Tomás Revilla

Curriculum Vitae

Biology Centre ASCR
Branišovská 1160/31
České Budějovice 370 05
Czech Republic
☎ *+420 38 777 5233*
✉ *tomrevilla@gmail.com*
tomrevilla.sdf.org

Personal information

Full Name **Tomás Augusto Revilla Rimbach**

Place and date of birth **September 16, 1973, Essen, Germany**

Citizenship **Venezuelan**

Education

1997 **Licenciate in Biology**, *Central University of Venezuela*, Caracas, Venezuela.

2000 **M.S. in Ecology**, *Central University of Venezuela*, Caracas, Venezuela.

2010 **Ph.D. in Mathematics and Natural Sciences**, *University of Groningen*, Groningen, The Netherlands.

Awards

2004 Doctoral grant from the European Union Programme of High Level Scholarships for Latin America (AlBan). Doctoral Programme. Declined

2004 Doctoral tuition sponsored by the Computational Life Siences Programme of the Netherlands Organization for Scientific Research (NWO)

Work experience

1993–1999 **Teaching Assistant in Chemical Physics, Biostatistics, Evolution, and Population Ecology**, *School of Biology, Faculty of Science, Universidad Central de Venezuela*, Caracas, Venezuela.

1998–1999 **Lecturer in Biostatistics, and Chemical Physics. School of Biology**, *Faculty of Science, Universidad Central de Venezuela*, Caracas, Venezuela.

2000–2001 **Research Assistant in the Project *Dynamics of Infectious Diseases in Heterogeneous Environments*, directed by Dr. Diego Rodríguez**, *Institute of Tropical Zoology, Faculty of Science, Universidad Central de Venezuela*, Caracas, Venezuela.

2001 **Statistical Consultant**, *Organon Venezolana S.A (AKZO-NOBEL)*, Caracas, Venezuela.

2005–2009 **Research Assistant in the Project *The emergence of biocomplexity: a steady state between physical and biotic evolution?*, directed by Dr. Franz J. Weissing**, *Theoretical Biology Group, Faculty of Mathematics and Natural Sciences, University of Groningen*, Groningen, The Netherlands.

2009–2010 **Research Assistant in the Project *Testing the metabolic theory of ecology with the help of temperature controlled phytoplankton experiments*, directed by Dr. Franz J. Weissing**, *Theoretical Biology Group, Faculty of Mathematics and Natural Sciences, University of Groningen*, Groningen, The Netherlands.

2010–2011 **Researcher and Lecturer**, *Instituto de Zoología y Ecología Tropical (IZET), Faculty of Science, Universidad Central de Venezuela*, Caracas, Venezuela.

2011–2015 **Post-doctoral fellow**, *Station D'Ecologie Experimentale du CNRS à Moulis*, Moulis, France.

2015–present **Post-doctoral fellow**, *Laboratory of Theoretical Ecology, Institute of Entomology, Academy of Sciences of the Czech Republic*, České Budějovice, Czech Republic.

Publications in peer reviewed journals

T. A. Revilla. Resource Competition in Stage-structured Populations. *Journal of Theoretical Biology*, 204(2):289–298, 2000. IF: 2.113.

T. A. Revilla. Effects of Intraguild Predation on Resource Competition. *Journal of Theoretical Biology*, 214(1):49–62, 2002. IF: 2.113.

T. A. Revilla and G. Garcia-Ramos. Fighting a virus with a virus: a dynamic model for HIV-1 therapy. *Mathematical Biosciences*, 185(2):191–203, 2003. IF: 1.246.

L. F. Chaves, M. J. Hernandez, T. A. Revilla, D. J. Rodriguez, and J. E. Rabinovich. Mortality profiles of *Rhodnius prolixus* (Heteroptera: Reduviidae), vector of Chagas disease. *Acta Tropica*, 92(2):119–125, 2004. IF: 2.218.

T. A. Revilla and F. J. Weissing. Nonequilibrium coexistence in a competition model with nutrient storage. *Ecology*, 89(3):865–877, 2008. IF: 4.809.

F. Encinas-Viso, T. A. Revilla, and R. S. Etienne. Phenology drives mutualistic network structure and diversity. *Ecology Letters*, 15(3):198–208, 2012. IF: 9.449.

T. A. Revilla, G. F. Veen, M. B. M. B. Eppinga, and F. J. Weissing. Plant-soil feedbacks and the coexistence of competing plants. *Theoretical Ecology*, 6(2):99–113, 2012. IF: 1.221.

