

UNIVERSIDAD AUSTRAL DE CHILE
FACULTAD DE CIENCIAS
INSTITUTO DE CIENCIAS AMBIENTALES Y EVOLUTIVAS

PROGRAMA DE MAGISTER EN PALEONTOLOGÍA

1. INFORMACION GENERAL

1.1. Nombre de la asignatura: LOS SITIOS ARQUEO-PALEONTOLÓGICOS DE MONTE VERDE Y PILAUCO.

1.2. Código: **CITI 320**

1.3. Créditos: 3

1.4. Período académico en que se dicta: Segundo semestre

1.5. Tipo de asignatura: Optativa

1.6. Horas Teóricas: 2 horas

1.7. Horas Prácticas: 2 horas

1.8. Cupo: 5 cupos

1.9. Pre-requisitos: 5 créditos cursados

1.10. Prof. Responsable: Dr. Mario Pino

1.11. Prof. (es) Colaborador (es): Dra. Ana M. Abarzúa

DESCRIPCIÓN DE LA ASIGNATURA

En esta asignatura se analizará críticamente el conocimiento de los dos sitios arqueo-paleontológico más antiguos de las Américas

OBJETIVOS DEL CURSO

OBJETIVO GENERAL: Comprender la relación ambiente – seres humanos en la transición Pleistoceno Holoceno de la nor-patagonia

OBJETIVOS ESPECÍFICOS

Analizar la literatura existente sobre esta problemática

Interpretar el conocimiento obtenido en Monte Verde y Pilauco en el marco de las

teorías mundiales de extinción de la megafauna y de poblamiento temprano
Discutir los cambios de paradigmas en relación con este tipo de sitios.

CONTENIDOS DE LA ASIGNATURA

Contexto de la transición Pleistoceno – Holoceno a nivel de las Américas
Interpretación del cambio climático a través de proxies.
Younger Dryas e inversión Huelmo Mascardi
Historia del descubrimiento e investigación en Monte Verde y Pilauco
Evidencias asociadas a Monte Verde
Evidencias asociadas a Pilauco
Futuros desafíos.

METODOLOGÍA DE TRABAJO

En el aula se trabajará en seminarios basados en la lectura y discusión de artículos, el trabajo práctico se desarrollará en el sitio Pilauco sobre la base de una estadía semanal para abordar un tópico específico (prospección, muestreo, excavación, análisis de fósiles y microfósiles)

NORMAS DE EVALUACIÓN

Notas semanales en cada seminario (33%), escritura de un paper (33%), informes de campo (33%).

BIBLIOGRAFÍA

Monte Verde

DILLEHAY, T.; PINO, M.; DAVIS, M.E.; VALASTRO, S.; VARELA, A.; CASAMIQUELA, R. 1982. Monte Verde: Radiocarbon dates from an early-man site in South-Central Chile. *Journal of Field Archaeology*. 9: 547-550.

DILLEHAY, T. & PINO, M. 1986. Monte Verde: An early man site in south-central Chile. *Andean Archaeology. Monograph XXVII, Ins. of Archaeology. Univ. of California* 1-17. Los Angeles.

DILLEHAY, T.; PINO, M.; SANZANA, P., MUÑOZ, G. & SAAVEDRA, J. 1986. Monte Verde adaptaciones humanas en el centro sur de Chile durante el Pleistoceno tardío. *J. Societé des Americanistes, Paris, LXXII*; pp 87-186.

PINO, M. & DILLEHAY, T. 1988. Monte Verde, South-central Chile: Stratigraphy, Climate Change and Human Settlement. *Geoarchaeology: Vol.3, N3*, 177-191.

DILLEHAY, D., PINO, M. ROSEN, J. OCAMPO, C., RIVAS, P. & POLLACK, J. 1999. On Monte Verde: Replay to Fiedel Part I. *Discovering Archaeology* 6.

DILLEHAY, T.; RAMÍREZ, C.; PINO, M.; COLLINS, M.; ROSSEN, J.; & PINO-NAVARRO, J.D. 2008. Monte Verde: Seaweed, Food, Medicine, and the Peopling of South America. *Science* 320 (5877): 784 – 786. DOI: 10.1126/science.1156533.

PINO, M. 1989. Regional and Site Geology. En T. DILLEHAY (ED):MONTE VERDE. VOL. I Palaeoenvironment and site context, 89-132, Smithsonian Press.

