

CURRICULUM VITAE – RODOLFO DIRZO

EDUCATIONAL BACKGROUND

Undergraduate Education

- B.Sc., Biology 1968-1972

Universidad Autónoma de Morelos (University of State of Morelos, Mexico)

Graduation: September, 1974

Thesis: "Mapa de Vegetación de la Cuenca del Río Cutzamalá, Edos. de Michoacán, Guerrero y México" (Vegetation analysis and mapping in the Cutzamala Basin, Mexico).

Major Advisor: Prof. Francisco González-Medrano

Graduate Education

- M.Sc., Ecology. 1976-1977

School of Plant Biology, University of Wales, UK

Graduation: December 1977

Thesis: "Plant palatability and feeding behaviour of the slug *Agriolimax caruanae*".

Major Advisor: Prof. John L. Harper

- Ph.D., Ecology 1977-1980

School of Plant Biology, University of Wales, Great Britain

March 1980

Thesis: "Studies on plant-animal interactions: Terrestrial molluscs and their food plants".

Major Advisor: Prof. John L. Harper

FIELDS OF INTEREST

Plant population ecology

Tropical ecology

Evolutionary ecology

Species interactions

Defense mechanisms in plants

Conservation biology

Biodiversity science

Disease ecology (especially zoonosis-biodiversity relationships)

The history of science

Biocultural diversity

Traditional ecological knowledge, cultural diversity conservation

Latin American biodiversity

Science education at all levels

Outreach to the general public

TEACHING

- Teacher's assistant (TA): General Ecology. School of Sciences, National University of Mexico (UNAM), 1972-1973
- TA: Botany. University of Morelos, 1972-1973
- TA: General Ecology. School of Sciences, National University of Mexico (UNAM), 1973
- TA: Plant Ecology. School of Sciences, National University of Mexico (UNAM), 1975-1976
- Instructor: Community Ecology. Metropolitan University of Mexico (UAM), Ixtapalapa, 1980
- Instructor: Population Ecology. National Institute of Biotic Resources, Mexico. 1988
- Instructor: Tropical Ecology. University of Costa Rica and Organization for Tropical Studies, Costa Rica, 1981- 1993, 1995-1997, 1999, 2011, 2013-2014
- Invited faculty: Fundamentals in Tropical Biology. Organization for Tropical Studies, Costa Rica, 1988, 1990, 1993
- Invited faculty: Tropical Ecology and Conservation, National Institute of Research of Amazonia (INPA) and Organization for Tropical Studies, Costa Rica, 1996, 1999, 2001, 2002, 2004
- Instructor: Field Ecology. Graduate Program, Institute of Ecology, UNAM. 1986-1997
- Invited faculty: Tropical Ecology. Program MIRT (Minority Research Training), University of California, Irvine, Estación Los Tuxtlas, Mexico, 1993-1995
- Invited faculty: Topics in Modern Biology: Ecology and Herbivory in Tropical Systems. University of Puerto Rico, 1988, 2000
- Invited faculty: Tropical Ecology and Conservation Biology. National University of Colombia and WWF. Reserva La Planada, Pasto, Colombia, 1991, 1993, 1994
- Instructor: Bio-conservation. Institute of Ecology, UNAM. 1993-1995
- Instructor and coordinator: Biological Conservation. Red Latinoamericana de Botánica/University of Chile. Santiago, Chile, March 1993, UNAM (Los Tuxtlas), November 1994; National University, Tucumán Argentina. October 1996, and UNAM-Universidad de Morelos, November 2000; University of Chile, Santiago, 2003
- Instructor and coordinator "Tropical Field Ecology", Estación Biológica de Chajul, Selva Lacandona Chis. Instituto de Ecología UNAM, Ministry of Environment. March 1996, 1997, 1999
- Instructor, "Evolutionary Ecology of Plant-Animal Interactions" Graduate Program in Ecology, UNAM; 2000-2004
- Instructor, "Population Biology" Graduate Program in Ecology, UNAM. 2003
- Invited faculty: Tropical Ecology and Conservation, Organization for Tropical Studies, Perú, 2002-2003

- Instructor, "Tropical ecology and evolutionary ecology" Posgraduate program in Ecology, UNAM. 2004
- Instructor, Amazonian Tropical Ecology—plant-animal interactions, Museu Goeldi, Belem, Brazil, 2005
- Instructor: Evolutionary Ecology and plant-animal interactions. Universidad Nacional de Colombia, 2010
- Instructor and Coordinator. Biodiversidad y Conservación Biológica. Universidad Nacional de Nicaragua-León-Paso Pacifico. 2011
- Instructor, "Theoretical and practical aspects of scientific publication" UNAM-Canada Campus, 2012, 2013, 2014

At Stanford University:

- Instructor (undergrad level), Tropical Ecology and Conservation (BIO175), 2005-2010
- Instructor (undergrad, grad levels), Field Ecology Methods, 2005-2009
- Instructor (undergrad, grad levels), Conservation Problems in Latin America, 2008-2009.
- Instructor (undergrad, grad levels), Ecology (BIO 101), 2006-2011
- Instructor (grad), Field Ecology (BIO 375), 2011, 2013
- Instructor (Faculty in Residence), BOSP at Santiago Campus (undergrad): Ecology and biodiversity of Latin America (Fall, 2012)
- Instructor (grad), Topics in Latin American Studies (LATINAM 200): 2010-2016 (Fall, Winter, Spring quarters)
- Ecology and Sustainability: A summer Institute course for science teachers from the USA and Mexico (Summer 2016)
- Instructor (undergrad), BIO 18Q: Plant EcoEvo, 2013 (Intro Sem – Spring quarter)
- Instructor (undergrad/graduate), Ecology and Natural History of Jasper Ridge Biological Preserve (BIO 105; formerly Docent Training), 2008-2020 (winter and spring quarters)
- Instructor, Conservation Science: A Latin American emphasis (BIO 144): undergrad, grad levels, 2014-2017, 2019, 2020 (spring quarter)
- Instructor, Bio-Cultural Diversity and Community-Based Conservation (a Summer BOSP course): undergraduate (summer quarter: 2015-2017; 2019)
- ScienceInSpanish-SpanishInScience (BIO 208), undergrad and grad levels (Spring 2015 – 2017, 2019)
- Volunteers in Latin America (LATINAM 92): Pre-field readings and discussion (Summer 2017)
- Ornithology (BIO 121—Sponsor and guest lecturer; Instructors: Tyler McFadden, Lucas Pavan), undergrads and graduate students (Spring 2019, 2020)
- **Regular Guest Lectures:**

- General Ecology (BIO 101): 2014-2017, 2019
- Earth Systems Core (ESyS 10): 2014-2017, 2019
- Human Biology Core (HumBio 4B): 2015-2017, 2019
- Interdisciplinary Research Core course, E-IPER (ENVRES 335): 2017-2019, 2021
- Guest lectures while on sabbatical:
 - Ecology and Natural History of Jasper Ridge Biological Preserve (BIO 105; formerly Docent Training), 2018 (winter and spring quarters)
 - Human Biology Core (HumBio 4B)
- STEAM for Latina Girls: An educational program for girls from underserved populations of the Bay Area, CA. (Spring 2015, 2016, 2017, 2019)

PROFFESIONAL APPOINTMENTS

- Research assistant, Instituto de Biología, UNAM 1974-1980
- Associate professor, Instituto de Biología, September 1980 to September 1983
- Professor, Instituto de Biología, Estación de Biología Tropical Los Tuxtlas, Veracruz, September 1983 to November 1985
- Director, Los Tuxtlas Biological Station. November 1985 to December 1987
- Professor, Instituto de Ecología (formerly Centro de Ecología), UNAM, November 1989-August 2005
- Chair, Department of Evolutionary Ecology, Instituto de Ecología, UNAM, 1994-1997
- Coordinator of the Biology Section, Mexican Academy of Sciences, 1997, 2002
- Chair, Committee of Ecology, Evolution and Systematics, National Council of Science and Technology of Mexico (CONACYT), 2000-2004
- Coordinator of Graduate Program in Ecology, Instituto de Ecología, UNAM, 1998-2004
- Professor (Endowed Chair: The Bing Professor in Environmental Science), Stanford University, 2004-present
- Director, Center for Latin American Studies, Stanford, 2010-2013; 2013-2016
- Senior Fellow, Woods Institute for the Environment, Stanford, 2010-2015, 2016-present
- Co-Director (with Prof. William Durham): The Osa-Golfito Initiative (INOGO), Woods Institute for the Environment, Stanford, 2011-present
- Visiting professor (on sabbatical): Instituto de Ecología, UNAM, September 2017-March 2018
- Visiting researcher (on sabbatical): Mexico's National Commission for Biodiversity, September 2017-March 2018
- Visiting scholar (on sabbatical): The German Institute for Integrative Biodiversity (iDiv), Leipzig, Germany, April-September 2018
- Visiting scholar: Institute of Zoology of The Chinese Academy of Sciences, Beijing, December 2020

- Associate Chair for Diversity and Inclusion, School of Earth, Energy and Environment, Stanford University, 2020-

SABBATICAL LEAVES

- Missouri Botanical Garden, St. Louis Missouri, USA, November 1989-July 1990 (Sponsor/host: Peter H. Raven)
- Estación Biológica de Doñana, Seville, Spain, August-December 1990 (Sponsor/host: Carlos M. Herrera)
- Northern Arizona University, Flagstaff AZ. August 1997-August 1998 (Sponsors/hosts: Thomas Whitham and Peter Price)
- The Mexican National Commission for Biodiversity (CONABIO), September 2017-March 2018; host: Prof. Jose Sarukhan
- Instituto de Ecología, UNAM, September 2017-March 2018; host: Prof. Constantino Macías
- German Intitute for Integrative Biodiversity (Leipzig, Germany), April-September 2018. Hosts: Profs. Henrique Pereira and Marten Winter.

