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Dr. PABLO A. MARQUET,

Birthdate and place: August 2, 1963 - Santiago, Chile.

Current affiliation: Full Professor, Ecology Department, Catholic University of Chile, P.O. Box 114-D, Santiago, Chile.
Associated Scientist at the Center for Advanced Studies in Ecology and Biodiversity (CASEB, Chile) and Instituto de Ecología y Biodiversidad (IEB)
External Faculty The Santa Fe Institute (USA)

Phone: (56-2) 686 2639. Fax: (56-2)
686 2621/686 2822. E-mail: pmarquet@bio.puc.cl
URL: <http://www.bio.puc.cl/profs/marquet>

Education: B.Sc. (Biology) Universidad de Concepción, Concepción (Chile), 1987;
Ph.D. (Biology) University of New Mexico (USA), 1993; Postdoctoral Fellowship,
Catholic University of Chile 1994.

Professional experience: Research instructor, Catholic University of Chile (1988-1990); Assistant Professor, Department of Ecology, Catholic University of Chile (1994-1997); Associate Professor, Department of Ecology, Catholic University of Chile (1998-2004); Full Professor (2005-) and Director of Research and Graduate Studies (Faculty of Biological Sciences, P. Universidad Católica de Chile). Have been Teaching and Visiting Professor at the Universidad de La República (Uruguay), and Visiting Professor at the Universidad Autónoma Metropolitana (Mexico), Sabbatical fellow of the National Center for Ecological Analysis and Synthesis (NCEAS, 2006-2007) and Santa Fe Institute (SFI, 2007).

Professional and academic honors: Instructor fellowship (1988, Catholic University of Chile); Fulbright-AMCHAM-LASPAU Fellowship (1990-1992); Graduate Student Achievement Award (1993, University of New Mexico); Young Scientist Award (1995, Biological Society of Chile), and the 2001 Outstanding Paper in the Discipline of Landscape Ecology Award given by the U.S. Chapter of the International Association for Landscape Ecology. Appointed Member of the FONDECYT Council for Science and Technological Development (2002-2005); Appointed member of the Science Advisory Board of the National center for Ecological Analysis and Synthesis (NCEAS, USA), Appointed International Fellow of the Santa Fe Institute (2002-2004); Appointed member of the Frontier Science Program of the Chilean National Academy of Sciences (2004-2006). Appointed member of The Faculty of 1000 (2005). Awarded a Guggenheim Fellowship (2006), Appointed member of the Science Board of SARAS (South American Institute for Resilience and Sustainability Studies 2007), Appointed member of the Science Board and Associated Researcher of the Valparaiso Complex System Institute (2007), Appointed member of the Advisory Committee for the Pew

Fellows Program (2008).

Professional Affiliations: Belongs to eight professional societies, among them, Ecological Society of America, Ecological Society of Chile, Society for Conservation Biology and the American Association for the Advancement of Science.

Professional Services: President of the Ecological Society of Chile (1999-2001), Chairman of the Doctoral Program in Ecology, Catholic University of Chile (1999-2006) Associate editor *Revista Chilena de Historia Natural* (1997-2004), *Ecology Letters* (1999-2005), *Diversity and Distribution* (2000- 2007), *Global Ecology and Biodiversity* (2004-2007), *Theoretical Ecology* (2007-), *Biodiversity Letters* (2007-). Reviewer of papers for *Nature*, *Science*, *Proceedings of the National Academy of Science*, *Ecology*, *Proceeding of the Royal Society*, *Ecological Modelling*, *Biology Letters*, *Biological Invasions*, *Trends in Ecology and Evolution*, *The American Naturalist*, *Functional Ecology*, *Ecology Letters*, *Ecoscience*, *Ecography*, *Journal of Biogeography*, *Diversity and Distribution*, *Journal of Herpetology*, *Conservation Biology*, *Acta Theriologica*, *Studies in Neotropical Fauna and Environment*, *Oryx*, *Revista Chilena de Historia Natural*, *Mastozoología Neotropical*, *Acta Zoológica Mexicana*, *Boletín de la Sociedad de Biología de Concepción* (Chile), *Boletín del Museo Nacional de Historia Natural* (Chile), *Revista Chungará* (Chile). Reviewer of proposals for NSF-USA, The Austrian Science Fund (FWF), the Chilean National Science Foundation (FONDECYT), Lincoln Park Zoo-Scott Neotropical Fund, John Simon Guggenheim Memorial Foundation. Member of the Biology panel (Chilean National Science Foundation 1995-1999), member of the NSF panel *Advancing Theory in Biology*. Has been extramural reviewer of five tenure applications (UC Davies, SUNY, Sheffield UK, University of New Mexico, Universidad de Comahue), External reviewer Program for the Development of Basic Sciences (PEDECIBA), Universidad de la República, Uruguay, 2007. Chairman of the GRC Conference "Towards a metabolic basis of ecology and evolution" (2006)

