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## Biography

Dr. Di Ieva received his Medical Degree in 2002 and specialisation in Neurosurgery in 2007 in Italy. He was a consultant neurosurgeon in Milan from 2007 to 2009, mainly involved in the treatment of brain and pituitary tumours, working closely with ENT and craniomaxillofacial surgeons, oncologists and radiation oncologists, as well as in the emergency management of neurotrauma. He also worked as a researcher at the Centre for Anatomy and Cell Biology of the Medical University of Vienna, Austria, from 2009 to 2011, where he completed a PhD in Clinical Neurosciences (introducing innovative methods in neuropathology and MRI). He was appointed A/Professor of Neuroanatomy and was invited multiple times to teach neurotraumatology and neurosurgery in several countries, including Italy, Austria, Switzerland, Germany, USA, and UAE. Dr. Di Ieva completed a 3-year clinical & research fellowship in skull base surgery in 2014 at the St. Michael's Hospital, University of Toronto, where he also gained further experience in the Gamma Knife radiosurgery and continued to perform emergency neurosurgery in one of the largest trauma centres of Ontario, Canada. His multidisciplinary experience allowed him to lead the publication of the "Handbook of Skull Base Surgery" (Thieme, New York, 2015), which is one of the most used books in the field worldwide. In 2015 Dr. Di Ieva moved to Sydney, where he worked further in general neurosurgery and complex spine surgery (mainly at the Macquarie University Hospital, North Shore Private and Royal North Shore Hospitals, and Sydney Adventist Hospital), earning the fellowship with the Royal Australasian College of Surgeons in 2017. He is a full time consultant neurosurgeon at the Macquarie University Hospital and Associate Professor of Neurosurgery at Macquarie University.

## Clinical Expertise

Neuro-oncology (surgical and multidisciplinary treatment of tumours and cancer of the central and peripheral nervous systems); pituitary and skull base surgery (including treatment of complex tumours and conditions affecting the cranial nerves and the craniocervical junction); pain treatment (including microvascular decompression and percutaneous treatments for craniofacial pain and hemifacial spasm, decompression of peripheral nerves, spine surgery); microneurosurgery, endoscopic and minimally invasive ("keyhole") neurosurgery; awake surgery and neuromonitoring; hydrocephalus; neurotraumatology, including the multidisciplinary management of traumatic brain and spine injuries and post-concussion patients.

## Academic qualifications

Associate Professor of Neurosurgery, Macquarie University

Professor of Neurosurgery, Italian Ministry of Education, Universities and Research

Associate Professor of Neuroanatomy, Medical University of Vienna, Austria

MD, summa cum laude (2002)

European Board in Neurosurgery (2007)

PhD in Clinical Neurosciences (2011)

FRACS (Fellow of the Royal Australasian College of Surgeons, RACS)

2019 John Mitchell Crouch Fellowship, RACS

Fellowship in Skull Base Surgery and Neuro-oncology (St. Michael's Hospital, Toronto, Canada)

Fellowship in General and Spine Surgery (Royal North Shore Hospital, North Shore Private Hospital and Sydney Adventist Hospital, Sydney)

Associate Investigator, Australian Research Council (ARC) Centre of Excellence in Cognition and its Disorders

Associate Member of the Centre for Elite Performance, Expertise and Training, Macquarie University

Board Member of the Society for Brain Mapping & Therapeutics, USA

## Employment

### **Associate Professor**

Associate Professor  
Department of Clinical Medicine  
Macquarie University  
3 Apr 2018 → present

### **Professor of Neurosurgery**

Italian Ministry of Education, Universities & Research  
Italy  
31 Oct 2018 → present

### **Associate Professor of Neurosurgery**

Ministry of Education, Universities and Research  
Italy  
1 Dec 2017 → present

### **Honorary Research Fellow**

Garvan Institute Medical Research  
Sydney, Australia  
11 May 2015 → 11 May 2018

