

TEN YEARS WITH AKUTNĚ.CZ®

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ABSTRACT

The 18 October, 2017 marked the 10-year anniversary of the day when, upon entering the domain name akutne.cz, educational content was displayed in the worldwide Internet network for the first time. It is rather unique that, throughout the ten years, this has been a strictly academic activity aimed to unify and modernize the education of acute medicine.

Recently, education in medical fields has undergone dynamic changes and a shift to modern teaching methods. The educational and publishing portal of AKUTNĚ.CZ (the AKUTNĚ.CZ Portal) reflects these changes and brings to light the modern forms of education for both under- and postgraduate candidates in Anaesthesiology and Intensive Medicine (AIM). It is a great appreciation and, at the same time, commitment to the future that a large part of more than 150 students of the Faculty of Medicine of Masaryk University who participated in its development have chosen AIM for their further professional growth.

This article aims to introduce the ten-year history of the AKUTNĚ.CZ Portal.

PORTAL SUPPORT

The creation and development of the AKUTNĚ.CZ portal were strongly influenced by four grants from the Higher Education Development Fund (FRVŠ). The creation of the portal itself was initiated by the first grant in 2007 (FRVŠ 421/2007 F3d Training Portal of Acute Medicine). It was a great appreciation that, at the very beginning of its activity, the portal was assigned the International Standard Serial Number ISSN 1803-179X. Further direction of the portal towards its flagship – the implementation of Virtual Patient in the form of interactive algorithms in teaching – was made possible in 2009 (FRVŠ 1969/2009 F3d Multimedia Decision-Making Algorithms in the Teaching of Acute Medicine). Today, these Virtual Patients, the number of which has so far reached 80, represent an integral part of both undergraduate and postgraduate education in AIM. In the same year, another project enhancing the field education was addressed (FRVŠ 1893/2009 Aa Videoconferencing System for Operations and

Anaesthesiology). By 2011, the latest grant from perishing FRVŠ (FRVŠ 2216/2011 Fd3 Unified Framework for Multimedia Interactive Algorithms in Professional Guaranteed Acute Medicine) was obtained which brought the portal into another dimension marked by clearly defined and professionally guaranteed professional content. The accent on the use of interactive algorithms in bilingual problem-oriented education focused on the decision-making process was further facilitated by the FRMU (the Development Fund of Masaryk University) project No. 1541/2015. In recent years, this project has been supporting the activities of the Nadační fond AKUTNĚ.CZ (the endowment fund) established at Masaryk University. Moreover, the AKUTNĚ.CZ portal has been granted a significant professional support by an international academic network of shared educational content, MEFANET (www.mefanet.cz). At the same time, the content of the portal is archived by the National Library of the Czech Republic within the WebArchiv project.

Abbreviations	
AIM	Anesteziologie a intenzivní medicína (Anaesthesiology and Intensive Medicine)
MCQ	Multiple Choice Question
KUM	Kurz urgentní medicíny (Emergency Medicine Course)
FM MU	Faculty of Medicine at Masaryk University
BLS	Basic Life Support
ALS	Advanced Life Support
ČSARIM	Česká společnost anesteziologie, resuscitace a intenzivní medicíny (Czech Society of Anaesthesiology, Resuscitation and Intensive Medicine)
ČSIM	Česká společnost intenzivní medicíny (Czech Society of Intensive Medicine)
FRVŠ	Fond rozvoje vysokých škol (Higher Education Development Fund)
ČSFPS	Česko-Slovenské fórum pro sepsi (Czech-Slovak Forum for Sepsis)
AMEE	An International Association For Medical Education
ESA	European Society of Anaesthesiology
MEFANET	Medical Faculties Network
IF	Impact Factor
WoS	Web of Science

BRIEF STRUCTURE OF THE PORTAL

The structure of the portal has been stable over the years, allowing readers to navigate its content easily. It consists of the following sections: News, Education, Publications, and Reports. The history and development of portal structure are detailed in Table 1.

