



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s) **Prof. Domenico ALVARO**

Address(es)

Telephone(s)

Fax(es)

E-mail

Nationality Italy

Gender Male

### Work experience

SSD= MED/12 (Gastroenterology)

Work experience

Dates 2005-present Full Professor of Gastroenterology, Univ. Sapienza, Rome

2002-2005 Associate Professor of Gastroenterology, Univ. Sapienza, Rome

2001-2002 Researcher, Gastroenterology, Univ. Sapienza, Rome

1988-2001 "Funzionario Tecnico, Univ. Sapienza, Rome

1990-1992, Associate Researcher" Digestive Diseases, YALE Univ. USA.

Current:

Full Professor of Gastroenterology, Chief of Department of Translational and Precision Medicine

Chief of Div. Gastroenterology, Policlinico Umberto 1° University Hospital.

Dates

Occupation or position held

**Div. Gastroenterology, Policlinico Umberto 1° University Hospital.**

Main activities and responsibilities

2003-present, Teaching Patologia Integrata III, CCLE

2003-present, Teaching at Scuola di Specializzazione Gastroenterologia , Sapienza Rome

2004-present, Appointed Coordinator of Patologia Integrata III, Medical School Faculty, CCLA Sapienza Univ. of Rome, Italy

2005-present, Teaching at Master in Experimental and Clinical Hepatology

2008-Present, Editorial Board Digestive and Liver Diseases

2008-2010, President Italian Society Gastroenterology (Sezione Lazio)

2008-2016, Responsabile (law)-Editor of Digestive and Liver Disease

2010-present, Member of Medical Academy Rome

2010-present, Chief of the Latina Regional Center for Celiac Disease

2011-present, Member of Editorial Board Hepatology

2011-2012, Member Working Team, Italian Drug Agency (AIFA)

2011-2016, Member of steering committee Department of "Scienze e Biotecnologie Medico-Chirurgiche", University of Rome "Sapienza".

2014-present, Responsible of the Centre of Rare Disease, ASL Latina

2015-present, Member of the Faculty Committee for the appointment of Professor Emeritus

2015-present, Representative of the Sapienza University in the consortium for organ transplant

2016-2018 Member of the steering committee Italian Society of Gastroenterology

2018-present. President of Italian Society of Gastroenterology (SIGE)

2018- Chief of Department of Translational and Precision Medicine, University of Rome Sapienza, Italy

Name and address of employer | Department of Translational and Precision Medicine, University of Rome Sapienza, Italy

Type of business or sector | Gastroenterology (MED12)

**Education and training**

Dates | 1988 Bursary National Health Institute, Rome  
1987 Bursary National Health Institute, Rome  
1986 Bursary National Health Institute, Rome  
1988 Specialization Gastroenterology Univ. Sapienza Rome  
1985 Specialization Internal Medicine, Univ. Sapienza Rome  
1981 Bursary Health Ministry, Rome  
1980 Master's degree in medicine at the University of Rome "La Sapienza" with honours

Title of qualification awarded

Principal subjects/occupational skills covered

Name and type of organisation providing education and training

Level in national or international classification | (remove if not relevant, see instructions)

**Personal skills and competences**

Research activity in the field of liver damage, liver regeneration, drug-induced liver damage, drug-transporters in the liver, hepatic cell proliferation and apoptosis, cholestasis, liver disease pathophysiology and treatment, Hepatic Stem-cells, regenerative medicine of liver and pancreas, cholangiocarcinoma.

Mother tongue(s) | **Specify mother tongue** (if relevant add other mother tongue(s), see instructions)

Other language(s)

Self-assessment

European level (\*)

**Language**

**Language**

		Understanding		Speaking				Writing	
		Listening	Reading	Spoken interaction		Spoken production			
English	C2		C2		C2		C2		C2

(\*) [Common European Framework of Reference for Languages](#)

**Additional information**

**Scientific activities:**  
**Full papers= 250; H.I.= 50, total citations=6954**  
**N. 2 International patents**  
**Editorial Board of Hepatology, Digestive and Liver Disease**

