western Civilization. There are growing mental health issues in youth and the causes are multiple, but one could be that the debate has been banned in several institutions. Future generations should be taught about academic freedom because the outlook of the University is tightly linked to this highly precious and timeless value.

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## REFERENCES

1. de Gouveia RH, Gulczynski J, Canzonieri V, Nesi G, History of Pathology Working Group of the European Society of P. Rudolf Virchow: 200th birth anniversary. *Virchows Arch* 2021; 479(6): 1063–5.
2. Ellis H, Linssen R. Rudolf Virchow: the father of today's pathology. *Br J Hosp Med (Lond)* 2021; 82(10): 1–2.

3. Lange KW. Celebrating public health lives: Rudolf Virchow. *Public Health* 2021; 198: 290–1.
4. Mangione S, Tykocinski ML. Virchow at 200 and Lown at 100 – Physicians as Activists. *N Engl J Med* 2021; 385(4): 291–3.
5. Ribatti D. Rudolf Virchow, the founder of cellular pathology. *Rom J Morphol Embryol* 2019; 60(4): 1381–2.
6. Huecker MR, Shreffler J, McKenney PT, Davis D. Imposter Phenomenon. StatPearls. Treasure Island (FL): StatPearls Publishing, 2023.
7. Hudlický T. The Case of Tomáš Hudlický – Where now? National Association of Scholars. 2020 (released 03/08/2020). (Accessed October 3, 2023, at <https://www.nas.org/blogs/article/the-case-of-tomas-hudlickywhere-now>.)
8. Hudlický T. Withdrawal: 'Organic synthesis – Where now?' is thirty years old. A reflection on the current state of affair. *Angew Chem Int Ed Engl* 2020; 59(31): 12576.
9. Walker M. Routledge Studies in the History of Science, Technology and Medicine. Science and Ideology A Comparative History, 2002.
10. Graham LR. Science in Russia and the Soviet Union. A Short History. Cambridge: Cambridge University Press, 2004.
11. Graham LR. Science, Philosophy, and Human Behavior in the Soviet Union. New York: Columbia University Press, 1991.
12. Graham LR. Science and philosophy in the Soviet Union. New York: Knopf, 1972.
13. Vasil'kov YaV, Sorokina MYu. Lyudi i sud'by. Biobibliograficheskiy slovar' vostokovedov zhertv politicheskogo terrora v sovetskiy period (1917–1991) (People and Destiny. Bio-Bibliographic Dictionary of Orientalists – Victims of the political terror during the Soviet period (1917–1991)). Peterburgskoe Vostokovedenie (Internet), 2003.
14. Sergi C. Diversity, Cultural Competence, and Multiculturalism: A Stronghold for the Future of Biotechnology. *Ann Clin Lab Sci* 2018; 48(4): 549–52.
15. Sergi CM. NLRP-3 Inflammasome: A Key Target, but Mostly Overlooked following SARS-CoV-2 Infection. *Vaccines (Basel)* 2022; 10(8): 1307.
16. Sergi CM. COVID-19 in childhood and phenotypes of pediatric inflammatory multisystem syndrome. In: Rezaei N. Translational Autoimmunity, Vol 4. Elsevier, 2022: p. 91–100.
17. Sergi CM, Leung AKC. Vaccination: a question of social responsibility. *J Prev Med Hyg* 2021; 62(1): E46–E47.
18. Sergi CM, Chiu B. Targeting NLRP3 inflammasome in an animal model for Coronavirus Disease 2019 (COVID-19) caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). *J Med Virol* 2021; 93(2): 669–70.
19. Burnett ML, Sergi CM. Face Masks Are Beneficial Regardless of the Level of Infection in the Fight Against COVID-19. *Disaster Med Public Health Prep* 2020; 14(5): e47–e50
20. Khan A, Sergi C. SAMHD1 as the Potential Link Between SARS-CoV-2 Infection and Neurological Complications. *Front Neurol* 2020; 11: 562913.
21. Sergi CM. Science, Culture, and Politics: Despair and Hopes in the Time of a Pandemic. Hauppauge: NOVA Science Publishers, 2021.
22. Sergi CM. mRNA vaccination in children and youth: a cautionary note. *Arch Med Sci* 2022; 18(5): 1404–6.
23. Goad M. DEI on the Decline. *CounterCurrent* (released 28/2/2023). (Accessed October 3, 2023, at <https://www.nas.org/blogs/article/the-case-of-tomas-hudlickywhere-now>.)
24. Goad M, Chartwell BR. Ideological Intensification. A Quantitative Study of Diversity, Equity, and Inclusion in STEM Subjects at American Universities. National Association of Scholars (released 28/11/2023). (Accessed October 3, 2023, at <https://www.nas.org/reports/ideological-intensification/full-report>.)
25. Levy N-H, Sharansky N. Freedom and Tyranny. *Tablet* 2023. Museum of Jewish Heritage (released 12/2/2023). (Accessed October 3, 2023, at <https://www.youtube.com/watch?v=YdpiEmroKYQ>.)
26. Solzhenitsyn AI. The Gulag Archipelago. New York: Harper & Row, 1973.
27. Krylov AI. The Peril of Politicizing Science. *J Phys Chem Lett* 2021; 12(22): 5371–6.
28. Zinsmeister K. The compound fractures of identity politics. *City Journal* (released 2021). (Accessed October 3, 2023, at <https://www.city-journal.org/article/the-compound-fractures-of-identity-politics>.)
29. Pluckrose H, Lindsay JA. Cynical Theories: How Activist Scholarship Made Everything about Race, Gender, and Identity and Why This Harms Everybody. Durham, NC: Pitchstone Publishing, 2020.