Table 1. The firsts of the AKUTNĚ.CZ portal

Section	Date	Event	Detail
Launch	18 Sep 2007	portal of AKUTNĚ.CZ	Launching the educational portal of AKUTNĚ.CZ
News	17 Jan 2008	News	Establishing collaboration with the educational server of the 3rd FM CU
Congresses	2 Oct 2008	Report	Xth annual Czech-Slovak Dialogues on Pain
Congresses	18 Oct 2008	Report from an international congress	ASA, Orlando
Publications	13 Oct 2008	Lecture proceedings	9th Anaesthesia Days at the Na Homolce Hospital
Transmissions	23 Oct 2010	Video transmission	12th Colours of Sepsis
Education	24 Dec 2009	Multimedia algorithms	First published algorithms
Education	24 Nov 2009	Conference	1st AKUTNĚ.CZ Conference
Education	16 Apr 2011	Course	Emergency Medicine Course
Publications	28 Apr 2011	Monitoring of articles	Establishing the monitoring of articles

News is the oldest and at the same time one of the most visited sections of the portal. Gradually, it had to be thematically divided for its scale and so nowadays, we have dominant news about expert events, feuilletons, but also news monitoring professional literature in the given field or reviews of current professional books. Reports section is filled with the entries by the reporters of AKUTNĚ.CZ, physicians and students, from national and international expert events. More than 100 reports have been created since the portal was founded and the team of reporters have visited over 13 countries. Frequently, the team members participated actively in the congresses as the authors of posters and/or lecturers making the portal unquestionably unique.

EDUCATION

Virtual patient on AKUTNĚ.CZ

The true showpiece of the portal are the modern bilingual teaching aids in the form of virtual patients, the co-called AKUTNĚ.CZ Interactive Algorithms, which currently number well over 80. Undoubtedly, this is one of the largest sets of Virtual Patients worldwide. Unlike most of other teaching aids, AKUTNĚ.CZ algorithms undergo a multiple-stage peer review with an expert, usually outside the FM MU, as the last referee. Therefore, it is no coincidence that the algorithms have been awarded at university (the best electronic teaching aid), national (ČSARIM award), and international level (highly cited publication in the Journal of Medical Internet Research which, with IF 5.1, is World 1 in this area). The best published algorithms for each year can be found in Table 2. All algorithms undergo regular reviews to stay up-to-date and to follow the latest recommendations. The uniqueness of the algorithms is underlined by original illustrations and

videos added to each node. Subsequently, the acquired knowledge can be verified by test questions complementing each algorithm. It is worth mentioning that, with 18%, the algorithms rank the second in the number of visits, just behind the portal front page; see Figure 1.

Table 2. Winners of the best algorithm competition published on the AKUTNĚ.CZ portal in the given year

Period	Rank	Name of the algorithm	Authors
before 2012	1st	Acute Coronary Syndrome	Lukáš Dadák, Hana Harazim, Martina Pleskačová
	2nd	Treatment of Acute Postoperative Pain	Ivo Kříkava, Martina Kosinová, Gabriela Kolářová
	3rd	Diabetes Mellitus	Petr Štourač, Michaela Drašková, Mayra Bermudés, Monika Ťažká
		Electric Shock	Olga Smékalová, Martina Šablaturová
2013	1st	Peripartal Life-Threatening Haemorrhage	Petr Štourač, Kristýna Malá, Jan Hudec, Vojtěch Hurčík
	2nd	Acute Abdomen	Hana Harazim, Zdeněk Drlík
	3rd	Childbirth in the Field	Michaela Drašková, Hana Harazim, Eva Filipová, Veronika Horváthová, Táňa Novotná
2014	1st	Caesarean Section	Petr Štourač, Tomáš Korbička, Gabriela Matuščinová, Klára Přichystalová, Petra Polochová
	2nd	Newborn Resuscitation	Petr Štourač, Lubomíra Longauerová, Hana Pulkrábková, Terezie Lásková
	3rd	Laryngospasm	Hana Harazim, Jan Blahut, Monika Ďuricová
2015	1st	Ski Slope Injury	Martina Kosinová, Lucie Janalíková, Ludovít Kadlec
	2nd	Epilepsy	Hana Harazim, Radka Kadlčíková, Mária Moravská
	3rd	Rupture of Abdominal Aortic Aneurysm	Martina Kosinová, Lukáš Korbel, Kateřina Gajdošíková, Daniela Hahnová
2016	1st	Carbon Monoxide Poisoning	Martina Klincová, Lubomíra Ventrčová Longauerová, Jakub Zmrzlík, Barbora Žajdlíková
	2nd	Crush Syndrome	Olga Smékalová, Dominika Machajdíková, Deana Slovjaková
	3rd	Anaesthesia of Obese Patient	Marek Kovář, Marta Juřeníková, Emma Jurkovičová