Grants: Has led over 20 research projects, funded by among others, Biodiversity Support Program, FONDECYT Chile and US National Science Foundation. Has participated as Co-PI in 10 other projects, funded by IAI, FONDECYT, and US National Institute of Health. Total funding US\$6 Millions

Lectures and Congresses: Has delivered over 20 lectures in Chilean, Mexican, Uruguayan, French, U.K. and U.S. research institutions, and has given over 40 presentations in national and international meetings (Argentina, Australia, Brasil, Colombia, Chile, Czech Republic, Great Britain, Mexico, Puerto Rico, United States of America, Uruguay and Venezuela). Has organized 15 symposia and workshops, both national and international.

Doctoral students and postdocs: Has graduated 14 Ph.D.: Alejandro Brazeiro (1999), Carmen Espoz (2002), Cristián Hernández (2004), Hernán Cofré (2004), Olga Barbosa (2005), Marcelo Rivadeneira (2005) Matias Arim (2005) Fabio Labra (2005), Pablo Vergara (2006), Sebastian Abades (2006), Marcela Aldana (2007) and Luis Balboa (2008), Petra Wallem (2009), Horacio Zeballos (2009). Currently has six

doctoral student (Ana Borthagaray, Constanza Weinberger, Leonor Valenzuela, Fernando Alfaro, Mariela Nuñez-Avila, and Leonardo Ramírez). Has supervised the following seven postdocs: Claudio Veloso (1997-99), Javier Figueroa (1998-2000) Fabio M. Tognelli (2003 –2004), Ernesto Badano (2006-2007), Fabio Labra (2006-2008), Sebastian Abades (2007-2008) and Angelica Gonzalez (2008). Has been a member of 19 doctoral dissertation committees.

Publications: Author of 105 scientific publications, 21 book chapters and two edited books.(1954 citations, H=23 [at least 23 papers have been cited 22 times or more])