- 1: Alvaro D. Gallstones: Bad Company for the Steatotic Liver. *Gastroenterology*. 2017 May;152(6):1284-1286.
- 2: Maraldi T, Guida M, Beretti F, Resca E, Carpino G, Cardinale V, Gentile R, Ardizzoni A, Murgia A, Alvaro D, Gaudio E, De Pol A. Human biliary tree stem/progenitor cells immunomodulation: Role of hepatocyte growth factor. *Hepatology*. 2017 Apr;67(5):465-479.
- 3: Nevi L, Carpino G, Costantini D, Cardinale V, Riccioni O, Di Matteo S, Melandro F, Berloco PB, Reid L, Gaudio E, Alvaro D. Hyaluronan coating improves liver engraftment of transplanted human biliary tree stem/progenitor cells. *Stem Cell Res Ther*. 2017 Mar 20;8(1):68.
- 4: Raggi C, Correnti M, Sica A, Andersen JB, Cardinale V, Alvaro D, Chiorino G, Forti E, Glaser S, Alpini G, Destro A, Sozio F, Di Tommaso L, Roncalli M, Banales JM, Coulouarn C, Bujanda L, Torzilli G, Invernizzi P. Cholangiocarcinoma stem-like subset shapes tumor-initiating niche by educating associated macrophages. *J Hepatol*. 2017 Jan;66(1):102-115.
- 5: Ebata T, Ercolani G, Alvaro D, Ribero D, Di Tommaso L, Valle JW. Current Status on Cholangiocarcinoma and Gallbladder Cancer. *Liver Cancer*. 2016 Nov;6(1):59-65.
- 6: Wu N, Meng F, Invernizzi P, Bernuzzi F, Venter J, Standeford H, Onori P, Marzioni M, Alvaro D, Franchitto A, Gaudio E, Glaser S, Alpini G. The secretin/secretin receptor axis modulates liver fibrosis through changes in transforming growth factor- $\beta$ 1 biliary secretion in mice. *Hepatology*. 2016 Sep;64(3):865-79.
- 7: Alvaro D, Gaudio E. Liver Capsule: Biliary Tree Stem Cell Subpopulations. *Hepatology*. 2016 Aug;64(2):644. doi: 10.1002/hep.28546.
- 8: Bernuzzi F, Marabita F, Lleo A, Carbone M, Mirolo M, Marzioni M, Alpini G, Alvaro D, Boberg KM, Locati M, Torzilli G, Rimassa L, Piscaglia F, He XS, Bowlus CL, Yang GX, Gershwin ME, Invernizzi P. Serum microRNAs as novel biomarkers for primary sclerosing cholangitis and cholangiocarcinoma. *Clin Exp Immunol*. 2016 Jul;185(1):61-71.
- 9: De Francesco V, Ridola L, Hassan C, Bellesia A, Alvaro D, Vaira D, Zullo A. Two-week Triple Therapy with either Standard or High-dose Esomeprazole for First-line H. pylori Eradication. *J Gastrointest Liver Dis*. 2016 Jun;25(2):147-50.
- 10: Banales JM, Cardinale V, Carpino G, Marzioni M, Andersen JB, Invernizzi P, Lind GE, Folseraas T, Forbes SJ, Fouassier L, Geier A, Calvisi DF, Mertens JC, Trauner M, Benedetti A, Maroni L, Vaquero J, Macias RI, Raggi C, Perugorria MJ, Gaudio E, Boberg KM, Marin JJ, Alvaro D. Expert consensus document: Cholangiocarcinoma: current knowledge and future perspectives consensus statement from the European Network for the Study of Cholangiocarcinoma (ENS-CCA). *Nat Rev Gastroenterol Hepatol*. 2016 May;13(5):261-80. doi: 10.1038/nrgastro.2016.51.
- 11: Carpino G, Puca R, Cardinale V, Renzi A, Scafetta G, Nevi L, Rossi M, Berloco PB, Ginanni Corradini S, Reid LM, Maroder M, Gaudio E, Alvaro D. Peribiliary Glands as a Niche of Extrapancreatic Precursors Yielding Insulin-Producing Cells in Experimental and Human Diabetes. *Stem Cells*. 2016 May;34(5):1332-42.
- 12: Carpino G, Renzi A, Cardinale V, Franchitto A, Onori P, Overi D, Rossi M, Berloco PB, Alvaro D, Reid LM, Gaudio E. Progenitor cell niches in the human pancreatic duct system and associated pancreatic duct glands: an anatomical and immunophenotyping study. *J Anat*. 2016 Mar;228(3):474-86.
- 13: Carpino G, Renzi A, Franchitto A, Cardinale V, Onori P, Reid L, Alvaro D, Gaudio E. Stem/Progenitor Cell Niches Involved in Hepatic and Biliary Regeneration. *Stem Cells Int*. 2016;2016:3658013.
- 14: Carpino G, .....Alvaro D, Gaudio E. Activation of biliary tree stem cells within peribiliary glands in primary sclerosing cholangitis. *J Hepatol*. 2015 Jun 25.
- 15: Cardinale V....., Alvaro D. Profiles of cancer stem cell subpopulations in cholangiocarcinomas. *Am J Pathol*. 2015 Jun;185(6):1724-39.
- 16: Cardinale V, .... Alvaro D. Transplantation of human fetal biliary tree stem/progenitor cells into two patients with advanced liver cirrhosis. *BMC Gastroenterol*. 2014 Dec 4;14:204.
- 17: Riccio M, ...Alvaro D, De Pol A. The Fas/Fas ligand apoptosis pathway underlies immunomodulatory properties of human biliary tree stem/progenitor cells. *J Hepatol*. 2014 Nov;61(5):1097-105.
- 18: Cardinale V, Alvaro D. PTPN3 mutations and HBV may exert synergistic effects in the origin of the intrahepatic cholangiocarcinoma. *Gastroenterology*. 2014 Sep;147