Recordings from video conferencing and other teaching aids of AKUTNĚ.CZ

AKUTNĚ.CZ team monitors the latest best practices of professional societies. They succeeded in publishing the *Manuál kritických stavů* (the “Manual of Critical Situations”) written by Dr Stern, a senior consultant, as well as several domestic and foreign aids, mainly for clinical practice. Highly used and visited are the records of lectures from expert events. Eager readers may already watch their parts online in the course of the lectures. The records often become a part of the post-conference proceedings of the event. Being traditional partners, there are also the events organized by the AKUTNĚ.CZ portal (AKUTNĚ.CZ Conference, Urgent Medicine Course), Ostrava’s Colours of Sepsis and the International Congress of Traumatology and Forensic Medicine in Mikulov.

AKUTNĚ.CZ Conference, Urgent Medicine Course and Contact Teaching

The activities of the portal are not only the virtual ones. Each year, the implementation team prepares the AKUTNĚ.CZ Conference which, according to the number of participants, ranks among the largest one-day events in AIM. Traditionally, the AKUTNĚ.CZ Conference takes place in November when the Bohunice campus fills with almost 1,000 participants from among the experts and students alike. Every year, they may choose from a number of lectures held in several parallel sections (non-medical, Young Anaesthesiologists, themed blocks held in a parallel section). We also provide the greatest opportunity for practical training in individual workshops found elsewhere in the Czech Republic. The workshops have traditionally included, for example, an internationally certified Essential Pain Management course, a legendary workshop ...jde o čas... ("... time matters..."), PBL/TBL lessons with AKUTNĚ.CZ Virtual Patient, the basics of ultrasonic technique and viscoelastic coagulation methods, and others. The AKUTNĚ.CZ Conference has also pioneered the implementation of workshops using an advanced patient simulator. The progress of the Conference can be seen in Table 3. What is more, all the time since its inception, the conference is exempt from the registration fee.

Table 3. The development of the AKUTNĚ.CZ Conference

Year	Date	Number of participants	Number of sections	Workshops
I	21 Nov 2009	188	1	2
II	20 Nov 2010	250	1	2
III	19 Nov 2011	420	2	3
IV	17 Nov 2012	470	2	4
V	16 Nov 2013	659	2	4
VI	22 Nov 2014	725	3	8
VII	19 Nov 2015	954	3	8
VIII	18 Nov 2016	928	3	11
IX	25 Nov 2017	1086	4	13

Additionally, the AKUTNĚ.CZ team organizes a weekly Emergency Medicine course for FM MU students, which is intended for the students of the 4th-6th years of General Medicine and, in the last year, also of Dentistry. Supervised by experienced specialists, students practice the basic and advanced resuscitation, airways management and access to the vascular system, on-site traffic accident and much more. Students' interest in this event is enormous, which is attested to by the fact that every year, the capacity of the course fills up within 2 minutes after the beginning of the registration. Furthermore, AKUTNĚ.CZ organizes some other, also very popular, courses – Workshop Airway Academy within the framework of Colours of Sepsis and/or First Aid Station at Masaryk Junior University.