### **Associate Investigator**

ARC Centre of Excellence in Cognition and its Disorders (CCD)  
Canberra, Australia

### **Associate Member**

Centre for Elite Performance, Expertise and Training (CEPET)  
Australia

### **A/Prof. of Neuroanatomy**

Medical University of Vienna  
1090 Vienna, Austria

### **Board Member**

Society for Brain Mapping & Therapeutics (SBMT)  
United States

## Research outputs

### **Cranial nerve nomenclature: historical vignette**

Li Ching Ng, A., Rosenfeld, J. V. & Di Ieva, A., 1 Aug 2019, In : World Neurosurgery. 128, p. 299-307 9 p.

### **How I do it: 3D exoscopic endoscope-assisted microvascular decompression**

Li Ching Ng, A. & Di Ieva, A., 1 Jul 2019, In : Acta Neurochirurgica. 161, 7, p. 1443-1447 5 p.

### **Letter to the Editor Regarding "The Exoscope in Neurosurgery: An Innovative Point of View. A Systematic Review of the Technical, Surgical, and Educational Aspects"**

Di Ieva, A. & Tschabitscher, M., 1 Jul 2019, In : World Neurosurgery. 127, p. 652 1 p.

### **Compendio di biologia per infanti**

Di Ieva, A., 21 Dec 2018, Rome: Aracne Editrice. 160 p. (Vita: Origine & Evoluzione)

### **Preface**

Di Ieva, A., Oct 2018, *Algebraic quantum theory of consciousness: a solution to the problem of quantum collapse in systems having three anticommuting elements*. Conte, E. (ed.). Italy: Aracne Editrice, p. 7-9 3 p.

### **Microvascularization of Grade I meningiomas: effect on tumor volume, blood loss, and patient outcome**

Karsy, M., Burnett, B., Di Ieva, A., Cusimano, M. D. & Jensen, R. L., 1 Mar 2018, In : *Journal of Neurosurgery*. 128, 3, p. 657-666 10 p.

### **Spectrobiopsy in neurodiagnostics: the new era**

Di Ieva, A., Choi, C. & Magnussen, J. S., 1 Feb 2018, In : *Neuroradiology*. 60, 2, p. 129-131 3 p.

### **Training in skull base surgery: a holistic perspective**

Di Ieva, A., 1 Dec 2017, In : *Journal of Neurosurgical Sciences*. 61, 6, p. 690-691 2 p.

### **Vasculogenic mimicry in clinically non-functioning pituitary Adenomas: a histologic study**

Di Michele, J., Rotondo, F., Kovacs, K., Syro, L. V., Yousef, G. M., Cusimano, M. D. & Di Ieva, A., Oct 2017, In : *Pathology and Oncology Research*. 23, 4, p. 803-809 7 p.

### **Box-counting method in quantitative analysis of images of the brain**

Milosevic, N. T., Di Ieva, A., Jelinek, H. & Rajkovic, N., 5 Jul 2017, *2017 21st International Conference on Control Systems and Computer Science (CSCS) : proceedings*. Dumitrache, Florea, AM., Pop, F. & Dumitrascu, A. (eds.). Piscataway, NJ, USA: Institute of Electrical and Electronics Engineers (IEEE), p. 343-349 7 p. 7968581

### **The impact of body mass index and height on the risk for glioblastoma and other glioma subgroups: a large prospective cohort study**

Wiedmann, M. K. H., Brunborg, C., Di Ieva, A., Lindemann, K., Johannesen, T. B., Vatten, L., Helseth, E. & Zwart, J. A., 1 Jul 2017, In : *Neuro-Oncology*. 19, 7, p. 976-985 10 p.

### **Cerebrospinal fluid leaks in extended endoscopic transsphenoidal surgery: covering all the angles**

Fathalla, H., Di Ieva, A., Lee, J., Anderson, J., Jing, R., Solarski, M. & Cusimano, M. D., Apr 2017, In : *Neurosurgical Review*. 40, 2, p. 309-318 10 p.

