



Gagea Adrian, Cs I, Prof.univ.dr.ing.

Director al Centrului de Cercetari Interdisciplinare al ANEFS, Bucuresti,
Director al Consiliului Universitar pentru Cercetare Stiintifica in Cultura Fizica si Sport,
Profesor de Biomecanica, titular la Catedra de Discipline Medicale, Facultatea Kinetoterapie,
ANEFS,

Domenii de competenta si rezultate semnificative

- Cercetare interdisciplinara in domeniul educatiei fizice si sportului:
 - reactivitatea biologica la efortul fizic,
 - electrofiziologie,
 - metode si logistica de cercetare,
 - modelare si simulare computerizata.
- Biomecanica analitica:
 - analiza computerizata a miscarilor,
 - patternurile relationale ale calitatilor motrice.
- Managementul granturilor de cercetare:
 - colective pluri si interdisciplinare.

Lucrari stiintifice publicate sau comunicate

- Peste 100 de lucrari stiintifice publicate sau comunicate, dintre care mentionam :

Gagea, A., Science of Sport, JUCO Review, Colorado, November 2002, USA

Gagea, A., How will advanced science influence sport performance, FISU Magazine, August 2002, Brussels, Belgium

Gagea, A., A. Partheniu , A practical method of estimating the mobility of the cerebral excitation and inhibition in man. Coautor, Revista Roum. de Sciences Sociales, nr.22, 1978, Bucuresti

Gagea, A. Secousse musculaire quasi liminaire chez l'homme, Kinanthropologie 3/3 1971, pp.179-192, Belgique

Gagea, A., Expressions mathematique de la neurodynamique par rapport à la reaction motrice digitale en reponse aux stimuli visuels et auditifs codifies, Kinanthropologie, 3/2 1971, pp.71-82, Belgique

Gagea, A. The relationship between maximal muscular power and neuroexcitability in sportsmen, Rev. Medicine du Sud-Est, Tome XV, nr. 8, 704-710, 1979, France

- Congresul II European de Medicina Sportiva, Bucuresti, septembrie 1969, *Le modele logico-matematic de la secousse musculaire quasi liminaire chez l'homme*,
- Congresul Olimpic, august 1972, Munchen, Germania, *Neurodynamic aspects of brain activity in terms of some precision variable in target-shooting*, coautor,
- Congresul Olimpic, august 1976, Montreal, Canada, *A Complex and Practical method of studying the transitory alternation in the reactivity of physical effort*, coautor,
- Congresul Olimpic, septembrie 1980, Moscova-Tbilisi, Rusia, *Redundance of The Electro-Dermal Reflex*,
- Congresul Olimpic, august 1992, Barcelona-Malaga, Spania, *A Logical-Mathematical Pattern of the Effort-Recovery Cycle in man*,
- Cogresul de Stiinta Sportului, februarie 2001, *Applied Biamechanics*, Rasht, Iran,
- International Seminar Melbourne's Monash University, February 2002, *A logico-mathematical*

- pattern of the exogenic agressed steam cell*, Monash Institute of Reproduction and Development, Australia,
- International Seminar Melbourne's Monash University, March 2002, *Theoretical approach of Sport Science*, Australia,
 - International Seminar Melbourne's Monash University, March 2002, *Extrasensory communication channels in man*, Australia,
 - Scientific Forum of CESU, September 2002, *Advanced science and doping*, Cape Town, , South Africa,
 - Worldwide Forum of Rectors, November 2002, *Advanced Science and Athletic Performance*, Manzanilla, Mexico
 - International Society of Biomechanics XIX Congress, 2003, *Biomechanics Poses Laws*, , Dunedin, New Zealand
 - International Society of Biomechanics XIX Congress, 2003, *Phases Theory of Muscular Effort in Biomechanical Movement*, Dunedin, New Zealand
 - Worldwide Forum of Rectors, Mai 2004, *Advanced Science and Top Sport*, Madrid, Spania
 - World University President Summit, August 2006, *The Application of Advanced Science in High Performance Sport*, Keynote speaker, Bangkok, Thailanda.

