

## CURRICULUM VITAE

### PERSONAL DATA

Name Dita Brígida Vizoso  
 Birthday 14th of October 1968  
 Birthplace Caracas, Venezuela  
 Nationality Spanish  
 Languages Spanish and Galician  
                   mother tongues  
                   English, German and French  
 Personal interests Biology, Evolution of society, Photography, Poetry, the Sea.

### EDUCATION

Ph.D. Université de Fribourg / Universität Basel, Switzerland  
 1999-2003 Dissertation: Phenotypic plasticity in a host-parasite interaction with horizontal and vertical transmission.  
                   Advisor: Prof. Dieter Ebert  
 Diploma Simón Bolívar University, Venezuela  
 1989-1996 Thesis: Effects of habitat heterogeneity on the community structure of marine invertebrate living in macroalgae.  
                   Advisor: Prof. Freddy Losada.

### GRANTS AND SCHOLARSHIPS

2002 Roche Research Foundation, Switzerland.  
                   Fellowship for Ph.D. thesis writing. 14000.- CHF  
 2001-2002 Roche Research Foundation, Switzerland.  
                   Fellowship for third year of Ph.D. research project. 29250.- CHF  
 1998 European Science Foundation.  
                   Scientific program on theoretical biology of adaptation. 19089.- FF  
 1997-2001 CONICIT, Venezuela.  
                   Scholarship for graduate studies. 52000.- USD

### RESEARCH EXPERIENCE (OTHER THAN DISSERTATION AND DIPLOMA THESIS)

2005- Ultrastructural analyses of the interaction between sperm and female receptacle in *Macrostomum lignano*.  
                   Collaboration with Dr. Gunde Rieger, Dr. Lukas Schärer, and Prof. Reinhard Rieger, University of Innsbruck, Austria.  
 2005- Parasite-induced sex-ratio distortion in *Daphnia magna*.  
                   Collaboration with Dr. Sandra Lass, Olivia Roth, and Prof. Dieter Ebert, University of Basel, Switzerland  
 2004- Antagonistic Sexual Co-evolution in *Macrostomum lignano*.  
                   Collaboration with Dr. Lukas Schärer and Prof. Reinhard Rieger, University of Innsbruck, Austria; Markus Pfenninger, J.W.Goethe-Universität, Germany; and Yoshida Wataru, Hirosaki University, Japan.  
 2004- Experimental Evolution: Polygamy vs. Monogamy in *Macrostomum lignano*.  
                   Collaboration with Dr. Lukas Schärer, University of Innsbruck, Austria  
 2004- Ecology of sex allocation in a simultaneous hermaphrodite.  
                   Collaboration with Dr. Lukas Schärer and Prof. Reinhard Rieger, University of Innsbruck, Austria  
 2003- Laboratory assistance, Zoology and Limnology Department, Innsbruck.  
                   Laboratory maintenance, culturing of diatoms and different *Macrostomum* species  
 2001 *Kudoa ovivora* from different hosts. rDNA analysis.  
                   Collaboration with Dr. Lukas Schärer and Dr. Haris Lessios, Université Pierre et Marie Curie, Paris; and Smithsonian Tropical Research Institute, Panama

## Research experience (cont.)

- 2000-2001 Parasite-induced shift in sex-allocation in a sequential hermaphrodite fish.  
Collaboration with Dr. Lukas Schärer, Université Pierre et Marie Curie, Paris; and Smithsonian Tropical Research Institute, Panama
- 2000 Genetic polymorphism in resistance to endo-parasites in *Daphnia magna*.  
Collaboration with Prof. Dieter Ebert and Patrick Mucklow, University of Basel, Switzerland
- 2001 Laboratory assistance, Zoology Institute Basel  
Maintenance and breeding of *Drosophila melanogaster* (fruit fly) in the Lab of Dr. Tad Kawecki
- 1999-2000 Laboratory assistance, Zoology Institute Basel  
Laboratory maintenance, culturing of chlorophytic algae and different *Daphnia* (water flea) species in the Lab of Dr. Dieter Ebert
- 1999 Research assistance, Tsu University, Japan.  
Assisted Dr. Lukas Schärer with the design and completion of experiments with chaetognats (arrow-worms), in the Lab of Prof. Taichiro Goto
- 1998 Individual-based modelling of diverging populations: the effect of mutation ratio and carrying capacity.  
Research under the advise of Dr. Ulf Dieckmann and Dr. Hans Metz, International Institute of Applied System Analysis, Austria.
- 1997-1999 Development of models and software to study the evolution of ecosystems.  
Research under the advise of Michael Döbeli, Theoretical Ecology and Evolution, University of Basel, Switzerland.
- 1995 Morphological analyses and distribution of macro-algae on a rocky shelf.  
Universidad Simón Bolívar, Venezuela.
- 1994 Preliminary karyotypic characterization of the gastropod *Modulus modiolus* cf. for ecotoxicological tests.  
Research assistance for Profs. Elia García and Roberto Cipriani, Dpto. Estudios Ambientales, Universidad Simón Bolívar, Venezuela.
- 1993 Morphometric analyses of *Strombina sp.*, GASTROPODA.  
Research assistance for Prof. Roberto Cipriani, Universidad Simón Bolívar, Venezuela.
- 1992-1991 Classification of the micro-gastropoda infauna of the seaweed *Thalassia testudinum* in Morrocoy National Park.  
Research assistance for Prof. Roberto Cipriani, Universidad Simón Bolívar, Venezuela.
- 1991 Dynamics of sugar production in pineapple maturation.  
Research under the supervision of Prof. Marisol Castrillo, Universidad Simón Bolívar, Venezuela.

