

CV – Géza Meszéna

Degrees, positions, publications

Education and degrees

Secondary school: Berzsenyi Dániel Gimnázium (Budapest), special mathematics class, 1970-74

International Physics Olympiad: 1974, Warsaw, 1st prize

Master: Eötvös University, Budapest, Physics-Biophysics, 1980

Doctor of University: Eötvös University, Biology-Biophysics, 1986

Candidate (PhD): Academy of Sciences, Physics, 1994

Habilitation: Eötvös University, Physics, 2006

Doctor of Academy: Academy of Sciences, Biology-Ecology, 2007

Positions

Atomic Energy Research Institute, doctoral fellowship, 1980

Eötvös University, Department of Atomic Physics, doctoral fellowship, 1980-1984

demonstrator, 1984-87

assistant professor, 1987-98

Eötvös University, Department of Biological Physics, associated professor 1998-2016

Collegium Budapest, associate fellow, 2000-2001

Széchenyi Professor, 1999-2002

Széchenyi Professor, 2003-2006

Eötvös University, Department of Biological Physics, full professor 2016-

MTA-ELTE Theoretical Biology and Evolutionary Ecology Research Group, group leader 2017-2022

Publication statistics

- Book in English: 1
- Refereed papers in English: 49
- Refereed book chapters in English: 7
- Independent citations (MTMT): 2353
- Google Scholar citations: 4057
- Hirsch index (Google Scholar) 24

MTMT listing of publications:

https://vm.mtmt.hu/search/slist.php?nwi=1&inited=1&ty_on=1&url_on=1&cite_type=2&orderby=3D1a&locati on=mtmt&stn=1&AuthorID=10000084&Scientific=1

Scientific cooperation, grants, conferences

Longer stays abroad

- 1982: Biophysics School, International Centre for Theoretical Physics, Trieste, Italy, 1 month
1987: Univ. of Illinois at Urbana/Champaign, USA, photosynthesis, 5 months, Soros scholarship
1992: Univ. of Amsterdam, the Netherlands, bioenergetics, 3 months, Peregrinatio II. Foundation
1994: University of Leiden, the Netherlands, evolutionary biology, 3 months, European Union
1995: University of Leiden, the Netherlands, 2 months, NWO
1997: University of Utrecht, the Netherlands, 2 months, NWO
1998: University of Aarhus, Denmark, 2 months, ESF
1999: Ecole Normale Supérieure, France, 2 months, ESF

Grants

PI in Hungarian grants:

- Ecological foundations of adaptive dynamics, FKFP, 1999-2000, 1,700 kFt
Population genetics of adaptive speciation, OTKA, 1999-2001, 1,900 kFt
Adaptive ecology in varying environment, OTKA, 2005-2008, 7,997 kFt
Mechanism generating and maintaining biological diversity, OTKA, 2010-2015, 12,000 kFt
Mathematical theory of biological diversity, NKFI K_17, 2017-2021, 17,808 kFt

Hungarian coordinator: Dutch-Hungarian (NWO & OTKA) grant, Adaptive dynamics:

- 1994-1996: 107 kNfl
1997-1999: 50 kNfl
2001-2003: 70 kNfl

Dutch coordinators: Prof. dr. Odo Diekmann, University of Utrecht & Prof. dr. Hans Metz, University of Leiden.

Steering Committee member: European Research Networking Programme of the European Science Foundation „Frontiers of Speciation Research (FroSpects)”, 2008-2012, 500 k Euro. Organisers: Åke Bränström, Ulf Dieckmann és Jacques van Alphen. Home page: <http://www.iiasa.ac.at/Research/EEP/FroSpects>

Conferences organised

I organised 8 international conferences in the frameworks of the 2 international collaborations above. See my home page for further information.

Dutch-Hungarian cooperation:

- Adaptive Dynamics Workshop, Veszprém, 1995 (project opening)
- Adaptive Dynamics: beyond ESS, Budapest & Mátraháza, 1996
- Adaptive Dynamics Workshop, Budapest-Csillebérc, 1998
- Adaptive Dynamics Workshop, Budapest-Csillebérc, 2000
- Adaptive Dynamics Workshop, Veszprém, 2002
- Adaptive Dynamics Workshop, Collegium Budapest, Budapest, 2004 (project closing)

FroSpects:

- Speciation Symposium, Debrecen, 2009
Regional symposium with researchers from Poland and Czech Republic.
- Niche theory and speciation, Keszthely (Lake Balaton), 2011
Workshop with 50 attendants from Europe and North America. Home page:
<http://nichews.elte.hu>
Evolutionary Ecology Research published a special issue after the workshop, edited by Géza Meszéna & Andrew Hendry.

Committees and refereeing

Steering Committee: ESF Research Networking Programme „Frontiers of Speciation Research” (closed)

OTKA grant committee: Bioinformatics-Biophysics (closed)

ELTE PhD committees: regular

Program Committee: ELTE Biology PhD School, Theoretical and Evolutionary Biology program

Grant application refereeing: European Research Council (closed), OTKA (regular)

Journal refereeing: Physical Review Letters, Physical Review, Proceedings of the Royal Society B, Ecology Letters, American Naturalist, Evolution, Journal of Evolutionary Biology, Evolutionary Ecology, Evolutionary Ecology Research, Journal of Mathematical Biology, Journal of Theoretical Biology, Theoretical Population Biology, Journal of Biological Dynamics, Theoretical Ecology, PLoS One

Teaching

Organisation of teaching

With Imre Derényi we developed the Biophysics speciality of the Physics course both at BSc and MSc levels. A Biophysics master course was initiated also.

Courses

- Biological Physics, credit: 4, Biology BSc, 60-120 students
- Physics, credit: 4, Biology BSc, 300 students (with Imre Derényi)
- Theoretical Evolutionary Biology, credit: 3, Physics BSc Biophysics speciality, cc. 10 students
- Theoretical ecology, 3-5 students
- Biophysics seminar (alternating with Gábor Horváth): physics students, cc. 10 students
- Biophysics course seminar (with Imre Derényi): 5-10 students
- Seminar on Theoretical Evolutionary Biology and Ecology, research seminar, also for PhD students

Supervising

Student projects

- Krisztián Mágori. 2nd prize at ELTE Biology TDK, 1998/9
- Zoltán Zimborás: 3rd prize ELTE Physics TDK, 1998/9
- János Asbóth & András Vukics: 2nd prize, ELTE Physics TDK, National: honorary mention, 1999/2000
- Diána Lantos: ELTE Biology TDK, 2000
- Benjámín Márkus: shared 1st prize ELTE Biology TDK, 2015

BSc

- Dávid Hummel (2009)
- László Ruff (2013)
- Márk Stromp (2014)
- Domícián Kovács (2015)
- Alekszej Romanenko (2015)
- Dániel Nagy (2016)
- Bianka Kovács (2017)

MSc

- István Czibula (1997)
- Krisztián Mágori (1999)
- Diána Lantos (2001)
- Csaba Tóth (2004)
- György Barabás (2008)
- Dávid Völgyes (2008)
- Richard Erdélyi (2013)
- Kristóf Törkenczy (2014)
- Benjámín Márkus (2016)

PhD

- Krisztián Mágori, 1999-2002, PhD 2004
- Ferenc Mizera, 1999-2002.
- Péter Szabó, 2001-2004; PhD in 2006
- Jeromos Vukov, 2004-2007; PhD in 2008
- András Szilágyi, 2004-2007; PhD in 2010