Recenzii internationale:

- Journal Articles. Andrasik, Frank, Attanasio, Virginia. Biofeedback in pediatrics: Current Status and appraisal. URL: [www. flash net/~neuro/refer.htm](http://www.flash.net/~neuro/refer.htm)
- EEG Biofeedback References: 1971 – Present. Journal Articles, Book Chapters, and Dissertations URL: [members. aol. com/eegspectrm/html/refs.htm](http://members.aol.com/eegspectrm/html/refs.htm)
- Biomechanics and Physique, Editet by J.G. Williams and Sperryn, Edward Arnould Publishers Ltd.,1976 URL: www.psu.edu/crsweb/lifesci/medhome.htm,
- Adrian Gagea, Partheniu Alexandre, Expressions Mathematiques de la Neurodinamique Cerebrale par Rapport de la Reaction Motrice Visuel, Siemens Infonet, ID 71- Index 00240738 KFNTI: 2775

Carti publicate

1. BIOMECHANICS AND PHYSIQUE, in: SPORT MEDICINE, Second Edition, Edited by J.G. Williams and P.N.Sperryn, Edward Arnould Publishers Ltd., 1976, London, pp 107 – 191, coautor, 15 %, Isbn – 07131- 4275-8,
2. MUSCULAR POWER AND NEUROMUSCULAR EXCITABILITY IN SPORTSMEN, (Doctoris Thesis), Ed. AWF, 1978, Warszawa, p 123, Awf – 772-146-6,
3. BIOMECHANICA IN SPORT, in: MEDICINA SPORTIVA APLICATA, sub redactia prof.dr. I. Dragan, Ed. Editis, 1994, Bucuresti, pp 355 – 372, 4.5 %, Isbn 973-41-0321-0
4. INFORMATICA SI STATISTICA, Curs Master, Ed. ANEFS, 1996, Bucuresti, p 120, cd.18-1996,
5. METODOLOGIA CERCETARII STIINTIFICE IN EDUCATIE FIZICA SI SPORT, Ed. Fundatiei Romania de Maine, Bucuresti 1999, p 384, Isbn 973- 582-246-6
6. STATISTICA COMPUTERIZATA, Ed. Ecologica, 2000, p 273, Isbn 973-8061-27-x,
7. CERCETARI INTERDISCIPLINARE DIN DOMENIUL SPORTULUI, Ed. Destin, Deva, 2002, p 282, Isbn 973-
8. BIOMECHANICA TEORETICA, Ed. Scrisul Gorjean, Tg. Jiu, 2002, p 183, Isbn 973-85522-5-7,
9. RECOMANDARI PRIVIND REDACTAREA SI SUSTINEREA LUCRARILOR DE LICENTA, Ed. fundatiei Romania de Maine, Bucuresti, 2003, p 54, Isbn 973- 582-701-8.
10. CERCETARI INTERDISCIPLINARE IN EDUCATIE FIZICA SI SPORT, Ed. MIRA, Bucuresti, 2006, 200, Isbn 978-973-745-009-8
11. BIOMECHANICA TEORETICA, Ed. ANEFS, Bucuresti 2006, , p 167, cd. 44-2006
12. CERCETARI INTERDISCIPLINARE IN SPORTUL DE PERFORMANTA, Ed. MIRA, Bucuresti, 2007, p 245, Isbn 978-973-745-045-6
13. CERCETARI INTERDISCIPLINARE IN SPORTUL DE PERFORMANTA, Ed.

MINISTERUL INTERNELOR SI REFORMEI ADMINISTRATIVE, ISBN 978-973-745-6, Bucuresti, 2007

14. . CERCETARI INTERDISCIPLINARE IN SPORTUL DE PERFORMANTA, Ed.

MINISTERUL INTERNELOR SI REFORMEI ADMINISTRATIVE, ISBN 978-973-745, Bucuresti, 2008

15. ANALYTICAL BIOMECHANICS, Ed. Char. Dounias &Co, ISBN 978-960-9300546-4, Greece, 2008

16. GHID PENTRU INTOCMIREA UNUI PLAN DE CERCETARE DOCTORAL Si SUGESTII PENTRU REDACTAREA UNEI TEZE DE DOCTORAT, Ed. Univ. « Aurel Vlaicu », ISBN 978-973-752-212-2, Arad, 2008

Brevete de inventii si inovatii

113. Aparat de inregistrare a curbelor intensitate-durata pentru studiul excitabilitatii neuromusculare. (Current - Duration Curves Recorder Device for the Neuromuscular Excitability Study). Coautor, ***Inventie*** OSIM nr.50073/1968, 33 %

113. bis. Registrierungszgerat der Intensitat-Dauer-Kurven zum Studium der Neuromuskularen Raizbarkeit. Deutsches Patentamt P 2162012.2.35, R.F.G., 33%

113. tris. Registrierungszgerat der Intensitat-Dauer-Kurven zum Studium der Neuromuskularen Raizbarkeit.. Patentanwaltsburo Berlin, R.D.G., 1972. 33 %