## PUBLICATIONS

- submitted **Vizoso, D. B.** and Schärer, L. Resource-dependent sex allocation in a simultaneous hermaphrodite.  
Schärer, L. and **Vizoso, D. B.** Phenotypic plasticity in sperm production rate: there's more to it than testis size.
- 2005 **Vizoso, D. B.** and Ebert, D. (2005) Phenotypic responses of *Daphnia magna* to vertical and horizontal infection with a microsporidian parasite. *Journal of Evolutionary Biology*. **18**: 911-921.  
**Vizoso, D. B.**, Lass, S. and Ebert, D. (2005) Different mechanisms of transmission of the microsporidium *Octosporea bayeri*: a cocktail of solutions for the problem of parasite permanence. *Parasitology*. **130**: 501-509.  
**Vizoso, D. B.** and Ebert, D. (2005) Mixed inoculations of a microsporidian parasite with horizontal and vertical infections. *Oecologia*. **143**: 157-166.

## Publications (cont.)

- 2004 Mucklow, T. P., **Vizoso, D. B.**, Jensen, K. H., Refardt, D. & Ebert, D. (2004) Variation for phenoloxidase activity and its relation to parasite resistance within and between populations of *Daphnia magna*. *Proceedings of the Royal Society of London Series B - Biological Sciences*, **271**: 1175-1183.  
**Vizoso, D. B.** and Ebert, D. (2004) Within-host dynamics of a microsporidium with horizontal and vertical transmission: *Octosporea bayeri* in *Daphnia magna*. *Parasitology*, **128**: 31:38.
- 2003 Schärer, L. and **Vizoso, D. B.** (2003) Parasite-induced sex change in a sequential hermaphrodite, the reef fish *Thalassoma bifasciatum*. *Behavioral Ecology and Sociobiology* **55**: 137-143  
**Vizoso, D. B.** (2003) Phenotypic plasticity in a host-parasite interaction with horizontal and vertical transmission: A study on infection routes and genetic diversity of *Octosporea bayeri* (Microsporidia) in *Daphnia magna* (Cladocera). *Inaugural-Dissertation*. Universität Freiburg (Switzerland)
- 1996 **Vizoso, D. B.** (1996). Effects of habitat complexity on the structure of marine invertebrate communities in macroalgae. *Thesis. Universidad Simón Bolívar*. Caracas, Venezuela.
- 1994 **Vizoso, D. B.** (1994). Fractal Dimension in Landscape Ecology. *Ediciones de la Universidad Simón Bolívar*. Caracas, Venezuela.