### **Overweight, obesity and height as risk factors for meningioma, glioma, pituitary adenoma and nerve sheath tumor: a large population-based prospective cohort study**

Wiedmann, M. K. H., Brunborg, C., Di Ieva, A., Lindemann, K., Johannesen, T. B., Vatten, L., Helseth, E. & Zwart, J. A., 2017, In : *Acta Oncologica*. 56, 10, p. 1302-1309 8 p.

### **Diagnostic Value of Fractal Analysis for the Differentiation of Brain Tumors Using 3-Tesla Magnetic Resonance Susceptibility-Weighted Imaging**

Di Ieva, A., Le Reste, P. J., Carsin-Nicol, B., Ferre, J. C. & Cusimano, M. D., 1 Dec 2016, In : *Neurosurgery*. 79, 6, p. 839-845 7 p.

### **Arginine vasopressin (AVP): a review of its historical perspectives, current research and multifunctional role in the hypothalamo-hypophysial system**

Rotondo, F., Butz, H., Syro, L. V., Yousef, G. M., Di Ieva, A., Restrepo, L. M., Quintanar-Stephano, A., Berczi, I. & Kovacs, K., 1 Aug 2016, In : *Pituitary*. 19, 4, p. 345-355 11 p.

### **Current applications and future perspectives of the use of 3D printing in anatomical training and neurosurgery**

Baskaran, V., Štrkalj, G., Štrkalj, M. & Di Ieva, A., 24 Jun 2016, In : *Frontiers in Neuroanatomy*. 10, p. 1-7 7 p., 69.

### **Biomarkers of pituitary carcinomas**

Sav, A., Rotondo, F., Syro, L. V., Di Ieva, A., Cusimano, M. D. & Kovacs, K., 3 May 2016, In : Expert Review of Endocrinology and Metabolism. 11, 3, p. 253-261 9 p.

### **Computational fractal-based analysis of brain tumor microvascular networks**

Di Ieva, A. & Al-Kadi, O. S., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 393-411 19 p. (Springer Series in Computational Neuroscience).

### **Computational fractal-based analysis of MR susceptibility-weighted imaging (SWI) in neuro-oncology and neurotraumatology**

Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 311-332 22 p. (Springer Series in Computational Neuroscience).

### **Computational fractal-based neurosciences: an overview**

Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 499-502 4 p. (Springer Series in Computational Neuroscience).

### **Fractal analysis in clinical neurosciences: an overview**

Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 189-198 10 p. (Springer Series in Computational Neuroscience).

### **Fractal analysis in neurological diseases**

Esteban, F. J., Díaz-Beltrán, L. & Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 199-211 13 p. (Springer Series in Computational Neuroscience).

### **Fractal-based analysis of arteriovenous malformations (AVMs)**

Di Ieva, A. & Reishofer, G., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 279-293 15 p. (Springer Series in Computational Neuroscience).

### **Fractal geometry meets computational intelligence: future perspectives**

Livi, L., Sadeghian, A. & Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 567-580 14 p. (Springer Series in Computational Neuroscience).

### **Fractals in neuroanatomy and basic neurosciences: an overview**

Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 83-89 7 p. (Springer Series in Computational Neuroscience).

### **Fractals in neuroimaging**

Lahmiri, S., Boukadoum, M. & Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 295-309 15 p. (Springer Series in Computational Neuroscience).

### **Handbook of skull base surgery**

Di Ieva, A. (ed.), Lee, J. M. (ed.) & Cusimano, M. D. (ed.), 2016, New York: Thieme Medical Publishers. 1004 p.

### **Histological fractal-based classification of brain tumors**

Al-Kadi, O. S. & Di Ieva, A., 2016, *The Fractal geometry of the brain*. Di Ieva, A. (ed.). New York: Springer, Springer Nature, p. 371-391 21 p. (Springer Series in Computational Neuroscience).