IMPACT ON THE EXPERTS

Domestic

The AKUTNĚ.CZ portal has become visible not only on the academic and clinical grounds, where it enjoys a significant support from, among others, both FM MU and the University Hospital Brno, but it is also supported by professional companies, namely the Czech Society of Anaesthesiology, Resuscitation and Intensive Medicine, the Czech Society of Intensive Medicine, the Czech-Slovak Forum for Sepsis and, last but not least, the Czech Medical Chamber. Throughout its many years of existence, the portal and its activities have been awarded several times at university, national, and international level. This happened at the ČSARIM National Congress already in 2009. In 2012, the Virtual Patients were awarded the best published works and aids of the FM MU. A great appreciation is the use of AKUTNĚ.CZ algorithms in undergraduate education at the Third Faculty of Medicine of the Charles University (FM CU) whose educational materials appear reciprocally on AKUTNĚ.CZ website.

International

During the first year of its activity, the AKUTNĚ.CZ portal was already presented at the University of Basel. International activities of the portal are most often reflected in the form of presentations at foreign conferences. These are lectures and posters about portal's activities as well as presentations of the scientific work of the AKUTNĚ.CZ team. The first presentations of the AKUTNĚ.CZ portal abroad were given, quite symbolically, at the largest AMEE conference on medical education, by associate professors, doc. Štourač and doc. Schwarz, in 2012 in Lyon, France. Following were more detailed insights into the portal and its activities at IAMSE 2013 (St Andrews, UK), AMEE 2014 (Milan, Italy), and Anesthesiology 2015 (San Diego, US). Similarly successful was the presentation of Dr Klincová at the Euroanaesthesia 2016 Congress in London (UK).

Another important way of realizing international cooperation is the involvement of the AKUTNĚ.CZ portal in the MEFANET international network, a project supporting the cooperation of Czech and Slovak medical faculties in the development of modern and e-learning methods of teaching.

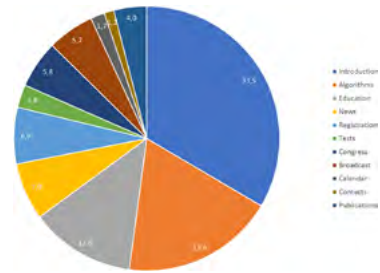


Figure 1. The share of representation of individual pages of the AKUTNĚ.CZ portal



Figure 2. Access to the AKUTNĚ.CZ portal worldwide in 2007-2017

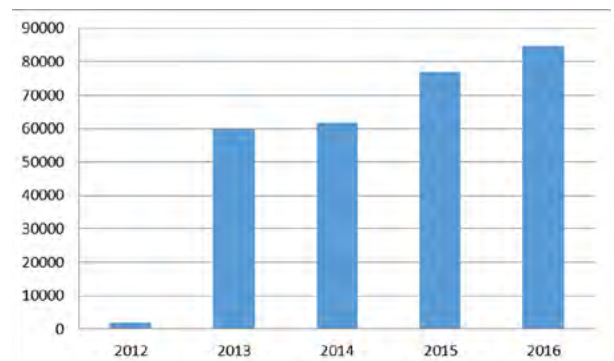


Figure 3. Number of visits to the AKUTNĚ.CZ portal in the given years

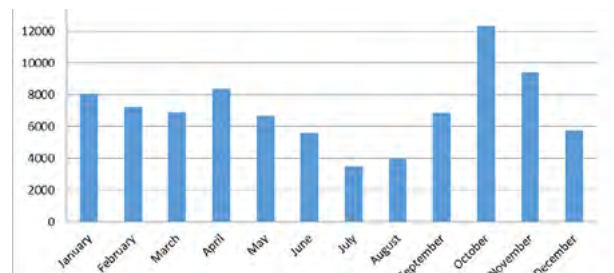


Figure 4. Number of visits in the months of 2016

The world-wide visibility of the AKUTNĚ.CZ portal is best documented by the world map below with country-by-country views (Figure 2).

