

## Raccolta informazioni su Gruppi di Ricerca- DiSCOG

### CAPOGRUPPO

<b>Nominativo</b>	Farinati Fabio
<b>Ruolo Universitario</b>	Professore Associato Confermato
<b>SSD</b>	MED/12
<b>Ruolo ospedaliero (se presente)</b>	
<b>Sezione di appartenenza</b>	Gastroenterologia
<b>Unità Operativa Semplice (se presente)</b>	Responsabile Unità Operativa semplice di Epatologia.
<b>Unità Operativa Complessa</b>	

### LINEE DI RICERCA (solo linee di ricerca attuali; se presenti piu' linee di ricerca indicarle con un numero e fare riferimento al numero per tutte le informazioni sottostanti, quando appropriato)

- 1) Definizione della storia naturale e delle indicazioni terapeutiche nell'HCC: studio di biomarcatori e dei meccanismi molecolari di progressione.
- 2) Studio dei biomarcatori per la valutazione della progressione e definizione della prognosi in pazienti con Esofago di Barrett.
- 3) studio dei meccanismi della risposta infiammatoria nelle gastriti autoimmuni.

### AFFERENTI AL GRUPPO DI RICERCA

#### 1) PERSONALE UNIVERSITARIO (PROFESSORI E RICERCATORI)

<b>Nominativo</b>	<b>Ruolo (SSD)</b>	<b>Dipartimento di afferenza</b>
Bortolami Marina	Ricercatore confermato MED/05	DiSCOG

#### 2) PERSONALE NON STRUTTURATO (DOTTORANDI, SPECIALIZZANDI, ASSEGNISTI, BORSISTI)

<b>Nominativo</b>	<b>Ruolo</b> ** per gli specializzandi e dottorandi specificare la scuola di appartenenza	<b>Dipartimento di afferenza</b>
Piciocchi Marika	Assegnista	DiSCOG
Giacomin Anna	Specializzanda (Scuola di Specializzazione in Gastroenterologia)	DiSCOG
Pozzan Caterina	Specializzanda (Scuola di Specializzazione in Gastroenterologia)	DiSCOG
Vanin Veronica	Specializzanda (Scuola di Specializzazione in Gastroenterologia)	DiSCOG
Gazzola Alessia	Specializzanda (Scuola di Specializzazione in Gastroenterologia)	DiSCOG
Maddalo Gemma	Specializzanda (Scuola di Specializzazione in Gastroenterologia)	DiSCOG

#### 3) PERSONALE TECNICO DI LABORATORIO STRUTTURATO

Nominativo	Livello	Dipartimento di afferenza
Cardin Romilda	Biologo-Tecnico D3	DiSCOG
Carlotto Chiara	Tecnico di Laboratorio D3	DiSCOG
Minotto Milena	Tecnico di Laboratorio C6	DiSCOG

**4) PERSONALE DI RICERCA APPARTENENTE AD ALTRE AMMINISTRAZIONI (IOV, AZIENDA OSPEDALIERA, VIMM, ETC)**

Nominativo	Ruolo	Ente di appartenenza
Davide Pastorelli	Responsabile Unità Operativa Dipartimentale	IOV

**COLLABORAZIONI NAZIONALI E INTERNAZIONALI SOSTENUTI DA: PROGETTI DI RICERCA/PUBBLICAZIONI/SCAMBI DI PERSONALE** ( ultimi 5 anni, sostanziate da piu' pubblicazioni e/o progetti di ricerca in comune)

**Progetto 1:**

**Gruppo ITA.LI.CA** (Italian Liver Cancer, Gruppo Collaborativo che riunisce 16 Unità cliniche e di ricerca in Italia)

**Centro Studi Fegato (CSF)**, Trieste: Prof. Tiribelli Claudio

**Short-term fellowship EASL:** Prof. Pinzani Massimo - University College London (UCL) - Institute for Liver & Digestive Health, UCL Medical School – Royal Free Campus