### **The Fractal geometry of the brain**

Di Ieva, A. (ed.), 2016, New York: Springer, Springer Nature. 585 p. (Springer Series in Computational Neuroscience)

### **The Fractal geometry of the brain: an overview**

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**Magnetic resonance susceptibility weighted imaging in neurosurgery: Current applications and future perspectives**

Di Ieva, A., Lam, T., Alcaide-Leon, P., Bharatha, A., Montanera, W. & Cusimano, M. D., 1 Dec 2015, In : Journal of Neurosurgery. 123, 6, p. 1463-1475 13 p.

**Pituitary adenoma and the chemokine network: a systemic view**

Grizzi, F., Borroni, E. M., Vacchini, A., Qehajaj, D., Liguori, M., Stifter, S., Chiriva-Internati, M. & Di Ieva, A., 11 Sep 2015, In : Frontiers in Endocrinology. 6, p. 1-5 5 p., 141.

**Diagnostic and prognostic biomarkers of a sellar melanocytic tumor mimicking pituitary adenoma: Case report and literature review**

Mohammed, A. A., Rotondo, F., Munoz, D. G., Kovacs, K., Bilbao, J. M., Karamchandani, J. R., Di Ieva, A. & Cusimano, M. D., 1 Sep 2015, In : Pathology, research and practice. 211, 9, p. 682-687 6 p.

**Autophagy in endocrine tumors**

Weckman, A., Rotondo, F., Di Ieva, A., Syro, L. V., Butz, H., Cusimano, M. D. & Kovacs, K., 1 Aug 2015, In : Endocrine-Related Cancer. 22, 4, p. R205-R218 14 p.

**Human Kallikrein 10 Expression in Surgically Removed Human Pituitary Corticotroph Adenomas: An Immunohistochemical Study**

Di Meo, A., Rotondo, F., Kovacs, K., Cusimano, M. D., Syro, L. V., Di Ieva, A., Diamandis, E. P. & Yousef, G. M., 23 Jul 2015, In : Applied Immunohistochemistry and Molecular Morphology. 23, 6, p. 433-437 5 p.

**Endoscopic versus microscopic approach for surgical treatment of acromegaly**

Fathalla, H., Cusimano, M. D., Di Ieva, A., Lee, J., Alsharif, O., Goguen, J., Zhang, S. & Smyth, H., 18 Jul 2015, In : Neurosurgical Review. 38, 3, p. 541-549 9 p.

**Osteomalacia-Inducing Tumors of the Brain: A Case Report, Review and a Hypothesis**

Fathalla, H., Cusimano, M., Di Ieva, A., Karamchandani, J., Fung, R. & Kovacs, K., 1 Jul 2015, In : World Neurosurgery. 84, 1, p. 189.e1-189.e5 5 p.

**Treatment of Invasive Silent Somatotroph Pituitary Adenoma with Temozolomide. Report of a Case and Review of the Literature**

Ghazi, A. A., Rotondo, F., Kovacs, K., Amirbaigloo, A., Syro, L. V., Fathalla, H., Di Ieva, A. & Cusimano, M. D., 22 May 2015, In : Endocrine Pathology. 26, 2, p. 135-139 5 p., 6.

**Crooke's cell tumors of the pituitary**

Di Ieva, A., Davidson, J. M., Syro, L. V., Rotondo, F., Montoya, J. F., Horvath, E., Cusimano, M. D. & Kovacs, K., 21 May 2015, In : Neurosurgery. 76, 5, p. 616-622 7 p.

**Computational Analyses of Arteriovenous Malformations in Neuroimaging**

Di Ieva, A., Boukadoum, M., Lahmiri, S. & Cusimano, M. D., 1 May 2015, In : Journal of Neuroimaging. 25, 3, p. 354-360 7 p.

**Chordoid meningiomas: Incidence and clinicopathological features of a case series over 18 years**

Di Ieva, A., Laiq, S., Nejad, R., Schmitz, E. M., Fathalla, H., Karamchandani, J., Munoz, D. G. & Cusimano, M. D., 1 Apr 2015, In : Neuropathology. 35, 2, p. 137-147 11 p.