F. Encinas-Viso, T. A. Revilla, and R. S. Etienne. Shifts in pollinator population structure may jeopardize pollination service. *Journal of Theoretical Biology*, 352:24–30, 2014. IF: 2.113.

F. Encinas-Viso, T. A. Revilla, E. van Velzen, and R. S. Etienne. Frugivores and cheap fruits make fruiting fruitful. *Journal of Evolutionary Biology*, 27(2):313–324, 2014. IF: 2.747.

T. A. Revilla, F. Encinas-Viso, and M. Loreau. (A bit) Earlier or later is always better: Phenological shifts in consumer-resource interactions. *Theoretical Ecology*, 7(2):149–162, 2014. IF: 1.221.

T. A. Revilla. Numerical responses in resource-based mutualisms: a time scale approach. *Journal of Theoretical Biology*, 378:39–46, 2015. IF: 2.113.

T. A. Revilla and F. Encinas-Viso. Dynamical transitions in a pollination–herbivory interaction: a conflict between mutualism and antagonism. *PLoS ONE*, 10(2):e0117964, 2015. IF: 2.806.

T. A. Revilla, F. Encinas-Viso, and M. Loreau. Robustness of mutualistic networks under phenological change and habitat destruction. *Oikos*, 124(1):22–32, 2015. IF: 4.03.

T. A. Revilla and F. Encinas-Viso. Ecología y Evolución de la Endozoocoria. *Acta Biologica Venezuelica*, 35(2):187–215, 2016.

T. A. Revilla and V. Křivan. Pollinator foraging adaptation and the coexistence of competing plants. *PLoS ONE*, 11(8):e0160076, 2016. IF: 2.806.

T. A. Revilla and V. Křivan. Competition, trait-mediated facilitation, and the structure of plant-pollinator communities. *Journal of Theoretical Biology*, 440:42–57, 2018. IF: 2.113.

Other publications

- ✍ T.A. Revilla. "Multispecies Resource Competition", *PhD Thesis*, University of Groningen. 2010.
- ✍ T.A. Revilla. "Changement climatique: synchronisation des espèces et modélisation", In *Ariège, terre de science, Collection Petit Illustré.* (19), pp. 16. La Dépêche du Midi / CNRS, 2013.
- ✍ T.A. Revilla and Encinas-Viso, F. "Ecología y Evolución de la Endozoocoria", In *Modelos y Simulaciones Biológicas: Ecología y Evolución*. Cipriani, R. & de Vladar, H. (ed.). Amazon Createspace. 2015.
- ✍ Arnoldi J.-F., Haegeman B., Revilla T. y Loreau M. "Particularity of 'Universal resilience patterns in complex networks'". bioRxiv, 2016

Talks and Posters

1999 **Talk:** ***Competition for resources in stage-structured populations***, III Venezuelan Congress of Ecology, Puerto Ordaz, Venezuela.

2000 **Talk:** ***Conditions for coexistence in food webs with omnivory: a three species model***, *L Annual Convention of the Venezuelan Association for the Advancement of Science*, Caracas, Venezuela.

2001 **Talk:** ***Fighting virus with virus: a dynamical model***, *V Venezuelan Congress of Ecology*, Merida, Venezuela.

2006 **Talk:** ***Multispecies resource competition: The variable storage model***, *Annual meeting of the Dutch Society of Theoretical Ecology*, Schorl, The Netherlands.

2006 **Poster:** ***Integrating Resource and Metabolism Based Approaches to Ecology: A Simple Food Chain Model***, *Gordon Research Conference on "The metabolic basis of ecology"*, Lewiston ME, United States of America.

2006 **Talk:** ***Multispecies competition models with resource storage***, *CEES Symposium on "Experimental and Theoretical Approaches to Biodiversity"*, Groningen, The Netherlands.

2007 **Talk:** ***Stability properties of competition models: a comparison***, *Annual Verweij Meeting*, Lunteren, The Netherlands.

2007 **Poster:** ***Non-equilibrium dynamics of a resource competition model with nutrient storage***, *EPSRC/BICS Workshop "Mathematical Models and Experimental Microbial Systems: Tools for Studying Evolution"*, Bath, United Kingdom.

2007 **Talk**, *CEES Symposium on "Integrative Ecology at Different Organization Levels"*, Groningen, The Netherlands.