114. Metoda si aparat pentru explorarea corelativa si multilateral a functiei nervoase. (Method and Device for the Corelative and Integrative Exploration of the Nervous Function). Coautor, ***Inventie*** OSIM nr.61358/1969. 33 %

115. Aparat pentru evidentierea sonora a ritmului alfa din activitatea electrica cerebrala. (Device for the Sound Convection of the Alpha Rithm of the Electric Brain Activity). ***Inventie*** OSIM nr.005543/1973. 50 %

116. Instalatie electronica pentru aprecierea calitatii procesului de elaborare a focului in tirul de performanta. (Electronic Installation for Estimation of the Target-Shooting Process). ***Inventie*** OSIM nr.0081890/1980. 100 %

117. Montaj perfectionat de EKG pentru inscriere cu hirtie obisnuita. inovatie omologata, Coautor. Nr.12768/1967, I.E.F.S., Bucuresti. 33 %

118. Metoda si aparat electronic pentru studiul contractiilor izometrice la mina si picior cu posibilitati de inregistrare EEG. inovatie omologata, Coautor. Nr.12769/1967, I.E.F.S., Bucuresti. 33 %

119. Metoda si aparat pentru studiul reflexelor miotatice la om. inovatie omologata, Coautor. Nr.12770/1967, I.E.F.S., Bucuresti. 33 %

Produse si concepte cu caracter de proprietate intelectuala

- Simularea cu un model logico-matematic original a comportamentului retelelor paucineuronale implicate in reactia motrica, la om (13),
- Identificarea cantitatii minimale de electricitate care determina secusa musculara la om si denumirea acesteia quebase (14),
- Descoperirea fenomenului de compensatie fazico-tonica in excitabilitatea neuromusculara prin cresterea puterii musculare (45),
- Identificarea teoretica si experimental a unitatii fenomenelor Tarchanoff, Veragouth, Féré, Galvanic skin reflex din cadrul reflexelor electrodermale la om (61),
- Elaborarea unor functii de conversie cantitate - calitate, denumite functii alpha -gamma (Generalizarea seturilor Fuzzy) (67),
- Elaborarea indicatorului de putere maxima anaeroba instantanee (78),
- Simularea supracompensatiei in iteratia efort-refacere printr-o relatie de histeresis a dificultatii de efort-capacitate de efort (75),
- Elaborarea legilor proprii ale biomecanicii (114).

Membru in colective de redactie sau editoriale

- International Journal of Sport Traumatology, Torino, Italy, 1978-1988
- Revista Educatie Fizica si Sport, Bucuresti, 1972-1991

Premii si distinctii

- Maestru al Sportului, CNEFS, 1972
- *Certificate*, International Olympic Committee, 1993
- *Human Science Award*, American Biographical Institute, 1998

Alte activitati profesionale sau conexe domeniului EFS

- Conducator de doctorate: 70,
- Visiting professor:
 - Pennsylvania State University, USA, 1991,
 - Institutul de Medicina Sportiva, Nicosia, Cipru, 1996,
 - Monash University, Melbourne, Australia, 2002,
 - CSIRO, Sydney, Technicon, Cape Town, Manzanilla, Mexic, Syracuse, USA (guest scholar),
- Membru CE al Federatiei Internationale a Sportului Universitar (Sheffield-Anglia, 1991-1995, Fukuoka - Japonia, 1995-1999, Palma de Majorca - Spania, 1999 - 2003, Daegu - Coreea, 2003-2007, Bangkok, Thailanda, 2007-2011),
- Membru fondator al *International Society of Biomechanics* (Pennstate Univ., U.S.A.), 1973,
- Sport de performanta: *World Top Ten*, 1971 (track and field, indoor shot-put), 18 ori campion al României,
- Reprezentant al *Fundatia Cousteau* in Romania pentru *Petitia drepturilor generatiilor viitoare*,
- *Chairman* la: Campionatele Mondiale Universitare de Caiac-Kanoe (Praga, 1995), CMU de Handbal feminin (Bulgaria, 1996), CMU de Triatlon (Liberec, Cehia 1996), CMU de Badminton (Strasbourg, Franta 1996), CMU Universitare de Handbal feminin (Polonia, 1998), CMU de Handbal masculin (Jugoslavia, 1999), CMU de Badminton (Sofia, 2000), CMU de Taekwondo (Kaoshiung, Taiwan, 2000), CMU de Sah (Varna, Bulgaria, 2000), CMU de Seiling (Queberon, Franta, 2002), CMU de Canoeing (Bari, Italia, 2002), CMU Sah (Novokuznetsk, Russia, 2008).