(3):719-20.

19: Glaser S, ...Alvaro D,...Alpini G. Secretin stimulates biliary cell proliferation by regulating expression of microRNA 125b and microRNA let7a in mice. *Gastroenterology*. 2014 Jun;146(7):1795-808.e12.

20: Carpino G, ...Alvaro D, Gaudio E. Evidence for multipotent endodermal stem/progenitor cell populations in human gallbladder. *J Hepatol*. 2014 Jun;60(6):1194-202.

21: Lanzoni G,.. Alvaro D, Inverardi L, Reid LM. Concise review: clinical programs of stem cell therapies for liver and pancreas. *Stem Cells*. 2013 Oct;31(10):2047-60. doi: 10.1002/stem.1457. Review.

22: Cardinale V, Carpino G, Reid LM, Gaudio E, Alvaro D. Notch2 signaling and undifferentiated liver cancers: evidence of hepatic stem/progenitor cell origin. *Hepatology*. 2013 Sep;58(3):1188.

10: Wang Y, ... Alvaro D, Gaudio E, Inverardi L, Reid LM. Biliary tree stem cells, precursors to pancreatic committed progenitors: evidence for possible life-long pancreatic organogenesis. *Stem Cells*. 2013 Sep;31(9):1966-79.

23: Cardinale V, ... Alvaro D. An isolate alpha-fetoprotein producing gastric cancer liver metastasis emerged in a patient previously affected by radiation induced liver disease. *World J Hepatol*. 2013 Jul 27;5(7):398-403.

24: Semeraro R, .... Alvaro D. The fetal liver as cell source for the regenerative medicine of liver and pancreas. *Ann Transl Med*. 2013 Jul;1(2):13.

25: De Minicis S, Kisseleva T, Francis H, Baroni GS, Benedetti A, Brenner D, Alvaro D, Alpini G, Marzioni M. Liver carcinogenesis: rodent models of hepatocarcinoma and cholangiocarcinoma. *Dig Liver Dis*. 2013 Jun;45(6):450-9.

26: Liu JZ, .. Alvaro D, .... ; UK-PSCSC Consortium; International IBD Genetics Consortium, Dense genotyping of immune-related disease regions identifies nine new risk loci for primary sclerosing cholangitis. *Nat Genet*. 2013 Jun;45(6):670-5.

27: Han Y, Glaser S, Meng F, Francis H, Marzioni M, McDaniel K, Alvaro D, Venter J, Carpino G, Onori P, Gaudio E, Alpini G, Franchitto A. Recent advances in the morphological and functional heterogeneity of the biliary epithelium. *Exp Biol Med* (Maywood). 2013 May;238(5):549-65.