**Current status on histological classification in Cushing's disease**

Syro, L. V., Rotondo, F., Cusimano, M. D., Di Ieva, A., Horvath, E., Restrepo, L. M., Wong, M., Killinger, D. W., Smyth, H. & Kovacs, K., 1 Apr 2015, In : Pituitary. 18, 2, p. 217-224 8 p.

**Human kallikrein 10 in surgically removed human pituitary adenomas**

Rotondo, F., Di Ieva, A., Kovacs, K., Cusimano, M. D., Syro, L. V., Diamandis, E. P. & Yousef, G. M., 1 Apr 2015, In : Hormones. 14, 2, p. 272-279 8 p.

### **Invasive, Atypical and Aggressive Pituitary Adenomas and Carcinomas**

Sav, A., Rotondo, F., Syro, L. V., Di Ieva, A., Cusimano, M. D. & Kovacs, K., 1 Mar 2015, In : *Endocrinology and Metabolism Clinics of North America*. 44, 1, p. 99-104 6 p.

### **Fractals in the neurosciences, part II: Clinical applications and future perspectives**

Di Ieva, A., Esteban, F. J., Grizzi, F., Klonowski, W. & Martín-Landrove, M., 17 Feb 2015, In : *Neuroscientist*. 21, 1, p. 30-43 14 p.

### **The indusium griseum and the longitudinal striae of the corpus callosum**

Di Ieva, A., Fathalla, H., Cusimano, M. D. & Tschabitscher, M., 1 Jan 2015, In : *Cortex*. 62, p. 34-40 7 p.

### **Letter to the Editor**

Kovacs, K., Rotondo, F., Horvath, E., Syro, L. V., Di Ieva, A., Cusimano, M. D. & Munoz, D. G., 2015, In : *Endocrine Pathology*. 26, 1, p. 93-94 2 p.

### **Progress in the diagnosis and classification of pituitary adenomas**

Syro, L. V., Rotondo, F., Ramirez, A., Di Ieva, A., Sav, A., Restrepo, L. M., Serna, C. A. & Kovacs, K., 2015, In : *Frontiers in Endocrinology*. 6, p. 1-8 8 p., 97.

### **The comprehensive AOCMF classification: skull base and cranial vault fractures - Level 2 and 3 tutorial**

Ieva, A. D., Audigé, L., Kellman, R. M., Shumrick, K. A., Ringl, H., Prein, J. & Matula, C., 25 Dec 2014, In : *Craniofacial Trauma and Reconstruction*. 7, 5, p. S103-S113 11 p.

### **A journey into the technical evolution of neuroendoscopy**

Di Ieva, A., Tam, M., Tschabitscher, M. & Cusimano, M. D., 1 Dec 2014, In : *World Neurosurgery*. 82, 6, p. E777-E789 13 p.

### **The comprehensive AOCMF classification system: radiological issues and systematic approach**

Buitrago-Téllez, C. H., Cornelius, C. P., Prein, J., Kunz, C., di Ieva, A. & Audigé, L., Dec 2014, In : *Craniofacial Trauma and Reconstruction*. 7, Suppl 1, p. S123-5130 8 p.

### **Fractal-based arteriovenous malformations detection in brain magnetic resonance images**

Lahmiri, S., Boukadoum, M. & Di Ieva, A., 22 Oct 2014, *NEWCAS 2014: Proceedings of the 2014 IEEE 12th International New Circuits and Systems Conference*. Piscataway, NJ: Institute of Electrical and Electronics Engineers (IEEE), p. 21-24 4 p.

### **Intrasellar melanocytic tumor mimicking pituitary adenoma**

Rotondo, F., Munoz, D. G., Karamchandani, J., Bilbao, J., Iakovlev, V., Cusimano, M. D., Di Ieva, A. & Kovacs, K., Jun 2014, In : *Endocrine Reviews*. 35, 4 Supplement, 1 p., SUN-0724.