PEER-REVIEWED PUBLICATIONS

1. Dirzo, R. 1980. Experimental studies on slug-plant interactions. I. The acceptability of thirty plant species to the slug *Agriolimax caruanae*. ***Journal of Ecology* 68**: 981-998
2. Dirzo, R. & Harper, J. L. 1980. Ditto. II. The effect of grazing by slugs on high density monocultures of *Capsella bursa-pastoris* and *Poa annua*. ***Journal of Ecology* 68**: 999-1012
3. Dirzo, R. & Harper, J.L. 1982. Ditto III. Differences in the acceptability of individual plants of *Trifolium repens* to slugs and snails. ***Journal of Ecology* 70**: 101-118
4. Dirzo, R. & Harper, J.L. 1982. Ditto. IV. The performance of cyanogenic and acyanogenic plants of *Trifolium repens* in the field. ***Journal of Ecology* 70**: 119-128
5. Dirzo, R., Fernández, A., Gómez, G. & González, V. 1982. Un aparato sencillo para medir la dureza del follaje en estudios de herbivoría. ***Boletín de la Sociedad Botánica de México* 43**: 81-88
6. Dirzo, R. 1983. Sobre el significado del “co” en coevolución. ***Boletín de la Sociedad Botánica de México* 44**: 91-94

7. Dirzo, R. 1985. Metabolitos secundarios en las plantas: ¿Atributos Panglossianos o de valor adaptativo? **Ciencia 36**: 137-145
8. Filip, V. & Dirzo, R. 1985. Tabla de vida del gusano de bolsa *Malacosoma incurvum* Var. *Aztecum* Neumogen (Lepidoptera: Lasiocampidae) en Xochimilco, D. F. México. **Folia Entomologica 66**: 31-45
9. Dirzo, R. 1987. Estudios sobre interacciones planta-herbívoro en “Los Tuxtlas”, Veracruz. **Revista de Biología Tropical 36**: 119-132
10. Dirzo, R. & Chapin, F. S. III. 1987. Algunos problemas importantes en el estudio de las interacciones planta-herbívoro en los bosques tropicales. **Revista de Biología Tropical 35**: 207-211
11. de la Cruz, M. & Dirzo, R. 1987. A survey of the standing levels of herbivory in seedlings from a Mexican rain forest. **Biotropica 19**: 98-106
12. Núñez-Farfán, J., & Dirzo, R. 1988. Within-gap spatial heterogeneity and seedling performance in a Mexican tropical forest. **Oikos 51**: 274-284
13. Oyama, K. & Dirzo, R. 1988. Biomass allocation in the dioecious Tropical Palm *Chamaedorea tepejilote* and its life history consequences. **Plant Species Biology 3**: 23-33
14. Domínguez, C., Dirzo, R., & Bullock, S. H. 1989. On the function of floral nectar in *Croton suberosus* (Euphorbiaceae). **Oikos 56**: 109-114
15. Núñez-Farfán, J., & Dirzo, R. 1989. Leaf survival in relation to herbivory in two tropical pioneer species. **Oikos 54**: 71-74
16. Ibarra-Manriquez, G. & Dirzo, R. 1990. Plantas mirmecófilas arbóreas de la Estación de Biología Los Tuxtlas, Veracruz, México. **Revista de Biología Tropical 38**: 79-82
17. Dirzo, R. & Miranda, A. 1990. Contemporary neotropical defaunation and forest structure, function and diversity: a sequel to John Terborgh. **Conservation Biology 4**: 444-447
18. Oyama, K. & Dirzo, R. 1991. Ecological aspects of the interaction between *Chamaedorea tepejilote*, a dioecious palm, and *Calyptocephala marginipennis*, a herbivorous beetle, in a Mexican Rain Forest. **Principes 35**: 86-93

19. Núñez-Farfán, J, & **Dirzo**, R. 1991. Effects of defoliation on the saplings of a gap-colonizing neotropical tree. *Journal of Vegetation Science* **2**: 459-464
20. **Dirzo**, R. y Miranda, A. 1991. El límite boreal de la selva en el Continente Americano: Contracción de la selva y solución de una controversia. *Interciencia* **16**: 240-247
21. **Dirzo**, R. & García M.C. 1992. Rates of deforestation in Los Tuxtlas, a Neotropical area in Southeast Mexico. *Conservation Biology* **6**: 84-90
22. Masera, O., Ordóñez, M.J., & **Dirzo**, R. 1992. Emisiones de carbono a partir de la deforestación en México. *Ciencia* **43**: 151-153
23. Oyama, K., **Dirzo**, R., & Ibarra-Manriquez, G. 1992. Population structure of the dominant palm species in the understory of a Mexican lowland rain forest. *Tropics* **2**: 23-28
24. **Dirzo**, R. Horvitz, C.C. Quevedo, H. & López, M.A. 1992. The effects of gap size and age on the understory herb community of a tropical Mexican rain forest. *Journal of Ecology* **80**: 809-822
25. **Dirzo**, R. 1993. Una pérdida irreparable para la botánica Neotropical: Alwyn H. Gentry. *Boletín de la Sociedad Botánica de México* **53**: 125-128
26. Oyama, K. & **Dirzo**, R. 1994. Population structure of a monophagous chrysomelid beetle in a Mexican lowland rain forest. *Tropics* **3**:163-167
27. Núñez-Farfán, J. & **Dirzo**, R. 1994. Evolutionary ecology of *Datura stramonium* in Central Mexico: Natural selection for resistance to herbivorous insects. *Evolution* **42**: 423-436
28. Domínguez, C.A. & **Dirzo**, R. 1994. Effects of defoliation on *Erythroxylum havanense*, a tropical proleptic species *Ecology* **75**: 1896-1902
29. **Dirzo**, R. & Raven, P.H. 1994. Un inventario biológico para México. *Boletín de la Sociedad Botánica de México*. **55**:29-34
30. Domínguez, C.A. & **Dirzo**, R. 1995. Rainfall and flowering synchrony in a tropical shrub: Variable selection on the flowering time of *Erythroxylum havanense*. *Evolutionary Ecology* **9**: 204-216

31. Filip, V., **Dirzo**, R., Maass, J.M. & Sarukhán J. 1995. Within-and among-variation in the levels of damage on the foliage of trees from a tropical deciduous forest in west Mexico. *Biotropica* **27**: 78-86
32. Cairns, M.A., **Dirzo**, R. & Zadroga, F. 1995. Forests of Mexico: A diminishing resource? *Journal of Forestry* **93**: 21-24
33. Arizmendi, M.C., Domínguez, C.A. & **Dirzo** R. 1996. The role of an avian nectar robber and of hummingbird pollinators on the reproduction of two plant species. *Functional Ecology* **10**: 119-127
34. **Dirzo**, R., & Gómez, B.G. 1996. Ritmos temporales de la investigación taxonómica de plantas vasculares en México y una estimación del número de especies conocidas. *Annals of the Missouri Botanical Garden* **83**: 396-403
35. Núñez-Farfán, J., Cabrales, R. & **Dirzo**, R. 1996. Mating system consequences on resistance to herbivory and life history traits in *Datura stramonium*. *American Journal of Botany* **83**: 1041-1049
36. **Dirzo**, R. 1996. José Sarukhán, An outstanding tropical biologist, Honorary Fellow of ATB, 1996. *Biotropica* **28**: 616-617
37. Rosenthal, J. P. & **Dirzo**, R. 1997. Effects of life history, domestication and agronomic selection on plant defense against insects: evidence from maizes and wild relatives. *Evolutionary Ecology* **11**: 337-355
38. Noble, I. R., & **Dirzo**, R. 1997. Forests as human-dominated ecosystems. *Science* **277**: 522-525
39. Morón, A., Jaramillo V. J., & **Dirzo**, R. 1997. Species composition of root-feeding macroarthropods in a subalpine grassland associated with pine forest in México. *The Canadian Entomologist* **129**: 71-80
40. Morón, A., **Dirzo**, R., & Jaramillo V. J. 1997. Defoliation and below-ground herbivory in the grass *Muhlenbergia quadridentata*: Effects on plant performance and on the root-feeder *Phyllophaga* sp. (Coleoptera, Melolonthidae) *Oecologia* **110**: 237-342
41. Montaña, C. **Dirzo**, R., & Flores, A. 1997. Structural Parasitism of an Epiphytic Bromeliad upon *Cercidum praecox* in an intertropical Semiarid Ecosystem. *Biotropica* **29**: 517-521