- 1) Ortiz, J C & **P.A. Marquet** (1987) Una nueva especie de lagarto altoandino: *Liolaemus islugensis* (Reptilia - Iguanidae). *Gayana (Zool.)* 51: 59-63.
- 2) Medel R G, **P A Marquet** & F M Jaksic (1988) Microhabitat shifts of lizards under different contexts of sympatry: a case study with South American *Liolaemus*. *Oecologia (Berl.)* 76: 567-569.
- 3) Nuñez H, **P A Marquet**, R G Medel & F M Jaksic (1989) Niche relationships between two sympatric *Liolaemus* lizards in a fluctuating environment: The "lean" versus "feast" scenario. *Journal of Herpetology* 23: 22-28.
- 4) **Marquet P A**, J C Ortiz, F Bozinovic & F M Jaksic (1989) Ecological aspects of thermoregulation at high altitudes: the case of Andean *Liolaemus* lizards in northern Chile. *Oecologia* 81: 16-20.
- 5) **Marquet P A** (1989) Paleobiogeography of South American cricetid rodents: a critique to Caviedes & Iriarte. *Revista Chilena de Historia Natural* 62:193-197.
- 6) **Marquet P A**, F Bozinovic, R G Medel, Y L Werner & F M Jaksic (1990) Ecology of *Garthia gaudichaudi*, a Gecko endemic to the semiarid region of Chile. *Journal of Herpetology* 24: 431-434.
- 7) Jaksic F M, J E Jimenez, R G Medel & **P A Marquet** (1990) Habitat and diet of the Darwin's fox (*Pseudalopex fulvipes*) on the Chilean mainland. *Journal of Mammalogy* 71: 246-248.
- 8) **Marquet P A**, S A Navarrete & J C Castilla (1990) Scaling population density to body size in rocky intertidal communities. *Science* 250: 1125-1127. (Foto portada y comentado)
- 9) **Marquet P A** (1990) Competition between distantly related taxa: three reasons why it is not more often reported. *Revista Chilena de Historia Natural* 63:149-156.
- 10) Jimenez J E, **P A Marquet**, R G Medel & F M Jaksic (1990) Comparative ecology of Darwin's fox (*Pseudalopex fulvipes*) in mainland and island settings of Southern Chile. *Revista Chilena de Historia Natural* 63:177-186.
- 11) Medel R G, **P A Marquet**, S F Fox & F M Jaksic (1990) Depredación sobre

lagartijas en Chile central: importancia relativa de atributos ecológicos y morfológicos. *Revista Chilena de Historia Natural* 63:261-266.

12) Bozinovic F & **P A Marquet** (1991) Energetics and torpor in *Phyllotis darwini rupestris*: A rodent from the Chilean Pacific coastal desert. *Journal of Mammalogy* 72:734-738.

13) Jaksic F M, S Silva, **P A Marquet** & L C Contreras (1991). Food habits of Gurney's buzzard in Pre-Andean ranges and high Andean plateau of northernmost Chile. *Journal of Raptor Research* 25:116-119.

14) **Marquet P A**, L C Contreras, S Silva, J C Torres-Mura & F Bozinovic (1993). Natural history of *Microcavia niata* in the high Andean zone of northern Chile. *Journal of Mammalogy* 74:136-140.

15) **Marquet P A**, L C Contreras, S Silva & F M Jaksic. (1993). Food habits of *Pseudalopex foxes* in the Atacama desert, pre-Andean ranges, and the high-Andean plateau of northernmost Chile. *Mammalia* 57:130-135.

16) Brown J H, **P A Marquet** & M Taper (1993). The evolution of body size: Consequences of an energetic definition of fitness. *The American Naturalist* 142(4): 573-584

17) **Marquet P A**, J Pineda, J Clark, M-J Fortin, C Jacobi, S Wallins, J Wu, S Bollens & R D Holt. (1993). Ecological and evolutionary consequences of patchiness. *Lecture Notes in Biomathematics* 96: 277-304.

18) **Marquet, P A.** (1993). Ambiente en las áreas fronterizas del norte de Chile: La frontera Chileno-Peruana y Chileno-Boliviana. Pp.79-91. In: E Tréllez (ed.) *Ambiente y Fronteras: Una visión desde los países del convenio Andrés Bello*. Tercer Mundo Editores, Santafé de Bogotá, Colombia.

19) **Marquet, P.A.** (1994) Small mammals in the Atacama desert and in the adjacent Andean area: Biogeography and Community structure. *Australian Journal of Zoology* 42:527-542

20) Moreno, PI, C Villagrán, **PA Marquet**, & LG Marshall. (1994). Quaternary paleobiogeography of northern and central Chile. *Revista Chilena de Historia Natural* 67: 487-502.

21) **Marquet P A**, S A Navarrete & J C Castilla (1995) Body size, population density and the energetic equivalence rule. *Journal of Animal Ecology* 64: 325-332.

22) Kelt DA, JH Brown, EJ Heske, **PA Marquet**, SR Morton, JRW Reid, KA Rogovin, & G Shenbrot (1996) Community structure of desert small mammals: comparisons across four continents. *Ecology* 77: 746-761.