### **Aggressive pituitary adenomas—diagnosis and emerging treatments**

Di Ieva, A., Rotondo, F., Syro, L. V., Cusimano, M. D. & Kovacs, K., 2014, In : *Nature Reviews Endocrinology*. 10, 7, p. 423-435 13 p.

### **Computational fractal-based analysis of brain arteriovenous malformation angioarchitecture**

Di Ieva, A., Niamah, M., Menezes, R. J., Tsao, M., Krings, T., Cho, Y. B., Schwartz, M. L. & Cusimano, M. D., 2014, In : *Neurosurgery*. 75, 1, p. 72-79 8 p.

### **Detrended fluctuation analysis of brain hemisphere magnetic resonance images to detect cerebral arteriovenous malformations**

Lahmiri, S., Boukadoum, M. & Di Ieva, A., 2014, *IEEE International Symposium on Circuits and Systems: ISCAS 2014: proceedings*. Piscataway, NJ: Institute of Electrical and Electronics Engineers (IEEE), p. 2409-2412 4 p.

**Distinguishing Alzheimer's disease from normal pressure hydrocephalus: A search for MRI biomarkers**

Di Ieva, A., Valli, M. & Cusimano, M. D., 2014, In : Journal of Alzheimer's Disease. 38, 2, p. 331-350 20 p.

**Evaluation of cerebral aneurysm wall thickness in experimental aneurysms: Comparison of 3T-MR imaging with direct microscopic measurements**

Sherif, C., Kleinpeter, G., Mach, G., Loyoddin, M., Haider, T., Plasenzotti, R., Bergmeister, H., Di Ieva, A., Gibson, D. & Krssak, M., 2014, In : Acta Neurochirurgica. 156, 1, p. 27-34 8 p.

**Fractals in the neurosciences, part I: General principles and basic neurosciences**

Di Ieva, A., Grizzi, F., Jelinek, H., Pellionisz, A. J. & Losa, G. A., 2014, In : Neuroscientist. 20, 4, p. 403-417 15 p.

**Improving differential diagnosis of pituitary adenomas**

Syro, L. V., Builes, C. E., Di Ieva, A., Sav, A., Rotondo, F. & Kovacs, K., 2014, In : Expert Review of Endocrinology and Metabolism. 9, 4, p. 377-386 10 p.

**MicroRNAs as biomarkers in pituitary tumors**

Di Ieva, A., Butz, H., Niamah, M., Rotondo, F., De Rosa, S., Sav, A., Yousef, G. M., Kovacs, K. & Cusimano, M. D., 2014, In : Neurosurgery. 75, 2, p. 181-188 8 p.

**Skull base embryology: A multidisciplinary review**

Di Ieva, A., Bruner, E., Haider, T., Rodella, L. F., Lee, J. M., Cusimano, M. D. & Tschabitscher, M., 2014, In : Child's Nervous System. 30, 6, p. 991-1000 10 p.

**The first AO classification system for fractures of the craniomaxillofacial skeleton: rationale, methodological background, developmental process, and objectives**

Audigé, L., Cornelius, C. P., Ieva, A. D., Prein, J. & CMF Classification Group, 2014, In : Craniomaxillofacial Trauma and Reconstruction. 7, Suppl 1, p. S6-S14 9 p.

**Watertight dural closure in brain surgery: a simple model for training**

Matula, C., Kjærsgaard, L. & Di Ieva, A., 2014, In : Journal of Neurological Surgery, Part A: Central European Neurosurgery. 75, 3, p. 241-245 5 p.

**Autophagy in the endocrine glands**

Weckman, A., Di Ieva, A., Rotondo, F., Syro, L. V., Ortiz, L. D., Kovacs, K. & Cusimano, M. D., 19 Dec 2013, In : Journal of Molecular Endocrinology. 52, 2, p. R151-R163 13 p.