Recruiting students for AIM

It is a great appreciation for the AKUTNĚ.CZ portal and its authors from among teachers that over one third of more than 150 FM MU graduates who cooperated with the AKUTNĚ.CZ portal remained faithful to AIM. Professional specialization of our graduates is dealt with in detail by Dr Klineciová in her publications. A lot of the graduates remain external collaborators of the portal long after completing their studies. Some have even become members of the portal Management.

Interest of the experts

We have documented the interest in the portal quite convincingly in the previous paragraphs. But let the numbers speak. Throughout the entire period of the existence of the portal, its website has reached the number of 14,297,509 visitors. The accompanying chart even shows how the portal traffic increases each year (Figure 3).

Looking at statistics in more detail, we find that the average traffic per month exceeds 2,300 users. Their priority is clear – interactive algorithms, our flagship, sweep the board. The next chart shows that the traffic increases significantly in October and November (Figure 4), which is undoubtedly due to the interest in the AKUTNĚ.CZ Conference and the activities around the Congress. Our Facebook page already boasts more than 3,200 fans whose number continues to grow. Not only do we appear on Facebook and our website, we also have accounts on Instagram, Twitter, and Google+.

PUBLISHING ACTIVITIES OF AKUTNĚ.CZ MEMBERS

It has already been mentioned above that AKUTNĚ.CZ motivates students towards AIM. Many of them engage themselves in teaching and, patiently enough, build their academic and scientific careers. One of such graduates/doctors is Dr Hana Harazim who worked on the use of remifentanyl in obstetric analgesia during her student years. Not only did she rank 2nd at the Students' Scientific Conference of the FM MU, she also won 1st place in the category of free communication at the national ČSARIM Congress 2011. There is also Martina Kosinová, MD whose works were published in prestigious European Journal of Anaesthesiology and the International Journal of Obstetric Anesthesia.

Lots of work have been based on the activities of the AKUTNĚ.CZ portal. Internationally, the most visible one was published in the Journal of Medical Internet Research which, according to the Web of Science, has repeatedly been No. 1 in the Medical Informatics category. The article has been widely quoted by prestigious publications. You can find a more detailed summary of the publishing activities related to the AKUTNĚ.CZ portal in Table 4. Our important publishing partner is the MEFANET Journal (mj.mefanet.cz) which is indexed, for example, in the ERIH+ international database.

Table 4. The publications on the AKUTNĚ.CZ portal (1)