**Progetto 3:** Dott.ssa Daniela Basso (Dipartimento di Medicina, Università di Padova)

**PARTECIPAZIONE A PROGETTI INTERNAZIONALI** ( ultimi 5 anni; indicare per ogni linea di ricerca)

**Progetto 1:**

- **FLIP:** FATTY LIVER INTERNATIONAL PROGRAM - PROGETTO CEE (DOTT. Bellentani Stefano, Modena)
- **STUDI MULTICENTRICI INTERNAZIONALI SULLA TERAPIA DELL' HCC:** SHARP, BRISK-034, BRISK-037, RAD 001, ADI-PEG, GC33.
- **BCLC (BARCELONA) CLINIC LIVER CANCER GROUP,** PROF. JORDI BRUIX.
- **INSTITUTE FOR SCIENTIFIC INFORMATION ON COFFEE (ISIC):** Studio sul ruolo nutrizionale del caffè'

**FINANZIAMENTI** ( ultimi 5 anni; indicare per ogni linea di ricerca)

**PROGETTO 1:**

- PROGETTO DI ATENEIO 2012-2014 (UNIVERSITA' DEGLI STUDI DI PADOVA))
- INSTITUTE FOR SCIENTIFIC INFORMATION ON COFFEE (ISIC): Studio sul ruolo nutrizionale del caffè'

**PROGETTO 2:** VENETO REGION AIRC GRANT 2008 (PADUA, ITALY)

**Progetto 1:**

1. Borzio M, Fornari F, De Sio I, et al. Adherence to American Association for the Study of Liver Diseases guidelines for the management of hepatocellular carcinoma: results of an Italian field practice multicenter study. *Future Oncol* . 2013;9:283-294.
2. Cillo U, Vitale A, Dupuis D, et al. Laparoscopic ablation of hepatocellular carcinoma in cirrhotic patients unsuitable for liver resection or percutaneous treatment: a cohort study. *PLoS One*. 2013;8:e57249.
3. Floreani A, Farinati F. Risk factors associated to hepatocellular carcinoma in primary biliary cirrhosis. *Hepatology*. 2013.
4. Giannini EG, Marengo S, Bruzzone L, et al. Hepatocellular carcinoma in patients without cirrhosis in Italy. *Dig Liver Dis*. 2013;45:164-169.
5. Cucchetti A, Trevisani F, Cescon M, et al. Cost-effectiveness of semi-annual surveillance for hepatocellular carcinoma in cirrhotic patients of the Italian Liver Cancer population. *J Hepatol*. 2012;56:1089-1096.
6. Farinati F. Digestive oncology: It's now or never. *Dig Liver Dis*. 2012;44:180-181.
7. Farinati F, Giacomini A, Vanin V, et al. TACE treatment in hepatocellular carcinoma: what should we do now? *J Hepatol*. 2012;57:221-222.
8. Farinati F, Giacomini A, Vanin V, et al. Liver transplantation for hepatocellular carcinoma in clinical practice: the lesson from a 20-year multicentre experience in Italy. *Eur J Gastroenterol Hepatol*. 2012;24:195-202.
9. Giacomini A, Sergio A, Vanin V, et al. Molecular targeted therapy in hepatocellular carcinoma: present achievements and future challenges. *Dig Dis*. 2012;30:284-288.
10. Giannini EG, Farinati F, Del Poggio P, et al. Ten-year outcome of radiofrequency thermal ablation for hepatocellular carcinoma: an Italian experience. *Am J Gastroenterol*. 2012;107:1588-9; author reply 1590.
11. Giannini EG, Marengo S, Borgonovo G, et al. Alpha-fetoprotein has no prognostic role in small hepatocellular carcinoma identified during surveillance in compensated cirrhosis. *Hepatology*. 2012;56:1371-1379.
12. Llovet JM, Pena CE, Lathia CD, et al. Plasma biomarkers as predictors of outcome in patients with advanced hepatocellular carcinoma. *Clin Cancer Res*. 2012;18:2290-2300.
13. Santi V, Buccione D, Di Micoli A, et al. The changing scenario of hepatocellular carcinoma over the last two decades in Italy. *J Hepatol*. 2012;56:397-405.
14. Farinati F, Giacomini A, Vanin V. Sorafenib for hepatocellular carcinoma according to Child-Pugh class of liver function. *Cancer Chemother Pharmacol*. 2011;68:1639-40; author reply 1641-2.
15. Giacomini A, Cazzagon N, Sergio A, et al. Hepatitis B virus-related hepatocellular carcinoma: primary, secondary, and tertiary prevention. *Eur J Cancer Prev*. 2011;20:381-388.
16. Giannini EG, Farinati F, Trevisani F. Alpha-fetoprotein in hepatocellular carcinoma surveillance: wake not the dead. *Hepatology*. 2011;54:376-377.
17. Giannini EG, Savarino V, Risso D, et al. Relative decrease in the role played by hepatitis B virus infection in the aetiology of hepatocellular carcinoma during a 20-year period: a multicentre Italian study. *Liver Int*. 2011;31:192-196.

