

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, 1999-2006

Eötvös University, Department of Biological Physics, full professor 2016-2023, retired from 2023

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

HUN-REN Centre for Ecological Research, Institute of Evolution, research professor 2023-

Book

Theory-based Ecology: A Darwinian approach by Liz Pásztor, Zoltán Botta-Dukát, Gabriella Magyar, Tamás Czárán, & Géza Meszéna. Oxford University Press, 2016

Other publications

- | | |
|---------------------------------|-------|
| • Refereed papers in English: | 48 |
| • Book chapters in English: | 7 |
| • Book chapters in Hungarian: | 3 |
| • Independent citations (MTMT): | 2994 |
| • Google Scholar citations: | 5280 |
| • Hirsch index (MTMT/Google) | 22/29 |

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&location=mtmt&stn=1&AuthorID=10000084&Scientific=1

Google Scholar: <https://scholar.google.com/citations?user=EcZFEcAAAAAJ&hl=hu&oi=ao>

Scientific cooperation, grants, conferences

Longer stays abroad

1982: Biophysics School, International Centre for Theoretical Physics, Triest, 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

International grants

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 (FroSpecs)”, 2008-2012, 500 k Euro. Organisers: Åke Bränström, Ulf Dieckmann és Jacques van Alphen. Home page: <http://www.iiasa.ac.at/Research/EEP/FroSpecs>

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, 2017-2023, 17 808 kFt

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-Csillebér, 1998
- Adaptive Dynamics Workshop, Budapest-Csillebér, 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.

International Initiative for Theoretical Ecology

Incorporated in England & Welsh, as charity. I am a Trustee and organizer of an international webinar series on Theoretical Ecology.

Committees and refereeing

Council of Professors of Institute of Physics: president, 2019-23

Exam committee for Physics BSc final exam: president

OTDK jury: president

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)

Steering Committee: ESF Research Networking Programme „Frontiers of Speciation Research” (2008-13)

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

Courses

- Physics, credit: 4, Biology BSc, ~300 students (with Imre Derényi)
- Biophysics, credit: 4, Biology BSc, ~100 students (with Imre Derényi)
- Theoretical Evolutionary Biology, credit: 3, Physics BSc Biophysics speciality, cc. 10 students
- Theory Based Ecology, credit: 6, Biology MSc ~10 students
- Biophysics seminar (alternating with Gábor Horváth): physics students, cc. 10 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
- Benjámin 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)
- Bálint Futó (2017)
- Miklós Gula (2019)

MSc

- István Czibula (1997)
- Krisztián Mágori (1999)
- Diána Lantos (2001)
- Csaba Tóth (2001)
- György Barabás (2008)
- Dávid Völgyes (2008)
- Richard Erdélyi (2013)
- Kristóf Törkenczy (2014)
- Benjámin Márkus (2016)
- Anna Redl (2021)

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

Teaching organisation

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.