Year	1st author	Citation
2007	Daniel Schwarz	SCHWARZ, Daniel, Pavel ŠEVČÍK, Petr ŠTOURAČ a Roman ŠTOUDEK. Educational portal of Emergency Medicine. In Proceedings of Information and Communication Technologies in Education 2007. 1st edition. Ostrava: University of Ostrava, 2007. pp. 191-193, 3 pp. ISBN 978-80-7368-388-7.
2008	Petr Štourač	ŠTOURAČ, Petr, Roman ŠTOUDEK, Ivo KŘÍKAVA, Daniel SCHWARZ, Milan KRATOCHVÍL a Pavel ŠEVČÍK. AKUTNE.CZ – nový publikační formát o akutní medicíně. In Novinky v anesteziologii, intenzivní medicíně a léčbě bolesti 2008. 1st edition. Brno: Galén, 2008. pp. 364-365, 2 pp. ISBN 978-80-7262-589-5.
2009	Petr Štourač	ŠTOURAČ, Petr, Daniel SCHWARZ, Petr BAKALÍK, Roman ŠTOUDEK, Ivo KŘÍKAVA, Radim ŠUSTR, Olga SMÉKALOVÁ a Pavel ŠEVČÍK. Multimedialní výukové algoritmy na portálu AKUTNE.CZ [ISSN 1803-179X]. In SOJKA, Petr a Jiří RAMBOUSEK. SCO 2009. Brno: Masarykova univerzita, 2009. pp. 53-57, 5 pp. ISBN 978-80-210-4878-2.
2010	Petr Štourač	ŠTOURAČ, Petr, Ivo KŘÍKAVA, Daniel SCHWARZ, Roman ŠTOUDEK, Peter BAKALÍK, Olga SMÉKALOVÁ, Lukáš BREYER, Pavel ŠEVČÍK, Ivo ŠNÁBL, Radim ŠUSTR, Zuzana ĎURIŠOVÁ, Jana WOLFOVÁ, Lenka MAKOVÁ, Michal IZAKOVIČ, Miloš HONS, Jan MAYER, Gabriela KOLÁŘOVÁ, Elena KRÁTKA, Martina KOSINOVÁ, Martin CHOVANEC, Zdeněk CHVÁTAL, Michal MALÝ, Eliška KRAJTLOVÁ a Dominik KUCHAR. AKUTNE.CZ projects – How to join medical students to e-learning content developing. In MEFANET report 03 – Edukační sborník z 3. konference lékařských fakult ČR a SR s mezinárodní účastí na téma e-learning a zdravotnická informatika ve výuce lékařských oborů. 1st edition. Brno: Masarykova univerzita, 2010. pp. 101-103, 3 pp. ISBN 978-80-210-5302-1.
	Petr Štourač	ŠTOURAČ, Petr. ... sejdeme se na AKUTNE.CZ [ISSN 1803-179X]. Naše fakulta, Brno: Lékařská fakulta MU, 2010, vol. 1, No. 1, pp. 18-21.
	Daniel Schwarz	SCHWARZ, Daniel a Petr ŠTOURAČ. Sejdeme se na AKUTNĚ.CZ. MEFANETin, Brno, 2010, year 2010, March, pp. 11-13.
2011	Petr Štourač	ŠTOURAČ, Petr, Zuzana MARKUSEKOVÁ, Hana SUCHOMELOVÁ a Martina KOSINOVÁ. III. konference AKUTNE.CZ. Naše fakulta, Brno: Lékařská fakulta MU, 2011, vol. 2, No. 08, pp. 18-19. ISSN 1805-0131.
	Petr Štourač	ŠTOURAČ, Petr, Zuzana MARKUSEKOVÁ, Hana HARAZIM a Martina KOSINOVÁ. III. konference AKUTNE.CZ. MEFANETin, Brno, 2011, year 2011, No. 03, pp. 43-47. ISSN 1804-8013.
	Kateřina Jedličková	JEDLIČKOVÁ, Kateřina, Anna JANEČKOVÁ, Martina KOSINOVÁ, Olga SMÉKALOVÁ a Petr ŠTOURAČ. Kurz urgentní medicíny 2011. Naše fakulta, Brno: Lékařská fakulta MU, 2011, vol. 2, No. 06, pp. 16-21.
	Kateřina Jedličková	JEDLIČKOVÁ, Kateřina, Anna JANEČKOVÁ, Martina KOSINOVÁ, Olga SMÉKALOVÁ a Petr ŠTOURAČ. Kurz urgentní medicíny pro studenty LF. MEFANETin, Brno, 2011, year 2011, No. 02, pp. 12-15. ISSN 1804-8013.
	Lenka Baláková	BALÁKOVÁ, Lenka, Petr ŠTOURAČ, Ivo KŘÍKAVA, Pavel ŠEVČÍK, Daniel SCHWARZ, Ivo ŠNÁBL, Radim ŠUSTR a Petr HOLUB. Využití e-learningového portálu AKUTNE.CZ při studiu medicíny. In Petr Sojka, Martin Kvizda. Sborník SCO 2011. 1st edition. Brno: MUNI Press, 2011. pp. 165-169, 5 pp. ISBN 978-80-210-5528-5.