18. Lombardi G, Zustovich F, Farinati F, et al. Pegylated liposomal doxorubicin and gemcitabine in patients with advanced hepatocellular carcinoma: results of a phase 2 study. *Cancer*. 2011;117:125-133.
19. Stroffolini T, Trevisani F, Pinzello G, et al. Changing aetiological factors of hepatocellular carcinoma and their potential impact on the effectiveness of surveillance. *Dig Liver Dis*. 2011;43:875-880.
20. Vitale A, Morales RR, Zanusi G, et al. Barcelona Clinic Liver Cancer staging and transplant survival benefit for patients with hepatocellular carcinoma: a multicentre, cohort study. *Lancet Oncol*. 2011;12:654-662.
21. Vitale A, Navaglia F, Ramirez Morales R, et al. Molecular refinement of clinical staging in hepatocellular carcinoma patients evaluated for potentially curative therapies. *PLoS One*. 2011;6:e23093.
22. Alvaro D, Cannizzaro R, Labianca R, et al. 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). *Dig Liver Dis*. 2010;42:831-838.
23. Cillo U, Vitale A, Volk ML, et al. The survival benefit of liver transplantation in hepatocellular carcinoma patients. *Dig Liver Dis*. 2010;42:642-649.
24. Giacomini A, Sergio A, Vanin V, et al. Megestrol and embryonic extracts in the treatment of advanced hepatocellular carcinoma: A prospective randomized trial in the pre-sorafenib era. *Hepatol Res*. 2010;40:153-160.
25. Giannini EG, Bodini G, Corbo M, et al. Impact of evidence-based medicine on the treatment of patients with unresectable hepatocellular carcinoma. *Aliment Pharmacol Ther*. 2010;31:493-501.
26. Giannini EG, Savarino V, Rizzo D, et al. Transarterial chemoembolization in Child-Pugh class B patients with hepatocellular carcinoma: between the devil and the deep blue sea. *Liver Int*. 2010;30:923-4; author reply 924-5.
27. Mescoli C, Castoro C, Sergio A, et al. Hepatic spleen nodules (HSN). *Scand J Gastroenterol*. 2010;45:628-632.
28. Mirici-Cappa F, Gramenzi A, Santi V, et al. Treatments for hepatocellular carcinoma in elderly patients are as effective as in younger patients: a 20-year multicentre experience. *Gut*. 2010;59:387-396.
29. Santi V, Trevisani F, Gramenzi A, et al. Semiannual surveillance is superior to annual surveillance for the detection of early hepatocellular carcinoma and patient survival. *J Hepatol*. 2010;53:291-297.
30. Vitale A, Volk ML, Pastorelli D, et al. Use of sorafenib in patients with hepatocellular carcinoma before liver transplantation: a cost-benefit analysis while awaiting data on sorafenib safety. *Hepatology*. 2010;51:165-173.
31. Cavazza A, Caballeria L, Floreani A, et al. Incidence, risk factors, and survival of hepatocellular carcinoma in primary biliary cirrhosis: comparative analysis from two centers. *Hepatology*. 2009;50:1162-1168.
32. Farinati F, Sergio A, Balducci A, et al. Early and very early hepatocellular carcinoma: when and how much do staging and choice of treatment really matter? A multi-center study. *BMC Cancer*. 2009;9:33-2407-9-33.
33. Farinati F, Sergio A, Giacomini A, et al. Is female sex a significant favorable prognostic factor in hepatocellular carcinoma? *Eur J Gastroenterol Hepatol*. 2009;21:1212-1218.
34. Giannini EG, Marabotto E, Savarino V, et al. Hepatocellular carcinoma in patients with cryptogenic cirrhosis. *Clin Gastroenterol Hepatol*. 2009;7:580-585.