23) Taper M L. & **P A Marquet** (1996) How do species really divide resources?

American Naturalist 147:1072-1086.

24) Brown JH, **PA Marquet**, & M.L.Taper (1996) Darwinian fitness and reproductive power: reply to Koslowski. *American Naturalist* 147:1092-1097.

25) Lima M, **PA Marquet**, & FM Jaksic (1996) Extinction and colonization processes in subpopulations of five sympatric small mammals. *Oecologia* 107: 197-203.

26) Carothers, JH, FM Jaksic, & **P.A. Marquet** (1996). A model for species distributions along a gradient: *Liolaemus* lizards as study systems. *Revista Chilena de Historia Natural* 69: 301-307.

27) Keitt, T H, & **P A Marquet** (1996) Extinction cascades in introduced Hawaiian birds suggest self-organized criticality. *Journal of Theoretical Biology* 182: 161-167.

28) Torres-Contreras H, Silva-Aranguiz E, **PA Marquet**, PA Camus, & FM Jaksic (1997) Small mammals subpopulations at a semiarid neotropical site. *Journal of Mammalogy* 78(2): 505-513.

29) **Marquet, PA**, & M. Fox (1997) Southern Temperate biota and ecosystems: Past, present, and future. *Trends in Ecology and Evolution* 12: 294-295.

30) Carothers, JH, SF Fox, **PA Marquet** PA & FM Jaksic (1997) Thermal characteristics of ten Andean lizards of the Chilean genus *Liolaemus*. *Revista Chilena de Historia Natural* 70: 297-309.

31) Jaksic, FM, **PA Marquet**, & H. González (1997) Una perspectiva ecológica sobre el uso del agua en el norte grande: la región de Tarapacá como estudio de caso. *Estudios Públicos* 68: 171-195.

32) **Marquet P A**, & J. X. Velasco-Hernández (1997) A source-sink patch occupancy metapopulation model. *Revista Chilena de Historia Natural* 70: 371-380.

33) **Marquet P A** & M L Taper (1998). On size and area: Patterns in body size extremes across landmasses. *Evolutionary Ecology* 12: 127-139.

34) Lima M, **PA Marquet**, & FM Jaksic (1998) Population persistence and extinction of three neotropical small mammal species. *Oecologia* 115: 120-126.

35) Keymer, J. E., **P. A. Marquet** & A.R. Johnson. (1998) Pattern formation in a patch occupancy metapopulation model: A cellular automata approach. *Journal of Theoretical Biology* 194: 79-90.

36) Spotorno AE, H Cofré, G Manríquez, Y Vilina, **PA Marquet** & LI Walker (1998) Genoma intermedio en una especie de mamífero filotino *Loxodontomys* en Chile central. *Revista Chilena de Historia Natural* 71: 359-373.

37) Santelices, B. & **P.A. Marquet**. (1998) Seaweeds, latitudinal diversity patterns, and

the Rapoport's rule. *Diversity and Distribution* 4: 71-75.

38) Carothers, JH, **PA Marquet** & FM Jaksic (1998) Thermal ecology of a *Liolaemus* lizard assemblage along an Andean altitudinal gradient in Chile. *Revista Chilena de Historia Natural* 71: 39-50.

39) **Marquet PA**, F Bozinovic, GA Bradshaw, CC Cornelius, H González, JR Gutierrez, E R Hajek, JA Lagos, F López-Cortés, L Nuñez, E F Rosello, C Santoro, H Samaniego, VG Standen, JC Torres-Mura & FM Jaksic (1998) Los ecosistemas del Desierto de Atacama y area Andina adjacente. *Revista Chilena de Historia Natural* 71: 593-617.

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41) Cofre H & **PA Marquet** (1999) Conservation status, rarity, and geographic priorities for conservation of Chilean Mammals: an assessment. *Biological Conservation* 88: 1-16.

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43) Lima M, **PA Marquet** & FM Jaksic. (1999) El Niño events, precipitation patterns, and rodents outbreaks are statistically associated in semiarid Chile. *Ecography* 22: 213-218.