28: Kar SP, Italian PBC Genetics Study Group, Gershwin ME, Siminovitch KA, Amos CI. Pathway-based analysis of primary biliary cirrhosis genome-wide association studies. *Genes Immun*. 2013 Apr;14(3):179-86. doi: 10.1038/gene.2013.1.

29: Nobili V, ....Alvaro D, Gaudio E. Hepatic progenitor cells activation, fibrosis, and adipokines production in pediatric nonalcoholic fatty liver disease. *Hepatology*. 2012 Dec;56(6):2142-53.

30. Cardinale V,Wang Y,Carpino G,Mendel G,Alpini G,Gaudio E,Reid LM,Alvaro D (2012). The biliary tree-a reservoir of multipotent stem cells. *NATURE REVIEWS. GASTROENTEROLOGY & HEPATOLOGY* (ISSN:1759-5045),

31. Cardinale V,Wang Y,Carpino G,Reid LM,Gaudio E,Alvaro D (2012). Mucin-producing cholangiocarcinoma might derive from biliary tree stem/progenitor cells located in peribiliary glands. *HEPATOLOGY* (ISSN:0270-9139),

32. Cardinale V,Carpino G,Reid LM,Gaudio E,Alvaro D (2012). Cholangiocarcinoma: A cancer in search of the right classification. *HEPATOLOGY* (ISSN:0270-9139),

33.Nobili V, Carpino G, Alisi A, Franchitto A, Alpini G, De Vito R, Onori P, Alvaro D, Gaudio E. (2012). Hepatic progenitor cells activation, fibrosis and adipokines production in pediatric nonalcoholic fatty liver disease. *HEPATOLOGY* (ISSN:1527-3350),

34. Cardinale V, Carpino G, Reid L, Gaudio E, Alvaro D. (2012). Multiple cells of origin in cholangiocarcinoma underlie biological, epidemiological and clinical heterogeneity. *WORLD JOURNAL OF GASTROINTESTINAL ONCOLOGY* (ISSN:1948-5204), 94- 102, 15;

35. PetruzzIELLO L, Hassan C, Alvaro D, Kohn A, Rossi Z, Zullo A, Cesaro P, Annibale B, Barca A, Di Giulio E, Rossi PG, Grasso E, Ridola L, Spada C, Costamagna G; on behalf of Lazio Appropriateness Group. (2012). Appropriateness of the Indication for Colonoscopy: Is the Endoscopist the "Gold Standard"? *JOURNAL OF CLINICAL GASTROENTEROLOGY*(ISSN:0192-0790),

36. WANG Y; CUI CB; YAMAUCHI M; MIGUEZ P; ROACH M; MALAVARCA R; COSTELLO MJ; CARDINALE V; WAUTHIER E; BARBIER C; GERBER DA; D. ALVARO; REID LM (2011). Lineage restriction of human hepatic stem cells to mature fates is made efficient by tissuespecific biomatrix scaffolds. *HEPATOLOGY* (ISSN:0270-9139), 293-305, 53(1);

37. D. ALVARO; BRAGAZZI MC; BENEDETTI A; FABRIS L; FAVA G; INVERNIZZI P;

MARZIONI M;NUZZO G; STRAZZABOSCO M; STROFFOLINI T; FROM AND THE AISF CHOLANGIOCARCINOMA COMMITTEE (2011). Cholangiocarcinoma in Italy: A national survey on clinical characteristics, diagnostic modalities and treatment. Results from the "Cholangiocarcinoma" committee of the Italian Association for the Study of Liverdisease. DIGESTIVE AND LIVER DISEASE (ISSN:1590-8658), 60- 65, 43;

38. DEMORROW S; ONORI P; VENTER J; INVERNIZZI P; FRAMPTON G; WHITE M; A. FRANCHITTO;KOPRIVA S; BERNUZZI F; FRANCIS H; COUFAL M; GLASER S; FAVA G; MENG F; ALVARO D; CARPINO G; GAUDIO E; ALPINI G (2011). Neuropeptide Y inhibits cholangiocarcinoma cell growth and invasion. AMERICAN JOURNAL OF PHYSIOLOGY. CELL PHYSIOLOGY (ISSN:0363-6143), C1078- C1089, 300 (5);