DILLEHAY, T. & PINO, M. 1989. Stratigraphy and Chronology. En T. DILLEHAY (ED): MONTE VERDE. VOL. I. Palaeoenvironment and site context, 133-146, Smithsonian Press.

DILLEHAY, T. & PINO, M. 1997. Site Settings and Stratigraphy. En T. DILLEHAY (ED): MONTE VERDE. VOL. 2: Archaeological Context and Interpretation., 25 - 40. Smithsonian Press.

DILLEHAY, T. & PINO, M. 1997. Radiocarbon Chronology. En T. DILLEHAY (ED): MONTE VERDE. VOL. 2: Archaeological Context and Interpretation., 41 - 52. Smithsonian Press.

DILLEHAY, T.; RAMIREZ, C.; DIAZ - VAZ, J.; OLSON, J.; CIBULL, M.; RIMMER, S.; PINO, M.;UGENT, D. & TINDALL, D. 1997. Analysis of Trace Residues on the Archaeological Lithics. En T. DILLEHAY (ED): MONTE VERDE. VOL. 2: Archaeological Context and Interpretation., 540 - 551. Smithsonian Press.

PINO, M. 2003. Stratigraphy and Environmental Geology of Monte Verde Classic Uniformitarianism and Multiples Scales of Research. In: M. SALEMME, N. FLEGENHEIMER Y L. MIOTTI (eds.) Ancient Evidences for Paleo South Americans From Where the South Winds Blow. Center for the Studies of the First Americans (CSFA) and Texas A&M University Press 93-97.

Pilauco

PINO, M. 2008. Pilauco, Un Sitio Complejo Del Pleistoceno Tardío. Osorno, Norpatagonia chilena. Valdivia, Chile. 164p.

GONZÁLEZ E., PREVOSTI, F.J. & PINO, M. 2010. Primer registro de Mephitidae (Carnivora: Mammalia) para el Pleistoceno de Chile. *MAGALLANIA*, (Chile), 38(2):239-248.

GONZÁLEZ, E., PINO, M., RECABARREN, O., BUSQUETS, T. , CANALES, P.; SALVADORES, L., CHÁVEZ, M.; VÁSQUEZ, F., BUSTOS, C., RAMOS, P., NAVARRO, R.X. 2011. Paleontología social: una experiencia educativa sobre ciencia, patrimonio e identidad. *Revista Calidad de la Educación* 34 : 231- 245.

RECABARREN, O.; PINO, M. & CID, I. 2011. A new record of Equus (Mammalia: Equidae) from the Late Pleistocene of central-south Chile. *Revista Chilena de Historia Natural* 84: 535-542.

PINO, M.; CHAVEZ, M., NAVARRO, X., LABARCA, R. (2013) The late Pleistocene Pilauco site, south central Chile. *Quaternary International* 299:3-12.

LABARCA, R.; PINO, M.; RECABARREN, O. (en prensa). Los Lamini (Cetartiodactyla: Camelidae) extintos del yacimiento de Pilauco (Norpatagonia chilena): aspectos taxonómicos y tafonómicos preliminares. *Estudios Geológicos*. doi:10.3989/egeol.40862.219

GONZÁLEZ E.; LABARCA, R.; CHÁVEZ, M.; PINO, M. (aceptado) First fossil record of the smallest deer cf. *Pudu Molina*, 1792 (ARTIODACTYLA, CERVIDAE) in the Late Pleistocene of South America.. *Journal of Vertebrate Paleontology*.

RECABARREN, O.; PINO, M.; ALBERDI, M.T. (enviado). La Familia Gomphotheriidae en América del Sur: evidencia de molares al norte de la Patagonia chilena. *Estudios Geológicos*.

Tomado de WEB of Science bajo palabras clave Monte Verde y Chile

[An Alternative Model for the Early Peopling of Southern South America Revealed by Analyses of Three Mitochondrial DNA Haplogroups](#)

Author(s): de Saint Pierre, Michelle; Bravi, Claudio M.; Motti, Josefina M. B.; et al.
Source: PLOS ONE Volume: 7 Issue: 9 Article Number: e43486 DOI: 10.1371/journal.pone.0043486 Published: SEP 10 2012

[Geological perspectives on the Monte Verde archeological site in Chile and pre-Clovis coastal migration in the Americas](#)