## PRESENTATIONS

- 2005 **Vizoso, D. B.** Associations of reproductive traits: sperm & genital morphology in *Macrostomum* species.  
 Sexual Conflict in Hermaphrodites. Workshop University Tübingen. Germany, July 2005  
**Vizoso, D. B.** and Schärer, L. Complex sperm morphology and behaviour in the hermaphrodite *Macrostomum* and its possible roles in sexual conflicts (Poster).  
 Congress on Sperm and Seminal Fluid. Monte Verità, Switzerland. February 2005  
 Royal Society discussion meeting - Sexual conflict: a new paradigm?. London, UK. May 2005
- 2004 Schärer, L. and **Vizoso, D. B.** Experimental evolution under monogamy vs. polygamy in a simultaneous hermaphrodite: sex allocation meets sexual conflict (Poster).  
 Experimental Evolution Workshop. Fribourg, Switzerland. October 2004.  
 Schärer, L. and **Vizoso, D. B.** Condition-dependence in sex allocation: male allocation comes first  
 Gender Transitions Workshop. Bonn, Germany. April 2004.
- 2003 **Vizoso, D. B.** Parasite-induced sex in *Daphnia magna*  
 SESP Meeting, University of Leiden, Netherlands. June 2003.  
**Vizoso, D. B.** The role of parasites in the maintenance of cyclic parthenogenesis (Poster).  
 International Workshop Evolutionary ecology of the pre-zygotic stage in animal and plants. Ascona, Switzerland. February 2003.
- 2002 **Vizoso, D. B.** Horizontal and vertical transmission of a Microsporidia infecting *Daphnia magna* host life-history responses.  
 Université Pierre et Marie Curie, Paris, France; University of Münster, Germany. May-June 2002.  
**Vizoso, D. B.** *Octosporea bayeri* in *Daphnia magna*: when transmission modes meet.  
 5th Schmid-Hempel & Ebert Host-Parasite Workshop, University of Fribourg, February 2002.

## Presentations (cont.)

- 2000 **Vizoso, D. B.** and Ebert, D. Effect of parasite mode of transmission on the life history traits of its host: adaptation or constraint?  
Satellite Symposium of Evolutionary Ecology. Lausanne, Switzerland. February 2000.
- 1999 **Vizoso D. B.** Effects of ecosystem dynamics on long-term evolutionary patterns.  
VII Congress of the European Society for the Study of Evolution. Barcelona, Spain. August 1999.
- 1998 **Vizoso, D. B.** and Losada, F. Size distribution of marine invertebrates as a response to environmental heterogeneity.  
IX Congress Zoologia et Botanica, Geneva, Switzerland. February 1998.
- 1995 **Vizoso, D. B.** and Suárez, I. Where the dilution effect does work: more reasons to live in groups.  
III Latin-American Congress of Ecology, Mérida, Venezuela. October 1995.
- Alvarez, H., Llambí, L.D., Lucheti, A., Márquez, E., Mostaceros, J., Papadakis, J., Ramos, R., Sebastiani, M., Stolk, M.E., Villaró, M. and **Vizoso, D. B.** Methodology to incorporate the environmental impact studies approach in the territorial ordination for sustainable development. Study case: proposal for the ordination plan and regulations of the Cataniapo River Basin, Amazonas, Venezuela.  
III Latin-American Congress of Ecology, Mérida, Venezuela. October 1995.
- Vizoso, D. B.** Use and misuse of fractal dimension in ecology.  
III Latin-American Congress of Ecology, Mérida, Venezuela. October 1995.
- Suárez, I., **Vizoso, D. B.** and Besada, M. New tools in the geomorphologic ordination: the fractal dimension added.  
Symposium of the Glacial Waters and Climatic Change. La Paz, Bolivia. June 1995.
- 1994 Paredes, C., Klein, E., Cruz, J., Diaz, Y., Galindo, L., Isea, J., Papadakis, J., Ramos, R., Siegert, I., Suárez, I., and **Vizoso. D. B.** Spatial Characterization of the Superficial Sediments in the North Zone of the Morrocoy National Park.  
ASOVAC annual meeting, Coro, Venezuela. November 1994.

## CONFERENCES, COURSES AND WORKSHOPS

- 2005 Royal Society discussion meeting - Sexual conflict: a new paradigm?.  
London, UK. May 2005  
Organized by Tracey Chapman, Tom Tregenza and Nina Wedell
- Congress Sperm and Seminal Fluid. Monte Verità, Switzerland. February 2005.  
Organized by Eric Kübli (University of Zürich, Switzerland), Paul Ward (Museum of Zoology, University of Zürich), and Paul Schmid-Hempel (ETH, Zürich, Switzerland)
- 2003 International Conference on Sex, Sexual Selection and Speciation (SESP).  
Leiden, Netherlands. June 2003.  
Organized by Vicky Schneider & Martine Maan, Institute of Biology, University of Leiden, Netherlands.
- International Workshop Evolutionary ecology of the pre-zygotic stage in animal and plants. Ascona, Switzerland. February 2003.  
Organized by Bernhard Schmid, Giordina Bernasconi (University of Zurich, Switzerland), Barbara Hellriegel (Technical University Munich, Germany) and Io Skogsmyr (University of Lund, Sweden)
- 2002 Satellite Symposium on Sex Allocation in Hermaphrodites. Münster, Germany. August 2002.  
Organized by Cristina Lorenzi, Lukas Schäfer and Gabriela Sella, University of Turin, Italy; and University of Münster, Germany.