35. Vitale A, Saracino E, Boccagni P, et al. Validation of the BCLC prognostic system in surgical hepatocellular cancer patients. *Transplant Proc.* 2009;41:1260-1263.
36. De Martin E, Senzolo M, Boninsegna S, et al. HCV histological recurrence and survival following liver transplantation in patients with and without hepatocellular carcinoma. *Transplant Proc.* 2008;40:1974-1975.
37. Guido M, Fassan M, Giacomelli L, et al. Micronuclei and broken eggs in human liver carcinogenesis. *Anticancer Res.* 2008;28:2507-2511.
38. Llovet JM, Ricci S, Mazzaferro V, et al. Sorafenib in advanced hepatocellular carcinoma. *N Engl J Med.* 2008;359:378-390.
39. Marino D, Boso C, Crivellari G, et al. Fatal HBV-related liver failure during lamivudine therapy in a patient with non-Hodgkin's lymphoma. *Tumori.* 2008;94:748-749.
40. Cardin R, Piciocchi M, Sinigaglia A, et al. Oxidative DNA damage correlates with cell immortalization and mir-92 expression in hepatocellular carcinoma. *BMC Cancer.* 2012;12:177.
41. Cardin R, Piciocchi M, Martines D, et al. Effects of coffee consumption in chronic hepatitis C: A randomized controlled trial. *Dig Liver Dis.* 2012, doi:pii: S1590-8658(12)00424-0. 10.1016/j.dld.2012.10.021 (in press).
42. Farinati F, Piciocchi M, Lavezzo E, et al. Oxidative stress and inducible nitric oxide synthase induction in carcinogenesis. *Dig Dis.* 2010;28(4-5):579-84.
43. Piciocchi M, Cardin R, Vitale A, et al. Plasma circulating free DNA in the progression of liver damage. *J Clin Gastroenterol* 2013 (submitted).
44. Bortolami M, Cardin R, Kotsafti A, et al. TGF-beta and hepatocellular carcinoma. *Hepatology.* 2008 47(3):1095.
45. Bortolami M, Kotsafti A, Cardin R, et al. Fas / FasL system, IL-1beta expression and apoptosis in chronic HBV and HCV liver disease. *J Viral Hepat.* 2008;15:515-522.
46. Kotsafti A, Cardin R, Farinati F, et al. Bax inhibitor-1 down-regulation in the progression of chronic liver diseases. *BMC Gastroenterol.* 2010;10:35.
47. Kotsafti A, Farinati F, Cardin R, et al. Autophagy and apoptosis-related genes in chronic liver disease and hepatocellular carcinoma. *BMC Gastroenterol.* 2012;12:118.