42. Masera, O, Ordóñez, M.J. & **Dirzo**, R. 1998. Carbon emissions from Mexican forests: Current situation and long-term scenarios. *Climatic Change* **35**: 265-295
43. Domínguez, C.A., Eguiarte, L. E., Nuñez-Farfan, J. & **Dirzo**, R. 1998. Flower morphometry of *Rhizophora mangle* (Rhizophoraceae): Geographical variation in Mexican populations. *American Journal of Botany* **85**: 637-643
44. Guevara, R. & **Dirzo**, R. 1998. A rapid method for the assessment of diversity of the mycota: The fungal community of an evergreen cloud forest as an example. *Canadian Journal of Botany* **76**: 596-601
45. Bazzaz, F.A., Ceballos, G., Davis, M., **Dirzo**, R., Ehrlich, P.R., Eisner, T., Levin, S., Lawton, J.H., Lubchenco, J., Matson, P.A., Mooney, H.A., Raven, P.H., Roughgarden, J.E., Sarukhán, J., Tillman, D.G., Vitousek, P., Walker, B., Wall, D.H., Wilson, E.O., & Woodwell, G. 1998. Ecological science and the human predicament. *Science* **282**: 879
46. Sánchez-Ramos, G., **Dirzo**, R., & Balcázar-Lara, M. 1999. Especificidad y herbivoría de Lepidoptera sobre especies pioneras y tolerantes del bosque Mesófilo de la Reserva de la Biosfera El Cielo, Tamaulipas, México. *Acta Zoologica Mexicana* **78**: 103-115
47. Guevara, R., & **Dirzo**, R. 1999. Consumption of macro-fungi sporophores by invertebrates in a Mexican tropical cloud forest: do fruit body characteristics matter? *Journal of Tropical Ecology* **15**: 603-617
48. Mendoza, E., & **Dirzo**, R. 1999. Deforestation in Lacandonia (Southeast Mexico): Evidence for the declaration of the northernmost tropical hot spot. *Biodiversity and Conservation* **8**: 1621-1641
49. Sala O. E., F. Stuart Chapin III, J. J. Armesto, E. Berlow, J. Bloomfield, R. **Dirzo**, E. Huber-Sanwald, L.F. Huenneke, R. Jackson, A. Kinzig, R. Leemans, D. Lodge, H. A. Mooney, M. Oesterheld, L. Poff, M. T. Sykes, B. H. Walker, M. Walker, & D. Wall. 2000. Global biodiversity scenarios for the year 2100. *Science* **287**: 1770-1774
50. Trejo, R. I., & **Dirzo**, R. 2000. Deforestation of seasonally dry tropical forest towards its northern distribution: a national and local analysis in Mexico. *Biological Conservation* **94**: 133-142
51. García-Guzmán, G., & **Dirzo**, R. 2001. Patterns of leaf-pathogen infection in the understory of a Mexican rain forest: incidence, spatiotemporal variation, and mechanisms of infection. *American Journal of Botany* **88**: 634-635

52. Lambin E.F., Turner B.L., Geist H., Agbola S., Angelsen A., Bruce J.W., Coomes O., **Dirzo** R., Fischer G., Folke C., George P.S., Homewood K., Imbernon J., Leemans R., Li X., Moran E.F. Mortimore M., Ramakrishnan P.S., Richards J.F., Skånes H., Steffen W., Stone G.D., Svedin U., Veldkamp T., Vogel C., & Xu J., 2001. The Causes of land-use and land-cover change: ***Global Environmental Change* 11**: 261-269
53. Lindig-Cisneros, R., R. **Dirzo**, & F. J. Espinosa-García. 2002. Effects of domestication and agronomic selection on phytoalexin antifungal defense in *Phaseolus* beans. ***Ecological Research* 17**: 315-321
54. Trejo, R. I., & **Dirzo**, R. 2002. Floristic diversity of Mexican seasonally dry tropical forests. ***Biodiversity and Conservation* 11**: 2063-2048
55. Núñez-Farfán, J., C. A. Domínguez, L. E. Eguiarte, A. Cornejo, M. Quijano, J. Vargas & R. **Dirzo**. 2002. Genetic divergence among Mexican populations of red mangrove (*Rhizophora mangle*): geographic and historic effects. ***Evolutionary Ecology Research* 4**:1049-1064
56. Campo, J., & **Dirzo**, R. 2003. Leaf quality and herbivory responses to soil nutrient addition in secondary tropical dry forests of Yucatán, México. ***Journal of Tropical Ecology* 19**: 1-7
57. **Dirzo**, R, & P. H. Raven. 2003. Global state of biodiversity and loss. ***Annual Review of Environment and Natural Resources*. 28**: 137-167
58. Del Val, E. & **Dirzo**, R. 2003. Does ontogeny cause changes in the defensive strategies of the myrmecophyte *Cecropia peltata*? ***Plant Ecology* 169**: 35-41
59. Boege, K. & **Dirzo** R. 2004. Intraspecific variation in growth, defense and herbivory in *Dialium guianense* (Caesalpiniaceae) mediated by edaphic heterogeneity ***Plant Ecology*. 175**: 59-69
60. Mendoza, E. & R. **Dirzo** 2005. A quantitative study of forest fragmentation in Los Tuxtlas, Mexico. ***Revista Chilena de Biología Tropical* 78**: 451-467
61. **Dirzo**, R. & M. Loreau. 2005. Biodiversity science evolves. ***Science* 310**: 943
62. Rodríguez, J.P., **Dirzo**, R. & Goodman, T. 2005. La ciencia de la biodiversidad en America Latina. ***Interciencia* 30**: 449

63. de Melo, F.P.L., **Dirzo**, R. & Tabarelli, M. (2006) Biased seed rain in forest edges: Evidence from the Brazilian Atlantic forest. *Biological Conservation* **132**: 50-60.
64. Vallejo, M., Dominguez, C.A., & **Dirzo**, R. 2006. Simulated seed predation reveals a variety of germination responses of neotropical rain forest species. *American Journal of Botany* **93**: 369-376
65. Souza, V., Espinosa-Azuar, L., Escalante, A.E., Eguiarte, L. E., Farmer, J., Forney, L., Lloret, L., Rodriguez-Martínez, J. L., Soberón, X., **Dirzo**, & Elser, J.J. 2006. An endangered oasis of aquatic microbial biodiversity in the Chihuahuan desert. *Proceedings of the National Academy of Sciences* **103**: 6565-6570
66. Martínez M.L., Manson R.H., Balvanera P., **Dirzo** R., Soberón J., García-Barrios L., Martínez-Ramos M, Moreno-Casasola P, Rosenzweig L, Sarukhán J. 2006. The origin and evolution of ecology in Mexico: a case study of the challenges facing an emerging science in Latin America. *Frontiers in Ecology and the Environment* **4**: 259-267
67. García-Guzmán, G., & **Dirzo**, R. 2006. Influence of plant abundance on disease incidence in a Mexican tropical forest. *EcoScience* **13**: 523-530
68. Aguirre, A., Vallejo, M., Goroztieta-Salazar, L., Arias, D. M. & **Dirzo**, R. 2007. Variation in sexual expression in *Jacaratia mexicana* (Caricaceae) in southern Mexico: Frequency and relative seed performance of fruit-producing males. *Biotropica* **39**:79-86
69. **Dirzo**, R., Mendoza, E., & Ortíz, P. 2007. Size-related differential seed predation in a heavily defaunated Neotropical rain forest. *Biotropica* **39**:355-362
70. Boege, K., **Dirzo**, R., & Siemens, D. 2007. Ontogenetic switches from plant resistance to tolerance: minimizing costs with age? *Ecology Letters* **10**: 177-187
70. Mendoza, E., & **Dirzo**, R. 2007. Seed-size variation determines interspecific differential predation by mammals in a neotropical rain forest. *Oikos* **116**:1841-1852
71. López, J.C., & **Dirzo**, R. 2007. Floristic diversity of sabal palmetto woodland: an endemic and endangered vegetation type from Mexico. *Biodiversity and Conservation* **16**: 807-825
72. Wright, S.J., Stoner, K.E., Beckman, N., Corlett, R.T., **Dirzo**, R., Muller-Landau, H.C., Nunez-Iturri, G., Peres, C.A., & Wang, B.C. 2007. The plight of large animals in tropical forests and the consequences for plant regeneration. *Biotropica* **39**:289-291

73. Fáveri, S.B., Vasconcelos, H.L., & **Dirzo**, R. 2008. Effects of Amazonian forest fragmentation on the interaction between plants, insect herbivores, and their natural enemies. *Journal of Tropical Ecology* **24**:57-84
74. Aguirre, A., & **Dirzo**, R. 2008. Effects of fragmentation on pollinator abundance and fruit set of an abundant understory palm in a Mexican tropical forest. *Biological Conservation* **141**:375-384
75. Aguirre, A., Vallejo-Marín, M., Piedra-Malagón, E.M., Cruz-Ortega, R., & **Dirzo**, R. 2009. Morphological variation in the flowers of *Jacaratia mexicana* A. DC. (Caricaceae), a subdioecious tree. *Plant Biology* **11**:417-424
76. Mendoza, E. & **Dirzo**, R. 2009. Seed tolerance to predation: Evidence from the toxic seeds of the buckeye tree (*Aesculus californica*; Sapindaceae). *American Journal of Botany* **94**: 1255-1261
77. **Dirzo**, R., & Thompson, J. N. 2009. La coevolución y las enseñanzas de Darwin. *Ciencia Hoy* **19**:43-48
78. **Dirzo**, R. 2009. Prof. Ernesto Medina, 2008 ATBC Honorary Fellow. *Biotropica* **41**: 137-138
78. **Dirzo**, R., Aguirre, A. & López, J.C. 2009. Diversidad florística de las selvas húmedas en paisajes antropizados. *Investigación ambiental* **1**:17-22
79. Busby, P., Vitousek, P. & **Dirzo**, R. 2009. Prevalence of tree regeneration by sprouting and seedling along a rainfall gradient in Hawai'i. *Biotropica* **42**:80-86
80. Chinchilla, F., Ceballos, G., and **Dirzo**, R. 2009. Value of premontane moist forest fragments for mammalian conservation in Costa Rica: trash or treasure? *International Journal of Tropical Ecology* **57**:
81. Gutiérrez-Granados, G. & **Dirzo**, R. 2009. Remoción de semillas, herbivoría y reclutamiento de plántulas de *Brosimum alicastrum* (Moraceae) en sitios con manejo forestal contrastante de la Selva Maya, Quintana Roo, Mexico. *Boletín Sociedad Botánica de México* **85**: 51-58
82. Gutiérrez-Granados, G. & **Dirzo**, R. 2010. Indirect effects of timber extraction on plant recruitment and diversity via reductions in abundance of frugivorous spider monkeys. *Journal of Tropical Ecology* **26**:45-52