## Conferences, courses and workshops (cont.)

- First European Conference on Behavioural Biology: Conflict and Resolution. Münster, Germany. August 2002.  
Organized by Norbert Sachser (Department of Behavioural Biology) and Nico Michiels (Department of Evolutionary Biology) at the University of Münster, Germany.
- Evolutionary and ecological aspects of disease and parasitism, May 2002.  
Organized by Andrew Cunningham (Institute of Zoology), Alex Kraaijeveld (Centre for Population Biology) and the Zoological Society of London, UK.
- 5th Schmid-Hempel & Ebert Host-Parasite Workshop  
Organized by Dieter Ebert, University of Fribourg, February 2002.
- 2000 Satellite Symposium of Evolutionary Ecology.  
Lausanne, Switzerland. February 2000.
- 1999 VII Congress of the European Society for the Study of Evolution.  
Barcelona, Spain. August 1999.
- 1998 Workshop on Population Biology, Guarda, Switzerland.  
Organized by Michael Döbeli and the Zoology Institute Basel, Switzerland.
- Young Scientists Summer Program of the IIASA.  
Laxenburg, Austria. May-September 1998.
- IX Congress Zoologia et Botanica.  
Geneva, Switzerland. February 1998.
- Second Winter School on Population Dynamics.  
Woudschoten, the Netherlands. January 1998. Organized by the Department of Evolution, University of Leiden, the Netherlands.
- 1997 International Discussion Workshop on Evolutionary Biology, Guarda, Switzerland.  
June 1997. Organized by Steve Stearns and the Zoology Institute Basel, Switzerland.
- 1995 III Latin-American Congress of Ecology  
Mérida, Venezuela. October 1995.

## TEACHING EXPERIENCE

- 2001 Laboratory of Parasitology, University of Fribourg.  
Laboratory assistant. Dept. Biology, University of Fribourg.
- 1996 Laboratory of Oceanography, Simón Bolívar University.  
Laboratory and field teaching assistant. Prof. Eduardo Klein, Dpto. Estudios Ambientales, USB.
- Laboratory of Ecology, Simón Bolívar University.  
Laboratory and field teaching assistant. Profs. Eduardo Klein and Bibiana Bilbao, Dpto. Estudios Ambientales, USB.
- 1995 Population Biology, Simón Bolívar University.  
Lecturer and teaching assistant. Prof. Moritz Benado, Dpto. Estudios Ambientales, USB.
- 1994 Genetics, Simón Bolívar University.  
Lecturer and teaching assistant. Prof. Omar Arenas, División de Ciencias Biológicas, USB.
- 1993 Laboratory of Basic Genetics, Simón Bolívar University.  
Laboratory teaching assistant. Prof. Cristina Sajo, Dpto. Biología Celular, USB.

## REFEREEING OF MANUSCRIPTS

Parasitology, Oecologia, Proceedings of the Royal Society B, Trends in Parasitology.

## SUPERVISION AND TRAINING

- 2001 Teaching and supervision of laboratory techniques for the Diploma Thesis of Pia Salathé  
Universität Basel, Diploma Advisor: Prof. Dieter Ebert
- 2000 Training and supervision of research assistants in reef-fish field observation, measurement and handling.  
Bocas del Toro, Panamá, Project Leader: Dr. Lukas Schärer

## Supervision and training (cont.)

- 2000 Teaching and supervision of experimental design, laboratory techniques, and data analyses for the Diploma Thesis of Patrick Mucklow  
Universität Basel, Diploma Advisor: Prof. Dieter Ebert

## OTHER WORKING EXPERIENCE

- 1999-2000 Biometrical Practice BIOP, Basel, Switzerland.  
Data entry
- 1996-1997 Natural History Museum, Caracas, Venezuela.  
Bibliographical research and script writing. *Orinoco Basin* exhibition.
- 1994-1997 Freelance photography assistant.  
Studio and outdoors.
- 1994-1997 Phaedrus Inc. Caracas, Venezuela.  
Statistical advisor, CEO.
- 1994-1996 Institute of Marine Technology (INTECMAR), Caracas, Venezuela.  
Research assistant.
- 1993-1996 National Institute for Natural Resources Management (MARNR), Caracas, Venezuela.  
Research assistant and data manager.
- 1986-1991 PEUSB, Caracas, Venezuela.  
Sales manager, Marketing.