2008 **Poster:** ***Non-equilibrium dynamics of a resource competition model with nutrient storage***, *NERN Annual Meeting 2008*, Lunteren, The Netherlands.

2009 **Talk:** ***Integrating metabolic and resource competition theories: simple modelling approaches***, *Mathematical Models in Ecology and Evolution 2009, University of Bristol*, Bristol, United Kingdom.

2009 **Poster:** ***Plant-soil feedbacks and competition dynamics***, *94th Annual Meeting of the Ecological Society of America*, Albuquerque NM, United States of America.

2011 **Talk:** ***Evolutionary ecology of seed dispersal by frugivores: From exploitation to mutualism***, *96th Annual Meeting of the Ecological Society of America*, Austin TX, United States of America.

2014 **Talk:** ***Robustness of mutualistic networks under phenological change and habitat destruction***, *99th Annual Meeting of the Ecological Society of America*, Sacramento CA, United States of America.

2014 **Talk:** ***Dynamical transitions in a pollination-herbivory interaction: a conflict between mutualism and antagonism***, *Joint Annual Meeting Société Française d'Écologie and British Ecological Society*, Lille, France.

2015 **Talk:** ***The Evolutionary Ecology of Endozoochory***, *BIOMATH 2015: International Conference on Mathematical Methods and Models in Biosciences*, Blagoevgrad, Bulgaria.

2015 **Poster:** ***Pollinator forraging flexibility and the coexistence of competing plants***, *Mathematical Models in Ecology and Evolution 2015*, Paris, France.

2015 **Talk:** ***Pollinator forraging flexibility and the coexistence of competing plants***, *5th conference of the Czech Society for Ecology*, České Budějovice, Czech Republic.

2016 **Charla:** ***Pollinator forraging flexibility and the coexistence of competing plants***, *Conflict, Competition, Cooperation & Complexity: Using Evolutionary Game Theory to model realistic populations*, Plön, Germany.

Other activities

1999	Member of the Local Committee for the Iberoamerican School of Astrobiology (IASA), Instituto de Estudios Avanzados (IDEA), Caracas Venezuela. Organized by The Abdus Salam International Centre for Theoretical Physics, (Trieste - Italy).
2000	Coordinator of the Theoretical Biology Seminar Session, L Annual Convention of the Venezuelan Association for the Advancement of Science (AsoVAC), Universidad Simón Bolívar, Caracas.
Academic Visitor	Theoretical Biology Laboratory of the Tropical Zoology Institute, Universidad Central de Venezuela.
Peer reviewer	*The American Naturalist*, *Journal of Theoretical Biology, Theoretical Ecology, Theoretical Population Biology, Oikos, Journal of Biological Dynamics*, *Marine Ecology Progress Series, Journal of Mathematical Biology, Ecological Modelling, Applied Mathematical Modelling, New Phytologist* and *Axios Review*.

Skills

Languages	Spanish (native), English (advanced), French and German (basic)
Computing	GNU/Linux, Unix. Programming in C, Matlab, Octave, R. Typesetting in LaTeX/LyX & HTML
Other	Mathematical modelling, numerical analysis, statistics, teaching

Personal references

Dr. Diego J. Rodríguez	**Professor**, *Universidad Central de Venezuela*, Caracas, Venezuela. http://izt.ciens.ucv.ve/izet/?page_id=198
Dr. Jesus A. León	**Professor**, *Universidad Central de Venezuela*, Caracas, Venezuela. http://izt.ciens.ucv.ve/izet/?page_id=198
Dr. María J. Hernández	**Professor**, *Universidad Central de Venezuela*, Caracas, Venezuela. https://www.researchgate.net/profile/Mj_Hernandez
Dr. Franz J. Wessing	**Professor**, *University of Groningen*, Groningen, The Netherlands. https://www.rug.nl/staff/f.j.weissing
Dr. Rampal S. Etienne	**Researcher**, *University of Groningen*, Groningen, The Netherlands. https://www.rug.nl/staff/r.s.etienne
Dr. Michel Loreau	**Professor**, *Station d'Ecologie Expérimentale du CNRS*, Moulis, France. http://www.cbtm-moulis.com/m-171-michel-loreau.html
Dr. Vlastimil Křivan	**Professor**, *Czech Academy of Sciences*, České Budějovice, Czech Republic. http://baloun.entu.cas.cz/krivan/