#### **Progetto 2:**

1. Cardin R, Piciocchi P, Tieppo C, et al. Oxidative DNA damage in Barrett's mucosa: correlation with telomeric dysfunction and p53 mutation. *Ann Surg Oncol* 2013. (In press).
2. Rugge M, Zaninotto G, Parente P, et al. Barrett's esophagus and adenocarcinoma risk: the experience of the North-Eastern Italian Registry (EBRA). *Ann Surg.* 2012;256:788-94
3. Zaninotto G, Parente P, Salvador R, et al. Long-term follow-up of Barrett's epithelium: medical versus antireflux surgical therapy. *J Gastrointest Surg.* 2012;16:7-14.

#### **Progetto 3:**

1. Rugge M, Fassan M, Pizzi M, et al. Autoimmune gastritis: histology phenotype and OLGA staging. *Aliment Pharmacol Ther.* 2012;35:1460-1466.
2. Zorzetto V, Maddalo G, Basso D, et al. Immunotherapy for gastric premalignant lesions and cancer. *Immunotherapy.* 2012;4:587-599.

3. Zorzetto V, Tollardo M, Plebani M, et al. Interleukin 1beta and tumor necrosis factor-alpha polymorphisms in autoimmune gastritis. *Eur J Gastroenterol Hepatol*. 2011;23:196.

#### **Altre pubblicazioni del Gruppo di Ricerca:**

Scarpa R, Alaggio R, Norberto L, et al. Tryptophan hydroxylase autoantibodies as markers of a distinct autoimmune gastrointestinal component of autoimmune polyendocrine syndrome type 1. *J Clin Endocrinol Metab*. 2013;98:704-712.

Scarpa M, Cardin R, Bortolami M, et al. Mucosal immune environment in colonic carcinogenesis: CD80 expression is associated to oxidative DNA damage and TLR4-NFκB signalling. *Eur J Cancer*. 2013;49(1):254-63.

Negrini M, Miotto E, Sabbioni S, et al. MINT31 methylation in gastric noninvasive neoplasia: potential role in the secondary prevention of gastric cancer. *Eur J Cancer Prev*. 2012;21:442-448.

Fassan M, Pizzi M, Farinati F, et al. Lesions indefinite for intraepithelial neoplasia and OLGA staging for gastric atrophy. *Am J Clin Pathol*. 2012;137:727-732.

Dei Tos AP, Laurino L, Bearzi I, et al. Gastrointestinal stromal tumors: the histology report. *Dig Liver Dis*. 2011;43 Suppl 4:S304-9.

Rugge M, Fassan M, Farinati F, et al. The war of the worlds: metaplastic versus nonmetaplastic atrophic gastritis. *Gastrointest Endosc*. 2011;73:411-2; author reply 412-3.

Rugge M, Fassan M, Pizzi M, et al. Operative link for gastritis assessment vs operative link on intestinal metaplasia assessment. *World J Gastroenterol*. 2011;17:4596-4601.

Rugge M, Fassan M, Pizzi M, et al. Operative Link for Gastritis Assessment gastritis staging incorporates intestinal metaplasia subtyping. *Hum Pathol*. 2011;42:1539-1544.

Tieppo C, Betterle C, Basso D, et al. Gastric type I carcinoid: a pilot study with human G17DT immunogen vaccination. *Cancer Immunol Immunother*. 2011;60:1057-1060.

Zerbi A, Capitanio V, Boninsegna L, et al. Surgical treatment of pancreatic endocrine tumours in Italy: results of a prospective multicentre study of 262 cases. *Langenbecks Arch Surg*. 2011;396:313-321.

Scarpa M, Bortolami M, Cecchetto A, et al. Mucosal immune environment in colonic carcinogenesis: CD80 up-regulation in colonic dysplasia in ulcerative colitis. *Eur J Cancer*. 2011; 47(4):611-9).

Zerbi A, Falconi M, Rindi G, et al. Clinicopathological features of pancreatic endocrine tumors: a prospective multicenter study in Italy of 297 sporadic cases. *Am J Gastroenterol*. 2010;105:1421-1429.