39. M. Marzioni,A. Torrice,S. Saccomanno,C. Rychlicki,L. Agostinelli,I. Pierantonelli,P.Rh?nnstad,L. Trozzi,T. Apelqvist,R. Gentile,C. Candelaresi,G. Fava,R. Semeraro,A.Benedetti,E. Gaudio,A. Franchitto,P. Onori,S. D. Minicis,G. Carpino,E. Kallin,D. Alvaro,S. Nilsson (2011). An oestrogen receptor beta-selective agonist exerts anti-neoplastic effects in experimental intrahepatic cholangiocarcinoma. DIGESTIVE AND LIVER DISEASE (ISSN:1590-8658),

40. A. Renzi,S. Glaser,S. Demorrow,R. Mancinelli,F. Meng,A. Franchitto,J. Venter,M. White, H. Francis,Y. Han,D. Alvaro,E. Gaudio,G. Carpino,P. Onori,G. Alpini (2011). Melatonin inhibits cholangiocyte hyperplasia in cholestatic rats by interaction with MT1 but not MT2 melatonin receptors. Am J Physiology 301(4):G634-43

41. TURNER R; LOZOYA O; WANG Y; CARDINALE V; E. GAUDIO; ALPINI G; MENDEL G; WAUTHIER E; BARBIER C; ALVARO D; REID LM (2011). Human hepatic stem cell and maturational liver lineage biology. HEPATOLOGY (ISSN:0270-9139), 1035- 1045, 53 (3);

42. Cardinale V,Wang Y,Carpino G,Cui CB,Gatto M,Rossi M,Berlolo PB,Cantafora A,Wauthier E, Furth ME,Inverardi L,Dominguez-Bendala J,Ricordi C,Gerber D,Gaudio E,Alvaro D,Reid L (2011). Multipotent stem/progenitor cells in human biliary tree give rise to hepatocytes, cholangiocytes and pancreatic islets. HEPATOLOGY (ISSN:0270-9139),

43. Glaser S,Gaudio E,Renzi A,Mancinelli R,Ueno Y,Venter J,White M,Kopriva S,Chiasson V, DeMorrow S,Francis H,Meng F,Marzioni M,Franchitto A,Alvaro D,Supowit S,DiPette DJ,Onori P,Alpini G (2011). Knockout of the neurokinin-1 receptor reduces cholangiocyte proliferation in bile duct-ligated mice. AMERICAN JOURNAL OF PHYSIOLOGY: GASTROINTESTINAL AND LIVER PHYSIOLOGY (ISSN:0193-1857), 301;

44. Carpino G,Cardinale V,Onori P,Franchitto A,Berlolo PB,Rossi M,Wang Y,Semeraro R, Anceschi M,Brunelli R,Alvaro D,Reid LM,Gaudio E (2011). Biliary tree stem/progenitor cells in glands of extrahepatic and intrahepatic bile ducts: an anatomical in situ study yielding evidence of maturational lineages. JOURNAL OF ANATOMY (ISSN:0021-8782),

45. Han Y,DeMorrow S,Invernizzi P,Jing Q,Glaser S,Renzi A,Meng F,Venter J,Bernuzzi F,White M, Francis H,Lleo A,Marzioni M,Onori P,Alvaro D,Torzilli G,Gaudio E,Alpini G (2011). Melatonin exerts by an autocrine loop antiproliferative effects in cholangiocarcinoma; its synthesis is reduced favoring cholangiocarcinoma growth. AMERICAN JOURNAL OF PHYSIOLOGY: GASTROINTESTINAL AND LIVER PHYSIOLOGY (ISSN:0193-1857), 301(4):G623-33

46. D. ALVARO; CANNIZZARO R; LABIANCA R; VALVO F; FARINATI F (2010).Cholangiocarcinoma: A position paper by the Italian Society of Gastroenterology (SIGE), the Italian Association of Hospital Gastroenterology (AIGO), the Italian Association of Medical Oncology (AIOM) and the Italian Association of Oncological Radiotherapy (AIRO). DIGESTIVE AND LIVER DISEASE (ISSN:1590-8658), 831- 838, 42(12);

