

Summary report on research accreditation

I. General information

Name of organization	Institute of Neurology and Neurosurgery
Organization type (<i>to underline</i>)	Research institute High education institution <u>Ministerial research institute</u>
Research mission of organization	Forecasting trends in morbidity, mortality and disability by nervous system diseases; Determining the impact of neurological disorders on public health and demographics; Development of interventional strategies;
Strategic research direction (s)	Biomedicine, pharmaceuticals, health maintenance and strengthening
Evaluated period	2008-2013
Web of organization	www.inn.md

II. Research capacity (annual average for evaluated period)

Total number of employees	34.1					
Number of scientific researches	34.1					
Number of researches who possess honorific titles, scientific degrees, scientific and scientific-didactical titles	ASM full members	ASM corresp. members	Professor	Associated professor	Dr.hab.	Dr. (PhD)
	1	-	7	4	9	9
Number of researches involved in international projects	FP7		STCU	Bilateral	Others	
	-		-	1	-	
Number of young researches (under 35 years old)	Dr. (PhD)		PhD students		Others	
	-		3		9	
Financial resources (thousand MDL)	Public budget		International projects/grants		Research contracts	
	1794,3		-		-	
Distribution of expenditures (thousand MDL)	Salary		Infrastructure development		Other	
	892,7		941,0		223,5	
Expenditures for infrastructure development (thousand MDL)	Equipment		IT infrastructure		Endowment of experimental resorts	
	893,2		47,8		-	
List of 3 basic research methods, installations, technologies (per accredited field)	<p>-nonpharmacological noninvasive treatment by transcranial electrical stimulation (alternating current at continuous association) of patients with chronic migraine;</p> <p>- cardiorespiratory diagnosis of sleep breathing disorders of outpatient and inpatient;</p> <p>- therapy with CPAP (Continuous Positive Airway Pressure) for</p>					

	obstructive sleep apnea syndrome in outpatient and inpatient; - method of rehabilitation of postural control in post-stroke patients by physical therapy program based on the effects of functional transfer
List of provided scientific services	-mini-invasive endoscopic evacuation of spontaneous intraventricular putaminale hematoma; -retrograde ventriculocisternografia with digital 3D reconstruction; -cerebral ventricular drainage by temporary continuously irrigation system of spontaneous intracerebral hematoma; -double ultrasound checking the degree of brain tumor resection; -determination of prognostic markers of glioma by rela 2 HG and lactate magnetic resonance spectroscopy; -endoscopic foraminoplastia by stent application in the treatment of hydrocephalus intraventricular due to foramen Monroe occlusion; -endoscopic transnasal transseptal transsphenoidal approach; - endoscopic endonasal transsphenoidal approach for resection of pituitary adenomas; -stereotactic biopsy of deep brain tumors with the Leksell frame
List of editorial activities	Institute of Neurology and Neurosurgery is the co-founder of the “The Bulletin of the Academy of Sciences. Medical Sciences” Journal.

III. Distribution of number of research projects and themes during evaluated period

Institutional projects	2008 4	2009 4	2010 4	2011 2	2012 2	2013 2
Projects in the frame of State Programmes	2008 -	2009 -	2010 -	2011 -	2012 -	2013 -
Technological transfer projects	2008 1	2009 -	2010 -	2011 1	2012 1	2013 1
Projects for equipment procurement	2008 1	2009 -	2010 -	2011 -	2012 1	2013 -
Projects for young researches	2008 -	2009 -	2010 1	2011 1	2012 1	2013 -
Projects in the frame of bilateral programmes	2008 -	2009 -	2010 1	2011 -	2012 -	2013 -
International	2008	2009	2010	2011	2012	2013

projects/grants	-	-	-	-	-	-
List of 3 representative international projects/grants	-					
Research contracts	2008 -	2009 -	2010 -	2011 -	2012 -	2013 -
List of 3 representative research contracts	-					