44) **Marquet, PA** & H. Cofre (1999) Large temporal and spatial scales in the structure of mammalian assemblages in South America: A macroecological approach. *Oikos* 85: 299-309.

45) Hernández-Suárez, CM, **PA Marquet** & J. X. Velasco-Hernández. (1999) Threshold parameters and metapopulation persistence. *Bulletin of Mathematical Biology* 60: 1-14.

46) Jaksic, F.M., J.C. Torres-Mura, C. Cornelius & **P.A. Marquet**. (1999) Small mammals of the Atacama desert (Chile) and their predation by native foxes and owls. *Journal of Arid Environments* 42: 129-135.

47) Cornelius, C., H. Cofré & **P.A. Marquet** (2000) The effects of habitat fragmentation on bird species in a relict temperate forest in semiarid Chile. *Conservation Biology* 14: 1-11.

48) Kelt, D.A., **P.A. Marquet** & J.H. Brown. Geographical ecology of South American desert small mammals: consequences of observations at local and regional scales. *Global Ecology and Biogeography* letters

49) Keymer, J.E., **P.A. Marquet**, J.X. Velasco-Hernández and S.A. Levin. Extinction thresholds and metapopulation persistence in dynamics landscapes. *American*

Naturalist 156: 478-494

50) Fernández, M., E. Jaramillo, **P.A. Marquet**, C. Moreno, S. Navarrete, P. Ojeda, C. Valdovinos, and J. Vasquez (2000). Diversity, ecology and biogeography of Chilean benthic nearshore ecosystems: an overview and guidelines for conservation. *Revista Chilena de Historia Natural* 73: 797-830.

51) **Marquet P.A.** (2001) Ecology goes macro. *Nature* 412: 481-482.

52) Carothers, J. H., F. M. Jaksic & **P. A. Marquet**. (2001) Altitudinal zonation among lizards of the genus *Liolaemus*: questions answered and unanswered questions. *Revista Chilena de Historia Natural*: 74: 313-316.

53) Cornelius, C., S.A. Navarrete, and **P.A. Marquet**. (2001) Effects of human activity on the structure of coastal marine bird assemblages in central Chile. *Conservation Biology* 15: 1396-1404.

54) Alvarado, J. L., R. Pinto, **P. A. Marquet**, C. Pacheco, R. Guiñez & J. C. Castilla (2001) Patch recolonization by the tunicate *Pyura praeputialis* (Heller) in the rocky intertidal at the bay of Antofagasta, Chile: evidence for self-facilitation mechanisms. *Marine Ecology Progress Series*. 224: 93-101.

55) **Marquet P.A.** (2002). Of predators, prey, and power laws. *Science* 295: 2229-2230. (Perspective).

56) Barbosa, O. & **P.A. Marquet** (2002). Effects of forest fragmentation on the beetle assemblage at the relict forests of fray Jorge, Chile. *Oecologia* 132: 296-306.

57) **Marquet, P.A.** (2002) The search for general principles in ecology. *Nature* 418:723.

58) **Marquet, P.A.** & M.C. Depassier (2002) Kleiber and Planck. The missing link? *Response. Science* 298: 60-61.

59) Palma, R.E., E. Rivera-Milla, T. L. Yates, A. E. Spotorno and **P. A. Marquet** (2002) mtDNA phylogeography of the Chilean colilargo *Oligoryzomys longicaudatus* (Rodentia: Sigmodontinae) along its latitudinal gradient. *Molecular Phylogenetics and Evolution* 25:245-253.

60) Reid, S., C. Cornelius, O. Barbosa, C. Meynard, C. Silva-Garcia & **P.A. Marquet** (2002). Conservation of temperate forest birds in Chile: Implications from the study of an isolated forest relict. *Biodiversity and Conservation* 11: 1975-1990.

61) Labra, F., N. Lagos & **P.A. Marquet** (2003) Dispersal and transients in metapopulations. *Ecology Letters* 6:197-204.