83. Villaseñor-Sánchez, E., **Dirzo**, R. & Renton, K. 2010. Importance of the lilac-crowned parrot in pre-dispersal seed predation of *Astronium graveolens* in a Mexican tropical dry forest. *Journal of Tropical Ecology* **26**:227-236
84. Betsabé Ruiz-Guerra, Roger Guevara, Néstor A. Mariano & **Dirzo**, R. 2010. Insect herbivory declines with forest fragmentation and covaries with plant regeneration mode: evidence from a Mexican tropical rain forest. *Oikos* **119**:317-325
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13. **Dirzo**, R., Young, H.S., Mooney, H.A., & Ceballos, G. (editors) 2011. *Seasonally dry tropical forests: Ecology and Conservation*. Island Press.
14. Simonetti, J.A. & R. **Dirzo**. 2011 (editors). *Conservacion biológica: perspectivas desde América Latina*. Editorial Universitaria, Santiago, Chile.
15. Quinn, H.R., Anderson, W.W., Atwater, T., Bell P., Corcoran, T., **Dirzo**, R., et al. 2011. *Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. The National Academy Press., Washington, D.C.16.
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2. **Dirzo**, R. 1990. A Neotropical Companion. Kricher, J.C. 1989. Princeton University Press. *Boletín de la Sociedad Botánica de México* 50: 163-165.
3. **Dirzo**, R. 1991. Ecological relationships of plants and animals. Howe, H.F. & Westley, L.C. 1988. Oxford University Press. *Interciencia* 16: 46-47.

4. **Dirzo**, R. 1992. Race to save the tropics-Ecology and economics for a sustainable future. R. Goodland (Ed.). Island Press. *Plant Science Bulletin*. 40: 18-19.
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7. **Dirzo**, R. 2006. The tropics beyond species diversity: richness of biotic interactions. *Ecology* 87: 3216-3219.
8. **Dirzo**, R. 2009. Anthropogenically Driven Contemporary Evolution: Lessons For Biodiversity Conservation. *Evolution* 63-11:3038-3041.

POPULAR AND EDUCATIONAL ARTICLES, CHAPTERS AND BOOKS

1. **Dirzo**, R. 1974. ¿Porqué ecología de poblaciones de plantas? *Biología*. 4:171-176.
2. Singer, S. & **Dirzo**, R. 1983. La ecología vegetal: un homenaje a Darwin. *Naturaleza*. 1: 19-25.
3. **Dirzo**, R. & Martínez-Ramos, M. 1985. Las interrogantes de Darwin, en Veracruz. *Información Científica y Tecnológica*. (CONACyT) 7: 21-24.
4. **Dirzo**, R. 1990. La biodiversidad como crisis ecológica actual: ¿Qué sabemos? *Ciencias*. (Número especial) 4: 48-55.
5. **Dirzo**, R. 1991. Rescate y restauración ecológica de la selva de Los Tuxtlas. *Ciencia y Desarrollo*. 17: 33-45.
6. **Dirzo**, R. 1991. La vegetación: exuberancia milenaria. In: *Lacandonia: El Ultimo Refugio*. Editado por Universidad Nacional Autónoma de México y Agrupación Sierra Madre. pp. 52-74.
7. Miranda, A. & **Dirzo**, R. 1991. Defaunación neotropical contemporánea: Posibles consecuencias sobre la dinámica y conservación de una selva de México. *Revista de difusión científica tecnológica y humanística de Chiapas*. 3: 53-61.
8. Guevara, R. & **Dirzo**, R. 1992. Patrones de fungivoría en el bosque mesófilo de montaña de El Triunfo, Chiapas. *Micofagia*. 1: 87-92.
9. **Dirzo**, R. 1993. Deforestación tropical contemporánea. *Omnia*. 26: 13-20.
10. **Dirzo**, R. & Miranda, A. 1993. Deforestación y diversidad biológica. In: *Memorias de la Reunión Anual del Programa Universitario del Medio Ambiente*, Vol. 1. Contribución 31. 13 p.
11. **Dirzo**, R. 1994. *Mexican Diversity of Flora*. CEMEX and Agrupación Sierra Madre. México. 191 p.
12. **Dirzo**, R. & Raven, P.H. 1994. Un inventario biológico para México. *Boletín de la Sociedad Botánica de México*. 55: 29-34.
13. Gómez-Pompa, A. & **Dirzo**, R. 1995. Análisis histórico y perspectivas de las áreas naturales protegidas de México. *Revista Universidad de Guadalajara* (March-April): 17-21.

14. **Dirzo**, R. 1996 Selva Húmeda una celebración biológica. In: *Conservemos las especies de México*. Servicio Postal Mexicano. Secretaría de Comunicaciones y Transportes. 23-31.
15. **Dirzo**, R. 1996 Mexico's Floristic Diversity. *Voices of Mexico* 36: 97-104.
16. **Dirzo**, R. & Fellous, J.L. 1998. Strengthening the regional emphasis of IGBP. *Global Change Newsletter*, 36: 5-6.
17. **Dirzo**, R. 1999. La biodiversidad como crisis ecológica actual ¿qué sabemos? In: *La Evolución Biológica*. J. Núñez-Farfán, y L. E. Eguiarte (Comp.) Facultad de Ciencias, Instituto de Ecología UNAM CONABIO.
18. **Dirzo**, R. 1999. El manejo racional de los ecosistemas forestales. *Investigación y Ciencia* (Versión en español de Scientific American). 278: 47-48.
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20. **Dirzo**, R. 2000. Carlos Vázquez Yanes y el Instituto de Ecología. *Ciencias* 57: 8-17
21. **Dirzo**, R. R. Lindig, & J. P. Rosenthal. Plantas cultivadas y sus parientes silvestres: sistemas modelo para estudios de ecología química. 2002. In: *Relaciones Químicas entre organismos: Aspectos básicos y perspectivas y su aplicación*. Anaya, A. L., F. Espinosa-García, R. Cruz-Ortega. UNAM. PyV. Pp. 607-632.
22. **Dirzo**, R. & Koleff, P. 2010. Biodiversidad: Colorido y personalidad de nuestro planeta. ***Ciencia y Desarrollo***
23. Pringle, E.G., **Dirzo**, R. 2016. Efectos del cambio climático antropogénico sobre las interacciones mutualistas entre especies tropicales. ***CIENCIAS*** 120-121
24. **Dirzo**, R. 2019. La verdadera cara de la extinción biológica. ***Este País***, septiembre, pp. 40-43

PRESENTATIONS IN CONFERENCES AND SYMPOSIA

- In Mexico: ~690 presentations
 - In USA and other countries: ~290 presentations
 - **Invited Departmental/Institutional Seminars (137 presentations)**
- University of Groningen, Holanda, 1980
 - Stanford University, 1983

- University of California, Irvine, 1984
- Smithsonian Tropical Research Institute, 1985
- Universidad de Costa Rica, 1986
- University of Miami, 1987
- University of California, Berkeley, 1988
- Stanford University, 1988
- Pomona College, Rancho Santa Ana Botanic Garden, 1988
- University of Puerto Rico, 1988
- University of California, San Diego, 1988
- University of Missouri-St. Louis, 1990
- University of Florida, 1990
- University of California, Irvine, 1990
- University of Southern Missouri, 1990
- Harvard University, 1990
- New York Botanical Garden, 1990.
- Pennsylvania State University, 1990
- Missouri Botanical Garden, 1990
- Real Jardín Botánico de Madrid, 1990
- Universidad de Sevilla, 1990
- Universidad de Granada, 1990
- University of California, Stanford, 1991
- University of California, Irvine, 1994
- University of California, Stanford (Biol. Sciences) 1994
- University of California, Stanford (FSI), 1994
- University of California, Riverside, 1995
- Northern Arizona University, 1997
- Stanford University, 1997
- Northern Arizona University (Biology), 1997
- Stanford University (Biol. Sciences), 1997
- University of California, Davis, 1998, 2007
- Bodega Marine Laboratories, 1998
- Northern Arizona University (Forestry), 1998
- University of California – Santa Barbara, 1998
- New Mexico State University, 1998
- University of Illinois, Chicago, Biology, 1998
- Universidad de Costa Rica, 1999
- Instituto Venezolano de Ciencias (IVIC), 2000
- Harvard University, 2001
- Stanford University, 2002