Author(s): Dickinson, William R.
Source: QUATERNARY RESEARCH Volume: 76 Issue: 2 Pages: 201-210 DOI: 10.1016/j.yqres.2011.06.011 Published: SEP 2011

[Language Spread Rates and Prehistoric American Migration Rates](#)

Author(s): Nichols, Johanna
Source: CURRENT ANTHROPOLOGY Volume: 49 Issue: 6 Pages: 1107-1115 DOI: 10.1086/592436 Published: DEC 2008

[The seventy-year itch - Controversies over human antiquity and their resolution](#)

Author(s): Meltzer, DJ
Source: JOURNAL OF ANTHROPOLOGICAL RESEARCH Volume: 61 Issue: 4 Pages: 433-468 Published: WIN 2005

[Monte Verde: Seaweed, food, medicine, and the peopling of South America](#)

Author(s): Dillehay, Tom D.; Ramirez, C.; Pino, M.; et al.
Source: SCIENCE Volume: 320 Issue: 5877 Pages: 784-786 DOI: 10.1126/science.1156533 Published: MAY 9 2008

[Initial occupation of the Pacific coast of Chile during late Pleistocene times](#)

Author(s): Jackson, Donald; Mendez, Cesar; Seguel, Roxana; et al.
Source: CURRENT ANTHROPOLOGY Volume: 48 Issue: 5 Pages: 725-731 DOI:
10.1086/520965 Published: OCT 2007

[Resolving an anomalous radiocarbon determination on mastodon bone from Monte Verde, Chile](#)

Author(s): George, D; Southon, J; Taylor, RE
Source: AMERICAN ANTIQUITY Volume: 70 Issue: 4 Pages: 766-772 Published:
OCT 2005

[Mitochondrial DNA and Y chromosome diversity and the peopling of the Americas: Evolutionary and demographic evidence](#)

Author(s): Schurr, TG; Sherry, ST
Conference: 28th Annual Meeting of the Human-Biology-Association Location: Tempe, AZ Date: APR 26, 2003
Sponsor(s): Human Biol Assoc
Source: AMERICAN JOURNAL OF HUMAN BIOLOGY Volume: 16 Issue: 4 Pages:
420-439 DOI: 10.1002/ajhb.20041 Published: JUL-AUG 2004

[Early Holocene human skeletal remains from Santana do Riacho, Brazil: implications for the settlement of the New World](#)

Author(s): Neves, WA; Prous, A; Gonzalez-Jose, R; et al.
Source: JOURNAL OF HUMAN EVOLUTION Volume: 45 Issue: 1 Pages: 19-42
DOI: 10.1016/S0047-2484(03)00081-2 Published: JUL 2003

[When Patagonia was colonized: people mobility at high latitudes during Pleistocene/Holocene transition](#)

Author(s): Miotti, L; Salemme, MC
Conference: Meeting on the Archaeology of the Pleistocene/Holocene Transition
Location: ARGENTINA Date: DEC, 2000
Source: QUATERNARY INTERNATIONAL Volume: 109 Pages: 95-111 Article
Number: PII S1040-6182(02)00206-9 DOI: 10.1016/S1040-6182(02)00206-9
Published: 2003

Some difficulties in modeling the original peopling of the Americas

Author(s): Bryan, AL; Gruhn, R
Conference: Meeting on the Archaeology of the Pleistocene/Holocene Transition
Location: ARGENTINA Date: DEC, 2000
Source: QUATERNARY INTERNATIONAL Volume: 109 Pages: 175-179 Article
Number: PII S1040-6182(02)00211-2 DOI: 10.1016/S1040-6182(02)00211-2
Published: 2003

[Human occupations and climate change in the Puna de Atacama, Chile](#)

Author(s): Nunez, L; Grosjean, M; Cartajena, I
Source: SCIENCE Volume: 298 Issue: 5594 Pages: 821-824 DOI:
10.1126/science.1076449 Published: OCT 25 2002

Title: [Climate, fire, and vegetation between about 13,000 and 9200 C-14 yr BP in the Chilean lake district](#)

Author(s): Moreno, PI

Source: QUATERNARY RESEARCH Volume: 54 Issue: 1 Pages: 81-89 DOI: 10.1006/qres.2000.2148 Published: JUL 2000

Times Cited: [34](#) (from All Databases)

Title: [Monte Verde, a late Pleistocene settlement in Chile, vol 1, Palaeoenvironment and site context, vol 2, The archaeological context and interpretation](#)