62) Valdovinos, C. S. A. Navarrete & **P.A. Marquet** (2003). Mollusk species diversity in the Southeastern Pacific: Why are there more species towards the south? *Ecography* 26:239-144.

63) Smith, F.A.; Lyons, S.K.; Ernest, S.K.M.; Jones, K.E.; Kaufman, D.M.; Dayan, T.; **Marquet, P.A.**; Brown, J.H., and J.P. Haskel (2003). Body mass of late quaternary mammals. *Ecology*. 84 (12): 3403-3403.

64) Torres-Perez, F., J. Navarrete-Droguett, R. Aldunate, T. L. Yates, G. J. Mertz, P. A. Vial, M. Ferres, **P. A. Marquet** & R. E. Palma (2004) Peridomestic small mammals associated with confirmed cases of human Hantavirus disease in southcentral Chile. *American Journal of Tropical Medicine and Hygiene* 70(3): 305-309.

65) George-Nascimento, M. G. Muñoz, **P.A. Marquet** & R. Poulin (2004) Testing the energetic equivalence rule with helminth endoparasites of vertebrates. *Ecology Letters* 7:527-531.

66) A. S. L. Rodrigues, S. J. Andelman, M. I. Bakarr, L. Boitani, T. M. Brooks, R. M. Cowling, L.D. C. Fishpool, G. A. B. da Fonseca, K. J. Gaston, M. Hoffman, J. Long, **P. A. Marquet**, J. D. Pilgrim, R. L. Pressey, J. Schipper, W. Sechrest, S. N. Stuart, L. G. Underhill, R. W. Waller, M. E. J. Watts, and X. Yan. (2004) Effectiveness of the global protected area network in representing species diversity. *Nature* 428: 640-643.

67) Arim, M. & **P.A. Marquet** (2004) Intraguild predation: a widespread interaction related to species biology. *Ecology Letters* 7: 557-564.

68) **Marquet, P.A.**, F. Labra & B.A. Maurer (2004) Metabolic ecology: linking individuals and ecosystems. *Ecology* 85: 1794-1796

69) Smith, F.A., Brown, J.H., Haskell, J.P., Alroy, J. Charnov, E. L., Dyan, T., Enquist, B.J., Ernest, M. S.K., Hadly, E.A., Jablonski, D., Jones, K.E., Kaufman, D.M., Lyons, S.K., **Marquet, P.A.**, Niklas, K. Maurer, B.A., Porter, W. Roy, K. Tiffney, B., and Willig, M.R. (2004) Similarity of mammalian body size across the taxonomic hierarchy and across space and time. *American Naturalist* 163: 672-691.

70) Figueroa, J. A., S. A. Castro, **P. A. Marquet** & F. M. Jaksic. 2004. Exotic plant invasions to the mediterranean region of Chile: causes, history and impacts. *Revista Chilena de Historia Natural* 77: 465-483.

71) **Marquet, P.A.** and G.A. Bradshaw (2004). Symposium: Ecosystem disruption in the Americas. *Revista Chilena de Historia Natural* 77: 369-370.

72) A. S. L. Rodrigues, H. R. Akçakaya S. J. Andelman, M. I. Bakarr, L. Boitani, T. M. Brooks, J. S. Chanson, L.D. C. Fishpool, G. A. B. da Fonseca, K. J. Gaston, M. Hoffman, **P. A. Marquet**, J. D. Pilgrim, R. L. Pressey, J. Schipper, W. Sechrest, S. N. Stuart, L. G. Underhill, R. W. Waller, M. E. J. Watts, and X. Yan (2004) Global Gap Analysis: Priority Regions for Expanding the Global Protected-Area Network. *Bioscience* 54: 1092–1100.

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75) **Marquet, P.A.**, R.A. Quiñones, S. Abades, F. Labra, M. Tognelli, M. Arim and M. Rivadeneira . (2005) Scaling and power-laws in ecological systems. *Journal of Experimental Biology* 208: 1749-1769.

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