30. McWhorter J. The Elect: The threat to a progressive America from anti-black anti-racists. *Substack* (released 2021). (Accessed October 3, 2023, at <https://johnmcwhorter.substack.com/p/the-elect-neoracists-posing-as-antiracists>.)
31. Huddle TS. Against the Turn to Critical Race Theory and “Anti-racism” in Academic Medicine. *HEC Forum* 2022; 35(4): 337–356.
32. A Latin Dictionary. Oxford: Clarendon Press, 1966.
33. Colish ML. Medieval Foundations of the Western Intellectual Tradition, 400–1400. New Haven: Yale University Press, 1997.
34. Rüegg W. Foreword. The University as a European Institution. A History of the University in Europe – Universities in the Middle Ages. Cambridge: Cambridge University Press, 1992.
35. Verger J. The Universities and Scholasticism (c. 1198–c. 1300). In: Abulafia D. The New Cambridge Medieval History, vol. 5. Cambridge: Cambridge University Press, 2007: 277–313.
36. Riché P. Education and Culture in the Barbarian West: From the Sixth through the Eighth Century. Columbia: University of South Carolina Press, 1978.
37. Rashdall H. The Universities of Europe in the Middle Ages, vol. 1. Salerno, Bologna, Paris. Oxford: The Clarendon Press, 1895.
38. Georgedes K. Religion, Education and the Role of Government in Medieval Universities: Lessons Learned or Lost? *Forum on Public Policy* 2006; 2(1): 73–96.
39. Leff G. Paris and Oxford Universities in the Thirteenth and Fourteenth Centuries. An Institutional and Intellectual History. New York: Wiley, 1968.
40. Oestreich T. “Pope St. Gregory VII”. In: Herbermann C. Catholic Encyclopedia. New York: Robert Appleton Company, 1913.
41. Rüegg W. Chapter 1: Themes. In: De Ridder-Symoens H. A History of the University in Europe, 1. Cambridge: Cambridge University Press, 2003: 4–34.
42. Makdisi G. Rise of Colleges: Institutions of Learning in Islam and the West. Edinburgh: Edinburgh University Press, 1981.
43. Daun H, Arjmand R. Islamic Education. In: Zajda J. International Handbook of Globalisation, Education and Policy Research. Netherlands: Springer, 2005.
44. Malagola C. Statuti delle Università e dei Collegi dello Studio Bolognese. Bologna: Zanichelli, 1888.
45. Dicks DR. Early Greek Astronomy to Aristotle. Ithaca, NY: Cornell University Press, 1970.
46. Ramasubramanian K. Model of planetary motion in the works of Kerala astronomers. *Bull Astr Soc India* 1998; 26: 11–31.
47. Guessoum N. Copernicus and Ibn Al-Shatir: does the Copernican revolution have Islamic roots? *The Observatory* 2008; 128: 231–9.
48. Dreyer. 1953. A history of astronomy from Thales to Kepler: formerly titled History of the planetary systems from Thales to Kepler by Dreyer, J. L. E. (John Louis Emil), 1852–1926 Publication date: 1953. Publisher: Courier Corporation ([New York] Dover Publications), 1953. ISBN 0486600793, 9780486600796. Length 438 pages.
49. Linton. 2004. Title From Eudoxus to Einstein: A History of Mathematical Astronomy. Author: Christopher M. Linton. Publisher: Cambridge University Press, 2004. ISBN 0511214677, 9780511214677. Length 516 pages.
50. Russo L. The Forgotten Revolution: How Science Was Born in 300 BC and Why it Had to Be Reborn. Heidelberg: Springer, 2003.
51. Neugebauer O. A History of Ancient Mathematical Astronomy. Berlin – Heidelberg – New York: Springer, 1975.
52. Smith HW. Man and His Gods. New York: Grosset & Dunlap, 1952.
53. Patel V, Fancourt D, Furukawa TA, Kola L. Reimagining the journey to recovery: The COVID-19 pandemic and global mental health. *PLoS Med* 2023; 20(4): e1004224.
54. de Matos MG, Carvalho M, Branquinho C, Noronha C, Moraes B, Gaspar T, Guedes FB, Cerqueira A, Santos O, Rodrigues NN. COVID-19, Wellness and Life Satisfaction in Adolescence: Individual and Contextual Issues. *Int J Environ Res Public Health* 2023; 20(8): 5600.
55. Huang X, Sokolovskiy K, Yessetova S, Kazakova S. How Coronavirus Restrictions Adopted by Governments Affected World Religious Groups: A Review. *J Relig Health* 2023; *J Relig Health*; 62(4): 2779–2798.
56. Guliuzza RJ. Lifting the Curtain on Scientific Elitism. *Acts & Facts* 2022; 51(3): 4–6.
57. Guliuzza RJ. The Tyranny of Consensus Thinking. *Acts & Facts* 2021; 50(8): 4–6.
58. Hawking S. On the Shoulders of Giants: The Great Works of Physics and Astronomy. Philadelphia: Running Press, 2003.
59. Magrini G. Villa Il Gioiello 2010 1 December 2010. Magrini, Graziano (1 December 2010). “Villa Il Gioiello”. Translated by Victor Beard. Institute and Museum of the History of Science, Florence. Archived from the original on 21 May 2015. Retrieved 14 May 2015.
60. Britannica T. Academic Freedom. In: Encyclopaedia Eo. Encyclopaedia Britannica 2020. (Accessed October 3, 2023, at <https://www.britannica.com/topic/academic-freedom>.)
61. Sergi CM. Translational pediatrics: reflections for the 21st century and beyond. *Transl Pediatr* 2022; 11(11): 1886–1891.