	Lenka Baláková	BALÁKOVÁ, Lenka, Petr ŠTOURAČ, Ivo KŘÍKAVA, Markéta BRANDOVÁ, Anna JANEČKOVÁ, Andrej ČERNÝ, Daniel SCHWARZ, Ivo ŠNÁBL, Radim ŠUSTR a Pavel ŠEVČÍK. Methodical Guidance of Students During Multimedial Algorithm Creation for the portal AKUTNE.CZ. In D. Schwarz, M. Komenda, S. Štípek, V. Mihál, L. Dušek. MEFANET report 04. 1st edition. Brno: Masarykova univerzita, 2011. pp. 24-26, 3 pp. ISBN 978-80-210-5539-1.
2012	Martina Kosinová	KOSINOVÁ, Martina, Markéta BRANDOVÁ, Zuzana MARKUSEKOVÁ, Roman ŠTOUDEK a Petr ŠTOURAČ. Kurz urgentní medicíny 2012...aneb výuka léčby akutních stavů v praxi. MEFANETin, Brno, 2012, year 2012, No. 01, pp. 28-33. ISSN 1804-8013.
	Anna Janečková	JANEČKOVÁ, Anna, Ida ŠALGOVIČOVÁ, Kateřina JEDLIČKOVÁ, Martina KOSINOVÁ a Petr ŠTOURAČ. KURZ URGENTNÍ MEDICÍNY 2012. Naše fakulta, Brno: Lékařská fakulta MU, 2012, vol. 3, No. 2012, pp. 9-12. ISSN 1805-0131.
2013	Petr Štourač	ŠTOURAČ, Petr, Hana HARAZIM, Daniel SCHWARZ, Ivo KŘÍKAVA, Martin KOMENDA, Roman ŠTOUDEK, Olga SMÉKALOVÁ, Martina KOSINOVÁ, Richard HŮLEK, Jan MALÁSKA, Radim ŠUSTR, Ivo ŠNÁBL, Ladislav DUŠEK a Roman GÁL. AKUTNE.CZ algorithms and SEPSIS-Q scenarios as interactive tools for problem based learning sessions in medical education. MEFANET Journal, Brno: Facta Medica, 2013, vol. 1, No. 2, pp. 61-73. ISSN 1805-9163.
	Petr Štourač	ŠTOURAČ, Petr, Martina KOSINOVÁ, Hana HARAZIM, Olga SMÉKALOVÁ a Roman GÁL. 5th AKUTNE.CZ Congress. MEFANET Journal, Brno: Facta Medica, 2013, vol. 1, No. 2, pp. 82-84. ISSN 1805-9163.
	Daniel Schwarz	SCHWARZ, Daniel, Hana HARAZIM, Petr ŠTOURAČ, Martin KOMENDA a Ladislav DUŠEK. Infrastructure of clinical cases for medical education. In Information and Communication Technology in Education. Proceedings. first, 2013. Ostrava: University of Ostrava, 2013. pp. 268-273, 320 pp. ISBN 978-80-7464-324-8.
2014	Daniel Schwarz	SCHWARZ, Daniel, Petr ŠTOURAČ, Martin KOMENDA, Hana HARAZIM, Martina KOSINOVÁ, Jakub GREGOR, Richard HŮLEK, Olga SMÉKALOVÁ, Ivo KŘÍKAVA, Roman ŠTOUDEK a Ladislav DUŠEK. Interactive algorithms for teaching and learning acute medicine in the network of medical faculties MEFANET. Journal of medical Internet research, Toronto: JMIR Publications Inc., 2013, vol. 15, No. 7, pp. 298-311. ISSN 1438-8871. doi:10.2196/jmir.2590.
	Martina Kosinová	KOSINOVÁ, Martina, Markéta BRANDOVÁ, Olga SMÉKALOVÁ a Petr ŠTOURAČ. IV. konference AKUTNĚ.CZ. MEFANETin. 2013, 6(1), 26-32. ISSN 1804-8013.
	Petr Štourač	ŠTOURAČ, Petr, Martina KOSINOVÁ, Hana HARAZIM, Olga SMÉKALOVÁ, Roman ŠTOUDEK a Roman GÁL. Experience-based teaching of acute medicine for extra motivated medical students and young physicians – 4th Emergency Medicine Course and 6th AKUTNĚ.CZ Congress. MEFANET Journal, Brno: Facta Medica, 2014, vol. 2, No. 2, pp. 79-82. ISSN 1805-9163.
	Martina Kosinová	KOSINOVÁ, Martina, Michaela DRAŠKOVÁ, Hana HARAZIM, Olga SMÉKALOVÁ, Petr ŠTOURAČ a Roman GÁL. Jubilejní V. konference AKUTNĚ.CZ. Naše fakulta. 2014, 5(19), 10-13. ISSN 1805-0131.
	Hana Harazim	HARAZIM, Hana, Martina KOSINOVÁ, Roman ŠTOUDEK a Petr ŠTOURAČ. "Zdravotnická pevnost Boyard" – aneb týmy mediků v biologicky nebezpečné akci. Naše fakulta. 2014, 5(19), 33-36. ISSN 1805-0131.