Author(s): Miracle, P

Source: ANTIQUITY Volume: 73 Issue: 282 Pages: 944-947 Published: DEC 1999

Times Cited: [1](#) (from All Databases)

Title: [The prehistoric exploration and colonization of Fuego-Patagonia](#)

Author(s): Borrero, LA

Source: JOURNAL OF WORLD PREHISTORY Volume: 13 Issue: 3 Pages: 321-355

DOI: 10.1023/A:1022341730119 Published: SEP 1999

Times Cited: [30](#) (from All Databases)

Title: [Radiocarbon analyses of modern organics at Monte Verde, Chile: No evidence for a local reservoir effect](#)

Author(s): Taylor, RE; Haynes, CV; Kirner, DL; et al.

Source: AMERICAN ANTIQUITY Volume: 64 Issue: 3 Pages: 455-460 DOI: 10.2307/2694145 Published: JUL 1999

Times Cited: [8](#) (from All Databases)

Title: [The Late Pleistocene cultures of South America](#)

Author(s): Dillehay, TD

Source: EVOLUTIONARY ANTHROPOLOGY Volume: 7 Issue: 6 Pages: 206-216

DOI: 10.1002/(SICI)1520-6505(1999)7:6<206::AID-EVAN5>3.0.CO;2-G Published: 1999

Times Cited: [33](#) (from All Databases)

Title: [On the Pleistocene antiquity of Monte Verde, southern Chile](#)

Author(s): Meltzer, DJ; Grayson, DK; Ardila, G; et al.

Source: AMERICAN ANTIQUITY Volume: 62 Issue: 4 Pages: 659-663 DOI: 10.2307/281884 Published: OCT 1997

Times Cited: [84](#) (from All Databases)

Title: [Monte Verde and the antiquity of humankind in the Americas](#)

Author(s): Adovasio, JM; Pedler, DR

Source: ANTIQUITY Volume: 71 Issue: 273 Pages: 573-580 Published: SEP 1997

Times Cited: [27](#) (from All Databases)

Title: [Anthropology - Monte Verde and the Pleistocene peopling of the Americas](#)

Author(s): Meltzer, DJ

Source: SCIENCE Volume: 276 Issue: 5313 Pages: 754-755 DOI:

10.1126/science.276.5313.754 Published: MAY 2 1997

Times Cited: [52](#) (from All Databases)

Title: [THE MECHANISM OF ORGANIC PRESERVATION AT MONTE VERDE, CHILE, AND ONE USE OF BIOMOLECULES IN ARCHAEOLOGICAL INTERPRETATION](#)

Author(s): TUROSS, N; DILLEHAY, TD

Source: JOURNAL OF FIELD ARCHAEOLOGY Volume: 22 Issue: 1 Pages: 97-110

DOI: 10.2307/529852 Published: SPR 1995

Times Cited: [27](#) (from All Databases)

Title: [CLOCKING THE FIRST AMERICANS](#)

Author(s): MELTZER, DJ

Source: ANNUAL REVIEW OF ANTHROPOLOGY Volume: 24 Pages: 21-45 DOI:

10.1146/annurev.anthro.24.1.21 Published: 1995

Times Cited: [48](#) (from All Databases)

Title: [ON A PLEISTOCENE HUMAN OCCUPATION AT PEDRA-FURADA, BRAZIL](#)

Author(s): MELTZER, DJ; ADOVASIO, JM; DILLEHAY, TD

Source: ANTIQUITY Volume: 68 Issue: 261 Pages: 695-714 Published: DEC 1994

Times Cited: [35](#) (from All Databases)

Title: [PALEOINDIANS AND FIRE DURING THE LATE QUATERNARY IN SOUTHERN SOUTH-AMERICA](#)

Author(s): HEUSSER, CJ

Source: REVISTA CHILENA DE HISTORIA NATURAL Volume: 67 Issue: 4 Pages:

435-443 Published: DEC 1994

Times Cited: [38](#) (from All Databases)

Title: [AN OVERVIEW OF THE RESEARCH FINDINGS AND CULTURAL IMPLICATIONS OF THE LATE PLEISTOCENE SITE OF MONTE-VERDE, CHILE](#)

Author(s): DILLEHAY, TH

Source: ANTHROPOLOGIE Volume: 98 Issue: 1 Pages: 128-148 Published: 1994

Times Cited: [1](#) (from All Databases)