47. CARDINALE V; D. ALVARO (2010). Ascofuranone: a possible therapeutic tool for autosomal dominant polycystic kidney disease? MOLECULAR CANCER THERAPEUTICS (ISSN:1535-7163), 3100- 3100, 9(11);

48. GATTO M; D. ALVARO (2010). Cholangiocarcinoma: risk factors and clinical presentation. EUROPEAN REVIEW FOR MEDICAL AND PHARMACOLOGICAL SCIENCES (ISSN:1128-3602), 363- 367, 14(4);

49. GATTO M; D. ALVARO (2010). New insights on cholangiocarcinoma. WORLD JOURNAL OF GASTROINTESTINAL ONCOLOGY (ISSN:1948-5204), 136- 145, 15;2(3);

50. LIU X; INVERNIZZI P; LU Y; KOSOY R; LU Y; BIANCHI I; PODDA M; XU C; XIE G; MACCIARDI F; SELMI C; LUPOLI S; SHIGETA R; RANSOM M; LLEO A; LEE AT; MASON AL; MYERS RP; PELTEKIAN KM; GHENT CN; BERNUZZI F; ZUIN M; ROSINA F; BORGHESIO E; FLOREANI A; LAZZARI R; NIRO G; ANDRIULLI A; MURATORI L; MURATORI P; ALMASIO PL; ANDREONE P; MARGOTTI M; BRUNETTO M; COCO B; D.

ALVARO; BRAGAZZI MC; MARRA F; PISANO A; RIGAMONTI C; COLOMBO M; MARZIONI M; BENEDETTI A; FABRIS L; STRAZZABOSCO M; PORTINCASA P; PALMIERI VO; TIRIBELLI C; CROCE L; BRUNO S; ROSSI S; VINCI M; PRISCO C; MATTALIA A; TONIUTTO P; PICCIOTTO A; GALLI A; FERRARI C; COLOMBO S; CASELLA G; MORINI L; CAPORASO N; COLLI A; SPINZI G; MONTANARI R; GREGERSEN PK; HEATHCOTE EJ; HIRSCHFELD GM; SIMINOVITCH KA; AMOS CI; GERSHWIN ME; SELDIN MF (2010). Genomewide meta-analyses identify three loci associated with primary biliary cirrhosis. NATURE GENETICS (ISSN:1061-4036), 658- 660, 42(8);

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53. TORRICE A; CARDINALE V; GATTO M; R. SEMERARO; NAPOLI C; ONORI P; ALPINI G; GAUDIO E; ALVARO D (2010). Polycystins play a key role in the modulation of cholangiocyte proliferation. DIGESTIVE AND LIVER DISEASE (ISSN:1590-8658), 377- 385, 42(5);

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55. MANCINELLI R; FRANCHITTO A; GAUDIO E; ONORI P; GLASER S; FRANCIS H; VENTER J; DEMORROW S; G. CARPINO; KOPRIVA S; WHITE M; FAVA G; ALVARO D; ALPINI G (2010). After damage of large bile ducts by gamma-aminobutyric acid, small ducts replenish the biliary tree by amplification of calcium-dependent signaling and de novo acquisition of large cholangiocyte phenotypes. AMERICAN JOURNAL OF PATHOLOGY (ISSN:0002-9440), 1790- 1800, 176(4);

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65. E. GAUDIO; CARPINO G; CARDINALE V; FRANCHITTO A; ONORI P; ALVARO D (2009). New insights into liver stem cells. DIGESTIVE AND LIVER DISEASE (ISSN:1590-8658), 455- 462,41(7);
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Rome, November 19, 2018.

*Ai sensi e per effetto del D.Lgs. n. 196/2003 'Codice in materia di protezione dei dati personali e sensibili', autorizzo al trattamento dei dati e delle informazioni contenute nel curriculum vitae ai fini del procedimento ECM, consapevole che il CV verrà incluso nell'allegato all'atto della validazione della richiesta di accreditamento, e che sarà visibile nella Banca Dati del sito ECM, accessibile a tutti gli utenti e tramite INTERNET (motori di ricerca). Autorizzo altresì il trattamento ai fini della trasmissione (successiva allo svolgimento dell'evento formativo) alla Commissione Nazionale per la Formazione Continua"*