- University of California, Santa Cruz, 2004
- Stanford University, 2004
- Institute of Ecosystem Studies, 2005
- University of California, Berkeley, 2005
- Univesidad de Chile, 2005
- Museu Goeldi, Belem, Brazil, 2005
- Universidad Estasdual de Sao Paulo, 2006
- Universidad de Sao Paulo, Campinas, 2006
- University of California, Davis, 2007
- Instituto de Ecología, UNAM, 2007
- Ohio State University, 2008
- Cornell University, 2008
- University of Missouri, Columbia, 2009
- University of California, Berkeley, 2010
- World Wildlife Fund, Washington DC, 2010
- The Natural History Museums of Kenya, Nairobi, 2010
- Instituto de Ecología, UNAM, 2010
- Museo de Geología, Universidad de Guadalajara, 2010
- University of California, Merced, 2011
- Colorado State University, 2011
- Instituto de Ecología, AC, Mexico, 2011
- University of Arizona, Tempe, AZ, 2012
- Santa Clara University, Santa Clara, CA, 2012
- University of Utah, Salk Lake, 2012
- University of California, Los Angeles, 2012
- Universidad de Buenos Aires, Argentina, 2012
- Florida International University, 2013
- University of Hawai'i, Hylo, 2013
- Universidad de Sao Paulo, 2013
- Universidad de Ciencias y Artes de Chiapas (UNICACH), 2013
- Politecnico de Chiapas, 2013
- Universidad Intercultural de Mexico, Campus San Cristobal, 2013
- Quito Botanical Gardens, 2014
- University of Nevada, Reno, 2014
- University of Tennessee, 2014
- University of Texas, 2015
- Austin Botanical Gardens, 2015
- Universidad Nacional Autonoma de Mexico (UNAM), 2015
- Universidad de la Sierra de Juarez, Oaxaca, 2015

- CIIDIR (Center for Interdisciplinary Research), Oaxaca, 2015
- Universidad de Tabasco, Mexico, 2015
- Instituto de Ecología, AC, 2016
- Kent University, 2016
- Rice University, 2016
- MIT, Boston, 2016
- CIIDIR (Center for Interdisciplinary Research), Oaxaca, 2016
- Universidad de la Sierra de Juárez, Oaxaca, 2017
- National University of Mexico (UNAM), 2017
- Universidad de Las Américas, Puebla, Mexico, 2017
- Benemérita Universidad de Puebla, Mexico, 2017
- Universidad de Morelos, Mexico, 2017
- iDiv, The German Institute for Integrated Biodiversity Research, Leipzig, Germany 2018
- Lund University, Sweden 2018
- Stirling University, UK, 2018
- Bangor University, Wales, UK, 2018
- University of Cambridge, UK, 2018
- Senckenberg Research Institute for Biodiversity and Climate Change, Frankfurt, Germany, 2018
- Leipzig University Botanical Gardens, Germany, 2018
- Universidad Autónoma del Estado de Morelos, Mexico, 2019
- El Colegio Nacional de Biólogos de México, Mexico 2019
- Instituto Nacional de Geografía y Estadística (INEGI), Mexico, 2019
- National Center for Biological Sciences, Bangalore, India, 2019
- Kansas University, Lawrence, Kansas, 2019
- University of Arizona, Tucson, AZ, 2019
- Chinese Academy of Sciences, Beijing, 2020
- Universidade do Rio Grande do Sul, 2020
- Universidad Federal do Rio de Janeiro, 2020
- Stanford University, School of Earth, 2020
- Instituto de Ecología (INECOL) AC, 2020
- Universidad Autónoma de Tlaxcala, 2020
- The Mexican College of Biologists, 2020
- Universidad Autónoma de Tamaulipas, 2020
- ConCiencia en Las Américas, 2020
- Toktli Environmental Education Consortium, Mexico City, 2020
- National University of Mexico (UNAM), 2020
- Universidad Autónoma de Morelos, Mexico, 2020
- Universidad de Los Andes, Arequipa, Peru, 2020

- Stanford's Bechtel International Center, 2020
- Universidad Nacional de Costa Rica, 2020
- Colegio de la Frontera Sur, Mexico, 2020
- Museo de la Luz, Mexico City, 2020
- Universidad Veracruzana, Mexico, 2020
- Argentinian Society of Mammalogy, 2020
- Universidad Autonoma de Durango, Mexico, 2020
- Universidad Nacional Autonoma de Mexico, School of Sciences, 2021
- National Federation of Biologists, Mexico, 2021
- Universidad Veracruzana, CITRO, 2021
- University of Toronto, Mississauga, 2021
- University of Isazuai, Ecuador, 2021
- Pontificia Universidad Catolica de Chile, 2021
- Universidad Nacional Autonoma de Mexico, School of Sciences, 2021
- Chinese Academy of Sciences, 2021
- Universidad Nacional de Colombia (Botanical Gardens), 2021
- Instituto de Ecologia, A.C., Xalapa, Mexico
- Universidad Nacional Autonoma de Mexico, Institute of Biotechnology, 2021
- Universidad Autonoma de Taxcala, Mexico, 2021
- Benemerita Universidad Autonoma de Puebla, Mexico, 2021
- Universidad Nacional Autonoma de Mexico, School of Sciences, 2021

MAJOR ADVISOR OF STUDENTS (Graduation completed in Dirzo Lab, UNAM or Dirzo Lab, Stanford)

B. Sc. Level (Student, year, Thesis Title, and Institution)

1. Zagorín, H.B. 1982. Reducción de la adecuación de plántulas tropicales por herbivoría. Instituto de Investigaciones Biomédicas, UNAM
2. Trejo, R.I. 1983. Estudio de la vegetación en la zona de Tlalcozotitlán, en la depresión oriental del Río Balsas, Gro., Facultad de Ciencias, UNAM
3. López, E. S. 1984. Estudio de la vegetación de Huamuxtitlan, Gro. en la depresión oriental del Balsas. Facultad de Ciencias, UNAM
4. Oyama, A.K. 1984. Biología comparativa entre individuos masculinos y femeninos de *Chamaedorea tepejilote* (Palmae).. Facultad de Ciencias, UNAM
5. Núñez-Farfán, J. 1985. Aspectos ecológicos de especies pioneras en una selva húmeda de México. Facultad de Ciencias, UNAM

6. Arias, D. M. 1986. Análisis de la comunidad de semillas en suelos superficiales de selva baja caducifolia. Escuela de Ciencias Biológicas, Universidad de Morelos
7. Illescas-Ramos, M. 1987. Algunos aspectos de la ecología post-dispersión de semillas de *Trichilia martiana* (Meliaceae), en la selva de Los Tuxtlas, Ver. Facultad de Ciencias, UNAM
8. Mota, L. M. 1987. Estudio experimental sobre la ecofisiología digestiva de una iguana herbívora, *Iguana iguana*. Facultad de Ciencias, UNAM
9. Palomeque, R. 1988. Demografía y Herbivoría de *Omphalea oleifera* (Euphorbiaceae) en Los Tuxtlas. Facultad de Ciencias, UNAM
10. Andrade, O. 1989. Insectos depredadores asociados a las semillas de plantas arbóreas de la Estación de Biología "Los Tuxtlas". Facultad de Ciencias, UNAM
11. Escobar, P. 1989. Aceptabilidad de semillas tropicales por dos especies de roedores, *Peromyscus mexicanus* Saussure, 1860 (Cricetidae) y *Heteromys desmarestinanus* Gray 1868 (Heteromyidae) en la selva de Los Tuxtlas, Veracruz. Facultad de Ciencias Biológicas, Universidad Veracruzana
12. Careaga, S.A. 1989. Efecto de la variación en el tamaño de las semillas sobre el desempeño de plántulas de especies tropicales. Facultad de Ciencias, UNAM
13. Guevara, R.E. 1994. Ecología de la interfase hongo-micófago en el bosque mesófilo de la Reserva de la Biosfera El Triunfo, Chis. Universidad Veracruzana
14. Sánchez, C. 1995. Depredación predisposición en semillas de *Nectandra ambigens* en la selva de Los Tuxtlas. Facultad de Ciencias, UNAM
15. Frías, R. 1996. Ecología del mutualismo entre *Cecropia obtusifolia* y hormigas *Azteca* en la selva de Los Tuxtlas. Facultad de Ciencias, UNAM.
16. Mendoza, E. 1997. Análisis de la deforestación de la selva Lacandona: Patrones, magnitud y consecuencias. Facultad de Ciencias, UNAM
17. Barajas, N. 1998. Respuestas ecológicas y fisiológicas de plantas pioneras y tolerantes a la defoliación en La Selva Lacandona, Chis., México Facultad de Ciencias, UNAM
18. López-Acosta, J.C. 1999. Depredación predisposición y germinación de semillas de *Ficus tecolutensis*, una especie hemiepífita de la selva de Los Tuxtlas Ver. Universidad Veracruzana
19. Del Val, E. 1999. Defensa Química y por hormigas durante la ontogenia de *Cecropia peltata* (Cecropiaceae) en la selva Lacandona. Facultad de Ciencias, UNAM
20. Boege, K. 1999. Influencia de la heterogeneidad edáfica en la asignación de recursos y en la herbivoría de *Dialium guianense* (Caesalpiniaceae): consecuencias ecológicas y evolutivas. Facultad de Ciencias, UNAM
21. Cachú, Y. 1999. Variación intraespecífica en la incidencia de patógenos foliares en *Syngonium podophyllum* Schott (Araceae) en la selva de Los Tuxtlas, Veracruz. Escuela de Biología Universidad Simón Bolívar
22. Zenteno, L. 2001. Efectos de la Fragmentación del Hábitat sobre la Herbivoría en *Chamaedorea alternans* (Arecaceae) en la Selva de Los Tuxtlas, Veracruz. Benemérita Universidad Autónoma de Puebla, Escuela de Biología