**Analysis of intracranial pressure: Past, present, and future**

Di Ieva, A., Schmitz, E. M. & Cusimano, M. D., Dec 2013, In : Neuroscientist. 19, 6, p. 592-603 12 p.

**Endoscopic extradural subtemporal approach to lateral and central skull base: A cadaveric study**

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**Microvascular morphometrics of the hypophysis and pituitary tumors: From bench to operating theatre**

Di Ieva, A., Weckman, A., Di Michele, J., Rotondo, F., Grizzi, F., Kovacs, K. & Cusimano, M. D., Sep 2013, In : Microvascular Research. 89, p. 7-14 8 p.

**Cranial sutures: A multidisciplinary review**

Di Ieva, A., Bruner, E., Davidson, J., Pisano, P., Haider, T., Stone, S. S., Cusimano, M. D., Tschabitscher, M. & Grizzi, F., Jun 2013, In : Child's Nervous System. 29, 6, p. 893-905 13 p.

**Rethinking immunotherapy for brain cancers in the light of cancer complexity**

Grizzi, F. & Di Ieva, A., May 2013, In : The Indian journal of medical research. 137, 5, p. 871-873 3 p.

**Endoscopic far-lateral approach to the posterolateral craniovertebral junction: An anatomical study**

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**Practical guidelines for setting up an endoscopic/skull base cadaver laboratory**

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**Comment**

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**Three-dimensional susceptibility-weighted imaging at 7 T using fractal-based quantitative analysis to grade gliomas**

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**Canula-assisted endoscopy in bi-portal transphenoidal cranial base surgery: Technical note**

Cusimano, M. D., Di Ieva, A., Lee, J. & Anderson, J., 2013, In : Acta Neurochirurgica. 155, 5, p. 909-911 3 p.

**Ghrelin: A GH-releasing, appetite-regulating gastric hormone**

Di Michele, J., Rotondo, F., Kovacs, K., Di Ieva, A., Syro, L. V., Latta, E. & Cusimano, M. D., 2013, In : Advances in Neuroimmune Biology. 4, 2, p. 51-65 15 p.

**Endoscopic approaches to the trigeminal nerve and clinical consideration for trigeminal schwannomas: A cadaveric study**

Komatsu, F., Komatsu, M., Ieva, A. D. & Tschabitscher, M., Oct 2012, In : Journal of Neurosurgery. 117, 4, p. 690-696 7 p.

**Endoscopy and skull base**

Komatsu, F., Komatsu, M., Ieva, A. D. & Tschabitscher, M., Oct 2012, In : Journal of Neurosurgery. 117, 4, p. 689 1 p.

**Computerized occlusion rating: A superior predictor of aneurysm rebleeding for ruptured embolized aneurysms**

Sherif, C., Gruber, A., Schuster, E., Lahnsteiner, E., Gibson, D., Milavec, H., Feichter, B., Wiesender, M., Dorfer, C., Krawagna, M., Di Ieva, A., Bavinszki, G. & Knosp, E., Sep 2012, In : American Journal of Neuroradiology. 33, 8, p. 1481-1487 7 p.

**Fractal analysis of microvascular networks in malignant brain tumors**

Di Ieva, A., Sep 2012, In : Clinical Neuropathology. 31, 5, p. 342-351 10 p.

**Endoscopic telovelar approach to the fourth ventricle: Anatomic study**

Ieva, A. D., Komatsu, M., Komatsu, F. & Tschabitscher, M., Jul 2012, In : Neurosurgical Review. 35, 3, p. 341-348 8 p.

**Strong 5-aminolevulinic acid-induced fluorescence is a novel intraoperative marker for representative tissue samples in stereotactic brain tumor biopsies**

Widhalm, G., Minchev, G., Woehrer, A., Preusser, M., Kiesel, B., Furtner, J., Mert, A., Ieva, A. D., Tomanek, B., Prayer, D., Marosi, C., Hainfellner, J. A., Knosp, E. & Wolfsberger, S., Jul 2012, In : Neurosurgical Review. 35, 3, p. 381-391 11 p.