IV. Scientific publications

Total number of publications abroad	Books 1	Chapters in books 5	Journal papers 4
Total number of publications in ISI journals and books	Books -	Chapters in books -	Journal papers 1
Total number of publications in the country	Books 6	Chapters in books 1	Journal papers 184
Total number of conference abstracts	International abroad 143	International in the country 4	National 11
List of 5 representative publications (per accredited field)	<ol style="list-style-type: none"> 1. Moldovanu Ion, Odobescu Stela, Craciun Cristina. Chronic migraine with and without medication overuse: the role of drug phobia and associated factors (According to the date of the Moldovan Headache Center, Chisinau). Cephalalgia. Headache Currents (impact factor = 3.4), V. 28, Issue 11, 2008, pp. 1229-1233. 2. Zepca Victor, Cristina Petrescu, Nina Iziunov, Angela Baroncea. Forming knowledge about behavioral risk factors in vocational school students from Moldova. Revista Medico-Chirurgicală a Societății de Medici și Naturaliști din Iași, 2009, vol. 113, nr. 3, supl. 1, p. 123-126 3. Zepca Victor, Nina Iziunov. Self-assessed body mass by vocational school students from Moldova. Revista Medico-Chirurgicală a Societății de Medici și Naturaliști din Iași, 2009, vol. 113, nr. 3, supl. 1, p. 118-122 4. Осипова В.В., Азимова Ю.Э., Табеева Г.Р., Тарасова С.А., Амелин А.В., Куцемелов И.В., Молдовану И.В., Одобеску С.С., Наумова Г.И. Diagnosis of headaches in Russia and the former Soviet Union countries: state of the problem and its solutions. Анналы клинической и экспериментальной неврологии, том June, 2012, ISSN 2075-5473 N2, Москва, с. 16-21 (0.186 - impact factor) 		
List of 5 citations	Chronic migraine with and without medication overuse: the role of drug phobia and associated factors (according to the data of		

	<p>Headache Centre, Chisinau, the Republic of Moldova). Ion Moldovanu¹, Stela Odobescu² and Cristina Craciun¹ Cephalalgia Volume 28, Issue 11, pages 1229–1233, November 2008</p> <p>Cited in:</p> <ol style="list-style-type: none"> 1. The prevalence of primary headache disorders in Russia: A countrywide survey. I Ayzenberg, Z Katsarava, A Sborowski, M Chernysh, V Osipova, G Tabeeva, N Yakhno, TJ Steiner. Cephalalgia, April 2012, vol. 32, no. 5 373-381 2. Headache-attributed burden and its impact on productivity and quality of life in Russia: structured healthcare for headache is urgently needed. I Ayzenberg, Z Katsarava, A Sborowski, M Chernysh, V Osipova, G Tabeeva, V. Osipova, TJ Steiner. European Journal of Neurology, Volume 21, Issue 5, pages 758–765, May 2014 3. Диагностика головных болей в России и странах постсоветского пространства: состояние проблемы и пути ее решения. В.В.Осипова, Ю.Э.Азимова, Г.Р.Табеева, С.А.Тарасова, А.В.Амелин, И.В.Куцемелов, И.В.Молдовану, С.Одобеску, Г.И.Наумова, Анналы клинической и экспериментальной неврологии. 4. Epidemiology, Risk Factors, and Treatment of Chronic Migraine: A Focus on Topiramate. Stephen Silberstein, Hans-Christoph Diener, Richard Lipton, Peter Goadsby, David Dodick, Genaro Bussone, Fred Freitag, Susan Schwalen, Steven Ascher, Jacqueline Morein, Steven Greenberg, David Biondi and Joseph Hulihan. Headache: The Journal of Head and Face Pain, Volume 48, Issue 7, pages 1087–1095, July/August 2008 5. Lifting The Burden: The Global Campaign Against Headache. Lars Jacob Stovner, Zaza Katsarava, Rigmor Jensen, Gretchen L. Birbeck, Paolo Martelletti. Handbook of Headache. 2011, pp 737-744
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V. Innovation outputs

Total number of patents	Registered in the country 3	Registered abroad -	Implemented -
Total number of new developed methods and technologies	Registered -	Non-registered -	Implemented -
Total number of new scientific products	Registered 26	Non-registered -	Implemented 26
Total number of scientific outputs for central and local authorities (draft of law, strategies etc.)	6		
Total number of scientific outputs for educational institutions	Handbooks for high education 1	Handbooks for pre-university institutions -	Delivered university courses 19
List of 5 representative innovation outputs (per accredited field)	1. A method of treatment of cervical radiculopathy by selective regional infiltration. Authors: S. Pleșca, D. Gherman, M. Sangheli, O. Șchiopu. Patent Nr. 93, 21.08.2009		

	<p>2. Device and method for draining of cerebral ventricles. Authors: D. Lîsi, V. Timirgaz, G. Zapuhlîh. Patent Nr. 128, 21.05.2009</p> <p>3. Preoperative prophylactic method of cerebral ischemia. Authors: V. Parpauț, M. Gavriiuc. Patent Nr. 119, 02.06.2009.</p> <p>4. Kinesiology tape application method in the treatment of complex recovery syndrome "painful shoulder" in patients with post-stroke hemiparesis. Authors: Pascal O., Dimitras S., Agapii E., Cojocari D. Implementation Act on 31.05.2013</p> <p>5. Application of low frequency pulse electroanalgezia in recovery treatment of complex syndrome "shoulder pain" in patients with post-stroke hemiparesis. Authors: Pascal O., Agapii E., Cojocaru D., Cozac V. Implementation Act on 12.06.2013</p>
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VI. Major scientific and innovation achievements