23. Sánchez, J. G. 2002. Variación intraespecífica en la herbivoría y su impacto en algunos componentes del éxito reproductivo masculino y femenino de *Ipomoea pauciflora* en una Selva Baja Caducifolia. Facultad de Ciencias UNAM
24. Palomino M. 2002. Variación intersexual en la asignación de recursos y herbivoría en *Cecropia obtusifolia* en la selva de Los Tuxtlas. Facultad de Ciencias UNAM
25. Meneses. N. 2002. Biología reproductiva y un análisis del impacto de la fragmentación sobre el éxito reproductivo de *Bactris mexicana* en la selva de Los Tuxtlas. Facultad de Ciencias UNAM
26. Carrasco P.V. 2002. Variación interespecífica en la herbivoría en plantas de fenología contrastante en la Selva Baja de Huautla. Facultad de Ciencias UNAM
27. Ruiz. B. 2003. Impacto de la fragmentación sobre los factores del ambiente físico y los patrones de herbivoría en plantas de la selva de Los Tuxtlas, Veracruz. Facultad de Ciencias UNAM
28. Bonilla, S. 2004. Incidencia de agallas sobre las especies de moraceae simpátricas en la selva de Los Tuxtlas. Benemérita Universidad Autónoma de Puebla
29. García, K. 2007. Herbivoría y fragmentación en la selva de Los Tuxtlas, Universidad Autónoma del Estado de Morelos

M. Sc. Level and Honors (Student, year, Thesis Title, and Institution; UNAM and Stanford)

1. Banderas, A. 1988. Análisis de la estructura de la comunidad fitobentónica del Lago El Sol, Nevado de Toluca, México. Facultad de Ciencias, UNAM
2. Jiménez, C. 1989. Estudios experimentales sobre la aceptabilidad del follaje de plantas tropicales a insectos fitófagos. Facultad de Ciencias, UNAM
3. Cruz de la, M. 1990. Estudio sobre herbivoría y demografía en *Echeveria gibbiflora* (Crassulaceae) en el Pedregal de San Angel. Facultad de Ciencias, UNAM
4. García-Guzmán, G. 1990. Ecología de Patógenos en el follaje de plantas en la selva de Los Tuxtlas. Facultad de Ciencias, UNAM
5. Meli, P. 2004. Ensayo de introducción de plantas para la restauración de potreros en Los Tuxtlas. Posgrado en Ciencias Biológicas, UNAM
6. Uusimaa, H. 2004. Consequences of defaunation: variation in the intensity of trampling the understorey of two Mexican rainforests of contrasting conservation. University of Helsinki, School of Bio-Sciences
7. Carrasco, V. 2004. Manual de manejo germinativo de especies arbóreas para su uso en la reforestación de la selva de Los Tuxtlas, Ver. Posgrado en Ciencias Biológicas, UNAM
8. De la Vega, A. 2005. El papel de los cítricos en la restauración de potreros de Los Tuxtlas, Veracruz. Facultad de Ciencias, UNAM
9. Kristina Marie Bischell. 2008. Ecology of soap plant at Jasper Ridge, Stanford University
10. Katherine J. Mertes. 2009. Land use change in Los Tuxtlas, Mexico, Stanford University

11. Chu, C. 2013. The joint effects of leaf chemistry and phyllosphere fungi on levels of herbivory in a tropical tree (*Pisonia grandis*) at Palmyra Atoll. Department of Biology, Stanford University
12. Hoskins, S. 2012. Behavioral responses of mule deer (*Odocoileus hemionus*) to camera traps. Department of Biology, Stanford University
13. Chu, C.H. 2012. The Joint Effects of Leaf Chemistry and Phyllosphere Fungi on Levels of Herbivory in a Tropical Tree (*Pisonia grandis*). Department of Biology, Stanford University
14. Minh, C. N. Ho. 2013. A survey of insect flux across aquatic and terrestrial boundaries: Implications for resource subsidies and wetland conservation. Department of Biology, Stanford University
15. Miller-Ter Kuile, A. 2012. Honors Thesis, Earth Systems – Biosphere Track
16. Morgidge, T. 2013. The Effects of non-trophic herbivory by vertebrates on understory plants in temperate and tropical ecosystems (**Firestone Medal Award, Biology**), Department of Biology, Stanford University
17. Yeung, K. 2015. Herpetofauna diversity across three ecosystems in the Jasper Ridge Biological Preserve. Department of Biology, Stanford University
18. Nolan, I. 2015. The effects of herbivory, transgenerational changes and conspecific communication on the induced defences of wild radish (**Firestone Medal Award Winner, Biology**), Stanford University
19. Zuckewise, A. 2016. Bobcat habitat preferences and long-term mammal survey at Jasper Ridge Biological Preserve. Department of Biology, Stanford University
20. Bieler, S. 2017. Correlative analysis of the effect of galling insects on plant performance. Department of Human Biology, Stanford University.
21. Powell, T., 2017. Sapling recruitment and oak regeneration limitation at Jasper Ridge Biological Preserve. Department of Biology, Stanford University
22. Bejjani, M. 2018. Development of sense of place in USA zoos: Effect of featuring local vs. exotic species. Department of Biology, Stanford University
23. Weber, D. 2018. Influence of anthropogenic disturbance on vertebrate trampling of understory plants in a North American temperate woodland. Department of Biology, Stanford University
24. Tattoni, David. 2020. Riparian Avifauna of the San Francisco Bay Region: Population Dynamics and Future Outlooks with Anthropogenic Climate Change. School of Earth, Energy and the Environment, Stanford University (**Firestone Medal Award Winner, Biology**)
25. Nelson, Rebecca. 2020. Variation in Insect Herbivory, Palatability, and Plant Defensive Traits across sympatric California Oak species (**Fox Award Winner, Biology**)
26. Drake, Osanna V. 2020. Chytridiomycosis on a California University Campus: Comparing infection prevalence by physiology, climate, and local environment. Honors program in Earth Sciences, Stanford University

27. Risberg, Carl. 2021. A global analysis of non-trophic impact of herbivores on seedling models under contrasting levels of defaunation. Honors Program in Earth Sciences, Stanford University (**Outstanding Research Award**)

Ph. D. Level (Student, year, Thesis Title, and Institution)

1. Domínguez, C. A. 1990. Consecuencias ecológicas y evolutivas del patrón de floración sincrónico y masivo de *Erythroxylum havanense*. UACPyP-CCH-Centro de Ecología. (Awarded with special honors)
2. Núñez-Farfán J. 1991. Biología evolutiva de *Datura stramonium* L. en el centro de México: Selección natural de la resistencia a los herbívoros, sistema de cruzamiento y variación genética intra e interpoblacional. UACPyP-CCH-Centro de Ecología
3. Rosenthal, J. P. 1993. Effects of life history, domestication, and agronomic selection on plant resistance to insects: Maizes and wild relatives University of California, Berkeley.
4. Arizmendi, M.C. 1994. Interacciones ecológicas múltiples: El caso de la polinización por colibríes y el ladrón de néctar *Diglossa baritula*. UACPyP-CCH-Centro de Ecología.
5. Morón, A. 1995. Interacciones planta-herbívoro en un pastizal alpino: la interfase aérea y subterránea. UACPyP-CCH-Centro de Ecología.
6. Trejo, R. I. 1998. Distribución y diversidad de selvas bajas de México: relaciones con el clima y el suelo. Facultad de Ciencias, UNAM.
7. Mariano, N. 2001. Efecto de la herbivoría sobre la adecuación masculina y femenina de *Cucurbita argyrosperma* ssp. *sororia*. UACPyP-CCH-Centro de Ecología.
8. Sánchez-Ramos, G. 2002. Estudio de la interacción planta-herbívoro en el bosque mesófilo de la reserva de la biosfera El Cielo, Tamaulipas, México. Tesis Doctoral Facultad de Ciencias UNAM.
9. Mendoza, Eduardo. 2005. Consecuencias ecológicas de la defunación tropical. Tesis Doctoral, Posgrado en Ciencias Biomédicas, UNAM, Mexico.
10. López, J.C. 2007. Ecología evolutiva de la interacción planta-herbívoro en *Ficus* hemiepipítos. Instituto de Ecología, AC.
11. Aguirre, A. 2009. Efectos de la fragmentación en la ecología y reproducción de la palma *Astrocaryum mexicanum* en Los Tuxtlas. Posgrado en Ciencias Biológicas, UNAM.
12. Ruiz, B. 2010. Fragmentación e interacciones planta-herbívoro-enemigo natural. Posgrado en Ciencias Biológicas, UNAM
13. Gutiérrez-Granados, G. 2010. Impactos de la extracción forestal sobre mamíferos herbívoros y la interacción planta-mamífero. Posgrado en Ciencias Biológicas, UNAM
14. Young, H. S. 2010. Indirect effects of plant community shifts across ecosystem boundaries. Stanford University
15. Kurten, E. 2010. Mammal-plant interactions in tropical forests. Stanford University.