**Fractal analysis of the susceptibility weighted imaging patterns in malignant brain tumors during antiangiogenic treatment: Technical report on four cases serially imaged by 7 T magnetic resonance during a period of four weeks**

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**A management algorithm for cerebrospinal fluid leak associated with anterior skull base fractures: Detailed clinical and radiological follow-up**

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### **Fractal dimension as a quantifier of the microvasculature of normal and adenomatous pituitary tissue**

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### **De novo formation of the ventriculus terminalis? A brief report of a special case**

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### **The neuroanatomical plates of Guido da Vigevano**

Di Ieva, A., Tschabitscher, M., Prada, F., Gaetani, P., Aimar, E., Pisano, P., Levi, D., Nicassio, N., Serra, S., Tancioni, F., Arosio, M. & Rodriguez y Baena, R., 2007, In : *Neurosurgical Focus*. 23, 1, p. 1-4 4 p., E15.

### **Oligodendroglial gliomatosis cerebri: Case report**

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### **Cancer initiation and progression: An unsimplifiable complexity**

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### **Spinal decompression and vertebroplasty in Paget's disease of the spine**

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### **Sperm protein 17 is expressed in human nervous system tumours**

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### **Functional disability after instrumented stabilization in lumbar degenerative spondylolisthesis: A follow-up study**

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### **Calvarial metastases as clinical presentation of renal cell carcinoma: Report of two cases and review of the literature**

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### **Intradural spinal metastasis of renal clear cell carcinoma causing cauda equina syndrome**

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### **Arnold's neuralgia caused by solitary fibrous tumor: Case report**

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### **Meningeal melanocytoma of the temporal lobe. An uncommon tumor in an unusual location: Case report**

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## **Prizes**

### **Aesculap EANS (European Association of Neurosurgical Societies) Laboratory Research Prize**

Antonio Di Ieva (Recipient), 9 Oct 2011

### **Award 2011 Editor's Choice Section, Brain Anatomy & Physiology: "Best Paper of the year".**

Antonio Di Ieva (Recipient), 26 Jun 2011

### **"Beniamino Guidetti" European Prize from the Italian Society of Neurosurgery (SINch)**

Antonio Di Ieva (Recipient), 26 Sep 2014

**First Prize for research in neuroscience from the Italian Society of Neurosurgery (SINch)**

Antonio Di Ieva (Recipient), 27 Oct 2010

**First Prize for scientific research, International Association of Lions Club**

Antonio Di Ieva (Recipient), 25 May 2005

**John Mitchell Crouch Fellowship**

Antonio Di Ieva (Recipient), 8 Aug 2018

## Awards

## Projects

**NHMRC - PG: Advanced computational fluid dynamic (CFD) technology to predict cerebrovascular aneurysm haemorrhage**

Sen, I., Morgan, M., Mao, Y., Di Ieva, A., Javadzadegan, A., Yang, Q. & Zhu, F.

1/01/19 → 31/12/23

**CEPET: Centre for Elite Performance Expertise and Training (CEPET) - MQRC 2019**

Thompson, B., Wiggins, M., Crane, M., Curby, K., Downey, G., Griffin, B., Kallen, R., Pearlman, K., Reichle, E., Rich, A., Richardson, M., Sutton, J., Taylor, M., Auton, J., Baird, A., Bicknell, K., Carrigan, A., Di Ieva, A., Garrido, W., Kangas, M., Olsen, K., Williams, M. & Yu, L.

1/01/19 → 31/12/21

**Computational Neurosurgery Lab**

Di Ieva, A.

1/01/19 → ...

**Computational Neurosurgery Lab**

Di Ieva, A.

1/01/19 → 31/12/20

**The Brain Donut**

Di Ieva, A.

1/12/17 → 31/12/18

**Visual search dynamics and image complexity in radiology**

Nalepka, P., Carrigan, A. & Di Ieva, A.

8/06/19 → 21/12/19