Short description of main scientific results and its confirmation (by awards, citations, development of international projects etc.)	<p>Four highly specialized centers for diagnosing and treatment were launched: <i>National Center for Headache and Autonomic Disorders</i>, <i>National Center for Back Pain</i>, <i>National Center for Surgery of Pain</i>, <i>National Center for Sleep Disorders</i>.</p> <p>In the frame of the bilateral Moldavian-German project <i>Chronic migraine preventive treatment by transcranial direct current stimulation</i>, it was established the effectiveness of cathodic electrical transcranial stimulation in increasing the threshold of preshional pain.</p> <p>The non-farmacologic and non-invasive treatment for patients with chronic migraine by transcranial electrical stimulation has been implemented.</p> <p>As result of the study of ischemic cerebral tissue stupefaction phenomena at patients with atherosclerotic stenosis of carotid arteries, a preoperative prophylactic method of cerebral ischemia was elaborated.</p> <p>In the rehabilitation of post-stroke patients with hemiparesis the reeducation of balance and postural control in by positional biofeedback on stabilographic platform was achieved.</p> <p>A range of neurosurgical technics were implemented: endoscopic management of hydrocephalus secondary to intracranial tumours, CT-guided transpedicular vertebral fixation with "ARC" system, the endoscopic inspection method in surgical treatment of late subdural hematomas, percutaneous vertebroplasty in treatment of vertebral hemangioma in lumbar region.</p> <p>The improvement of neurological and neurosurgical service was accomplished by integration of medical informational system and telemedicine.</p>					
Number of organization' invited speakers at international conferences	2008	2009	2010	2011	2012	2013
Short description of technological transfer and innovation results	<p>The implementation of the <i>Medical Information System</i> allowed the optimization of neurological and neurosurgical service.</p> <p>Modern scientific equipment was implemented for mini - invasive technologies in the treatment of neurocompressive syndromes, for</p>					

and its certification by implementation	stabilizing pedicle screws and rods with titanium in the treatment of degenerative diseases of the thoraco - lumbar spine and for percutaneous vertebroplasty in the surgical treatment of symptomatic vertebral hemangiomas. In the frame of the project 13.824.19.182T <i>Deploying laser surgery of cerebral tumors</i> there were implemented: - Endoscopic transnasal ablation of pituitary adenomas by transseptal transsphenoidal approach. Author: R.Safta. Implementation Act No. 3 of 22.03.2012; - Endonasal endoscopic ablation of pituitary adenomas by transsphenoidal approach. Author: R.Safta. Implementation Act No. 4 of 22.03.2012; - Stereotactic biopsy of deep brain tumors in the Leksell frame. Author: E.Condrea. Implementation Act No. 5 of 22.03.2012					
Number of defended dr.hab. and dr. theses per year	2008 1/2	2009 0/1	2010 0/1	2011 0/3	2012 1/2	2013 1/3

VII. Present/further involvement in the Seventh Framework Programme (FP7): specific programmes (Cooperation, Ideas, People, Capacities) of interest and its sub-divisions.

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VIII. Accredited research field and its evaluation by the National Council for Accreditation and Attestation of the Republic of Moldova (very good/good/satisfactory)

Neurology and neurosurgery – good

IX. Category (A/B/C) attributed by the National Council for Accreditation and Attestation of the Republic of Moldova to the organization

Category B

X. Institutional development actions planned for the next 5 years (maximum ½ page).

1. Development of policy for preventing and treating diseases of the nervous system;
2. Coordination of national surveillance and management of patients with diseases of the nervous system;
3. Providing medical care, including neuroimaging and laboratory diagnosis;
4. Analysis of statistical data in order to establish the epidemiological features and to assess the trends of nervous system diseases in society;
5. Development of methodical advisory by organization of supervision, inspection of laboratories and training of specialists in the field;
6. Monitoring and evaluation of level of achievement of national program for surveillance,

prevention, emergency and planned care, and recovery from nervous system diseases;

7. Accomplishment of retroactive connections with national medical institutions of primary and secondary level;

8. Enhancement of the activity of science department through development and implementation of new strategies for providing modern healthcare, participation to international scientific projects in the field of health, and implementation of scientific researches into the practical activity: diagnose and treatment of disorders of nervous system.