Title: [PALEOENVIRONMENT AND SITE CONTEXT - MONTE VERDE - A LATE PLEISTOCENE SETTLEMENT IN CHILE, VOL 1 - DILLEHAY,TD](#)

Author(s): WEST, FH

Source: AMERICAN ANTIQUITY Volume: 58 Issue: 1 Pages: 166-167 DOI:

10.2307/281462 Published: JAN 1993

Times Cited: [3](#) (from All Databases)

Title: [MONTE-VERDE - A LATE PLEISTOCENE SETTLEMENT IN CHILE, VOL 1 - PALEOENVIRONMENT AND SITE CONTEXT - DILLEHAY,TD](#)

Author(s): MELTZER, D

Source: AMERICAN ANTHROPOLOGIST Volume: 93 Issue: 3 Pages: 739-739

DOI: 10.1525/aa.1991.93.3.02a00570 Published: SEP 1991

Times Cited: [1](#) (from All Databases)

Title: [MONTE VERDE - A LATE PLEISTOCENE SETTLEMENT IN CHILE, VOL 1, PALEOENVIRONMENT AND SITE CONTEXT - DILLEHAY,TD](#)

Author(s): DINCAUZE, DF

Source: JOURNAL OF FIELD ARCHAEOLOGY Volume: 18 Issue: 1 Pages: 116-119

DOI: 10.2307/530157 Published: SPR 1991

Times Cited: [5](#) (from All Databases)

Title: [MONTE-VERDE - A LATE PLEISTOCENE SETTLEMENT IN CHILE, PT 1, PALEOENVIRONMENT AND SITE CONTEXT - DILLEHAY,TD](#)

Author(s): OLIVER, JR

Source: MAN Volume: 26 Issue: 1 Pages: 165-165 DOI: 10.2307/2803482

Published: MAR 1991

Times Cited: 0 (from All Databases)

Title: [MONTE VERDE - A LATE PLEISTOCENE SETTLEMENT IN CHILE, VOL 1, PALEOENVIRONMENT AND SITE CONTEXT - DILLEHAY,TD](#)

Author(s): MORLAN, RE

Source: SCIENCE Volume: 249 Issue: 4971 Pages: 937-938 DOI:

10.1126/science.249.4971.937-a Published: AUG 24 1990

Times Cited: 0 (from All Databases)

Title: [30,000 YEARS OF HUMAN COLONIZATION IN TASMANIA - NEW PLEISTOCENE DATES](#)

Author(s): COSGROVE, R

Source: SCIENCE Volume: 243 Issue: 4899 Pages: 1706-1708 DOI:

10.1126/science.243.4899.1706 Published: MAR 31 1989

Times Cited: [23](#) (from All Databases)

Title: [EARLY RAINFOREST ARCHAEOLOGY IN SOUTHWESTERN SOUTH AMERICA RESEARCH CONTEXT DESIGN AND DATA AT MONTE VERDE CHILE](#)

Author(s): DILLEHAY T D

Source: PURDY, B. A. (ED.). WET SITE ARCHAEOLOGY; INTERNATIONAL CONFERENCE HELD IN GAINESVILLE, FLORIDA, USA, DECEMBER 12-14, 1986.

XIII+338P. TELFORD PRESS: CALDWELL NEW JERSEY, USA. ILLUS. MAPS Pages: 177-206 Published: 1988

Times Cited: 0 (from All Databases)

Title: [STONE TOOLS ASSOCIATED WITH MIDDLE PLEISTOCENE FAUNA IN THE TOCA DA ESPERANCA CENTRAL REGION BAHIA STATE BRAZIL](#)

Author(s): DE LUMLEY H; DE LUMLEY M-A; BELTRAO M D D C; et al.

Source: Anthropologie (Paris) Volume: 91 Issue: 4 Pages: 917-942 Published: 1987

Times Cited: 0 (from All Databases)

Title: [POTATO REMAINS FROM A LATE PLEISTOCENE SETTLEMENT IN SOUTH-CENTRAL CHILE](#)

Author(s): UGENT, D; DILLEHAY, T; RAMIREZ, C

Source: ECONOMIC BOTANY Volume: 41 Issue: 1 Pages: 17-27 DOI:

10.1007/BF02859340 Published: JAN-MAR 1987

Times Cited: [27](#) (from All Databases)