16. Adams, R. 2010. Ecological and evolutionary connections between genetic and species diversity, Stanford University.
17. Pringle, E. 2011. Context-dependent interactions in an ant-plant-hemipteran symbiosis. Stanford University.
18. Donatti, I. C. 2011. Ecological studies on seed dispersal networks: Insights from a diverse tropical ecosystem. Stanford University.
19. Zepeda, V. 2011. Interacciones planta-herbívoro en especies dioicas de *Chamamedorea* en la selva de Los Tuxtlas, Ver. Posgrado en Ciencias Biológicas, UNAM
20. Busby, P. 2012. Causes and consequences of fungal diseases in cottonwoods. Stanford University.
21. Abelson, E. 2013. Brain size and extinction risk in mammals. Stanford University.
22. López, A. 2015. Balancing management and preservation of Mediterranean scattered oak woodlands (Dehesas) in human-dominated landscapes. Polytechnical University of Madrid, Spain.
23. Schroeder, J. 2017. Community composition and ecology of Neotropical root-associated fungi. Stanford University, Department of Biology (Defense November 2017)
24. Wojakowski, M. M. 2017. A new paradigm for the conservation of turtles: ecosystem-based approaches for understanding population variability. Stanford University, Department of Biology (Defended September 2017)
25. Morrison, B.L. 2019. Complex species interactions in a human world: The impact of agricultural intensification on species interactions network structure. Department of Biology (Defended June 2019)
26. Reshamwala, H.S. 2020. Ecology of the Red Fox in the North-Western Trans-Himalayan Landscape of India. Saurashtra University, Rajko, India (Scheduled for defense September 2021)
27. Martin, J.T. 2021. Bi-directionality in host-parasite interactions. Department of Biology (Defended June 2021)
28. McFadden, T.N., 2021. Can working lands work for conservation? Department of Biology (Defended June 2021)

Current Graduate Students:

- **PhD**

Taylor McFadden

Lucas Pavan

Luisa Genes

Chinmay Sonawane

- **Postdocs/visiting scholars:**

Eduardo Mendoza

Yolanda Cachú
Sasha Kramer
Roger E. Guevara
Hillary S. Young
Guangfu Chan
Javier Ruiz
Eric Kurten
Mar Sobral
Kim Williams-Guillén
Esther Sebastian-Gonzalez
Itzel Arias
Joseph Fragoso
Ben Wilder
Jomar Barbosa
Ramón Perea
Geraldo Fernandes
Pedro Galetti
Fernando H. Martin Goncalves
Yasmine Antonioni
Gianalberto Losapio
Tongbao Qu
Karina Madriaza

RECOGNITIONS/AWARDS

- Outstanding B.Sc. Thesis Award (September 1974)
- National System of Researchers of Mexico Level I Award (1984 - 1990).
- National System of Researchers of Mexico Level II Award (1990-1998)
- National System of Researchers of Mexico Level III Award (1999-)
- Botanical Society of Mexico Award for Student Thesis Award: Biología Comparativa de Individuos masculinos y femeninos de *Chamaedorea tepejilote* (Palmae). A. Ken Oyama. First prize, México, 1987
- Graduate student Award: Juan Núñez-Farfán, Mexico 1991. First Prize; Weizman Prize of the Mexican Academy of Science for Student Thesis Award: Biología evolutiva de *Datura stramonium* L. en el centro de México: Selección natural de la resistencia a los herbívoros, sistema de cruzamiento y variación genética intra e interpoblacional. PhD, Centro de Ecología- UACEPYP/CCH
- Pew Scholar in Conservation and the Environment Award. The Pew Charitable Trust, Madison, Wisconsin, USA. 1992
- President, Association for Tropical Biology, 1994

- Selected speaker to the special symposium on Achievements and Challenges in Ecology (Ecological Society of America-British Ecological Society), Orlando, 2000.
- Member, Mexican Academy of Sciences
- Member, Morelos Academy of Science
- Outstanding Service Award of the Organization for Tropical Studies, 2002.
- Presidential Award: Ecological Merit in Research 2003 by SEMARNAT, Ministry of Environment 2003.
- Universidad Nacional Autónoma de México Award in Natural Sciences, Research UNAM 2003.
- Foreign Associate, US National Academy of Sciences, 2004
- Foreign Member, American Academy of Arts and Sciences, 2004
- Member, California Academy of Sciences, 2008
- Fellow, Ecological Society of America
- Doctor Honoris Causa, Universidad Autonoma del Estado de Morelos, Mexico, 2015
- Medal of Honor (Science), State Congress, Morelos, 2015
- Merit in Ecology Medal, Ecological Society of Mexico, 2015
- Miriam Arnold Rollan Prize for Community Service, Stanford University, 2016
- Medal for Merit in Research and Education: International Association for Tropical Biology (ATBC), 2017
- President Miguel Aleman Medal for outstanding work in ecology and environmental problems, Mexico City, 2017.
- Medal Alfonso L. Herrera: Distinguished Scientist, Universidad Autonoma de Puebla, Mexico, Mexico City 2017
- Medal Luis Cifuentes, Mexican Federation of Biologists, Area of Research, Puerto Vallarta, Mexico, 2020
- Naturaleza, Sociedad y Territorio Prize. International Book Fair, Universidad de Guadalajara, Mexico, 2021
- Honorary Lectures (“Catedras”):
 - The UNESCO Lecture on Global Change, Universidad del Estado de Morelos, Mexico, 2017
 - Alfonso L. Herrera Lecture, Universidad Autonoma de Puebla, Mexico, 2017
 - The President Miguel Aleman Lecture, Mexico City 2017
 - The Boething Lecture, Center for Conservation Biology, Stanford University, 2018

SERVICE

Service to the Community

Outreach and education programs underserved populations in California

- REAL – The Redwood Environmental Academy of Leadership. Partners: The Redwood City High School. 2008-Present
- STEAM for Latina Girls – Science, Technology, Engineering, Arts and Mathematics for Latina Girls. Partners: Stanford’s Center for Latin American Studies, The Mexican Consulate in San Jose, CA and a Middle School from the Bay Area (each year a different school). 2015-Present
- Con-Ciencia y Diversion—A 5-episodes series of programs on ecology, biodiversity, and global change for underserved schools in Bay Area. 2020

Editorial Service

- Member of the Editorial Board: Boletín Soc. Bot. Méx. 1986-1993.
- Member of the Editorial Board: Trends in Ecology and Evolution. 1993--
- Member of the Editorial Board: Vida Silvestre Neotropical 1993-2000
- Member of the Editorial Board: Biotam. 1994-2000
- Member of the Editorial Board: Ecological Studies, Springer Verlag. 1994-2004
- Member of the Editorial Board: Plant Ecology. 1995-2000
- Member of the Editorial Board: Acta Zoológica Mexicana 1997-2004
- Member of the Editorial Board: PNAS, 2005-
- Member of the Editorial Board: Biological Conservation 1998-2006
- Member of the Editorial Board: Biotropica 1998-2000
- Member of the Editorial Board: Folia Entomologica 1998-2004
- Member of the Editorial Board: Ecología Austral 1999-2004
- Member of the Editorial Board: Tropical Ecology, 2012-
- Member of the Editorial Board: Ecosystem Health and Sustainability, 2016-
- Member of the Editorial Board: Annals of the Brazilian Academy of Sciences, 2020-
- Member of the Editorial Board: Sustainability, 2020-

- Reviewer for:

- Trends in Ecology and the Environment
- Science
- Science Advances
- Nature
- PNAS (reviewer and editor)
- Ecology
- Ecology Letters
- Evolution
- Annual Review of Ecology and Systematics
- PLoS One
- PLoS Biology

- Oecologia
- Oikos
- Plant Ecology
- Biotropica
- Interciencia
- Journal of Vegetation Science
- Conservation Biology
- Biological Conservation
- Biodiversity Conservation
- Journal of Animal Ecology
- Journal of Ecology
- Journal of Tropical Ecology
- Forest Ecology and Management
- Anais of the Brazilian Academy of Sciences
- Forest Ecology and Management
- Perspectives in Ecology and Conservation

- Service in National/International Committees and Boards

- INPC (International Network Planning Committee), OTS, 1989.
- National Institutes of Health, Proposals Review Panel, 1998.
- Scientific Programme Committee, XVI International Botanical Congress, 1999.
- Evaluation Committee of Educational Program of Organization for Tropical Studies, OTS, 1998.
- Graduate Education Review Committee of the OTS 2000-2001
- National Committee DIVERSITAS 2001-
- Chair, National Committee of SCOPE (Scientific Committee on Problems of the Environment) 2001-2002
- Executive Committee, DIVERSITAS 2002-
- Chair, Biology Section, Mexican Academy of Sciences, 2002-2004
- Vice-chair, DIVERSITAS, 2002-
- Education Committee, Organization for Tropical Studies, OTS, 2004-
- Stanford University: Curriculum Committee, 2005-2006
- Stanford University: Advisory Board: Center for Latin American Studies, 2005-2010
- Editorial Board of Trends in Ecology and Evolution, 1994-
- Co-coordinator of sections 6 y 7 of the Global Biodiversity Assessment, 1994-1995
- Public Affairs Committee of the Ecological Society of America, 1995-1998
- Elected member of the Scientific Committee of the Program International Geosphere-Biosphere Program (IGBP), International Council of Scientific Organizations (ICSU), Sweden. 1998-2001.