Table 4. The publications on the AKUTNĚ.CZ portal (2)

Year	1st author	Citation
2015	Hana Harazim	HARAZIM, Hana, Petr ŠTOURAČ, Martina KOSINOVÁ, Olga SMÉKALOVÁ, Roman ŠTOUDEK, Daniel SCHWARZ, Vít RUSNÁK a Miloš LIŠKA. Zapojení interaktivní výuky do pregraduálního studia akutní medicíny: virtuální pacient, pokročilé simulace a přenosy z operačních sálů. Anesteziologie & intenzivní medicína, Praha: Česká lékařská společnost J.E. Purkyně, 2015, vol. 26, No. 4, pp. 202-212. ISSN 1214-2158.
	Petr Štourač	ŠTOURAČ, Petr a Daniel SCHWARZ. Služební cesty virtuálního pacienta AKUTNĚ.CZ®. Naše fakulta. 2014, 5(23), 19-21. ISSN 1805-0131.
	Zuzana Markuseková	MARKUSEKOVÁ, Zuzana, Olga SMÉKALOVÁ a Petr ŠTOURAČ. 17. Colours of Sepsis. Antiinfective News. 2015, 6(1), 29-30. ISSN 1804-4212.
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Since 2016, the motivation of young authors in their scientific efforts has been encouraged by the Jiří Mach Prize which is awarded by the Nadační fond AKUTNĚ.CZ for the best original work in acute medicine published in the previous year by an author younger than 35 years of age. The first laureates were Kateřina Růžková, MD and Jozef Klučka, MD.

IMPLEMENTATION TEAM

What remains to be answered is who stands behind the portal. No activities of the portal would be possible without the volunteer work of so many doctors, students, and even lay enthusiasts, often recruiting from the families of AKUTNĚ.CZ supporters. The top management currently consists of an eight-member team providing the portal's ongoing operation and taking care of its economy. The IT support is provided by the team of the Institute of Biostatistics and Analyses of the Medical Faculty of MU. Support to videoconferencing is provided by the team of the Institute of Computer Science of MU. Linguistic (albeit not content) correctness is supervised by a linguist/proofreader. And a large group of remarkably motivated people is made up by our reviewers.

CONCLUSION

Over the past 10 years, the AKUTNĚ.CZ portal has become an important meeting place for those interested in acute medicine, both nationally and internationally. And undoubtedly, many students have successfully been motivated to choose anaesthesia and intensive medicine as their field of study.

... let's meet on AKUTNĚ.CZ