Scarpa M, Bortolami M, Morgan SL, et al. TGF-beta1 and IGF-1 Production and Recurrence of Crohn's Disease After Ileo-Colonic Resection. *Surg Res*. 2009; 152(1):26-34.

Biasco G, Velo D, Angriman I, et al. Gastrointestinal stromal tumors: report of an audit and review of the literature. *Eur J Cancer Prev*. 2009;18:106-116.

58. Farinati F, Cardin R, Bortolami M, et al. Oxidative DNA damage in gastric cancer: CagA status and OGG1 gene polymorphism. *Int J Cancer*. 2008;123:51-55.

59. Farinati F, Cardin R, Cassaro M, et al. Helicobacter pylori, inflammation, oxidative damage and gastric cancer: a morphological, biological and molecular pathway. *Eur J Cancer Prev*. 2008;17:195-200.

61. Herszenyi L, Farinati F, Cardin R, et al. Tumor marker utility and prognostic relevance of cathepsin B, cathepsin L, urokinase-type plasminogen activator, plasminogen activator inhibitor type-1, CEA and CA 19-

9 in colorectal cancer. *BMC Cancer*. 2008;8:194-2407-8-194.

62. Herszenyi L, Farinati F, Miheller P, et al. Chemoprevention of colorectal cancer: feasibility in everyday practice? *Eur J Cancer Prev*. 2008;17:502-514.

63. Herszenyi L, Istvan G, Cardin R, et al. Serum cathepsin B and plasma urokinase-type plasminogen activator levels in gastrointestinal tract cancers. *Eur J Cancer Prev*. 2008;17:438-445.

**TECNOLOGIA, METODICHE, COMPETENZE DISPONIBILI PER POSSIBILI FUTURE COLLABORAZIONI**

**Strumentazione** disponibile presso il Laboratorio della Gastroenterologia:

Water HPLC a due canali: UV e Detector Elettrochimico Alfatech

Termociclatore Applied Biosystem

ABI PRISM 7900 Applied Biosystem Real Time PCR

Apparato per elettroforesi bidimensionale: Ettan IPGphor 3, Electrophoresis Power Supply EPS 601, MultiTemp III Thermostatic Circulator Electrophoresis Unit, Ettan DALTsix

Agilent 2100 Bioanalyzer

Lettore per piastre ELISA

Microscopio

**Metodologie disponibili:**

1. Estrazione e purificazione di DNA nucleare e mitocondriale da tessuti, linee cellulari e sangue.
2. Estrazione e quantificazione di proteine da tessuti e linee cellulari.
3. Isolamento di mitocondri da tessuti.
4. Determinazione del danno ossidativo al DNA nucleare e mitocondriale (addotto 8-idrossideossiguanosina) mediante HPLC con rilevazione elettrochimica.
5. Determinazione dell'attività della telomerasi in estratti proteici nucleari mediante Real Time PCR in SYBR Green.
6. Misura della lunghezza del DNA telomerico mediante Real Time PCR in SYBR Green.
7. Analisi dello stato di metilazione del promotore di geni mediante Real Time PCR metilazione-specifica in SYBR Green dopo trattamento del DNA con Sodiobisolfito.
8. Tecnica di Western Blot per la valutazione dell'espressione proteica.
9. Determinazione mediante saggi ELISA.
10. Estrazione e purificazione di RNA da tessuti e linee cellulari.
11. Analisi dell'espressione genica di citochine proinfiammatorie, fattori di crescita, oncogeni, recettori mediante Real Time PCR quantitativa assoluta.
12. Tecniche di immunistochimica, TUNEL.
13. Valutazione dell'integrità e purezza degli acidi nucleici.
14. Analisi densitometrica.
15. Determinazione di elementi in tracce: ferro, rame e zinco in liquidi biologici e tessuti mediante spettrofotometria di assorbimento atomico.
16. Analisi fluorimetrica.