- Chair, Biology section, Mexican Academy of Sciences, 2002-2004
- Member at Large of the Ecological Society of America Governing Board. 2000-2001.
- Governing board and Chair of the Conservation Program of the Mexican Fund for the Conservation and Nature 2000-
- Governing board of Interdisciplinary Center for Biodiversity and the Environment (CeIBA) 2001
- Board of Trustees, The Christensen Fund. 2006-2011; 2017-
- Board of Trustees, The Cary Institute for Ecosystem Studies. 2006-2011
- Board of Trustees, Paso Pacifico. 2007-
- National Academies Committee for the Development of A Framework for Science Education, 2010-2012
- Public Affairs Committee, Cary Institute for Ecosystem Studies, 2010-2011
- Board of Science Education, the US National Academies, 2011-
- Scientific Advisory Committee, Inter-American Institute of Global Change, 2011-
- Scientific Council on Biodiversity for the Central American Integration System (SICA), Central American Commission for Environment and Development (CCAD), 2012-
- Vice-President, The Latin American Plant Sciences Network (RLB), 2012-
- Scientific Advisory Board, Instituto Regional de Biodiversidad de Centroamérica y el Caribe (IRBIO), 2012-2014
- Advisory Board, Mongabay, 2017
- Advisory Board, BSCS-Science Learning (Biological Sciences Curriculum Study, USA), 2019-

Service within Stanford University

Advisory Board, CLAS, 2005-2010

Interdisciplinary Review Program, 2005-2006

Steering Committee, Haas Center, 2009-

Committee for the Review of Undergraduate Majors, 2010-2013

Committee for the Review of Interdisciplinary Graduate Programs, 2010-2012

Advisory Board of Bing Overseas Seminars Program, 2010-

Jasper Ridge Biological Preserve Advisory Committee, 2008-

EcoEvo Retreat Committee, 2008-

Campus Sustainability Committee, 2011-2010

Committee for EVP Awards, Woods Institute for the Environment, 2013-2015

Advisory Committee, BOSP, Stanford, 2013-

Steering Committee, Haas Center for Public Service, 2015-2016

Breadth Governance Board, 2019-2021

Public Art Committee, 2019-2021

Diversity, Equity and Integration Committee, Department of Biology 2020-

Associate Chair, Diversity and Integration, School of Earth 2020-

Environmental Justice Working Group, Stanford 2020-

Research Grants

- Estudios sobre el efecto de herbívoros en la dinámica de poblaciones de plantas tropicales. National Council of Science and Technology, Mexico (CONACyT), 1982
- Herbivoría y fitoquímica en dos selvas húmedas de México. CONACyT, 1985
- Studies on plant-pathogen interactions in a Mexican rainforest. National Geographic Society, 1987
- Evaluación experimental del significado adaptativo de características vegetales en su interacción con animales, en Chamela. CONACyT, 1989
- Análisis comparativo del efecto de dos grupos contrastantes de herbívoros en plantas del Pedregal de San Ángel. CONACyT 1990
- Investigaciones sobre conservación tropical e interacciones planta-animal. Jessie Smith Noyes Foundation. 1989-1990
- Plant-Animal Interactions in Mediterranean Forests, Spain. Ministerio de Educación y Ciencia, Spain 1990
- Ecología de polinizadores y ladrones de néctar en un bosque mesófilo de México. Dirección General de Asuntos del Personal Académico, UNAM. 1991
- Factores limitantes de la fecundidad en *Ipomoea wolcottiana*. CONACyT, 1992
- Floristic diversity and conservation status of Mexican tropical dry forests. National Geographic Society. 1992
- Desarrollo científico de la Estación Chajul, en la Selva Lacandona. Pew Scholars Program in Conservation and the Environment. 1992
- Ecología evolutiva del género *Begonia* en México. Dirección General de Asuntos del Personal Académico, UNAM. 1994
- Efecto de la Herbivoría sobre la adecuación masculina en *Cucurbita argyrosperma sororia* CONACyT, 1996
- Grant for Sabbatical Leave, UNAM and CONACyT, 1997-1998
- Consecuencias de los patrones de uso de la tierra sobre la interacción planta-animal. CONACyT 1999
- Biodiversity and human impacts in Iberoamerica, CYTED (Science and Technology for Development of Iberoamerica), 2003-2008
- BioAct. Module on Survey of mammals of the Jasper Ridge Biological Preserve. NSF
- Invasion in Paradise: Cascading Effects of Invasion of Coconut Palms. National Geographic Society, 2009
- Evolutionary Ecology of a Multi-Species Mutualism at a Regional Scale. National Science Foundation, 2009 – 2010 (co-PI with Deborah Gordon and Elizabeth Pringle)
- Ecology of seasonally dry tropical forests in Mexico. Center for Latin American Studies, Stanford, 2007

- Mutualistic Interaction between plants and insects: mymecophilly. Freeman Spogil Institute for International Studies, Stanford University, 2005-2006. Granted
- Dissertation Research (DIG to Douglas McCauley): The Effects of Removing Large Herbivores on the Ecology of Infectious Disease. National Science Foundation, 2009 – 2010
- Dissertation Research (DIG to Hillary S. Young): Allochthonous Nutrient Depletion as Mechanism of Plant Invasion (*Cocos nucifera*). National Science Foundation, 2008-2010
- Dissertation Research (DIG to Erin Kurten): How Mammals Impact Plant Functional Diversity of a Neotropical Forest. National Science Foundation, 2008 – 2010
- Ecology: Learning by doing and making a difference. Stanford University K-12 Initiative. 2008 -2010
- National Science Foundation, 2005-2010. Testing Enrichment Planting in Fragmented Tropical Landscapes.
- National Science Foundation, 2005-2010. Evolutionary ecology of the *Azteca-Cordia alliodora* mutualism. 2009-2011
- Woods Institute for the Environment, Stanford University, Environmental Ventures Project, 2010-2011. Effects of defaunation and land use on risks of disease in humans in East Africa.
- National Science Foundation, 2008-2010. Dissertation Research (DIG to Eric Ableson): Mammalian encephalization and extinction risks.
- The Woods Institute for the Environment, Stanford University, 2012-2019. The Osa-Golfo Initiative.
- National Geographic Society, Rat eradication in an insular ecosystem: The Palmyra atoll, 2015-2017
- The German Institute for Integrative Biodiversity Research, Leipzig, Germany, 2018
- The National Science Foundation, 2018-2022. Ambassadors for STEM Training to Enhance Participation (A-STEP)
- Center for Latin American Studies, Stanford. Tinker faculty Research Grant, 2021

OTHER ACTIVITIES

- Scientific Events Organizer

- Symposium "Una década en la ciencia: avances en la ecología, UNAM. México, November 1980.
- Symposium Plant Population Ecology: Homage to Charles Darwin. Oaxtepec, México, 1982.
- Symposium No. 8: Interacciones planta-animal. IV Congreso Latinoamericano de Botánica. Medellín Colombia, 1986.
- Symposium and Workshop Population and Physiological Ecology of Plants in Mesoamerican Forests. San José, Costa Rica, 1986 (with D. A. Clark and N. Fetcher, NSF).
- Symposium "Biología de las Poblaciones". X Congreso Mexicano de Botánica, Guadalajara, 1987.
- Annual Meeting of Chemical Ecology (with Ana Luisa Anaya). UNAM, July 1989.
- Ecological sustainability and institution building in Latinamerica (coorganizador con T. Smith and Enrique Forero). Missouri Botanical Garden, May 1990.
- Program Chair of the Association for Tropical Biology Annual meeting, American Institute of Biological Sciences, San Antonio, Texas, August, 1991.
- International Meeting on Problems of the Knowledge and Conservation of Biodiversity, 1992, México D.F. (with José Sarukhán and Daniel Piñero).
- The Ecosystem Functions of Biodiversity: Tropical Rain Forests; December 4-8, 1993; Oaxtepec, México (with Gordon Orians)
- Program Chair, Association for tropical Biology Annual meeting, Guadalajara, Jalisco, 1994.
- Symposium 13: Conservación de bosques templados y tropicales. VI congreso Latinoamericano de botánica, Mar del Plata, Argentina, October 1994.
- Annual Meeting of Chemical Ecology (with Ana Luisa Anaya). UNAM, November 1996.
- Global Change Open Science Conference of the IGBP, Cuernavaca, February 2000.
- Global Change Open Science Conference of the IGBP, Amsterdam, July 2001.
- Local Program Co-Chair, Ecological Society of America Annual Meeting, 2002.
- Local organizer, First Open Science Conference DIVERSITAS, Oaxaca, Mexico, 2005
- Organizing committee: Ecology in an era of globalization: challenges and opportunities for environmental scientists in the Americas. Ecological Society of America. Jan 2006
- Ecology and conservation of tropical dry forests from Latin America, 2009
- INTECOL Congress and 100th Anniversary of the British Ecological Society, 2012-13
- ATBC and OTS Annual Meeting and 50th Anniversary, 2013
- ATBC Organizing Committee of the Association's Annual Meeting, 2016-17